Chronic disease and associated risk factors information monitoring systems

The results of an audit of Australian data collections and policies and a review of the international experience

Jeanette Pope and Su Gruszin

2002

Public Health Information Development Unit,
The University of Adelaide

Prepared by Jeanette Pope & Su Gruszin of the Public Health Information Development Unit, Adelaide University, as a further development of material brought together in the Audit phase of the Feasibility Study for Developing a Nation-wide Chronic Disease and Associated Risk Factors Information and Monitoring System, for the Commonwealth Department of Health & Ageing.

National Library of Australia Cataloguing–in–Publication data

Pope, Jeanette. Chronic disease and associated risk factors information and monitoring system : the results of an audit of Australian data collections and policies and a review of the international experience.

ISBN 1 920697 46 2.

1. Chronic diseases - Risk factors - Australia. 2. Health risk assessment - Australia. I. Gruszin, Su. II. Title.

616.0440994

PROJECT CONSORTIUM

La Trobe University

Public Health Information Development Unit, Adelaide University

Victorian Public Health Research and Education Council

Menzies School of Health Research/CRC for Aboriginal & Tropical Health

Please note: Appendices B and F, the *Full audit of current Australian data collections* are works-in-progress.

Contents

Executive Summary v
List of Abbreviations ix
Acknowledgements xiii

Chapter one The feasibility of a chronic disease and associated risk factors information and monitoring system for Australia **1**

1.1 The feasibility study 1
1.2 The audit phase 1
1.3 The consortium 2
1.4 Background and context 2
1.5 Terminology 3
1.5.1 Surveillance or monitoring 3
1.5.2 Risk factors and determinants 4
1.6 Contents of this report 4

Chapter two The Australian situation **7**

2.1 Australian policies for chronic disease and risk factor monitoring 8
2.1.1 A national strategy 8
2.1.2 Other chronic disease policies 9
The Northern Territory Preventable Chronic Disease Strategy 10
The Smoking , Nutrition, Alcohol and Physical Activity (SNAP) Framework for General Practice 11
2.1.3 Population health monitoring policies 12
The NSW Population Health Surveillance Strategy 12

2.2 Australian collections, indicator sets, reporting and data warehousing 13
2.2.1 Australian time series data collections 13
National Health Survey (NHS) 13
State-wide Computer Assisted Telephone Interview (CATI) health surveys 14
Two examples of State CATI health surveys: NSW and SA 19
The NSW Health Survey Program 19
SA CATI collections 20
General Social Survey (GSS) 22
Health provider collections 22
The National Hospital Morbidity Database 22
Medicare 22
Disease Registries 22
Bettering the Evaluation and Care of Health (BEACH) 23
Vital statistics and demographic information 24
The National Mortality Database and National Death Index 24
The National Perinatal Data Collection 25
Australian Secondary Schools Alcohol and Drug Survey (ASSAD) 25
Community Housing Infrastructure Needs Survey (CHINS) 26
Survey of Disability, Ageing and Carers (SDAC) 27
Other time series collections 28
2.2.2 Proposed time series collections 28
Australian Health Measurement Survey (AHMS) program 28
State-wide continuous CATI health survey collections 29

2.2.3 Current indicator sets 29
2.2.4 Current reporting of chronic disease information 31
The Australian Institute of Health and Welfare (AIHW).......... 31
The Social Health Atlas of Australia 32
Program for Enhanced Population Health Infostructure (PEPHI).......... 32
2.2.5 Current data warehousing of chronic disease and risk factor information .. 33
HealthWIZ: National Social Health Data Base 33
Health Outcomes Information Statistical Toolkit (HOIST).......... 33
Victorian Primary Care Partnerships resource.......... 34

2.3 Desirable qualities of a population health and health behaviour monitoring system 35
2.3.1 Desirable qualities as determined by Commonwealth policy makers.......... 35
2.3.2 Lack of timeliness 36
2.3.3 Lack of small area data 39
2.3.4 Lack of information on some priority population groups 40
2.3.5 Lack of integration or integrated reporting 40

2.4 Summary: Considerations for a chronic disease information and monitoring system in the Australian context.......... 42

Chapter 3 The international situation **49**

3.1 Overarching strategies for chronic disease monitoring 50
3.1.1 Countrywide Integrated Noncommunicable Diseases Intervention Programme (WHO) 50
3.1.2 WHO Stepwise Approach to Surveillance of Non Communicable Disease Risk Factors.......... 51
3.1.3 A strategic approach for Australia.......... 54

3.2 National (or international) surveys with components of objective measurement 55
MONtor trends in CArdiovascular diseases project 55
Health Survey for England 56
National Health and Nutrition Examination Survey.......... 56

3.3 National (or international) surveys of self report 58
Canadian Community Health Survey.......... 58
State and Local Area Integrated Telephone Survey 59

3.4 Standardised modules of self-report questions in harmonised surveys.......... 62
3.4.1 Harmonisation 62
EURope ALIMentation 62
Behavioral Risk Factor Surveillance System 63
Youth Risk Behavior Surveillance System 66
Rapid Risk Factor Surveillance System.......... 67
FINBALT Health Monitor 68

3.5 Indicator sets derived from existing data sources 71
Healthy People 2010 and the Leading Indicators for Healthy People 2010.......... 71
Public Health Observatories.......... 73
Norgeshelsa, The National Indicator System.......... 74
Health-Track.......... 75

3.6 Summary: Lessons from the International experience 76

3.6.1 Are the four monitoring methods possible in Australia ………………….. 76
3.6.2 A single or multiple survey approach ………………...………………….. 77

Chapter 4 A monitoring framework and options for the development of chronic disease information in Australia 83

4.1 What chronic disease information is needed in Australia?: a conceptual framework ……………………………………………………………… 84
4.1.1 The development of a framework for chronic disease and associated risk factor/determinant information in Australia ……………………………………. 84

4.2 Strategies for developing chronic disease information in Australia ………. 86
4.2.1 Strategy one: A "health observatory" ……………………………….... 88
4.2.2 Strategy two: Standardising elements of current State CATI health survey collections……………………………………………………………………... 89
4.2.3 Strategy three: Develop the Australian Health Measurement Survey ……. 91
4.2.4 Strategy four: Repeating previous national surveys ………….………... 93

Chapter 5 The audit of current Australian data collections in relation to chronic disease 97

5.1 The audit ……………………………………………………….…….. 98
5.2 Selection criteria ….……………………………………………………….. 98
5.3 Audit summary ……………………………………………………………. 98
5.4 The findings: information gaps and best options for information development ……………………………………………………………….. 99

Appendices

A Policies and strategies related to chronic disease and associated risk factors in Australia……………………………………………………………..... 107

B Topics covered by the National Health Survey and State CATI health surveys ……………………………………………………………………….. 111

C The content of the General Social Survey…………………………………... 115

D Expanded list of WHO STEPS measures for risk factor assessment ………. 119

E The National Health Performance Framework…………………………….... 121

F The full audit of Australian data collections in relation to chronic disease and associated risk factors……………………………………….………… 123

List of Figures and Tables

Figures

2.1 Topics from *Preventing chronic disease: a strategic framework* that fit the selection criteria for priorities in Australia 9
2.2 The Northern Territory's three point framework to guide implementation – prevention, early detection and best practice management of chronic disease 11
2.3 Time frame for uses of population health surveillance data 36
3.1 STEPS approach to Surveillance – Increasing comprehensiveness and complexity with each step 52
3.2 STEPS approach to Surveillance – Measures and methodologies for each step 53
4.1 A monitoring framework for chronic disease and associated risk factors (also shown in Appendix F).. 85
4.2 Topics that could potentially be developed through the development of a survey with objective measures.. 90
4.3 Topics that could potentially be developed through the development of harmonised CATI topics.. 92
4.4 Topics that could potentially be developed through the repetition of national surveys.. 94

Tables

2.1 Comparison of topics covered by State & Territory CATI health surveys .. 14
2.2 A comparison of the key features of the National Health Surveys and State & Territory CATI health surveys 16
2.3 The National Health Performance Committee's inventory of performance indicators 30
2.4 National Health Priority Areas: status of existing indicator sets.............. 30
2.5 Short and long term population health inequality indicators.................. 37
2.6 The most timely vehicle to use to investigate a given topic after the policy maker has determined the desired frequency of information on that topic... 38
2.7 The most appropriate vehicle to use depending on the level of small area data required by policy makers.. 39
2.8 The most appropriate vehicle to use to investigate particular population groups of interest to the policy maker.. 40
3.1 A summary of the WHO STEPS risk factor assessment............................ 52
3.2 Content for the first year of the Canadian Community Health Survey......... 59
3.3 Behavioral Risk Factor Surveillance Survey content in 2000...................... 64
3.4 The Ten Leading Health Indicators for Healthy People 2010...................... 72
4.1 Four strategies for utilising existing collections or creating new data to cover all the topics in the monitoring framework.. 87
5.1 Summary of the data audit.. 101

Executive Summary

Background to the Feasibility Study

In late 2000, the then Commonwealth Department of Health and Aged Care awarded a tender for the conduct of a feasibility study to investigate the development of a nation-wide behavioural risk factor surveillance system. The system was to encompass data collection, analysis, and reporting, on chronic diseases and associated risk factors, as a basis for policy and intervention developments.

This report presents an overview of the audit phase of the project based on the further development and integration of a number of documents prepared in that phase.

The Australian situation: results from the audit of policy and data collections

The policy situation

At the present time, there is no overarching national chronic disease prevention and health promotion policy that could provide a guide for action in Australia. There is, however, a comprehensive national background paper, *Preventing Chronic Disease: A Strategic Framework*, (NPHP 2001) that provides a national statement on the complexity of chronic disease and associated risk factors/determinants and outlines the need for more coordination in the area. The Northern Territory's *Preventable Chronic Disease Strategy* (Weeramanthri *et al*. 1999; Weeramanthri & Edmond 1999) is the most developed State policy for chronic disease, and the *Smoking, Nutrition, Alcohol and Physical Activity (SNAP) Framework for General Practice* (JAG on General Practice and Population Health 2001) is the most detailed examination of a particular set of behavioural risk factors. New South Wales (NSW) is the only State that has a population health monitoring strategy (the *Strategy for Population Health Surveillance in New South Wales (*Jorm & Puech 1997)).

Existing Australian data collections

There is a range of data sources in Australia that could provide an infrastructure on which an information and monitoring system for chronic diseases and their associated risk factors and determinants could be developed.

Australia does not have a regular national survey that includes physical and biochemical measures (such as the actual, rather than self-reported, measurement of height and weight) but the proposed Australian Health Measurement Survey program has been developed to this end and is expected to be run in conjunction with the National Health Survey.

Indicator sets and data access tools

Several indicator sets have been compiled in Australia including the National Health Priority Areas' Indicators (the Australian Institute of Health and Welfare), and the social and health indicators contained in the *Social Health Atlas of Australia* (Glover *et al.* 1999). There are also several tools available for accessing population data on chronic diseases, which include HealthWIZ, the Health Outcomes Information Statistical Toolkit (NSW) and a Victorian Primary Care Partnerships resource (a paper-based information resource (Ruth *et al*. 2001)).

The utility of existing Australian information resources: results from a consultation with policy makers

Program managers and policy makers described the existing systems for chronic disease and associated risk factor monitoring in Australia as generally uncoordinated and fragmented. They reported difficulty in accessing information and assessed the available information as often poorly analysed, limited, relatively old, lacking time series, not comparable (across different sources) and with poor linkages between risk factors and diseases. Key deficiencies were identified as:

- a lack of timeliness;
- a lack of small area data;
- a lack of information on some priority population groups such as children and youth, older persons, Aboriginal and Torres Strait Islanders, and people from non-English speaking backgrounds; and,
- a lack of integration or integrated reporting.

Policy makers identified the importance of the better use of existing data sources. Many did not know that particular data sources existed and did not know how to access or utilise others.

An ideal system

Policy makers described their vision of an ideal information system as one where national data collection was coordinated and integrated (i.e. where various data sources or information were able to be linked). Such a system would utilise standardised measures and definitions for some topics in order to obtain national estimates (or state comparisons), but would also leave jurisdictions space to pursue local initiatives in their survey programs. The system would include biological information and cover small geographical areas and particular population groups. The system would provide easy access and have a national information dissemination plan.

Existing overseas information systems: the results of the audit of international 'best practice'

Few countries rely on only one type of data collection to provide information on chronic diseases, and their associated risk factors and determinants. A mix of strategies appears to be important as no single survey type is able to provide all the information required by policy makers (particularly for different geographic area levels). A mix of strategies also allows for the inclusion of objective measures and broad indicators of socioeconomic or environmental determinants that may only be obtainable from separate data sources.

The development of a chronic disease information framework for Australia

A monitoring system needs to focus on a set of priority chronic disease topics and their associated risk factors and socioeconomic determinants (including relevant health service related actions). The framework developed (see Figure 4.1, page 85) has been based on the chronic diseases currently considered a national priority in Australia and the risk factors and determinants that have been recognised as being associated with those diseases.

Information gaps identified using the framework to audit existing data collections

Australia has inadequate national incidence and prevalence data on two of the priority health conditions and many risk factors and determinants, particularly in the areas of biological, behavioural, psychosocial, community, and environmental factors, and health system actions. The best socioeconomic data are not linked to health data (i.e. are collected in the Census and Household Expenditure Survey, etc) but some individual socioeconomic measures are contained in the National Health Survey and proposed for the forthcoming General Social Survey. Data about children and young people (under the age of 18 years) for most topics is inadequate.

Best options for information development in Australia

Four strategies for creating better time series information on chronic diseases and associated risk factors and determinants in Australia have been identified by matching Australia's information gaps with the international best practice. They are:

- Development of a "health observatory" that collates and reports indicators from existing data sources;
- Standardising elements of current state-wide CATI health survey systems to harmonise into national data;
- Development of the proposed objective (physical and biochemical) measures survey, the Australian Health Measurement Survey program; and,
- Repetition of previous national surveys, such as the National Nutrition Survey.

A detailed examination of the strategies that could be adopted to develop better chronic disease monitoring information in Australia can be found in Chapter five.

The greatest advantage of adopting a four strategy approach is that it draws together a range of current activities and developments in public health information in Australia. The use of existing data sources increases the use of current collections, while the further development of CATI collections builds on the growing strength of developments in this area. The inclusion of an option for collecting objective (physical and biochemical) measures provides an important opportunity to increase the usefulness of self report data through validation and the production of weights for self reported surveys, while the repetition of one-off national surveys could provide time series information on some framework topics.

References

JAG (Joint Advisory Group) on General Practice and Population Health (2001) *Smoking, Nutrition, Alcohol and Physical Activity (SNAP) Framework for General Practice: Integrated approaches to supporting the management of behavioural risk factors of Smoking, Nutrition, Alcohol and Physical Activity (SNAP) in General Practice.* Canberra: Commonwealth Department of Health and Ageing.

Jorm L & Puech M (1997) *Strategy for Population Health Surveillance in New South Wales: Discussion Paper.* Sydney: NSW Health

Glover J, Harris K & Tennant S (1999) *A Social Health Atlas of Australia.* Adelaide: Public Health Information Development Unit, University of Adelaide. NPHP (National Public Health Partnership) (2001) Preventing Chronic Disease: A Strategic Framework. Background Paper. Melbourne: NPHP.

Ruth D, Sulaiman N & Harris C (2001) *Primary Care Partnerships: Selecting and accessing population data — an information resource.* Melbourne: Victorian Government Department of Human Services, Aged, Community and Mental Health Division.

Weeramanthri T, Morton S, Hendy S, Connors C, Rae C & Ashbridge D (1999) *Northern Territory Preventable Chronic Disease Strategy – Overview and Framework.* Darwin: Territory Health Services.

Weeramanthri TS & Edmond K (1999) *Northern Territory Preventable Chronic Disease Strategy – the Evidence Base: Best buys and key result areas in chronic disease control.* Darwin: Territory Health Services.

List of Abbreviations

AA	Active Australia
ABS	Australian Bureau of Statistics
ACCV	Anti-Cancer Council of Victoria
ACS	Australian Cancer Society
AHMAC	Australian Health Ministers Advisory Council
AHMS	Australian Health Measurement Survey program (proposed)
AHS	Area Health Service (NSW)
AIHW	Australian Institute of Health and Welfare
ASSAD	Australian Secondary Schools Alcohol and Drug Survey (coordinated by the CBRC of the ACCV)
ATSI	Aboriginal and Torres Strait Islanders
ATSIC	Aboriginal and Torres Strait Islander Commission
BEACH	Bettering the Evaluation and Care of Health (AIHW and the University of Sydney)
BMI	Body Mass Index
BRFSS	Behavioral Risk Factor Surveillance System (CDC)
BSB	Behavioral Surveillance Branch, Division of Adult and Community Health, National Center for Chronic Disease Prevention and Health Promotion (CDC)
CAI	Computer Assisted Interviewing
CAPI	Computer Assisted Personal Interviewing
CASRO	Council of American Survey Research Organizations
CATI	Computer Assisted Telephone Interviewing
CATI TRG	CATI Technical Reference Group
CBRC	Centre for Behavioural Research in Cancer (ACCV)
CCHS	Canadian Community Health Survey
CDC	Centers for Disease Control and Prevention (US)
CEHIP	Central East Health Information Partnership (Ontario, Canada)
CHINS	Community Housing and Infrastructure Needs Survey (ABS)
CINDI	Countrywide Integrated Non-communicable Diseases Intervention programme (WHO)
CPSE	Centre for Population Studies in Epidemiology [South Australia]
CURF	Confidentialised Unit Record File
CVD	Cardiovascular disease
DHAC	Commonwealth Department of Health and Aged Care
DHFS	Commonwealth Department of Health and Family Services
DM	Diabetes Mellitus
EEWP	Extended Electronic White Pages (an enhanced EWP system in use in Qld CATI health surveys)
EUPASS	EUropean Physical Activity Surveillance System
EURALIM	EURope ALIMentation (Europe)
EWP	Electronic White Pages
FACS	Commonwealth Department of Family and Childrens Services
FACS	Commonwealth Department of Family and Children's Services
GIS	Geographical Information Systems
GP	General Practitioner
GPPAC	General Practice Partnership Advisory Council
GSS	General Social Survey (ABS)
HFA-DB	Health For All Data Base (WHO)
HIC	Health Insurance Commission
HIV	Human Immunodeficiency Virus
HOIST	Health Outcomes Information Statistical Toolkit (NSW)

HSE	Health Survey for England
IDI	International Diabetes Institute
IPAQ	International Physical Activity Questionnaire
ISR	Institute for Social Research (York University, Canada)
JAG	Joint Advisory Group [on General Practice and Population Health; consists of members of the NPHP and GPPAC]
MONICA	MONItor trends in Cardiovascular diseases project (WHO)
MPS	Monthly Population Survey (ABS)
NATSIS	National Aboriginal and Torres Strait Islander Survey (ABS)
NCD	NonCommunicable Diseases
NCHS	National Center for Health Statistics (CDC)
NCIS	National Coroners Information System (Monash University National Centre for Coronial Information)
NDS	National Drug Strategy
NDSHS	National Drug Strategy Household Survey
NESB	Non English Speaking Background
NH&MRC	National Health & Medical Research Council
NHANES	National Health and Nutrition Examination Survey (NCHS, CDC)
NHF	National Heart Foundation
NHIS	National Health Interview Survey (CDC)
NHPA	National Health Priority Areas
NHPAs	National Health Priority Areas
NHPAC	National Health Priority Action Council [subcommittee of AHMAC; replaces the National Health Priority Committee]
NHPC	National Health Performance Committee
NHPC	National Health Priority Committee [subcommittee of AHMAC; superseded by the National Health Priority Action Council]
NHS	National Health Survey (ABS)
NIPH	National Institute of Public Health (Norway)
NIS	National Immunization Survey (CDC)
NNS	National Nutrition Survey (ABS)
NPHIWG	National Public Health Information Working Group
NPHP	National Public Health Partnership
NPSU	National Perinatal Statistics Unit (AIHW)
NT	Northern Territory
NWAHS	North West Adelaide Health Study (CPSE)
NZ	New Zealand
OATSIH	Office of Aboriginal and Torres Strait Islander Health
PAPI	Paper and Pencil Personal Interviews
PBS	Pharmaceutical Benefits Scheme (HIC)
PCDS	Preventable Chronic Disease Strategy (NT)
PEPHI	Program for Enhanced Population Health Infostructure (NSW)
PHIDU	Public Health Information Development Unit
PHOs	Public Health Observatories (UK)
RDD	Random Digit Dialling
RRFSS	Rapid Risk Factor Surveillance System (Canada)
SAL	Survey of Aspects of Literacy (ABS)
SAMSS	South Australian Monitoring and Surveillance System (CPSE)
SAND	Supplementary Analysis of Nominated Data (BEACH)
SAS	Statistical Analysis Software
SCH	Statistical Clearing House
SDAC	Survey of Disability, Ageing and Carers (ABS)
SERCIS	Social Environmental and Risk Context Information System (SA)
SES	Socio-economic status
SIGNAL	Strategic Inter-Governmental Nutrition Alliance

SIGPAH	Strategic Inter-Governmental forum on Physical Activity and Health
SLA	Statistical Local Area
SLAITS	State and Local Area Integrated Telephone Survey (CDC)
SMHWB	Survey of Mental Health and Wellbeing (ABS)
SNAP	Smoking, Nutrition, Alcohol misuse, Physical inactivity
SNAP(S)	Smoking, Nutrition, Alcohol misuse, Physical inactivity, (Stress)
STDs	Sexually Transmitted Diseases
STEPS	Stepwise Approach to Surveillance of Non Communicable Disease Risk Factors (WHO)
URF	Unit Record File
VIC DHS	Victorian Department of Human Services
VPHS	Victorian Population Health Survey
WHO	World Health Organization
YRBS	Youth Risk Behavior Survey (CDC)
YRBSS	Youth Risk Behavior Surveillance System (CDC)

Acknowledgments

This final report represents a significant amount of time, thought and energy from the jurisdictions participating in the audit, and could not have been brought to this stage without the assistance of many people. The Public Health Information Development Unit (PHIDU), on behalf of the La Trobe Consortium, wishes to thank all involved in the project to date for sharing their views and knowledge, and acknowledges the following people (listed below) in particular for their assistance. We especially thank Di Hetzel, Joy Eshpeter, and Fearnley Szuster for information provided, and, with Margo Eyeson-Annan, for reviewing this report.

Commonwealth:

Australian Bureau of Statistics

Marelle Rawson, Paul Atyeo, Ken Black, Carol Kee, Mike Langan, Marion McEwin

Australian Institute of Health and Welfare

Geoff Sims, Kuldeep Bhatia, Gerard Fitzsimmons, Paul Magnus, Paul Meyer

Commonwealth Department of Health and Aged Care

Joy Eshpeter, Simon Doyle, Colin Sindall (Population Health Division), Klaus Klaucke (Tobacco & Alcohol Section), Jonette McDonnell (National Health Priority Areas), Sharon Tuffin, Trish Donnolly (Environmental Health Section), Georgia Tarjan, Leticia White (SIGNAL Secretariat), Mia Fuso, Catharina van Moort (SIGPAH Secretariat), Cathy McGreevy (National Health Priority Action Council Secretariat)

Commonwealth Scientific and Industrial Research Organisation

Sally Record

National Centre for Aboriginal and Torres Strait Islander Statistics

Janis Shaw

Office of Aboriginal and Torres Strait Islander Health

Carey Smith

States and Territories:

ACT	Cathy Baker, Sally Rubenach
NSW	Louisa Jorm, Margo Eyeson-Annan, Deborah Baker
NT	Edouard d'Espaignet, Cheryl Rae, Noelene Swanson
QLD	Jackie Steele, Kerry Brady, Magnolia Cardona, Gayle Pollard
SA	David Wilson, Anne Taylor, Eleanora Dal Grande, Tiffancy Gill
TAS	Lori Rubenstein; Jeanette Lewis, Rosie Hippel
VIC	Michael Ackland, Loretta Vaughan
WA	Merran Smith, Bernadette Bowman, Jim Cody, Alison Daly, Neil Lynch, Rex Milligan, Lynne Roberts

Non government agencies:

Cancer Council of Victoria, Centre for Behavioural Research in Cancer

Melanie Wakefield, Victoria White

Cancer Council of Victoria, Cancer Epidemiology Centre

Allison Hodge

Menzies School of Health Research

Joan Cunningham

Prometheus Information

George Preston

TVW Telethon Institute for Child Health Research

Stephen R Zubrick

WHO-NCD Project, Menzies Centre for Population Health Research, University of Tasmania

Robert H. Granger

Expert Groups:

Australian Food and Nutrition Monitoring Unit on behalf of SIGNAL (Strategic Intergovernmental Nutrition Alliance)

Geoffrey C Marks, Karen Webb, Ingrid HE Rutishauser, Amanda Lee

National Public Health Partnership

Cathy Mead

National Vascular Disease Prevention Partnership

Stephen Colagiuri, Andrew Tonkin, Andrew Boyden,

Brian Conway, David Harris, Franca Smarrelli, Jeff Donnan, John Knight

SIGPAH (Strategic Inter-Governmental forum on Physical Activity and Health)

Michele Herriot, Mia Fuso, Catharina van Moort

Sallie Newell, co-author of paper on self-report and gold standards.[1]

Expert groups that responded but were unable to provide assistance at the time

Cancer Strategies Group

Rosemary Knight

Cardiovascular Health and Stroke Strategies Group

John Chalmers

CATI Technical Reference Group

---

[1] Newell, SA, Girgis, A, Sanson-Fisher, RW, Savolainen, NJ. (1999) The Accuracy of Self-Reported Health Behaviors and Risk Factors Relating to Cancer and Cardiovascular Disease in the General Population: A Critical Review. American Journal of Preventive Medicine 1999:17(3):211-229. p 213.

National Health Priority Performance Advisory Group

Michael Frommer

Also consulted but no response. National Diabetes Strategies Group and the National Asthma Reference Group.

International:

Health Canada

Bernard Choi

Rapid Risk Factor Surveillance System (Durham Region Health Department)

Philippa Holowaty, Kathy Moran

WHO, Countrywide Integrated Noncommunicable Disease Intervention (CINDI) programme

WHO, Surveillance, Noncommunicable Diseases and Mental Health (STEPS)

Regina Winkelmann

Chapter 1 The feasibility of a chronic disease and associated risk factors information and monitoring system for Australia

1.1 The Feasibility Study

In late 2000, the then Commonwealth Department of Health and Aged Care (DHAC) awarded a tender for the conduct of a feasibility study to investigate the development of a nation-wide behavioural risk factor surveillance system. The system was to encompass data collection, analysis, and reporting, on chronic diseases and associated risk factors, as a basis for policy and intervention developments.

The feasibility study had four parts:

1. conduct an analysis and audit of existing chronic disease and associated risk factor data collections;
2. conduct an analysis and audit of existing chronic disease and associated risk factor monitoring and surveillance policies and practices;
3. conduct a feasibility study on the development of a nation-wide-chronic disease and associated risk factor surveillance system through coordination and harmonisation of approaches across all jurisdictions; and,
4. conduct a feasibility study on the development of supplementary surveillance systems, focusing on Aboriginal and Torres Strait Islander people and on remote regions (DHAC 2000).

1.2 The audit phase

This report summarises and presents key areas related to parts one and two of the study, the audit of existing collections and strategies. The specific project requirements of this audit phase were to:

1. Undertake an audit and analysis of the policies and practices related to chronic disease and associated risk factor monitoring and surveillance in Australia and internationally including the:
    - audit of chronic disease and associated risk factor surveillance and monitoring objectives, policies, strategies and practices across all jurisdictions in Australia, with a focus on preventable chronic conditions and common risk factors;
    - identification of strengths and deficiencies in chronic disease and associated risk factor surveillance and monitoring objectives, policies, strategies and practices across all jurisdictions in Australia; and,
    - identification of international best practice in integrated chronic disease and associated risk factor surveillance data collection, analysis and reporting.
2. Undertake an audit and analysis of the major State/Territory/regional/national data sets and collections, related to chronic disease and associated risk factor surveillance and monitoring, including the:
    - audit of major past, current and planned chronic disease and associated risk factor surveillance and monitoring data sets or collections across all

jurisdictions in Australia, including information on scope and design of the data sets, population groups surveyed eg age group, location information, scope of risk factors identified, and estimated investment in data collection, analysis and reporting;

- identification of strategic chronic disease and associated risk factor health survey information needs and level of data required (national, regional and small-area) as a basis for policy and intervention developments; and,
- identification of strengths and gaps or deficiencies in national data sets or collections related to integrated chronic disease and associated risk factor surveillance and monitoring as a basis for policy, strategy and intervention development and evaluation (DHAC 2000).

1.3 The consortium

The contract to undertake the feasibility study was awarded to the La Trobe/Victorian Public Health Research and Education Council Risk Factor Surveillance Consortium in 2001. The Consortium comprised the following members:

- Faculty of Health Sciences, La Trobe University, Melbourne;
- Victorian Public Health Research and Education Council, Melbourne;
- Public Health Information Development Unit, University of Adelaide; and,
- Menzies School of Health Research / Cooperative Research Centre for Aboriginal & Tropical Health, Darwin.

1.4 Background and context

In August 2000 the National Public Health Partnership (NPHP) endorsed the commencement of work on developing an integrated chronic disease and behavioural risk factor monitoring and surveillance system, as part of its broader strategy for the "development of a framework and national work program for the systematic collection, aggregation and use of public health information at the national level" (AIHW 1999: vi).

At that time there were no integrated, nation-wide data collections in Australia that had the capacity for monitoring chronic diseases and associated risk factors. Existing national health information systems mainly focus on episodes of acute disease, communicable disease or other specific disease events. The state of knowledge on basic population health chronic disease issues such as the epidemiology of established or emerging associated risk factors was poor.

It was envisaged that development of a chronic disease monitoring system would include both the development of a strategy, and an action plan. It was noted that the work would need to be done in close collaboration with State/Territory Health Departments and through established national health information consultative processes.

In 2001 a background paper on a strategic framework for preventing chronic disease in Australia, *Preventing chronic disease: a strategic framework*, was published by the NPHP and endorsed by the Australian Health Ministers Advisory Council (AHMAC) (NPHP 2001(a)) (see section *2.1 Australian policies for chronic disease and risk factor monitoring*). It describes the chronic diseases causing the greatest disease burden in Australia and their major risk factors and determinants. It moves from a static model of lifestyle risk to one

based on a whole-of-life model of chronic disease aetiology that takes into account the interactive and cumulative impact of social and biological influences through life. This dynamic model requires identification of risk factors (e.g. obesity, stress, physical inactivity, unhealthy diet, tobacco use) and determinants (e.g. socioeconomic status, the physical environment, community characteristics, public policy). This framework has been used as the basis of the feasibility study.

The feasibility study represents the action plan and the audit phase represents the background paper for developing an action plan. The audit phase has been designed to outline the current situation in Australia and internationally to provide options for considering an integrated system within Australia. It attempts to draw together several other projects being conducted through, or supported by DHAC, including:

- the *National Health Priority Areas (NHPAs) initiative*, a collaboration between Commonwealth, State and Territory governments which seeks to improve the health of Australians by targeting those diseases or conditions which impose a high social and financial cost and which, with targeted intervention offer the opportunity for significant health gain. The six current NHPAs are: Cardiovascular Health, Cancer Control, Diabetes Mellitus, Injury Prevention and Control, Mental Health, and Asthma.
- the *National CATI (Computer Assisted Telephone Interviewing) Health Survey Technical Reference Group (CATI-TRG)*, supported by the Commonwealth Department of Health and Ageing (DoHA), the Australian Bureau of Statistics (ABS) and the Australian Institute of Health and Welfare (AIHW). The CATI TRG is currently devising standardised questionnaire modules that could be utilised by the State CATI health survey systems so information could be more readily compared.
- the proposed *Australian Health Measurement Survey (AHMS)*, a program of national surveys containing objective measures, being developed by DoHA. The Public Health Information Development Unit (PHIDU) in strategic partnership with AIHW, under the auspices of the NPHP, is developing the business case for AHMS; in line with a key recommendation of the National Public Health Information Development Plan and in the National Public Health Information Working Group's (NPHIWG) work program.
- the *ABS' National Health Survey (NHS)*, supported by DoHA to move to a more frequent survey program (from six to three yearly).

1.5 Terminology

1.5.1 Surveillance or monitoring

Surveillance is the "systematic collection, analysis and interpretation of outcome-specific data essential to the planning, implementation, and evaluation of public health programs" (Thacker & Stroup, 1988). The broad purpose of a chronic disease surveillance system is therefore *to provide on-going trend information* about chronic disease outcomes and their associated risk factors, socioeconomic determinants and health practices, in order *to inform public health action* including the planning, implementation and evaluation of health policies, strategies, programs and other prevention and control measures.

In this report the words "information and monitoring" are used in preference to "surveillance". Although surveillance has positive active connotations for some public health practitioners it also has negative connotations to lay people and can imply unwanted government scrutiny into personal aspects of life. Indigenous organisations in particular have raised concerns about the use of the word surveillance in relation to infectious disease monitoring systems (ANCARD 1997). As the most important aspect of an information system is trust that it will be used appropriately, the use of terms that do not have negative connotations is important.

1.5.2 Risk factors and determinants

'Risk factors and determinants' is used in this report in recognition of the growing international literature showing the importance of including socioeconomic determinants (such as income) alongside traditional risk factors (such as smoking) in any discussion of chronic disease (for a good review of the international literature and pathways see Marmot & Wilkinson, 1999). These broader determinants affect health through a number of important pathways including: material wellbeing (access to food, shelter, clothing, heating, etc), healthy environments (access to recreational facilities, exposure to dust in remote areas), access to services (health, transport, education) and psychosocial wellbeing (work control, social support, general levels of stress). These factors are recognised as providing the backdrop for many behaviours and many behavioural risk factors, such as smoking, are subsequently socially patterned by socioeconomic status. These factors are therefore important when considering strategies for developing information on chronic disease. The need for inclusion of a broader range of health determinants is recognised in Australia's national and State chronic disease strategies (see section *2.1 Australian policies*) and in most current international work in the area (see *Chapter 3 The international situation*).

1.6 Contents of this report

Chapter two of this report, *The Australian situation*, outlines the current Australian situation for chronic disease information in Australia. It outlines current chronic disease policies and the major time series data collections that currently collect chronic disease and risk factor/determinant information. It also examines the qualities that policy makers have outlined as important for information generated by a monitoring system.

Chapter three, *The international situation*, reviews the range of international developments in the area of chronic disease information and monitoring in order to establish some "best practice" examples.

Chapter four, *A monitoring framework and options for the development of chronic disease information in Australia*, provides a framework for considering the chronic diseases and associated risk factors/determinants identified as a policy priority in Australia. Four strategies are outlined for data development to fill information gaps highlighted by the framework.

Chapter five, *The audit of current Australian data collections in relation to chronic disease*, describes the audit of Australian data collections and provides a summary of the data audit.

The full data audit can be found in *Appendix F The full audit of current Australian data collections in relation to chronic disease*.

Internet sites

Australian Department of Health and Ageing (DoHA) website: http://www.health.gov.au/

DoHA Population Health Division website http://www.health.gov.au/pubhlth/

Public Health Information Development Unit website: http://www.publichealth.gov.au

National Public Health Information Development Plan (Australian Institute of Health and Welfare and National Public Health Information Working Group) website http://www.aihw.gov.au/publications/health/nphidp99/

National Public Health Partnership website: http://www.dhs.vic.gov.au/nphp

References

AIHW (Australian Institute of Health and Welfare) (1999) *National Public Health Information Development Plan: Directions and recommendations 1999*. Jointly prepared by the Australian Institute of Health and Welfare and the National Public Health Information Working Group. AIHW Cat. No. HWI 22. Canberra: AIHW

ANCARD (ANCARD Working Party on Indigenous Sexual Health) (1997) *The National Indigenous Australians' Sexual Health Strategy 1996-97 to 1998-99* Canberra: Australian Government Publishing Service

DHAC (Commonwealth Department of Health and Aged Care) (2000) Request for Tender: Feasibility study for developing a chronic disease and behavioural risk factor surveillance system. RFT 76/0001. Canberra: DHAC

Marmot M & Wilkinson RG (eds) (1999) *Social Determinants of Health.* Oxford: Oxford University Press

NPHP (National Public Health Partnership) (2001(a)) *Preventing chronic disease: a strategic framework - Background Paper, October 2001*. Melbourne: NPHP.

Thacker SB & Stroup DF (1998) In Brownson RC & Pettiti DB (eds) *Applied Epidemiology: theory to practice*. New York: Oxford University Press

Chapter 2 The Australian situation

This chapter outlines the current chronic disease information situation in Australia. It is divided into three sections.

The first, *Australian policies for chronic disease and risk factor monitoring*, gives an overview of chronic disease and chronic disease monitoring policies. It builds on an audit of policies and strategies in the national *Preventing chronic disease: a strategic framework* (NPHP 2001), Australia's only overarching national statement on chronic disease.

The second, *Australian time series data collections, indicator sets, reporting and data warehousing*, describes the major time series data collections, indicator sets, reporting and data warehousing in Australia, including:

Data collections:

- National Health Survey (NHS);
- various State-wide Computer Assisted Telephone Interviewing (CATI) health surveys;
- General Social Survey (GSS);
- Health provider collections, including Bettering the Evaluation and Care of Health (BEACH);
- Vital statistics and demography collections;
- Australian Secondary Schools Alcohol and Drug Survey (ASSAD);
- Community Housing Infrastructure Needs Survey (CHINS); and
- Survey of Disability, Ageing and Carers (SDAC).

Data warehouses:

- HealthWIZ;
- Health Outcomes Information Statistical Toolkit (HOIST);
- Victorian Primary Care Partnerships;

The final section, *Desirable qualities of a population health and health behaviour monitoring system*, examines these collections in light of the qualities desired by policy makers for a useful information and monitoring system.

2.1 Australian policies for chronic disease and risk factor monitoring

2.1.1 A national strategy

There is currently no overarching national chronic disease prevention and health promotion policy that could provide a guide for action in Australia (NPHP 2001), but the need for more co-ordination in the area has been recognised and outlined in the National Public Health Partnership's AHMAC endorsed *Guidelines for Improving National Public Health Strategies Development and Coordination* (NPHP 1999). These guidelines called for the development of a framework for a more coherent approach to chronic disease prevention (NPHP 1999).

The national *Preventing chronic disease: a strategic framework* was subsequently developed in a background paper, and endorsed by AHMAC in 2001 (NPHP 2001). The paper sets out the key dimensions of a framework and action plan for chronic disease prevention in Australia, including:

- "clustering" of risk and protective factors, biological risk factors (or markers) and preventable conditions (see Figure 2.1);
- systematic building of the evidence base and information systems to provide the basis for action;
- a "whole-of-life" approach to prevention and health promotion;
- a "whole-of-system" approach to prevention and management of conditions across the continuum of care;
- an explicit focus on addressing and reducing health inequalities; and,
- a strategic management architecture to guide action and improve coordination (NPHP 2001: 3-7).

Criteria for defining priority chronic disease topics in Australia are outlined, including:

- the diseases and conditions included contribute to a significant proportion of the burden of disease, overall and/or for particular population groups;
- they can be prevented, or controlled on the basis of current knowledge;
- they share common modifiable risk factors and underlying determinants which are amenable to prevention;
- there is a strong evidence base for the inclusion of each condition, risk or protective factor, including preventive measures;
- the conditions share elements in their pathogenesis and hence are frequently present as co-morbidities in the same individual, and in population groups with similar exposures;
- the interrelationships between psychosocial factors, mental and physical health are recognised;
- there is a logical relationship between the various components;
- the areas included are compatible with other credible policy frameworks (e.g. WHO);
- there is agreement and support for what is included among key stakeholders; and,
- improvements in coordination, collaboration and integration across the nominated areas are expected to deliver benefits which outweigh the costs of doing so (NPHP 2001: 29-32).

On the basis of these criteria a set of chronic conditions were selected and reported in the strategic framework (Figure 2.1) and these have been used as the basis for the conceptual

framework for the audit phase of the feasibility study into a monitoring system.

Figure 2.1 Topics from Preventing chronic disease: a strategic framework *that fit the selection criteria for priorities in Australia (NPHP 2001: 31)*

Risk and Protective Factors	***Biological Risk Factors/Markers***	***Preventable Chronic Diseases and Conditions***
Behavioural Factors ▪ Diet ▪ Physical activity ▪ Smoking ▪ Alcohol misuse ***Psychosocial Factors*** ▪ "Sense of control" ▪ Social support/social exclusion ▪ Resilience and emotional well-being ***Early life factors*** ▪ Maternal health ▪ Low birthweight ▪ Childhood infections ▪ Abuse and neglect	▪ Obesity ▪ Hypertension ▪ Dyslipidemia (disordered lipids, including ebvated cholesterol) ▪ Impaired Glucose Tolerance ▪ Proteinuria	▪ Ischaemic Heart Disease ▪ Stroke ▪ Type 2 Diabetes ▪ Renal Disease ▪ Chronic Lung Disease (COPD & Asthma) ▪ Certain Cancers (e.g. colorectal, lung) ▪ Mental Health Problems/Depression* *Possible inclusion*: ▪ Oral Health* ▪ Musculo-skeletal conditions
Non modifiable factors: Age, sex, ethnicity, genetic make-up, family history ***Socio-environmental determinants*** (*may or may not be modifiable*): Socio-economic status, community characteristics (e.g. presence/absence of social capital), working conditions, environmental health etc		

* can also be defined as risk/protective factors

Internet sites

National Public Health Partnership (Chronic Disease Strategy) website:
http://www.dhs.vic.gov.au/nphp/chrondis/index.htm

2.1.2 Other chronic disease policies

The background paper *Preventing Chronic Disease: A Strategic Framework* included a partial audit of existing strategies and policies that relate to chronic disease and associated risk factors in Australia (NPHP 2001). This list, which has been expanded to include policies identified by this project and includes some international chronic disease policies, can be found in *Appendix A Policies and strategies related to chronic disease*. The list is not exhaustive but it does show a proliferation of policies in Australia, despite the absence of a unifying mechanism or umbrella policy.

The Northern Territory Preventable Chronic Disease Strategy

The most well developed State-wide policy for chronic disease is the Northern Territory's *Preventable Chronic Disease Strategy*. Its' goals are:

> To reduce the projected incidence and prevalence of the five common chronic diseases (type 2 diabetes, renal disease, hypertension, ischaemic heart disease and chronic airways disease) and their immediate underlying causes (poor nutrition, inadequate environmental health, obesity, physical inactivity, alcohol misuse, tobacco smoking, childhood malnutrition and low birth weight) in the Northern Territory within ten years (Weeramanthri *et al*. 1999: 3),

and,

> To reduce the projected impact – hospitalisations, deaths and financial costs – of the five common chronic diseases in the Northern Territory within three years (Weeramanthri *et al*. 1999: 3).

The five chronic diseases (chosen from a review of health and economic data to determine the greatest health and economic loses) are seen as having common underlying factors and these are seen to accumulate across the life-course from *in utero* and childhood to later life (Figure 2.2). All factors are seen as inextricably linked with broader socioeconomic determinants (particularly education and employment), including the lifestyle factors of smoking and physical inactivity, which are seen as "reflective of unrelenting socio-environmental constraints rather than personal preferences" (Weeramanthri *et al.* 1999: 2). The strategy argues that the major causes of chronic diseases are preventable and early intervention is needed before complications appear. It also recognises that some groups in the population have increased risk and targeting is therefore warranted.

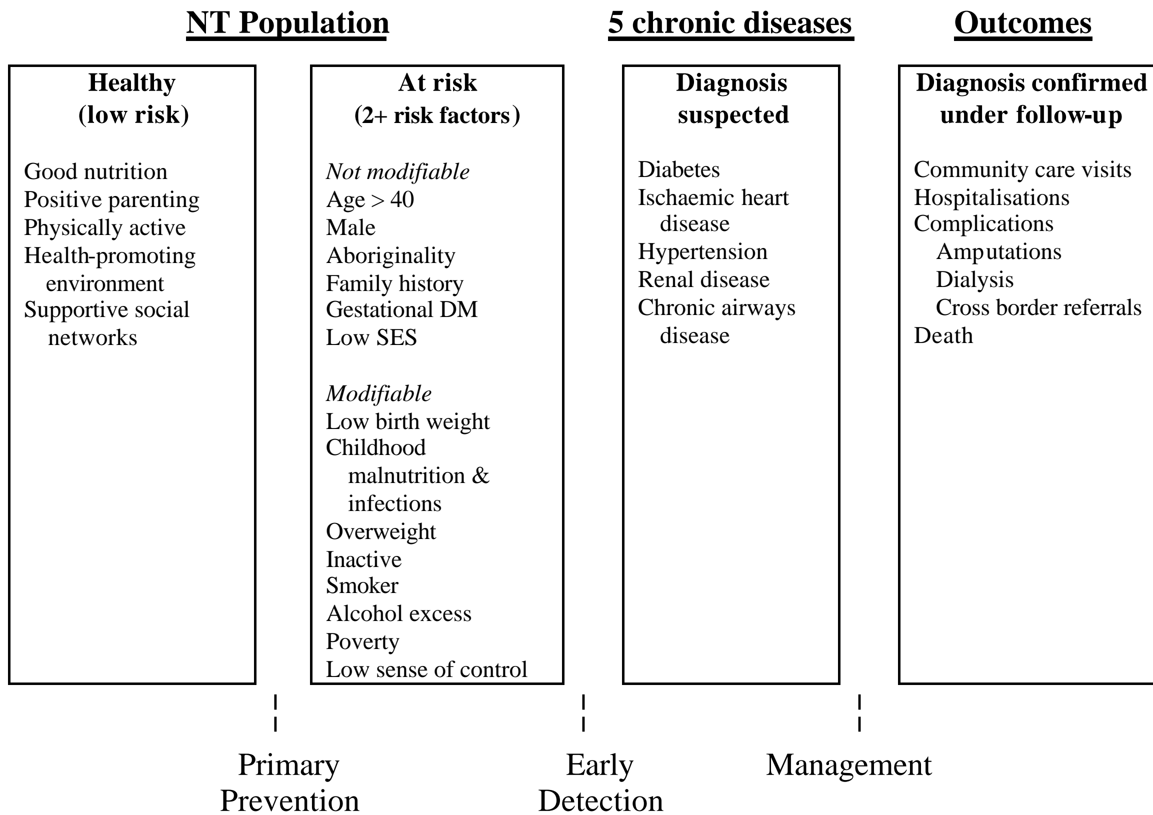
The strategy proposes a framework for the introduction of prevention, early detection and best practice management of chronic disease using the most cost effective interventions currently available (established through an evidentiary review (Weeramanthri & Edmond 1999)) (Figure 2.2). It sets out six "result areas":

1) maternal health;
2) promotion of child growth;
3) underlying determinants of health;
4) lifestyle modification;
5) early detection and early treatment; and,
6) best practice management.

Within each area it further identifies key associations supported by a strong evidence base (i.e. an association with poverty or low birth weight), and, "best buys" defined as programs of discrete sets of activities, also supported by an evidence base, that can be identified and purchased. For example, the first result area is maternal health and one key association is low infant birth weight (Weeramanthri & Edmond 1999: 4). The "best buy" intervention is the aggressive treatment of all maternal infections, which can be achieved utilising the "Strong women, strong babies, strong culture" program (Territory Health Services 2001).

Monitoring chronic disease and associated risk factors/determinants allows for some evaluation of the success of programs as well as providing information about any change in the population groups most affected.

Figure 2.2 The Northern Territory's three point framework to guide implementation – prevention, early detection and best practice management of chronic disease (Weeramanthri et al 1999: 5).



Internet sites

Northern Territory Health Preventable Chronic Disease Strategy website:
http://www.nt.gov.au/nths/cdc/preventable/pcds.shtml

Preventable Chronic Disease Strategy – the Evidence Base: Best buys and key result areas in chronic disease control website: http://www.nt.gov.au/nths/cdc/preventable/evidence.shtml

Health gains website: http://www.nt.gov.au/nths/health_gains/health_gains.shtml

The Smoking, Nutrition, Alcohol and Physical Activity (SNAP) Framework for General Practice

The *Smoking, Nutrition, Alcohol and Physical Activity (SNAP) Framework for General Practice* (also referred to as 'the SNAP Framework') sets out a systematic approach to supporting general practice in more evidence based approaches to identification and management of four key behavioural risk factors (tobacco use, poor diet, alcohol misuse, and inadequate physical activity) which can have a significant impact on the National Health Priority Areas (NHPAs) of cardiovascular disease, diabetes, cancer, mental health, injury, and asthma (JAG (Joint Advisory Group) on General Practice and Population Health 2001). The framework's aims are consistent with and support those of the background paper

Preventing Chronic Disease: A Strategic Framework (NPHP 2001). The framework has been endorsed by the JAG on General Practice and Population Health, the NPHP, and the General Practice Partnership Advisory Council (GPPAC) (Personal communication, L Paton).

Internet sites

Improving Population Health outcomes through partnership with General Practice website (includes the SNAP Framework): http://www.health.gov.au/pubhlth/about/gp/

2.1.3 Population health monitoring policies

The audit identified only one Australian strategy (from NSW) that focuses specifically on population health monitoring. Other States and Territories do not appear to have overarching policies but instead have policies focused more specifically on diseases, disease groups, risk or specific population groups (see *Appendix A Policies and strategies related to chronic disease*).

The NSW Population Health Surveillance Strategy

The *Strategy for Population Health Surveillance in New South Wales* (Jorm & Puech 1997), sets out an approach to monitoring population health status and risks to health (biological, environmental, behavioural) to support health policy. Its' objective is:

> To ensure that we have appropriate, timely and valid population health information to monitor health status and respond to health problems and to support planning, implementation and evaluation of health services and programs in NSW (Jorm & Puech 1997: 2).

The strategy identifies "key surveillance areas" as those with current information gaps such as general health status, cardiovascular disease, physical activity and social health-equity (Jorm & Puech 1997: 8-9). It suggests a time frame (Figure 2.3) and process to prioritise content. The need to develop capacity to: respond to emerging issues; develop monitoring methods; improve the dissemination of information; and evaluate surveillance efforts are also discussed.

Since the document was produced in 1997, many of its strategies have been set in place to meet the information needs identified, and a key component has been the NSW Health Survey Program described in Section *2.2.1 Existing time series collections*.

Internet sites

NSW Health (Population Health Surveillance Strategy) website: http://www.health.nsw.gov.au/public-health/pophsurv/pophsurv.htm

2.2 Australian collections, indicator sets, reporting and data warehousing

2.2.1 Australian time series collections

Australia has a number of data collections available on various aspects of chronic disease and risk factor/determinant topics. The following section outlines Australia's major time series collections, which are:

- the National Health Survey (NHS);
- the various State-wide Computer Assisted Telephone Interviewing (CATI) health surveys;
- the General Social Survey (GSS);
- the health provider collections (hospital morbidity, Medicare, disease registers, BEACH);
- vital statistics and demography collections;
- Australian Secondary Schools Alcohol and Drug Survey (ASSAD);
- Community Housing Infrastructure Needs Survey (CHINS);
- the Survey of Disability, Ageing and Carers (SDAC).

National Health Survey (NHS)

The National Health Survey (NHS) conducted by the Australian Bureau of Statistics (ABS) collects a range of health-related information on a triennial basis (previously five to six yearly) from face-to-face household surveys for the Australian population. Its objectives are to obtain national benchmark information on a range of health issues and to enable trends in health to be monitored over time. Surveys have a core component, repeated in all surveys to provide time series data, and a non-core component which can be varied from survey to survey. An Indigenous supplement was included in the 2001 survey, and in 1995 the National Nutrition Survey (NNS) (which included the objective measurements of blood pressure, height and weight) was linked to it. In 2004-05 the ABS plans to commence the Indigenous Health Survey as a series of surveys (every six years) focusing on Indigenous health and run separately from (rather than as a supplement to) the NHS (ABS unpublished communication, 2002). The NHS covers various topics including health status, recent illness (1995 only), long-term conditions, self assessed health status, general health/wellbeing, health related actions, health risk factors and population characteristics.

Advantages and limitations of the NHS as a population monitoring tool

The key features of the NHS are described in Table 2-2 and a list of the topics covered in the survey can be seen in *Appendix B Topics covered by the National Health Survey and State-wide CATI health surveys*. The advantages of the NHS are that it is:

- national;
- has an excellent response rate; and,
- can provide limited time series data over a substantial period of time (since the inclusion of risk information in 1989-90).

The limitations of the NHS are that:

- the information is self-report;

- it cannot generally provide small area data below capital city/rest of state (although jurisdictions can pay to have over sampling in an area);
- there is a substantial time period between the end of data collection and output of results (9 months for the 2001 survey);
- unit record files cannot be released unless confidentialised (losing geographic detail); and,
- the cost of buying data can be prohibitive.

Data currency has improved with the survey now being run triennially (at the expense of some sample size) but the lack of an annual survey does mean there is competition for topic space.

Internet site

For information on National Health Survey publications see the Australian Bureau of Statistics (ABS) website: http://www.abs.gov.au

State-wide Computer Assisted Telephone Interview (CATI) health surveys

Most of the States and Territories have, or are developing, a CATI health survey infrastructure to survey on a range of health topics within their jurisdictions. The Northern Territory (NT), the Australian Capital Territory (ACT) and Tasmania do not have their own survey infrastructure but multi-state collaborative or 'buddy systems' have been developed, supported by funding from the Commonwealth, to cover these areas. The New South Wales (NSW) program surveys the ACT, the South Australian (SA) program has surveyed the NT (in the WANTSA 2000 survey) and the Victorian program has surveyed Tasmania (in the Community Capacity survey).

Table 2.1 Comparison of topics covered by State & Territory CATI health surveys

Topic areas	NSW *	VIC	QLD	WA	WA NT SA	SA	TAS ‡
Health Conditions	✓	✓	✓	✓	✓	✓	✗
Biological Conditions	✓	✓	✓	✓	✓	✓	✗
Human Function	✓	✗	✓	✓f	✓	✓	✓
Wellbeing	✓	✓	✓	✓	✓	✓	✓
Health Behaviours	✓	✓	✓	✓	✓	✓	✗
Early Life Factors	✓	✗	✗	✓f	✗	✓	✗
Psychosocial Factors	✓	✓	✗	✓f	✓	✓	✗
Environmental Factors	✓f	✗	✓	✓	✗	✗	✗
Community Capacity	✓	✓	✓	✗	✗	✗ f	✓
Socioeconomic Factors	✓	✓	✓	✓	✓	✓	✓
Contact with Health System and Disease Management	✓	✓	✓	✓	✓	✓	✗
Accessibility to health services in general	✓	✗	✓	✗	✗	✗	✗

* ACT included in NSW Older Persons & Child Health Surveys, see Appendix F. ‡ = Community Capacity Survey f = future

Table 2-1 (previous page) summarises the major survey topics included in the different State and Territory surveys. A detailed list of topics can be found in *Appendix B Topics covered by the NHS and CATI health surveys*. The key features of the surveys such as frequency, sample size, area unit, target population groups, reports and data release, are shown in Table 2-2 (following). The timing of surveys in the different States and Territories varies from intermittent (especially previously, e.g. QLD) to continuous (e.g. NSW, WA). Victoria began a series of six CATI health surveys over three years, with data collection for the first survey in 2001, after successful prototype and demonstration surveys. Queensland, with the longest experience in CATI health surveys (since 1992 for the Queensland Regional Health Survey with a sample size of 10 500) is currently consulting with users to rationalise and determine optimum frequencies for (especially time series) topics. Three states (NSW (from February 2002), WA (from April 2002), and SA (planned for 2002)), are currently implementing or considering continuous data collection. SA may soon have three types of CATI survey vehicles: one continuous (SAMSS), one up to three times a year (the user pays Health Monitor) and one intermittent (SERCIS) (see *SA CATI collections* this section).

In the majority of the State-wide CATI health surveys (Victoria, WA, SA), the surveying is outsourced to an external agency while the management, analysis and reporting are performed in-house. The Queensland and NSW programs follow a different model in that they are completely managed and operated in-house.

CATI standardisation: the CATI Technical Reference Group (TRG)

The National CATI Health Survey Technical Reference Group (CATI TRG), was established as a subcommittee of the National Public Health Information Management Working Group (NPHIWG), to develop best practice methods and standardised data tools for the CATI surveys. The CATI TRG's functions are to:

1. Develop and provide expert advice on:
   - CATI health survey best practice to facilitate national consistency in data collection;
   - the development of appropriate CATI modules through the National Health Information Agreement data development processes, including questions for use in CATI health surveys;
   - the technical and logistical issues involved in CATI health surveys, to facilitate the development of infrastructure;
   - priorities for the development of CATI health surveys that meet National, State and Territory specific needs.
2. Establish and implement a work program and report regularly on progress.
3. Inform and make recommendations to NPHIWG on CATI health survey activities and on integration of these efforts within the wider framework of public health information development.
4. Inform and make recommendations to NPHIWG on future activities of this Reference Group.

Table 2.2 A comparison of the key features of the National Health Survey and State & Territory CATI health surveys

	Frequency	Sample size	Area unit/ target population groups	Reports and data release
National Health Survey (NHS)	Triennial from 2001. Previously conducted 1989-90, 1995.	29,100 persons in 2001 including Indigenous supplement (total of 19 000 adults, 10 000 children)	Australia Individual States & Territories (except NT*; excluding Indigenous population) Australia by Geographic/remoteness (ARIA+) : Major cities/Inner regional/Outer regional (including remote & very remote).	Data dissemination strategy. Reports at end of survey (first summary reports within 9 months), supplementary tables available electronically, & access to metadata in electronic form via ABS website. CURF available at cost; & possibly through HealthWIZ.
CATI				
NSW Health Survey Program	Continuous from 200). Surveys of adults 1997, 1998; older persons 1999; children 2001.	22 000 per year (1 300 per Area Health Service (AHS)) all ages	17 regional AHS	Data dissemination strategy planning quarterly & annual reports, & data available through interactive website. CURF available to AHS via HOIST (internet), to other users by request.
VIC Population Health Survey	Time series starting 2001 (6 surveys over 3 years)	7 000 to 10 000 per survey 7 500 completed interviews for 2001 survey 10 000 for 1999 demonstration survey	Urban/rural; some regional (9 VIC DHS regions) Can target age groups, sub-regional areas	Preliminary reporting within 3 months, final 6 months, available on internet. Will assess CURF availability on request.
QLD Omnibus Survey Program	Annual from 2000 First large regional survey in 1992, range of smaller surveys since.	1 000 to 3 000 per survey: disposed as a general population & targeted surveys; or one longer general population survey. Planning 3 000 sample for Omnibus in 2003; previous sample sizes were: 2 500 - Omnibus 2002; 3 100 - Omnibus 2001; 1 500 Omnibus, 800 Asthma & 1 000 Diabetes in 2000.	Urban/rural; zonal (3 zones); some smaller areas Can target age groups, small areas	Reports at end of survey (within 2 months). Will assess CURF/data file availability on request.

Continued on next page

* NT included but sample size to small to adequately report NT separately

Continued from previous page

CATI	Frequency	Sample size	Area unit/ target population groups	Reports and data release
WA	Continuous from 2000. Previous survey 1995.	6 600 per year (500 per month) all ages	11 health regions with rural/remote over-sampling Can target age groups	Quarterly reports to regions (intranet). Overview publication (within 6 months). CURF available to regions.
WA NT SA (run out of WA and SA)	One off 2000	2 500 per State/Territory WA topped up their sample by 7 500	Metropolitan, rural & remote (over-sampling in rural & remote areas) Regional in WA (11 regions)	Reporting at end of survey (draft within 6 months). CURF available on request.
SA SAMSS	Continuous from 2002	7 200 per year (600 per month) all ages	Metropolitan/Rest of State Can target age groups, NESB (larger groups)	Planning quick access to data for departmental users (intranet). Annual report (12 months data) Examining feasibility of CURF release.
SERCIS	Intermittent, ad hoc (>1 per year) since 1997.	Varies from survey to survey: 6 045 Gambling patterns 2001 2 619 Older persons 2000	Up to 7 regions depending on user requirements, sample design & size Can target age groups, NESB, other characteristics	Reports at end of survey (within 3 months). CURF available on request.
Health Monitor	Up to three times a year & on demand since 1999.	2 000 per regular survey; otherwise designed to meet user needs (user pays)	Metropolitan/Rest of State Can target area/s, age groups	Reports at end of survey (within 3 months). User pays CURF available on request.
TAS (run by VIC)	Community capacity 2001	2 500 completed interviews	4 SLAs (of 44 Tasmania-wide)	Reporting within 4 months (available electronically & in hard copy).

Advantages and limitations of the CATI health surveys as population health monitoring tools

There are six main advantages in using the CATI health surveys for population health monitoring:

- they are usually more frequent than large national household interview based surveys such as the triennial NHS and can therefore report more current data, more often;
- they have more timely reporting (i.e. the period between end of data collection to the production of reports is shorter). The time delay for the NHS reports will be a minimum of nine months while CATI surveys can report within two months;
- samples are less clustered and more designed to produce reliable output for small geographic areas (such as health regions) and population groups (such as children and young people, older people, or people of Non-English Speaking Background (NESB)) (Wilson *et al*. 1999; CPSE 1999; NSW Health 2001);
- they have the ability to reach some population groups more readily than other collection methodologies. This applies especially to populations living in remote and/or sparsely settled areas, and NESB populations through the ability to conduct multi-lingual interviews (as demonstrated in the NSW program (NSW Health 2001));
- they can be quickly adapted to collect information on emerging health policy and planning needs; and,
- the unit cost of each CATI survey is generally lower than that of a face-to-face interview (partly because interviews are shorter), which means more interviews can be performed for the same expenditure. Both the NSW and SA systems have demonstrated that telephone interviews are more cost effective than face-to-face interviews for obtaining information on people in rural and remote areas.

The limitations of CATI systems are that:

- the information is self-report;
- some questions or topics are better suited to personal interviews and the use of cue cards and visual aids (e.g. questions on nutrition, medications);
- different States are at different levels of development (in terms of funding, infrastructure and capacity); and,
- aspects of the State systems are not currently standardised and can therefore not be used to describe a nation-wide picture.

Telephone surveys under-represent people without telephones (3% of households in SA in 1998 (Wilson *et al*. 1999: 627)) who are more likely to be poorer, unemployed, Indigenous, and remote (Dal Grande 2002; Harding undated), homeless or institutionalised (in prison, hospital, nursing home etc.) (PHIDU 2001: 3). Although household telephone coverage in Australia is high (97.8% of households had a fixed (and 58.5% had at least one mobile) telephone in 2000 (ABS 2000(b))), it is not uniform, and has been shown to vary according to household attributes, being lower for households of young, unmarried or low income people, and for those living in rented accommodation (Steel & Boal 1988: 291-293). Households with these characteristics are more likely to be under-represented in telephone surveys. However, because of the high coverage, differences between those with and without telephones are unlikely to affect *population* prevalence estimates of health and health behaviours for *most* population groups (Wilson *et al*. 1999; Anderson *et al.* 1998; Ford 1998).

Telephone surveys using the Electronic White Pages (EWP) for sampling (e.g. SA), also under-represent those with unlisted (including silent) numbers (an estimated 15% Australia-

wide in 2000, 18% in SA in 1998, and 12.5% in major SA country towns (Bennett & Steel 2000; Wilson *et al*. 1999; Woollacott *et al.*1999). Households with unlisted numbers are more likely to contain people who are younger; separated, divorced or never married; and unemployed; and to be located in metropolitan areas (Dal Grande 2002; Wilson *et al*. 1999). Use of EWP rather than random digit dialling (RDD) sampling in telephone surveying has the potential for bias, with under-estimation of 'mover households', and of single parent family and unrelated persons households (Bennett & Steel 2000: 269). Although the differences are not large, they should be considered in line with the purpose of the survey.

Two examples of State CATI health surveys: NSW and SA

The following section details two of the most well developed CATI surveys: the NSW Health Survey Program and the South Australian CATI collections. The two States have taken very different approaches to the establishment of survey programs. NSW started with a program of surveys focused on different population groups which have been amalgamated into their continuous collection, while SA has focused on the creation of a range of different survey vehicles based on differently timed collections (infrequent, frequent and continuous).

The NSW Health Survey Program

The *NSW Health Survey Program* is a key element of the NSW Population Health Surveillance Strategy and was established in 1996 to provide State and local area information about the health of the NSW population (NSW Health 2001). In NSW seventeen Area Health Services (AHS) are responsible for the health of geographically defined populations and funding is tied to performance agreements using defined performance indicators. Existing data sets such as the NHS do not provide information at the AHS level (NSW Health 2001) and regional telephone health surveys run by individual AHS during the early 1990s did not produce data that could be compared across areas. The Department therefore developed a CATI health survey, based on a population sample of 1 000 per AHS (17 000 total) per annum.

The objectives of the NSW Health Survey Program are to:

- provide ongoing information on self-reported health status, health risk factors, health service use, and satisfaction with health services, in order to inform and support planning, implementation and evaluation of health services and programs in NSW;
- collect information that is not available from other sources;
- respond quickly to emerging data needs;
- ensure that the information collected is high quality, timely and cost-effective;
- provide a flexible in-house survey facility that can be used for other purposes (for example, rapid surveys to address acute public health issues or disasters, or to provide population information for outbreak investigations);
- foster an increased organisational commitment to outcomes-focused and evidence-based approaches to the monitoring and delivery of health services and programs (NSW Health 2001: 6).

Each of the annual surveys in the program have focused on different population groups (1997 and 1998 on adults, 1999 on older people and 2001 on children). The Health Survey Program also conducts surveys for other NSW Health branches and external partners (including the ACT) and provides information for investigation of infectious and non-

infectious disease outbreaks, environmental problems, evaluation of health promotion activities, and investigation of effects of legislative changes (e.g. smoke detectors) (NSW Health 2001: 7).

The surveys are extensively reported and available both in print format, electronically and on line. Analyses based on data from the 1997 and 1998 NSW Health Surveys have a wide selection of graphs and downloadable files, and in addition to age, sex, and AHS, indicators are examined by region and remoteness, country of birth/language spoken at home/language of interview, highest level of education, socioeconomic status, employment, Indigenous status, and self-rated health status. A notable achievement is the regular conduct of interviews in the major non-English languages used in NSW for people from non-English speaking backgrounds (NESB). The combined 1997 and 1998 adults dataset is available on-line through the Health Outcomes Information Statistical Toolkit (NSW Health 2001) (see section *2.2.5 Current data warehousing of chronic disease and risk factor information*).

From February 2002, the NSW Health Survey Program commenced continuous (11 months per year) data collection focused on information to support the public health priority areas outlined in *Healthy people 2005: New directions for public health in New South Wales* (NSW Health 2000(b)). These include social determinants of health, individual/behavioural determinants of health, major health problems, population groups with special needs, settings, partnerships and infrastructure (Eyeson-Annan 2001). The sample includes all ages (interviewing parents/carers for children under 16) and at least 2 000 interviews will be completed per month (excepting the Christmas/New Year period), giving a total of 22 000 each year, divided equally among AHS's. Age dependant core questions are asked with additional (changeable) modules added to explore AHS-specific questions and emerging issues. Core questions have been fixed for five years. Automated and interactive reporting facilities will be used and key indicator reports will be available quarterly (Eyeson-Annan 2001).

SA CATI collections

SA has two CATI survey vehicles (one frequent, one infrequent) and a third continuous collection is planned for 2002. These surveys are run by the South Australian Centre for Population Studies in Epidemiology (CPSE) as part of a population health surveillance system that also includes an annual face-to-face survey called the Health Omnibus Survey.

The Social, Environmental and Risk Context Information System (SERCIS)

In 1995 the CPSE started it's first CATI collection, an (at least) annual survey called the Social, Environmental and Risk Context Information System (SERCIS). The sample size of some SERCIS surveys is now sufficient to obtain regional data for all seven country health regions in South Australia (Dal Grande *et al.* 2001; Taylor *et al.* 1998).

The original objective of SERCIS was to address the South Australian Health Commission's health goals and targets. By 1997, SERCIS had completed a number of key population studies, including a major study on SA health goals and targets in the health priority areas. Other reports provided data on some health issues in Australia for the first time, addressing aspects of mental health, migrant health, disability and rural health. The SERCIS process has assisted other health units obtain information relating to breast-feeding, social phobia, legionella infection, and colorectal cancer (SAHC 1998). Since 1995, SERCIS has built up a range of reports, including those which report on regional areas. They are available on the

CPSE website although routine access to unit record data or on-line/interactive reporting are not yet provided.

The SERCIS sample has also been used for further, more detailed, research in case control (Scheil et al. 1998), postal, face-to-face surveys (such as the Health Outcomes Survey 1998) and objective measurement studies (such as the North West Adelaide Health Study (NWAHS 2000, 2001, 2002)).

Health Monitor

In 1999 CPSE began it's second CATI survey, the Health Monitor survey of 2000 South Australian households conducted three times a year. Health Monitor, like the Health Omnibus Survey, is a user-pay service.

Planned South Australian Monitoring and Surveillance System (SAMSS)

SA plans to introduce a continuous population health monitoring data collection from 2002 called the South Australian Monitoring and Surveillance System (SAMSS). The continuous monitoring system is conceptualised as small, simple, and with a rapid turnaround of data, initially to internal (SA Department of Human Services) users, possibly later to external users. The planned sample size is 600 per month (state-wide) for a total of 7 200 per year (12 months collection), initially structured to provide estimates at metropolitan/rest of state areas. Quick access to cleaned data is anticipated for Departmental users via intranet, with annual publication of a report covering 12 months data. The feasibility of providing access to a Confidentialised Unit Record File (CURF) is being explored.

Internet sites

National CATI Health Survey Technical Reference (CATI-TRG) website:
http://www.dhs.vic.gov.au/nphp/catitrg/index.htm

State-wide CATI health surveys and/or monitoring

NSW Health Survey Program website: http://www.health.nsw.gov.au/public-health/survey/hsurvey.html

SA Centre for Population Studies in Epidemiology website:
http://www.dhs.sa.gov.au/pehs/CPSE.html

SA Social, Environmental and Risk Context Information System (SERCIS) website:
http://www.dhs.sa.gov.au/pehs/cpse/SERCIS.html

Victorian Population Health Survey website:
http://www.dhs.vic.gov.au/phd/hce/epid/vphs.htm

WA Population Surveys website: http://www.health.wa.gov.au/Publications/cwhs/

General Social Survey (GSS)

The General Social Survey (GSS) is planned for 2002 to collect a range of information, including self-reported health and disability status, on a four yearly basis from face-to-face household surveys for the Australian population. The Indigenous Social Survey (ISS), which will share around 50% of content with the GSS, is planned to be conducted every six years, and to be run separately in 2008. The GSS covers various topics in the areas of demographics, health (self assessed health and disability status), housing, education, work, income, financial stress, assets and liabilities, information technology, transport, family and community and crime. A list of sub-topics for the first GSS can be found in *Appendix C Topics in the General Social Survey*.

Health provider collections

Australia's main health provider based information collections include hospital, Medicare, cancer and diabetes databases and registers. An ongoing national study of general practice activity that collects information about general practitioner (GP)-patient encounters (the BEACH program (Bettering the Evaluation and Care of Health)) also gives health provider information.

The National Hospital Morbidity Database

The National Hospital Morbidity Database is compiled by AIHW from electronic summary records collected in admitted patient morbidity data collection systems in Australian hospitals. The collection is essentially a set of (non-identifiable) summary information about patients who have been separated (i.e. discharged) from (almost all) public and private hospitals in Australia. Information includes demographic, administrative and length of stay data, and data on the diagnoses of the patient, the procedures they underwent in hospital and external causes of injury and poisoning (AIHW 2001(a)). The database is based on hospital episodes and not individual patients, so those who separate more than once have more than one record (AIHW 2000(a)). Financial year data is updated every 12 months (currently held for 1993-94 to 2000-01) and reported annually in *Australian Hospital Statistics* (e.g. AIHW 2002(b)) and in *Australia's Health* (AIHW 2002(a)).

Medicare

The Health Insurance Commission (HIC) administers Australia's universal health insurance scheme, Medicare, and collects billing information on visits and procedures performed in public hospitals and by medical practitioners including GPs, specialists, participating optometrists and dentists (specified services only). On 30 June 2001, there were 20.06 million people registered (HIC 2001). HIC reports annually (e.g. HIC 2001), provides interactive reporting through its website and can provide de-identified information for health researchers.

Disease Registries

There are currently three major national population based disease registries in Australia and they collect information about cancer, diabetes, and end stage renal failure.

Cancer

Cancer (excepting skin cancer) is required to be registered by State and Territory law and the cancer registries collate demographic, diagnosis and treatment information about people

with newly diagnosed cancer from hospitals, pathologists, radiation oncologists, cancer treatment centres and nursing homes. Information about cancer deaths is also collected from the Registrars of Births, Deaths and Marriages. The National Cancer Statistics Clearing House is maintained at AIHW, which uses data collated from registries to monitor cancer incidence, mortality and emerging trends (AIHW 2000(a), AIHW & AACR 2001).

Diabetes

The National Diabetes Register was established in 1999 to collect information about Australians who have insulin-dependant diabetes. It is operated by the AIHW using data from Diabetes Australia and the Australasian Paediatric Endocrine Group (AIHW 2000(a)). The publication of the *National Diabetes Register Statistical Profile 2000* (AIHW 2001(b)), the first statistical report of the National Diabetes Register, marks the availability of the register for research purposes.

End stage renal failure

The Australia and New Zealand Dialysis and Transplant Registry (ANZDATA) was established in 1977 (amalgamating the previously separate registries for dialysis and transplants), and is coordinated by the Queen Elizabeth Hospital, Adelaide. ANZDATA collects a wide range of statistics which relate to the outcomes of treatment of those with end stage renal failure (ANZDATA 2002).

Bettering the Evaluation and Care of Health (BEACH)

The BEACH program (Bettering the Evaluation and Care of Health), is a continuous national study of general practice activity that collects information about general practitioner (GP)-patient encounters. The survey is run by the University of Sydney and the AIHW with a sample determined by the General Practice Branch of the Commonwealth Department of Health and Ageing every three months. A random sample of general practitioners (GPs) is selected from all recognised GPs who claimed a minimum of 375 general practice Medicare items in the most recently available three-month Health Insurance Commission data period (to ensure inclusion of the majority of part-time GPs). Approximately 1 000 GPs participate in the program each year (Britt *et al*. 2001).

Each GP records details from 100 doctor-patient encounters on structured paper encounter forms that examine morbidity managed at the encounters as well as characteristics of the health care delivery, prescription and advice on medication, and provision of other treatments. A supplementary component within BEACH, the SAND program (Supplementary Analysis of Nominated Data), collects additional information about the patient, such as their health risk behaviours and use of health care services, from the patient. SAND collects core information on patient height, weight, patient-assessed well-being, alcohol use and smoking status from every GP. It also contains a section that varies to address different issues related to patient/health care delivery in general practice.

The BEACH program has three primary aims:

- to provide a reliable and valid data-collection process for general practice that is responsive to the ever-changing needs of information users;
- to establish an ongoing database of GP-patient encounter information; and
- to assess patient risk factors and health states and the relationship these factors have with health service activity (Sayer *et al*. 2000:1).

GPs receive an analysis of their results compared with nine other unidentified practitioners, the national average and with targets relating to the National Health Priority Areas. Each participating GP earns audit points from the Royal Australian College of General Practitioners towards his or her quality assurance requirements.

Internet sites

The National Hospital Morbidity Database (AIHW):
http://www.aihw.gov.au/hospitaldata/morbidity.html

Health Insurance Commission (HIC) (Medicare) website: http://www.hic.gov.au/corp/

Internet sites (continued)

National Cancer Statistics Clearing House website (AIHW):
http://www.aihw.gov.au/cancer/ncsch/index.html

National Diabetes Register Statistical Profile website (AIHW):
http://www.aihw.gov.au/publications/cvd/ndrsp00/index.html

The Australia and New Zealand Dialysis and Transplant Registry website:
http://www.anzdata.org.au/ANZDATA/anzdatawelcome.htm

The Family Medicine Research Centre and AIHW GP Statistics and Classification Unit website: http://www.fmrc.org.au/

BEACH, General Practice Activity in Australia (AIHW):
http://www.aihw.gov.au/publications/gep/gpaa00-01/index.html

Vital statistics and demographic information

Australia's detailed vital statistics collections based on births and deaths registrations are briefly described below. The major demographic collection is the five yearly Census of Population and Housing conducted by the ABS (most recently in 2001), and various collections producing population estimates (by age, sex, country of birth, Indigenous status, registered marital status, geographical distribution) as well as estimates of families and households (ABS 2001(a)). Population projections are published regularly by ABS, as well as statistics on births, deaths, marriages, divorces, overseas arrivals and departures, and internal migration.

The National Mortality Database and National Death Index

State and territory Registrars of Births, Deaths and Marriages collect primary information relating to deaths through the death certification process. All factors contributing to a death are recorded by Registrars. The ABS codes these causes, selects the underlying cause of death, and makes the data available to the AIHW National Mortality Database. The data contained are reported in various AIHW publications, notably the *Australia's Health* series, which presents information on the levels and trends in deaths overall and from various causes in Australia (Reid 2000). The Registrars also provide index level information on the fact of death (all deaths from 1980 on), to the AIHW National Death Index on a continuous

basis (monthly or quarterly). The Index is used for the purpose of linking across databases, such as cancer registries, or for approved population-based studies. Underlying cause of death information is annually added to the National Death Index from the National Mortality Database (AIHW 1999).

The National Perinatal Data Collection

The National Perinatal Data Collection is based upon an agreed national perinatal minimum data set; and is an annual collation of State and Territory perinatal data by the AIHW National Perinatal Statistics Unit (NPSU). Data are collected at the hospital level by midwives and other health information staff from mothers as well as from hospital and other records to complete notification forms for all births of 20 weeks or more gestation, or birthweight of 400 g or more. The information collected includes characteristics of the mother; previous pregnancies; the current pregnancy; labour, delivery and the puerperium; and the baby's birth status (live birth or stillbirth), sex, birthweight, Apgar scores and outcome (Nassar & Sullivan 2001: 1). The NPSU publishes the annual *Australia's mothers and babies* report (e.g. Nassar & Sullivan 2001) as well as other reports which draw on the perinatal data.

Internet sites

Information and publications on Australia's major demographic collections, including the *Census of Population and Housing*, and vital statistics (births, deaths, marriages, etc) can be found at the Australian Bureau of Statistics (ABS) website: http://www.abs.gov.au/

Information and publications on Australia's detailed vital statistics collections can be found at the Australian Institute of Health and Welfare (AIHW) website: http://www.aihw.gov.au/

AIHW National Mortality Database website: http://www.aihw.gov.au/mortality/index.html and http://www.aihw.gov.au/mortality/mortality_database.html

AIHW National Death Index website: http://www.aihw.gov.au/cancer/ndi/index.html

AIHW National Perinatal Statistics Unit (NPSU) website: http://www.npsu.unsw.edu.au/
Perinatal Data Collections website: http://www.npsu.unsw.edu.au/Data.htm

Australian Secondary Schools Alcohol and Drug Survey (ASSAD)

Australia generally has few collections on children and young people and even fewer which have a time series and are ongoing. The NHS has already been discussed above (see *National Health Survey*, this section). The Australian Secondary Schools Alcohol and Drug Survey (ASSAD) is notable for the length of its time series and for being conducted in the schools setting.

ASSAD is a national triennial survey of secondary school students (aged 12 to 17 years) coordinated by the Centre for Behavioural Research in Cancer (CBRC) of the Anti-Cancer Council of Victoria (ACCV) and run by individual States and Territories. ASSAD

commenced in 1984 and is run triennially. The core survey material covers demographics, smoking, alcohol and illicit drug use. Individual States and Territories can piggyback supplementary surveys onto the core survey, for example, in 1990 (VIC, SA) and 1993 (ALL) jurisdictions asked questions related to sun behaviours and in 1999 VIC included questions on attitudes and access to cigarettes/tobacco and alcohol, use of free time, future intentions, memory/impact of health promotion advertisements (e.g. on asthma, diabetes, mental health, skin cancer) (CBRC 1999(a), CBRC 1999(b)). Some States are now discussing the addition of questions on expanded risk factors including diet and physical activity.

The purpose of ASSAD is to:

- provide baseline data on drug use and exposure, knowledge and attitudes;
- monitor and evaluate National Drug Strategy issues;
- develop drug related trend data; and,
- identify needs and strategies to address drug related problems (DHAC & AIHW 2000: 59).

Junior and senior schools identified through a random sample are approached to participate in the survey, and if they agree, a random sample of approximately 80 students from mixed years is drawn from school rolls (20 students each from junior school years 7 to 10; 40 students each from senior school years 11 and 12). In 1996 the overall school response rate was 77%, and student response rate was 91% (a total of 31,529 students surveyed nation-wide in 434 schools). Both response rates, however, are declining as demands on staff and students (particularly year 12 students) increase, and as more surveys make approaches to schools. Some schools now ration school-based surveys to three per year, making it important to coordinate research demands in this setting (in 1999 the (then) DHAC funded CBRC's national coordination to ensure that schools were not approached by other stakeholders to run surveys with overlapping content). The CBRC identifies chronic truants and early school leavers as likely to be under-represented in the survey.

Although coordinated nationally, each State/Territory runs its own survey and manages its own supplementary data, while CBRC reports on the survey nationally (Hill *et al.* 1986; White *et al.* 1988; Hill *et al*. 1993; Hill *et al*. 1999). The Commonwealth has access through the provision of national 'uninterpreted' unit record data, which is used for broad level monitoring and evaluation of the National Drug Strategy and to inform policy interventions at both state and national levels (DHAC & AIHW 2000: 59-60).

Community Housing Infrastructure Needs Survey (CHINS)

The Community Housing Infrastructure Needs Survey (CHINS) is one of few data collections that focuses on a subpopulation, in this case, the Aboriginal and Torres Strait Islander population (urban, rural and remote). CHINS is a census of all Aboriginal and Torres Strait Islander (ATSI) discrete communities and Indigenous housing organisations in all States and Territories. Information is available only at the community/organisation level (no person level data is collected) and population estimates relate to the total community population and may include non-Indigenous persons.

CHINS collects nation-wide Indigenous statistics on housing conditions (housing stock, management practices and financial arrangements of Indigenous organisations that provide housing to ATSI people), and a wide range of infrastructure details (such as water, power and sewerage systems, education facilities and health services). For health these include

distance to nearest hospital, first aid clinic and chemist/dispensary and presence of health promotion programs.

The survey aims to provide information that can be used to:

- identify and assess community and housing related infrastructure in discrete ATSI communities, and to make basic assessments of other ATSI community housing;
- contribute to the process of planning future development ATSI communities;
- provide a basis for evaluating future need in ATSI communities; and,
- facilitate the development of databases on ATSI communities and other ATSI community housing in each State and Territory (ABS 1999(a): 60).

During 1997/98 the Aboriginal and Torres Strait Islander Commission (ATSIC) commissioned research to determine the status of existing data sources relating to Indigenous housing and infrastructure. This research concluded that inconsistencies between collection methodologies and reference periods meant that no nationally consistent data existed (SCH 1999). The ABS was then commissioned and funded by ATSIC to conduct the survey under the authority of the *Aboriginal and Torres Strait Islander Commission Act 1989* to fill these identified information gaps (ABS 2000(a): iv). CHINS has been conducted in both 1999 and 2001 (in conjunction with the Census (ABS 2001(b): 1)). In 1999 a total of 707 Indigenous housing organisations (20 424 dwellings) and 1 291 discrete Indigenous communities (15 603 dwellings, 109 994 persons) were surveyed.

The survey is conducted through personal interview with key members of Indigenous housing organisations and communities, including community council chairpersons, administrators, coordinators, clerks, housing officers, water and essential service officers and health clinic administrators. CHINS was the ABS first survey undertaken in this manner and extensive testing and validation have confirmed the suitability of the methodology for this survey (ABS 2000(a): 61-62). CHINS is reported through publications and access to unit records is through a file prepared for ATSIC.

Internet site

Publications from CHINS can be found at the Australian Bureau of Statistics (ABS) website: http://www.abs.gov.au

Survey of Disability, Ageing and Carers (SDAC)

The ABS Survey of Disability, Ageing and Carers (SDAC) collects information on people with disabilities, older persons, carers and controls (for comparison of demographic and socioeconomic situations) (ABS 1999(b)). In 1998, for the first time, household interviews were conducted using computer assisted personal interviewing (CAPI) to collect, store, manipulate and transmit data. In 1998 a total of 37 580 persons in households and 5 716 persons in cared accommodation were enumerated, (a response rate of 93%), with 84% fully responding. DHAC and FACS use the information as the basis for allocating and distributing program funds to State governments (ABS unpublished communication).

Four national surveys have been run (1981, 1988, 1993 and 1998) and some information in each changes over time after consultations with users to ensure disability and caring issues

are adequately covered. For instance, the scope of the survey was expanded from 1988, to collect information about informal carers of people with a disability and the 1993 and 1998 surveys collected information about people living in cared accommodation, such as nursing homes, as well as those in households (ABS 1999: 1-2). Comparison between surveys is complex.

Internet site

Publications from the Survey of Disability, Ageing and Carers can be found at the Australian Bureau of Statistics (ABS) website: http://www.abs.gov.au

Other time series collections

Other nation-wide, time series collections, not previously mentioned (on which more information can be found in *Appendix F*), include the National Drug Strategy Household Survey, which focuses on risk factors including tobacco and alcohol as well as use of a range of other (illicit) drugs; and the dental collections, which include the National Dental Telephone Interview Survey and the Child Dental Health Survey.

Internet sites

Reports from the National Drug Strategy Household Survey can be found under the heading of Statistical Data in the National Drug Strategy website: http://www.health.gov.au/pubhlth/nds/resources/publist.htm

Information on the dental data collections can be found at the Dental Statistics and Research Unit website: http://www.adelaide.edu.au/socprev-dent/dsru/data_frame.html

2.2.2 Proposed time series collections

Australian Health Measurement Survey (AHMS) program

The Australian Health Measurement Survey (AHMS) is proposed as a program of cross sectional population health surveys, collecting objective measures to examine a range of disease outcomes and risk factors/determinants in the Australian population over time. The proposed AHMS is recommended to commence in association with the NHS program in 2004/5 and be repeated at a time interval of six years with the possibility of more frequent repeats once the initial survey has been analysed. The objective (physical and biochemical) health measures collected by AHMS will complement the subjective (self-report) information collected by the NHS for the Australian population (see previous entry this section). The surveys have been designed to contain core measures taken at every survey, which will include the major risk factors and determinants for chronic disease, and special

interest modules that will change at each survey to focus in more detail on particular diseases of topics of interest. A business case for the survey was prepared by PHIDU for AHMAC in 2002. Approval and funding have been gained for the survey to be piloted in 2003.

Australia does not currently have a regular national survey that includes physical and biochemical measures. The only national surveys that have taken such measures in Australia have been the:

- National Heart Foundation capital cities surveys took blood, blood pressure, fasting glucose (1980 and 1983 only) and body measurements in adults (aged 20+ years) in 1980, 1983, 1989;
- Australian Council for Health, Physical Education and Recreation Inc.'s Australian Health and Fitness Survey took blood, blood pressure and body measurements in students (aged 7 to 15 years) in 1985;
- Environmental Protection Authority's National Survey of Lead in Australian Children took blood in children (aged 1-4 years) in 1995;
- National Nutrition Survey took body measurements and blood pressure (16+ only) in a NHS sub-sample of adults and children (aged 2+ years) in 1995; and,
- International Diabetes Institute's Australian Diabetes, Obesity and Lifestyle Study (AusDiab) took blood, blood pressure, bioimpedance, urine, ECG, body measurements, (foot screening, sensory tests and retinal photography in a sub-sample) in adults (aged 25+ years) in 1999.

State-wide continuous CATI health survey collections

Three of the States, NSW, SA and WA, are currently implementing or planning continuous CATI collections. The NSW and SA collections are described in *Two examples of State CATI Surveys: NSW and SA* earlier in this section. The WA survey is proposing a similar approach to that of NSW (although using an external contractor to collect data) with an annual sample size of around 6 600 designed to give estimates at the health region level. Table 2.2 provides a comparison of the key features of the NHS and the State & Territory CATI health surveys, including the continuous collections proposed or in implementation.

2.2.3 Current indicator sets

There are a range of indicators on different aspects of chronic disease that already exist in Australia and it is important that any new work builds on the large amount of work that has already been undertaken in this area. The audit therefore examined existing indicator sets that include chronic disease and risk factor topics. Eleven sets of performance indicators have been identified and documented in an inventory in the National Health Performance Committee's (NHPC) *Fourth National Report on Health Sector Performance Indicators* (NHPC 2000: 73) and are listed in Table 2.3.

Table 2.3. The National Health Performance Committee's inventory of performance indicators (NHPC 2000).

National Health Ministers' Benchmarking Group including subsets: Health status and health determinants; Acute hospital performance indicators.
National Health Priority Areas including sub sets: Cancer control; Cardiovascular health; Diabetes; Injury, prevention and control; Mental health.
Australian Health Care Agreements
Public Health Outcome Funding Agreement 1999-04 including subsets: National drug strategic framework; National childhood immunisation program; National older persons immunisation program; BreastScreen Australia; National cervical cancer screening program; Alternative birthing; Female genital mutilation
Commonwealth Budget Papers 1998/99 including subsets: Population health and safety; Access to Medicare; Enhance quality of life for older Australians; Quality health care; Rural health care; Hearing services; Aboriginal and Torres Strait Islander health; Choice through private health; Health investment
Maternity Services
Interim National Performance Indicators for Aboriginal and Torres Strait Islander Health
Palliative Care Draft Indicators (1998)
National Cervical Cancer Screening Monitoring Indicators
National Breast Cancer Screening Monitoring Indicators
Standards for General Practitioners (Draft January 2000)

Source: NHPC 2000, Appendix D, pp 73-85.

The National Health Priority Areas (NHPA) indicators are the latest to have been developed and include the leading indicators reported in *Australia's Health* (AIHW 2000(a)). They were originally developed by expert groups as a small number of strategic tracking indicators for Health Ministers, as part of Australia's response to the WHO *Health for All in the Year 2000* initiative. These indicators will be further progressed through the National Health Priority Performance Advisory Group and the expert committees responsible to the National Health Priority Action Council (NHPAC). Of the current 120 NHPA indicators 80 are reported. Table 2.4 gives an overview of the current status of the NHPA indicator sets in Australia.

Table 2.4 National Health Priority Areas: status of existing indicator sets

Topics	**Indicator set**	**No of indicators**	**Relationship of data to indicators**
Ischaemic heart disease, stroke, associated risk factors	National Health Priority Area (NHPA): Cardiovascular health	30 (8 risk factors; 22 cardiovascular health)	2002: 8 out of 8 risk factor indicators; 10 out of 22 cardiovascular health indicators reported.
Diabetes	NHPA: Diabetes mellitus	20	2002: 16 out of 20 indicators reported.
Injury	NHPA: Injury prevention and control	34	2002: 20 out of 34 indicators reported.
Mental Health	NHPA: Mental health	10	2002: 5 out of 10 indicators reported.
Cancer Control	NHPA: Cancer control	26	2002: 21 out of 26 indicators reported.
Asthma	NHPA: Asthma	20	Assessment of available data to occur after indicators endorsed.

Sources: AIHW 2000(a); AIHW 2000(b); AIHW 2002(a); AIHW & DHFS 1997; DHFS & AIHW 1998 (a & b), DHAC&AIHW 1998; DHAC&AIHW 1999(a & b); DHAC NHPA Unpublished list 2001.

2.2.4 Current reporting of chronic disease information

The Australian Institute of Health and Welfare (AIHW)

The AIHW is Australia's national health and welfare statistics and information agency, and is part of the Commonwealth's Health and Aged Care portfolio. The Institute releases the following major publications covering national chronic disease information:

General public health reports:

- *The burden of disease and injury in Australia* (Mathers *et al.*1999);
- *National Public Health Information Development Plan* (AIHW & NPHIWG 1999);
- *Australia's Health* (biannual) (e.g. AIHW 2000(a)); and,
- *Australian Health Trends* (five yearly) (e.g. de Looper & Bhatia 2001).

Reports on the National Health Priority Areas:

- *National Health Priority Area Reports* on: Cancer control (DHFS & AIHW 1998(b)), Cardiovascular health (DHAC & AIHW 1999(b)), Diabetes mellitus (DHAC & AIHW 1999(a)), Injury prevention and control (DHFS & AIHW 1998(a)), Mental health (DHAC & AIHW 1998) and the draft report on Asthma (AIHW 2000(b));

Reports on chronic disease:

- *Chronic Diseases and Associated Risk Factors in Australia 2001* (AIHW 2002(c));

Reports on population groups:

- *The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples* (ABS & AIHW 2001);
- *Australia's children: their health and wellbeing 2002* (Al-Yaman *et al.*2002);
- *Australia's young people: their health and wellbeing 1999* (*Moon et al*. 1999); and,
- *Australia's Mothers and Babies*, (annual) (e.g. Nassar & Sullivan 2001).

Health provider reports:

- *Australian Hospital Statistics* (annual summary, which includes characteristics of the hospital care of people admitted to public and private hospitals in Australia) (e.g. AIHW 2002(b));
- BEACH, *General Practice Activity in Australia* Reports (see AIHW website).

Internet sites

Australian Institute of Health and Welfare (AIHW) website: http://www.aihw.gov.au/

AIHW publications: for a full list see *Publications: Health*
http://www.aihw.gov.au/publications/health.html

AIHW datasets: for a list including contacts see *Data Online: Data Collection Contacts*
http://www.aihw.gov.au/dataonline/datacontacts.html

The Social Health Atlas of Australia

PHIDU has published a Social Health Atlas of Australia (2nd Edition) (Glover *et al.* 1999), available in print and also on line. The Atlas brings together a wide range of information about the health status and health service use of the Australian population which is shown graphically in maps. The Atlas seeks particularly to illustrate the linkages between socioeconomically disadvantaged areas, poorer health status and greater use of services.

> **Internet sites**
> Public Health Information Development Unit (PHIDU) website:
> http://www.publichealth.gov.au/phidu.htm
> The Social Health Atlas of Australia is available from:
> http://www.publichealth.gov.au/atlas.htm

Program for Enhanced Population Health Infostructure (PEPHI)

The Program for Enhanced Population Health Infostructure (PEPHI) comprises a series of projects to improve access to, and analysis and reporting of, population health information in NSW (NSW Health 2000(a): 9). The proposed developments aim to enhance access to useful population health information for:

- health professionals working outside the public health system, administrators, planners and policy analysts working in non-health sectors, students, and the general public.
- public health system staff at all levels.
- data analysts and researchers to population health data and to relevant analytical techniques and facilities (NSW Health 2000(a):10).

PEPHI proposes to meet these goals through three major strategies:

- expansion of *internet*-based publication programs to dramatically expand the current publication program by using electronic publishing on the internet and intranet to provide a wider range of health indicators, and more information at the AHS and smaller geographic levels.
- development of a range of *intranet*-based interactive analysis and reporting facilities to provide more flexible access to information for staff in the public health system.
- enhancement of the Health Outcomes and Information Statistical Toolkit (HOIST) facility to promote easier access to data collections for skilled analysts and researchers and to provide infrastructure for the first two strategies (NSW Health 2000(a)).

The benefits are perceived as: provision of more detail and improved timeliness of information; promotion of a population-based perspective in health policy development and services planning and delivery; and promotion and facilitation of population health research in NSW using the wide range of data already available.

Internet site

NSW Health, Program for Enhanced Population Health Infostructure website:
http://www.health.nsw.gov.au/public-health/pephi/index.html

2.2.5 Current data warehousing of chronic disease and risk factor information

HealthWIZ: National Social Health Database

HealthWIZ (developed by Prometheus Information)is a data base of a range of national health data collections that allows users to create statistical tables and maps of information about the demographic and socio-economic characteristics, health status and health service use of Australian communities. HealthWIZ currently includes the national population census, population counts (used in rates calculations), hospital morbidity data, aged care data, cancer registry data, Medicare claims data and cancer screening updates. HealthWIZ provides access to the ABS National Health Survey, and datasets based on other health surveys are under development or are planned. Most of the data collections are available in time series, and enable statistics to be generated for small areas. HealthWIZ is currently available as a CD ROM and is moving towards usage on line (sample data is currently available).

Internet sites

Prometheus Information website: http://www.prometheus.com.au

HealthWIZ, Australia's National Social Health Database website:
http://www.prometheus.com.au/healthwiz/hwiz.htm

HealthWIZ on line website: http://www.prometheus.com.au/hwonline/hwzonl.htm

Health Outcomes Information Statistical Toolkit (HOIST) (New South Wales)

New South Wales Health Outcomes Information Statistical Toolkit (HOIST) is a population health data access and analysis facility developed and operated by the Epidemiology and Surveillance Branch for use by NSW Health Department and Area Health Service staff in population and public health.

The facility provides access to most of the datasets relevant to population health, including NSW Health Department data collections covering notifiable (communicable) diseases, cancer, births, birth defects, dental health, hospital inpatient statistics, emergency department presentations, and population-based survey data, as well as data sourced from the Australian Bureau of Statistics (Census, population, mortality and survey data) and other organisations. Historical as well as current data are available for most data collections on HOIST, and as

far as possible code values and variable names used in the data collections have been made consistent with one another (and with national standards where appropriate).

HOIST also provides a comprehensive and documented set of tools and techniques, based on the SAS software system but developed by HOIST users themselves, for the manipulation, analysis and reporting of the data to which the system provides access. Data warehouses such as HOIST, allow 'data mining' and 'quarrying' for analysis, hypothesis testing, and modelling. They do however, rely on sophisticated analytic techniques, and users and potential users have indicated that they would make better use of HOIST data if they had technical assistance (Eyeson-Annan 2001).

Internet site

NSW Health, Health Outcomes Information Statistical Toolkit website:
http://www.hprb.health.nsw.gov.au/public-health/epi/hoist.html

Victorian Primary Care Partnerships resource

The Victorian publication, *Primary Care Partnerships: Selecting and accessing population data— an information resource,* is a paper-based information resource (Ruth *et al*. 2001). Although the data sets are not collected together in one access site, the publication describes how to access them, and more importantly, how to use the primary data for analysis of local areas.

Internet site

The publication is available from the Primary Health Knowledge Base website (Department of Human Services, Victoria), a knowledge exchange system for Victorian primary health service planners, funders and service providers:
http://hnb.ffh.vic.gov.au/acmh/phkb.nsf

2.3 Desirable qualities of a population health and health behaviour monitoring system

2.3.1 Desirable qualities as determined by Commonwealth policy makers

Consultations were held early in this project with program and policy makers to identify national information needs. The policy makers were from the Commonwealth Department of Health and Aged Care's Drug Strategy and Population Health Social Marketing Branch, National Drug Strategy Unit, Primary Prevention Section and from the National Health Priority Action Council. Policy makers were asked to characterise the current chronic disease and associated risk factor information situation in Australia and then outline an ideal system.

Program and policy makers described the current situation in relation to chronic disease monitoring as generally uncoordinated and fragmented. They reported that accessing information was often difficult and the information that could be obtained was often poorly analysed, limited, relatively old, lacked time series and had poor linkages between risk factors and diseases. They particularly noted that information coming from many different sources (e.g. media, internet, library, ABS, AIHW, research institutes, States and Territories) was not comparable due to different definitions and measurements. Specific data gaps were identified as: small areas, chronic disease management, population groups, knowledge and attitudes, consumer data on service access and satisfaction, and data that could be used for program evaluation.

The key deficiencies in the current situation were identified as:

- lack of timeliness;
- lack of small area data;
- lack of information on some priority population groups such as children and youth, older persons, NESB populations and Aboriginal and Torres Strait Islanders; and,
- lack of integration or integrated reporting.

When asked what the ideal situation would be, program and policy makers reported they would like a clear statement of the current data picture. Ideally national data collection would be a coordinated and integrated system, with standardised measures (still with room for local initiatives), and good linkages between jurisdictions. The integrated system would be:

- comprehensive;
- times series;
- quick response;
- have easy data access;
- have agreed definitions and standard measures;
- provide universal population health indicators including performance indicators;
- include risk factors, including biological risk factors through the proposed Australian Health Measurement Survey, and population groups;

- attempt to link various collections;
- cover small areas and be geographically diverse; and,
- have a national dissemination plan.

Policy makers also outlined the need for accessible integrated information on interventions through initiatives such as data clearinghouses such as a central tobacco control data archive on clinical effects.

The following section examines in detail the key deficiencies in the current situation as reported by Commonwealth program and policy makers.

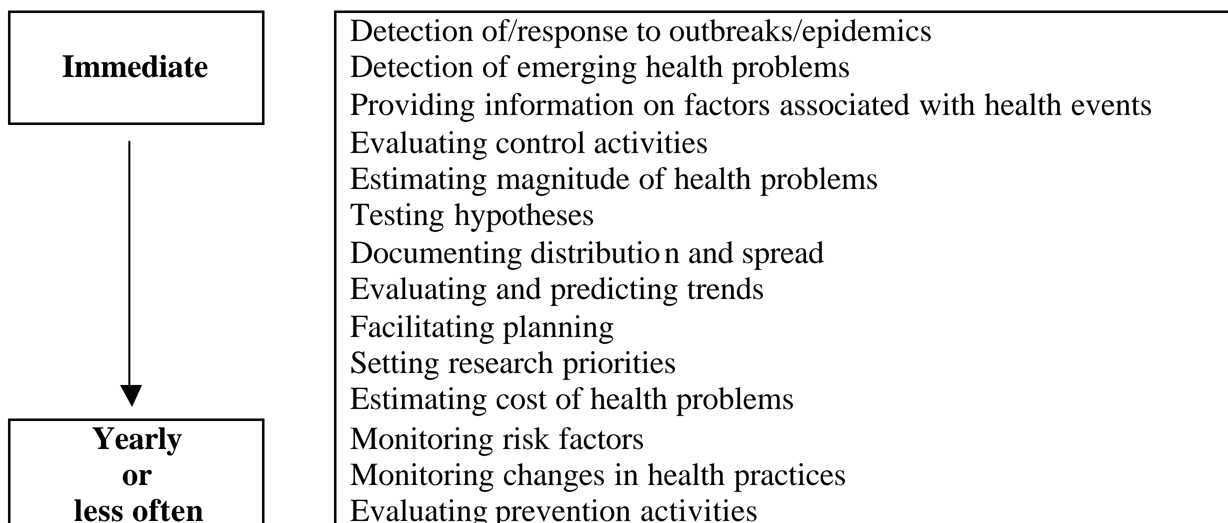
2.3.2 Lack of Timeliness

Technically, 'timeliness' means the period from the end of data collection to the release of an information report or data for policy makers to use. In this report the term is used more broadly to include the frequency of a survey. The result of poor timeliness is old data, and some policy makers suggested that the usefulness of some of Australia's chronic disease information is compromised because it is old by the time it becomes available. For instance, the five NHPA indicator sets reported in AIHW's *Australia's Health 2000* were based on data from 1998 or previous periods (AIHW 2000(a)). It has been noted in the literature that a rapid turn-around is often more important to policy makers than absolute accuracy and completeness (Berkelman *et al*. 1997: 746).

Determining the optimal timeliness of information, however, is an area that has received little attention. It is likely that some indicators would be best suited to ongoing or close time series surveying while others would be needed less frequently to detect meaningful changes. For example, detection of HIV requires close time series or continuous monitoring while cholesterol levels have changed little in over 20 years (Dunstan *et al*. 2001) and frequent monitoring is therefore unnecessary.

Some programs are now working towards schedules of optimum times for the collection of different topics (e.g. QLD, NSW). The NSW *Strategy for Population Health Surveillance in New South Wales* gives a general description of timeliness for the different categories of factors, which is outlined in Figure 2.3 (Jorm & Puech 1997: 5).

Figure 2.3 Time frame for uses of population health surveillance data (Jorm & Puech 1997: 5)



A more specific schedule is set out in the New Zealand Ministry of Health's, (2001) *Indicators of Inequality*, which divides indicators into short term (3-5 years) 'rapidly responsive', and longer term (10 years), for which rapid change cannot realistically be expected (Table 2.5) (New Zealand Ministry of Health 2001: 14).

Table 2.5 Short and long term population health inequality indicators (New Zealand Ministry of Health 2001: 14) [some measures truncated for space, see reference for precise measures]

Short term indicators (3-5 years)	**Long term indicators (10 years)**	
DALE LEo All cause YLL rate Self rated health Severity adjusted disability prevalence Avoidable mortality and YLL rate Avoidable hospitalisation rate Infant mortality rate Low birth weight Breastfeeding rates DMF teeth at age 12 Hearing failure at school entry (or earlier) Youth fertility rate Youth suicide and attempted suicide rate Youth road traffic injury, hospitalisation and mortality rate IHD mortality rate Rheumatic fever notification rate Breast cancer registration rate Invasive cervical cancer registration rate Hepatitis B notification rate Combined Vaccine Preventable Disease notification rate Meningococcal disease notification rate Smoking rate Physical inactivity rate Obesity rate Diabetes rate Hypertension rate	DALE ILEo All cause age adjusted DALY rate LEo All cause age standardised YLL rate Self rated health SF-36 (physical health) SF-36 (mental health) Disability prevalence All cause age adjusted hospitalisation rate Age adjusted avoidable mortality rate Infant mortality rate Low birth weight Growth rate Child abuse notification rate Child dental caries rate (DMF under 12) Hearing failure at school entry (or earlier) Youth fertility Youth suicide rate Youth road traffic injury hospitalisation rate Age adjusted IHD mortality rate Age adjusted RHD hospitalisation rate Age adjusted stroke mortality rate Age adjusted kidney failure rate	Age adjusted asthma hospitalisation rate Age specific advanced stage breast cancer registration rate Age adjusted invasive cervical cancer registration rate Age adjusted primary liver cancer registration rate Age specific Vaccine Preventable Disease notification rate Age adjusted psychiatric hospital first admission rate Age adjusted smoking prevalence rate Adult or child average dietary intakes Age adjusted prevalence of physical inactivity Age adjusted prevalence of hazardous drinking Age adjusted prevalence of regular cannabis use Age adjusted prevalence of obesity Age adjusted prevalence of type 2 diabetes Age adjusted prevalence of hypertension Age adjusted prevalence of high cholesterol

Table 2.6 compares the timeliness suggested by the Jorm and Puech (1997) and N.Z. (New Zealand Ministry of Health 2001) schedules with current collections in Australia. It shows which of the current collections could be used as a vehicle to investigate topics at different time intervals. For example, if it was determined that 3-5 yearly monitoring would be

sufficient most of the current Australian surveys could be used as a vehicle, but if the topic was something that changed more frequently, only the CATI health surveys could currently provide the information. The CATI health surveys currently offer the best overall timeliness because they are increasingly becoming continuous and moving towards frequent reporting (i.e. three monthly).

Table 2.6 The most timely vehicle to use to investigate a given topic after the policy maker has determined the desired frequency of information on that topic. (In order)

Current surveys	**Surveillance timing**		
	Yearly or less (Jorm & Puech 1997)	**3-5 yearly** (MOH, NZ 2001)	**10 yearly** (MOH, NZ 2001)
CATI surveys	✓	✓	✓
BEACH	✓	✓	✓
NHS §	✗	✓	✓
ASSAD	✗	✓	✓
GSS §	✗	✓ (projected)	✓
SDAC	✗	✗	✓
CHINS 1999, 2001	✗	✓	✗

§ Note that an Indigenous Health Survey is currently planned six yearly commencing from 2004-05, and the Indigenous Social Survey is planned for 2002 and every six years thereafter (ABS, unpublished communication).

2.3.3 Lack of small area data

The consultations in this audit showed that policy makers at all levels are most interested in small area information and some jurisdictions felt that the lack of this information was a major disadvantage of Australia's national surveys. A similar situation has been reported by users of the US BRFSS (Figgs *et al.* 2000; Bloom *et al*. 2000), the NSW Health Survey Program data (Banks & Eyeson-Annan 2001) and in an evaluation of users of HealthWIZ in Australia (Glover *et al*. 1999). The HealthWIZ evaluation found that policy makers were willing to sacrifice timeliness of data for accuracy in small areas.

Table 2.7 shows the types of geographic information that can be obtained from the various time series surveys in Australia. Most of the surveys cannot provide reliable data at the levels cited as important by the policy makers above. For example, the 2001 National Health Survey will only report data at the level of capital city/rest of state (excluding the Northern Territory) and jurisdictions with smaller populations may therefore not be able to access useful data. Currently CATI is the only vehicle designed to give reliable small area data.

Table 2.7 The most appropriate vehicle to use depending on the level of small area data required by policy makers. (in order)

Current surveys	**Small area available**	
	Regional – smaller regions within State	**Capital city/rest of state**
CATI surveys	✓	✓
CHINS 1999, 2001	✓	✓
SDAC	synthetic estimates for SLAs for some variables	✓
ASSAD	✗	✓
GSS	✗	✓ (projected)
NHS 2001	✗	✓ *
BEACH	✗	✗

* No estimates at this level for the Northern Territory

2.3.4 Lack of information on some priority population groups

Consultations in the audit revealed that policy makers want information on particular target population groups, most notably age groups, Indigenous people and people from non-English speaking backgrounds (NESB). A similar desire was found in US policy makers in the evaluation of the BRFSS (Figgs *et al.* 2000; Bloom *et al.* 2000). A deficit in data for each of these groups was evident in the audit summary, in particular in the areas of health status and health determinants (see *Chapter 5 The audit of Australian data collections in relation to chronic diseases*).

Table 2.8 shows the population groups that the current Australian time series collections are designed to measure. The surveys can generally be disaggregated to the three population groups mentioned above although some surveys do not collect data on children and the number of Indigenous people in some surveys is too small for analysis unless a time series is combined. It is also likely that most surveys cannot disaggregate NESB into smaller categories. A notable exception is the NSW CATI Health Survey Program, which is designed to capture data on the largest language groups in NSW. In general CATI has the best flexibility to focus in on different populations for different reasons, except in the case of surveys such as CHINS that have been specifically designed with a population group focus.

Table 2.8 The most appropriate vehicle to use to investigate particular population groups of interest to the policy maker. (in order)

Current surveys	Potential for disaggregation			
	Age	Indigenous status	NESB	SES
CATI surveys	✓	✓*	✓	✓
NHS 2001	✓	✓*	✓	✓
BEACH	✓	✓*	✓	✗ §
SDAC	✓	✗	✓	✓
GSS	18 +	✗	✓	✓
ISS	15 +	✓	n/a	✓
ASSAD	12 -17	✓*	✓	✗ §
CHINS 1999, 2001	✗	✗ #	n/a	✗ §

* Although any one sample may be too small for analysis § Although survey includes postcode

Population estimates are for total community populations and may include non-Indigenous persons

2.3.5 Lack of integration or integrated reporting

Lack of integration at the reporting end of systems was identified as a current problem. Policy makers felt that there was a bewildering array of data sources available (although they did not necessarily know about them) and they felt some way of integrating this information would increase its utility to them. In both the evaluation of the users of

HealthWIZ (Glover *et al*. 1999) and the NSW Health Survey Program (Banks & Eyeson-Annan 2001) users reported they needed assistance with the analysis of various data and interpretation of various results. Even when the data is prepared and warehoused (such as in HOIST) users still report that they need assistance accessing and understanding data.

A second issue that has been documented around the world is the issue of standardising measures on different surveys (i.e. State surveys) so their results can be integrated ("harmonised" see section *3.3.1 Harmonisation of existing data sources*). In Australia there are a number of projects working on standardised questions for the range of surveys, including the CATI developments mentioned in section *2.2.1 Existing time series collections: CATI health surveys*. Another example is the Strategic Inter-Government forum on Physical Activity and Health (SIGPAH), established by the National Public Health Partnership, to coordinate a national approach to measuring and reporting on physical activity in Australia (SIGPAH 2001). A physical activity data requirements paper is currently being prepared by the SIGPAH secretariat.

2.4 Summary: Considerations for a chronic disease information and monitoring system in the Australian context

The Australian policy context for chronic disease is limited by the absence of an overarching national policy but the national and Northern Territory strategies are comprehensive and provide an excellent guide for considering important elements for a national monitoring system. Both the national and Northern Territory strategies and the consultation with key policy makers outlined two types of information that would enhance chronic disease policy making.

The first is an evidence base for interventions, which includes research information on the key associations between chronic diseases and risk factors/determinants and the efficacy of interventions. This type of evidence base is being built internationally by the WHO through its CINDI program (see section *3.1 Overarching strategies for chronic disease monitoring*) and underpins the Northern Territory Preventable Chronic Disease Strategy (see section *2.1.2 Other chronic disease policies*). This important type of information system will be vital to successful chronic disease control but is not the subject of this report.

The second type of information required is monitoring information that can track the prevalence of various health states in different population groups over time and give an indication of the overall effectiveness of public policies and actions. This type of monitoring information is collected in many countries (see *Chapter 3 The International situation*) and some national information is collected in Australia through the ABS collections (see *2.2 Australian time series data collections*). This report focuses on monitoring information, and in particular strategies and methodologies for developing national data and estimates using existing infrastructure.

Both the Australian strategies describe a particular need for a monitoring system to include:

- a similar set of priority chronic diseases;
- co-morbidity;
- socioeconomic determinants as well as risk factors;
- risk factors/determinants across the life course;
- the distribution of disease conditions and risk factors/determinants across population groups; and,
- relevant health and related services.

These key features have been considered in the design of a framework for chronic disease and associated risk factor/determinant monitoring for Australia outlined in Chapter 4 (*A monitoring framework and options for the development of chronic disease information in Australia*).

Policy makers also outlined a number of general qualities for chronic disease information. These include that the information produced be:

- timely;
- integrated;
- include small area data; and,

- include information on some priority population groups such as children and youth, older persons, NESB populations and Aboriginal and Torres Strait Islanders.

Policy makers saw the better use of existing data sources as important. There is currently a range of collections in Australia that can supply some information on chronic disease and associated risk factors/determinants, but not all policy makers know these collections exist or how to access or integrate them. These data sources, however, provide an important infrastructure on which a chronic disease monitoring system could be developed. Chapter 3 examines how other countries have established chronic disease monitoring systems and Chapter 4 describes strategies for creating better chronic disease information in Australia.

References

ABS & AIHW (Australian Bureau of Statistics and Australian Institute of Health & Welfare) (2001) *The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples*. ABS Catalogue no. 4704.0; AIHW Catalogue no. IHW 6. Canberra: ABS.

ABS (Australian Bureau of Statistics) (1999(a)) *Application of GIS use in the Community Housing and Infrastructure Needs Survey: A Case Study*. Canberra: ABS.

ABS (Australian Bureau of Statistics) (1999(b)) *Disability, Ageing and Carers Australia,1998: Users Guide*. ABS Cat. No. 4431.0. Canberra: ABS.

ABS (Australian Bureau of Statistics) (2000(a)) *Housing and Infrastructure in Aboriginal and Torres Strait Islander Communities, Australia, 1999*. ABS Cat. No. 4710.0. Canberra: ABS.

ABS (Australian Bureau of Statistics) (2000(b)) Population Survey Monitor: unpublished tables.

ABS (Australian Bureau of Statistics) (2001(a)) *ABS Demography News - December 2001*. Canberra: ABS.

ABS (Australian Bureau of Statistics) (2001(b)) *NCATSIS News: A Newsletter for Aboriginal and Torres Strait Islander Statistical Issues, Issue 9, May 2001*. Darwin: ABS.

ABS (Australian Bureau of Statistics) (2002) Indigenous Health Survey (National). http://www.abs.gov.au/ausstats/abs@.nsf/0/1A8650F3AF9F5C70CA256BD00028807F?Open accessed 21 August 2002.

AIHW & AACR (Australian Institute of Health & Welfare & Australasian Association of Cancer Registries) (2001) *Cancer in Australia 1998*. (Cancer Series no. 17) AIHW cat. no. CAN 12. Canberra: AIHW.

AIHW & DHFS (Australian Institute of Health and Welfare and Commonwealth Department of Health and Family Services) (1997) *First report on National Health Priority Areas 1996: Summary*. AIHW Cat. No. PHE2. Canberra: AIHW & DHFS.

AIHW & NPHIWG (Australian Institute of Health and Welfare and National Public Health Information Working Group) (1999) *National Public Health Information Development Plan: Directions and recommendations 1999*. AIHW Cat. No. HWI 22. Canberra: AIHW.

AIHW (Australian Institute of Health & Welfare) (1999) From the inside: The Disease Registers Unit. In *ACCESS,* Issue 1, March 1999. http://www.aihw.gov.au/inet/publications/corporate/access/access01/-access01-c08.html accessed 15 August 2001.

AIHW (Australian Institute of Health & Welfare) (2000(a)) *Australia's health 2000*. AIHW Cat. No. 19. Canberra: AIHW.

AIHW (Australian Institute of Health & Welfare) (2000(b)) *National Health Priority Area Indicators for Monitoring Asthma: Report of a consultation workshop*. Canberra: AIHW.

AIHW (Australian Institute of Health & Welfare) (2001(a)) *Australian hospital statistics 1999–00*. AIHW Cat. No. HSE 14 (Health Services Series no. 17). Canberra: AIHW.

AIHW (Australian Institute of Health & Welfare) (2001(b)) *National Diabetes Register statistical Profile 2000*. AIHW Cat No. CVD-18. Canberra: AIHW.

AIHW (Australian Institute of Health & Welfare) (2002(a)) *Australia's health 2000*. AIHW Cat No. AUS 25. Canberra: AIHW.

AIHW (Australian Institute of Health & Welfare) (2002(b)) *Australian hospital statistics 2000-01*. AIHW Cat No. HSE 20 (Health Services Series No. 19). Canberra: AIHW.

AIHW (Australian Institute of Health & Welfare) (2002(c)) *Chronic diseases and associated risk factors in Australia 2001*. AIHW Cat No. PHE 33. Canberra: AIHW.

Al-Yaman F, Bryant M & Sargeant H (2002) *Australia's children: their health and wellbeing 2002*. AIHW Cat. No. PHE 36. Canberra: AIHW.

Anderson JE, Nelson DE & Wilson RW (1998) Telephone coverage and measurement of health risk indicators: data from the National Health Interview Survey. *American Journal of Public Health* 88(9): 1392-1395.

ANZDATA (2002) Australia and New Dialysis and Transplant Registry (ANZDATA). http://www.anzdata.org.au/ANZDATA/anzdatawelcome.htmaccessed 15 March 2002.

Banks C & Eyeson-Annan M (2001) Uses of NSW Health Survey Program Data – a survey of users *Public Health Bulletin* 12 (8):214-220.

Bennett DJ & Steel D (2000) An evaluation of a large-scale CATI household survey using random digit dialling. *Australia and New Zealand Journal of Statistics* 42(3): 255-270.

Berkelman RL, Stroup DF & Buehler JW (1997) Public health surveillance. In Detels R, Holland WW, McEwen J & Omenn GS [eds.] Oxford Textbook of Public Health, Volume 2: The Methods of Public Health (3rd ed). New York: Oxford University Press.

Bloom Y, Figgs LW, Baker EA, Dugbatey K, Stanwyck CA & Brownson RC (2000) Data uses, benefits, and barriers for the Behavioural Risk Factor Surveillance System: a qualitative study of users. *Journal of Public Health Management Practice*. 6: 78-86.

Britt H, Miller GC, Knox S, Charles J, Valenti L, Henderson J, Kelly Z, Pan Y (2001) *General practice activity in Australia 2000–01*. AIHW cat. no. GEP 8 (General Practice Series No. 8). Canberra: AIHW.

CBRC (Centre for Behavioural Research in Cancer) (1999(a)) *Australian Secondary Schools Alcohol and Drug Survey (ASSAD): Core survey*. Melbourne: Anti-Cancer Council of Victoria.

CBRC (Centre for Behavioural Research in Cancer) (1999(b)) *Australian Secondary Schools Alcohol and Drug Survey (ASSAD): Victorian supplementary survey*. Melbourne: Anti-Cancer Council of Victoria.

CPSE (Centre for Population Studies in Epidemiology) (1999*) Social Environmental Risk Context Information System (SERCIS) Surveys: Executive Summaries and Questionnaires 1995-1998*. Adelaide: CPSE, Public and Environmental Health Service, Department of Human Services.

Dal Grande E (2002) *Telephone Monitoring of Public Health Issues: a comparison of telephone sampling issues*. Thesis(MPH). Adelaide: Department of Public Health, University of Adelaide.

Dal Grande E, Woollacott T, Taylor A, Starr G (2001) *Diabetes and Health Risk Factors 1997 & 1998 - South Australian Health Goals & Targets Health Priority Areas - March 2001*. Adelaide: SA Department of Human Services.

de Looper M & Bhatia K (2001) *Australian health trends 2001*. AIHW Cat. No. PHE 24. Canberra: AIHW.

DHAC & AIHW (Commonwealth Department of Health & Aged Care and Australian Institute of Health & Welfare) (1998) *National Health Priority Areas: Mental Health.* Canberra: DHAC and AIHW.

DHAC & AIHW (Commonwealth Department of Health & Aged Care and Australian Institute of Health & Welfare) (1999(a)) *National Health Priority Areas Report: Diabetes Mellitus 1998*. AIHW Cat. No. PHE 10. Canberra: DHAC and AIHW.

DHAC & AIHW (Commonwealth Department of Health & Aged Care and Australian Institute of Health & Welfare) (1999(b)) *National Health Priority Areas Report: Cardiovascular Health 1998*. AIHW Cat. No PHE9. Canberra: DHAC and AIHW.

DHAC & AIHW (Commonwealth Department of Health & Aged Care and Australian Institute of Health & Welfare) (2000) *Meeting the National needs for public health information: Revisited, data and information sources within the Population Health Division: Commonwealth Department of Health and Aged Care.* Canberra: Data and Information Services Unit, DHAC.

DHFS & AIHW (Commonwealth Department of Health & Aged Care and Australian Institute of Health & Welfare) (1998(a)) *National Health Priority Areas Report : Injury Prevention and Control 1997*. AIHW Cat. No. PHE 3. Canberra: DHFS and AIHW.

DHFS & AIHW (Commonwealth Department of Health & Aged Care and Australian Institute of Health & Welfare) (1998(b)) *National Health Priority Areas Report on Cancer Control 1997*. AIHW Cat. No. PHE 4. Canberra : DHFS and AIHW.

Dunstan D, Zimmet P, Welborn T, Sicree R, Armstrong T, Atkins R, Cameron A, Shaw J, & Chadban S (2001) *Diabetes & associated disorders in Australia 2000, The accelerating epidemic: Australian diabetes, obesity & lifestyle report (AusDiab).* Melbourne: International Diabetes Institute.

Eyeson-Annan M (2001) Continuous data collection under the NSW Health Survey Program – what will it mean? *Public Health Bulletin* 12 (8): 235-237.

Figgs LW, Bloom Y, Dugbatey K, Stanwyck CA, Nelson DE & Brownson RC (2000) Uses of behavioural risk factor surveillance system data, 1993-1997. *American Journal of Public Health*. 90 (5): 774-776.

Ford ES (1998) Characteristics of survey participants with and without a telephone: findings from the third National Health and Nutrition Examination Survey. *Journal of Clinical Epidemiology* 51(1): 55-60.

Glover J, Harris K & Tennant S (1999) *A Social Health Atlas of Australia*. Adelaide: Public Health Information Development Unit, University of Adelaide.

Glover J, Mercer N, Hugo G & Marbach D (1999) HealthWIZ Strategy Review, draft report. Adelaide: PHIDU. http://www.publichealth.gov.au/PDF/HWIZrprt.pdf accessed 2 June 2001

Harding L [compiler] (undated) *Inventory Of Indigenous Data Holdings in South Australian Government Agencies*. Adelaide: ABS.

HIC (Health Insurance Commission) (2001) Annual Report 2000-01. Canberra: HIC.

Hill D, White V & Letcher T (1999) Tobacco use among Australian secondary students in 1996. *Australian and New Zealand Journal of Public Health* 23(3): 252-259.

Hill D, Willcox S, Gardner G & Houston J (1986) *Cigarette and Alcohol Consumption Among Australian Secondary Schoolchildren in 1984*. Melbourne: Centre for Behavioural Research in Cancer, Anti-Cancer Council of Victoria.

Hill DJ, White VM, Williams RM & Gardner GJ. (1993) Tobacco and Alcohol Use Among Australian Secondary School Students in 1990. *Medical Journal of Australia* 158: 228-234.

JAG (Joint Advisory Group) on General Practice and Population Health (2001*) Smoking, Nutrition, Alcohol and Physical Activity (SNAP) Framework for General Practice: Integrated approaches to supporting the management of behavioural risk factors of Smoking, Nutrition, Alcohol and Physical Activity (SNAP) in General Practice*. Canberra: Commonwealth Department of Health and Ageing.

Jorm L & Puech M (1997) *Strategy for Population Health Surveillance in New South Wales: Discussion Paper*. Sydney: NSW Health.

Mathers C, Vos T & Stevenson C (1999) *The burden of disease and injury in Australia*. Canberra: AIHW.

Ministry of Health, New Zealand (2001) Indicators of Inequality: classification and selection of ethnic health disparity indicators. *Public Health Intelligence Occasional Bulletin No 5*. Wellington, New Zealand: Ministry of Health.

Moon L, Meyer P & Grau J (1999) *Australia's young people: their health and wellbeing 1999*. AIHW Cat. No. PHE 19. Canberra: AIHW.

Moon L, Rahman N & Bhatia K (1998) *Australia' s children: their health and wellbeing 1998*. AIHW Cat. No. PHE 7. Canberra: AIHW.

Nassar N & Sullivan EA (2001) *Australia's mothers and babies 1999*. AIHW Cat. No. PER 19 (Perinatal Statistics Series no. 11). Sydney: AIHW National Perinatal Statistics Unit.

NHPC (National Health Performance Committee) (2000) *Fourth National Report on health sector performance indicators*. Canberra: NHPC.

NPHP (National Public Health Partnership) (1999) *Guidelines for Improving National Public Health Strategies Development and Coordination*. [Melbourne]: NPHP. http://hna.ffh.vic.gov.au/nphp/natstrat/index.htmaccessed 14 June 2001.

NPHP (National Public Health Partnership) (2001) *Preventing Chronic Disease: A Strategic Framework. Background Paper*. Melbourne: NPHP.

NSW Health (2000(a)) *Program for Enhanced Population Health Infostructure (PEPHI): Discussion Paper*. Sydney: NSW Health Department.

NSW Health (2000(b)) *Healthy People 2005 – New Directions for Public Health in NSW*. Sydney: NSW Health Department.

NSW Health (2001) Overview of the NSW Health Survey Program. *NSW Public Health Bulletin.* Supplement 12(S-2).

NWAHS (North West Adelaide Health Study) (2002) *Brief reports, No. 2002-08*. Adelaide: Centre for Population Studies in Epidemiology, Department of Human Services.

NWAHS (North West Adelaide Health Study) (2001) *Initial results*. Adelaide: Centre for Population Studies in Epidemiology, Department of Human Services.

NWAHS (North West Adelaide Health Study) (2000) North West Adelaide Health Study Information package. Adelaide: North Western Adelaide Health Service. http://www.nwadelaidehealthstudy.org/ accessed 14 June 2001.

PHIDU (Public Health Information Development Unit, The University of Adelaide) (2001) *Computer Assisted Survey Information Collection: Australian Health Surveys. Question and Module Development Principles and Practices*. Adelaide: PHIDU, The University of Adelaide. http://www.publichealth.gov.au/pdf/manual.pdf accessed 17 December 2001.

Reid J (2000) *Australia's Health in the information age - statistics and the people*. Paper presented at the Australia's Health 2000 conference, Thursday 22 June 2000, Manning Clark Theatre, Australian National University, Canberra. [Canberra: AIHW.] http://www.aihw.gov.au/conferences/ah00/ah00-s01.html accessed 19 December 2001.

Ruth D, Sulaiman N & Harris C (2001) *Primary Care Partnerships: Selecting and accessing population data— an information resource*. Melbourne: Victorian Government Department of Human Services, Aged, Community and Mental Health Division.

SAHC (South Australian Health Commission) (1998) *Annual Report for 1997 of the Epidemiology Branch – Public and Environmental Health Service – South Australian Health Commission*. Adelaide: SAHC.

Sayer GP, Britt H, Horn F, Bhasale A, McGeechan K, Charles J, Miller G, Hull B & Scahill S (2000) *Measures of health and health care delivery in general practice in Australia: SAND Supplementary Analysis of Nominated Data 1998-99*. AIHW cat. no. GEP 3 (General Practice Series No. 3). Canberra: AIHW.

SCH (Statistical Clearing House) (1999) *Community Housing and Infrastructure Needs Survey, Quarter Ending October 1999*. http://www.sch.abs.gov.au/SCH/a1610103.nsf/0/-07B9ABF1DF5B3A56CA256753001BDFEF?OpenDocument accessed 30 August 2001.

Scheil W, Cameron S, Dalton C, Murray C, Wilson D (1998) A South Australian Salmonella Mbandaka outbreak investigation using a database to select controls. *Australian and New Zealand Journal of Public Health* 22(5): 536-539.

SIGPAH (2001) SIGPAH website http://www.dhs.vic.gov.au/nphp/sigpah/ accessed 19 October 2001.

Steel D & Boal P (1988) Accessibility by Telephone in Australia: Implications for Telephone Surveys. *Journal of Official Statistics* 4(4): 285-297.

Taylor A, Dal Grande E, Woollacott T, Parsons J, Wilson D, Hetzel D, Anastassiadis K, Phillips P, Popplewell P (1998) *South Australian Health Goals and Targets - Health Priority Areas Survey - September-October 1997*. Adelaide: SA Health Commission.

Territory Health Services (2001) *Health gains* website: http://www.nt.gov.au/nths/health_gains/health_gains.shtml Darwin: Northern Territory Government accessed 14 January 2001.

Weeramanthri T, Morton S, Hendy S, Connors C, Rae C & Ashbridge D (1999) *Northern Territory Preventable Chronic Disease Strategy – Overview and Framework*. Darwin: Territory Health Services.

Weeramanthri TS & Edmond K (1999) *Northern Territory Preventable Chronic Disease Strategy – the Evidence Base: Best buys and key result areas in chronic disease control*. Darwin: Territory Health Services.

White V, Hill D, Gardner G & Pain M (1988) *Cigarette and Alcohol Consumption among Australian Secondary Schoolchildren in 1987*. Melbourne: Centre for Behavioural Research in Cancer, Anti-Cancer Council of Victoria.

Wilson D, Starr G, Taylor A & Dal Grande E (1999) Random digit dialling and Electronic White pages samples compared: demographic profiles and health estimates. *Australian and New Zealand Journal of Public Health* 23(6): 627-633.

Woollacott T, Anastassiadis K, Hetzel D, Dal Grande E & Taylor A (1999) Getting Better Information From Country Consumers For Better Rural Health Service Responses. Paper presented at National Rural Health Alliance: 5th National Rural Health Conference, Adelaide, March 1999.

Chapter 3 The international situation

The following chapter reviews the range of international developments in the area of chronic disease and associated risk factor/determinant monitoring. The first section examines two overarching international strategies that provide useful guidelines and protocols. These are:

- the WHO Countrywide Integrated Non-communicable Diseases Intervention (CINDI) Programme; and,
- the WHO Stepwise Approach to Surveillance (STEPS) of Non Communicable Disease Risk Factors.

The second and third sections identify key methodologies currently in use, and describe some best practice examples of the key methodologies. These include:

- National (or international) surveys with components of objective measurement
  - MONItor trends in Cardiovascular diseases project (MONICA) (worldwide)
  - Health Survey for England (UK)
  - National Health And Nutrition Examination Survey (NHANES) (US)
- Centralised national (or international) standardised surveys of self-report
  - State and Local Area Integrated Telephone Survey (SLAITS) (US)
  - Canadian Community Health Survey (CCHS)
- Standardised modules of self-report questions in harmonised surveys
  - EURope ALIMentation (EURALIM) (Europe)
  - Behavioral Risk Factor Surveillance System (BRFSS) (US)
  - Youth Risk Behavior Surveillance System (YRBSS) (US)
  - Rapid Risk Factor Surveillance Survey (RRFSS) (Ontario, Canada)
  - FINBALT Health Monitor (Finland, Estonia, Latvia, Lithuania)
- Indicators derived from the integration of existing data sources:
  - Healthy People 2010 & the Leading Indicators for Healthy People 2010 (US)
  - Public Health Observatories (UK)
  - Norgeshelsa, The National Health Indicator System (Norway)
  - Health-Track (US)

Most countries utilise more than one methodology, realising no one method can provide all data needed for the different levels of action. For example, the US has a national centralised survey that collects objective measures (NHANES see section *3.2 National (or international) surveys with components of objective measurement)*, a system that collects and collates self-report information from various States (BRFSS see section *3.4 Standardised modules of self-report questions in harmonised surveys*) and a set of health indicators drawn from a range of existing sources (Healthy People 2010 see section *3.5 Indicator sets derived from existing data sources*). A new survey mechanism has also recently been established to collect information on chronic disease in children that can give small area estimates (SLAITS see section *3.2 National (or international) surveys of self-report*). This new data collection system is the only one in the US that can provide national as well as regional (sub-State) level data.

3.1 Overarching strategies for chronic disease monitoring

There are two major international strategies for chronic disease monitoring that could help to inform the establishment of a system in Australia, both developed by the World Health Organisation (WHO). The first, *Countrywide Integrated Noncommunicable Diseases Intervention (CINDI) Programme* (CINDI, undated), has been adopted by the countries of Europe and Canada, while the second, *STEPwise* (Bonita *et al.* 2001), is currently being taken up in Asia/Pacific, the US, Russia, Mexico and Brazil.

3.1.1 Countrywide Integrated Noncommunicable Diseases Intervention Programme (WHO)

The Countrywide Integrated Noncommunicable Diseases Intervention (CINDI) Programme is part of the WHO policy framework for Health for All in the 21st Century. It is an overarching set of guidelines and protocols designed to assist member countries to establish projects and programmes initially in demonstration sites, to help prevent and control non-communicable diseases (cardiovascular diseases, cancer, chronic respiratory diseases, diabetes) and to promote healthier lifestyles. Its aims are to reduce common risk factors by:

- improving the lifestyles of communities through a reduction in smoking, unhealthy nutrition, alcohol abuse, physical inactivity and psycho-social stress;
- improving the risk factor profiles of individuals at high risk of chronic disease by enhancing the preventive practices of health professionals; and,
- maximising the success of programmes by exchanging information and building up international networks (CINDI undated: 3).

Current CINDI member countries are Austria, Belarus, Bulgaria, Croatia, Cyprus, Czech Republic, Estonia, Finland, Germany, Hungary, Italy, Kazakhstan, Kyrgystan, Latvia, Lithuania, Malta, Poland, Portugal, Romania, Russia, Slovakia, Slovenia, Spain (Catalonia), Turkmenistan, Ukraine and United Kingdom (Northern Ireland). Canada is the only non-European member.

CINDI recognises that there can be no single prescription for a universally applied, integrated prevention and control programme, and that programs will depend on local circumstances, disease prevalence, resources, priorities and cultural aspects (CINDI undated: 3). It therefore allows member countries wide scope for implementation of a CINDI programme with each preparing its own detailed national protocol with objectives and plan of action for implementation (WHO 1999). This approach has resulted in quite different focuses reflecting cultural and national differences and priorities. These differences are reflected in recent CINDI reporting, with Spain focussing on a festival, Germany on software development, while other member countries have pursued more traditional actions (CINDI undated).

Although each country programme is tailored to their specific needs there are a number of common stages in the development of the programme. These include the establishment of:

- program management;
- a situation analysis or baseline survey of the common risk factors;
- interventions useful to the area;

- a national protocol and plan of action;
- guidelines and methods of intervention;
- regular monitoring and evaluation surveys; and,
- joint major evaluations at five-year intervals (CINDI undated: 3).

The final two points are a key feature of the CINDI programme. Member countries supply an evaluation of their programmes and interventions to CINDI using a standard evaluation tool. If the interventions are deemed successful they can become "demonstration areas" of best practice, which can be implemented nationally or in other countries.

CINDI proposes baseline risk factor/determinant monitoring and has produced a manual of standard questions for monitoring surveys (based on the FINBALT survey, which see). The tools provided by CINDI however, are not prescriptive. CINDI is not endeavouring to fully standardise monitoring but to instead make it flexible and modifiable in different cultural settings. The key aspect is that any monitoring reports against aspects of the interventions deemed necessary in a given setting.

The advantage of being a member of CINDI is the access to a wide range of resources and expertise through the collaborative network. CINDI provides information about the effectiveness of a range of policies and interventions that could be implemented by different countries. CINDI also runs demonstration sites in every country (where data collection is attached to specific programs), training schools, a data management centre and working groups on policy, capacity building, fundraising, communications and marketing. It also provides standard measurement tools and evaluation instruments (for example, QUIT program evaluations) and runs events at which participants exchange information and experience on issues of concern.

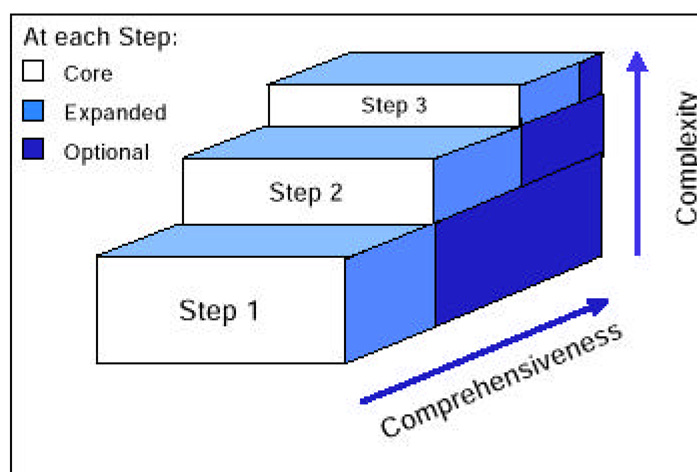
Internet sites

CINDI website: http://www.who.dk/eprise/main/WHO/Progs/CHR/Home

3.1.2 WHO Stepwise Approach to Surveillance of Non Communicable Disease Risk Factors

The WHO Stepwise approach to Surveillance (STEPS) of NCD Risk Factors initiative presents a set of chronic disease risk factors (with standardised questions and measurement protocols) to be used by chronic disease monitoring systems worldwide (Bonita *et al.* 2001). STEPS organises risk factor measurement into three levels that provide different options for monitoring using different amounts of resources (to encompass monitoring in developed and developing countries). Each "step" increases the comprehensiveness of the measures and the complexity of the collection methodologies (Figure 3.1). The system would ensure that all countries collect some basic standardised data, while still allowing individual countries to design surveillance systems of varying complexity, to meet their individual requirements, resources and capacities. Although the focus of the STEPS approach is on assisting less developed countries to develop basic chronic disease risk factor information, the building block approach has general applicability.

Figure 3.1 STEPS approach to Surveillance – Increasing comprehensiveness and complexity with each step (Bonita et al. 2001: 20)



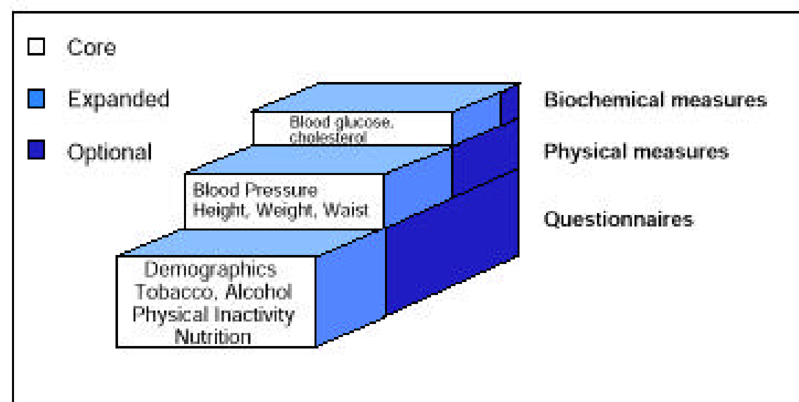
Each step in the model increases the difficulty and cost of collection, with Step 1 focusing on subjective self-reported information (questionnaires), and Steps 2 and 3 focusing on objective measures (physical measures and blood samples). Within each step there is also increasing complexity in the types of measures that can be taken from "core" to "expanded core" to "optional" measures (Table 3.1).

Table 3.1 A summary of the WHO STEPS risk factor assessment (Bonita et al. 2001: 21)

Measures Level	**Step 1 (Self-report)**	**Step 2 (Physical)**	**Step 3 (Biomedical)**
Core	Demographic, Tobacco, Alcohol, Nutrition, Physical inactivity	Measured weight + height, waist girth, Blood pressure	Fasting blood sugar; Cholesterol
Expanded core	Education, Household Indicators, Dietary pattern	Hip girth	HDL-Cholesterol, Triglycerides
Optional (examples)	Other health-related behaviours; Knowledge+ attitudes regarding health; quality of life	Timed walk, Skinfolds, Pedometer	Oral glucose tolerance test; Urine examination

For example, within Step 1 (self-reported information), there are three options for specific measures. Depending on the resources available countries can choose to focus on the "core" measures of four major risk factors or can expand questionnaires to include "expanded core" socioeconomic measures, or, "optional" risk factor measures (Figure 3.2). A detailed table of core, expanded and optional content can be found in *Appendix D Expanded list of WHO STEPS measures for risk factor assessment*.

Figure 3.2 STEPS approach to Surveillance – Measures and methodologies for each step (Bonita et al. 2001: 21)



The STEPS documentation outlines four guiding principles for choice of measures for monitoring. These are the:

- significance of the risk factor for public health (based on the nature and severity of the chronic diseases with which it is associated (morbidity, disability, mortality));
- cost of collecting valid data on a long-term, repeated basis;
- availability and strength of the evidence that interventions will change the risk factor and reduce chronic disease in the community; and,
- the ability to measure the risk factor burden uniformly in different settings to ensure compatibility and to measure changes over time (Bonita *et al*. 2001).

The strongest interest in the STEPS approach has so far come from less developed countries. The Asian and Pacific countries that have adopted STEPS to some extent into new or existing collection systems are Fiji, Marshall Islands, Vietnam, Indonesia, Bangladesh and India. Most countries collect, at least, the core items for Steps 1 (self-report) and 2 (physical measures) but only Fiji currently plans to collect biochemical measures. Samoa and the Federated States of Micronesia have programs in development and WHO plans to involve more than 100 countries over the next three years including Tuvalu, Vanuatu, the Cook Islands, Nauru, Palau and Kiribati.

In order to contribute into the STEPS worldwide surveillance program Australia could do a number of things. It could:

- utilise data from existing national surveys such as the NHS for Step 1 (self-report);
- standardise modules in State CATI health surveys to supply national information for Step 1 (self-report), or,
- continue to develop the proposed Australian Health Measurement Survey, which, in conjunction with the NHS, could provide information on all three Steps (self-report, physical, biomedical).

Internet sites

Information on the WHO Global NCD (NonCommunicable Disease)Risk Factor Surveillance Strategy can be found at the website: http://www.who.int/ncd/surveillance/

Internet sites (continued)

Publications on surveillance, including the *Stepwise approach to Surveillance*, can be found at the website: http://www.who.int/ncd/surveillance/surveillance_publications.htm

Publications from the WHO Behavioural Risk Factor Surveillance program can be found at http://www.who.int/hpr/brfs/publications.htm and also at: http://www.who.int/hpr/nphpublications.htm

3.1.3 A strategic approach for Australia

As outlined in chapter 2, two types of information are needed to support chronic disease strategies. The first is information on effective interventions and the CINDI program outlines one way that this information could be collected and utilised. The CINDI approach leads to a very different idea of data collection for monitoring. Instead of making a commitment to standard data collections, States and Territories under a CINDI strategy are asked to make a commitment to collecting data that adequately reports on the programs that they have put in place in their local areas. States and Territories would be asked to commit to a common evaluation strategy, rather than (or as well as) common data tools, and the evaluation would consider the most valuable data and programs for the different settings. This approach would mean some overarching policies and protocols would have to be developed at the national level, but States and Territories would still have autonomy over their data collections and implementation of particular initiatives. A CINDI style information system would examine best practices through a common evaluation process and provide a formal process in which best practice information can be shared. A CINDI style system would include baseline surveys of common risk factors/determinants (the monitoring aspect) and would provide member countries with standardised question modules that could be modified to match intervention needs. An intervention evaluation monitoring system would be an extremely useful resource in Australia but this report focuses solely on baseline monitoring information.

The WHO STEPS program is a more simplistic program that focuses on developing basic standardised risk factor information across countries. Most of the information needed for Step 1 (self-report) of STEPS is already collected in Australia by the NHS but if more timely data, or small area data, were required new options would need to be considered. These could include setting up a new Commonwealth run survey, or, as is described in the next section, by getting States and Territories to standardise sections of their CATI health surveys to be brought together nationally. The proposed Australian Health Measurement Survey (AHMS) is the only option currently being considered that could be used to generate monitoring data for Steps 2 and 3. Australia is in a better position to include more detailed socioeconomic data to match its self-report and objective measures than is currently suggested by STEPS (which is largely written for resource poor countries without well developed information infrastructure).

The following section examines the types of strategies and methodologies that have been adopted internationally to monitor chronic diseases.

3.2 National (or international) surveys with components of objective measurement

National programs of on-going population surveys with components of objective measurement collect objective evidence on physical states (e.g. weight), disease outcomes (e.g. diabetes), biological states (e.g. high blood pressure), and behaviours (e.g. exposure to tobacco) that cannot be accurately ascertained by self-report. They have been developed, or are being developed, in several countries including the United States, the United Kingdom, Scotland, Singapore, Germany, New Zealand and Finland. The programs in the US and the UK are the most sophisticated, and survey results and analyses have been highly valued for use by policy-makers and researchers. Both the US and the UK conduct their survey on an annual, rolling basis; include a wide range of objective measures; survey children; offer interview and measurement in respondents' homes (or in mobile clinics); have a longitudinal component for follow-up of participants; some linkage to administrative data; and store collected samples for further research.

The WHO has also run a multi-country study of cardiovascular heart disease (MONICA) using a set of standardised instruments and protocols. Objective measures surveys allow the examination of disease and risk factor/determinant trends as well as associations between disease states and risk factors/determinants. They can also be used to validate self-report information by comparing objective measures with subjective (self-report) measures.

The key feature of these types of surveys is that they consist of one standardised measurement instrument that is operationalised by a centralised authority. The advantage of this design is that national estimates can easily be obtained. The surveys can also provide population group estimates but regional data can only be obtained if surveys are designed to combine several years of data. Centralised surveys can be expensive (although some would argue not necessarily as expensive as an accumulation of separate surveys to achieve the same ends), and in the case of MONICA, have been criticised for being imposed and not taking into account local priorities and issues.

There is a great deal of interest in obtaining national objective measures for Australia and a proposal is currently being prepared to run a survey program in conjunction with the NHS (see Section *2.2.2 Proposed time series collections: Australian Health Measurement Survey program*).

MONItor trends in CArdiovascular diseases project (World-wide)

The World Health Organisation's *MONItor trends in CArdiovascular diseases project* (MONICA), was established in the early 1980s in 21 countries (41 centres) around the world, including in Australia, to monitor trends in cardiovascular disease and related risk factors over a ten-year period. The project provided each centre with standardised methodologies, protocols and instruments for the collection of data. MONICA has produced an enormous amount of data and its results have been published in Australia (Waters & Bennett 1995) but it has since been suggested that complete standardisation of instruments

between collections is not possible or practical across countries. The four most important disadvantages of this type of highly centralised approach have been described as:

- the high cost involved;
- the difficulty in developing standard meanings for different cultures;
- the potential for local resistance to a centrally run system that may be seen as overriding or being unresponsive to local needs and considerations;
- excessive delays in releasing timely information to the public (Morabia 2000).

Health Survey for England (UK)

The Health Survey for England (HSE) is an annual survey that collects nationally representative information on the health of the population through interviews and a physical examination by a nurse visiting the home. A key element of the survey, which is commissioned by the Department of Health, UK, is that it is managed by an external agency (the National Centre for Social Research) rather than the Office for National Statistics. Core content items, objectively measured at every survey, are: height, weight, and body dimensions; and blood pressure; as well as subjective measures of general health and risk factors. Special interest modules are run in individual surveys to allow particular health issues or population groups to be examined in more depth. Past modules have included cardiovascular disease (1994), asthma/accidents/disability (1995), children and young people (1997), ethnic groups (1999) and older people and social exclusion (2000). Modules planned until 2006 include disability, asthma, accidents, physical activity, eating habits, oral health, cardiovascular disease and social exclusion in various age and ethnic groups (Department of Health, UK 2000). Samples are stored for later use and participants permission is sought to link results to administrative records.

The survey sample is 20 000 nationally selected from all age groups and the data can be disaggregated down to the health authority level (for core topics), through combining three years full sample data, once in every five years. Over-sampling of minority population groups (children, ethnic minorities, elderly in care institutions) is anticipated in two out of five years (with consequent reduction of the main sample) (Department of Health, UK 2000). Individual topic modules are planned to rotate on a five year schedule. Response rates are complex and vary according to stage of the collection process. For the 1999 HSE, estimated interview response rates were 70% for adults and 74% for (sampled) children in the general population sample; and 60% and 65% respectively in the total ethnic minority sample (Erens *et al*. 2001).

Internet sites

Health Survey for England website: http://www.doh.gov.uk/public/summary.htm

National Health and Nutrition Examination Survey (US)

The National Health and Nutrition Examination Survey (NHANES) collects nationally representative information on the health and nutritional status of the US population through interviews and physical examinations taken in a mobile measurement centre. Topics

investigated in NHANES III (1988-94) included high blood pressure, high blood cholesterol, obesity, passive smoking, lung disease, osteoporosis, HIV, hepatitis, Helicobacter pylori, immunisation status, diabetes, allergies, growth and development, blood lead, anaemia, food sufficiency, dietary intake (including fats and antioxidants) and nutritional blood measures. Samples are stored for later use and permission is sought to link results to administrative records.

Previously a periodic multi-year survey, the current NHANES (IV, from 1999) has been redesigned as a continuous annual survey, collecting a nationally representative sample (interviews and examinations) on around 5 000 persons in 15 locations per year (88 locations over 6 years) (NCHS CDC 2001(g)). The sample covers all ages, with over-sampling of Black and Mexican Americans, adolescents (12-19 years), older persons (60+ years), low income persons and pregnant women, to improve estimates for these groups (NHANES 2001). The small annual sample is not structured to provide information on States/small areas, and analyses for subpopulations will require three years of data. The new design also allows greater flexibility in questionnaire and examination components. NHANES IV collects data on cardiovascular and respiratory disease; vision; hearing; mental illness; growth; infectious diseases and immunization status in children; obesity; dietary intake and behaviour; nutritional status; disability; skin diseases; environmental exposures; physical fitness; and other health-related topics (NHANES 2001). It has been linked to the National Health Interview Survey at several levels (including content), and will be integrated with the US Department of Agriculture's *Continuing Survey of Food Intakes by Individuals* (in 2002), enabling dietary intake data to be linked directly to health status data (NCHS 2001(h)). Response rates for NHANES III were 86% for the household interview and 78% for the medical examination (NCHS 2001(g)).

Internet sites

NHANES website: http://www.cdc.gov/nchs/nhanes.htm

3.3 National (or international) surveys of self-report

Many countries have developed national surveys, controlled by a central agency, and utilising a fully standardised methodology, to obtain self-report information on population health including chronic diseases and their associated risk factors. Notable examples include the Canadian Community Health Survey (CCHS) and the State and Local Area Integrated Telephone Survey, recently developed in the US to deal with perceived deficiencies in existing 'national' samples, including a lack of information on children and small areas.

The key feature of these surveys is that they produce accurate national and smaller area estimates. Their disadvantages include the potential inaccuracy of self-report information. These types of national surveys often take a longer time to report information (18 months from the commencement - or six months from the cessation - of data collection for the first CCHS) than other survey types. This is also the case in Australia and the third stage of this feasibility study found little support for a new national survey of this kind.

The following examples have been included because of their ability to generate smaller area data.

Canadian Community Health Survey (Canada)

The Canadian Community Health Survey (CCHS) is a newly established (2000) on-going survey (personal and telephone interviews) of 136 health regions and territories across Canada. It measures health determinants, health status and health system utilisation and is conducted by Statistics Canada, in partnership with Health Canada, the Canadian Center for Health Information, and the provincial and territorial Ministries of Health.

The surveys have a core content component that will remain fixed over time to meet basic health reporting commitments and optional content (Table 3.2). Core modules were selected after a consultation with data users. Optional content modules are posted on a Statistics Canada website along with selection rules for provincial ministries of health and/or health regions. The first survey will focus on mental health and other topics of interest include nutrition and social support.

It is expected that a set of objective physical measures will be taken at some time in the future and that the survey will eventually include children of all ages (the first survey focuses only on persons 12 +). The survey asks respondents for permission for data linkage but issues have arisen with the British Columbia Civil Liberties Association over whether informed consent was obtained (British Columbia Civil Liberties Association 2000; CMA 2001). Privacy issues have also arisen during the first cycle of the survey in relation to its perceived intrusive nature, in particularly in relation to questions on sexual behaviour, and answers by proxies.

The CCHS has a two-year collection cycle, made up of two distinct surveys containing the same content but run at different levels: a health region-level survey in the first year with a total sample of 130 000 and a provincial-level survey in the second year with a total sample of 30 000. Sample sizes in any particular month or year may increase due to provincial or health region-level sample buy-ins. The CCHS is designed to provide data at the health region level (sub-province).

Dissemination arrangements include:

- quarterly provincial and national data available to provinces;
- master files at nine university centres to be available to all approved research projects for free (with agreed output for Statistics Canada);
- remote users can write their own SAS files for Statistics Canada to run the data (and screen for data confidentiality); and,
- a public microdata file to be made available through the provinces.

Statistics Canada plans to make some data available by the Internet as well as producing more standard data products (such as data files, tabular statistics, and special reports) (Hamel 2000). It will also run workshops for local authorities on how to use data files.

Table 3.2 Content for the first year of the Canadian Community Health Survey (from all surveys over 136 regions) (Statistics Canada 2001).

Core or common content		**Optional content**
Alcohol (consumption)	Income	Breast examinations
Alcohol dependence /abuse	Labour force	Breast self examinations
Blood pressure check	Socio-demographic characteristics	Changes made to improve health
Breastfeeding		Dental visits
Chronic conditions		Depression
Contacts with mental health professionals		Distress
		Driving under influence
Exposure to second hand smoke		Drug use
Food insecurity		Eye examinations
Fruit and vegetable consumption		Flu shots
General health		Home care
Health care utilisation		Mastery
Health Utility Index (HUI)		Mood
Height / weight		Physical check-up
Injuries		Sedentary activities
Mammography		Self-esteem
PAP smear test		Sexual behaviours
Physical activities		Smoking cessation aids
PSA test		Social support
Restriction of activities		Spirituality
Smoking		Suicidal thoughts and attempts
Tobacco alternatives		Use of protective equipment
Two-week disability		Work stress

Internet site

The CCHS website: http://www.statcan.ca/english/concepts/health/

State and Local Area Integrated Telephone Survey (US)

The State and Local Area Integrated Telephone Survey (SLAITS) is a survey mechanism that allows for the rapid collection of population-based data at a national and regional (73 regions in the 50 states) level. It is the only survey mechanism in the US that can provide

reliable estimates for regional levels. SLAITS 'piggybacks' health surveys onto the National Immunization Survey (NIS) sample. The NIS surveys over a million households per year, screening for the presence of very young children to monitor their levels of immunisation. If the NIS detects a household with eligible children it gives them the NIS survey and the SLAITS survey, otherwise only the SLAITS survey is given. This opportunistic survey mechanism reduces unit costs and infrastructure and makes it easy to over-sample particular population groups because the initial NIS sample frame is so large.

Both government agencies and non-profit organisations can sponsor questionnaire modules for SLAITS and several survey modules have already been developed that can be used at any time. These include:

- A health module: focusing on access and barriers to care, health insurance coverage, health status and limitations of activity, health care utilisation, socio-demographic characteristics, family income and assets, household composition and family structure (NCHS CDC 2001(a)).
- A child well-being and welfare module: focusing on public assistance program participation and factors that support child well-being (such as, health care coverage, reliable child care, safe neighbourhoods, and parental employment) using questions drawn from other national surveys (NCHS CDC 2001(b) & 2000(c)). The population of interest was children (under 18 years) living in households below 200% of the federal poverty level; and the strategy included over-sampling these households to ensure they made up at least half of the final sample. CASRO response rates were 70.2% (although there was considerable variability across geographic areas) (Blumberg *et al*. 2000).
- The *National Survey of Early Childhood Health*: focusing on paediatric care (and its impact) from the parent's perspective (NCHS CDC 2001(d)), including health care utilisation, perceptions of the quality of the focal child's paediatric care, level of interaction between the respondent and health care providers, family interactions and home safety, respondent and child health, financial welfare and health insurance and demographic information about the focal child, respondent, and household (NCHS CDC 2001(e)). The CASRO response rate was 65.3%.
- A children with special health care needs module: focusing on children with special health care needs (those receiving regular ongoing comprehensive care within a medical home), family decision making, health and welfare services, insurance coverage (NCHS CDC 2001(f)). CASRO response rates were around 67%.

The key features of SLAITS are described as its:

- use of standardised questions to produce comparative data across states and for the nation;
- ability to address state-specific data needs with customised questions and specific domains of interest;
- targeting capacity for population sub-groups such as those with specific health conditions, or from low-income households;
- provision of estimates adjusted for non-coverage of households without telephones; and,
- rapid implementation and quick turnaround of data, so that changes in health and welfare-related programs can be tracked (NCHS CDC 2001(c)).

The general reporting strategy for SLAITS is to provide summary statistics and public-use microdata files on CD-ROM and the internet. Information on the survey designs, questionnaires, sampling and estimation procedures are available through publicly released methodology reports. When surveys are in the field, brief overviews and flowcharts of the survey design are available (see for instance NCHS CDC 2001(f)). All publicly accessible information is listed on, and available through, the web site. As with other CDC systems, the transparency and availability of information is high.

This strategy for obtaining national data is US specific because their NIS provides a unique sample frame and infrastructure. Australia does not have a similar survey of households onto which another survey could be 'piggybacked' and it would therefore be difficult to establish this type of survey.

Internet sites

The SLAITS website: http://www.cdc.gov/nchs/slaits.htm

3.4 Standardised modules of self-report questions in harmonised surveys

Many countries are now reporting at national or supranational levels on data combined from individual sub-national (ie State) or national survey collections. These surveys utilise standard question modules that can be combined to give supranational or national (ie 'nation-wide') estimates but also leave room for jurisdictions to pursue their own information needs. These surveys are usually designed to provide reliable estimates on defined areas (ie States in the US; member countries in Europe; health unit regions in Ontario, Canada).

The disadvantages of such surveys relate to the potential inaccuracy of subjective self-reported information, biases associated with telephone sampling, and issues related to the combining of data from different sample populations. The Behavioral Risk Factor Surveillance System in the US, for example, has had difficulty in determining the appropriate methodology for combining individual State data to give national estimates (US Department of Health and Human Services 1998).

The standardisation of components of the State CATI health surveys in Australia is well developed (see section *2.2.1 Existing time series collections: State-wide CATI Health Surveys*). Modules are currently being devised for the major behavioural risk factors (smoking, nutrition, alcohol misuse, physical inactivity, stress), some self-reported chronic disease (asthma, diabetes) and socioeconomic determinants.

3.4. 1 Harmonisation

The process of standardising data collected from different sources is technically called harmonisation. Harmonisation refers to the process of taking data from disparate collections (such as State collections) and making it comparable to provide a broader level estimate (such as a national estimate) (NPHP 1999). There are two different types of harmonisation. The first, *output harmonisation*, involves bringing together data from collections that have used different measures for the same topic and attempting to make them comparable or equivalent (Jensen 2000). This requires adjusting for the different populations sampled by the different collections. The second, *input harmonisation*, aims to standardise monitoring tools used by the various collections such as, questionnaires, questions or coding frames (Jensen 2000). Output harmonisation is now largely considered to be too cumbersome and difficult and attention has turned to standardising components of different collections (input harmonisation).

EURope ALIMentation (Europe)

The European Commission's Community Action Programme for Health Reporting funds a number of projects designed to establish monitoring systems across Europe (member and potential member 'states' or nations) on a range of population health topics. These include projects to develop and test Europe-wide monitoring systems for physical activity

(EUPASS), cardiovascular disease (EUROCISS) and food availability (DAFNE). *EURope ALIMentation* (EURALIM) collects and recodes cancer and cardiovascular disease risk factor variables from different European studies to create a common database of risk factors in the European population. EURALIM originally focused on output harmonisation but found pooling and harmonising data from independently conducted surveys was not a suitable strategy for a risk factor surveillance system. The EURALIM team has since proposed an intermediate solution based on a short monitoring instrument common to all locales and added to all risk factor surveillance instruments (i.e. input harmonisation) (Morabia 2000).

Internet sites

The European Commission's Public Health website:
http://europa.eu.int/comm/health/ph/programmes/monitor/index_en.htm

EURALIM project website: http://www.epidemiology.ch/euralim/

Behavioral Risk Factor Surveillance System (US)

The Behavioral Risk Factor Surveillance System (BRFSS) consists of all 50 US States, the District of Columbia, and 3 Territories (since 1994) collecting data through a series of monthly telephone interviews (reported annually) (CDC 1998). The purpose of the BRFSS is to collect uniform, state-based data on the risk factors/determinants linked to chronic disease, injury and preventable infectious diseases in the US population. Currently the CDC uses the median of all states for its national estimates, but this may not accurately reflect the national picture, and the process is under evaluation (US Department of Health and Human Services 1998). The BRFSS is administered by the Behavioral Surveillance Branch (BSB) of the Centres for Disease Control and State/Territory/District BRFSS Coordinators (CDC 1998).

The BRFSS content is designed to give States flexibility to examine topics of local concern while also providing annual comparable data on national issues. Survey content therefore includes core questions, optional modules and State-added questions (Table 3.3) (CDC 1998). The core and optional modules are sets of standard questions that states cannot modify (CDC 1998). The number of States which used particular modules in the 2000 survey is described in Table 3.3. The BRFSS has a working group that reviews content, questionnaire design and proposes optional modules for review by all BRFSS coordinators at the annual BRFSS conference held in March (CDC 1998). A *Question Appraisal System* manual is also available to assist State and CDC questionnaire designers to evaluate and revise survey questions (CDC 1999).

The sample of adults (18+ years) is selected by random digit dialling and varies in size between States depending on funding. Most States structure their samples to obtain estimates for smaller areas, such as health regions, but small area data are usually obtained by combining several years of data (CDC 2001(a)). Special population groups can also be over-sampled. The latest available quality control reports (for 1999 and 2000 BRFSS data) show that median response rates have dropped significantly between 1995 and 2000 (from 68% to 49% for the most conservative CASRO rate) (CDC undated (a) & (b)).

Table 3.3 Behavioral Risk Factor Surveillance Survey content in 2000 (Brackets indicate the number of states that included the module in their 2000 survey) (CDC 2001(c))

Core		**Optional**	**State-added**			
Fixed Annual *(Number of questions)*	**Rotating Biannual** *(Number of questions)*	**All modules used in 2000** *(Number of states)*	**All topics used in 2000** *(Number of states)*			
Health status (4) Health insurance (3) Routine checkup (1) Diabetes (1) Smoking (5) Pregnancy (1) Women's health (10) HIV/AIDS (14) Demographics (14)	Odd years: Hypertension (3) Injury (5) Alcohol (5) Immunisations (2) Colorectal screening (4) Cholesterol (3) Even years: Physical activity (10) Fruits & vegetables (6) Weight control (6)	Alcohol Consumption (11) Arthritis (36) Cardiovascular Disease (14) Cholesterol Awareness (6) Colorectal Cancer Screening (5) Diabetes (48) Disability (12) Family planning (13) Folic acid (18) Health care coverage & utilisation (4) Health care satisfaction (3) Hypertension awareness (6) Immunisation (18) Injury control (4) Oral health (10) Quality of life & care giving (22) Sexual behaviour (4) Skin cancer (6) Smokeless tobacco use (18) Tobacco use prevention (20)	Activity limitation (10) AIDS (4) Alcohol (5) Arthritis (4) Asthma (10) Birth control (3) Cancer (3) Cardiovascular disease (4) Chickenpox (1) Child care (1) Child health (11) Cholesterol (4) Chronic conditions (3) City/town/village/parish/ward (8) Clinical breast exams (4) Colorectal cancer screening (4) Demographics (8) Depression (5) Diabetes (13)	Dietary fat (2) Drug use (3) Environmental health (1) Ethnicity (8) Firearms (4) Fish consumption (1) Folic acid (4) Food consumption (4) Food handling (3) Future interviews (4) Gambling (2) Health care (12) Health care coverage (24) Health education (2) Hepatitis (2) Highway safety (3) Hypertension (6) Immunisation (9) Injury (5)	Interview characteristics (2) Lead poisoning (2) Lyme disease (3) Mammograms (5) Medications (1) Mental health care (2) Nutrition (1) Occupation (2) Oral health (11) Osteoporosis (12) Pap smears (1) Pesticides (1) Physical activity (5) Pregnancy (3) Preventive counselling (6) Prostate cancer (6) Public health services (3) Quality of life (3) Rabies (1) Radon (1) Sexual behaviour (7)	Skin cancer (3) Smoke detectors (2) Smokeless tobacco (3) Smoking (24) Social context (3) Stroke (1) Telephone service (5) Urbanicity (2) Violence (6) Vitamins (2) Zip code (12)

Many States have contracted out their data collection and focus in-house activities on developing strategies to conduct analysis, dissemination, interventions and evaluations. Nonetheless most material about survey design and conduct is available on-line through the BRFSS homepage on the CDC website. This includes training materials, the *User's Guide* (CDC 1998), questionnaires, codebooks and quality control reports (such as CDC undated (a)).

Results are compiled annually and published by CDC and individual States. A State Publications Database lists State publications arising from the BRFSS (CDC 2001(b)) and the CDC also maintains a site that allows internet users to download (without cost) State BRFSS data from 1996.

CDC reports that State and local health departments rely heavily on BRFSS data and a number of studies have investigated uses, benefits, and barriers to use of the BRFSS (Remington *et al.* 1988; Figgs *et al.* 2000; Bloom *et al.* 2000). These studies found the data were used most frequently for public education, trend analyses, planning, policy support and program evaluation, and to support legislation (i.e. use of tobacco and seatbelts (Remington 1988)).

Barriers to use are commonly reported as insufficient special population or subgroup data, insufficient city, county or region specific data, lack of data analysis skills and insufficient staff (Remington *et al.* 1988; Figgs *et al.* 2000; Bloom *et al.* 2000). In one study, users expressed concerns about the limitations of self-reported data, the declining response rate, the lack of telephone coverage among some populations of interest and variations in some definitions. Many thought that a periodic non-telephone household survey would be an important complement to the BRFSS although no comparison has been made of BRFSS and other national data (Bloom *et al.* 2000). Some wanted more say in determining questions to be included/excluded from the core (Bloom *et al.* 2000). The authors' recommendations for addressing users concerns included:

- the continued development of over-sampling techniques (to improve data on under-represented populations);
- an increase in staffing and training to improve data use;
- increased user friendly reporting (print and on-line); and,
- improved communications with users including states and the public (Bloom *et al.* 2000).

Other criticisms of the BRFSS relate to inconsistency in methods (especially as data collection is carried out by a number of different agencies); inability to react to inclusion of urgently needed data items (as negotiations for each survey occur once a year only); and a lack of information on children.

The BRFSS experience with collating State medians to provide national (ie nation-wide) estimates could not be emulated in Australia, given the dominance of the 3 eastern States in the national population (making up around 77% of the total Australian population).

Internet site

BRFSS website: http://www.cdc.gov/nccdphp/brfss/index.htm

Youth Risk Behavior Surveillance System (US)

The Youth Risk Behavior Surveillance System (YRBSS) is an epidemiologic surveillance system that monitors the prevalence of behaviours in young people that put their health at risk (NCCDPHP, ASH 2001(a)). The YRBSS has five purposes:

- to determine the prevalence and age of initiation of health risk behaviours;
- to assess whether health risk behaviours change over time;
- to examine the co-occurrence of health risk behaviours among young people;
- to provide comparable national, state, and local data; and,
- to monitor progress toward achieving the Healthy People 2010 objectives (16 objectives) and the National Education Goals (NCCDPHP, ASH 2001(a)).

YRBSS data also contribute three of the ten leading health indicators (see section *3.5 Indicator sets derived from existing data sources*) (Kann *et al.* 2000).

The YRBSS monitors behaviours that contribute to unintentional injuries, violence, tobacco use, alcohol use, other drug use, Human Immunodeficiency Virus (HIV) infection, Sexually Transmitted Disease (STD) infection, unintended pregnancies, unhealthy diets and physical inactivity (NCCDPHP, ASH (2001(b)). The YRBSS derives its information from five state and national surveys (described in more detail below) including:

- State, Territory and local school-based surveys of high school students conducted biennially since 1991 (YRBS);
- a national survey of high school students conducted in 1990 and biennially since 1991;
- a household-based survey conducted in 1992 among a national sample of youth aged 12-21 years, whether or not enrolled in school;
- the national college-based survey conducted in 1995; and,
- the national alternative high school survey, conducted in 1998 (NCCDPHP, ASH 1997; NCCDPHP, ASH 2001(a)).

The system is run by the Division of Adolescent and School Health at the CDC and State and Local Coordinators (Kann *et al.* 2000). CDC provides funding and technical support including a 3-day training course for State and local co-ordinators, specialised sampling software and assistance in analysing data, preparing reports and applying findings to school health programs and policies (NCCDPHP, ASH 2001(c)).

Results are published and (de-identified) data can be downloaded from the YBRSS website. CDC has also published six years of summary data on a CD-ROM (called *Youth99*), which includes tables and graphs of national, State, and local data over time and videos on how state and local agencies are using the data (CDC 2001(d)).

The surveys within the YBRSS

Ongoing:

- *The Youth Risk Behavior Survey* (YRBS) is a school-based survey of (mostly) public school students in grades 9 to 12 every 2 years. The survey contains core and optional content, although schools can delete questions in the core to better meet the interests and needs of their local district. In 1999 the YRBS was conducted in 42 States, 4 territories, and 16 large cities (Kann *et al.* 2000). The average sample size was 2 200 and most surveys had overall response rates of more than 60% (Kann *et al.* 2000). Some, however, have very low response rates (e.g. 28% overall in

California in 1999 (school response rate 46%, student response rate 61%) (California Department of Education 2001(a)).

- *The National Youth Risk Behaviour Survey* is a school-based survey that covers students in grades 9-12 in public and private schools. It over-samples in schools with substantial numbers of black and Hispanic students, enabling separate analysis of these groups. In 1999, 15 349 respondents in 144 schools represented an overall response rate of 66% (school response rate 77%, student response rate 86%) (NCCDPHP, ASH 2000).

One off or irregular surveys:

- *The National Health Interview Survey* is a household-based survey that had a supplement focused on 12- to 21-year-olds in 1992.
- *The National Alternative High School Youth Risk Behavior Survey* was a school-based survey conducted in 1998 among a representative sample of almost 9 000 students in alternative schools.
- *The National College Health Risk Behavior Survey* was a mail back survey conducted in 1995 among undergraduate students enrolled in public and private, 2- and 4-year colleges and universities and is planned to be repeated in 2003.

The major reported limitation of the YRBSS is that its composite surveys are not representative of all young people, and not even all those attending school in some areas (Kann *et al*. 2000: 4). Most State and local surveys do not gather enough data from some minority populations in their jurisdictions to allow for accurate separate analyses of these subgroups (specific categories vary by jurisdiction) (US Department of Health and Human Services 1997).

Internet sites

YRBSS website: http://www.cdc.gov/nccdphp/dash/yrbs/

Rapid Risk Factor Surveillance System (Ontario, Canada)

The Rapid Risk Factor Surveillance System (RRFSS) commenced at approximately the same time as Canada's national CCHS and sees itself as a complementary data collection system. The RRFSS was specifically designed to deal with local questions that could not be included in the CCHS. Its goal is to gather timely data for planning, implementing, monitoring and evaluating public health programs and services in participating health departments across Ontario (RRFSS Working Group 2001).

The RRFSS was based on the US BRFSS, and its advice to overcome potential quality control problems and methodological inconsistency by using a single data collection agency. The RRFSS surveys the Canadian population in the province of Ontario on various lifestyle behaviours affecting health (including those associated with cancer, heart disease and injury) and behaviours targeted by public health programs (CEHIP 2000(a)). The RRFSS commenced in January 2001 and by June there were 11 health units participating. Additional health units may join for an annual cost of $CAN 40 000 (in 2001), which covers

the creation of a CATI system, 100 completed interviews per month for 12 months and the creation of data sets in SPSS or SAS format. Additional sample can be added for additional cost. It is planned for participating health units to receive the data on a monthly basis, around two weeks after data are collected (CEHIP 2001(a)).

The RRFSS questionnaire has a core component of approximately 60 questions from modules that all RRFSS participating health units have agreed to ask for the duration of the survey cycle (one year). It also contains up to 40 questions specified by individual health units (CEHIP 2001(a)). RRFSS topics have included asthma rates, smoking, drinking and driving, sun safety, women's health issues, bicycle helmet use, the amount of water testing being conducted in private wells and rates of rabies vaccinations (ISR 2001).

Where appropriate, questions have been taken from established national surveys (such as the CCHS, National Population Health Survey and the US BRFSS) to enable comparison and to maximise use of questions that have been validity and reliability tested (CEHIP 2001(a)). The website maintains a data dictionary, searchable by topics, which provides information on comparable questions asked in other (dated) surveys (CEHIP 2001(b)). The questionnaires are also available through the website. It is anticipated that some further changes may be made to the questionnaire based on interviewer observation and feedback.

The Institute for Social Research (ISR) at York University collects the data (CEHIP 2001(a)) and the Central East Health Information Partnership (CEHIP) (a consortium of District Health Councils, Boards of Health and Universities (CEHIP 2001(c)) hosts and maintains the website, provides support for data analysis and has developed a prototype automated web-based results reporting system (CEHIP 2001(a)). A volunteer RRFSS Working Group, drawn from participating health units and other interested organisations such as the Health Intelligence Units, coordinates all RRFSS-related activities amongst health units and up to four health units volunteer to act as go-between for the RRFSS Working Group and the ISR on questionnaire content (CEHIP 2001(a)).

Internet site

RRFSS website: http://www.cehip.org/rrfss/about_rrfss.htm

FINBALT Health Monitor (Finland, Estonia, Latvia, Lithuania)

The FINBALT Health Monitor is a collaborative survey for monitoring health-related behaviour, practices and lifestyles in four European countries: Estonia (since 1990), Latvia (since 1998), Lithuania (since 1994) and Finland (since 1978). The FINBALT Health Monitor project aims are:

- to serve national health policy and health promotion; and,
- to carry out comparative studies related to major public health problems in participating countries (KTL 2001).

Specific research focuses include the description and comparison of:

- health behaviour and other health-related factors in the participating countries (such as daily smoking and alcohol use);

- socio-demographic variation in health behaviour and other health related factors (such as gender differences in smoking and alcohol use); and,
- the relationship between trends in health behaviour and other health-related factors and health promotion and social, cultural and political factors (KTL 2001).

The project is led by KTL (Kansanterveyslaitos Folkhälsointitutet), the Finnish National Public Health Institute, Department of Epidemiology and Health Promotion (funded by the Ministry of Social Affairs and Health in Finland) and by Steering Committees and National Survey teams in each country.

All four countries survey representative, random, cross-sectional samples of their adult population (general age group 15 to 64 years) drawn from national population registers or equivalents. In Finland, the annual sample size is 5 000 with an average response rate of 75%; in Estonia the biannual sample is 2 000 (was 1 500 from 1990 to 1994) with response rates from 63% to 83%; in Latvia the first survey, in 1998, had a sample size of 3 002 with a response rate of 77%; and in Lithuania (1994-98) the biannual sample size was 3 000 with response rates of 65%, 69% and 64% respectively (Kasmel & Lipand 1999; Pudule *et al.* 1999; Petkeviciene & Klumbiene 1999; Dregbal & Petkeviciene 1999; Dregval *et al.* 2000). In total, for spring 1998, questionnaires were sent to a random sample of 13 000 people aged 15-65 years old in the four participating countries (Kärkkäinen *et al.* 2001).

The surveys are implemented in April-May to ensure comparability and to avoid seasonal variation. The data collection method is a mail-back questionnaire (with reminders).

The questionnaire has an 'obligatory' (core), 'highly recommended', and 'optional' content. The core of 100 questions remains unchanged over time and is common to all participating countries. It covers:

- socio-demographic background;
- health (health services, diseases, subjective health);
- behavioural factors (smoking; food habits; alcohol consumption; physical activity); and,
- height and weight.

In addition to the core questions, each country includes questions on themes of local interest, many of which have changed over the years to reflect current interests.

The FINBALT questionnaire has also been used to develop the health monitoring survey for the WHO CINDI program (see section *3.1.1 CINDI programme*).

An increasing number of agencies, organisations and researchers in Finland are using the data or taking advantage of the system to collect information (see, for example, Luoto *et al.* 2000; Laaksonen *et al.* 2001). Some examples of the uses of the Finnish data include:

- changes to anti-smoking legislation, such as major changes in worksite smoking policy after the survey revealed frequent exposure of non-smokers to tobacco smoke at work;
- evaluation of national and targeted health education/promotion campaigns and programmes, such as national Quit & Win and related television campaigns;
- support tool for interventions such as smoking cessation activities, after the survey revealed that around 60% of Finnish smokers would like to stop smoking, or, further interventions on dietary fats after the survey revealed rapid changes in their use; and,
- data for further research such as spin off research that showed smoking differences between socioeconomic groups have remained constant over time whereas differences in dietary habits have almost disappeared (KTL 2001).

The Baltic collections are more recent and there is less documentation in English about their uses. They have, however, recorded some notable changes in health behaviours including in eating habits (such as the increased use of vegetable oil for cooking and decreased use of butter on bread in Estonia and Lithuania), smoking (increases in all countries, particularly in women) and self-reported health status (increases in Estonia) (Petkeviciene & Klumbiene 1999; Pudule *et al.* 1999; Dregval & Petkeviciene 1999; Kasmel & Lipand 1999).

Internet site

FINBALT website: www.ktl.fi/eteo/finbalt

3.5 Indicator sets derived from existing data sources

In developed countries, much of the information needed for monitoring chronic disease and associated risk factors already exists and is/could be reported as indicators. Indicators are summary measures taken from ongoing data sources and are useful for monitoring because they allow for the easy interpretation of a large mass of data by policy makers (DHAC & AIHW1998: 129). The development of indicator sets, particular those created to report at local or health areas (see the *UK Public Health Observatories* below) are an important way to maximise the use of data collected by a variety of health, administrative and population data collections.

The advantages of indicator sets are that they ensure maximum use is made of already collected data, they are less expensive than establishing new collections, and they can include information about a broader set of environmental and socioeconomic determinants of health (as they are not constrained by the information collected by one survey). They are also used as a way of feeding information back to the public and the general health sector. Their main disadvantage is that they have limited ability to analyse associations between risk factors or diseases, although they are often used to ecologically describe the characteristics of areas (i.e. demographics, socioeconomic characteristics, types of illnesses and deaths, clustering of behavioural or biochemical risk factors, etc).

Australia currently does not have a chronic disease indicator set, but the AIHW are planning a time series of publications that will report the chronic diseases and risk factors for which information is currently collected in Australia. Unfortunately, this audit shows that there are very few topics that can currently be reported against nationally (see *Chapter 4 A monitoring framework and options for the development of chronic disease information in Australia*).

Healthy People 2010 and the Leading Indicators for Healthy People 2010 (US)

The Healthy People strategy (running since 1979, in its third generation) is a significant and innovative health initiative in the US and is designed to provide information to:

- address disparities in health status and health outcomes between diverse population groups; and,
- improve the overall health of the United States population (Chrvala & Bulger 1999).

The strategy provides a framework for considering population health and has developed hundreds of indicators to quantify various health issues for the 467 specific objectives of the strategy. Currently the indicators are derived from 190 data sets kept in an electronic database, DATA2010, which is maintained by CDC. Data from 23 of the 190 data sets included in DATA2010 are used to monitor three fifths of the objectives. These major data sets include:

- National Health Interview Survey (67 objectives),
- National Health and Nutrition Examination Survey* (35 objectives),
- National Vital Statistics System – Mortality (23 objectives),
- National Survey of Family Growth (14 objectives),

- National Hospital Discharge Survey (11 objectives),
- Youth Risk Behavior Surveillance System* (11 objectives),
- HIV/AIDS Surveillance System (10 objectives),
- Behavioral Risk Factor Surveillance System* (9 objectives),
- National Household Survey on Drug Abuse (8 objectives),
- School Health Policies and Programs Study (8 objectives),
- National Vital Statistics System – Natality (8 objectives) (US DHHS 2001; a * indicates that the data set is discussed in this chapter).

The 2010 generation of the strategy includes a new development: the release of a short set of indicators to the public designed specifically to create change in the population. The ten *Leading Health Indicators* were selected for their ability to motivate action and their importance as public health issues, and because data was available to measure progress (US DHHS 2001). The set reflects a shift in emphasis away from simple mortality measures toward a more complex array that includes protective and risk behaviours and environmental factors (Table 3.4). The *Leading Health Indicators* will be used to monitor the health of the nation over the next ten years (US DHHS 2001).

Table 3.4 The Ten Leading Health Indicators for Healthy People 2010 (US Department of Health & Human Services 2001).

1.	Physical activity
2.	Overweight and obesity
3.	Tobacco use
4.	Substance abuse
5.	Responsible sexual behaviour
6.	Mental health
7.	Injury and violence
8.	Environmental quality
9.	Immunisation
10.	Access to health care

The general public currently has access to the DATA2010 interactive database through the Internet, and detailed statistical summary reports are published in the National Center for Health Statistics' *Statistical Notes* series (NCHS CDC 2002). Experience with health indicators during the first two decades of Healthy People, however, suggests that traditional methods of communication and dissemination are unlikely to be successful in communicating to the general public and motivating public actions to improve the status of specific indicators. Healthy People has therefore developed a new data dissemination strategy that calls for the use of the most effective strategies for the communication and dissemination of information about the leading health indicators (including through electronic communication), the use of the most compelling and appropriate language that will communicate to the diverse groups of the population and encourage those subgroups to take action, and an ongoing system of process evaluation. This is to provide ongoing feedback about the successes and failures of specific dissemination strategies for diverse population groups and to support modification of these strategies, if necessary (Chrvala & Bulger 2000).

Internet sites

Healthy People website: http://www.cdc.gov/nchs/hphome.htm

Healthy People 2010 website: http://www.health.gov/healthypeople/

Healthy People 2010 Leading health indicators website: http://www.health.gov/healthy-people/LHI/

The DATA2010 interactive database for monitoring Healthy People 2010 (includes objectives and identified subgroups) is available at: http://wonder.cdc.gov/data2010/

Descriptions of the major data sources for monitoring Healthy People 2010 objectives are at: http://www.health.gov/healthypeople/document/html/tracking/THP_PartC.htm

An historical record of the Healthy People 2000 objectives can be found at: http://odphp.osophs.dhhs.gov/pubs/hp2000/

Public Health Observatories (UK)

In 1999 in the UK a Government White Paper, *Saving Lives: Our Healthier Nation*, was released with the objectives of improving the health of the population as a whole and improving the health of the worst off in society (Great Britain Department of Health 1999). It was recognised that a clearer co-ordinated national picture of health and health inequality was needed in order to track changes over time. A Public Health Observatory (PHO) was subsequently established in each of the eight National Health Service, forming a national association of Public Health intelligence to:

- Monitor health and disease trends and highlighting areas for action;
- Identify gaps in health information;
- Advise on methods for health and health inequality impact assessments;
- Draw together information from different sources in new ways to improve health;
- Carry out projects to highlight particular health issues;
- Evaluate progress by local agencies in improving health and cutting inequality; and,
- Give early warning of future public health problems (APHO 2001: 3).

The PHOs are required to strengthen public health input into the broad range of cross-government initiatives aimed at improving health and reducing inequalities including a number of specific plans and strategies (APHO 2001: 1). Although predominantly linked to academic institutions, each PHO's set up reflects local differences. Some inherited well developed regional priorities, others have had to generate them from scratch, in consultation with stakeholders (Beishon 2001). The PHOs have been described as providing independent reporting, and as providing stability through government and/or National Health Service changes (Beishon 2001). The eight PHOs, together with other partner organisations, form the Association of Public Health Observatories, a national network of knowledge, information and surveillance in public health, to facilitate collaborative working at national level (APHO 2001). As well as uniting and supporting the PHOs, the ASHO also runs national collaborative projects (Beishon 2001).

The PHOs have built data warehouses using existing data structured around strategy objectives. The data sets are critically assessed to determine if improvements could be made and pilot projects have been undertaken based on locally determined priorities. The PHOs

have also begun to develop indicator sets, other reports and web-based information to report on the data warehoused. The data in the data warehouses are publicly available. Some PHOs have commented on the surprisingly high usage of data simply through its being made more easily accessible (Beishon 2001).

Internet site

The Association of Public Health Observatories website: http://www.pho.org.uk/

Norgeshelsa, The National Health Indicator System (Norway)

Norgeshelsa ('the Norwegian Health') (launched 2001) creates health indicators from existing collected statistical data sets in order to provide a knowledge base for political action. It aims to provide information on health and health related conditions (including important risk and protective factors and health inequalities) to improve the basis for prioritising target groups, priority areas and strategies. It also aims to provide a simple, accessible and well-arranged system that can make data available to politicians, policy makers, the media, health professionals and voluntary organisations (NIPH 2001(b)).

An indicator description is produced for each indicator, including: a definition, method of calculation, the groups the indicator describes (age, sex, etc), the time period, geographical areas, data quality, source of data and any other pertinent comments (NIPH 2001(a); NIPH 2001(b)). The indicators are available on CD and the web (free and in Norwegian and English) and a fully interactive internet version is planned for 2001 (NIPH 2001(a)). Norgeshelsa allows the user to present data in different ways including graphs, charts, histograms, and maps of geographical distributions.

Norgeshelsa has dissemination strategy with the goals of making the indicators widely known (almost 2 000 copies had been downloaded at September 2001) and to ensure user feedback is incorporated into the system (NIPH 2001(b)).

In Norway municipalities and counties have been made responsible for both preventive and general population health services and small area data is therefore in demand. Only a few data collections however, can provide small area information (NIPH 2001(b)) and the data in other collections is limited by: (1) data confidentiality requirements (legislated under the Data Protection Act in Norway), and, (2) small samples used in national surveys (NIPH 2001(b)). Subsequently data developments have not kept pace with the country's devolution of service provision responsibility.

Internet site

Norgeshelsa, the Norwegian National Health Indicator System website:
http://www.folkehelsa.no/fag/nhis/english.html

Health-Track (US)

Health-Track is a proposed new data collection that hopes to connect data about environmental hazards, human exposure to hazards, and health outcomes (including chronic diseases). If funded, Health-Track will geo-code and plot, information about hazards (i.e. a pesticide spill), exposure to hazards (i.e. the people exposed) and health outcomes, which will allow small areas and populations at risk to be identified. All events would be reported into the system, and alerts of exceptional events (i.e. unusual environmental events or disease clusters) would be reported out to relevant agencies for action. It would therefore provide a nation-wide early warning system for critical environmental health threats. The system also hopes to build up a knowledge base from the scientific literature on causality between environmental exposures and health outcomes (Environmental Health Tracking Project Team 2000).

Although still a proposed system, Health-Track has been included here for three reasons. The first is its emphasis on the geographical plotting of both hazards and outcomes which would allow, for instance, communities with apparently high disease rates (ie 'clusters' such as a high rate of multiple sclerosis) to be identified, as well as potentially causative agents or events (such as pollution from a nearby oil refinery). This goes well beyond surveys with small State samples (such as the BRFSS) for which the smallest geographical area of analysis is still too large to provide useful information to local communities. The second is its desire to link 'environmental health' (priorities for tracking include PCBs, dioxin, heavy metals (mercury, lead), pesticides and water and air contaminants) with human health outcomes. The third is the priority list of health conditions, unequally distributed across differing communities or subpopulations, which includes chronic diseases and some risk factors: asthma and chronic respiratory diseases; birth defects including low birth weight and pre-term births (increasing); diabetes; developmental diseases including autism, cerebral palsy, mental retardation; cancers, especially childhood cancers; and neurological diseases such as Alzheimer's, multiple sclerosis and Parkinson's disease (Health-Track 2001).

Internet sites

Health-Track website: http://health-track.org/

3.6 Summary: Lessons from the International experience

3.6.1 Are the four monitoring methods possible in Australia?

The international experience shows that much of the infrastructure and thinking towards establishing a monitoring and information system in Australia is in place. If current developments continue (see *Chapter 2 The Australian situation*), Australia should be able to fulfill baseline monitoring requirements of both the CINDI and STEPS strategies. In the case of CINDI however, baseline monitoring is only half of the chronic disease information needed and the development of a intervention evidence based to which monitoring is tied should also be considered and would allow for inclusion of more socioeconomic data such as the different jurisdictions policies to curb tobacco industry and smoking related behaviour or the provision of recreational facilities in areas.

The lessons Australia can take from the international literature for each of the four strategies used for monitoring chronic disease and risk factors/determinants are discussed below.

National (or international) surveys with components of objective measurement

The development of a national survey with objective measures, the Australian Health Measurement Survey, has been under way in Australia over the last four years (see section *2.2.2 Proposed time series collections*). The overseas experience suggests that this type of survey can successfully provide objective health information and there is nothing in the international experience to suggest that this type of survey would not be equally successful in Australia. Perhaps the only caution from the international literature is from MONICA, where difficulties were reported applying standardised surveys designed in one cultural setting to others. This may mean that a separate, or modified, objective measures survey may need to be considered for Australia's Indigenous population.

National (or international) standardised surveys of self-report

The international literature suggests that setting up a new centralised survey of self-reported information is not the most viable option for a chronic disease and risk factor/determinant monitoring system in Australia. These types of surveys are expensive and often slow in information release. Subsequently, countries utilising this option have also found a need to develop State and Territory survey systems to get more timely, local area data. Australia already has a national self-report survey (the NHS see section *2.2.1 Existing time series collections*) that provides important national information but it would be expensive to increase the sample size to create small area estimates. The only national survey that has successfully been able to provide national and small area data is the US SLAITS but it has a unique infrastructure that is not currently available in Australia.

Standardised modules of self-report questions in State and Territory surveys

The development of standardised modules of self-report questions for State and Territory health surveys is a popular way of generating chronic disease and risk factor/determinant information in many countries. Australia is also currently planning some standardised modules for its' State and Territory CATI health surveys (beginning with smoking, nutrition, alcohol misuse, physical inactivity, stress; (self-reported) asthma and diabetes; and some socioeconomic determinants). This type of data collection is less expensive and can provide regional data. It has also been other countries experience that decentralised collections are

more acceptable to local authorities because they provide autonomy over other aspects of the survey collection content.

Indicators derived from the integration of existing data sources

The international experience suggests it is useful to have bodies that draw together and report information from health, environmental and socioeconomic collections, particularly if they are reported by smaller geographic areas. This allows local policy makers and other health professionals to quickly ascertain a range of information about the areas for which they make decisions. Australia has begun developing this type of information resource with the Social Health Atlas and HealthWIZ (see section *2.2.4 Current reporting of chronic disease information*), and the AIHW are planning to develop a regular report on chronic disease and associated risk factors and determinants. The advantage of many of the overseas systems is that they data warehouse and provide assistance and interactive tools (such as HealthWIZ) to help users manipulate data. These systems also have well developed dissemination strategies that ensure information is released in the most appropriate forms (languages, mediums) for different sectors of the population. These types of indicator sets can draw information from a broad range of sources and have the potential to report on a broader set of determinants as described as necessary by the two Australian strategies (see section *2.1 Australian policies for chronic disease*).

3.6.2 A single or multiple survey approach

Few countries rely on only one type of data collection to provide information on chronic disease, associated risk factors and determinants. Countries like the UK and the US, for example, have national objective measurement surveys, national self-report surveys, and indicator sets that are collated from disparate data collections. Most of these surveys have now achieved good timeliness (at least biannual).

A mix of strategies appears to be important as no one international survey is considered to provide all information reported to be desired by policy makers (particularly for different area levels). A mix also allows for consideration of the objective measures of health as well as the broader socioeconomic determinants, rather than solely relying on self-report information.

References

APHO (Association of Public Health Observatories) (2001) Public Health Observatories in England, Progress and prospects 2000/01: A report to the National Governing Board. [n.p.]: APHO http://www.pho.org.uk/ accessed 23 August 2001

Beishon M (2001) Public Health Observatories: One year on - Public health in close-up. In *Health Development Today* (6). http://www.hda-online.org.uk/html/hdt1101/phos.html accessed 18 December 2001

Bloom Y, Figgs LW, Baker EA, Dugbatey K, Stanwyck CA & Brownson RC (2000) Data uses, benefits and barriers of the Behavioural Risk Factor Surveillance System: a qualitative study of users. *Journal of Public Health Management Practice*. 6: 78-86

Blumberg SJ, Pradip KM, Tompkins MS & Ezzati-Rice TM (2000) *Child Well-Being in Texas, October 1998 - March 1999.* Hyattsville, Maryland: NCHS, CDC

Bonita R, de Courten M, Dwyer T, Jamrozik K & Winkelmann R (2001) *The WHO Stepwise Approach to Surveillance (STEPS) of NCD risk factors* Geneva: World Health Organisation

British Columbia Civil Liberties Association (BCCLA) (2000) [Press release] Newsflash: Privacy group assails Stats Can health survey practices. Vancouver: BCCLA. http://www.bccla.org/pressreleases/00statscan.html accessed 23 October 2001

California Department of Education (2001(a)) Youth Risk Behavior Survey Results, California High School Survey, Survey Summary. Sacramento: California Department of Education. http://www.cde.ca.gov/cyfsbranch/lsp/health/YRBS/1999_YRBS/CAHSurveySummary.pdf accessed 5 November 2001

CDC (Centers for Disease Control and Prevention) (1998) *Behavioral Risk Factor Surveillance System User's Guide*. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention

CDC (Centers for Disease Control and Prevention) (1999) *BRFSS Questionnaire Appraisal System (QAS).* Atlanta: CDC.

CDC (Centers for Disease Control and Prevention) (2001(a)) Tracking Major Health Risks Among Americans: The Behavioral Risk Factor Surveillance System At A Glance 2001. http://www.cdc.gov/nccdphp/brfss/at-a-gl.htm accessed 23 July 2001

CDC (Centers for Disease Control and Prevention) (2001(b)) State Publications Search. Atlanta: CDC. http://www2.cdc.gov/nccdphp/brfss2/publications/index.asp accessed 7 November 2001

CDC (Centers for Disease Control and Prevention) (2001(c)) BRFSS Questionnaires. Atlanta: CDC. http://www.cdc.gov/nccdphp/brfss/brfsques.htm accessed 23 July 2001

CDC (Centers for Disease Control and Prevention) (undated (a)) *1999 BRFSS Summary Quality Control Report*. Atlanta: CDC

CDC (Centers for Disease Control and Prevention) (undated (b)) *2000 BRFSS Summary Quality Control Report*. Atlanta: CDC

CEHIP (2001(a)) Rapid Risk Factor Surveillance System: FAQs for Public Health Units. Newmarket, Ontario: CEHIP. http://www.cehip.org/rrfss/faqs.htm accessed 14 November 2001

CEHIP (2001(b)) Rapid Risk Factor Surveillance System: Data Dictionary. Newmarket, Ontario: CEHIP. http://www.cehip.org/rrfss/Data%20Dictionary/dictionary_form.html accessed 14 November 2001

CEHIP (2001(c)) Central East Health Information Partnership: About CEHIP. Newmarket, Ontario: CEHIP. http://www.cehip.org/menujs.html accessed 14 November 2001

Chrvala CA. & Bulger RJ (2000) *Leading Health Indicators for Healthy People 2010: Final Report.* Washington DC: Institute of Medicine.

CINDI (undated) *CINDI 2000: CINDI Highlights, Number 6*. Belfast: The Health Promotion Agency for Northern Ireland

CMA (Canadian Medical Association) (2001) Massive survey raises health data concerns. *CMA Interface* 2(1):1

Department of Health, UK (2000) Proposed health survey programme 2001-2006. http://www.doh.gov.uk/public/proposed.htm accessed 21 November 2001

DHAC & AIHW (Commonwealth Department of Health and Aged Care & Australian Institute of Health and Welfare) (1998) *National Health Priority Areas: Mental Health* Canberra: DHAC & AIHW

Dregbal L & Petkeviciene J (1999) Health perception and health behaviour among Lithuanian adult population, in IUHPE (International Union for Health Promotion and Education). *Effectiveness and Quality of Health Promotion – Best Practices*. Paper presented at the 4th European IUHPE Conference. Finnish Centre for Health Promotion Publications 5/1999. Saarijärvi, Finland: Finnish Centre for Health Promotion

Dregval L, Petkyavichene Y & Klumbene Y (2000) [Abstract] Changes in lifestyle that affect the health of adults in Lithuania in 1994–1998. *Diseases prevention and health promotion* No. 4, 2000

Environmental Health Tracking Project Team (John Hopkins School of Hygiene and Public Health, Department of Health Policy and Management) (2000) *America's Environmental Health Gap: Why the Country Needs a Nationwide Health Tracking Network*. Technical Report. Baltimore: Pew Environmental Health Commission

Erens B, Primatesta P & Prior G [Eds] (2001) *Health Survey for England - The Health of Minority Ethnic Groups '99*. 2 Volumes. London: The Stationary Office. http://www.official-documents.co.uk/document/doh/survey99/hse99.htm accessed 15 November 2001

Figgs LW, Bloom Y, Dugbatey K, Stanwyck CA, Nelson DE & Brownson RC (2000) Uses of behavioural risk factor surveillance system data, 1993-1997. *American Journal of Public Health* 90(5): 774-776

Great Britain Department of Health (1999) *Saving Lives: Our Healthier Nation.* London: The Stationary Office

Hamel M (2000) Better Information on the Health of Canadians: the Canadian Community Health Survey. Paper presented at the *Canada E-Health 2000: From Vision to Action* Conference. October 22-24, 2000, Ottawa, Ontario, Canada

Health-Track (2001) *Transition Report to the New Administration: Strengthening our Public Health Defense Against Environmental Threats*. Baltimore: Pew Environmental Health Commission

ISR (Institute for Social Research, York University) (2001) Current projects: Rapid Risk Factor Surveillance System (RRFSS) Study. Toronto, Ontario: ISR. http://www.isr.yorku.ca/projects/current.html accessed 15 November 2001

Jensen L (2000) From Maastricht to Lisbon: Prospects for European Social Statistics. *Sigma* 3/2000: 2-4

Kann L, Kinchen SA, Williams BI, Ross JG, Lowry R, Grunbaum JA, Kolbe LJ & State and Local YRBSS Coordinators (2000) Youth Risk Behavior Surveillance – United States, 1999. *Morbidity and Mortality Weekly Report* 49(SS-5):1-38

Kärkkäinen S, Hausen H, Seppä L, Karjalainen S (2001) Oral health and related factors in the Baltic Countries and Finland. Paper presented at the *5th Congress of the European Association of Dental Public Health, EADPH.* Marburg, Germany. September 21st and 22nd, 2001

Kasmel A & Lipand A (1999) Health behaviour among Estonian Adult Population 1990-1998. In International Union for Health Promotion and Education *Effectiveness and Quality of Health Promotion – Best Practices*. Finnish Centre for Health Promotion Publications 5/1999. Saarijärvi, Finland: Finnish Centre for Health Promotion.

KTL (Kansanterveyslaitos Folkhälsointitutet) (2001) FINBALT Health Monitor. http://www.ktl.fi/eteo/finbalt/main.htm accessed 27 July 2001.

Laaksonen M, Prattala R & Karisto A (2001) Patterns of unhealthy behaviour in Finland. *European Journal of Public Health* 11(3): 294-300.

Luoto R, Latikka P, Pukkala E, Hakulinen T & Vihko V (2000) The effect of physical activity on breast cancer risk: A cohort study of 30 548 women. *European Journal of Epidemiology* 16(10): 973-980

Morabia A (2000) Worldwide Surveillance of Risk Factors to Promote Global Health *American Journal of Public Health* 2000 90: 22-24

NCCDPHP, ASH (National Center for Chronic Disease Prevention and Health Promotion, Adolescent and School Health) (1997) Youth Risk Behavior Surveillance: National College Health Risk Behavior Survey—United States, 1995**.** *Morbidity and Mortality Weekly Report* 46 (SS-6): 1-56

NCCDPHP, ASH (National Center for Chronic Disease Prevention and Health Promotion, Adolescent and School Health) (2000) *1999 National School-based Youth Risk Behavior Survey: Public-use Data Documentation*. Atlanta: CDC

NCCDPHP, ASH (National Center for Chronic Disease Prevention and Health Promotion, Adolescent and School Health) (2001(a)) YRBSS Youth Risk Behavior Surveillance System: 2001 YRBS Information. http://www.cdc.gov/nccdphp/dash/yrbs/ accessed 23 July 2001

NCCDPHP, ASH (National Center for Chronic Disease Prevention and Health Promotion, Adolescent and School Health) (2001(b)) *2001 Youth Risk Behavior Survey: Item Rationale for the 2001 Questionnaire.* Atlanta: CDC

NCCDPHP, ASH (National Center for Chronic Disease Prevention and Health Promotion, Adolescent and School Health) (2001(c)) Assessing Health Risk Behaviors Among Young People:Youth Risk Behavior Surveillance System ,at a glance 2001. Atlanta: CDC. http://www.cdc.gov/nccdphp/dash/yrbs/00binaries/yrbsaag.pdf accessed 27 July 2001

NCCDPHP, ASH (National Center for Chronic Disease Prevention and Health Promotion, Adolescent and School Health) (2001(d)) *YRBSS Youth Risk Behavior Surveillance System: Youth99 (CD Rom).* Atlanta: CDC

NCHS CDC (National Center for Health Statistics, Centers for Disease Control and Prevention) (2001(d)) State and Local Area Integrated Telephone Survey (SLAITS): National Survey of Early Childhood Health. Hyattsville, Maryland: NCHS,CDC. http://www.cdc.gov/nchs/about/major/slaits/nsech.htm accessed 30 August 2001

NCHS CDC (National Center for Health Statistics, Centers for Disease Control and Prevention) (2001(e)) National Survey of Early Childhood Health, 2000: Executive Summary. Hyattsville, Maryland: NCHS, CDC. http://ftp.cdc.gov/pub/Health_Statistics/NCHS/slaits/-methodology%20reports/meth_rpt_nsech.pdf accessed 30 August 2001

NCHS CDC (National Center for Health Statistics, Centers for Disease Control and Prevention) (2001(f)) State and Local Area Integrated Telephone Survey (SLAITS): Children with Special Health Care Needs Module: Fact sheet. ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/slaits/-other%20info/factsheet_cshcn.pdf accessed 8 November 2001

NCHS CDC (National Center for Health Statistics, Centers for Disease Control and Prevention) (2001(a)) State and Local Area Integrated Telephone Survey (SLAITS): Health Module. Hyattsville, Maryland: NCHS,CDC. http://www.cdc.gov/nchs/about/major/slaits/mod_io_wa.htm accessed 30 August 2001

NCHS CDC (National Center for Health Statistics, Centers for Disease Control and Prevention) (2001(b)) State and Local Area Integrated Telephone Survey (SLAITS): Child Well-Being and Welfare Module. Hyattsville, Maryland: NCHS,CDC. http://www.cdc.gov/nchs/about/major/slaits/child_tx_mn.htm accessed 30 August 2001

NCHS CDC (National Center for Health Statistics, Centers for Disease Control and Prevention) (2001(c)) State and Local Area Integrated Telephone Survey (SLAITS). Hyattsville, Maryland: NCHS, CDC. http://www.cdc.gov/nchs/slaits.htm accessed 30 August 2001

NCHS CDC (National Center for Health Statistics, Centers for Disease Control and Prevention) (2002) *Statistical Notes* [ongoing series 1991-] http://www.cdc.gov/nchs/products/pubs/-pubd/hp2k/hp2k.htm#Statistical Notes accessed 23 January 2002

NCHS CDC (National Centre for Health Statistics, Centers for Disease Control and Prevention) (2001(g)) National Health and Nutrition Examination Survey: Participant page. Hyattsville, Maryland: NCHS, CDC. http://www.cdc.gov/nhanes/ accessed 30 August 2001

NCHS CDC (National Centre for Health Statistics, Centers for Disease Control and Prevention) (2001(h)) DHHS-USDA Dietary Survey Integration - Frequently Asked Questions. Hyattsville, Maryland: NCHS. http://www.cdc.gov/nchs/about/major/nhanes/faqs.htm accessed 30 December 2001

NHANES (National Health and Nutrition Examination Survey) 2001 *Interviewer Procedures Manual.* Hyattsville, Maryland: National Center for Health Statistics, CDC

NIPH (National Institute of Public Health, Norway) (2001(a)) *The National Health Indicator System (NHIS) in English*. Oslo: NIPH

NIPH (National Institute of Public Health, Norway) (2001(b)) *The National Health Indicator System and the data base Norgeshelsa in year 2000*. Oslo: NIPH

NPHP (National Public Health Partnership) (1999) Conference on Global Issues and Perspectives in Monitoring Behaviours in Populations: Surveillance of Risk Factors in Health and Illness, 22–24 September 1999 Centers for Disease Control and Prevention, Atlanta. *National Public Health Partnership News*. Issue 10, December: 11

Petkeviciene J & Klumbiene J (1999) Trends in Health Behaviour of Lithuanian Population 1994-1998, in IUHPE (International Union for Health Promotion and Education) Effectiveness and Quality of Health Promotion – Best Practices. Paper presented at the 4th European IUHPE Conference. Finnish Centre for Health Promotion Publications 5/1999. Saarijärvi, Finland: Finnish Centre for Health Promotion.

Pudule A, Villerusa A, Grinberga D & Rituma A (1999) The First FINBALT Health Behaviour Survey in Latvia, in IUHPE (International Union for Health Promotion and Education) Effectiveness and Quality of Health Promotion – Best Practices. Paper presented at the 4th European IUHPE Conference. Finnish Centre for Health Promotion Publications 5/1999. Saarijärvi, Finland: Finnish Centre for Health Promotion.

Remmington PL, Smith MY, Williamson DF, Anda RF, Gentry EM & Hogelin GC (1988) Design, characteristics, and usefulness of state-based behavioural risk factor surveillance: 1981-87. *Public Health Reports* 103: 364-378

RRFSS (Rapid Risk Factor Surveillance System) Working Group 2000 (2001) *An Adult Risk Factor Surveillance System for Ontario*. [Toronto, Ontario]: RRFSS

Statistics Canada (2001) The Canadian Community Health Survey (CCHS): Health Regions. Ottawa: Statistics Canada. http://www.statcan.ca/english/concepts/health/regions.htm accessed 24 October 2001

US DHSS (Department of Health & Human Services) (1997) Youth Risk Behavior Surveillance System (YRBSS). In *Directory of Minority Health and Human Services Data Resources*: Washington: US DHHS http://www.os.dhhs.gov/progorg/aspe/minority/mincdc21.htm accessed 31 October 2001

US DHSS (Department of Health & Human Services) (1998) *Leading Indicators for Healthy People 2010: A Report from the HHS Working Group on Sentinel Objectives.* Washington: US DHHS

US DHSS (Department of Health & Human Services) (2001) Healthy People 2010: Leading Health Indicators. Washington: US DHHS http://www.health.gov/healthypeople/LHI/ accessed 31 October 2001

Waters A & Bennett S (1995) Risk Factors for Cardiovascular Disease: a summary of Australian data. Canberra: AIHW (Cardiovascular Disease Series; No 1)

WHO (1999) *CINDI Handbook for Process Evaluation in Noncommunicable Disease Prevention*. Copenhagen: WHO Regional Office for Europe

Chapter 4 A monitoring framework and options for the development of chronic disease information in Australia

This chapter outlines a framework for considering the monitoring of chronic disease and associated risk factors in Australia. The framework has been used to highlight the chronic diseases currently considered a national priority and the risk factors and determinants shown to be associated with those diseases. The framework can be used to examine current information gaps and to consider strategies for improving public health information in those areas. Four strategies are outlined in the final section. They are:

- a "health observatory" that collates and reports indicators from existing data sources;
- standardising elements of current State/Territory CATI health survey systems;
- development of the proposed objective measures survey, the Australian Health Measurement Survey; and,
- repeating previous national surveys, in particular the National Nutrition Survey.

4.1 What chronic disease information is needed in Australia?: a conceptual framework

4.1.1 The development of a framework for chronic disease and associated risk factor/determinant information in Australia

In order to conceptualise information needs and gaps in Australia a theoretical framework for a nation-wide chronic disease and associated risk factor information and monitoring system was developed (Figure 4.1). It is based on the list of chronic diseases outlined as a national priority in the background paper, *Preventing Chronic Disease: A Strategic Framework* (NPHP 2001) (see section *2.1.1 A national strategy*). All (known) major determinants for each of the identified priority chronic diseases were then ascertained from an extensive literature search and expert consultations (related to the earlier development of a proposal for an Australian Health Measurement Survey program (see section *2.2.2 Proposed time series collections*)). These were then organised under the topic headings from the broader *National Health Performance Framework* (NHPC 2001) (see Appendix E). The performance framework was designed as an umbrella for all population health information in Australia and specifies the need for information in nine broad areas including disease outcomes, health behaviours, socioeconomic conditions and the health care system. This global information framework has been endorsed by AHMAC, and was chosen because it has wide acceptance and broad coverage.

The advantages of a monitoring framework are that it provides broad informational goals, allows for identification of information gaps and allows flexibility in further development because topics can be added and subtracted as priorities change.

Figure 4.1: A monitoring framework for chronic disease and associated risk factors

Underlined topic indicates nation-wide prevalence data over time available from existing sources.

HEALTH STATUS AND OUTCOMES How healthy are Australians? Is it the same for everyone? Where is the most opportunity for improvement?				
Health Conditions	**Biological Conditions**	**Human Function**	**Life Expectancy and Wellbeing**	**Deaths**
Ischaemic heart disease Stroke Certain cancers † Mental health problems /Depression * Musculoskeletal dis (falls) † Oral health conditions * Type 2 Diabetes Mellitus Renal disease † Chronic lung disease (COPD and asthma)	Obesity * Underweight * Hypertension * Dyslipidaemia * Impaired Glucose Tolerance * Insulin resistance * Elevated HbA1c * Proteinuria * Urinary tract infections * Infections *	Disability days Reduction of function Activity limitation Restriction in participation Deteriorating strength, reflexes, balance & vision	Self rated health	

DETERMINANTS OF HEALTH Are the factors determining health changing for the better?				
Person-related Factors	**Health Behaviours**	**Community Capacity**	**Environmental Factors**	**Socioeconomic Factors**
 Early Life Factors Low birth weight Low breast feeding rate Intrauterine growth retardation Poor early childhood development Abuse, neglect & exposure to domestic violence	Tobacco exposure: - smoking - passive Risky Alcohol intake Physical inactivity Exercise (asthma) Diet Supplements (musculoskeletal dis) Food chemicals Analgesic use Substance use Medications Preventative dental behaviours	Characteristics of communities & families such as: Housing quality Community services eg support, transport etc Literacy level Health literacy **Psychosocial factors** Psychosocial stress (life stress) eg arising from interpersonal violence, discrimination, etc (cortisol) Support & relationships - Low social capital - Low social support Low resilience	Natural environment - Exposure to allergens - Exposure to sunlight Products & technology - Exposure to pollution - Hazardous environs - Lack of exposure to fluorides	Education Income Economic capacity Wealth Poverty Ownership of resources Housing Area of residence Occupation inc employment status, relations & condtns Parents' occ at time of birth Food security Systems, eg taxation, social welfare Policies

HEALTH SYSTEM PERFORMANCE§ How well is the health system performing in delivering quality health actions to improve the health of all Australians?		
Effective	**Appropriate**	**Efficient**
Responsive	**Accessible** Accessibility to treatments for each of the health conditions above Accessibility to prevention programs	**Safe**
Continuous	**Capable**	**Sustainable**
Contact with health system and disease management Contact with health system (inc primary care); Early Detection & Screening; Use of complementary medicine; Clinical management; Management of complications; and, Self management		

* also considered risk factors; † requires further specification; § health system performance factors are being considered here only as risk factors for chronic disease.

Further specification of diseases within the model's categories should come after additional consultations with policy makers in relevant areas. Familial and/or genetic risk factors, which would be included in 'Person related factors', are important in the development of chronic disease but are not included in the framework because they are currently not modifiable.

4.2 Strategies for developing chronic disease information in Australia

All Australian data collections were audited to see which of the topics from the monitoring framework could be reported on using existing data collections. Topics where reasonable time series nation-wide information could be ascertained have been underlined in the framework (Figure 4.1). Indicators on these topics could be reported in Australia if they were drawn together in the style of the UK's Public Health Observatories.

Three further strategies were identified to generate information for the remaining topics (Table 4.1). These are:

- the development of standardised components of State-wide CATI collections;
- the development of a national survey with components of objective measurement (the proposed AHMS); and,
- repeating previous past, one-off, national surveys.

The greatest advantage of adopting a four strategy approach is that it draws together a range of current activities and developments in public health information in Australia. The use of existing data sources increases the use of current collections, while the further development of CATI collections builds on the growing strength of developments in this area. The inclusion of an option for collecting objective measures provides an important opportunity to increase the usefulness of self report data through validation and the production of weights for self reported surveys, while the repetition of one-off national surveys can give immediate time series information on some framework topics.

Table 4.1 Four strategies for utilising existing collections or creating new data to cover all the topics in the monitoring framework

Strategy for Australia	Description	Organisation responsible for development	Inter-national example	Topic areas from the framework that could potentially be covered
1. A "health observatory" – collecting, collating and reporting indicators from existing data sources	An information warehouse A regular chronic diseases publication reporting on topics in the framework utilising existing data collections Interactive forms of data based on areas Dissemination strategy including different mediums for the public	AIHW AIHW HealthWIZ AIHW	Public Health Observatories, CINDI Healthy People 2010 Public Health Observatories, Norgeshelsa All of the above	All
2. Standardis-ing elements of current State/Territory CATI health survey systems	Develop standardised elements of current State/Territory CATI collections	State and Territory CATI systems and the CATI TRG	BRFSS	Particularly relevant for the topic areas of 'health behaviours' and 'health care system
3. Development of new surveys	Develop the Australian Health Measurement Survey	PHIDU is the secretariat for project development Management has not been ascertained	Health Survey for England, NHANES	Particularly relevant for the topic areas of 'health outcomes' 'biological conditions'
4. Repeating previous surveys	Consider repeat of various national surveys such as the National Nutrition and Mental Health surveys	ABS		Particular risk factors (i.e. nutrition) or diseases (i.e. mental health)

4.2.1 Strategy one: A "health observatory"

Figure 4.1 (shown previously) shows the chronic disease topics that can be adequately reported against in Australia at present (underlined in Figure 4.1). Most of the existing data is un-validated self-report information and only available at the nation-wide (ie State/Territory and national) level. Some health outcomes data are available at a small area level (such as hospital admissions) but most risk factor data, currently collected by health survey, can only be disaggregated at the regional (capital city/rest of State) and not local level. As was seen in Chapter 2 timeliness of much of this data is also considered a problem by some policy makers (see section *2.3.2 Lack of timeliness*).

Establishing a health observatory on chronic disease in Australia would need to include a central data warehouse where existing data could be bought together, collated and reported as indicators at a national level. This is currently done in Australia by the Australian Institute of Health and Welfare (AIHW) using data collected (in the case of chronic disease) by the Australian Bureau of Statistics in their various national household surveys, disease registers and from administrative collections such as hospital admissions (see Chapter 2 for a description of Australia's current collections). Indicators are currently reported in various AIHW reports (see section *2.2.4 Current reporting of chronic disease information*).

The international observatories have other functions that would be useful in Australia. Other countries are developing interactive data assessment tools, in particular for the Internet, which allow for the health, social and economic description of local areas. They are also developing strategies (such as liaison officers and workshops) to help various users to analyse and apply data better and have dissemination strategies that include using different mediums to provide the public with information.

Interactive and area based data tools are being developed in Australia in the form of HealthWIZ and the Social Health Atlas (see *2.2.5 Current data warehousing of chronic disease and risk factor information*) and these provide a good infrastructure on which a chronic disease information base could be built. Other strategies, such as assistance with data analysis and use, and public dissemination strategies, need development.

The advantages of creating indicators from existing data sources are:

- reduced cost and effort
- coverage of 'socioeconomic factors' that help describe health inequalities
- the potential to create a summary public information and education tool as demonstrated by the summary indicators of the *Leading Indicators for Healthy People 2010* in the US (see section *3.5 Indicator sets derived from existing data sources*)

4.2.2 Strategy two: Standardising elements of State/Territory CATI health survey collections

Figure 4.2 shows the major topics that could be reported against through development of components of State-wide CATI health survey collections to create harmonised nation-wide data. The primary areas these surveys could contribute to are health behaviours, community capacity, psychosocial factors and aspects of health system performance.

The word harmonisation is used to describe the process of combining data from different sources (such as State and Territory CATI health survey collections) in order to establish nation-wide trends. The international experience suggests that standardising measurement instruments from the outset is an easier way to harmonise data than to try and combine disparate information after collection. Fully standardised surveys however, have also proven to be problematic and expensive (see MONICA in section 3.2 *)*. Most countries have subsequently moved to systems that leave control of surveys in local jurisdictions hands but incorporate standardised question modules (see section 3.4 *Standardised modules of self-report questions in harmonised surveys*). Even with standard question modules harmonisation poses difficulties because of differences between sample populations. The BRFSS, for example, is still evaluating how best to create national estimates from state based data (see BRFSS in section 3.4).

There is currently little standardisation of topics or instruments within CATI health survey collections but the CATI Technical Reference Group (National Public Health Information Working Group) is working on a program to standardise modules. Currently modules for smoking, nutrition, alcohol misuse, physical inactivity, and stress; self-reported asthma and diabetes; and some of the socioeconomic determinants of health are under consideration.

The advantages of creating indicators from CATI health survey collections are:

- the ability to supply smaller area data (currently down to regional)
- coverage of 'behavioural risk factors' and 'health management'
- the potential to create a summary public information and education tool as demonstrated by the summary indicators of the *Leading Indicators for Healthy People 2010* in the US (see section 3.5 *Indicator sets derived from existing data sources*)

Figure 4.2 Topics that could potentially be reported through the development of a survey with objective measures

<table>
<tr><th colspan="5">HEALTH STATUS AND OUTCOMES
How healthy are Australians? Is it the same for everyone? Where is the most opportunity for improvement?</th></tr>
<tr><th>Health Conditions</th><th>Biological Conditions</th><th>Human Function</th><th>Life Expectancy and Wellbeing</th><th>Deaths</th></tr>
<tr><td>Ischaemic heart disease
Stroke
Certain cancers †
Mental health problems /Depression *
Musculoskeletal dis (falls) †
Oral health conditions *
Type 2 Diabetes Mellitus
Renal disease †
Chronic lung disease (COPD and asthma)</td><td>Obesity *
Underweight *
Hypertension *
Dyslipidaemia *
Impaired Glucose Tolerance *
Insulin resistance *
Elevated HbA1c *
Proteinuria *
Urinary tract infections *
Infections *</td><td>Disability days
Reduction of function
Activity limitation
Restriction in participation
Deteriorating strength, reflexes, balance & vision</td><td>Self rated health</td><td></td></tr>
<tr><th colspan="5">DETERMINANTS OF HEALTH
Are the factors determining health changing for the better?</th></tr>
<tr><th>Person-related Factors</th><th>Health Behaviours</th><th>Community Capacity</th><th>Environmental Factors</th><th>Socioeconomic Factors</th></tr>
<tr><td>Early Life Factors
Low birth weight
Low breast feeding rate
Intrauterine growth retardation
Poor early childhood development
Abuse, neglect & exposure to domestic violence</td><td>Tobacco exposure:
- smoking
- passive
Risky Alcohol intake
Physical inactivity
Exercise (asthma)
Diet
Supplements (musculoskeletal dis)
Food chemicals
Analgesic use
Substance use
Medications
Preventative dental behaviours</td><td>Characteristics of communities & families such as:
Housing quality
Community services eg support, transport etc
Literacy level
Health literacy
Psychosocial factors
Psychosocial stress (life stress) eg arising from interpersonal violence, discrimination, etc (cortisol)
Support & relationships
- Low social capital
- Low social support
Low resilience</td><td>Natural environment
- Exposure to allergens
- Exposure to sunlight

Products & technology
- Exposure to pollution
- Hazardous environs
- Lack of exposure to fluorides</td><td>Education
Income
Economic capacity
Wealth
Poverty
Ownership of resources
Housing
Area of residence
Occupation inc employment status, relations & condtns
Parents' occ at time of birth
Food security
Systems, eg taxation, social welfare
Policies</td></tr>
</table>

<table>
<tr><th colspan="3">HEALTH SYSTEM PERFORMANCE
How well is the health system performing in delivering quality health actions to improve the health of all Australians?</th></tr>
<tr><th>Effective</th><th>Appropriate</th><th>Efficient</th></tr>
<tr><td>Responsive</td><td>Accessible
Accessibility to treatments for each of the health conditions above §
Accessibility to prevention programs</td><td>Safe</td></tr>
<tr><th>Continuous</th><th>Capable</th><th>Sustainable</th></tr>
<tr><td colspan="3">Contact with health system and disease management
Contact with health system (inc primary care); Early Detection & Screening; Use of complementary medicine; Clinical management; Management of complications; and, Self management</td></tr>
</table>

* also considered risk factors; † requires further specification; § health system performance factors are being considered here only as risk factors for chronic disease.

4.2.3 Strategy three: Develop the Australian Health Measurement Survey

Figure 4.3 shows the major topics that could be reported against if the first proposed survey of the Australian Health Measurement Survey program was run (see section *2.2.2 Proposed time series collections*). The survey currently has no commitment to funding. The primary areas this survey could contribute to are health conditions, biological conditions and human function.

Many overseas countries have now developed successful surveys with components of objective measurement (see section *3.2 National or international surveys with components of objective measurement*). The AHMS has the potential advantages of:

- providing some objective assessment on some health topics
- validation of the self report information currently collected in other surveys
- coverage of 'disease outcomes' and 'biological conditions'.

Figure 4.3 Topics that could potentially be developed through the development of harmonised CATI topics

HEALTH STATUS AND OUTCOMES **How healthy are Australians? Is it the same for everyone? Where is the most opportunity for improvement?**				
Health Conditions	**Biological Conditions**	**Human Function**	**Life Expectancy and Wellbeing**	**Deaths**
Ischaemic heart disease Stroke Certain cancers † Mental health problems /Depression * Musculoskeletal dis (falls) † Oral health conditions * Type 2 Diabetes Mellitus Renal disease † Chronic lung disease (COPD and asthma)	Obesity * Underweight * Hypertension * Dyslipidaemia * Impaired Glucose Tolerance * Insulin resistance * Elevated HbA1c * Proteinuria * Urinary tract infections * Infections *	Disability days Reduction of function Activity limitation Restriction in participation Deteriorating strength, reflexes, balance & vision	Self rated health	

DETERMINANTS OF HEALTH **Are the factors determining health changing for the better?**				
Person-related Factors	**Health Behaviours**	**Community Capacity**	**Environmental Factors**	**Socioeconomic Factors**
 Early Life Factors Low birth weight Low breast feeding rate Intrauterine growth retardation Poor early childhood devlpmnt **Abuse, neglect & exposure to domestic violence**	Tobacco exposure: - smoking - passive Risky Alcohol intake Physical inactivity **Exercise (asthma)** Diet Supplements (mus-culoskeletal dis) Food chemicals **Analgesic use** **Substance use** **Medications** **Preventative dental behaviours**	**Characteristics of communities & families such as:** Housing quality **Community services eg support**, transport etc Literacy level **Health literacy** **Psychosocial factors** Psychosocial stress (life stress) eg arising from interpersonal violence, **discrimination**, etc (cortisol) Support & relationships - **Low social capital** - Low social support Low resilience	Natural environment - Exposure to allergens - Exposure to sunlight Products & technology - Exposure to pollution - Hazardous environs - Lack of exposure to fluorides	Education Income Economic capacity Wealth Poverty Ownership of resources Housing Area of residence Occupation inc employment status, relations & condtns Parents' occ at time of birth Food security Systems, eg taxation, social welfare Policies

HEALTH SYSTEM PERFORMANCE **How well is the health system performing in delivering quality health actions to improve the health of all Australians?**		
Effective	**Appropriate**	**Efficient**
Responsive	**Accessible** **Accessibility to treatments for each of the health conditions above §** **Accessibility to prevention programs**	**Safe**
Continuous	**Capable**	**Sustainable**
Contact with health system and disease management Contact with health system (inc primary care); Early Detection & Screening; Use of complementary medicine; **Clinical management; Management of complications; and, Self management**		

* also considered risk factors; † requires further specification; § health system performance factors are being considered here only as risk factors for chronic disease.

4.2.4 Strategy four: Repeating previous national surveys

Figure 4.4 shows the major topics that could be reported against through the repetition of past, one-off national surveys.

Both the National Nutrition Survey (1995) and the National Survey of Mental Health and Wellbeing (1997) could be repeated to provide time series national data. There is currently no commitment to funding repeats of these surveys although there is some interest in repeating the National Nutrition Survey.

Figure 4.4 Topics that could potentially be developed through the repetition of national surveys

HEALTH STATUS AND OUTCOMES
How healthy are Australians? Is it the same for everyone? Where is the most opportunity for improvement?

Health Conditions	Biological Conditions	Human Function	Life Expectancy and Wellbeing	Deaths
Ischaemic heart disease Stroke Certain cancers † **Mental health problems /Depression *** Musculoskeletal dis (falls) † Oral health conditions * Type 2 Diabetes Mellitus Renal disease † Chronic lung disease (COPD and asthma)	Obesity * Underweight * Hypertension * Dyslipidaemia * Impaired Glucose Tolerance * Insulin resistance * Elevated HbA1c * Proteinuria * Urinary tract infections * Infections *	Disability days Reduction of function Activity limitation Restriction in participation Deteriorating strength, reflexes, balance & vision	Self rated health	

DETERMINANTS OF HEALTH
Are the factors determining health changing for the better?

Person-related Factors	Health Behaviours	Community Capacity	Environmental Factors	Socioeconomic Factors
	Tobacco exposure: - smoking - passive Risky Alcohol intake Physical inactivity Exercise (asthma) **Diet** **Supplements (mus-culoskeletal dis)** **Food chemicals** Analgesic use Substance use Medications Preventative dental behaviours	Characteristics of communities & families such as: Housing quality Community services eg support, transport etc Literacy level Health literacy	Natural environment - Exposure to allergens - Exposure to sunlight Products & technology - Exposure to pollution - Hazardous environs - Lack of exposure to fluorides	Education Income Economic capacity Wealth Poverty Ownership of resources Housing Area of residence Occupation inc employment status, relations & condtns Parents' occ at time of birth Food security Systems, eg taxation, social welfare Policies
Early Life Factors		**Psychosocial factors**		
Low birth weight Low breast feeding rate Intrauterine growth retardation Poor early childhood development Abuse, neglect & exposure to domestic violence		Psychosocial stress (life stress) eg arising from interpersonal violence, discrimination, etc (cortisol) Support & relationships - Low social capital - Low social support Low resilience		

HEALTH SYSTEM PERFORMANCE
How well is the health system performing in delivering quality health actions to improve the health of all Australians?

Effective	Appropriate	Efficient
Responsive	**Accessible** Accessibility to treatments for each of the health conditions above § Accessibility to prevention programs	**Safe**
Continuous	**Capable**	**Sustainable**

Contact with health system and disease management
Contact with health system (inc primary care); Early Detection & Screening; Use of complementary medicine; Clinical management; Management of complications; and, Self management

* also considered risk factors; † requires further specification; § health system performance factors are being considered here only as risk factors for chronic disease.

References

NHPC (National Health Performance Committee) (2001) *National Health Performance Framework Report*. Brisbane: Queensland Health

NPHP (National Public Health Partnership) (2001) *Preventing Chronic Disease: A Strategic Framework - background paper, October 2001*. Melbourne: NPHP

Chapter 5 The audit of current Australian data collections in relation to chronic disease

This chapter reports the findings from the audit of current and proposed Australian data collections in relation to chronic disease, associated risk factors and determinants. The audit process is briefly described together with the selection criteria developed to assess the ability of the collections to provide nation-wide data on the identified topics of interest from the monitoring framework (see Chapter 4). The audit findings for each of the major topic areas are summarised in relation to gaps and deficiencies in the data, and the best information development options among the strategies discussed in the previous chapter.

5.1 The audit

The audit sought to identify existing or proposed data collections for their potential contribution to a nation-wide chronic disease and associated risk factor information and monitoring system as conceptualised in the monitoring framework (see Figure A). All jurisdictions and select expert groups (see *Acknowledgements*) were asked to comment on the utility of the framework, potential data sources and the application of a set of selection criteria to those data sources.

5.2 Selection criteria

A set of selection criteria were determined in order to judge whether data sets could provide nation-wide chronic disease and associated risk factor/determinant information into a monitoring system. Data collections were examined for:

- 'nation-wide' population coverage (i.e. data is available at the national level or at the State/Territory level and could be aggregated to give a nation-wide estimate);
- time series (i.e. there is a commitment to ongoing funding of regular surveys);
- inclusion of most cases, or a representative sample; and,
- ability to be disaggregated by: age, sex, Indigenous status, ethnicity, socioeconomic status and geographic area of residence.

5.3 Audit summary

The full data audit can be found in *Appendix F The full audit of current Australian data collections*.

Table 5.1 summarises the data audit (see *Appendix F* for the full audit) in relation to the four strategies for utilising existing collections or creating new data to cover all the topics in the monitoring framework (as outlined in Table 4.1). For each topic in the monitoring framework, four things are shown:

- *Strategy one: A health observatory*. Topics with national or nation-wide time series data sources (that indicators could be created from) are shown in the un-shaded areas. Areas shaded grey indicate that no national or nation-wide time series data sources currently exist;
- *Strategy two: Standardising elements of State/Territory CATI health survey systems.* Topics that are collected in any of the State CATI health surveys are indicated in the *Standardising current CATI components* column. Each individual State or Territory that collects a topic is indicated;
- *Strategy three: Develop the Australian Health Measurement Survey*. Topics that could potentially be collected in the first proposed survey of the Australian Health Measurement Survey (AHMS) (subject to variation) are shown in the *Proposed AHMS* column; and,
- *Strategy four: Repeating previous national surveys*. Topics that could potentially provide time series coverage of a topic through repeating previously conducted national surveys (for example repeating the National Nutrition Survey) are shown.

5.4 The findings: information gaps and best options for information development

The following information gaps, and best information development options, were identified by the audit:

Health Conditions

Australia has inadequate national incidence and prevalence data on the priority health conditions. This under-representation is partly due to reliance on administrative data (i.e. mortality/morbidity collections) that detect only the "worst cases" (i.e. hospitalisations or deaths). There is a deficit of data on children (particularly for asthma).

The best option for obtaining information on health conditions is to obtain objective measures of these conditions through a survey such as the proposed AHMS. Standardised State-wide CATI health survey components for conditions such as asthma (presence of a wheeze etc) could also be considered, but self-report is not useful for diabetes or renal disease as affected individuals may not be aware of the presence of the condition.

Biological conditions

Australia has inadequate national incidence and prevalence data on biological conditions. The only two that are collected (under- and over -weight) are largely un-validated self-report measures and there is an absence of national biological data for children (including weight).

Biological information is best collected by an objective measures survey such as the proposed AHMS. Standardised modules for State-wide CATI health surveys could be developed for respiratory infections and weight (if self-reported weight is validated through objective measures) but would be unreliable for other topics as respondents are unlikely to know levels of biological markers.

Human Function and Well-being

Australia has adequate national information about the incidence and prevalence of self-reported health and disability – from the National Health Survey and the Survey of Disability, Ageing and Carers – except in children.

Health behaviours

Australia has inadequate national incidence and prevalence data on health behaviours. All current national data is un-validated self-report (except for smoking, which has been validated as accurate self-report measure), but some measures (such as physical activity), cannot be easily validated. There is a deficit of behavioural information in children.

The best option for obtaining information on health behaviours would be to establish standardised components for the State-wide CATI health surveys, and for some measures (such as tobacco exposure in children) to obtain objective measures from a survey such as the proposed AHMS.

Early life factors

There is very little national information about early life factors in Australia.

This information could be developed by incorporating instruments into State-wide CATI health survey questionnaires or by repeating national surveys that have contained these elements.

Psychosocial factors

There is very little national information about psychosocial factors in Australia.

This information could be developed by incorporating instruments into State CATI health survey questionnaires. Cortisol, or other physical/biochemical measures of psychosocial stress could be objectively measured in a survey such as the proposed AHMS.

Environmental factors

There is very little national information about environmental factors in Australia.

A survey of objective measures such as the proposed AHMS could examine environmental exposures in the population (as has been done in the US using NHANES). Indicators could also be developed from other non-health controlled data sources such those that report on hazardous environments, fluoridated water, pollen counts or pollution levels for different substances (as is being proposed for the US Health-Track system) and reported by geographic area for comparison to health data.

Community capacity

There is very little national information about community capacity in Australia.

This information could be developed by incorporating instruments into State-wide CATI health survey questionnaires or by repeating national surveys that have contained these elements. Indicators could also be developed from other non-health controlled data sources such as those that report on policy and systems, and be reported by geographic area for comparison to health data.

Socioeconomic factors

The best socioeconomic data is not linked to health data (i.e. is collected in the Census and Household Expenditure Survey, etc) but some individual socioeconomic measures are contained in the NHS and proposed for the forthcoming GSS.

Socioeconomic factors can be obtained by ensuring socioeconomic questions are included in all health surveys and by standardising the measures used in the State-wide CATI health surveys. Indicators could also be developed from other non-health controlled data sources such as those that report on economics, education, crime, urban planning, housing or policy and reported by geographic area for comparison to health data.

Contact with health system & disease management

Australia has inadequate information on the qualities of health service (i.e. accessibility) and disease management.

This information could be developed by incorporating instruments into State-wide CATI health survey questionnaires.

Table 5.1 Summary of the data audit.

Health Conditions						
	Existing data sources			**Potential new data sources**		
	Data source	**Data type**	**Age coverage**	**Standardising CATI components**	**Proposed AHMS**	**Repeat existing surveys**
Ischaemic heart disease	✓	Hospital Ads	All	NSW WA SA (f)		
Stroke	✓	Hospital Ads	All	WA SA (f)		
Certain cancers (to be specified)	✓	Registers	All	WA (f)		
Oral health conditions	✓	SR/OM	All	NSW QLD		
Musculoskeletal disease	✓	SR/ Hospital Ads	18 + /All	NSW WA SA (f)		
Mental health/depression	✓	OM	4 +	NSW QLD WA SA (f)	✓	✓ National Survey of Mental Health & Wellbeing
Chronic lung disease (COPD & asthma)				NSW VIC QLD WA SA (f)	✓	
Type 2 Diabetes Mellitus				POOR OPTION*	✓	
Renal disease				POOR OPTION*	✓	
Biological conditions						
Obesity	✓	SR	All	NSW VIC QLD WA SA (f)	✓	✓ National Nutrition Survey
Underweight	✓	SR	All	As above for Obesity	✓	✓
Hypertension				NSW VIC QLD WA SA (f)	✓	
Dyslipidaemia				NSW WA SA	✓	
Impaired glucose tolerance				NONE	✓	
Insulin resistance				NONE	✓	
Elevated HbA1c				NONE	✓	
Proteinuria				NONE	✓	
Respiratory infections (asthma)				?	✓	
Urinary tract infections (renal)				NONE	✓	
Other infections (musculoskeletal, oral health)				NONE		

Shaded area = topics that require development SR = Self-report OM = objective measures Hospital Ads= Hospital admissions f=future collection activities

Table 5.1 Summary of the data audit …continued.

Human Function and Well-being						
	Existing data sources			**Potential new data sources**		
	Data source	**Data type**	**Age coverage**	**Standardising CATI components**	**Proposed AHMS**	**Repeat existing survey**
Self rated health	✓	SR	15 +	NSW VIC QLD WA SA (f)	✓	
Disability days	✓	SR	15 +	SA WA (f)		
Reduction of function	✓	SR	15 +	NONE	✓	
Activity limitation	✓	SR	18 +	NONE	✓	
Restriction in participation	✓	SR	18 +	QLD		
Health behaviours						
Tobacco exposure: smoking	✓	SR	12 +	NSW VIC QLD WA SA (f)	✓	
Physical inactivity	✓	SR	18 +	NSW VIC QLD WA SA (f)	✓	
Exercise (asthma)	✓	SR	18 +	As above for Physical inactivity	✓	
Risky alcohol use	✓	SR	12 +	NSW VIC QLD WA SA (f)	✓	✓ National Survey of Mental Health and Well-being
Harmful substance use	✓	SR	12 +	NONE	✓	✓
Medications	✓	SR	15 +	NSW VIC QLD SA (f)	✓	
Preventative dental behaviours	✓	SR	15 +	NSW VIC QLD SA (f)	✓	
Diet	Some	SR	18 +	NSW VIC QLD WA SA (f)	✓	✓ National Nutrition Survey
Supplements (musculoskeletal)	✓	SR	18 +	QLD SA (f)	✓	✓ National Nutrition Survey
Tobacco exposure: passive				NSW QLD WA	✓	
Deteriorating strength, reflexes, balance & vision (musculoskeletal)				NONE	✓	
Food chemicals				NONE		

Shaded area indicates topics that require development SR = Self-report f=future collection activities

Table 5.1 Summary of the data audit …continued.

	Existing data sources			Potential new data sources		
Early life factors						
	Data source	**Data type**	**Age coverage**	**Standardising CATI components**	**Proposed AHMS**	**Repeat existing survey**
Low birth weight	✓	OM	All	SA (f)		
Low breast feeding rate	✓	SR	18 +	NSW WA SA (f)		✓ National Nutrition Survey
Intrauterine growth retardation				NONE		
Poor early childhood development				NONE		
Abuse, neglect & exposure to domestic violence	Reported cases only			SA		✓ Women's Safety Survey (contextual)
Psychosocial factors						
Psychosocial stress (life stress arising from discrimination etc)	✓	SR	18 +	VIC SA (f)	✓	✓ National Survey of Mental Health and Well-being
Low social support	✓	SR	18 +	NSW VIC WA SA (f)		
Low social capital				NSW VIC QLD SA Tas (f)		
Interpersonal violence	✓	SR	18 +	SA		
Low resilience				QLD WA SA (f)		
Environmental factors						
Exposure to sunlight	✓	SR	12 - 17	? NSW QLD WA	✓	
Exposure to allergens				NONE	✓	
Hazardous environments (injury)				NONE		
Exposure to pollution				NONE		
Lack of exposure to fluorides				NONE		

Shaded area indicates topics that require development SR=Self-report OM=objective measures f = future collection activities (NSW, WA, SA)

Table 5.1 Summary of the data audit …continued.

Community capacity (infrastructure)						
	Existing data sources			**Potential new data sources**		
	Data source	**Data type**	**Age coverage**	**Standardising CATI components**	**Proposed AHMS**	**Repeat existing survey**
Housing (quality)	✓	SR	18 +	NONE		
Community services: Transport	✓	SR	18 +	NSW SA (f)		
Characteristics of communities & families	✓	SR	18 +	QLD SA Tas (f)		
Literacy level	✓	OM	15+	SA (f)		✓ Survey of Aspects of Literacy
Health literacy				NONE		
Socioeconomic factors						
Education	✓	SR	All	NSW VIC QLD SA WA (f)	✓	
Income	✓	SR/HES	All	VIC QLD WA SA (f)	✓	
Ownership of resources (surrogate measures of SES i.e. ownership of car)	✓	SR	All	NONE		
Wealth	✓	SR/ HES	All	NONE		
Poverty	✓	SR/HES	All	NONE		
Housing (tenure, costs)	✓	SR	All	NSW VIC QLD		
Occupation incl employment status, relations & conditions	✓	SR	All	NSW VIC QLD WA SA (f)	✓	
Food security	✓	SR	All	NSW (f)		
Economic capacity	✓	SR	18 +	NONE		
Parents occupation at time of birth (life-course socioeconomic status)				NONE		
Policies				NONE		
Systems eg taxation, social welfare				NONE		

Shaded area indicates topics that require development SR=Self-report OM=Objective measures HES=Household Expenditure Survey f=future collection activities

Table 5.1 Summary of the data audit …continued.

Contact with health system & disease management						
	Existing data sources			**Potential new data sources**		
	Data source	**Data type**	**Age coverage**	**Standardising CATI components**	**Proposed AHMS**	**Repeat existing survey**
Contact with health system (inc primary care)	✓	SR	All	NSW VIC QLD WA SA (f)	✓	
Early detection & screening	✓ Cancers only	SR	All	NSW VIC QLD WA SA (f)	✓	
Self Management				NSW QLD SA (f)	✓	Asthma and diabetes
Clinical management				NSW QLD (f)		
Management of complications				NONE		
Use of complementary medicine	✓	SR	All	SA WA (proposed)		
Accessibility						
To any health service				NSW QLD		
To ischaemic heart disease treatments				NONE		
To stroke treatments				NONE		
To diabetes treatments				NONE		
To renal disease treatments				NONE		
To cancer treatments				NONE		
To chronic lung disease treatments	✓ Asthma only	SR	All	NONE		
To oral health treatments				QLD		
To mental health treatments	✓	SR	4 +	NONE		National Surveys of Mental Health & Wellbeing
To musculoskeletal disease treatments				NONE		
To prevention programs				NONE		

Shaded area indicates topics that require development SR=Self-report f=future collection activities

Appendix A: Policies and strategies related to chronic disease and associated risk factors in Australia

The background paper *Preventing Chronic Disease: A Strategic Framework* included a partial audit of existing strategies and policies that relate to chronic disease and associated risk factors in Australia (NPHP 2001). This list has been expanded to include policies identified by the audit phase and includes some international chronic disease policies. The list is not exhaustive but it does show a proliferation of policies in Australia, despite the absence of a unifying mechanism or umbrella policy.

Source	**Chronic disease and associated risk factor policies**
International	• WHO *Global Strategy for Prevention and Control of Non-Communicable Diseases*† • WHO Tobacco Free Initiative‡ • WHO Surveillance: *The WHO STEPwise Approach to Surveillance (STEPS) of NCD Risk Factors*, draft V4. (Source: WHO) • UK: *Saving Lives: Our Healthier Nation* † • USA: *Healthy People 2010* † • NZ National Drug Policy – Government's five-year action plan for tobacco, alcohol, illicit and other drugs (source: http://www.moh.govt.nz/moh.nsf/) • NZ National Alcohol Strategy (source: http://www.moh.govt.nz/moh.nsf/) • NZ Diabetes 2000 (source: http://www.moh.govt.nz/moh.nsf/) • Maori Health Strategy Discussion Document (source: http://www.moh.govt.nz/moh.nsf/)
Commonwealth /National	• *Preventing Chronic Disease: A Strategic Framework* (NPHP 2001) • National Health Priority Areas initiative † • *Eat Well Australia* (national nutrition strategy – developed by the Strategic Intergovernmental Nutrition Alliance (SIGNAL) under the NPHP) † • *Australia's national 'Food and Nutrition Policy' (FNP); and 'National Public Health Nutrition Strategy' (NPHNS)* – SIGPAH (source: http://hna.ffh.vic.gov.au/-nphp/signal/tor.htm) • National Childhood Nutrition Program † • National Aboriginal and Torres Strait Islander Nutrition Strategy and Action Plan † • *Active Australia* (national physical activity and health strategy – jointly developed with Australian Sports Commission) † • National Tobacco Strategy † • National Alcohol Action Plan † • *Acting on Australia's Weight* (NHMRC strategic plan for prevention of overweight and obesity) † • National Mental Health Strategy: *National Plan for Promotion, Prevention and Early Intervention for Mental Health 2000* † • Sharing Health Care Initiative (Chronic disease self management program; part of the Enhanced Primary Care Package) †

Source	Chronic disease and associated risk factor policies
	• draft *National Aboriginal and Torres Strait Islander Health Strategy* † • National Drug Strategy † • National Diabetes Strategy † • National Cancer Control Initiative † • *National Cancer Prevention Policy 2001-2003* – The Cancer Council Australia (source: www.cancer.org.au/ncpp.pdf) • National Cardiovascular Health Strategy (when developed) † • National Stroke Strategy. Stroke Australia Task Force, 1997. (source: http://www.clininfo.health.nsw.gov.au/hospolic/STROKNSW/strokns3.htm) • National Asthma Action Plan † • Rural Health Strategy † • Women's and Men's Health Strategies † • National Initiative for the Early Years (NIFTEY) † • Consumer participation and collaboration initiatives † • National Health Promoting Schools Initiative † • Strengthening Families and Communities Strategy † • *Framework for Integrating Behavioural Risk Factor Management in General Practice*, draft (for presentation to General Practice Partnership Advisory Council and National Public Health Partnership Group) ‡ • *National Asthma Strategy (source: National Asthma Campaign Australia; http://www.nationalasthma.org.au/phps.html)* • *National Falls Prevention for Older People Initiative* – "Step out with Confidence", part of the Enhanced Primary Care package (source: http://www.health.gov.au/hsdd/nhpq/pubs/pdf/bhoautumn2001.pdf)
NSW	• *Chronic and Complex Care Initiative* † • Primary Health Care Programs: cardiovascular disease and its risk factors (including diabetes), respiratory illness, and cancer ‡ • *Healthy People 2005 – New Directions for Public Health* (NSW Health Department August 2000) ‡ • *Improving Care for People with Chronic and Complex Conditions: a framework for change.* ‡
Vic	• The *Gatehouse Project* (a National Health Promoting Schools Initiative, designed to promote mental health and emotional well being in schools, but which has demonstrated an impact on other risk factors such as smoking) † • Cardiac secondary prevention strategy ‡ • *Victorian Stroke Strategy* implementation plan (with the National Stroke Foundation) ‡ • *Active Script Program* (funded by the Department of Human Services) ‡ • *SunSmart Campaign 2000-03* – Anti-Cancer Council Victoria (Source: www.sunsmart.com.au/campaign/pdfs/SScampaign2000.pdf accessed 11 July 2001) • *Healthy Eating, Healthy Victoria A Lasting Investment: A Strategic Framework for the Implementation of The Victorian Food And Nutrition Policy. Second Victorian Food and Nutrition Policy developed in 1995* (source: http://hna.ffh.vic.gov.au/phb/hprot/food/strategy/1.htm) • *Strengthening Systems for Health Promotion* (Public Health Division) (source: http://www.dhs.vic.gov.au/phd/9903034/9903034.pdf)

Source	Chronic disease and associated risk factor policies
Qld	• *North Queensland Chronic Disease Strategy* (Indigenous) † • *Model of Primary Health Care* † • *Nutrition, Physical Activity and Chronic Disease Outcome Area Plan* ‡ • *Information management strategic plan 2001-2006* (source: http://www.health.qld.gov.au/publications/imstratplan/imstratplan.pdf.pdf)
WA	• diverse strategies - Health Enhancement Branch, Public Health Division ‡ • *Start Right – Eat Right* (nutrition program training childcare centre staff to provide safe, nutritious food in a supportive eating environment for children) ‡ • *Feel Good – Quit* (anti-smoking campaign) ‡
SA	• Tobacco control, nutrition strategies, initiatives to promote physical activity, strategy to improve self-management of chronic disease ‡ • *Strategic Plan for Diabetes* § • *State Carers Strategy* §
Tas ACT	• *Whose Health Is It Anyway?* (project funded under the Shared Health Care Initiative Demonstration projects) ‡ • *Indigenous Health Plan* (to improve the health status of the Aboriginal and Torres Strait Islander people of the ACT) ‡
NT	• *Preventable Chronic Diseases Strategy* • *The Aboriginal Public Health Strategy and Implementation Guide 1997 – 2002; (source:* www.nt.gov.au/nths/comm_health/abhealth_strategy/apact/apacttoc.html) • *NT Aboriginal Health Policy 1996* (source: http://www.nt.gov.au/nths/comm_health/abhealth_strategy/policy/index.html) • *Strategy Twenty First Century: Strategic Intent: Territory Health Services* (source: http://www.nt.gov.au/nths/org_supp/public_affairs/strategic/final.pdf) • *Strategy 21: Directions 2005: Territory Health Services* (source: http://www.nt.gov.au/nths/org_supp/public_affairs/strategic/StrategicIntent20 01.pdf)

Sources: Items marked ‡ are from the NPHP's National Public Health Partnership News: Chronic Disease – the National Response. Issue 14, December 2000/January 2001. Items marked § are from Department of Human Services [SA]. (1999) Strategic Plan 1999/2002. [Adelaide]: DHS. http://www.health.sa.gov.au/stratplan/ accessed 18 June 2001. Items marked † are from *Preventing Chronic Disease: A Strategic Framework* (NPHP 2001).

Appendix B: Topics covered by the National Health Survey and State-wide CATI health surveys

Detailed list of topics covered by the National Health Survey (NHS) and State-wide CATI health surveys. This table presents an overview of the more detailed *Table F.2* in *Appendix F*. Note that 'f' indicates future collection activities.

Topics	State-wide CATI health surveys							NHS
	NSW	VIC	QLD	WA	WA NT SA	SA SERCIS	TAS Community Capacity	
HEALTH CONDITIONS:								
Ischaemic Heart Disease	f	-	98	95, 00, f	00	97, 99, 00, 01, f	-	89-90, 95, 01, 04-05
Stroke	-	-	-	f	-	97, 00, f	-	89-90, 95, 01, 04-05
Diabetes Mellitus (Type 2)	97, 98, 99, f	01	98, 00	95, 00, f	00	97, 98, 99, 00, 01, f	-	89-90, 95, 01, 04-05
Renal disease	-	-	-	? 95, 00	-	-	-	89-90, 95, 01, 04-05
Certain cancers (eg colorectal, lung)	-	-	99	f	-	-	-	89-90, 95, 01, 04-05
Chronic lung disease (COPD & Asthma)	97, 98, 99, 01, f	01	98, 00	95, 00, f	00	97, 98, 99, 00, 01, f	-	89-90, 95, 01, 04-05
Mental health problems/depression	97, 98, 99, 01, f	-	94, 98	f	00	97, 98, 00, 01, f	-	01, 89-90, 95, 04-05
Oral health conditions	98, 99, 01, f	-	98, 02	-	-	-	-	89-90, 04-05
Musculoskeletal disease[1]	99, f	-	96a, 98	95, 00	00	97, 98, 99, 00, f	-	89-90, 95, 01, 04-05
BIOLOGICAL CONDITIONS:								
Hypertension	97, 98	01	93, 98	95, 00	00	97, 98, 99, 00, 01, f	-	89-90, 95, 01, 04-05
Dyslipidaemia	97, 98, 99, 01, f	-	98	95, 00	00	97, 98, 99, 00, 01, f	-	89-90, 95, 01, 04-05
Impaired glucose tolerance	-	-	-	-	-	-	-	-
Insulin resistance	-	-	-	-	-	-	-	-
Elevated glycosylated haemoglobin (HbA1c) (diabetes)	-	-	-	-	-	-	-	-
Proteinuria	-	-	-	-	-	-	-	-
Obesity	97, 98, f	01	93, 98, 01, 02a	95, 00, f	00	97, 98, 00, 01, f	-	89-90, 95, 01, 04-05
Underweight (musculoskeletal disease)	As for Obesity above							
Urinary tract infections (renal disease)	-	-	-	-	-	-	-	01, 04-05 (long term)
Infections (asthma, musculoskeletal disease, oral health)	-	-	-	-	-	-	-	01, 04-05 (long term)
HUMAN FUNCTION:								

[1] Currently specified as fractures from falls, osteoarthritis & osteoporosis

Topics	State-wide CATI health surveys							NHS
	NSW	VIC	QLD	WA	WA NT SA	SA SERCIS	TAS Community Capacity	
Disability days	-	-	-	f	00	97, 98, 99, 00, 01, f	-	89-90, 95, 01, 04-05
Reduction of function	99, f	-	94	-	-	-	-	89-90, 95, 01, 04-05
Activity limitation	97, 98, 99, 01, f	-	94	-	-	-	-	-
Restriction in participation	-	-	94, 01	-	-	-	-	-
WELLBEING:								
Self rated health	97, 98, 99, 01, f	01	93, 94, 96a, 98, 02, 02a	95, 00, f	00	97, 98, 99, 00, 01, f	01	89-90, 95, 01, 04-05
HEALTH BEHAVIOURS:								
Tobacco exposure smoking	97, 98, 01, f	01	93, 96, 97, 98, 02, 02a	95, 00, f	00	97, 98, 99, 00, 01, f	-	89-90, 95, 01, 04-05
Tobacco exposure passive	97, f	-	93, 96, 97	95, 00	-		-	-
Physical inactivity	97, 98, 99, 01, f	01	93, 96a, 98, 01, 02	95, 00, f	00	97, 98, 00, 01, f	-	89-90, 95, 01, 04-05
Exercise (asthma)	As for Physical inactivity above							
Diet	97, 98, 99, 01, f	01	93, 96a, 01, 02a	95, 00, f	00	98, 01, f	-	89-90, 95, 01, 04-05
Supplements (musculoskeletal disease)	-	-	96a, 01	-	-	f	-	89-90, 95, 01, 04-05
Food chemicals	-	-	-	-	-	-	-	-
Risky Alcohol intake	97, 98, f	01	93, 98	95, 00, f	00	97, 98, 99, 00, 01, f	-	89-90, 95, 01, 04-05
Analgesic overuse	-	-	-	-	-	-	-	89-90, 95, 01, 04-05 use only
Substance use (depression)	-	-	-	-	-	-	-	-
Medications	98, 99, 01, f	01	98	-	-	f	-	89-90, 95, 01, 04-05
Preventive dental behaviours	98, 99, 01, f	01	98, 02	-	-	f	-	89-90, 95, 01, 04-05
EARLY LIFE FACTORS:								
Low birth weight	-	-	-	-	-	f	-	-
Intrauterine growth retardation	-	-	-	-	-	-	-	-
Low breast feeding rate	01, f	-	-	f	-	97, 98, f	-	89-90, 95, 01
Poor early childhood development	-	-	-	-	-	-	-	-
Abuse, neglect and exposure to domestic violence	-	-	-	-	-	98, 99	-	-
PSYCHOSOCIAL FACTORS:								
Psychosocial stress (life stress)	-	01	-	-	00	f	-	-
Psychosocial stress – Interpersonal violence	-	-	-	-	-	98, 99	-	-
Support and relationships – Low Social Capital	97, 98, 99, 01	01	02a	-	-	f	-	-
Support and relationships – Low Social Support	01, f	01	-	f	-	f	-	-

Topics	State-wide CATI health surveys							NHS
	NSW	VIC	QLD	WA	WA NT SA	SA SERCIS	TAS Community Capacity	
Resilience	-	-	02a	f	00	98, 99, f	-	-
ENVIRONMENTAL FACTORS:								
Natural Environment – Exposure to allergens	-	-	-	-	-	-	-	-
Natural Environment – Lack of exposure to sunlight	? f	-	? 93, 00	? 95, 00	-	-	-	-
Products and Technology – Exposure to pollution	-	-	-	-	-	-	-	-
Products and Technology – Harzardous environs	-	-	-	-	-	-	-	-
Products and Technology – Lack of exposure to fluorides	-	-	96	-	-	-	-	-
COMMUNITY CAPACITY:								
Characteristics of communities and families	-	-	98, 02a	-	-	f	01	-
Literacy level	-	-	-	-	-	f	-	-
Health literacy	-	-	02	-	-	f	-	-
Housing (quality)	-	-	-	-	-	f	-	-
Community services eg support, transport etcetera	97, 98, 99, f	-	-	-	-	f	-	-
SOCIOECONOMIC FACTORS:								
Education	97, 98, 01, f	01	93, 94, 96, 97, 98, 99, 00, 01, 02, 02a	95, 00, f	-	97, 98, 00, 01, f	-	89-90, 95, 01, 04-05
Income	-	01	93, 94, 96, 97, 98, 99, 00, 01, 02, 02a	95, 00, f	-	97, 98, 00, 01, f	-	89-90, 95, 01, 04-05
Ownership of resource	-	-	-	-	-	-	-	-
Housing (tenure, costs)	97, 98, 99, f	01	98	-	-	97, 98, 99, 00, 01	-	89-90, 95, 01, 04-05
Area of residence	yes	yes	yes	yes	yes	yes	yes	yes
Occupation (employment status, relations & conditions)	97, 98, f	01	93, 98, 00, 01, 02, 02a	95, 00, f	-	97, 98, 00, 01, f	-	89-90, 95, 01, 04-05
Parents occupation at time of birth	-	-	-	-	-	-	-	-
Food security	99, 01, f	-	93	-	-	-	-	01
Economic capacity (the $2,000 question)	-	-	-	-	-	-	-	-
Wealth	-	-	-	-	-	-	-	-
Poverty	-	-	-	-	-	-	-	-
Systems (eg taxation, social welfare)	-	-	-	-	-	f	-	-

Topics	State-wide CATI health surveys							NHS
	NSW	VIC	QLD	WA	WA NT SA	SA SERCIS	TAS Community Capacity	
Policies	97, f	-	93	-	-	-	-	-
CONTACT WITH HEALTH SYSTEM AND DISEASE MANAGEMENT:								
Contact with health system (including primary care)	97, 98, 99, 01, f	01	94, 98, 00	95, 00, f	00	97, 98, 00, f	-	89-90, 95, 01, 04-05
Early Detection & Screening	97, 98, 99, f	01	93, 96a, 97, 99	95, 00	-	f	-	89-90, 95, 01 (women)
Clinical management	f	-	00	-	-	-	-	-
Management of complications	-	-	-	-	-	-	-	-
Self management	97, 98	-	00	-	-	f	-	-
Use of complement-ary medicine	-	-	-	95, 00, f	-	f	-	89-90, 95, 01, 04-05
ACCESSIBILITY:								
To ischaemic heart disease treatments	-	-	-	-	-	-	-	-
To stroke treatments	-	-	-	-	-	-	-	-
To diabetes treatments	-	-	-	-	-	-	-	-
To renal diseases treatments	-	-	-	-	-	-	-	-
To cancer treatments	-	-	-	-	-	-	-	-
To chronic lung disease treatments	-	-	-	-	-	-	-	01
To oral health treatments	-	-	02	-	-	-	-	-
To mental health treatments	-	-	-	-	-	-	-	-
To musculoskeletal disease treatments	-	-	-	-	-	-	-	-
To prevention programs	-	-	-	-	-	-	-	-
To health services in general	97, 98, 99, 01, f	-	93, 96a	-	-	-	-	-
To cancer screening			96a					

Years and names of individual Qld surveys:

93	Qld Health Status Survey
94	Qld Regional Health Survey
96	Qld Public Health/Media Reach Survey 1996
96a	Qld Women's Health Survey
97	Qld Public Health/Media Reach Survey 1997
98	Qld Statewide Health Survey

99	Qld Colorectal Cancer Survey
00	Qld Chronic Diseases Survey
01	Qld Omnibus Survey (2001)
02	Qld Omnibus Survey (2002)
02a	[Qld] Social Capital Survey

For NSW and WA, where 'f' for future collection is shown, this reflects the activities of the continuous monitoring programs in these States. For SA SERCIS, where 'f' collection is shown, this reflects the proposed topics for the planned South Australian Monitoring & Surveillance System (SAMSS) – continuous collection vehicle. See *Appendix F* for more details on the collections and topics, and for a full list of References and sources.

Appendix C The content of the General Social Survey *

Core Content:

Demographic

Person	Age group
	Sex
	Social marital status
	Registered marital status
	Family type
Income unit	No of persons in income unit
	No of dependent children in income unit
	No of dependent children aged 0-4 years in income unit
	No of dependent children aged 5-14 years in income unit
	No of dependent children aged 15-24 years in income unit
	No of persons aged 65 years and over in income unit
Household	Household type
	Relationship in household
	No of persons in household
	No of dependent children in household
	No of dependent children aged 0-4 years in household
	No of dependent children aged 5-14 years in household
	No of dependent children aged 15-24 years in household
	No of persons aged 65 years and over in household
Geography	State/Territory of usual residence
	Capital city/balance of State
	Accessibility/Remoteness Index of Australia (ARIA) category
	Index of relative socio-economic disadvantage
Cultural diversity	Country of birth
	Year of arrival
	Main language other than English spoken at home
	Proficiency in spoken English

Health

	Self assessed health status
	Disability status
	Disability type
	Whether has employment restriction
	Whether has education restriction

Housing

Characteristics	Tenure type
	Landlord type
Costs	Weekly mortgage payments
	Weekly rent payments

Education

Attainment	Highest educational attainment
	Field of study
Current study	Full-time/part-time study
	Type of educational institution

Work

Status	Labour force status
	No of employed persons in household
	Retirement status
Employment characteristics	Multiple job holder
	Full-time/part-time status
	Hours usually worked in all jobs
	Status in employment in main job
	Occupation in main job
Precariousness	Job security in main job
	Permanent/casual status in main job

Income

Level of income	Personal gross weekly income
	Income unit gross weekly income
	Household gross weekly income
	Equivalised household gross weekly income
Source of income	All sources of personal income
	Principal source of personal income
	Type of government pension/allowance (principal)
	Type of government/pension/ allowance (auxiliary)
	Whether government support has been main source of income in last 2 years
	Time government support was main source of income
	Principal source of income unit income
	Principal source of household income

Financial Stress

	Ability to raise emergency money
	Cash flow problems
	Type of cash flow problem
	Dissaving actions
	Type of dissaving action

Assets and Liabilities

Assets	Value of dwelling
	Equity in dwelling
	Type of investment(s)
	Value of investment(s)
Liabilities	Amount owing on mortgage against home
	Consumer debt
	Type of consumer debt
	Value of consumer debt

Information Technology

Internet	Frequency of Internet access at home
	Purpose of Internet activity at home
	Type of government service accessed via the Internet for private purposes
Other technology	Whether computer used at home

Transport

	Perceived level of difficulty with transport
	Access to motor vehicles
	Travel time to work

Family and Community

Context	Type of stressor in last 12 months
	Type of social activity in the last 3 months
	Type of unpaid voluntary work in last 12 months
Networks	Frequency of face to face contact with family or friends
	Frequency of telephone, email and mail contact with family or friends
	Frequency of contact with family or friends
	Source of support in time of crisis
	Ability to ask for small favours
Support for others	Support for children 0-14 outside the household
	Support for children 15-24 outside the household
	Support for children outside the household
	Support for other relatives outside the household

Crime

Victimisation	Victim of assault in last 12 months
	Victim of break-in last 12 months
	Victim of assault or break-in in last 12 months
Feelings of	Feelings of safety at home during day
	Feelings of safety at home after dark

Supplementary topics:

Use of Information technology

Household access to technologies	Technologies used at home by household
Home Internet & computer access	Whether household has computer access at home
	No of computers used in the household
	Main reason household doesn't have access to a computer
	Whether household has Internet access at home
	Means of Internet access at home
	No of computers in the household used to access the Internet
	Frequency of household Internet access at home
	Main reason why household does not have Internet access at home
	Intention to have Internet access at home in next 12 months
Personal home computer and computer and Internet usage	Whether used a computer at home in last 12 months
	Purpose of computer use at home
	Main purpose of computer use at home
	Frequency of Internet access at home
	Purpose of Internet activity at home
	Main purpose of Internet access at home
Use of Information Technology at work	Whether has worked in a job business or farm in last 12 months including unpaid and voluntary work
	Whether has used a computer at work in last 12 months
	Frequency of Internet access at work
Use of Inform-ation Technology at other sites	Whether has used a computer outside of work or home in last 12 months
	Other sites where a computer has been used in last 12 months
	Frequency of Internet use other than at work or home in last 12 months

	Other sites where the Internet was accessed in last 12 months
Internet activities	Whether has used e-mail or chat sites via the Internet in last 12 months
	Whether has used the Internet to buy/sell shares for private purposes in last 12 months
	Whether has used the Internet to purchase/order goods/services for private purposes in last 12 months
	Types of goods/services purchased/ordered via the Internet for private purposes in last 12 months
	Frequency of goods/services purchased/ordered for private purposes via the Internet
	Total value of goods/services purchased/ordered via the Internet for private purposes
	Whether paid on-line for goods/services purchased/ordered via the Internet for private purposes
	Total value paid on-line for goods/services ordered via the Internet for private purposes
	Whether goods/services purchased/ordered via the Internet were purchased from Australia
	Main reason for not purchasing goods/services via the Internet
	Whether has accessed government services via the Internet for private purposes in last 12 months
	Types of government services accessed via the Internet for private purposes
	Financial services accessed via the Internet in last 3 months
	Financial services accessed via the telephone in last 3 months
Teleworking	Agreement to work from home
	Teleworking enabled by technology
	Technologies that enable teleworking
	No of hours usually worked from home
Any computer & Internet access	Any use of a computer in last 12 months
	Any use of the Internet in last 12 months

Attendance at selected culture and leisure venues and activities

	Whether has attended any selected culture and leisure venues and activities in last 12 months
	Which culture and leisure venues and activities were attended in last12 months
	No of times attended selected culture and leisure venues or activities in last 12 months
	Attendance at musicals and operas in last 12 months
	Attendance at zoological parks and aquaria in last 12 months
	Attendance at other performing arts in last 12 months

Attendance and participation in sport and recreational physical activities

Attendance at sporting events	Whether has attended any sporting events in last 12 months
	Types of sporting events attended in last 12 months
	No of times attended specific sporting event in last 12 months
Participation in sport & recreational physical activity	Whether has participated in sport or recreational physical activity in last12 months
	Types of sport or recreational physical activity participated in in last12 months
	Whether activity was organised by a club, association or other organisation
	Capacity in which participated in identified sport or activity
	No of times participated in identified sport or activity as a player in last 12 months
	No of times participated in identified sport or activity as a coach etc in last 12 months
	No of times participated in identified sport or activity as a referee etc in last 12 months
	No of times participated in identified sport or activity as an administrator in last 12 months
	No of times participated in identified sport or activity in another capacity in last 12 months
	Activity populations

* From the ABS General Social Survey Output Data Items Final Survey 2002, dated May 2002.

Appendix D: Expanded list of WHO STEPS measures for risk factor assessment

		Core	Expanded	Optional (examples)
Risk factors at Step 1	Demography	Age (25-64;10yr gps) Sex Education (years) Urban/Rural,	15-24 and/or 65-74 years Ethnicity Highest level of education Occupation	75-84 years Household size, Marital stat Household income and amenities,
	Tobacco Use	% Current daily smoker (+frequency, duration); % Ex smoker (daily) Mean age starting	Amount, Time since quitting Type of tobacco consumed,	Passive exposure to smoke; attempts to quit; beliefs, knowledge, attitude, behaviour (KAB)
	Alcohol	% consume alcohol currently and in past	Quantity: average volume; binge drinking	Problem drinking (CAGE); KAB
	Nutrition	% at high/low serve of fruit/Vegetable	Dietary patterns	Food Frequency Questionnaire
	Physical inactivity	% sedentary during occupation and non-occupation	% very active during occupation and non-occ., PA related to Transport patterns Mean energy expenditure	Mean energy expenditure at occupational and at non-occupational times,
	Other			Other behavioral risk factors (self-report): eg perceived health, seat belt use, stress, violence; Health service use;
Added risk factors at Step 2	Obesity	[M] Height, weight, waist	[M] Hip circumference	[Q] hx of weight loss, of max weight [M] Bioimpedance
	Blood pressure	[M] Systolic/Diastolic	[Q] % on BP treatment	[Q] % aware of BP measure heart disease, stroke, Compliance. [M] heart rate Family hx CVD
Added risk factors at Step 3	Diabetes	[B] Fasting blood glucose	[Q] Family hx diabetes [B] Oral Glucose Tolerance Test	[Q] hx of treatment (dietary, drugs);
	Blood lipids	[B] Blood Cholesterol	[B] Triglycerides [B] HDL Cholesterol	[Q] hx of treatment (dietary, drugs), of Cholesterol awareness
	Tobacco			[B] Carbon monoxide [B] Serum cotinine
	Alcohol			[B] Serum gamma GT

[Q] Questionnaire based information, either self- or interviewer administered

[M] Physical measurement; [B] Biochemical measurement

Source: Bonita R, de Courten M, Dwyer T, Jamrozik K & Winkelmann R (2001) *The WHO Stepwise Approach to Surveillance (STEPS) of NCD risk factors* Geneva: World Health Organisation, p 89 (Table 26).

Appendix E: The National Health Performance Framework

Health Status and Outcomes How healthy are Australians? Is it the same for everyone? Where is the most opportunity for improvement?			
Health Conditions	**Human Function**	**Life Expectancy and Wellbeing**	**Deaths**
Prevalence of disease, disorder, injury or trauma or other health-related states.	Alterations to body, structure or function (impairment), activities (activity limitation) and participation (restrictions in participation).	Broad measures of physical, mental, and social wellbeing of individuals and other derived indicators such as Disability Adjusted Life Expectancy (DALE).	Age and/or condition specific mortality rates.

Determinants of Health Are the factors determining health changing for the better? Is it the same for everyone? Where and for whom are they changing?				
Environmental Factors	**Socioeconomic Factors**	**Community Capacity**	**Health Behaviours**	**Person-related Factors**
Physical, chemical and biological factors such as air, water, food and soil quality resulting from chemical pollution and waste disposal.	Socioeconomic factors such as education, employment, per capita expenditure on health, and average weekly earnings.	Characteristics of communities and families such as population density, age distribution, health literacy, housing, community support services and transport.	Attitudes, beliefs knowledge and behaviours e.g. patterns of eating, physical activity, excess alcohol consumption and smoking.	Genetic related susceptibility to disease and other factors such as blood pressure, cholesterol levels and body weight.

Health System Performance How well is the health system performing in delivering quality health actions to improve the health of all Australians? Is it the same for everyone?		
Effective	**Appropriate**	**Efficient**
Care, intervention or action achieves desired outcome.	Care/intervention/action provided is relevant to the client's needs and based on established standards.	Achieving desired results with most cost effective use of resources.
Responsive	**Accessible**	**Safe**
Service provides respect for persons and is client orientated and includes respect for dignity, confidentiality, participation in choices, promptness, quality of amenities, access to social support networks, and choice of provider.	Ability of people to obtain health care at the right place and right time irrespective of income, physical location and cultural background.	The avoidance or reduction to acceptable limits of actual or potential harm from health care management or the environment in which health care is delivered.
Continuous	**Capable**	**Sustainable**
Ability to provide uninterrupted, coordinated care or service across programs, practitioners, organisations and levels over time.	An individual's or service's capacity to provide a health service based on skills and knowledge.	System or organisation's capacity to provide infrastructure such as workforce, facilities and equipment, and be innovative and respond to emerging needs (research, monitoring).

Source: NHPC (National Health Performance Committee) (2001) *National Health Performance Framework Report*. Brisbane: Queensland Health, p 8 (Table 2.1).

Appendix F: The full audit of Australian data collections in relation to chronic disease and associated risk factors

The audit process

The audit sought to identify existing or proposed data collections for their potential contribution to a nation-wide chronic disease and associated risk factor information and monitoring system as conceptualised in the monitoring framework (see Figure A). The audit information presented here is the result of a significant process of consultation and review with all jurisdictions. All jurisdictions and select expert groups (see *Acknowledgements*) were asked to comment on the utility of the framework, potential data sources and the application of a set of selection criteria to those data sources. Any errors found within the following documentation however, remain the responsibility of the authors.

Creating the monitoring framework

Two major Australian public health information frameworks, which have both been endorsed by the Australian Health Ministers Advisory Council, were chosen to provide the theoretical underpinnings of the monitoring system:

- The *National Health Performance Framework* (NHPC 2001), a global framework providing an infrastructure for population health information in Australia, was selected because it has broad coverage of topics, has a wide audience and is well accepted in Australia, and has a strong equity basis.
- *Preventing Chronic Disease: A Strategic Framework* (NPHP 2001), a background paper which sets out the "key dimensions" of priority chronic disease conditions in Australia (broadly based on the National Health Priority Areas), and their associated major modifiable risk and protective factors, and socio-environmental determinants[1], was used to furnish the *National Health Performance Framework* with topics because it is the most theoretically rigorous in identifying chronic disease determinants.

These two frameworks together created a consolidated framework of priority topics of relevance to a Nation-wide Chronic Disease and Associated Risk Factors Information and Monitoring System.

To ensure that all risk factors were included in the framework, all (known) major determinants for each of the identified priority chronic diseases[2] were listed under the framework subheadings. Information on determinants is based on best current knowledge derived from an extensive literature search and expert consultations related to the development of a proposal for an Australian Health Measurement Survey program by the Public Health Information Development Unit.

---

[1] (NPHP 2001: 35). The paper is informed by a wide range of strategies, policies and initiatives, such as the WHO Global Strategy for Prevention and Control of Non-Communicable Diseases, the National Health Priority Areas initiative, State and Territory initiatives, and the draft National Aboriginal and Torres Strait Islander Health Strategy, among others.

[2] Including musculoskeletal and oral health conditions, which are flagged for possible inclusion in *Preventing Chronic Disease: A Strategic Framework* (NPHP 2001: 4, Figure 1).

Jurisdictional consultations on the framework resulted in some topic name changes, and movement of topics within subheadings. The revised monitoring framework is shown on the next page (Figure A).

Figure A: A monitoring framework for chronic disease and associated risk factors

Underlined topic indicates nation-wide prevalence data over time available from existing sources.

HEALTH STATUS AND OUTCOMES

How healthy are Australians? Is it the same for everyone? Where is the most opportunity for improvement?

Health Conditions	Biological Conditions	Human Function	Life Expectancy and Wellbeing	Deaths
Ischaemic heart disease Stroke Certain cancers † Mental health problems /Depression * Musculoskeletal disease (falls) † Oral health conditions * Type 2 Diabetes Mellitus Renal disease † Chronic lung disease (COPD & asthma)	Obesity * Underweight * Hypertension * Dyslipidaemia * Impaired Glucose Tolerance * Insulin resistance * Elevated HbA1c * Proteinuria * Urinary tract infections * Infections *	Disability days Reduction of function Activity limitation Restriction in participation Deteriorating strength, reflexes, balance & vision	Self rated health	

DETERMINANTS OF HEALTH

Are the factors determining health changing for the better?

Person-related Factors	Health Behaviours	Community Capacity	Environmental Factors	Socioeconomic Factors
 Early Life Factors Low birth weight Low breast feeding rate Intrauterine growth retardation Poor early childhood development Abuse, neglect & exposure to domestic violence	Tobacco exposure: - smoking - passive Risky Alcohol intake Physical inactivity Exercise (asthma) Diet Supplements (musculoskeletal dis) Food chemicals Analgesic use Substance use Medications Preventative dental behaviours	Characteristics of communities & families such as: Housing quality Community services eg support, transport etc Literacy level Health literacy **Psychosocial factors** Psychosocial stress (life stress) eg arising from interpersonal violence, discrimination, etc (cortisol) Support & relationships - Low social capital - Low social support Low resilience	Natural environment - Exposure to allergens - Exposure to sunlight Products & technology - Exposure to pollution - Hazardous environs - Lack of exposure to fluorides	Education Income Economic capacity Wealth Poverty Ownership of resources Housing Area of residence Occupation inc employment status, relations & condtns Parents' occ at time of birth Food security Systems, eg taxation, social welfare Policies

HEALTH SYSTEM PERFORMANCE§

How well is the health system performing in delivering quality health actions to improve the health of all Australians?

Effective	Appropriate	Efficient
Responsive	**Accessible** Accessibility to treatments for each of the health conditions above Accessibility to prevention programs	**Safe**
Continuous	**Capable**	**Sustainable**

Contact with health system and disease management

Contact with health system (inc primary care); Early Detection & Screening; Use of complementary medicine; Clinical management; Management of complications; and, Self management

* also considered risk factors; † requires further specification; § health system performance factors are being considered here only as risk factors for chronic disease: lack of access to appropriate treatments is identified as a major determinant for almost all of the priority chronic diseases.

Identifying candidate data sets

All existing or proposed candidate data sets that could supply information on identified topics as presented in the framework (Figure A) for a Nation-wide Chronic Disease and Associated Risk Factors Information and Monitoring System were identified in a consultative process and with the assistance of the various jurisdictions. They are listed in Table F.1. Candidate data sets (from Table F.1) are listed under each relevant topic in the topic view of the framework presented in Table F.2 *Full audit*.

Table F.1 *List of all candidate data sources referred to in Full audit (Table F.2) and additional data sources nominated but not audited for topics (shaded)* provides additional information on the data sources.

Criteria for assessment

The criteria proposed for assessing the ability of candidate data sets to contribute to a nation-wide chronic disease and associated risk factors information and monitoring system were:

1. 'nation-wide' population **coverage** (i.e. data is available at the national level or at the State/Territory level and could be aggregated to give a nation-wide estimate);
2. **time series** (i.e. there is a commitment to ongoing funding of regular surveys) (**frequency** is also shown);
3. inclusion of most cases, or a representative sample (**sample/census**); and,
4. ability to be **disaggregated** by: **age**, **sex**, **Indigenous status**, **ethnicity**, socioeconomic status (**SES**), and geographic area of residence (**geog area**).

Note: Although the data for some topics or questions is potentially available from a survey, it may not be reliable or valid. For example, a survey that collects Indigenous status or ethnicity may not have a sufficient sample to produce estimates for these population groups. Surveys of the Indigenous population face the additional problems encountered in collecting data in remote areas. For example, the ABS National Health Survey excludes from its sample the 1% of the population in the most remote areas of Australia – called 'sparsely settled' areas. While not an issue for the non-Indigenous population, it is an issue for Indigenous people, as 18% of Australia's Indigenous population live in these areas. Specific strategies to address this issue include over-sampling to increase the sample take for specific population groups, or for the remote areas. The growing interest in having estimates from survey data available for small areas can be addressed by the production of synthetic estimates, or by the amalgamation of data from subsequent surveys.

Additional criteria suggested by jurisdictions during the audit phase were:

- the **mode** of collection and **sampling method** (NSW); and
- the required level of validity and reliability of the data or survey (WA).

The first criterion has been added to Table F.1 under the '**Additional information**' heading. The second suggested criterion has not been included in this phase of the project. The issue of the validity and reliability of data sources is complex, and few of the data sources listed here have addressed it, or gone beyond test-retest studies in doing so. Hence the basic information needed to set and assess required levels of

validity and reliability is not readily available at this time, nor was such an assessment part of the audit phase of the project.

Information on additional criteria is shown in Table F.1 under the **comments** heading. This includes the sample size and response rate of surveys, or an assessment of the completeness of census enumeration, where available.

The 'Full audit' topic listing

The results of assessment against the criteria are shown in Table F.2 *Full audit* with the information on candidate data sets which can supply data for each topic. A number of methods were used in preparing the *Full Audit* (Table F.2). Most jurisdictions prepared topic views of their relevant data sets, others have been constructed from interviews and reviews of survey and questionnaire instruments. In many cases additional information on the topic can be found under the **comments** heading. Not all instruments or primary documents have been sighted. Topics have been interpreted widely in assessing data sets for relevance and any errors of interpretation remain the responsibility of the authors.

The audit should be used as an indicative rather than definitive source of topics covered or data items included in the data sets. For actual details, readers or potential users will need to refer to data custodians or owners.

The tables following are:

Table F.1 List of all **candidate data sources** referred to in Full audit (Table F.2) and additional data sources nominated but not audited for topics (shaded); and,

Table F.2 **Full audit** - All topics from the monitoring framework (Figure A) are shown with candidate data sets of relevance to each topic.

The *Notes providing an explanation of symbols and abbreviations used in the preceding tables* are provided after the tables.

Lastly, the *References and Sources* section lists works referred to in the text and documentation examined during the audit process.

Table F.1: List of all candidate data sources referred to in Full audit (Table F.2) and additional data sources nominated but not audited for topics (shaded)

Candidate data set	Criteria										Additional information	
	1	2		3	4 Disaggregations:							
	coverage	time series	frequency	sample/ census	age	sex	Indigen-ous status‡	ethnicity ** ‡	SES	geog area ‡	mode & sampling method	comments
AA National Physical Activity **Survey**	nation-wide	yes	? 97, 99, 00	sample 18-75 yrs	yes	yes	no	no	no	b	CATI EWP (99)	Future surveys & frequency not yet determined. Sample size: 3,841 in 1999; response rate: 65% households, 89% eligible individuals.
ABS Australian Housing **Survey** (AHS)	nation-wide	yes	5 yearly 94, 99	sample 15+ yrs	yes	yes	yes [1]	yes	yes	b, d	CAI Sample designed to produce reliable household & person estimates at Australian, State/Territory & Capital City/Balance of State level.[2]	1999: usual residents private dwellings (incl caravan parks) in non-remote areas of Australia. 15,584 selected dwellings were in-scope households, of which 88% responded; final 99 sample incl 13,788 households and 27,688 persons. 1999 broadly similar to 1994.
ABS **Census** of Population and Housing	nation-wide	yes	5 yearly ..., 96, 01, 06	census of population all ages	yes	yes	yes from 71	yes	yes	CD	Drop off & collect Census of population & housing	Census collects data on the no. & certain key characteristics of: people in Australia on census night, & the dwellings they live in; providing a reliable basis for population estimation for each State, Territory & LGA, primarily for electoral purposes & distribution of government funds. Also provides data for small geographic areas & population groups. Data available in CDATA & variety other mechanisms.
ABS Community Housing and Infrastructure Needs **Survey** (CHINS)	nation-wide	yes	irregular[3] 99, 01	census of discrete Indigenous communities see comments	n/a	n/a	n/a[4]	n/a	n/a	b, e	Personal interview with key members of Indigenous housing organisations & communities, knowledgeable about housing & infrastructure issues.	ABS commissioned by ATSIC to conduct a census of all ATSI Communities & Indigenous Housing organisations to collect national Indigenous statistics on housing conditions & infrastructure to fill identified data gaps. No person level data. 99: total of 707 Indigenous housing

[1] For 1999 the sample of Indigenous households (excluding those in remote areas) was supplemented to improve the reliability of Indigenous estimates; the option for an increased sample of households to improve reliability of disaggregated data at sub-State level was offered to all States & Territories, & accepted by the SA Dept of Human Services (ABS 2000a: 51).
[2] Australian Housing Survey 1999 (ABS 2000a: 56).
[3] The 2nd CHINS, updating CHINS 1999, was conducted in conjunction with Census 2001 (ABS 2001b: 1).
[4] Population estimate relate to the total community population and may include non-Indigenous persons.

Candidate data set	Criteria										Additional information	
	1	2		3	4 Disaggregations:							
	coverage	time series	frequency	sample/ census	age	sex	Indigen-ous status‡	ethnicity ** ‡	SES	geog area ‡	mode & sampling method	comments
											Conducted with the 01 Census; complete enumeration of all Indigenous housing organisations & discrete communities.	organisations (20,424 dwellings) & 1,291 discrete Indigenous communities (15 603 dwellings, 109,994 persons) enumerated. Response rate of approximately 98% was expected.
ABS Family Characteristics **Survey**	nation-wide	yes but see comments	irregular 97, 02[5] see comments	sample families with children aged 0-17	yes	yes	yes	yes	yes	d	?? Mix of face-to-face (if first for LF) & telephone interviews. Conducted as a supplement to the MPS[6].	Major family surveys were conducted in 82 and 92 (see ABS Survey of Families); this short family survey was conducted as a supplementary topic to the MPS. Although surveys differ, common data items are broadly comparable.
ABS General Social **Survey** (GSS) (forthcoming)	nation-wide	yes in future	4 yearly[7] 02, 06	sample 18+ yrs	yes	yes	no	yes	yes	d	PAPI Household survey; sample of private dwellings excluding sparsely settled areas.	GSS anticipates 15,000 fully responding households. Will enable measurement of multiple social disadvantage across peoples' lives. Health information content among many other topics, see Appendix C. See also ISS.
ABS Household Expenditure **Survey**	nation-wide	yes	5 yearly 74-75, 75-76, 84, 88-89, 93-94, 98-99	sample 15+ yrs	yes	yes	yes	yes	yes	m	CAI - household & individual interview questionnaires; personal diary. Multistage sample design.	Usual residents of private dwellings in all areas except remote & sparsely settled areas. For 98-99 there were 8,908 dwellings in scope of which 6,893 (77%) were included as part of the final estimates.
ABS Indigenous Health **Survey** (IHS) (forthcoming)	nation-wide	yes in future	6 yearly from 04-05	sample ATSI only all ages	yes	yes	yes	n/a	yes	a	PAPI Household survey; sample of private dwellings in all geographic areas; sparsely settled incl only discrete Indigenous communities.	To be run in conjunction with the NHS to collect information about the health status of Indigenous Australians, use of health services and facilities, and health-related aspects of lifestyle. Some content will be in common with the NHS; for discrete Indigenous communities in sparsely settled areas content will be reduced

---

[5] The Family Characteristics Survey, first conducted in 1997, is expected to be conducted again in April 2002 (ABS 2001d).
[6] The Monthly Population Survey (MPS) is based on a multi-stage area sample of private dwellings (about 30,000 houses, flats, etc. in 1997 when the Family Characteristics Survey was conducted) and a list-sample of non-private dwellings (hospitals, hotels, etc.) covering about 0.5% of the population of Australia (MPS described more fully in *Labour Force, Australia* (ABS Cat. no. 6203.0)). Persons living in remote and sparsely settled parts of Australia were excluded (some 175,000 persons) , with minor impact on aggregate estimates produced for individual States and Territories, except for the NT where they account for over 20% of the population. Estimates for the NT therefore, represent only those areas included in the survey sample (ABS 1998b: 40).
[7] Originally planned to be conducted tri-ennially (02, 05, 08), currently planned for 4 yearly (02, 06) (ABS unpublished communication).

Candidate data set	Criteria										Additional information	
	1	2		3	4 Disaggregations:							
	coverage	time series	frequency	sample/ census	age	sex	Indigen-ous status‡	ethnicity ** ‡	SES	geog area ‡	mode & sampling method	comments
												and modified to be culturally appropriate.[8] See also NHS.
ABS Indigenous Social **Survey** (ISS) (forthcoming)	nation-wide	yes in future	6 yearly 02, 08	sample ATSI only 15+ yrs	yes	yes	yes	no[9]	yes	d	PAPI Household survey; sample of private dwellings including sparsely settled areas.	Health information content includes health risk (smoking, alcohol consumption, substance use). Some topics will be in common with the GSS. See also GSS.
ABS National Aboriginal and Torres Strait Islander **Survey**	nation-wide	no	one off (94)	sample of ATSI people all ages	yes	yes	yes	n/a	yes	b, m	PAPI Random sampling design[10]	17,210 ATSI people interviewed, including a sample of prisoners.
ABS National Health **Survey** (NHS)	nation-wide	yes	triennial from 01 89-90, 95, 01, 04-05 [77-78, 83]	sample all ages	yes	yes	yes	yes	yes	a	PAPI Stratified multistage area sample (enhanc-ed). 01: sampling strategy: to collect data on every child 0-6 yrs, 1 child 7-17, & 1 adult 18+ per household.	1st survey in NHS series conducted 89-90; prior surveys 77-78 & 83 (not part of NHS series) collected similar information, & may in some cases be used to provide lengthier time series information.[11] 01: sample size 29,000 persons incl Indigenous supplement[12] (total of 19,000 adults, 10,000 children); response rate approx 92%. 95: sample size 21,800 households, 54,000 persons; response rate 91.5% households fully/partly responding. See also IHS.

[8] ABS 2002b.
[9] ISS does not collect ethnicity although this can be derived from Indigenous status.
[10] Sample designed to produce useable data at ATSIC Region, State and Territory, part of State (major urban, other urban, and rural), and at National level (SSDA undated).
[11] ABS 1996a: 1. Survey design & comparisons are complex, especially across the two surveys 'in' the time series; for further information, see documentation (eg ABS 1995a, 1995b) or consult ABS.
[12] Additional sample of Indigenous people to be included sufficient to support national estimates for the Indigenous population, & enable comparisons between Indigenous and non-Indigenous populations for selected health characteristics (ABS 2000d: 1).

Candidate data set	Criteria										Additional information	
	1	2		3	4 Disaggregations:							
	coverage	time series	frequency	sample/ census	age	sex	Indigen-ous status‡	ethnicity ** ‡	SES	geog area ‡	mode & sampling method	comments
ABS National Nutrition **Survey** (NNS)	nation-wide	no	one off (95)	sample 2+ yrs	yes	yes	no	yes	yes	d	PAPI & objective measurements. Sub-sample of NHS	Sub-sample of respondents to the 95 NHS (13,858 respondents, 61.4%). Could give time series if repeated.
ABS **Survey** of Aspects of Literacy (SAL)	nation-wide	no	? irregular (96)	sample 15-74 yrs	yes	yes	yes	yes	yes	d	Personal interview & set of tasks pro-viding an objective assessment of English literacy & numeracy skills. Multi-stage area sample of private dwellings; 1 person per dwelling ran-domly selected.	Effective sample 10,709 persons, yielding 9,302 (87%) completed survey interviews. By conducting the SAL, Australia joined the International Adult Literacy Survey (IALS) coordinated by the OECD and Statistics Canada, in which countries undertake similar surveys over a 4-yr period enabling international comparisons of aspects of literacy measured by the IALS.[13]
ABS **Survey** of Disability, Ageing and Carers (SDAC)	nation-wide	yes	six yearly from 03 81, 88, 93, 98 03, 09,...	sample all ages See note 1	yes	yes	no g (98)	yes	yes	d, k	98: CAPI + self enumeration form of carers (households) plus data subset on people in cared accommodation collected using mail-back form complet-ed by establishment administrative staff.	ABS advise: Proposed for 2003 then 6 yearly. 81 relatable to later surveys; 93 onwards comparable on 88 survey (reduced back). 98: 37,580 persons in households & 5,716 persons in cared accommod-ation, response rate 93%, with 84% fully responding.
ABS **Survey** of Families in Australia	nation-wide	yes see comments	irregular (82, 92) see comments	sample [14] families	yes	yes	yes	yes	yes	d	PAPI Special Social Survey	Major family surveys conducted 82 & 92; a short family survey (see ABS Family Characteristics Survey) conducted 97. Although surveys differ, common data items are broadly comparable. Sample 33,981 persons in 92.
ABS **Survey** of Income and Housing Costs	nation-wide	yes from July 1994	annual to 00-01 biennial from 01-03	sample 15+ yrs	yes	yes	no	no	yes income & educat-ion	b	PAPI Sub-sample of priv-ate dwellings incl in ABS Monthly Pop-ulation Survey[15]	Conducted annually to 2000-01, biennially from 2001-03. Monthly sample of approx 650 dwellings (from MPS) resulting in approx 15,500 persons included, of these, about 85% respond.

[13] Health data items: Self perception of health; Whether disabled; Type of disability; Whether has learning difficulties; Extent to which learning difficulty has affected reading ability; Extent to which learning difficulty has affected writing ability, mathematical ability (ABS 1997: 39).
[14] All persons in private & selected non-private dwellings (hotels, motels, hospitals, residential colleges, nursing homes, prisons).
[15] The Monthly Population Survey (MPS) is a multistage sample of private dwellings and a list sample of other dwellings. One sixth of the last rotation group in the MPS are asked income questions.

Candidate data set	Criteria										Additional information	
	1	2		3	4 Disaggregations:							
	coverage	time series	frequency	sample/ census	age	sex	Indigen-ous status‡	ethnicity ** ‡	SES	geog area ‡	mode & sampling method	comments
ABS Women's Safety **Survey**	Australia	no	one off (96)	sample women only, 18+ yrs	yes	women only	no	no[16]	yes	Aust[17]	PAPI Designed to provide national estimates	User funded one off survey. Sample 6,300 women; response rate 78%.
Adult Dental Programs **Survey** (States)	nation-wide	yes since 1994	continuous	sample of public dental patients (adults)	yes	yes	yes	yes broad	no	post-code	Examination by dentists Sample of public dental patients.	Restricted to clients of public dental programs.
AIHW & USyd Bettering the Evaluation and Care of Health (BEACH & SAND) Health provider (GP activity) **survey**	nation-wide	yes since April 1998	continuous	sample of patients from HIC records of active recognised GPs	yes	yes	yes	yes NESB status[18]	no	State & RRMA	GP completion of paper forms capturing patient & encounter details. Cluster sample of patients from random sample of GPs with minimum 375 A1 Medicare items in recent 3 month period. Modification of classic synchronised sampling.	National GP Morbidity & Treatment Survey. In the 2000–01 BEACH data year a random sample of 999 GPs took part, providing details of 99,900 GP–patient encounters across Australia (Britt *et al* 2001). Topic: GP management of patient health problems.
AIHW Cardiovascular Disease National Clinical **Minimum Data Set**, in development	nation-wide in future	yes proposed	ıot yet known, possibly continuous	? persons attending ɔrimary healtł care provider	yes	yes	yes	yes	yes	? post-code	ₐdministrative data ℕational Clinical ℳinimum Data Set	AIHW advise: proposed system, stil ın development, expected to be in th field soon. National data from ɔrimary health care providers, ːhrough GP Divisions, to AIHW.
AIHW National Cancer Statistics **Clearing House**	nation-wide	yes since 1982	continuous	census of cancer notifications	yes	yes	no	yes but poor quality	no SEIFA can be derived	j SLA, p/code	Compiled registry data. All cancer notific-ations from State/ Terr cancer registries.	Data items provided by State cancer registries enable record linkage & analysis of cancer by site, etc.
AIHW National Child Protection **Data Collection**	nation-wide	yes	annual	census of notified cases	yes	yes	yes	no	no	b	Collated from administrative records collections	

[16] The survey collected information about country of birth, some estimates can be provided according to whether women were born in English and non-English speaking countries but not for women born in particular countries (ABS 1996c).
[17] The survey generally does not support reliable estimates for States & Territories, detailed disaggregation, or estimates relating to small population groups, such as Indigenous women (ABS 1996c).
[18] Question on NESB status (Yes/No) is based on whether the patient reports speaking a language other than English as their primary language at home.

Candidate data set	Criteria										Additional information	
	1	2		3	4 Disaggregations:							
	coverage	time series	frequency	sample/ census	age	sex	Indigen-ous status‡	ethnicity ** ‡	SES	geog area ‡	mode & sampling method	comments
AIHW National Community Mental Health Care **Database** Note: in early stages of development	nation-wide	yes in future	annual from 2000-01	census of mental health clients	yes	yes	yes	yes COB in 01-02	no but SEIFA can be derived	yes in 01-02	Collated from administrative records collections	Ethnicity incl country of birth & marital status to be collected in 2002-02. Quality of data in first year collection (2000-01) considered insufficient for publication.
AIHW National Death **Index**	nation-wide	yes since 1980	continuous	census of registered deaths	yes	yes	yes c	no	no	b	Index data only from Registrars	Use for fact of death only (for analysis AIHW Mortality Database can be used). Maintained in cooperation with State and Territory Registrars of Births, Deaths and Marriages.
AIHW National Diabetes **Register**	nation-wide	yes since 1999	continuous	partial census of insulin dependent diabetics	yes	yes	yes	yes	no but SEIFA can be derived	postcode & address	Register	Register: of people with insulin dep-endent diabetes (all types). Potential registrants referred by Diabetes Australia & the Australasian Paed-iatric Endocrine Group; consent rate about 70% (Feb 02).
AIHW National Hospital Morbidity **Database**	nation-wide	yes but see comments	ongoing annual	census of hospital separations	yes	yes	g	yes COB only	no	j SLA	Collated from administrative records collections	Caution: variables change frequently. Annual financial year reporting
AIHW National Mortality **Database**	nation-wide	yes	ongoing annual	census of registered deaths	yes	yes	yes c	yes	no	j SLA	Collated from administrative records collections	Incl main & associated causes of deaths (as recorded by Registrars) ABS-coded for statistical purposes. Used for analysis of deaths. For fact of death (eg for linking), see AIHW National Deaths Index.
AIHW Perinatal **Data Collection**	nation-wide	yes since 1991	annual	compilation of notified births & perinatal deaths	yes	yes	yes[19] mother only	yes COB only	no	j SLA, p/code	Collated from epidemiological collection & other administrative records collections	Based on notifications from State & Territory perinatal data collections, data collected by midwives & other health information staff using information obtained from mothers, hospital & other records. Data collected on all births of 20+ weeks gestation or birthweight of 400+ g.

[19] AIHW advise that ascertainment of maternal Indigenous status varies markedly across the States.

Candidate data set	Criteria										Additional information	
	1	2		3	4 Disaggregations:							
	coverage	time series	frequency	sample/ census	age	sex	Indigen-ous status‡	ethnicity ** ‡	SES	geog area ‡	mode & sampling method	comments
Australian Total Diet **Survey** (previously known as Australian Market Basket Survey (coordinated by ANZFA)	seven jurisdictions (State capital cities & Darwin)	yes since 1970	bi-annual (approx) latest 98 reported 01	sample of foods	n/a	n/a	n/a	n/a	n/a	n/a	Food sampled at up to 4 different times in the year, purchas-ed, prepared & anal-ysed. Representative foods (69 types) sampled from schedule of core, national & regional foods.	Survey coordinated by ANZFA in cooperation with State & NT depts of health (responsible for food samples). Foods are tested to monit-or pesticide residues & environment-al contaminants in food & to estim-ate population levels (for six age-gender groups) of dietary exposure to chemicals (based on dietary modelling). Estimated dietary exposures are compared to Austral-ian/WHO health standards.
Australia and New Zealand Dialysis and Transplant **Registry** (ANZDATA)	nation-wide	yes since 1977	continuous	census of people with end stage renal disease	yes	yes	yes	yes [20]	no	postcode at entry[21]	Register	ANZDATA collects a wide range of statistics relating to outcomes of treatment of people with end stage renal failure. Coordinated by the Queen Elizabeth Hospital, Adelaide.
Australian **Health Measurement Survey** program (AHMS) (proposed, unfunded) Note that the survey design is still in development.	nation-wide	planned in future	six yearly with NHS 1st in 04-05, then 10-11, 16-17, etc	sample 2-74 yrs	yes	yes	yes	yes	yes	a	Phase 1: NHS PAPI Phase 2: Nurse visit to home to collect objective measures. Sub-sample of NHS (which see) respondents	First survey proposed in association with the 2004-5 NHS & thereafter on a six yearly basis (every 2nd NHS). Survey aims to collect a core set of measures (height, weight, body dimensions; blood pressure; lung function; variety of biochemical analyses of blood, saliva & possibly urine) in association with subjective measures collected in the NHS.
Australian Secondary Schools Alcohol and Drug **Survey** (ASSAD) - ACCV & States	nation-wide	yes since 1984	triennial 84, 87, 90, 93, 96, 99,. 02	sample 12-17 yrs	yes	yes	yes p	yes	no	q	PAPI in schools Random sample of junior & senior schools, random sample of students drawn from partic-ipating school rolls.	Nationally coordinated, may incl state-wide supplementary surveys with state-specific topics. Core survey every 3 yrs, illicit drug use incl from 96. Response rates in 96: schools 77%; students 91% (31,529 students in 434 schools).
Australian Secondary Schools Alcohol and Drug **Survey** (ASSAD) - ACT record	state-wide supplementary ACT	yes	triennial 96, 99	sample 11-18 yrs	yes	yes	yes	yes	yes	ACT schools	PAPI in schools See comments.	Supplementary ACT survey. See previous entry for Australian Secondary Schools Alcohol and Drug Survey

[20] Ethnicity = 'Racial origin' and country of birth.
[21] For Indigenous people, Resident State at entry is also collected (ANZDATA 2002).

Candidate data set	Criteria										Additional information	
	1	2		3	4 Disaggregations:							
	coverage	time series	frequency	sample/ census	age	sex	Indigen-ous status‡	ethnicity ** ‡	SES	geog area ‡	mode & sampling method	comments
Australian Study of Health & Relationships (La Trobe University & Central Sydney Area Health Service)	national	no	one off 01	sample 16-59 yrs	yes	yes	?	?	?	?	CATI, preceded by letter for EWP sample. Modified RDD stratified by sex & state.	National study of men's & women's sexual health behaviour & attitudes. Sample size 19,000; response rates 72% for females; 71% for males; item completion rate 98% rate (at Nov 01). Data incl sexual attitudes & experiences, general health status indicators & risk behaviours, & a range of demographic information.
Busselton Health **Studies** (epidemiological research study series) Further information from Busselton Health Studies group at the University of WA.	whole population of one town: Busselton, in the south-west of WA	longitudinal cross-sectional surveys since 1966	all adults: 66, 69, 72, 75 78, 81, 87 (all adults 65+ yrs only), 90 (respiratory survey only); all school children: 67, 70, 73, 77 (high school only), 83; asthma families: 92; all participants (follow-up): 94-95	census ('compre-hensive' surveys) of all adult resid-ents; all sch-ool children; & all adults 65+ yrs; samples (eg asthma 250 families in 92 See comment	yes	yes	?	?	?	n/a	Questionnaire & mass health screenings. All adults from electoral roll; all school children.	Studies incl: series of cross-sectional whole-population health surveys (all adults 66 (91% response rate), 69, 72, 75, 78, 81 (n= 3,400-4,000); all school children 67, 70, 73, 77 (high school only, n= 556) & 83 (n=approx 1,600); all adults 65+ yrs 87 (n= 1,120); & respiratory survey 90 (all adults n=3,880); asthma survey 92 (n=250 families)); continuing follow up of survey participants (94-95: 10,000 known survivors invited to survey, response rate about 50%); collection of sera (for approx. 3,000 people from each survey & 4,500 from 94/95) & DNA samples (for 4,500 people 94/95 & most from the 250 asthma families survey 92); &, compilation of family relationship info between survey participants (approx. 2,000 families).[22]
Child Dental Health **Survey**	nation-wide	yes since 1977	continuous	sample age varies, see comment	yes	yes	s	s	no	post-code	Examination by dental therapist Random sample	Sample of children in School Dental Service. Coverage & ages vary between jurisdictions.

[22] Busselton Health Studies group 2001.

Candidate data set	Criteria										Additional information	
	1	2		3	4 Disaggregations:							
	coverage	**time series**	**frequency**	**sample/ census**	**age**	**sex**	**Indigen-ous status‡**	**ethnicity ** ‡**	**SES**	**geog area ‡**	**mode & sampling method**	**comments**
Child Fluoride **Study**	3 States SA, ACT, Qld (Brisbane & Townsville)	yes	longitudinal (1991-94) 10 yr follow-up commence 02	sample 5-12/15 yrs	yes	yes	yes	yes	yes	post-code	Research study Sample of records from School Dental Services (see Child Dental Health Survey)..	Large, multi-site longitudinal research study to examine the role of water fluoridation in the prevention of dental caries. 28,000 children at study commencement, followed for three years. Ten yr follow-up study to commence in 2002
CSIRO Australian Food and Nutrition **Surveys**	nation-wide	yes since 1988	five yearly 88, 93, 98-99	sample 18+ yrs	yes	yes	no	no 98-99: COB	no proxy: usual occupa tion	6 states, ACT incl with NSW	Post out, self-complete, mail-back National random sample drawn from electoral rolls	National population survey of usual food & nutrient intakes, using a quantified food frequency question-naire & questions on food preparat-ion practices & dietary habits. Anal-ysis for 1996 report incl % whose diet met selected dietary targets[23]. 88: sample 3,800, response rate 66% (yielding 2,315 respondents); 93: smaller sample, similar response rate (1,733 respondents); 98-99 sample 5,000 pre- and 5,000 post-introduct-ion of folate supplementation (6 months later), response rate 44% overall (19% in younger men). 98-99 incl additional demographics.
DHAC national **evaluation surveys** for the National Tobacco Campaign	Australia	yes since 1997	annual 97 May, Nov; 98; 99; 00; 01	sample 18-40 yrs	yes	yes	no	yes	yes	Aust.	CATI EWP enumeration survey[24] & quota sampling to generate 75% of sample as smokers/recent quitters	Surveys under contract to DHAC, analysed by ACCV. 98: 23,319 persons 18+ yrs enumerated in households; 2,289 respondents interviewed (2nd follow-up)[25].
DiabACT **clinical management system**	ACT resident	commencing Aug 2001	ongoing	? all ages	yes	yes	yes	yes	no	ACT region		Diabetes clinical management system for nurses, educators, dietitians and podiatrists.
Environmental Health Risk Perception in Australia **survey**	Australia (all jurisdictions)	no	one off (00)	sample 18+ yrs	yes	yes	no	COB	yes	Aust & 6 states only	CATI [SERCIS] EWP	DHAC funded. Initial eligible sample 3,255; 2,008 completed interviews; response rate 61.7%. ACT & NT – insufficient number for separate analysis.

[23] Baghurst et al. 1996: iv-v.
[24] Sample selected from each of six States; ACT was included with NSW, and NT was included with SA (Commonwealth Department of Health and Aged Care 2000: 26).
[25] Commonwealth Department of Health and Aged Care 2000: 26-7.

Candidate data set	Criteria										Additional information	
	1	2		3	4 Disaggregations:							
	coverage	time series	frequency	sample/ census	age	sex	Indigen-ous status‡	ethnicity ** ‡	SES	geog area ‡	mode & sampling method	comments
Health Monitor (SA) **survey**	state-wide (SA)	yes since Mar 99	up to 3 per year (on request)	sample 18+ yrs or by design	yes	yes	yes	yes	yes	area varies by request	CATI EWP	Generally sample around 2 000 per regular survey; by negotiation on a user pays basis. Geographic area & sample details vary according to user requirements, can sample sub-popul-ations (eg renal patients) & sub-regions (eg Whyalla).
HIC Australian Organ Donor **Register**	nation-wide	-	-	voluntary registrants	-	-	-	-	-	-	Register	Record of the status of intending donors who have voluntarily registered. Authorised users are state based organ donor registers & authorised medical personnel in the organ donation network.
HIC Childhood Immunisation **Register**	nation-wide	yes Since 1996	continuous	children under 7 yrs Immunisation providers							Register	National online database on the immunisation status of all children living in Australia under 7 years. At 30 June 2000: 1,988,146 children under 7 years were recorded, & 22,105 immunisation providers had supplied information since start-up.
HIC **Medicare data** (Australia's universal health insurance scheme)	nation-wide	yes Since 1984	continuous	census of Medicare users	yes	yes	no	no	no	post-code	Administrative data. Census of billing data for all Medicare users.	HIC administers the Medicare billing and payment system covering public (Medicare) patients in public hospitals; & treatments by medical practitioners incl GPs, specialists, participating optometrists & dentists (specified services only).[26] At 30 June 2000, there were 19.7m people registered for Medicare benefits & almost 210m claims pro-cessed in the July 99-June 00 period
HIC **Pharmaceutical** Benefits Scheme (PBS) **data**	nation-wide	yes	continuous	census of pharmacy providers; PBS users (in future)							Administrative data.	Through the PBS, the Common-wealth Government makes a range of necessary prescription medicines available at affordable prices to all Australian residents & overseas visitors eligible under Reciprocal Health Care Agreements. HIC

[26] HIC provides de-identified information for important health research projects that have the potential to improve health outcomes for Australians. Additionally, personal information relating to Medicare and PBS usage by individuals can be released to researchers where the individual has given fully informed consent. The Disease Management Program consists of a number of projects undertaken by research bodies sponsored by HIC (also providing data) with the purpose of learning more about the value of HIC data in disease management. Together with DHAC, the Program includes university researchers and the national peak bodies including Diabetes Australia and the National Heart Foundation. (HIC 2001).

Candidate data set	Criteria										Additional information	
	1	2		3	4 Disaggregations:							
	coverage	time series	frequency	sample/ census	age	sex	Indigen-ous status‡	ethnicity ** ‡	SES	geog area ‡	mode & sampling method	comments
												makes payments to pharmacists to subsidise medicines under a number of schemes.
Hospital-based cancer **registries**	hospital-specific	in future	ongoing	census of hospital based cancer notifications	yes	yes	yes	COB only	based on address	postcode & address	Registers Cancer notifications	Varies between States. Collated cases are held in AIHW National Cancer Clearing House (which see). [Info from WA]
IDI AusDiab (Australian Diabetes, Obesity & Lifestyle Study) **survey with objective measures component** See also IDI AusDiab Qld Supplement.	Australia	no	? one off (99-00)	sample 25+ yrs	yes	yes	yes	yes	yes	Aust	Personal interview & physical exam. Clustered stratified design	Plans to be repeated in 5 yrs[27]. 20,257 participants interviewed over 21 months, 11,247 for physical component (response rate: 55.3% - range from 49.5% (SA, Qld) to 61.8% (WA)).[28]
IDI AusDiab Qld Supplement **supplemental survey incl objective measures**	6 sentinel sites (Qld)	no	? one off (00)	sample 25+ yrs	yes	yes	yes	yes	yes	6 sentinel sites	Personal interview & clinical exam. Sample representat-ive of urban populat-ions	Sample=1,620 Self report dietary questions and blood nutritional indicators. See IDI AusDiab
Melbourne Collaborative **Cohort Study** (Monash University & the Cancer Council of Victoria)	capital city (Vic: Melbourne)	yes	longitudinal, ongoing from 90-94; follow ups 95-98; planned 02-	sample aged 40-69 yrs in 90-94	yes	yes	no	yes	yes	postcode	Baseline survey – visit to study centre to have physical mea-surements & blood samples taken, & to complete question-naires (FFQ, gener-al). Follow ups - mail-out, self-comp-lete, post-back questionnaire.	Long term, prospective study of diet, health & lifestyle in >41,500 Melb-ournians (incl 30% migrants from Italy & Greece), aged 40-69 yrs on recruitment in 1990-94. Follow ups in 1995-98; & planned from 2002. Study examining diet, environmental & genetic risks for: common cancers (breast, prostate, bowel); diabetes type 2; cardiovascular mortality; & other diseases and conditions. Coh-ort linked to Victorian Cancer Regis-try & Death Register, cross-checked with national mortality data for cause of death. Stored plasma; DNA for subgroup to look at genetic markers of disease susceptibility
National Coroners **Information System**	As at 1 Jan 01 participating	yes in future	continuous data from	Census of data from coronial	yes	yes	yes	yes	? proxy	yes	Census of data from coroners' files. Incl	National Internet-based data storage & retrieval system for coronial cases

[27] Information from National Vascular Disease Prevention Partnership late 2001.
28 Dunstan et al 2001: 35-37.

Candidate data set	Criteria										Additional information	
	1	2		3	4 Disaggregations:							
	coverage	**time series**	**frequency**	**sample/ census**	**age**	**sex**	**Indigen-ous status‡**	**ethnicity ** ‡**	**SES**	**geog area ‡**	**mode & sampling method**	**comments**
NCIS) MUNCCI Monash University National Centre for Coronial Information)	jurisdictions include all Australian states and territories except Qld		participating jurisdictions dates back to (in some cases prior to) 1 July 2000	cases in all participating jurisdictions.					measures		ll suicides; homic-ides; traffic, work-lace & sporting atalities; product elated fatal injuries rownings & adverse vents in hospitals.	n Australia to provide coroners with imely access to relevant coronial case information to inform their inv-estigations. Will also provide a research tool to authorised 3rd party users in death & injury surveillance, public health & safety.
National Dental Telephone Interview **Survey**	nation-wide	yes since 1994	?irregular 94, 95, 96, 99, 02,...	sample 5+ yrs	yes	yes	yes	yes	yes	postcode	CATI General population sample	Periodic telephone interview surveys of a general population sample to obtain data on range of items relating to dental health. Funded for 5 yrs in 2001. 99: 7,829 participants (6,589 – 18+ yrs), response rate 56.6%; 94-96 combined, 17,691 participants, response rate 71.5%[29]
National Drug Research Institute, & NSW Bureau of Crime Statistics & Research												Collate various law enforcement indicators considered surrogates of risky alcohol behaviour, eg night-time crashes, assaults.
National Drug Strategy Household **Survey**	nation-wide	yes since 1985	triennial from 01 85, 88, 91, 93, 95, 98, 01, 04, 07[30]	sample 14+ yrs	yes	yes	yes (94 only[31])	yes	yes	b, d, m (s)[32]	01 – 3 collection modes used: drop & collect; face-to-face; & CATI. 98 - Combination of PAPI & collect/ mailback question-naire. Multistage, stratified area, random-quota sample.[33]	Future frequency may be variable/ dependent on funding commitment. 01: overall sample size 53,945, response rate 50% (varying between 39% for the face-to-face, to 51% for the drop & collect modes). Addit-ional sample funded by WA (target-ed to 14-34 yr olds in metro Perth).[34] 98: sample size 10,030, response rate 56%.

[29] AIHW DSRU 2000.
[30] Expected future frequency (AIHW): 04, 07.
[31] Although ATSI peoples were included in the 1993 survey, their low incidence in the general population (1.6%) yielded insufficient sample to allow separate analysis. The 1994 National Drug Strategy Household Survey Urban Aboriginal and Torres Strait Islander Peoples Supplement, conducted by AGB McNair on behalf of the Commonwealth, involved face-to-face interviews with 2,993 ATSI people aged 14+ years, living in urban areas nationally, supplemented information obtained in 1993 (n=50), & provided reliable baseline data for this group (Commonwealth Department of Human Services and Health 1994).
[32] State/territory (ACT only at this level); capital city, other urban, and rural (NSW, Vic, Qld); and capital city/rest of state/territory (NT, SA, WA, Tas).
[33] Split sample design incorporating random household selection from a national sample of 8,357 private dwellings & mixture of random & targeted respondent selection. Minimum sample sizes sufficient to return reliable strata estimates were allocated to States and Territories and remainder of available quota distributed proportional to population Survey Technical Advisory Committee invited health authorities in NSW, Vic, Qld, Tas & ACT funded additional interviews supplementary to those allocated (AIHW 1999b: 39) .
[34] Design across the 3 samples is complex; as well as variations between previous surveys, consult documentation (AIHW 2002(a)).

Candidate data set	Criteria										Additional information	
	1	2		3	4 Disaggregations:							
	coverage	time series	frequency	sample/ census	age	sex	Indigen-ous status‡	ethnicity ** ‡	SES	geog area ‡	mode & sampling method	comments
National **Survey** of Mental Health and Wellbeing of adults (SMHWB)	nation-wide	no	one-off (97)	sample 18+ yrs	yes	yes	no	yes	yes	a	CAI Stratified multistage area sample of private dwellings.	Sample size 13,624 households; 10,641 fully responding participants (78.1%).[35] Conducted by ABS on behalf of DHFS.
National **Survey** of Mental Health and Wellbeing - child and adolescent component	nation-wide	no	one off (98)	sample 4-17 yrs	yes	yes	yes[36] p	yes	yes	t	Face-to-face inter-views with parents; questionnaires self-completed by parents & by 13-17 yr olds. Multistage probability sample	Sample size 4,500 children & adolescents; response rate 70% (participation rate 86%). Conducted by Adelaide Uni on behalf of DHFS. Could give time series if repeated.
National **Survey** of Mental Health and Wellbeing – low prevalence disorders [third component; see also SMHWB of adults; and child & adolescent component]	4 predomin-antly urban sites (ACT: Canb; Qld: Bris; Vic: Melb & WA: Perth).	no	one-off (97)	sample 18-64 yrs sample 'broadly representat-ive' of people with psychotic illnesses living in urban areas in Australia'[37]	yes	yes	no	?	?	4 sites (see cover-age)	Psychosis Screen: protocol incl clinical judgement of key worker administer-ing; standardised face-to-face interv-iew conducted by research nurses. Phase 1, month cen-sus of individuals in contact with main-stream mental health services, screened for psychotic dis-orders; Phase 2, stratified random sample of screen-positive individuals selected to interview	National study of people living with psychotic disorders, funded by DHFS, coordinated by Uni of WA. 980 screen positive individuals interviewed from a total of 3,800 identified from the 1 month census. Main assessment tool: the Diagnostic Interview for Psychosis consisting of 3 modules: demography and social functioning; diagnostic module; & service utilisation.. Phase 2 interviews also drew on special groups incl persons of no fixed abode/in marginal accom-modation, & those with psychotic disorders under care of GPs/private psychiatrists.[38]

[35] Additional sample funded by ACT (enhance reliability) & Vic (provide selected regional data); additional survey funded by WA (provide regional data); Vic & WA additional not included in national estimates (ABS 1999b).
[36] Accurate prevalence estimates not possible for Aboriginal and Torres Strait Island children and adolescents because they are not represented in large enough numbers in the study sample (although the number of children and adolescents of indigenous background included in the survey is consistent with that of the general population (approximately 3%)). Sawyer et al. (2000) note that a different type of study using culturally sensitive methods may be required to assess problems in this population.
[37] Jablonsky et al. 1999: 3.
[38] Study design is complex, see Jablonsky et al. 1999 for details.

Candidate data set	Criteria										Additional information	
	1	2		3	4 Disaggregations:							
	coverage	time series	frequency	sample/ census	age	sex	Indigen-ous status‡	ethnicity ** ‡	SES	geog area ‡	mode & sampling method	comments
NHF Australia's Risk Factor Prevalence **Study**	capital cities	yes past series	past series (80, 83, 89)	sample 20-64 yrs (80, 83) 20-69 yrs (89)	yes	yes	-	yes	yes	h	Attendance at local NHF Centre to complete question-naire & for physical examination Sample from Comm-onwealth electoral rolls for defined catchment areas.	Caution: different age groups, locations, & instruments used across the time series. 80, 83: approx 75% response rate. Topics shown in Table F.2 are from the 83 questionnaire instrument (NHF of Australia undated).
North West Adelaide Health **Study** (NWAHS)	part-capital city SA: NW Adelaide	yes	ongoing from 00	sample 18+ yrs	yes	yes	yes	yes	yes	SLAs	CATI questionnaire & physical exam at clinics EWP	Regional study of the health of peop-le in NW Adelaide, SA. 2500 rand-omly selected adults. Cohort study to be repeated in 2-3 years. Biomed-ical assessment incl measured blood pressure, body dimensions, fasting blood sample, allergy & lung function tests.
North West Adelaide Health **Study** (NWAHS Planned longitudinal extension of NWAHS	part-capital city SA: NW Adelaide	yes	longitudinal, ongoing from 00	sample 18+ yrs	yes	yes	yes	yes	yes	SLAs	CATI questionnaire & physical exam at clinic EWP	Longitudinal extension of NWAHS, planning to follow up participants biomedically every 5 years, with CATI questionnaire follow ups in between. 2,500 participants (NWAHS) plus planning for further 1,500+ for total of 4,000 in 2002.
NSW Child Health **Survey** (See also NSW Health Survey Program)	state-wide NSW & ACT	yes in future	one off (01) see comments	sample 0-12 yrs	yes	yes	yes	yes	yes	NSW Health regions	CATI RDD	Information collected on 9,425 child-ren, 83% response rate. Many topics same as NSW Health Survey 97, 98; & will be collected in future through NSW Health Survey Program.
NSW Health **Survey** (See also NSW Health Survey Program)	state-wide NSW	yes & in future	annual for (97, 98) continuous from 02	sample 16+ yrs	yes	yes	yes	yes	yes	NSW Health regions	CATI RDD	> 17,000 interviews, with overall response rates of 70.8% (97) & 65.0% (98), higher rates in rural than metro areas. Some topics also in NSW Older Persons Survey 99 & in NSW Health Survey Program.
NSW Health **Survey Program** – continuous data collection. 5 year development, collection & reporting plan. Interviewing throughout the year (11 months at 2,000 per	state-wide NSW & ACT	yes in future	continuous from 02	sample all ages for children <16, parents/ carers will be interviewed.	yes	yes	yes	yes	yes	17 NSW Health regions	CATI RDD	Will focus on providing information to support the public health priority areas of Healthy People 2005, social, individual or behavioural determin-ants of health, major health problems, population groups with special needs, settings, partnerships & infrastruc-ture. Existing questionnaires will be

Candidate data set	Criteria										Additional information	
	1	2		3	4 Disaggregations:							
	coverage	**time series**	**frequency**	**sample/ census**	**age**	**sex**	**Indigen-ous status‡**	**ethnicity ** ‡**	**SES**	**geog area ‡**	**mode & sampling method**	**comments**
month) for annual total of 22,000 participants.												rationalised to produce core sets of questions plus modules exploring particular issues.
NSW Older Persons **Survey** (See also NSW Health Survey Program)	state-wide NSW & ACT	yes in future	one off (99) see comments	sample 65+ yrs	yes	yes	yes	yes	yes	NSW Area Health regions	CATI EWP	Total 9,418 interviews, response rate 70.7% (range from 63.7% Central Sydney to 77.2% Macquarie)[39]. Many topics same as NSW Health Survey 97, 98; & will be collected in future through NSW Health Survey Program.
Qld Chronic Diseases **Survey** [3 modules: General population; Asthma management; Diabetes management]	state-wide Qld	no[##]	00	sample[#] 18+ yrs	yes	yes	yes	yes	yes	d	CATI EEWP	Prevalence (general population) survey: response rate 80%, 1,625 participants. Asthma management survey: response rate 90%, 800 participants. Diabetes management survey: response rate 95%, participants 1,100.
Qld Colorectal Cancer **Survey**	state-wide Qld	no[##]	99	sample[#] 40-80 yrs	yes	yes	yes	yes	yes	d	CATI EEWP	Response rate 78%; sample 900
Qld Health Status **Survey** (SF-36)	state-wide Qld	no[##]	94	sample[#] 18+ yrs	yes	yes	yes	yes	yes	a	CATI EEWP	Response rate 82%; sample 13,000
Qld Healthy Food Access Basket **Survey**	state-wide Qld	yes	98, 00 biennial in future	sample (92 selected stores)	-	-	-	-	-	ARIA categories[40]	Public health nutritionists & local health staff completed the survey with store managers Representative sample of stores from the 5 ARIA categories; over sampling very remote category.	Cross-sectional survey of costs & availability of basic food items, healthy food choices & tobacco & take-away food items; survey carried out in 92 selected stores in locations with varying degrees of accessibility /remoteness across Qld In 2000, 92 of 95 selected stores agreed to participate.
Qld Omnibus **Survey** (2001)	state-wide Qld	no[##]	one off 01	sample[#] 18+ yrs	yes	yes	yes	yes	yes	d	CATI EEWP - simple random sample of >95% of private households in Qld with fixed phones.	Response rate 79%; sample 3,100. Topics incl nutrition, physical activity, falls, food borne illness & child immunisation as well as standard demographics.

[39] PHD 2000: 8-9.

[40] Accessibility/Remoteness Index of Australia, based on a methodology developed by the National Key Centre for Social Applications of GIS (GISCA) ('GIS' is an acronym of 'geographical information systems'). The ARIA is a standard classification and index of remoteness which allows the comparison of information about populations based on their access, by road, to service centres (towns) of various sizes (Glover & Tennant 2002).

Candidate data set	Criteria										Additional information	
	1	2		3	4 Disaggregations:							
	coverage	time series	frequency	sample/ census	age	sex	Indigen-ous status‡	ethnicity ** ‡	SES	geog area ‡	mode & sampling method	comments
Qld Omnibus **Survey** (2002)	state-wide Qld	no##	one off 02	sample# 18+ yrs	yes	yes	yes	no	yes	d	CATI EEWP - simple random sample of >95% of private households in Qld with fixed phones.	Response rate 75%; sample 2,510. Topics incl self-reported general health, oral health, smoking, CPR, parenting programs, sources of health information, falls & standard demographics.
Qld Public Health/Media Reach **Survey** 1996	state-wide Qld	no##	96	sample# Princ care giver of children <12	yes	yes	yes	yes	yes	d	CATI EEWP	Response rate 82%; Fluoridation sample 1,200; Smoking sample 2,250.
Qld Public Health/Media Reach **Survey** 1997	state-wide Qld	no##	97	sample# Princ care giver of children 1-4 yrs	yes	yes	yes	yes	yes	d	CATI EEWP	Response rate 81%; Sun protection sample 950; Smoking sample 1,050
Qld Regional Health **Survey**	state-wide (Qld)	no##	93	sample# 18+ yrs	yes	yes	yes	yes	yes	a	CATI EWP	Response rate ~ 80%; sample 10,500. Conducted in all 13 of the (then) Qld Health Regions (sample approx 800/ region) to provide region-specific data on topics incl general health, risk factor behaviours (eg alcohol consumption, smoking, exercise, food habits), access to health services & women's health screening activit-ies. Questionnaire gives source of questions.[41]
Qld Reliability & Validity **Survey**	state-wide (Qld)	no##	99	sample# 18+ yrs	yes	yes	yes	yes	yes	d	CATI EEWP	Response rate 68%; sample 914.
[Qld] Social Capital **Survey**	state-wide Qld	no##	one off 02	sample# 18+ yrs	yes	yes	yes	no	yes	urban/ rural/ remote	CATI EEWP - simple random sample of >95% of private households in Qld with fixed phones.	Response rate 79%; sample 2,700. Topics incl social capital, efficacy, self-reported quality of life & gener-al health, nutrition, physical activity, self-reported height & weight (BMI), smoking, hospitalisation, & standard demographics.

[41] Queensland Health, Epidemiology and Health Information Branch 1993.

Candidate data set	Criteria										Additional information	
	1	2		3	4 Disaggregations:							
	coverage	time series	frequency	sample/ census	age	sex	Indigen-ous status‡	ethnicity ** ‡	SES	geog area ‡	mode & sampling method	comments
Qld Statewide Health **Survey**	state-wide Qld	no[##]	98	sample[#] 18+ yrs	yes	yes	yes	yes	yes	d	CATI EEWP	Response rate 72%; sample 5,600. Provides data on variety of topics including general health, risk factor behaviours (alcohol consumption, smoking, exercise, blood pressure), expectations of hospital patients, diabetes, oral health & home safety.
Qld Sunsafe **Survey**	state-wide Qld	no[##]	00	sample[#] 18-64 yrs	yes	yes	yes	yes	yes	d	CATI EEWP	Response rate 81%; sample 1,500.
Qld Women's Cancer Screening **Survey**	state-wide Qld	no[##]	97	sample[#] 40+ yrs	yes	yes	yes	yes	yes	d	CATI EEWP	Response rate 77; sample 1,100
Qld Women's Health **Survey**	state-wide Qld	no[##]	96	sample[#] 18+ yrs	yes	yes	yes	yes	yes	d	CATI EEWP	Response rate 75%; sample 2,700
Qld Young People's Mental Health **Survey**	state-wide Qld	no	one off (98)	sample 15-24 yrs	yes	yes	yes	cultural diversity [42]	yes	urban/-rural[43]	Telephone recruit-ment & follow up; mailback postal questionnaire. Stratified random sample, over-samp-ling postcodes with high proportions of 15-24 yr olds.	Total of 35,509 households contacted, 4,594 determined eligible (12.9%) & sent questionnaire; of these 3,092 returned; overall participation rate of 67.3% (males significantly lower than females).
SA Health Omnibus **Survey**	part-state SA cities > 1,000 pop	yes since 1991	annual	sample 15+ yrs	yes	yes	yes	yes	yes	d	PAPI	Questions vary from year to year. Sample approx. 4,500 households, > 3,000 persons; response rate approx 75%
SA Physical Activity **Survey**	state-wide (SA)	yes	98, 01	sample 18+ yrs	yes	yes	yes	yes	yes	a	CATI EWP	01 - 3,000 people interviewed; response rate of 75.2%.; participation rate of 79.2%. 98 – oversampled in 2 country regions.
SA SERCIS **Surveys**	state-wide SA	yes	more than 1 per year from 97	sample 18+ yrs	yes	yes	yes	yes	yes	a	CATI EWP	Sample size & participation rates vary from survey to survey. Older Persons... 2000 – final sample 2,619, participation rate 70.5%; Gambling patterns... 2001 – final sample 6,045, participation rate 73.1%.

[42] People from NESB (language spoken at home not English) and/or not born in Australia.
[43] Capital city/provincial/property or farm.

Candidate data set	Criteria										Additional information	
	1	2		3	4 Disaggregations:							
	coverage	time series	frequency	sample/ census	age	sex	Indigen-ous status‡	ethnicity ** ‡	SES	geog area ‡	mode & sampling method	comments
SA **Monitoring & Surveillance System** (SAMSS)	state-wide SA	yes in future	continuous from 2002	sample all ages	yes	yes	yes	yes	yes	a	CATI EWP	Planning continuous sample of 600 per month totaling 7 200 per year
State Cancer **Registries**	state-wide all states	yes	continuous	census	yes	yes	yes	yes	-		Register	
State Cancer Screening **registries**	state-wide all states	yes	continuous	census	yes	yes	no	no	no	post-code	Register	Breast & cervical screening have standard data items in electronic form.
State Child Protection **Data**	state-wide all states	yes									Administrative records	? Supplying data to AIHW
State Injury Surveillance **Systems**, eg VISS (Vic)	state-wide all states	yes	continuous	census	yes	yes	some					
State Perinatal **Data Collections**	state-wide all states	yes	continuous	census	yes	yes					Administrative records	As for AIHW Perinatal Data Collection
Survey of Mental Health and Wellbeing o Adults, Western Australia	state-wide WA	no	one-off (97-98)	sample 18+ yrs	yes	yes	no	yes	yes	WA mental health regions (group-ed)	CAI stratified multistage area sample of private dwellings.	Follow on survey from SMHWB; conducted in WA from Sept 97 to May 98. CURF contains data on 3,407 persons.
Tasmanian Community Capacity **Survey**	part-state Tas	no	01	sample						SLA	CATI RDD	4 SLAs with 2,500 total.
Tasmanian Health & Wellbeing **Survey** (Healthy Communities Survey)	state-wide Tas	no	one off (98)	sample 18+ yrs	yes	yes	yes	yes broad	yes	a	Mailback Electoral roll, stratified, random	Sample of 25,000. with response rate of 60-71%; approx 15,000 respondents.
University of Newcastle Women's Longitudinal Health **Survey**[44]	nation-wide	longitudinal	1996 to follow up 20 years	sample 18-75 yrs in 1996	yes	women only	yes	yes	yes	? urban/ rural/ remote	Mailback questionnaire Random selection from HIC-Medicare database	42,000 participants in baseline. 42%, initial response, 90% responses for follow ups. Young cohort (18-23 years), mid-age cohort (45-50 years) older cohort (70-75 years).

[44] An overall goal of the project is to clarify cause-and-effect relationships between women's health and a range of biological, psychological, social and lifestyle factors. By looking at the needs, views, lifestyles, health and factors affecting the health of individual women in Australia, Women's Health Australia will be able to make suggestions to government departments on ways of improving health services for women.

Candidate data set	Criteria										Additional information	
	1	2		3	4 Disaggregations:							
	coverage	time series	frequency	sample/ census	age	sex	Indigen-ous status‡	ethnicity ** ‡	SES	geog area ‡	mode & sampling method	comments
Victorian Population Health **Survey**	state-wide Vic	yes in future, but not for all questions	01-04	sample 18+ yrs	yes	yes	yes	yes COB	yes	9 DHS health regions (4 metro, 5 rural)	CATI RDD	CATI Aug-Oct 01, completed interviews with 7,500 households, participation rate of approx 70%. Follows pilot 98 & demonstration survey 99 (10,094 completed interviews, also demonstrated sub-regional samples (Ballarat & Shire of Pyrenees)). Some time series will be available in future. Funding for 6 surveys over next 3 yrs.
WA Aboriginal Child Health **Survey**[45] - TVW Telethon Institute for Child Health Research assisted by ABS.	state-wide WA	no	one off 00-01	sample Indigenous people only children 0-17 & carers; youth 12-17 & schools/teachers	yes	yes	yes (all)	-	yes	CDs	"tag team" PAPI (pairs an Indigenous guide with the surveyor) ABS sampling frame, each sampled CD searched to identify eligible families (as per NATSIS methodology). Allows inclusion of Indigenous families in 'low prevalence' areas.	By July 01: 731 CDs enumerated, listing 150,772 dwellings & randomly sampled 2012 familieis with Aboriginal children <18 yrs. Total 1809 (89.9%) of families have consented to participate. Interviews on 4,158 children, & further 839 young people 12-17, 2,465 carers of children. Currently gaining interview data from schools for 3,200 of the children (completion expected end 2001). Will seek permission to link data to birth & health records already held
WA Child Health **Survey**	state-wide WA	no	one off 01	sample 0-12 yrs	yes	yes	yes p	yes p	yes	11 WA health region	CATI EWP	Sample of around 1 000 (proxy interviews). Planned continuous survey program will allow for time series analysis.
WA Child Health **Survey**[46] - TVW Telethon Institute for Child Health Research & ABS.	state-wide WA	no	one off 93-94	sample 4-16 yrs, parents, teachers, schools	yes	yes	yes Perth metro sample only	yes	yes	yes	PAPI multiple informant methodology	1,462 families with 2,737 children 4-16 yrs; 413 schools attended by 2,319 children surveyed. 99.8% of records able to be linked to birth & health records held.

[45] Large scale community health survey of Indigenous children 0-17 yrs focusing on child & adolescent health & wellbeing (mental health), determinants of educational attainment, adverse health behaviours & other psychosocial problems. Data will be used to define priority targets for existing services & develop a knowledge-base from which preventive strategies, health promotion & educational programs can be developed to optimise healthy development of all young Indigenous Western Australians (Zubrick et al 2001: 11).

[46] Within the context of a general health survey, aimed to delineate the nature and extent of mental health problems in a state-wide representative sample of over 2,700 children aged 4-16 yrs. Survey was based on an ecological view of child development in which the family, the school and the local community are seen as the three key spheres of influence shaping children's development. Information on comparable measures was collected separately from parents, teachers and teens. Aim to identify the risk and protective factors which help to explain why only some children exposed to adverse family and social circumstances develop problems (Silburn 1996: 2).

Candidate data set	Criteria										Additional information	
	1	2		3	4 Disaggregations:							
	coverage	time series	frequency	sample/ census	age	sex	Indigen-ous status‡	ethnicity ** ‡	SES	geog area ‡	mode & sampling method	comments
WA **Data Linkage System** [See also the Diabetes Linkage Project]	cross jurisdictional state-wide WA	longitudinal	regular cont-nuous linkage (eg monthly, depending on originating system)	censuses of specific populations multi-system See comments	yes	yes	yes	yes	yes	yes	Data linkage of administrative, registry, and other records	Core data sets include: Births 1980-, Deaths 1969-, Hospital separations 1970-, Mental health clients 1966-, Cancer notifications 1981-, Midwives notifications 1980-. Total of 3.7m master records (Mar 02). Electoral roll, Emergency Dept, Ambulance, & Drug & Alcohol records may also be linked.[47]
WA Dept of Health Hospital Morbidity **Data System**	state-wide WA	yes	on-going annual	census of hospital admissions	yes	yes	yes	yes	no	WA	Administrative records	Later versions more up-to-date than snapshots sent to AIHW
WA Health **Survey**	state-wide WA	yes	irregular 95, 00	sample 18+ yrs	yes	yes	yes p	yes p	yes	11 WA health regions	CATI EWP	00: >10 000 people sampled. Planned continuous survey program will allow for time series analysis.
WA Nutrition Monitoring **Survey**	state-wide WA	yes	triennial 95, 98	sample 18-64 yrs	yes	yes			yes	yes	CATI RDD, quota	Approx 1 000 interviews (until quota filled). 75% Perth metro, 25% from 4 major regional centres.
WA Perth Dietary **Survey**	part-state WA: Perth											
WA Physical Activity Levels of Western Australian Adults **Survey**	state-wide WA	no	? (99)	sample 18+ yrs	yes	yes				4 WA regions	CATI EWP & most recent birthday; sample proportional to population.	Total of 3 178 residents in private dwellings with telephones responding; overall response rate of 46% (varies from 42% to 49% in regions).
WA Health & Wellbeing **Surveillance System**	state-wide WA	yes in future	continuous from 02	sample 16+ yrs	yes	yes	yes p	yes p	yes	11 WA health regions	CATI EWP	Planned sample of 6 600 fully responding interviews p.a. (550 per month); stratified by health regions with over sampling in rural & remote areas & of selected age groups.
WA Tobacco alcohol and illicit drug consumption **survey**	state-wide WA	yes since 1984	84, 85, 87; 91, 94; 97, ?02	sample 18+ yrs	yes	yes	no	no	yes	r		84-87 tobacco; 91-94 tobacco & alcohol; 97 tobacco, alcohol & illicit drugs. Feasibility of running in 02 being considered.
WANTSA Health & Wellbeing **Survey** [2000 Collaborative Health & Wellbeing Survey]	3 states WA, NT, SA	no	one off 00	sample 18+ yrs	yes	yes	yes	yes	yes	a	CATI EWP	Incl Mental health component (SF12 & KESSLER). WA interviewed an additional 7,500 people to allow for local estimates.

[47] The University of Western Australia 2002.

Table F.2: Full audit - All topics from the monitoring framework shown with candidate data sets of relevance to each topic

Health Conditions

Topics and candidate data sets	Criteria 1 coverage	2 time series	2 frequency	3 sample/-census	4 Disaggregations: age	sex	Indigenous status‡	ethnicity ** ‡	SES	geog area ‡	Comment
Health Conditions:	**Ischaemic Heart Disease**										
ABS National Aboriginal and Torres Strait Islander Survey	nation-wide	no	one off (94)	sample of ATSI people all ages	yes	yes	yes	n/a	yes	b, m	Topic: Heart problems, high blood pressure
ABS National Health Survey (NHS)	nation-wide	yes	triennial from 01 89-90, 95, 01, 04-05	sample all ages	yes	yes	yes	yes	yes	a	Topic: CVD prevalence, 01: medications.
ABS Survey of Disability, Ageing and Carers	nation-wide	yes	six yearly from 03 88, 93, 98 03, 09,...	sample all ages see note 1	yes	yes	no g (98)	yes	yes	d, k	Topic: Disabling conditions. See note 1.
AIHW National Death Index	nation-wide	yes since 1980	continuous	census of registered deaths	yes	yes	yes c	no	no	b	Use for fact of death only.
AIHW National Hospital Morbidity Database	nation-wide	yes but see comments	ongoing annual	census of hospital separat'ns	yes	yes	g	yes COB only	no	j SLA	Caution: variables change frequently. Annual financial year reporting
AIHW National Mortality Database & Uni Newcastle, Uni WA; & Qld Dept of Health estimate[1]	nation-wide	yes	ongoing annual	census of registered deaths	yes	yes	yes c	yes	no	j SLA	Used for analysis & estimation of deaths.
Australia and New Zealand Dialysis and Transplant Registry	nation-wide	yes since 1977	continuous	census of people with ESRD	yes	yes	yes	yes	no	postcode at entry	Topics: Co-morbid disease; Cause of death: Cardiac; Vascular
Melbourne Collaborative Cohort Study (Monash University & the Cancer Council of Victoria)	capital city Vic: Melbourne	yes	longitudinal, ongoing from 90-94; follow ups 95-98; planned 02-	sample aged 40-69 yrs in 90-94	yes	yes	no	yes	yes	postcode	Topics: Personal medical history incl self-report of angina, heart attack (at recruitment); self-reported Personal health events incl angina, heart by-pass surgery, heart angioplasty, heart attack, heart failure (at follow-up). CVD mortality confirmed thru link to Death Registry & national mortality data (cause of death).
National Survey of Mental Health and Wellbeing of adults	nation-wide	no	one-off (97)	sample 18+ yrs	yes	yes	no	yes	yes	a	Topic: Chronic physical conditions: heart trouble (self-report).
NHF Australia's Risk Factor Prevalence Study	capital cities	yes past series	irregular (80, 83, 89)	sample 20-64/69 yrs	yes	yes	-	yes	yes	h	Topics: 83: Ever been told you have angina, heart attack; On tablets or treatment for angina.
NSW Health Survey Program – continuous data collection.	state-wide NSW	yes in future	continuous from 02	sample all ages	yes	yes	yes	yes	yes	NSW Health regions	Topic: Cardiovascular disease prevalence & management.
Qld Statewide Health Survey	state-wide Qld	no[##]	98	sample[#] 18+ yrs	yes	yes	yes	yes	yes	d	Topics: (last 5 yrs) self-reported heart/angina attack; has immediate blood related family ever had heart attack.

[1] AIHW 2000: 56.

Topics and candidate data sets	Criteria 1 coverage	2 time series	2 frequency	3 sample/-census	4 Disaggregations: age	sex	Indigen-ous status‡	ethnicity ** ‡	SES	geog area ‡	Comment
SA Health Omnibus Survey	part-state SA cities > 1,000	yes since 1991	annual	sample 15+ yrs	yes	yes	yes	yes	yes	d	Topic included in 90, 91, 93.
SA SERCIS Surveys	state-wide SA	yes	more than 1 per year from 97	sample 18+ yrs	yes	yes	yes	yes	yes	a	Topic included 97, 99, 00, 01.
SA Monitoring & Surveillance System (SAMSS)	state-wide SA	yes in future	continuous from 2002	sample all ages	yes	yes	yes	yes	yes	a	Planned topics: CVD (heart disease, stroke)
University of Newcastle Women's Longitudinal Health Survey	nation-wide	longitudinal	1996 to follow up 20 years	sample 18-75 yrs in 1996	yes	women only	yes	yes	yes	urban/ rural/ remote	Topic: Cardiovascular disease prevalence
WA Aboriginal Child Health Survey	state-wide WA	no	one off 00-01	sample Indigen-ous child-ren 0-17	yes	yes	yes (all)	-	yes	CDs	Topic: Chronic health conditions: heart problems
WA Health Survey	state-wide WA	yes	irregular 95, 00	sample 18+ yrs	yes	yes	yes p	yes p	yes	11 WA health regions	Topic: heart conditions.
WA Health and Wellbeing Surveillance System	state-wide WA	yes in future	continuous from 02	sample 16+ yrs	yes	yes	yes p	yes p	yes	11 WA health regions	Proposed topic: NHPA disease estimates
WANTSA Health & Wellbeing Survey [2000 Collaborative Health & Wellbeing Survey]	3 states WA, NT, SA	no	one off 00	sample 18+ yrs	yes	yes	yes	yes	yes	a	Topic: Ever told by doctor that you have ... heart disease.
Health Conditions: Stroke											
ABS National Health Survey (NHS)	nation-wide	yes	triennial from 01 89-90, 95, 01, 04-05	sample all ages	yes	yes	yes	yes	yes	a	Topic: CVD prevalence, 01: medications.
ABS Survey of Disability, Ageing and Carers	nation-wide	yes	six yearly from 03 88, 93, 98 03, 09,...	sample all ages see note l	yes	yes	no g (98)	yes	yes	d, k	Topic: Disabling conditions.
AIHW National Death Index	nation-wide	yes since 1980	continuous	census of registered deaths	yes	yes	yes c	no	no	b	Use for fact of death only.
AIHW National Hospital Morbidity Database	nation-wide	yes but see comments	ongoing annual	census of hospital separat'ns	yes	yes	g	yes COB only	no	j SLA	Caution: variables change frequently. Annual financial year reporting
AIHW National Mortality Database & Uni Newcastle, WA; & Qld Dept of Health estimate[2]	nation-wide	yes	ongoing annual	census of registered deaths	yes	yes	yes c	yes	no	j SLA	Used for analysis & estimation of deaths.
Australia and New Zealand Dialysis and Transplant Registry	nation-wide	yes since 1977	continuous	census of people with ESRD	yes	yes	yes	yes	no	postcode at entry	Topics: Co-morbid disease; Cause of death.
Melbourne Collaborative Cohort Study (Monash University & the Cancer Council of Victoria)	capital city Vic: Melbourne	yes	longitudinal, ongoing from 90-94; follow ups 95-98; planned 02-	sample aged 40-69 yrs in 90-94	yes	yes	no	yes	yes	postcode	Topics: Personal medical history incl self-report of stroke (at recruitment); self-reported Personal health events incl stroke (at follow-up). CVD mortality confirmed thru link to Death Registry & national mortality data (cause of death).

[2] AIHW 2000: 56.

Topics and candidate data sets	Criteria 1	2		3	4 Disaggregations:						Comment
	coverage	time series	frequency	sample/-census	age	sex	Indigen-ous status‡	ethnicity ** ‡	SES	geog area ‡	
NHF Australia's Risk Factor Prevalence Study	capital cities	yes past series	irregular (80, 83, 89)	sample 20-64/69 yrs	yes	yes	-	yes	yes	h	Topics: 83: Ever been told you have stroke.
SA SERCIS Surveys	state-wide SA	yes	more than 1 per year from 97	sample 18+ yrs	yes	yes	yes	yes	yes	a	Topic included 97, 00
SA Monitoring & Surveillance System (SAMSS)	state-wide SA	yes in future	continuous from 2002	sample all ages	yes	yes	yes	yes	yes	a	Planned topics: CVD (heart disease, stroke)
WA Health and Wellbeing Surveillance System	state-wide WA	yes in future	continuous from 02	sample 16+ yrs	yes	yes	yes p	yes p	yes	11 WA health regions	Proposed topic: NHPA disease estimates
WANTSA Health & Wellbeing Survey [2000 Collaborative Health & Wellbeing Survey]	3 states WA, NT, SA	no	one off 00	sample 18+ yrs	yes	yes	yes	yes	yes	a	Topic: Ever told by doctor that you have ... stroke.
Health Conditions:	**Diabetes Mellitus (Type 2)**										
ABS National Aboriginal and Torres Strait Islander Survey	nation-wide	no	one off (94)	sample of ATSI people all ages	yes	yes	yes	n/a	yes	b, m	Topic: Diabetes (self-report)
ABS National Health Survey (NHS)	nation-wide	yes	triennial from 01 89-90, 95, 01, 04-05	sample all ages	yes	yes	yes	yes	yes	a	Topic: prevalence; 95, 01: incidence, treatment, related conditions.
ABS Survey of Disability, Ageing and Carers	nation-wide	yes	six yearly from 03 88, 93, 98 03, 09,...	sample all ages see note 1	yes	yes	no g (98)	yes	yes	d, k	Topic: Disabling conditions. All forms diabetes (self-report) - cannot disaggregate Type 2.
AIHW National Death Index	nation-wide	yes since 1980	continuous	census of registered deaths	yes	yes	yes c	no	no	b	Use for fact of death only.
AIHW National Diabetes Register	nation-wide	yes since 1999	continuous	partial census of insulin using diabetics	yes	yes	yes	yes	no	postcode & address	Register: of people with insulin dependent diabetes (all types).
AIHW National Hospital Morbidity Database	nation-wide	yes but see comments	ongoing annual	census of hospital separat'ns	yes	yes	g	yes COB only	no	j SLA	Caution: variables change frequently. Annual financial year reporting
AIHW National Mortality Database	nation-wide	yes	ongoing annual	census of registered deaths	yes	yes	yes c	yes	no	j SLA	Used for analysis of deaths.
AIHW Perinatal Data Collection	nation-wide	yes since 1991	annual	compilat-ion of notified births & perinatal deaths	yes	yes	yes mother only	yes COB only	no	j SLA, p/code	Topic: Gestational diabetes.
Australia and New Zealand Dialysis and Transplant Registry	nation-wide	yes since 1977	continuous	census of people with ESRD	yes	yes	yes	yes	no	postcode at entry	Topic: Co-morbid disease: Diabetes type 2.
IDI AusDiab	Australia	no	? one off (99-00)	sample 25+ yrs	yes	yes	yes	yes	yes	Aust	Personal interview & physical exam.
Melbourne Collaborative Cohort Study (Monash University & the Cancer Council of Victoria)	capital city Vic: Melbourne	yes	longitudinal, ongoing from 90-94; follow ups 95-98; planned 02-	sample aged 40-69 yrs in 90-94	yes	yes	no	yes	yes	postcode	Topics: Personal medical history incl self-report of diabetes (at recruitment); self-reported Personal health events incl diabetes (at follow-up). Self-report confirmed by doctors for diabetes outcome.

Topics and candidate data sets	Criteria										Comment
	1	2		3	4 Disaggregations:						
	coverage	time series	frequency	sample/-census	age	sex	Indigen-ous status‡	ethnicity ** ‡	SES	geog area ‡	
National Survey of Mental Health and Wellbeing of adults	nation-wide	no	one-off (97)	sample 18+	yes	yes	no	yes	yes	a	Topic: Chronic physical conditions: diabetes (type not specified, self-report)
NHF Australia's Risk Factor Prevalence Study	capital cities	yes past series	irregular (80, 83, 89)	sample 20-64/69 yrs	yes	yes	-	yes	yes	h	Topic: 83: Doctor/nurse ever told you that you had diab-etes/showed sugar in the urine; year first told; ever been given advice/treatment for diabetes/sugar trouble; blood analysis measures: glucose.
NSW Health Survey See NSW Health Survey Program for future time series	state-wide NSW	yes & in future	annual for (97, 98)	sample 16+ yrs	yes	yes	yes	yes	yes	NSW Health regions	Topic: Ever told & how old when 1st told by doctor/at hospital had diabetes/high blood sugar; whether pregn-ant when 1st told, & ever had apart from when pregnant; self management actions; age 1st started insulin inject-ions; usual health provider (for diabetes); diabetes com-plications: how long since consulted eye specialist, diabetes educator, dietitian, podiatrist; (last 12 months) no. of times health profess-ional checked feet, eyes,
NSW Health Survey Program – continuous data collection, annual reporting.	state-wide NSW	yes in future	continuous: 02-07 (annual: 97, 98, adults; 99 65+ yrs only)	sample all ages	yes	yes	yes	yes	yes	NSW Health regions	Topic: Diabetes: Prevalence & management topics plan-ned for each of 6 years; Complications & screening planned for 04 & 07.
NSW Older Persons Survey See NSW Health Survey Program for future time series	state-wide NSW & ACT	yes in future	one off (99)	sample 65+ yrs	yes	yes	yes	yes	yes	NSW Health regions	Topic: As for NSW Health Survey 97, 98.
North West Adelaide Health Study (NWAHS)	part-capital city SA: NW Adelaide	yes	ongoing from 00	sample 18+ yrs	yes	yes	yes	yes	yes	SLAs	Self report and biomedical assessment (n = 2500)
Qld Chronic Diseases Survey [3 modules: General population; Asthma management; Diabetes management]	state-wide Qld	no##	00	sample# 18+ yrs	yes	yes	yes	yes	yes	d	Topics: Diabetes awareness; ever been told by doctor/nurse /at hospital have diabetes/high blood sugar/touch of sugar; Ever had blood test; Pregnant when 1st told; Age 1st told; Treatment; Main health provider re diabetes; Whether & main reason had hospital admission (last 12 months); Ever had (range of comorbid-ities/risk factors); etc.
Qld Statewide Health Survey	state-wide Qld	no##	98	sample# 18+ yrs	yes	yes	yes	yes	yes	d	Topics: Ever been told by doctor/nurse that you have diabetes/high blood sugar; any of immediate blood related family have diabetes.
Qld Young People's Mental Health Survey	state-wide Qld	no	one off (1998)	yes 15-24 yrs	yes	yes	yes	cultural diversity	yes	urban/-rural	Topic: Diabetes (type not specified) (small sample size) self-report.
SA Health Omnibus Survey	part-state SA cities > 1,000	yes since 1991	annual	sample 15+ yrs	yes	yes	yes	yes	yes	d	Topic: self-reported diabetes.
SA SERCIS Surveys	state-wide SA	yes	more than 1 per year from 97	sample 18+ yrs	yes	yes	yes	yes	yes	a	Topic: self-reported diabetes. Topic included 97, 98, 99, 00, 01

Topics and candidate data sets	Criteria 1	2		3	4 Disaggregations:						Comment
	coverage	time series	frequency	sample/-census	age	sex	Indigen-ous status‡	ethnicity ** ‡	SES	geog area ‡	
SA Monitoring & Surveillance System (SAMSS)	state-wide SA	yes in future	continuous from 2002	sample all ages	yes	yes	yes	yes	yes	a	Planned topics: Diabetes.
University of Newcastle Women's Longitudinal Health Survey	nation-wide	longitudinal	1996 to follow up 20 years	sample 18-75 yrs in 1996	yes	women only	yes	yes	yes	urban/ rural/ remote	Topic: Diabetes prevalence
Victorian Population Health Survey	state-wide Vic	yes in future, but not for all questions	01-04	sample 18+ yrs	yes	yes	yes	yes COB	yes	9 DHS health regions	CATI commencing 01.
WA Aboriginal Child Health Survey	state-wide WA	no	one off 00-01	sample Indigen-ous child-ren 0-17	yes	yes	yes (all)	-	yes	CDs	Topic: Chronic health conditions: diabetes
WA Data Linkage System – Diabetes Linkage Project	cross jurisdictional	longitudinal	10 yrs		yes	yes					Will link 10 yrs of primary care, hospital & death data..
WA Health Survey	state-wide WA	yes	irregular 95, 00	sample 18+ yrs	yes	yes	yes p	yes p	yes	11 WA health regions	Topic: diabetes
WA Health and Wellbeing Surveillance System	state-wide WA	yes in future	continuous from 02	sample 16+ yrs	yes	yes	yes p	yes p	yes	11 WA health regions	Proposed topic: NHPA disease estimates
WANTSA Health & Wellbeing Survey [2000 Collaborative Health & Wellbeing Survey]	3 states WA, NT, SA	no	one off 00	sample 18+ yrs	yes	yes	yes	yes	yes	a	Topic: Ever told by doctor that you have ... diabetes
Health Conditions:	**Renal disease †**										
ABS National Aboriginal and Torres Strait Islander Survey	nation-wide	no	one off (94)	sample of ATSI people all ages	yes	yes	yes	n/a	yes	b, m	Topic: Specific illness/conditions: Kidney problems (self-report).
ABS National Health Survey (NHS)	nation-wide	yes	triennial from 01 89-90, 95, 01, 04-05	sample all ages	yes	yes	yes	yes	yes	a	Topic: Respondents may report as long term illness (although only 'kidney stones' presented on prompt card).
AIHW National Death Index	nation-wide	yes since 1980	continuous	census of registered deaths	yes	yes	yes c	no	no	b	Use for fact of death only.
AIHW National Hospital Morbidity Database	nation-wide	yes but see comments	ongoing annual	census of hospital separat'ns	yes	yes	g	yes COB only	no	j SLA	Caution: variables change frequently. Annual financial year reporting
AIHW National Mortality Database	nation-wide	yes	ongoing annual	census of registered deaths	yes	yes	yes c	yes	no	j SLA	Used for analysis of deaths.
Australia and New Zealand Dialysis and Transplant Registry	nation-wide	yes since 1977	continuous	census of people with ESRD	yes	yes	yes	yes	no	postcode at entry	Range of statistics re outcomes of treatments (incl dialysis & transplants) for end stage renal failure.
National Survey of Mental Health and Wellbeing of adults	nation-wide	no	one-off (97)	sample 18+ yrs	yes	yes	no	yes	yes	a	Topic: Chronic physical conditions: kidney disease (self-report).
WA Aboriginal Child Health Survey	state-wide WA	no	one off 00-01	sample Indigen-ous child-ren 0-17	yes	yes	yes (all)	-	yes	CDs	Topic: Chronic health conditions: kidney disease
WA Health Survey	state-wide WA	yes	irregular 95, 00	sample 18+ yrs	yes	yes	yes p	yes p	yes	11 WA health regions	Topics: kidney disease; ? organ transplantation.
Health Conditions:	**Certain cancers (eg colorectal, lung) †**										

Topics and candidate data sets	Criteria										Comment
	1	2		3	4 Disaggregations:						
	coverage	time series	frequency	sample/-census	age	sex	Indigen-ous status‡	ethnicity ** ‡	SES	geog area ‡	
ABS National Health Survey (NHS)	nation-wide	yes	triennial from 01 89-90, 95, 01, 04-05	sample all ages	yes	yes	yes	yes	yes	a	Topic: Cancer prevalence; 95: breast cancer incidence, 01: medications.
AIHW National Cancer Statistics Clearing House	nation-wide	yes since 1982	continuous	census of cancer notificat-ions	yes	yes	no	yes but poor quality	no	j SLA, p/code	Data collated from registries used to monitor cancer incidence, mortality & emerging trends.
Australia and New Zealand Dialysis and Transplant Registry	nation-wide	yes since 1977	continuous	census of people with ESRD	yes	yes	yes	yes	no	postcode at entry	Topics: Co-morbid disease; Cause of death.
Australian Secondary Schools Alcohol and Drug Survey (ASSAD)	nation-wide	yes since 1984	triennial 99,. 02	sample 12-17 yrs	yes	yes	yes p	yes	no	q	Topics 99 core survey: skin cancer beliefs.
Hospital-based cancer registries	hospital-specific	in future	ongoing	census	yes	yes	yes	yes COB	address proxy	postcode & address	Varies between States.
Melbourne Collaborative Cohort Study (Monash University & the Cancer Council of Victoria)	capital city Vic: Melbourne	yes	longitudinal, ongoing from 90-94; follow ups 95-98; planned 02-	sample aged 40-69 yrs in 90-94	yes	yes	no	yes	yes	postcod e	Topics: Self-reported Person-al health events incl cancer ; Urinary symptoms & prostate cancer (men only); Breast cancer in relatives (women only) (at follow-up). Cohort linked to Vic Cancer Registry to identify cancer cases (currently looking at: breast, bowel & prostate cancers).
National Survey of Mental Health and Wellbeing of adults	nation-wide	no	one-off (97)	sample 18+ yrs	yes	yes	no	yes	yes	a	Topic: Chronic physical conditions: cancer (not specified, self-report).
NSW Health Survey See NSW Health Survey Program for future time series of topic	state-wide NSW	yes & in future	annual for (97, 98)	sample age range varies see comment	yes	yes	yes	yes	yes	NSW Health regions	Topics: Cancer screening incl mammography (97, 98, wom-en 40-79 yrs only); cervical (98, women 20-69 yrs only), colorectal (97, 98, persons aged 40-80 yrs only); no. of times skin checked for [skin cancer (97, 98).
NSW Health Survey Program – continuous data collection, annual reporting.	state-wide NSW	yes in future	continuous from 02	sample 16+ yrs only	yes	yes	yes	yes	yes	NSW Health regions	Topic: Cancer screening (sample 16+ yrs only): mam-mography and cervical screening topics planned biannually from 02; prostate & bowel screening topics planned for 03.
NSW Older Persons Survey See NSW Health Survey Program for future time series of topic	state-wide NSW & ACT	yes in future	one off (99)	sample 65+ yrs women only	yes	yes	yes	yes	yes	NSW Health regions	Topics: Screening for - breast cancer: ever had, & when last had mammogram/ clinical breast examination (sample of women only).
Qld Colorectal Cancer Survey	state-wide Qld	no[##]	99	sample[#] 40-80 yrs	yes	yes	yes	yes	yes	d	Response rate=78%; sample=900
Qld Women's Cancer Screening Survey	state-wide Qld	no[##]	97	sample[#] 40+ yrs	yes	yes	yes	yes	yes	d	Response rate 77%; sample 1,100
State Cancer Registries	state-wide	yes	continuous	yes	yes	yes	yes	yes	-	?	
State Cancer Screening registries	state-wide	yes	continuous								Breast & cervical screening have standard data items in electronic form.
University of Newcastle Women's Longitudinal Health Survey	nation-wide	longitudinal	1996 to follow up 20 years	sample 18-75 yrs in 1996	yes	women only	yes	yes	yes	urban/ rural/ remote	Topic: Cancer prevalence

Topics and candidate data sets	Criteria										Comment
	1	2		3	4 Disaggregations:						
	coverage	**time series**	**frequency**	**sample/-census**	**age**	**sex**	**Indigen-ous status‡**	**ethnicity ** ‡**	**SES**	**geog area ‡**	
WA Aboriginal Child Health Survey	state-wide WA	no	one off 00-01	sample Indigen-ous child-ren 0-17	yes	yes	yes (all)	-	yes	CDs	Topic: Chronic health conditions: Cancer or leukemia
WA Health and Wellbeing Surveillance System	state-wide WA	yes in future	continuous from 02	sample 16+ yrs	yes	yes	yes p	yes p	yes	11 WA health regions	Proposed topic: NHPA disease estimates
Health Conditions:	**Chronic lung disease (COPD & Asthma)**										
ABS National Aboriginal and Torres Strait Islander Survey	nation-wide	no	one off (94)	sample of ATSI people all ages	yes	yes	yes	n/a	yes	b, m	Topic: Asthma prevalence (self-report).
ABS National Health Survey (NHS)	nation-wide	yes	triennial from 01 89-90, 95, 01, 04-05	sample all ages	yes	yes	yes	yes	yes	a	Topic: asthma prevalence only; 95, 01: asthma symptoms; 01: asthma treatment, management.
ABS Survey of Disability, Ageing and Carers	nation-wide	yes	six yearly from 03 88, 93, 98 03, 09,...	sample all ages see note 1	yes	yes	no g (98)	yes	yes	d, k	Topic: Disabling conditions: shortness of breath/difficulty breathing & underlying cause (incl asthma) (self-report). COPD not captured.
AIHW National Death Index	nation-wide	yes since 1980	continuous	census of registered deaths	yes	yes	yes c	no	no	b	Use for fact of death only.
AIHW National Hospital Morbidity Database	nation-wide	yes but see comments	ongoing annual	census of hospital separat'ns	yes	yes	g	yes COB only	no	j SLA	Caution: variables change frequently. Annual financial year reporting
AIHW National Mortality Database	nation-wide	yes	ongoing annual	census of registered deaths	yes	yes	yes c	yes	no	j SLA	Used for analysis of deaths.
Australia and New Zealand Dialysis and Transplant Registry	nation-wide	yes since 1977	continuous	census of people with ESRD	yes	yes	yes	yes	no	postcode at entry	Topics: Co-morbid disease: Chronic Lung; Cancer event; Cause of death.
Melbourne Collaborative Cohort Study (Monash University & the Cancer Council of Victoria)	capital city Vic: Melbourne	yes	longitudinal, ongoing from 90-94; follow ups 95-98; planned 02-	sample aged 40-69 yrs in 90-94	yes	yes	no	yes	yes	postcod e	Topics: Personal medical history incl self-report of asthma (at recruitment); self-reported Personal health events incl asthma (at follow-up).
National Survey of Mental Health and Wellbeing of adults	nation-wide	no	one-off (97)	sample 18+ yrs	yes	yes	no	yes	yes	a	Topics: Chronic physical conditions: Chronic bronch-itis, Asthma (self-report).
NSW Child Health Survey See NSW Health Survey Program for future time series of topic.	state-wide NSW	yes in future	one off (01)	sample 0-12 yrs	yes	yes	yes	yes	yes	NSW Health regions	Topics: Prevalence (Ever told by doctor/at hospital); age of child when first told; (last 12 months) symptoms of/treatment for; ; frequency of service use (GP, ED); (last month) no. of nights child's sleep disturbed by; written asthma management plan for child; (last month) use of reliever & preventer medication & frequency.

Topics and candidate data sets	Criteria 1	2		3	4 Disaggregations:						Comment
	coverage	**time series**	**frequency**	**sample/-census**	**age**	**sex**	**Indigen-ous status‡**	**ethnicity ** ‡**	**SES**	**geog area ‡**	
NSW Health Survey See NSW Health Survey Program for future time series of topic. See also NSW Older Persons Survey 99, NSW Child Health Survey 01.	state-wide NSW	yes & in future	annual (97, 98)	sample 16+ yrs	yes	yes	yes	yes	yes	NSW Health regions	Topics: Prevalence (Ever told by doctor/at hospital); last 12 months: symptoms of/treat-ment for; interference with daily activities & degree of interference; no. of days un-well; last month: no. of nights sleep disturbed by; (12 months) frequency of service use (GP, ED, hospital admis-sion); written asthma mana-gement plan, & in language spoken; (last month) use of reliever & preventer medication & frequency; whether medication prescript-ion or over-the-counter.
NSW Health Survey Program – continuous data collection, annual reporting.	state-wide NSW	yes in future	continuous: 02-07 (annual: 97, 98 adults; 01 children)	sample 2+ yrs	yes	yes	yes	yes	yes	NSW Health regions	Topic: Asthma prevalence & service use topics planned for each of 6 years; medications & severity topics planned 3 yearly (03, 06).
NSW Older Persons Survey See NSW Health Survey Program for future time series of topic.	state-wide NSW & ACT	yes in future	one off (99)	sample 65+ yrs	yes	yes	yes	yes	yes	NSW Health regions	Many topics same as NSW Health Survey 97, 98.
North West Adelaide Health Study (NWAHS)	part-capital city SA: NW Adelaide	yes	ongoing from 00	sample 18+ yrs	yes	yes	yes	yes	yes	SLAs	Self report and biomedical assessment (n = 2500)
Qld Chronic Diseases Survey [3 modules: General population; Asthma management; Diabetes management]	state-wide Qld	no[##]	00	sample 18+ yrs	yes	yes	yes	yes	yes	d	Topics: Ever told by doctor/nurse/at hospital have asthma; Had symptoms of/ taken treatment for asthma (last 12 months); Activity limitations arising from asth-ma; No. nights (last month) sleep disturbed by; Times (last 12 months) visited GP/ hospital ED/been admitted for an attack of asthma; etc.
Qld Statewide Health Survey	state-wide Qld	no[##]	98	sample[#] 18+ yrs	yes	yes	yes	yes	yes	d	Topics: Self reported asthma or bronchitis.
Qld Young People's Mental Health Survey	state-wide Qld	no	one off (1998)	yes 15-24 yrs	yes	yes	yes	cultural diversity	yes	urban/-rural	Topic: Asthma prevalence (self-report).
SA Health Omnibus Survey	part-state SA cities > 1,000	yes since 1991	annual	sample 15+ yrs	yes	yes	yes	yes	yes	d	Topic: Self-reported asthma.
SA SERCIS Surveys	state-wide SA	yes	more than 1 per year from 97	sample 18+ yrs	yes	yes	yes	yes	yes	a	Topic included 97, 98, 99, 00, 01
SA Monitoring & Surveillance System (SAMSS)	state-wide SA	yes in future	continuous from 2002	sample all ages	yes	yes	yes	yes	yes	a	Planned topics: Asthma
University of Newcastle Women's Longitudinal Health Survey	nation-wide	longitudinal	1996 to follow up 20 years	sample 18-75 yrs in 1996	yes	women only	yes	yes	yes	urban/ rural/ remote	Topic: Asthma prevalence
Victorian Population Health Survey	state-wide Vic	yes in future, but not for all questions	01-04	sample 18+ yrs	yes	yes	yes	yes COB	yes	9 DHS health regions	Topics: Asthma, Bronchitis, Emphysema, Chronic Lung Disease.
WA Aboriginal Child Health Survey	state-wide WA	no	one off 00-01	sample Indigen-ous child-ren 0-17	yes	yes	yes (all)	-	yes	CDs	Topic: Chronic health conditions: Recurring chest infection, breathing & asthma

Topics	Criteria										Comment
and candidate data sets	1	2		3	4 Disaggregations:						
	coverage	time series	frequency	sample/-census	age	sex	Indigen-ous status‡	ethnicity ** ‡	SES	geog area ‡	
WA Health Survey	state-wide WA	yes	irregular 95, 00	sample 18+ yrs	yes	yes	yes p	yes p	yes	11 WA health regions	Topics: Bronchitis, emphysema, asthma
WA Health and Wellbeing Surveillance System	state-wide WA	yes in future	continuous from 02	sample 16+ yrs	yes	yes	yes p	yes p	yes	11 WA health regions	Proposed topic: NHPA disease estimates
WANTSA Health & Wellbeing Survey [2000 Collaborative Health & Wellbeing Survey]	3 states WA, NT, SA	no	one off 00	sample 18+ yrs	yes	yes	yes	yes	yes	a	
Health Conditions:	**Mental health problems/depression ***										
AIHW National Community Mental Health Care Database	nation-wide	yes in future	annual from 2000-01	census of mental health clients	yes	yes	yes	yes COB in 01-02	no	yes in 01-02	Note: in early stages of development. Ethnicity incl country of birth & marital status to be collected in 2002-02. SEIFA can be derived for SES.
ABS National Health Survey (NHS)	nation-wide	yes	triennial from 01 89-90, 95, 01	sample all ages	yes	yes	yes	yes	yes	a	Topics: K10 asked in 01; opportunity to report depres-sion, anxiety & drug/alcoh-ol dependence in 95 & 01 (not incl on prompt card 95).
ABS Survey of Disability, Ageing and Carers	nation-wide	yes	six yearly from 03 88, 93, 98 03, 09,...	sample all ages see note l	yes	yes	no g (98)	yes	yes	d, k	Topic: Disabling conditions. For restriction arising from condition.
AIHW National Death Index	nation-wide	yes since 1980	continuous	census of registered deaths	yes	yes	yes c	no	no	b	Use for fact of death only.
AIHW National Hospital Morbidity Database	nation-wide	yes but see comments	ongoing annual	census of hospital separat'ns	yes	yes	g	yes COB only	no	j SLA	Caution: variables change frequently. Annual financial year reporting
AIHW National Mortality Database	nation-wide	yes	ongoing annual	census of registered deaths	yes	yes	yes c	yes	no	j SLA	Used for analysis of deaths.
Melbourne Collaborative Cohort Study (Monash University & the Cancer Council of Victoria)	capital city Vic: Melbourne	yes	longitudinal, ongoing from 90-94; follow ups 95-98; planned 02-	sample aged 40-69 yrs in 90-94	yes	yes	no	yes	yes	postcod e	Topics: Additional questions on feelings, anger & depres-sion (English speakers only) (at recruitment).
National Drug Strategy Household Survey – self report	nation-wide	yes since 1985	85, 88, 91, 93, 95, 98, 01, 04, 07	yes 14+ yrs	yes	yes	yes (94)	yes	yes	CD	Topics: Problems with work/ regular daily activities as result of emotional problems, past 4 weeks.
National Survey of Mental Health and Wellbeing - child and adolescent component	nation-wide	no	one off (1998)	yes 4-17 yrs	yes	yes	yes	yes	yes	t	Topics: prevalence of mental health problems (CBCL); mental disorders: Depressive Disorder, Conduct Disorder, & Attent-ion-Deficit/Hyperactivity Disorder; comorbidity of mental disorders; suicidal ideation & behaviour (6-17 yrs).
National Survey of Mental Health and Wellbeing of adults	nation-wide	no	one-off (97)	sample 18+ yrs	yes	yes	no	yes	yes	a	Topics incl: Anxiety, affect-ive & substance use disord-ers[3] (CIDI); cognitive imp-airment (MMSE, 65+); per-sonality disorders, psychosis (screeners); EPQ score; K10, suicidal thoughts/attempts

[3] Disorders included (those considered to have the highest population prevalence rates): Anxiety disorders (6): social phobia, agoraphobia, panic disorder, generalised anxiety disorder, obsessive compulsive disorder, & post-traumatic stress disorder; Affective disorders (5): major depressive episode, dysthymia, mania,

Topics and candidate data sets	Criteria										Comment
	1	2		3	4 Disaggregations:						
	coverage	time series	frequency	sample/-census	age	sex	Indigen-ous status‡	ethnicity ** ‡	SES	geog area ‡	
NHF Australia's Risk Factor Prevalence Study	capital cities	yes past series	irregular (80, 83, 89)	sample 20-64/69 yrs	yes	yes	-	yes	yes	h	Topics: 83: Psychological type; psychological disorder (General Health Questionnaire).
NSW Child Health Survey See NSW Health Survey Program for future time series of topic	state-wide NSW	yes in future	one off (01)	sample 0-12 yrs	yes	yes	yes	yes	yes	NSW Health regions	Topic: Emotional & behavioural problems (sample 4-12 years only); Infant behavioural problems (sample 0-11 months only); .
NSW Health Survey See NSW Health Survey Program for future time series of topic	state-wide NSW	yes & in future	annual (97, 98)	sample 16+ yrs	yes	yes	yes	yes	yes	NSW Health regions	Topic: General mental health (Adult Psychological Distress).
NSW Health Survey Program – continuous data collection, annual reporting.	state-wide NSW	yes in future	continuous: 02/03-07 (annual: 97, 98 adults; 99 65+ yrs; 01 children)	sample 5-15 yrs & 16+ yrs only see comment	yes	yes	yes	yes	yes	NSW Health regions	Topic: Mental health: Adult Psychological Distress topic (sample 16+ years only) planned for each of 6 years; Childhood Strengths & Difficulties topic (sample 5-15 yrs only) planned for each of 5 years from 03.
NSW Older Persons Survey See NSW Health Survey Program for future time series of topic	state-wide NSW & ACT	yes in future	one off (99)	sample 65+ yrs	yes	yes	yes	yes	yes	NSW Health regions	Topics: Mental health (Adult Psychological Distress).
Qld Health Status Survey (SF-36)	state-wide Qld	no[##]	94	sample[#] 18+ yrs	yes	yes	yes	yes	yes	a	Response rate=82%, Sample=13,000
Qld Statewide Health Survey	state-wide Qld	no[##]	98	sample[#] 18+ yrs	yes	yes	yes	yes	yes	d	Topics: Mental health: (last 12 months) experienced any emotional/mental health problems incl depression which significantly interfered with normal activities for >1 week; whether sought any help; types of, & main, people, places or services from which sought help; satisfaction with service received; whether taken any medication to help with anxiety/depression.
Qld Young People's Mental Health Survey	state-wide (Qld)	no	one off (1998)	yes 15-24 yrs	yes	yes	yes	cultural diversity	yes	urban/-rural	Topics: prevalence of mental health problems, especially depression & current depressive symptomatology (3 measures; all self-report, incl ever diagnosed with depression etc. by a doctor); self-harm; suicidal thoughts & behaviours.
SA Health Omnibus Survey	part-state SA cities > 1,000	yes since 1991	annual	sample 15+ yrs	yes	yes	yes	yes	yes	d	Topics included in 95, 98.
SA SERCIS Surveys	state-wide SA	yes	more than 1 per year from 97	sample 18+ yrs	yes	yes	yes	yes	yes	a	Topic included 97, 98, 00, 01
SA Monitoring & Surveillance System (SAMSS)	state-wide SA	yes in future	continuous from 2002	sample all ages	yes	yes	yes	yes	yes	a	Planned topics: Depression/ Mental health (K10) incl stress, suicidal ideation.

hypomania & bipolar affective disorder; Substance use disorders (2): abuse/harmful use & dependence on alcohol, &, abuse/harmful use & dependence on 4 drugs (cannabis/opioids/sedatives/stimulants) (Andrews et al. 1999: 3; ABS 1999b: 2).

Topics and candidate data sets	Criteria										Comment
	1	2		3	4 Disaggregations:						
	coverage	time series	frequency	sample/-census	age	sex	Indigen-ous status‡	ethnicity ** ‡	SES	geog area ‡	
WA Aboriginal Child Health Survey	state-wide WA	no	one off 00-01	sample Indigen-ous child-ren 0-17	yes	yes	yes (all)	-	yes	CDs	Topic: Mental health & wellbeing: Strengths & Difficulties Questionnaire; burden & severity; other
WA Child Health Survey	state-wide WA	no	one off 93-94	sample 4-16 yrs	yes	yes	?	?	yes	yes	Topics: mental health problems, deliberate self harm, juvenile offending
WA Health and Wellbeing Surveillance System	state-wide WA	yes in future	continuous from 02	sample 16+ yrs	yes	yes	yes p	yes p	yes	11 WA health regions	Proposed topic: NHPA disease estimates; mental health status.
WANTSA Health & Wellbeing Survey [2000 Collaborative Health & Wellbeing Survey]	3 states WA, NT, SA	no	one off 00	sample 18+ yrs	yes	yes	yes	yes	yes	a	Topics: K10, SF12; (last 12 month) told by a Dr that you have Anxiety/Depression/ Stress related /other mental health problem; whether still have condition; currently receiving medication.
Health Conditions: Oral health conditions*											
ABS National Health Survey (NHS)	nation-wide	yes	triennial from 01 89-90, 04-05	sample all ages	yes	yes	yes	yes	yes	a	Topic: Oral health 89-90; and planned for 04-05.
Adult Dental Programs Survey (States)	nation-wide	yes since 1994	continuous	sample (adults)	yes	yes	yes	yes broad	no	post-code	Examination by dentists; restricted to clients of public dental programs.
AIHW National Death Index	nation-wide	yes since 1980	continuous	census of registered deaths	yes	yes	yes c	no	no	b	Use for fact of death only.
AIHW National Hospital Morbidity Database	nation-wide	yes but see comments	ongoing annual	census of hospital separat'ns	yes	yes	g	yes COB only	no	j SLA	Caution: variables change frequently. Annual (fin yr)
AIHW National Mortality Database	nation-wide	yes	ongoing annual	census of registered deaths	yes	yes	yes c	yes	no	j SLA	Used for analysis of deaths.
Child Dental Health Survey	nation-wide	yes since 1977	continuous	sample children 4/5-13/15	yes	yes	s	s	no	post-code	Sample of children in School Dental Service. Coverage & ages vary between jurisdictions.
National Dental Telephone Interview Survey	nation-wide	yes since 1994	periodic 94, 95, 96, 99, 02,...	sample 5+ yrs	yes	yes	yes	yes	yes	post-code	Topics: access to dental care, self-assessed dental health status, present dental health needs, use of & satisfaction with dental services, preven-tive behaviours, experience of & attitudes to dentistry.
NSW Child Health Survey	state-wide NSW	yes in future	one off (01)	sample 0-12 yrs	yes	yes	yes	yes	yes	NSW Health regions	Topic: Oral health
NSW Health Survey	state-wide NSW	yes & in future	annual for (97, 98)	sample 16+ yrs	yes	yes	yes	yes	yes	NSW Health regions	Topic: Oral health – 98 only.
NSW Health Survey Program – continuous data collection.	state-wide NSW	yes in future	continuous from 02	sample all ages	yes	yes	yes	yes	yes	NSW Health regions	Topic: Oral health.
NSW Older Persons Survey	state-wide NSW & ACT	yes in future	one off (99)	sample 65+ yrs	yes	yes	yes	yes	yes	NSW Health regions	Topic: Oral health
Qld Omnibus Survey (2002)	state-wide Qld	no##	one off 02	sample# 18+ yrs	yes	yes	yes	no	yes	d	Topics incl dentition; oral health; last visit to dentist; distance & barriers to access to oral health care.
Qld Reliability & Validity Survey	state-wide (Qld)	no##	99	sample# 18+ yrs	yes	yes	yes	yes	yes	d	Topic: Hospital admission

Topics and candidate data sets	Criteria										Comment
	1	2		3	4 Disaggregations:						
	coverage	time series	frequency	sample/-census	age	sex	Indigen-ous status‡	ethnicity ** ‡	SES	geog area ‡	
Qld Statewide Health Survey	state-wide Qld	no[##]	98	sample[#] 18+ yrs	yes	yes	yes	yes	yes	d	Topics: No. of natural teeth still have; (last 4 weeks) had toothache; any teeth loose; gums bled, mouth ulcers/ sore gums; ever had full set of dentures; visits to dentist.
SA Monitoring & Surveillance System (SAMSS)	state-wide SA	yes in future	continuous from 2002	sample all ages	yes	yes	yes	yes	yes	a	Planned topics: Oral health behaviours.
WA Aboriginal Child Health Survey	state-wide WA	no	one off 00-01	sample Indigen-ous child-ren 0-17	yes	yes	yes (all)	-	yes	CDs	Topic: Dental health
Health Conditions:	**Musculoskeletal disease † Currently specified as fractures from falls, osteoarthritis & osteoporosis**										
ABS National Health Survey (NHS)	nation-wide	yes	triennial from 01 89-90, 95, 01, 04-05	sample all ages	yes	yes	yes	yes	yes	a	Topics: Arthritis prevalence; Injuries, accidents – prevalence, incidence (01).
ABS Survey of Disability, Ageing and Carers	nation-wide	yes	six yearly from 03 88, 93, 98 03, 09,...	sample all ages see note 1	yes	yes	no g (98)	yes	yes	d, k	Topic: Disabling conditions: collects arthritis-type condit-ions in aggregate only (self-report).
AIHW National Hospital Morbidity Database	nation-wide	yes but see comments	ongoing annual	census of hospital separat'ns	yes	yes	g	yes COB only	no	j SLA	Caution: variables change frequently. Annual financial year reporting
Melbourne Collaborative Cohort Study (Monash University & the Cancer Council of Victoria)	capital city Vic: Melbourne	yes	longitudinal, ongoing from 90-94; follow ups 95-98; planned 02-	sample aged 40-69 yrs in 90-94	yes	yes	no	yes	yes	postcode	Topics: Self-reported Person-al health events incl fractures (at follow-up).
National Survey of Mental Health and Wellbeing of adults	nation-wide	no	one-off (97)	sample 18+ yrs	yes	yes	no	yes	yes	a	Topic: Chronic physical conditions: Arthritis.
NSW Health Survey Program – continuous data collection, annual reporting.	state-wide NSW	yes in future	continuous: 03, 06 (annual: 99)	sample 60+ yrs only	yes	yes	yes	yes	yes	NSW Health regions	Topic: Falls in older people, topic planned for 03 & 06 (sample 60+ yrs only).
NSW Older Persons Survey See NSW Health Survey Program for future time series of topic	state-wide NSW & ACT	yes in future	one off (99)	sample 65+ yrs	yes	yes	yes	yes	yes	NSW Health regions	Topic: Falls (last 12 mon-ths); requiring medical treat-ment; fear of falling; use of personal alert/alarm in case of fall/emergency; whether would consider actions to reduce chances of falling.
Qld Statewide Health Survey	state-wide Qld	no[##]	98	sample[#] 18+ yrs	yes	yes	yes	yes	yes	d	Topics: Self reported osteoporosis; Falls: suffered accidental fall last 12 months that caused you to seek medical attention; how long ago; type of acticity doing when last fell; sort of factors that contributed to last fall; affect of fall on abilities & duration; whether admitted to hospital as result of last fall..
Qld Women's Health Survey	state-wide Qld	no[##]	96	sample[#] 18+ yrs	yes	yes	yes	yes	yes	d	Topics: Focus on osteoporosis
SA Health Omnibus Survey	part-state SA cities > 1,000	yes since 1991	annual	sample 15+ yrs	yes	yes	yes	yes	yes	d	Topics: Osteoporosis & arthritis. Topics included in 93, 95, 97, 98, 99, 01.
SA SERCIS Surveys	state-wide SA	yes	more than 1 per year from 97	sample 18+ yrs	yes	yes	yes	yes	yes	a	Topics: Osteoporosis & arthritis. Topics included 97, 98, 99, 00

Topics and candidate data sets	Criteria										Comment
	1	2		3	4 Disaggregations:						
	coverage	**time series**	**frequency**	**sample/-census**	**age**	**sex**	**Indigen-ous status‡**	**ethnicity ** ‡**	**SES**	**geog area ‡**	
SA Monitoring & Surveillance System (SAMSS)	state-wide SA	yes in future	continuous from 2002	sample all ages	yes	yes	yes	yes	yes	a	Planned topics: Osteoporosis.
State Injury Surveillance Systems, eg VISS (Vic)	state-wide	yes	? continuous	?	yes	yes	some	?	?	?	
WA Health Survey	state-wide WA	yes	irregular 95, 00	sample 18+ yrs	yes	yes	yes p	yes p	yes	11 WA health regions	Topic: Osteoporosis; Injury incl cause & type.
WANTSA Health & Wellbeing Survey [2000 Collaborative Health & Wellbeing Survey]	3 states WA, NT, SA	no	one off 00	sample 18+ yrs	yes	yes	yes	yes	yes	a	Topics: Osteoporosis & arthritis

Biological Conditions

Topics and candidate data sets	Criteria										Comment
	1	2		3	4 Disaggregations:						
	coverage	time series	frequency	sample/ census	age	sex	Indigenous status	ethnicity **	SES	Geog area	
Biological Conditions: Hypertension											
ABS National Aboriginal and Torres Strait Islander Survey	nation-wide	no	one off (94)	sample of ATSI people all ages	yes	yes	yes	n/a	yes	b, m	Topic: High blood pressure (self-report).
ABS National Health Survey (NHS)	nation-wide	yes	triennial from 01 89-90, 95, 01, 04-05	sample all ages	yes	yes	yes	yes	yes	a	Topic: Self-reported hypertension.
ABS National Nutrition Survey	nation-wide	no	one off (95)	sample 16+ yrs only	yes	yes	no	yes	yes	d	Topic: Measured blood pressure (16+ yrs only, excluding pregnant women).
ABS Survey of Disability, Ageing and Carers	nation-wide	yes	six yearly from 03 88, 93, 98 03, 09,...	sample all ages see note l	yes	yes	no g (98)	yes	yes	d, k	
Australia and New Zealand Dialysis and Transplant Registry	nation-wide	yes since 1977	continuous	census of people with ESRD	yes	yes	yes	yes	no	postcode at entry	Topics: Co-morbid conditions: Hypertension requiring treatment.
IDI AusDiab	Australia	no	? one off (99-/00)	sample 25+ yrs	yes	yes	yes	yes	yes	Aust	Personal interview & physical exam.
Melbourne Collaborative Cohort Study (Monash University & the Cancer Council of Victoria)	capital city Vic: Melbourne	yes	longitudinal, ongoing from 90-94; follow ups 95-98; planned 02-	sample aged 40-69 yrs in 90-94	yes	yes	no	yes	yes	postcode	Topics: Measured blood pressure, pulse rate; self-reported hypertension (at recruitment); self-reported high blood pressure (at follow-up).
National Survey of Mental Health and Wellbeing of adults	nation-wide	no	one-off (97)	sample 18+ yrs	yes	yes	no	yes	yes	a	Topic: Chronic physical conditions: High blood pressure (self-report).
NHF Australia's Risk Factor Prevalence Study	capital cities	yes past series	irregular (80, 83, 89)	sample 20-64/69 yrs	yes	yes	-	yes	yes	h	Topic: 83: Ever told have high blood pressure; on tablets for high blood pressure; measured blood pressure.
NSW Health Survey See NSW Health Survey Program for future time series of topic	state-wide NSW	yes & in future	annual (97, 98)	sample 16+ yrs	yes	yes	yes	yes	yes	NSW Health regions	Topics: When last measured; ever told by doctor/at hospital have high blood pressure/hypertension; self management actions.
NSW Health Survey Program – continuous data collection, annual reporting.	state-wide NSW	yes in future	continuous: 02, 05 (annual: 97, 98)	sample 16+ yrs only	yes	yes	yes	yes	yes	NSW Health regions	Topic: Cardiovascular disease precursors: blood pressure. Topic planned for 02 & 05. See NSW Health Survey.
North West Adelaide Health Study (NWAHS)	part-capital city SA: NW Adelaide	yes	ongoing from 00	sample 18+ yrs	yes	yes	yes	yes	yes	SLAs	Self report and biomedical assessment (n = 2500)
Qld Regional Health Survey	state-wide (Qld)	no##	93	sample# 18+ yrs	yes	yes	yes	yes	yes	a	Topics: When last had blood pressure measured; ever told have high blood pressure; whether on tablets for high blood pressure..
Qld Statewide Health Survey	state-wide Qld	no##	98	sample# 18+ yrs	yes	yes	yes	yes	yes	d	Topics: Self reported hypertension; when last had blood pressure measured; (last 12 months) has GP advised to modify diet/exercise to reduce blood pressure.

Topics and candidate data sets	Criteria 1 coverage	2 time series	2 frequency	3 sample/ census	4 Disaggregations: age	sex	Indigenous status	ethnicity **	SES	Geog area	Comment
SA Health Omnibus Survey	part-state SA cities > 1,000	yes since 1991	annual	sample 15+ yrs	yes	yes	yes	yes	yes	d	Topics included 90-98.
SA SERCIS Surveys	state-wide SA	yes	more than 1 per year from 97	sample 18+ yrs	yes	yes	yes	yes	yes	a	Topic included 97, 98, 99, 00, 01
SA Monitoring & Surveillance System (SAMSS)	state-wide SA	yes in future	continuous from 2002	sample all ages	yes	yes	yes	yes	yes	a	Planned topics: Blood pressure (self report).
Victorian Population Health Survey	state-wide Vic	yes in future, but not for all questions	01-04	sample 18+ yrs	yes	yes	yes	yes COB	yes	9 DHS health regions	CATI commencing 01.
WA Health Survey	state-wide WA	yes	irregular 95, 00	sample 18+ yrs	yes	yes	yes p	yes p	yes	11 WA health regions	Topic: Blood pressure (self report)
WANTSA Health & Wellbeing Survey [2000 Collaborative Health & Wellbeing Survey]	3 states WA, NT, SA	no	one off 00	sample 18+ yrs	yes	yes	yes	yes	yes	a	
No current repeated physical measure											Gold standard: ?
Biological Conditions: Dyslipidaemia											
ABS National Health Survey (NHS)	nation-wide	yes	triennial from 01 89-90, 95, 01, 04-05	sample all ages	yes	yes	yes	yes	yes	a	Topic: Self-reported high cholesterol.
IDI AusDiab	Australia	no	? one off (99-/00)	sample 25+ yrs	yes	yes	yes	yes	yes	Aust	Personal interview & physical exam.
Melbourne Collaborative Cohort Study (Monash University & the Cancer Council of Victoria)	capital city Vic: Melbourne	yes	longitudinal, ongoing from 90-94; follow ups 95-98; planned 02-	sample aged 40-69 yrs in 90-94	yes	yes	no	yes	yes	postcode	Topics: Blood analysis: cholesterol (at recruitment); self-reported high cholesterol (at follow-up).
NHF Australia's Risk Factor Prevalence Study	capital cities	yes past series	irregular (80, 83, 89)	sample 20-64/69 yrs	yes	yes	-	yes	yes	h	Topics: 83: Ever told have high cholesterol/high trigly-cerides; having treatment to lower blood fat; blood analysis measures: total & HDL cholesterol, triglycerides..
NSW Health Survey See NSW Health Survey Program for future time series of topic	state-wide NSW	yes & in future	annual (97, 98)	sample 16+ yrs	yes	yes	yes	yes	yes	NSW Health regions	Topics: When last measured; ever told by doctor/at hospital have high cholesterol/angina/heart attack/other heart problems; self management actions.
NSW Health Survey Program – continuous data collection, annual reporting.	state-wide NSW	yes in future	continuous: 02, 05 (annual: 97, 98)	sample 16+ yrs only	yes	yes	yes	yes	yes	NSW Health regions	Topic: Cardiovascular disease precursors: cholesterol. Topic planned for 02 & 05. See NSW Health Survey.
North West Adelaide Health Study (NWAHS)	part-capital city SA: NW Adelaide	yes	ongoing from 00	sample 18+ yrs	yes	yes	yes	yes	yes	SLAs	Self report and biomedical assessment (n = 2500)
Qld Statewide Health Survey – self report	state-wide Qld	no[##]	98	sample[#] 18+ yrs	yes	yes	yes	yes	yes	d	Topics: Ever had test for cholesterol; how recent; ever told by doctor/nurse have high cholesterol; last 12 months has GP advised to modify diet/exercise to reduce cholesterol.

Topics and candidate data sets	Criteria										Comment
	1	2		3	4 Disaggregations:						
	coverage	time series	frequency	sample/ census	age	sex	Indigenous status	ethnicity **	SES	Geog area	
SA Health Omnibus Survey	part-state SA cities > 1,000	yes since 1991	annual	sample 15+ yrs	yes	yes	yes	yes	yes	d	Topics included 91-98.
SA SERCIS Surveys	state-wide SA	yes	more than 1 per year from 97	sample 18+ yrs	yes	yes	yes	yes	yes	a	Topic included 97, 98, 99, 00, 01
SA Monitoring & Surveillance System (SAMSS)	state-wide SA	yes in future	continuous from 2002	sample all ages	yes	yes	yes	yes	yes	a	Planned topics: Cholesterol (self report).
WA Health Survey	state-wide WA	yes	irregular 95, 00	sample 18+ yrs	yes	yes	yes p	yes p	yes	11 WA health regions	
WANTSA Health & Wellbeing Survey [2000 Collaborative Health & Wellbeing Survey]	3 states WA, NT, SA	no	one off 00	sample 18+ yrs	yes	yes	yes	yes	yes	a	
No current repeated physical measure											Gold standard: ?
Biological Conditions: Impaired glucose tolerance *											
ABS National Health Survey (NHS)	nation-wide	yes	triennial from 01 89-90, 95, 01, 04-05	sample all ages	yes	yes	yes	yes	yes	a	
IDI AusDiab	Australia	no	? one off (99-/00)	sample 25+ yrs	yes	yes	yes	yes	yes	Aust	Personal interview & physical exam.
Melbourne Collaborative Cohort Study (Monash University & the Cancer Council of Victoria)	capital city Vic: Melbourne	yes	longitudinal, ongoing from 90-94; follow ups 95-98; planned 02-	sample aged 40-69 yrs in 90-94	yes	yes	no	yes	yes	postcode	Topics: Blood analysis: glucose (at recruitment)..
NHF Australia's Risk Factor Prevalence Study	capital cities	yes past series	irregular (80, 83, 89)	sample 20-64/69 yrs	yes	yes	-	yes	yes	h	Topics: Blood analysis measures: glucose.
North West Adelaide Health Study (NWAHS)	part-capital city SA: NW Adelaide	yes	ongoing from 00	sample 18+ yrs	yes	yes	yes	yes	yes	SLAs	biomedical assessment (n = 2500)
No current repeated physical measure											Gold standard: ?
Biological Conditions: Insulin resistance											
No current repeated physical measure											Gold standard: ?
Biological Conditions: Elevated glycosylated haemoglobin (HbA1c) (diabetes)											
IDI AusDiab	Australia	no	? one off (99-/00)	sample 25+ yrs	yes	yes	yes	yes	yes	Aust	Personal interview & physical exam.
North West Adelaide Health Study (NWAHS)	part-capital city SA: NW Adelaide	yes	ongoing from 00	sample 18+ yrs	yes	yes	yes	yes	yes	SLAs	Biomedical assessment (n = 2500)
No current repeated physical measure											Gold standard: ?
Biological Conditions: Proteinuria											
IDI AusDiab	Australia	no	? one off (99-/00)	sample 25+ yrs	yes	yes	yes	yes	yes	Aust	Personal interview & physical exam.
No current repeated physical measure											Gold standard: ?
Biological Conditions: Obesity											

Topics and candidate data sets	Criteria										Comment
	1	2		3	4 Disaggregations:						
	coverage	time series	frequency	sample/ census	age	sex	Indigenous status	ethnicity **	SES	Geog area	
ABS National Aboriginal and Torres Strait Islander Survey	nation-wide	no	one off (94)	sample of ATSI people all ages	yes	yes	yes	n/a	yes	b, m	Topic: Height, weight, BMI (self-report).
ABS National Health Survey (NHS)	nation-wide	yes	triennial from 01 89-90, 95, 01, 04-05	sample all ages	yes	yes	yes	yes	yes	a	Topics: Self-reported height & weight, calculated BMI.
ABS National Nutrition Survey	nation-wide	no	one off (95)	sample 2+ yrs	yes	yes	no	yes	yes	d	Topics: Measured height, weight, waist & hip circumferences (excluding pregnant women).
CSIRO Australian Food and Nutrition Surveys	nation-wide	yes since 1988	five yearly 88, 93, 98-99	sample 18+ yrs	yes	yes	no	? 88, 93 98-99: COB	proxy usual occ	6 states, ACT incl with NSW	Topics: self-reported height & weight (98-99).
IDI AusDiab	Australia	no	? one off (99-/00)	sample 25+ yrs	yes	yes	yes	yes	yes	Aust	Personal interview & physical exam.
Melbourne Collaborative Cohort Study (Monash University & the Cancer Council of Victoria)	capital city Vic: Melbourne	yes	longitudinal, ongoing from 90-94; follow ups 95-98; planned 02-	sample aged 40-69 yrs in 90-94	yes	yes	no	yes	yes	postcode	Topics: Measured height, weight, waist & hip circum-ferences, & bioimpedance (to estimate body composit-ion) (at recruitment); self-reported weight & waist circumference (at follow-up).
NHF Australia's Risk Factor Prevalence Study	capital cities	yes past series	irregular (80, 83, 89)	sample 20-64/69 yrs	yes	yes	-	yes	yes	h	Topics: 83: measured height & weight.
NSW Health Survey See NSW Health Survey Program for future time series of topic.	state-wide NSW	yes & in future	annual (97, 98)	sample 16+ yrs	yes	yes	yes	yes	yes	NSW Health regions	Topic: Height & weight (self-report); BMI (calculated).
NSW Health Survey Program – continuous data collection, annual reporting.	state-wide NSW	yes in future	continuous 02-07 (annual: 97, 98)	sample 16+ yrs only	yes	yes	yes	yes	yes	NSW Health regions	Topic: Height & weight (self-report); BMI (calcul-ated) (sample aged 16+ yrs only).
North West Adelaide Health Study (NWAHS)	part-capital city SA: NW Adelaide	yes	ongoing from 00	sample 18+ yrs	yes	yes	yes	yes	yes	SLAs	biomedical assessment (n = 2500)
Qld Omnibus Survey (2001)	state-wide Qld	no##	01	sample# 18+ yrs	yes	yes	yes	yes	yes	d	Topics: Self-reported height & weight.
Qld Regional Health Survey	state-wide (Qld)	no##	93	sample# 18+ yrs	yes	yes	yes	yes	yes	a	Topics: Self-reported height & weight; (male only) how would you describe your waistline?
Qld Reliability & Validity Survey	state-wide (Qld)	no##	99	sample# 18+ yrs	yes	yes	yes	yes	yes	d	
[Qld] Social Capital Survey	state-wide Qld	no##	one off 02	sample# 18+ yrs	yes	yes	yes	no	yes	urban/ rural/ remote	Topics incl Self-reported height & weight (BMI)..
Qld Statewide Health Survey	state-wide Qld	no##	98	sample# 18+ yrs	yes	yes	yes	yes	yes	d	Topics: Self reported height & weight; (past 12 months) has GP: measured your weight, advised you to lose weight, given advice about modifying weight, diet/exer-cise or referred you to a program to modify...
Qld Young People's Mental Health Survey	state-wide (Qld)	no	one off (1998)	yes 15-24 yrs	yes	yes	yes	cultural diversity	yes	urban/-rural	Topic: Obesity (self-report).

Topics and candidate data sets	**Criteria**										**Comment**
	1	**2**		**3**	**4 Disaggregations:**						
	coverage	**time series**	**frequency**	**sample/ census**	**age**	**sex**	**Indigenous status**	**ethnicity ****	**SES**	**Geog area**	
SA Health Omnibus Survey	part-state SA cities > 1,000	yes since 1991	annual	sample 15+ yrs	yes	yes	yes	yes	yes	d	Topics included 91-98.
SA SERCIS Surveys	state-wide SA	yes	more than 1 per year from 97	sample 18+ yrs	yes	yes	yes	yes	yes	a	Topic included 97, 98, 00, 01
SA Monitoring & Surveillance System (SAMSS)	state-wide SA	yes in future	continuous from 2002	sample all ages	yes	yes	yes	yes	yes	a	Planned topics: BMI (self report).
University of Newcastle Women's Longitudinal Health Survey	nation-wide	longitudinal	1996 to follow up 20 years	sample 18-75 yrs in 1996	yes	women only	yes	yes	yes	urban/ rural/ remote	Topic: Height, weight, BMI.
Victorian Population Health Survey	state-wide Vic	yes in future, but not for all questions	01-04	sample 18+ yrs	yes	yes	yes	yes COB	yes	9 DHS health regions	CATI commencing 01.
WA Health Survey	state-wide WA	yes	irregular 95, 00	sample 18+ yrs	yes	yes	yes p	yes p	yes	11 WA health regions	Topic: BMI as estimated from height & weight..
WA Health and Wellbeing Surveillance System	state-wide WA	yes in future	continuous from 02	sample 16+ yrs	yes	yes	yes p	yes p	yes	11 WA health regions	Proposed topic: BMI
WANTSA Health & Wellbeing Survey [2000 Collaborative Health & Wellbeing Survey]	3 states WA, NT, SA	no	one off 00	sample 18+ yrs	yes	yes	yes	yes	yes	a	
No current repeated physical measure											Gold standard: ?
Biological Conditions: Underweight (Musculoskeletal disease)											
ABS National Aboriginal and Torres Strait Islander Survey	nation-wide	no	one off (94)	sample of ATSI people all ages	yes	yes	yes	n/a	yes	b, m	Topic: Height, weight, BMI (self-report).
ABS National Health Survey (NHS)	nation-wide	yes	triennial from 01 89-90, 95, 01, 04-05	sample all ages	yes	yes	yes	yes	yes	a	Topics: Self-reported height & weight, calculated BMI.
ABS National Nutrition Survey	nation-wide	no	one off (95)	sample 2+ yrs	yes	yes	no	yes	yes	d	Topics: Measured height, weight, waist & hip circumferences (excluding pregnant women).
CSIRO Australian Food and Nutrition Surveys	nation-wide	yes since 1988	five yearly 88, 93, 98-99	sample 18+ yrs	yes	yes	no	? 88, 93 98-99: COB	proxy usual occ	6 states, ACT incl with NSW	Topics: self-reported height & weight (98-99)
IDI AusDiab	Australia	no	? one off (99-/00)	sample 25+ yrs	yes	yes	yes	yes	yes	Aust	Personal interview & physical exam.
Melbourne Collaborative Cohort Study (Monash University & the Cancer Council of Victoria)	capital city Vic: Melbourne	yes	longitudinal, ongoing from 90-94; follow ups 95-98; planned 02-	sample aged 40-69 yrs in 90-94	yes	yes	no	yes	yes	postcode	Topics: Measured height, weight, waist & hip circum-ferences, & bioimpedance (to estimate body composition) (at recruitment); self-reported weight & waist circumference (at follow-up).
NHF Australia's Risk Factor Prevalence Study	capital cities	yes past series	irregular (80, 83, 89)	sample 20-64/69 yrs	yes	yes	-	yes	yes	h	Topics: 83: measured height & weight.
NSW Health Survey Program – continuous data collection.	state-wide NSW	yes in future	continuous from 02	sample all ages	yes	yes	yes	yes	yes	NSW Health regions	Topic: BMI

Topics and candidate data sets	Criteria										Comment
	1	2		3	4 Disaggregations:						
	coverage	time series	frequency	sample/ census	age	sex	Indigenous status	ethnicity **	SES	Geog area	
North West Adelaide Health Study (NWAHS)	part-capital city SA: NW Adelaide	yes	ongoing from 00	sample 18+ yrs	yes	yes	yes	yes	yes	SLAs	biomedical assessment (n = 2500)
Qld Omnibus Survey (2001)	state-wide Qld	no##	01	sample# 18+ yrs	yes	yes	yes	yes	yes	d	Topics: self-reported height & weight.
Qld Regional Health Survey	state-wide (Qld)	no##	93	sample# 18+ yrs	yes	yes	yes	yes	yes	a	Topics: Self-reported height & weight; (male only) how would you describe your waistline?
Qld Reliability & Validity Survey	state-wide (Qld)	no##	99	sample# 18+ yrs	yes	yes	yes	yes	yes	d	
[Qld] Social Capital Survey	state-wide Qld	no##	one off 02	sample# 18+ yrs	yes	yes	yes	no	yes	urban/ rural/ remote	Topics incl Self-reported height & weight (BMI)..
Qld Statewide Health Survey	state-wide Qld	no##	98	sample# 18+ yrs	yes	yes	yes	yes	yes	d	Topics: Self reported height & weight; (past 12 months) has GP: measured your weight, advised you to lose weight, given advice about modifying weight, diet/exercise or referred you to a program to modify...
Qld Young People's Mental Health Survey	state-wide (Qld)	no	one off (1998)	yes 15-24 yrs	yes	yes	yes	cultural diversity	yes	urban/- rural	Topic: Prevalence of anorexia nervosa or bulimia (self-reported as diagnosed by doctor).
SA Health Omnibus Survey	part-state SA cities > 1,000	yes since 1991	annual	sample 15+ yrs	yes	yes	yes	yes	yes	d	Topics included 91-98.
SA SERCIS Surveys	state-wide SA	yes	more than 1 per year from 97	sample 18+ yrs	yes	yes	yes	yes	yes	a	Topic included 97, 98, 00, 01
SA Monitoring & Surveillance System (SAMSS)	state-wide SA	yes in future	continuous from 2002	sample all ages	yes	yes	yes	yes	yes	a	Planned topics: BMI (self report).
University of Newcastle Women's Longitudinal Health Survey	nation-wide	longitudinal	1996 to follow up 20 years	sample 18-75 yrs in 1996	yes	women only	yes	yes	yes	urban/ rural/ remote	Topic: Height, weight, BMI.
WA Health and Wellbeing Surveillance System	state-wide WA	yes in future	continuous from 02	sample 16+ yrs	yes	yes	yes p	yes p	yes	11 WA health regions	Proposed topic: BMI
WANTSA Health & Wellbeing Survey [2000 Collaborative Health & Wellbeing Survey]	3 states WA, NT, SA	no	one off 00	sample 18+ yrs	yes	yes	yes	yes	yes	a	
No current repeated physical measure											Gold standard: ?
Biological Conditions: Urinary tract infections (Renal disease)											
ABS National Health Survey (NHS)	nation-wide	yes	triennial from 01 01, 04-05	sample all ages	yes	yes	yes	yes	yes	a	Topic: infections that are long term conditions may be reported.
AIHW National Hospital Morbidity Database	nation-wide	yes but see comments	ongoing annual	census of hospital separat'ns	yes	yes	g	yes COB only	no	j SLA	Caution: variables change frequently. Annual financial year reporting
Biological Conditions: Infections (asthma, musculoskeletal disease, oral health)											
ABS National Health Survey (NHS)	nation-wide	yes	triennial from 01 01, 04-05	sample all ages	yes	yes	yes	yes	yes	a	Topic: infections that are long term conditions may be reported.
AIHW National Hospital Morbidity Database	nation-wide	yes but see comments	ongoing annual	census of hospital separat'ns	yes	yes	g	yes COB only	no	j SLA	Caution: variables change frequently. Annual financial year reporting

Topics and candidate data sets	Criteria										Comment
	1	2		3	4 Disaggregations:						
	coverage	time series	frequency	sample/ census	age	sex	Indigenous status	ethnicity **	SES	Geog area	
WA Aboriginal Child Health Survey	state-wide WA	no	one off 00-01	sample Indigenous children 0-17	yes	yes	yes (all)	-	yes	CDs	Topic: Recurring chest, skin, ear, & gastro infections

Human Function

Topics and candidate data sets	Criteria 1 coverage	2 time series	2 frequency	3 sample/ census	4 Disaggregations: age	sex	Indigenous status	ethnicity **	SES	Geog area	Comment
Human Function: Disability days											
ABS National Aboriginal and Torres Strait Islander Survey	nation-wide	no	one off (94)	sample of ATSI people all ages	yes	yes	yes	n/a	yes	b, m	Topic: Disability prevalence
ABS National Health Survey (NHS)	nation-wide	yes	triennial from 01 89-90, 95, 01	sample all ages	yes	yes	yes	yes	yes	a	Topic: Whether /no of days away from work/study due to illness or injury.
National Survey of Mental Health and Wellbeing of adults	nation-wide	no	one-off (97)	sample 18+ yrs	yes	yes	no	yes	yes	a	Topic: Disability (BDQ – days spent out of role), SF-12, SUDOR
SA SERCIS Surveys	state-wide SA	yes	more than 1 per year from 97	sample 18+ yrs	yes	yes	yes	yes	yes	a	Topic: How many days unable to work/carry out normal duties. Topic included 97, 98, 99, 00, 01
SA Monitoring & Surveillance System (SAMSS)	state-wide SA	yes in future	continuous from 2002	sample all ages	yes	yes	yes	yes	yes	a	Planned topics: Economic: Sick days.
WA Health and Wellbeing Surveillance System	state-wide WA	yes in future	continuous from 02	sample 16+ yrs	yes	yes	yes p	yes p	yes	11 WA health regions	Proposed topic: measures of disability.
WANTSA Health & Wellbeing Survey [2000 Collaborative Health & Wellbeing Survey]	3 states WA, NT, SA	no	one off 00	sample 18+ yrs	yes	yes	yes	yes	yes	a	Topic: How many days unable to work/carry out normal duties.
Human Function: Reduction of function											
ABS General Social Survey (GSS) (forthcoming)	nation-wide	yes in future	4 yearly 02, 06	sample 18+ yrs	yes	yes	no	yes	yes	d	Topic: Disability status incl has disability/long term health condition. Comparable to SDAC.
ABS Indigenous Social Survey (ISS) (forthcoming)	nation-wide	yes in future	6 yearly 02, 08	sample ATSI 15+ yrs	yes	yes	no	no	yes	d	Due to differences in remote and non-remote questionn-aires, ISS is only partially comparable to SDAC.
ABS National Health Survey (NHS)	nation-wide	yes	triennial from 01 89-90, 95, 01	sample 15+ only	yes	yes	yes	yes	yes	a	Topics: Whether had to cut down on other activities due to illness or injury. 95 also used SF-36, indicator data incl physical & social funct-ioning & role limitations due to physical & emotional problems (persons 15+ only).
ABS Survey of Disability, Ageing and Carers	nation-wide	yes	six yearly from 03 88, 93, 98 03, 09,...	sample all ages see note 1	yes	yes	no g (98)	yes	yes	d, k	Topics: Disability & Handicap identification.
National Survey of Mental Health and Wellbeing of adults	nation-wide	no	one-off (97)	sample 18+	yes	yes	no	yes	yes	a	Topics: SF-12 – indicators of physical & social funct-ioning & role limitations due to physical & emotional problems; MMSE (cognitive impairment); BDQ, SUDOR.
NSW Health Survey Program – continuous data collection, annual reporting.	state-wide NSW	yes in future	continuous: 02, 03, 04, 06 (annual: 97, 98, 99)	sample all ages	yes	yes	yes	yes	yes	17 NSW regions	Topic: Health status & disability topics planned for each of 6 years. See NSW Older Persons Survey.

Topics and candidate data sets	Criteria										Comment
	1	2		3	4 Disaggregations:						
	coverage	time series	frequency	sample/ census	age	sex	Indigenous status	ethnicity **	SES	Geog area	
NSW Older Persons Survey See NSW Health Survey Program for future time series of topic	state-wide NSW & ACT	yes in future	one off (99)	sample 65+ yrs	yes	yes	yes	yes	yes	NSW regions	Topics: Functional limitations (Health status & disability)
Qld Health Status Survey (SF-36)	state-wide Qld	no[##]	94	sample[#] 18+ yrs	yes	yes	yes	yes	yes	a	Response rate=82% Sample=13,000
Qld Young People's Mental Health Survey	state-wide (Qld)	no	one off (1998)	yes 15-24 yrs	yes	yes	yes	cultural diversity	yes	urban/-rural	Topics: Prevalence of disability associated with loss of sight; hearing; physical disability.
WA Aboriginal Child Health Survey	state-wide WA	no	one off 00-01	sample Indigen-ous child-ren 0-17	yes	yes	yes (all)	-	yes	CDs	Topic: Functional impairment due to illness or disability.
Human Function:	**Activity limitation**										
ABS Survey of Disability, Ageing and Carers	nation-wide	yes	six yearly from 03 88, 93, 98 03, 09,...	sample all ages see note 1	yes	yes	no g (98)	yes	yes	d, k	Topics: Disability & Handicap identification, Aids used/needed, etc
National Drug Strategy Household **Survey**	nation-wide	yes since 1985	triennial from 01 85, 88, 91, 93, 95, 98, 01, 04, 07[4]	sample 14+ yrs	yes	yes	yes (94 only)	yes	yes	b, d, m (s)	
National Survey of Mental Health and Wellbeing - child and adolescent component	nation-wide	no	one off (1998)	yes 4-17 yrs	yes	yes	yes	yes	yes	t	Topics: Limitations in peer & school activities, & self-esteem, by parental report for children (6-12 yrs) & parental & self-report for adolescents (13-17 yrs).
National Survey of Mental Health and Wellbeing of adults	nation-wide	no	one-off (97)	sample 18+ yrs	yes	yes	no	yes	yes	a	Topics: BDQ, SF-12, SUDOR.
NSW Child Health Survey See NSW Health Survey Program for future time series of topic.	state-wide NSW	yes in future	one off (01)	sample 0-12 yrs	yes	yes	yes	yes	yes	NSW Health regions	Topics: Activity limitations of child (past 4 weeks); effect on parent/family.
NSW Health Survey See NSW Health Survey Program for future time series of topic.	state-wide NSW	yes & in future	annual (97, 98)	sample 16+ yrs	yes	yes	yes	yes	yes	NSW Health regions	Topics: Problems/otherwise with mobility, self-care activities, usual activities.
NSW Health Survey Program – continuous data collection, annual reporting.	state-wide NSW	yes in future	continuous: 02-07 (annual: 97, 98 adults; 01 children)	sample all ages	yes	yes	yes	yes	yes	17 NSW regions	Topic: Disability topics planned for each of 6 years. See NSW Child Health, Health, & Older Persons Surveys.
NSW Older Persons Survey	state-wide NSW & ACT	yes in future	one off (99)	sample 65+ yrs	yes	yes	yes	yes	yes	NSW regions	Topics: Activity limitations.
Qld Health Status Survey (SF-36)	state-wide Qld	no[##]	94	sample[#] 18+ yrs	yes	yes	yes	yes	yes	a	Response rate=82% Sample=13,000
Human Function:	**Restriction in participation**										
ABS General Social Survey (GSS) (forthcoming)	nation-wide	yes in future	4 yearly 02, 06	sample 18+ yrs	yes	yes	no	yes	yes	d	Topic: Disability status: core activity restriction & level of restriction. Comparable to SDAC.

Topics and candidate data sets	Criteria										Comment
	1	2		3	4 Disaggregations:						
	coverage	time series	frequency	sample/ census	age	sex	Indigenous status	ethnicity **	SES	Geog area	
ABS Indigenous Social Survey (ISS) (forthcoming)	nation-wide	yes in future	6 yearly 02, 08	sample ATSI 15+ yrs	yes	yes	no	no	yes	d	Due to differences in remote and non-remote questionnaires, ISS is only partially comparable to SDAC.
ABS Survey of Aspects of Literacy	nation-wide	no	? irregular (96)	sample 15-74 yrs	yes	yes	yes	yes	yes	d	Topics: Whether disabled, Type of disability; Whether has learning difficulties, Extent to which affects reading, writing, & maths ability.
ABS Survey of Disability, Ageing and Carers	nation-wide	yes	six yearly from 03 88, 93, 98 03, 09,...	sample all ages see note l	yes	yes	no g (98)	yes	yes	d, k	Topic: Participation in community activities. Persons with a disability only.
National Survey of Mental Health and Wellbeing - child and adolescent component	nation-wide	no	one off (1998)	yes 4-17 yrs	yes	yes	yes	yes	yes	t	Topics: limitations in peer and school activities, & self-esteem, , by parental report for children (6-12 yrs) & parental & self-report for adolescents (13-17 yrs)
Qld Health Status Survey (SF-36)	state-wide Qld	no##	94	sample# 18+ yrs	yes	yes	yes	yes	yes	a	Response rate=82% Sample=13,000
Qld Omnibus Survey (2001)	state-wide Qld	no##	01	sample# 65+ yrs	yes	yes	yes	yes	yes	d	Topic: injury from falls. Response rate=79%, Sample=526 (65+ yrs)
WA Aboriginal Child Health Survey	state-wide WA	no	one off 00-01	sample Indigenous children 0-17	yes	yes	yes (all)	-	yes	CDs	Topic: Functional impairment due to illness or disability.

Wellbeing

Topics and candidate data sets	Criteria										Comment
	1	2		3	4 Disaggregations:						
	coverage	time series	frequency	sample/ census	age	sex	Indigenous status	ethnicity **	SES	Geog area	
Wellbeing:	**Self rated health**										
ABS General Social Survey (GSS) (forthcoming)	nation-wide	yes in future	4 yearly 02, 06	sample 18+ yrs	yes	yes	no	yes	yes	d	Topics: 02: Self-assessed health status.
ABS Indigenous Social Survey (ISS) (forthcoming)	nation-wide	yes in future	6 yearly 02, 08	sample ATSI 15+ yrs	yes	yes	no	no	yes	d	Topics: 02: Self-assessed health status.
ABS National Aboriginal and Torres Strait Islander Survey	nation-wide	no	one off (94)	sample of ATSI people all ages	yes	yes	yes	n/a	yes	b, m	Topic: SF 1
ABS National Health Survey (NHS)	nation-wide	yes	77-78, 83, 89-90, 95, 01, 04-05	sample 15+ only	yes	yes	yes	yes	yes	a	Single question for 15+ (& SF-36 in 95).
ABS Survey of Aspects of Literacy	nation-wide	no	? irregular (96)	sample 15-74 yrs	yes	yes	yes	yes	yes	d	Topic: Self perception of health.
ABS Survey of Disability, Ageing and Carers	nation-wide	yes	six yearly from 03 88, 93, 98 03, 09,...	sample all ages see note 1	yes	yes	no g (98)	yes	yes	d, k	98: collected self assessed health status in SF-12.
Melbourne Collaborative Cohort Study (Monash University & the Cancer Council of Victoria)	capital city Vic: Melbourne	yes	longitudinal, ongoing from 90-94; follow ups 95-98; planned 02-	sample aged 40-69 yrs in 90-94	yes	yes	no	yes	yes	postcode	Topics: Lifestyle: Health (at follow-up).
National Drug Strategy Household Survey	nation-wide	yes since 1985	triennial from 01 85, 88, 91, 93, 95, 98, 01, 04, 07	sample 14+ yrs	yes	yes	yes (94 only)	yes	yes	b, d, m (s)	Topics: SF1; compared to one year ago
National Survey of Mental Health and Wellbeing - child and adolescent component	nation-wide	no	one off (1998)	yes 4-17 yrs	yes	yes	yes	yes	yes	t	Topic: Health-related quality of life: for parents; & by parental report for children (6-12 yrs) & parental & self-report for adolescents (13-17 yrs).
National Survey of Mental Health and Wellbeing of adults	nation-wide	no	one-off (97)	sample 18+ yrs	yes	yes	no	yes	yes	a	Topics: GHQ-12, SF 12.
NSW Child Health Survey See NSW Health Survey Program for future time series of topic	state-wide NSW	yes in future	one off (01)	sample 0-12 yrs	yes	yes	yes	yes	yes	NSW Health regions	Topics: General mental health & wellbeing; general physical health status.
NSW Health Survey See NSW Health Survey Program for future time series of topic	state-wide NSW	yes & in future	annual (97, 98)	sample 16+ yrs	yes	yes	yes	yes	yes	NSW Health regions	Topics: General mental health & wellbeing; general physical health st atus.
NSW Health Survey Program – continuous data collection, annual reporting.	state-wide NSW	yes in future	continuous: 02-07 (annual: 97, 98, 99, 01)	sample all ages	yes	yes	yes	yes	yes	NSW Health regions	Topic: Health status & disability topic planned for each of 6 years. See NSW Child Health, Health & Older Persons Surveys.
NSW Older Persons Survey See NSW Health Survey Program for future time series of topic	state-wide NSW & ACT	yes in future	one off (99)	sample 65+ yrs	yes	yes	yes	yes	yes	NSW Health regions	Topics: General mental health & wellbeing; general physical health status.
Qld Omnibus Survey (2002)	state-wide Qld	no[##]	one off 02	sample[#] 18+ yrs	yes	yes	yes	no	yes	d	Topics incl Self-reported general health.

Topics and candidate data sets	Criteria										Comment
	1	2		3	4 Disaggregations:						
	coverage	time series	frequency	sample/ census	age	sex	Indigenous status	ethnicity **	SES	Geog area	
Qld Health Status Survey (SF-36)	state-wide Qld	no##	94	sample# 18+ yrs	yes	yes	yes	yes	yes	a	Response rate=82% Sample=13,000
Qld Regional Health Survey	state-wide (Qld)	no##	93	sample# 18+ yrs	yes	yes	yes	yes	yes	a	Topics: In general would you say your health is excellent, good, fair or poor.
Qld Reliability & Validity Survey	state-wide (Qld)	no##	99	sample# 18+ yrs	yes	yes	yes	yes	yes	d	
[Qld] Social Capital Survey	state-wide Qld	no##	one off 02	sample# 18+ yrs	yes	yes	yes	no	yes	urban/ rural/ remote	Topics incl Self-reported general health.
Qld Statewide Health Survey	state-wide Qld	no##	98	sample# 18+ yrs	yes	yes	yes	yes	yes	d	Topics: Self-reported health.
Qld Women's Health Survey	state-wide Qld	no##	96	sample# 18+ yrs	yes	yes	yes	yes	yes	d	
SA Health Omnibus Survey	part-state SA cities > 1,000	yes since 1991	annual	sample 15+ yrs	yes	yes	yes	yes	yes	d	Topics included 94, 95, 98.
SA Physical Activity Survey	state-wide (SA)	yes	98, 01	sample 18+ yrs	yes	yes	yes	yes	yes	SA & reg'l	
SA SERCIS Surveys	state-wide SA	yes	more than 1 per year from 97	sample 18+ yrs	yes	yes	yes	yes	yes	a	Topic included 97, 98, 99, 00, 01
SA Monitoring & Surveillance System (SAMSS)	state-wide SA	yes in future	continuous from 2002	sample all ages	yes	yes	yes	yes	yes	a	Planned topics: SF1/12/36.
Tasmanian Health & Wellbeing Survey (Healthy Communities Survey)	state-wide Tas	no	one off (98)	sample 18+ yrs	yes	yes	yes	yes broad	yes	a	Sample of 25,000. with response rate of 60-71% = approx 15,000 respondents. Mail survey
University of Newcastle Women's Longitudinal Health Survey	nation-wide	longitudinal	1996 to follow up 20 years	sample 18-75 yrs in 1996	yes	women only	yes	yes	yes	urban/ rural/ remote	SF 1, SF 3636
Victorian Population Health Survey	state-wide Vic	yes in future, but not for all questions	01-04	sample 18+ yrs	yes	yes	yes	yes COB	yes	9 DHS health regions	Topic: Psychological distress (using Kessler 10).
WA Aboriginal Child Health Survey	state-wide WA	no	one off 00-01	sample Indigenous children 0-17	yes	yes	yes (all)	-	yes	CDs	Topic: Mental health & wellbeing
WA Health Survey	state-wide WA	yes	irregular 95, 00	sample 18+ yrs	yes	yes	yes p	yes p	yes	11 WA health regions	Topic: MOS SF 36
WA Health and Wellbeing Surveillance System	state-wide WA	yes in future	continuous from 02	sample 16+ yrs	yes	yes	yes p	yes p	yes	11 WA health regions	Proposed topic: General quality of life; mental health status.
WANTSA Health & Wellbeing Survey [2000 Collaborative Health & Wellbeing Survey]	3 states WA, NT, SA	no	one off 00	sample 18+ yrs	yes	yes	yes	yes	yes	a	Topics: SF12.

Health Behaviours

Topics and candidate data sets	Criteria										Comment
	1	2		3	4 Disaggregations:						
	coverage	time series	frequency	sample/ census	age	sex	Indigenous status	ethnicity **	SES	Geog area	
Health Behaviours: Tobacco exposure: smoking											
ABS Indigenous Social Survey (ISS) (forthcoming)	nation-wide	yes in future	6 yearly 02, 08	sample ATSI 15+ yrs	yes	yes	no	no	yes	d	Topics: Health risk: Smoking.
ABS National Aboriginal and Torres Strait Islander Survey	nation-wide	no	one off (94)	sample of ATSI people all ages	yes	yes	yes	n/a	yes	b, m	Topics: Current smoker, consumption (self-report).
ABS National Health Survey (NHS)	nation-wide	yes	77-78, 83, 89-90, 95, 01, 04-05	sample 18+ only	yes	yes	yes	yes	yes	a	Topic collected from pop 18+ only.
AIHW & USyd Bettering the Evaluation and Care of Health (BEACH & SAND)	nation-wide	yes since April 1998	continuous	sample of patients from HIC records of active recognised GPs	yes	yes	yes	yes NESB status	no	State & RRMA	Topic: GP management of patient health problems.
Australia and New Zealand Dialysis and Transplant Registry	nation-wide	yes since 1977	continuous	census of people with ESRD	yes	yes	yes	yes	no	postcode at entry	Topics: Co-morbid conditions: Cigarette smoking (never, former, current)..
Australian Secondary Schools Alcohol and Drug Survey (ASSAD)	nation-wide	yes since 1984	triennial 84, 87, 90, 93, 96, 99,. 02	sample 12-17 yrs	yes	yes	yes p	yes	no	q	Topics 99 core survey: current smoker, ever smoked, consumption, future smoking, brand, packet size, etc.
Australian Secondary Schools Alcohol and Drug Survey (ASSAD) - ACT record	state-wide supplementary: ACT	yes	triennial 96, 99	sample 11-18 yrs	yes	yes	yes	yes	yes	ACT schools	See also Australian Secondary Schools Alcohol and Drug Survey.
DHAC national evaluation surveys for the National Tobacco Campaign	Australia	yes since 1997	annual 97, 98, 99, 00, 01	sample 18-40 yrs	yes	yes	no	yes	yes	Aust.	Topics: consumption, brand, awareness, opinions re smoking & health, future intentions, awareness of campaign
Melbourne Collaborative Cohort Study (Monash University & the Cancer Council of Victoria)	capital city Vic: Melbourne	yes	longitudinal, ongoing from 90-94; follow ups 95-98; planned 02-	sample aged 40-69 yrs in 90-94	yes	yes	no	yes	yes	postcode	Topics: Smoking: when started, when/if stopped, how much, how long in total (at recruitment); self-reported Smoking (at follow-up).
National Drug Strategy Household Survey	nation-wide	yes since 1985	triennial from 01 85, 88, 91, 93, 95, 98, 01, 04, 07	sample 14+ yrs	yes	yes	yes (94 only)	yes	yes	b, d, m (s)	Topics: Current smoker; Quit smoking actions past 6 months.
National Survey of Mental Health and Wellbeing - child and adolescent component	nation-wide	no	one off (1998)	yes 4-17 yrs	yes	yes	yes	yes	yes	t	Topics: use of cigarettes during previous 30 days (self-report by 13-17 yr olds).
National Survey of Mental Health and Wellbeing of adults	nation-wide	no	one-off (97)	sample 18+ yrs	yes	yes	no	yes	yes	a	Topic: smoking: current; regularly; ever regularly (self report).
NHF Australia's Risk Factor Prevalence Study	capital cities	yes past series	irregular (80, 83, 89)	sample 20-64/69 yrs	yes	yes	-	yes	yes	h	Topics: 83: Ever smoked; age started smoking regularly; have you given up; how much did/do you smoke; brand smoked; have you switched to lower tar cigarettes.
NSW Child Health Survey	state-wide NSW	yes in future	one off (01)	sample 0-12 yrs	yes	yes	yes	yes	yes	NSW Health regions	Topic: Smoking behaviour

Topics and candidate data sets	Criteria										Comment
	1	2		3	4 Disaggregations:						
	coverage	time series	frequency	sample/ census	age	sex	Indigenous status	ethnicity **	SES	Geog area	
NSW Health Survey	state-wide NSW	yes & in future	annual for (97, 98)	sample 16+ yrs	yes	yes	yes	yes	yes	NSW Health regions	Topic: Smoking behaviour
NSW Health Survey Program – continuous data collection.	state-wide NSW	yes in future	continuous from 02	sample all ages	yes	yes	yes	yes	yes	NSW Health regions	Topic: Current smoking.
Qld Omnibus Survey (2002)	state-wide Qld	no[##]	one off 02	sample[#] 18+ yrs	yes	yes	yes	no	yes	d	Topics incl Smoking status; quitting history.
Qld Public Health/Media Reach Survey 1996	state-wide Qld	no[##]	96	sample[#] Princ care giver of children <12	yes	yes	yes	yes	yes	d	Response rate 82%; Fluoridation sample 1,200; Smoking sample 2,250
Qld Public Health/Media Reach Survey 1997	state-wide Qld	no[##]	97	sample[#] Princ care giver of children 1-4 yrs	yes	yes	yes	yes	yes	d	Response rate 81%; Sun protection sample 950; Smoking sample 1,050
Qld Regional Health Survey	state-wide (Qld)	no[##]	93	sample[#] 18+ yrs	yes	yes	yes	yes	yes	a	Topics: Current smoker; whether smoke inside or go outside to smoke; whether other smokers smoke inside home.
Qld Reliability & Validity Survey	state-wide (Qld)	no[##]	99	sample[#] 18+ yrs	yes	yes	yes	yes	yes	d	
[Qld] Social Capital Survey	state-wide Qld	no[##]	one off 02	sample[#] 18+ yrs	yes	yes	yes	no	yes	urban/ rural/ remote	Topics incl Smoking status.
Qld Statewide Health Survey	state-wide Qld	no[##]	98	sample[#] 18+ yrs	yes	yes	yes	yes	yes	d	Topics: Currently smoke cigarettes/pipe/cigars; quite smoking last 12 months; does GP know yr smoking status; has GP advised to quit/congratulated on quitting.
Qld Young People's Mental Health Survey	state-wide (Qld)	no	one off (1998)	yes 15-24 yrs	yes	yes	yes	cultural diversity	yes	urban/ rural	Topics: Whether current smoker; How many cigarettes smoked per day.
SA Health Omnibus Survey	part-state SA cities > 1,000	yes since 1991	annual	sample 15+ yrs	yes	yes	yes	yes	yes	d	
SA SERCIS Surveys	state-wide SA	yes	more than 1 per year from 97	sample 18+ yrs	yes	yes	yes	yes	yes	a	Topic included 97, 98, 99, 00, 01
SA Monitoring & Surveillance System (SAMSS)	state-wide SA	yes in future	continuous from 2002	sample all ages	yes	yes	yes	yes	yes	a	Planned topics: Smoking.
University of Newcastle Women's Longitudinal Health Survey	nation-wide	longitudinal	1996 to follow up 20 years	sample 18-75 yrs in 1996	yes	women only	yes	yes	yes	urban/ rural/ remote	Topics: Current smoker, ever smoked, consumption.
Victorian Population Health Survey	state-wide Vic	yes in future, but not for all questions	01-04	sample 18+ yrs	yes	yes	yes	yes COB	yes	9 DHS health regions	CATI commencing 01.
WA Aboriginal Child Health Survey	state-wide WA	no	one off 00-01	sample Indigenous children 0-17	yes	yes	yes (all)	-	yes	CDs	Topic: incl parent/caregiver use of tobacco.
WA Child Health Survey	state-wide WA	no	one off 93-94	sample 4-16 yrs	yes	yes	?	?	yes	yes	Topic: Tobacco smoking
WA Health Survey	state-wide WA	yes	irregular 95, 00	sample 18+ yrs	yes	yes	yes p	yes p	yes	11 WA health regions	Topic: measures on intensity, duration & frequency.

Topics and candidate data sets	Criteria										Comment
	1	2		3	4 Disaggregations:						
	coverage	time series	frequency	sample/ census	age	sex	Indigenous status	ethnicity **	SES	Geog area	
WA Health and Wellbeing Surveillance System	state-wide WA	yes in future	continuous from 02	sample 16+ yrs	yes	yes	yes p	yes p	yes	11 WA health regions	Proposed topic: Smoking.
WA Tobacco alcohol and illicit drug consumption survey	state-wide WA	yes since 1984	84, 85, 87; 91, 94; 97, ?02	sample 18+ yrs	yes	yes	no	no	yes	r	84-87 tobacco; 91-94 tobacco & alcohol; 97 tobacco, alcohol & illicit drugs.
WANTSA Health & Wellbeing Survey [2000 Collaborative Health & Wellbeing Survey]	3 states WA, NT, SA	no	one off 00	sample 18+ yrs	yes	yes	yes	yes	yes	a	
No current repeated physical measure											Gold standard: cotinine.
Health Behaviours: Tobacco exposure: passive											
Australian Secondary Schools Alcohol and Drug Survey (ASSAD) - ACT record	state-wide supplementary: ACT	yes	triennial 96, 99	sample 11-18 yrs	yes	yes	yes	yes	yes	ACT schools	See also Australian Secondary Schools Alcohol and Drug Survey.
National Drug Strategy Household Survey	nation-wide	yes since 1985	triennial from 01 85, 88, 91, 93, 95, 98, 01, 04, 07	sample 14+ yrs	yes	yes	yes (94 only)	yes	yes	b, d, m (s)	Topics: Passive exposure.
NSW Child Health Survey See NSW Health Survey Program for future time series of topic.	state-wide NSW	yes in future	one off (01)	sample 0-12 yrs	yes	yes	yes	yes	yes	NSW Health regions	Topics: Household smoking status; whether smoke inside the home, & estimated no. of cigarettes smoked in home per day (all smokers).
NSW Health Survey See NSW Health Survey Program for future time series of topic	state-wide NSW	yes & in future	annual (97, 98)	sample 16+ yrs	yes	yes	yes	yes	yes	NSW Health regions	Topic: Smoking status; whether smoke in home; whether workplace has non-smoking policies/ restrictions.
NSW Health Survey Program – continuous data collection, annual reporting.	state-wide NSW	yes in future	continuous: 02-07; (annual: 97, 98, 01)	sample all ages	yes	yes	yes	yes	yes	NSW Health regions	Topic: Environmental tobacco smoke, topic planned for each of 6 years.
Qld Public Health/Media Reach Survey 1996	state-wide Qld	no##	96	sample# Princ care giver of children <12	yes	yes	yes	yes	yes	d	Response rate=82% Fluoridation sample=1,200 Smoking sample=2,250
Qld Public Health/Media Reach Survey 1997	state-wide Qld	no##	97	sample# Princ care giver of children 1-4 yrs	yes	yes	yes	yes	yes	d	Response rate 81%; Sun protection sample 950; Smoking sample 1,050
Qld Regional Health Survey	state-wide (Qld)	no##	93	sample# 18+ yrs	yes	yes	yes	yes	yes	a	Topics: Whether smoke inside or go outside to smoke; whether other smokers smoke inside home; attitude to smoking restrictions in cafes & restaurants; smoking restrictions in workplace.
WA Aboriginal Child Health Survey	state-wide WA	no	one off 00-01	sample Indigenous children 0-17	yes	yes	yes (all)	-	yes	CDs	Topic: incl parent/caregiver use of tobacco.
WA Health Survey	state-wide WA	yes	irregular 95, 00	sample 18+ yrs	yes	yes	yes p	yes p	yes	11 WA health regions	Topic: passive measures.
No current repeated physical measure											Gold standard: cotinine.
Health Behaviours: Physical inactivity											

Topics and candidate data sets	Criteria										Comment
	1	2		3	4 Disaggregations:						
	coverage	time series	frequency	sample/ census	age	sex	Indigenous status	ethnicity **	SES	Geog area	
AA National Physical Activity Survey	nation-wide	yes	? 97, 99, 00	sample 18-75 yrs	yes	yes	no	no	no	b	Topic: Physical activity (self-report).
ABS National Health Survey (NHS)	nation-wide	yes	triennial from 01 89-90, 95, 01, 04-05	sample all ages	yes	yes	yes	yes	yes	a	Topic: Physical activity (persons 15+ only).
Melbourne Collaborative Cohort Study (Monash University & the Cancer Council of Victoria)	capital city Vic: Melbourne	yes	longitudinal, ongoing from 90-94; follow ups 95-98; planned 02-	sample aged 40-69 yrs in 90-94	yes	yes	no	yes	yes	postcode	Topics: Physical activity (based on NHF survey questions current then) (at recruitment); self-reported Lifestyle: Physical activity (at follow-up).
NHF Australia's Risk Factor Prevalence Study	capital cities	yes past series	irregular (80, 83, 89)	sample 20-64/69 yrs	yes	yes	-	yes	yes	h	Topics; 83: Past 2 weeks: recreation, sport or health-fitness – vigorous/less vigorous exercise/ walking, sessions & total time; tasks at work & around house – moderate to heavy physical exertion, total time.
NSW Child Health Survey See NSW Health Survey Program for future time series of topic	state-wide NSW	yes in future	one off (01)	sample 0-12 yrs	yes	yes	yes	yes	yes	NSW Health regions	Topic: Physical activity & inactivity.
NSW Health Survey See NSW Health Survey Program for future time series of topic	state-wide NSW	yes & in future	annual for (97, 98)	sample 16+ yrs	yes	yes	yes	yes	yes	NSW Health regions	Topic: Physical activity & inactivity.
NSW Health Survey Program – continuous data collection, annual reporting.	state-wide NSW	yes in future	continuous from 02	sample all ages	yes	yes	yes	yes	yes	NSW Health regions	Topic: Physical activity & inactivity.
NSW Older Persons Survey See NSW Health Survey Program for future time series of topic	state-wide NSW & ACT	yes in future	one off (99)	sample 65+ yrs	yes	yes	yes	yes	yes	NSW Health regions	Topic: Physical activity & inactivity.
Qld Omnibus Survey (2001)	state-wide Qld	no##	01	sample# 18+ yrs	yes	yes	yes	yes	yes	d	Topics: Physical activity (Active Australia questions).
Qld Regional Health Survey	state-wide (Qld)	no##	93	sample# 18+ yrs	yes	yes	yes	yes	yes	a	Topics: Exercise for sport, recreation or fitness: (last 2 weeks) do any walking/moderate exercise/ vigorous exercise; how many hours of sleep usually get each night.
Qld Reliability & Validity Survey	state-wide (Qld)	no##	99	sample# 18+ yrs	yes	yes	yes	yes	yes	d	
[Qld] Social Capital Survey	state-wide Qld	no##	one off 02	sample# 18+ yrs	yes	yes	yes	no	yes	urban/ rural/ remote	Topics: Physical activity (Active Australia questions).
Qld Statewide Health Survey	state-wide Qld	no##	98	sample# 18+ yrs	yes	yes	yes	yes	yes	d	Topics: Exercise: (last 12 months) has GP asked about level of physical activity; (last 2 weeks) do any walking for exercise/any moderate/ vigorous exercise.
Qld Women's Health Survey	state-wide Qld	no##	96	sample# 18+ yrs	yes	yes	yes	yes	yes	d	
SA Health Omnibus Survey	part-state SA cities > 1,000	yes since 1991	annual	sample 15+ yrs	yes	yes	yes	yes	yes	d	Topics included 91-98.
SA Physical Activity Survey	state-wide (SA)	yes	98, 01	sample 18+ yrs	yes	yes	yes	yes	yes	SA & reg'l	

Topics and candidate data sets	Criteria										Comment
	1	2		3	4 Disaggregations:						
	coverage	time series	frequency	sample/ census	age	sex	Indigenous status	ethnicity **	SES	Geog area	
SA SERCIS Surveys	state-wide SA	yes	more than 1 per year from 97	sample 18+ yrs	yes	yes	yes	yes	yes	a	Topic included 97, 98, 00, 01
SA Monitoring & Surveillance System (SAMSS)	state-wide SA	yes in future	continuous from 2002	sample all ages	yes	yes	yes	yes	yes	a	Planned topics: Physical activity; TV watching (children, adults).
University of Newcastle Women's Longitudinal Health Survey	nation-wide	longitudinal	1996 to follow up 20 years	sample 18-75 yrs in 1996	yes	women only	yes	yes	yes	urban/ rural/ remote	Topic: CVD module, incidental activity, occupational activity.
Victorian Population Health Survey	state-wide Vic	yes in future, but not for all questions	01-04	sample 18+ yrs	yes	yes	yes	yes COB	yes	9 DHS health regions	CATI commencing 01.
WA Health Survey	state-wide WA	yes	irregular 95, 00	sample 18+ yrs	yes	yes	yes p	yes p	yes	11 WA health regions	Topics: time, intensity & duration allowing assessment against Australian standard.
WA Physical Activity Levels of Western Australian Adults	state-wide WA	no	? (99)	sample 18+ yrs	yes	yes				4 WA regions	
WA Health and Wellbeing Surveillance System	state-wide WA	yes in future	continuous from 02	sample 16+ yrs	yes	yes	yes p	yes p	yes	11 WA health regions	Proposed topic: Physical activity.
WANTSA Health & Wellbeing Survey [2000 Collaborative Health & Wellbeing Survey]	3 states WA, NT, SA	no	one off 00	sample 18+ yrs	yes	yes	yes	yes	yes	a	
Health Behaviours: Exercise (asthma)											
See surveys listed above under Health Behaviours: Physical inactivity.											
ABS National Health Survey (NHS)	nation-wide	yes	triennial from 01 95, 01	sample all ages	yes	yes	yes	yes	yes	a	Topic: Asthma, occurrence of symptoms induced by physical exertion
Health Behaviours: Diet											
ABS National Aboriginal and Torres Strait Islander Survey	nation-wide	no	one off (94)	sample of ATSI all ages	yes	yes	yes	n/a	yes	b, m	Topics: Consumption of fat, sugar
ABS National Health Survey (NHS)	nation-wide	yes	triennial from 01 89-90, 95, 01, 04-05	sample all ages	yes	yes	yes	yes	yes	a	01: incl short module of questions from 95 NNS to allow some time series analysis.
ABS National Nutrition Survey	nation-wide	no	one off (95) See comment	sample 2+ yrs See comment	yes	yes	no	yes	yes	d	Topics: Quantitative 24-hour dietary recall interview by trained nutritionist/dietitian (10% sample gave intake data for 2nd 24-hour period); self-complete FFQ (12+ yrs only); short questions on: usual diet, meal patterns, salt use (all respondents); fruit & vegetable intake, type of milk, type of fat, trimming of meat (12+ only); other questions incl desired changes in food intake (16+ only). See NHS above – partial topic time series of particular dietary indicators.
CSIRO Australian Food and Nutrition Surveys	nation-wide	yes since 1988	five yearly 88, 93, 98-99	sample 18+ yrs	yes	yes	no	? 88, 93 98-99: COB	proxy usual occ	6 states, ACT incl with NSW	Topics: usual food & nutrient intakes; food preparation practices & dietary habits (self-completed, food frequency questionnaire).

Topics and candidate data sets	Criteria										Comment
	1	2		3	4 Disaggregations:						
	coverage	time series	frequency	sample/ census	age	sex	Indigenous status	ethnicity **	SES	Geog area	
IDI AusDiab Qld Supplement	6 sentinel sites Qld	no	? one off (00)	sample 25+ yrs	yes	yes	yes	yes	yes	6 sentinel sites	Sample=1,620. Self report dietary questions and blood nutritional indicators.
Melbourne Collaborative Cohort Study (Monash University & the Cancer Council of Victoria)	capital city Vic: Melbourne	yes	longitudinal, ongoing from 90-94; follow ups 95-98; planned 02-	sample aged 40-69 yrs in 90-94	yes	yes	no	yes	yes	postcode	Topics: Self-report dietary data from FFQ (specifically designed to capture food in-takes of Greek & Italian mig-rants); Blood analyses of fatty acids & carotenoids (at recruitment), self-reported diet (at follow-up).
NHF Australia's Risk Factor Prevalence Study	capital cities	yes past series	irregular (80, 83, 89)	sample 20-64/69 yrs	yes	yes	-	yes	yes	h	Topics: 83: Add salt to cooked food; usual way of eating. Dietary recall form – type & quantity of food consumed 24 hours prior.
NSW Child Health Survey See NSW Health Survey Program for future time series of topic	state-wide NSW	yes in future	one off (01)	sample 0-12 yrs ages vary see comment	yes	yes	yes	yes	yes	NSW Health regions	Topic: Nutrition: How many serves of fruit/salad vegetables/cooked vegetables/hot chips does child usually eat in a day etc (7 short questions (sample 2-12 yrs only); Nutrition Folate in Pregnancy (sample 0-11 months only).
NSW Health Survey See NSW Health Survey Program for future time series of topic	state-wide NSW	yes & in future	annual (97, 98)	sample 16+ yrs	yes	yes	yes	yes	yes	NSW Health regions	Topic: Nutrition: How many serves vegetables/fruit/slices of bread, usually eat each day; How often eat fried food with batter ... etc (10 short questions).
NSW Health Survey Program – continuous data collection, annual reporting.	state-wide NSW	yes in future	continuous: 02-07 (annual: 97, 98 adults; 99 65+ yrs; 01 children)	sample all ages ages vary see comment	yes	yes	yes	yes	yes	NSW Health regions	Topics: Nutrition: Adult Dietary Guidelines (sample 16+ yrs), topics planned for each of six years from 02; Child Dietary Guidelines (sample 0-15 yrs), & Food handling (sample 16+ yrs; module to be developed), topics planned for each of 5 years from 03.
NSW Older Persons Survey See NSW Health Survey Program for future time series of topic	state-wide NSW & ACT	yes in future	one off (99)	sample 65+ yrs	yes	yes	yes	yes	yes	NSW Health regions	Topic: Nutrition: How many serves vegetables, fruit usually eat each day? (2 short questions).
Qld Healthy Food Access Basket Survey	state-wide Qld	yes	98, 00 biennial in future	92 selected stores	-	-	-	-	-	ARIA categories[5]	Accessibility & affordabil-ity of healthy foods & how varies across state incl rural & remote areas.
Qld Omnibus Survey (2001)	state-wide Qld	no##	01	sample# 18+ yrs	yes	yes	yes	yes	yes	d	Topic: Nutrition: fruit & vegetable intake; days a week eat take-away or fast foods; type of milk consumed.

[5] Accessibility/Remoteness Index of Australia, based on a methodology developed by the National Key Centre for Social Applications of GIS (GISCA) ('GIS' is an acronym of 'geographical information systems'). The ARIA is a standard classification and index of remoteness which allows the comparison of information about populations based on their access, by road, to service centres (towns) of various sizes (Glover & Tennant 2002).

Topics and candidate data sets	Criteria										Comment
	1	2		3	4 Disaggregations:						
	coverage	time series	frequency	sample/ census	age	sex	Indigenous status	ethnicity **	SES	Geog area	
Qld Regional Health Survey	state-wide (Qld)	no[##]	93	sample[#] 18+ yrs	yes	yes	yes	yes	yes	a	Topics: Food habits: (on average) intake of fruit, vegetables, red meat; trim fat off meat/chicken; (yesterday) no. of times ate out/ had takeaway; (last 12 months) were there times household ran out of food & there wasn't money to buy more food, has anyone in household eaten less than they should because couldn't afford enough food.
[Qld] Social Capital Survey	state-wide Qld	no[##]	one off 02	sample[#] 18+ yrs	yes	yes	yes	no	yes	urban/ rural/ remote	Topics incl Consumption of vegetables, fruit, milk.
Qld Women's Health Survey	state-wide Qld	no[##]	96	sample[#] 18+ yrs	yes	yes	yes	yes	yes	d	Topics: Focus on osteoporosis
SA Health Omnibus Survey	part-state SA cities > 1,000	yes since 1991	annual	sample 15+ yrs	yes	yes	yes	yes	yes	d	Topics included 95, 96, 97.
SA SERCIS Surveys	state-wide SA	yes	more than 1 per year from 97	sample 18+ yrs	yes	yes	yes	yes	yes	a	Topic included 98, 01
SA Monitoring & Surveillance System (SAMSS)	state-wide SA	yes in future	continuous from 2002	sample all ages	yes	yes	yes	yes	yes	a	Planned topics: Nutrition.
University of Newcastle Women's Longitudinal Health Survey	nation-wide	longitudinal	1996 to follow up 20 years	sample 18-75 yrs in 1996	yes	women only	yes	yes	yes	urban/ rural/ remote	Topic: Fruit & vegetables.
Victorian Population Health Survey	state-wide Vic	yes in future, but not for all questions	01-04	sample 18+ yrs	yes	yes	yes	yes COB	yes	9 DHS health regions	Topic: Low intake of fruit & vegetables.
WA Child Health Survey	state-wide WA	no	one off 93-94	sample 4-16 yrs	yes	yes	?	?	yes	yes	Topic: dietary behaviours
WA Health Survey	state-wide WA	yes	irregular 95, 00	sample 18+ yrs	yes	yes	yes p	yes p	yes	11 WA health regions	Topics: food eaten the previous day incl fruit, vegetables, fat, milk, cereal etc.
WA Nutrition Monitoring Survey	state-wide WA	yes	triennial 95, 98	sample 18-64 yrs	yes	yes			yes	yes	
WA Health and Wellbeing Surveillance System	state-wide WA	yes in future	continuous from 02	sample 16+ yrs	yes	yes	yes p	yes p	yes	11 WA health regions	Proposed topic: Nutrition.
WANTSA Health & Wellbeing Survey [2000 Collaborative Health & Wellbeing Survey]	3 states WA, NT, SA	no	one off 00	sample 18+ yrs	yes	yes	yes	yes	yes	a	
No current repeated physical measure											Gold standard:.
Health Behaviours: Supplements (musculoskeletal disease)											
ABS National Aboriginal and Torres Strait Islander Survey	nation-wide	no	one off (94)	sample of ATSI people all ages	yes	yes	yes	n/a	yes	b, m	Topic: Vitamins/ minerals
ABS National Health Survey (NHS)	nation-wide	yes	triennial from 01 89-90, 95, 01, 04-05	sample all ages	yes	yes	yes	yes	yes	a	01: Medications/supplements only linked to specific conditions (asthma, cancer, CVD, diabetes, mental health.

Topics and candidate data sets	Criteria										Comment
	1	2		3	4 Disaggregations:						
	coverage	time series	frequency	sample/ census	age	sex	Indigenous status	ethnicity **	SES	Geog area	
ABS National Nutrition Survey	nation-wide	no	one off (95)	sample 2+ yrs	yes	yes	no	yes	yes	d	Topics: Use of vitamin & mineral supplements (previous day): whether, & which.
CSIRO Australian Food and Nutrition Surveys	nation-wide	yes since 1988	five yearly 88, 93, 98-99	sample 18+ yrs	yes	yes	no	? 88, 93 98-99: COB	proxy usual occ	6 states, ACT incl with NSW	Topics: Vitamin and mineral supplements; 98-99 also incl folate & folate supplementation awareness.
NHF Australia's Risk Factor Prevalence Study	capital cities	yes past series	irregular (80, 83, 89)	sample 20-64/69 yrs	yes	yes	-	yes	yes	h	Topics: 83: How often do you take vitamin, mineral or other dietary supplements.
Qld Omnibus Survey (2001)	state-wide Qld	no[##]	01	sample[#] 18+ yrs	yes	yes	yes	yes	yes	d	Topics: Intake of vitamin or mineral supplements yesterday; type taken.
Qld Women's Health Survey	state-wide Qld	no[##]	96	sample[#] 18+ yrs	yes	yes	yes	yes	yes	d	
SA Monitoring & Surveillance System (SAMSS)	state-wide SA	yes in future	continuous from 2002	sample all ages	yes	yes	yes	yes	yes	a	Planned topics: Medications: alternative.
University of Newcastle Women's Longitudinal Health Survey[6]	nation-wide	longitudinal	1996 to follow up 20 years	sample 18-75 yrs in 1996	yes	women only	yes	yes	yes	urban/ rural/ remote	Topic: vitamins/minerals
Health Behaviours: Food chemicals											
Australian Total Diet Survey (coordinated by ANZFA)	seven jurisdictions (State capital cities & Darwin)	yes since 1970	bi-annual latest 98 reported 01	sample of foods	n/a	n/a	n/a	n/a	n/a	n/a	Foods tested to estimate & monitor population levels of dietary exposure to pesticide residues (incl chlorinated organic pesticides, carbamates, synthetic pyrethroids & fungicides) & environmental contaminants (antimony, arsenic, cadmium, copper, lead, mercury, selenium, tin, zinc). Walnuts, tahina & roasted salted peanuts tested for aflatoxins; milk samples for Aflatoxin M1. All foods tested for polychlorinated biphenyls.
Health Behaviours: Risky Alcohol intake (was High Alcohol intake)											
? ABS Women's Safety Survey	Australia	no	one off (96)	sample 18+ yrs	yes	women only	no	no	?	Aust	Topic: involvement of alcohol in physical/sexual violence.
ABS Indigenous Social Survey (ISS) (forthcoming)	nation-wide	yes in future	6 yearly 02, 08	sample ATSI 15+ yrs	yes	yes	no	no	yes	d	Topics: Health risk: Alcohol intake.
ABS National Aboriginal and Torres Strait Islander Survey	nation-wide	no	one off (94)	sample of ATSI people all ages	yes	yes	yes	n/a	yes	b, m	Topic: Last time alcohol consumed.
ABS National Health Survey (NHS)	nation-wide	yes	triennial from 01 89-90, 95, 01, 04-05	sample 18+ only	yes	yes	yes	yes	yes	a	Topic collected from sample aged 18+ yrs only.
AIHW & USyd Bettering the Evaluation and Care of Health (BEACH & SAND)	nation-wide	yes since April 1998	continuous	sample of patients from HIC records of active recognised GPs	yes	yes	yes	yes NESB status	no	State & RRMA	Topic: GP management of patient health problems.

[6] An overall goal of the project is to clarify cause-and-effect relationships between women's health and a range of biological, psychological, social and lifestyle factors. By looking at the needs, views, lifestyles, health and factors affecting the health of individual women in Australia, Women's Health Australia will be able to make suggestions to government departments on ways of improving health services for women.

Topics and candidate data sets	Criteria										Comment
	1	2		3	4 Disaggregations:						
	coverage	time series	frequency	sample/ census	age	sex	Indigenous status	ethnicity **	SES	Geog area	
Australian Secondary Schools Alcohol and Drug Survey (ASSAD)	nation-wide	yes since 1984	triennial 84, 87, 90, 93, 96, 99,. 02	sample 12-17 yrs	yes	yes	yes p	yes	no	q	Topics 99 core survey: consumption, setting, binge drinking.
Australian Secondary Schools Alcohol and Drug Survey (ASSAD) - ACT record	state-wide supplementary: ACT	yes	triennial 96, 99	sample 11-18 yrs	yes	yes	yes	yes	yes	ACT schools	See also Australian Secondary Schools Alcohol and Drug Survey.
Melbourne Collaborative Cohort Study (Monash University & the Cancer Council of Victoria)	capital city Vic: Melbourne	yes	longitudinal, ongoing from 90-94; follow ups 95-98; planned 02-	sample aged 40-69 yrs in 90-94	yes	yes	no	yes	yes	postcode	Topics: Intake of alcoholic beverages by age decade (at recruitment).
National Drug Strategy Household Survey	nation-wide	yes since 1985	triennial from 01 85, 88, 91, 93, 95, 98, 01, 04, 07	sample 14+ yrs	yes	yes	yes (94 only)	yes	yes	b, d, m (s)	Topic: Perceptions of risky alcohol intake; consumption details; initiation details incl age; associated activities; related abuse, injuries, absences; attitude to policies to reduce
National Survey of Mental Health and Wellbeing - child and adolescent component	nation-wide	no	one off (1998)	yes 13-17 yrs only	yes	yes	yes	yes	yes	t	Topic: use of alcohol during previous 30 days (self-report by 13-17 yr olds).
National Survey of Mental Health and Wellbeing of adults	nation-wide	no	one-off (97)	sample 18+ yrs	yes	yes	no	yes	yes	a	Topics: Alcohol harmful use/ dependence: consumption, binge drinking, frequency, associated behaviours (self-report).
NHF Australia's Risk Factor Prevalence Study	capital cities	yes past series	irregular (80, 83, 89)	sample 20-64/69 yrs	yes	yes	-	yes	yes	h	Topics: 83: How often usually drink alcohol, how many drinks, how much low alcohol beer.
NSW Health Survey See NSW Health Survey Program for future time series of topic	state-wide NSW	yes & in future	annual (97, 98)	sample 16+ yrs	yes	yes	yes	yes	yes	NSW Health regions	Topic: Alcohol: frequency & consumption.
NSW Health Survey Program – continuous data collection, annual reporting.	state-wide NSW	yes	continuous: 02-07 (annual: 97, 98)	sample 16+ yrs only	yes	yes	yes	yes	yes	NSW Health regions	Topic: Alcohol: frequency & consumption (from sample aged 16+ only). Topic planned for each of 6 years.
Qld Regional Health Survey	state-wide (Qld)	no[##]	93	sample[#] 18+ yrs	yes	yes	yes	yes	yes	a	Topics: Alcohol: How often have a drink containing alcohol; no. standard drinks per typical day when drinking; type, size (beer) & strength (beer) of drinks; how often drink >6 drinks one occasion; (last year) how often unable to stop drinking once started, failed to do what was normally expected because of drinking; how often needed a 1st drink in morning to get going after heavy drinking session; felt guilt/remorse after drinking, etc (WHO AUDIT questionnaire).
Qld Reliability & Validity Survey	state-wide (Qld)	no[##]	99	sample[#] 18+ yrs	yes	yes	yes	yes	yes	d	

Topics and candidate data sets	Criteria										Comment
	1	2		3	4 Disaggregations:						
	coverage	time series	frequency	sample/ census	age	sex	Indigenous status	ethnicity **	SES	Geog area	
Qld Statewide Health Survey	state-wide Qld	no[##]	98	sample[#] 18+ yrs	yes	yes	yes	yes	yes	d	Topic: Standard drinks – knowledge & understanding of, use of to track drinking; Alcohol: How often have a drink containing alcohol; no. standard drinks per typical day when drinking; type, size (beer) & strength (beer) of drinks; how often drink >6 drinks one occasion; (last year) how often unable to stop drinking once started, failed to do what was normally expected because of drinking; etc (WHO AUDIT questionnaire).
Qld Young People's Mental Health Survey	state-wide (Qld)	no	one off (1998)	sample 15-24 yrs	yes	yes	yes	cultural diversity	yes	urban/ rural	Topics: Whether drink alcohol & frequency; Binge drinking: no. of days consumed 5+ standard drinks/session (week prior); How often drove MV while under the influence (12 months prior).
SA Health Omnibus Survey	part-state SA cities > 1,000	yes since 1991	annual	sample 15+ yrs	yes	yes	yes	yes	yes	d	Topics included 91-98.
SA SERCIS Surveys	state-wide SA	yes	more than 1 per year from 97	sample 18+ yrs	yes	yes	yes	yes	yes	a	Topic included 97, 98, 99, 00, 01
SA Monitoring & Surveillance System (SAMSS)	state-wide SA	yes in future	continuous from 2002	sample all ages	yes	yes	yes	yes	yes	a	Planned topics: Alcohol.
University of Newcastle Women's Longitudinal Health Survey	nation-wide	longitudinal	1996 to follow up 20 years	sample 18-75 yrs in 1996	yes	women only	yes	yes	yes	urban/ rural/ remote	Topics: Consumption, binge drinking, frequency.
Victorian Population Health Survey	state-wide Vic	yes in future, but not for all questions	01-04	sample 18+ yrs	yes	yes	yes	yes COB	yes	9 DHS health regions	CATI commencing 01.
WA Aboriginal Child Health Survey	state-wide WA	no	one off 00-01	sample Indigenous children 0-17	yes	yes	yes (all)	-	yes	CDs	Topic: incl parent/caregiver use of alcohol.
WA Child Health Survey	state-wide WA	no	one off 93-94	sample 4-16 yrs	yes	yes	?	?	yes	yes	Topic: alcohol consumption
WA Health Survey	state-wide WA	yes	irregular 95, 00	sample 18+ yrs	yes	yes	yes p	yes p	yes	11 WA health regions	Topics: consumption based on 7 day diary incl amount, frequency & type for assessment against NHMRC guidelines.
WA Health and Wellbeing Surveillance System	state-wide WA	yes in future	continuous from 02	sample 16+ yrs	yes	yes	yes p	yes p	yes	11 WA health regions	Proposed topic: alcohol use.
WA Tobacco alcohol and illicit drug consumption survey	state-wide WA	yes since 1984	84, 85, 87; 91, 94; 97, ?02	sample 18+ yrs	yes	yes	no	no	yes	r	84-87 tobacco; 91-94 tobacco & alcohol; 97 tobacco, alcohol & illicit drugs.
WANTSA Health & Wellbeing Survey [2000 Collaborative Health & Wellbeing Survey]	3 states WA, NT, SA	no	one off 00	sample 18+ yrs	yes	yes	yes	yes	yes	a	
Health Behaviours:	**Analgesic overuse**										

Topics and candidate data sets	Criteria										Comment
	1	2		3	4 Disaggregations:						
	coverage	time series	frequency	sample/ census	age	sex	Indigenous status	ethnicity **	SES	Geog area	
ABS National Health Survey (NHS)	nation-wide	yes	triennial from 01 89-90, 95, 01	sample all ages	yes	yes	yes	yes	yes	a	Topic: Collects analgesic use but cannot measure 'overuse'. 01: analgesic use only collected for NHPA conditions.
Melbourne Collaborative Cohort Study (Monash University & the Cancer Council of Victoria)	capital city Vic: Melbourne	yes	longitudinal, ongoing from 90-94; follow ups 95-98; planned 02-	sample aged 40-69 yrs in 90-94	yes	yes	no	yes	yes	postcode	Topics: (not 'overuse') Drug audit (at recruitment), self-reported Use of painkillers (at follow-up).
National Drug Strategy Household Survey	nation-wide	yes since 1985	triennial from 01 85, 88, 91, 93, 95, 98, 01, 04, 07	sample 14+ yrs	yes	yes	yes (94 only)	yes	yes	b, d, m (s)	Topics: Use of analgesics for non-medical purposes.
National Survey of Mental Health and Wellbeing - child and adolescent component	nation-wide	no	one off (1998)	yes 4-17 yrs	yes	yes	yes	yes	yes	t	Topic: use of pain killers for non-medical purposes during the previous 30 days (self-report by those aged 13-17 yrs).
Health Behaviours:	**Substance use (Depression)**										
ABS Indigenous Social Survey (ISS) (forthcoming)	nation-wide	yes in future	6 yearly 02, 08	sample ATSI 15+ yrs	yes	yes	no	no	yes	d	Topics: Health risk: Substance use.
Australian Secondary Schools Alcohol and Drug Survey (ASSAD)	nation-wide	yes since 1984	triennial 96, 99,. 02	sample 12-17 yrs	yes	yes	yes p	yes	no	q	Topics: Illicit drug use from 96; 99 core survey: drug/ illicit drug/substance use, frequency, combinations, lessons.
National Drug Strategy Household Survey	nation-wide	yes since 1985	triennial from 01 85, 88, 91, 93, 95, 98, 01, 04, 07	sample 14+ yrs	yes	yes	yes (94 only)	yes	yes	b, d, m (s)	Topics: Use of wide range of substances incl amphetam-ines, barbiturates, heroin, inhalants, marijuana, etc.
National Survey of Mental Health and Wellbeing - child and adolescent component	nation-wide	no	one off (1998)	yes 4-17 yrs	yes	yes	yes	yes	yes	t	Topic: use of marijuana, & other drugs (such as LSD, inhalants, amphetamines, heroin, cocaine) during the previous 30 days (self-report by those aged 13-17 yrs).
National Survey of Mental Health and Wellbeing of adults	nation-wide	no	one-off (97)	sample 18+ yrs	yes	yes	no	yes	yes	a	Topic: substance use/depen-dence on cannabis, opioids, sedatives & stimulants (CIDI).
Qld Young People's Mental Health Survey	state-wide (Qld)	no	one off (1998)	yes 15-24 yrs	yes	yes	yes	cultural diversity	yes	urban/ rural	Topics: Illicit drug use (4 weeks prior): marijuana, sedatives, tranquillisers, hal-lucinogens, amphetamines, inhalants, cocaine, ecstasy & heroin; Whether ever used a needle to inject drugs for non-medical purposes.
WA Aboriginal Child Health Survey	state-wide WA	no	one off 00-01	sample Indigen-ous child-ren 0-17	yes	yes	yes (all)	-	yes	CDs	Topic: Sniffing glue/petrol/aerosols; using other drugs
WA Child Health Survey	state-wide WA	no	one off 93-94	sample 4-16 yrs	yes	yes	?	?	yes	yes	Topic: Marijuana use
WA Tobacco alcohol and illicit drug consumption survey	state-wide WA	yes since 1984	84, 85, 87; 91, 94; 97, ?02	sample 18+ yrs	yes	yes	no	no	yes	r	84-87 tobacco; 91-94 tobacco & alcohol; 97 tobacco, alcohol & illicit drugs.
Health Behaviours:	**Medications**										

Topics and candidate data sets	Criteria										Comment
	1	2		3	4 Disaggregations:						
	coverage	time series	frequency	sample/ census	age	sex	Indigenous status	ethnicity **	SES	Geog area	
ABS National Aboriginal and Torres Strait Islander Survey	nation-wide	no	one off (94)	sample of ATSI people all ages	yes	yes	yes	n/a	yes	b, m	Topic: Prescription medications
ABS National Health Survey (NHS)	nation-wide	yes	triennial from 01 89-90, 95, 01, 04-05	sample all ages	yes	yes	yes	yes	yes	a	Medications/supplements only linked to specific conditions (asthma, cancer, CVD, diabetes, mental health).
AIHW & USyd Bettering the Evaluation and Care of Health (BEACH & SAND)	nation-wide	yes since April 1998	continuous	sample of patients from HIC records of active recognised GPs	yes	yes	yes	yes NESB status	no	State & RRMA	Topic: GP management of patient health problems.
Melbourne Collaborative Cohort Study (Monash University & the Cancer Council of Victoria)	capital city Vic: Melbourne	yes	longitudinal, ongoing from 90-94; follow ups 95-98; planned 02-	sample aged 40-69 yrs in 90-94	yes	yes	no	yes	yes	postcode	Topics: Drug audit (at recruitment), self-reported Use of painkillers (at follow-up).
National Survey of Mental Health and Wellbeing - child and adolescent component	nation-wide	no	one off (1998)	yes 4-17 yrs	yes	yes	yes	yes	yes	t	Topic: Perceived need for services: Medication; use of prescription drugs for non-medical purposes (self-report by those aged 13-17 yrs).
NHF Australia's Risk Factor Prevalence Study	capital cities	yes past series	irregular (80, 83, 89)	sample 20-64/69 yrs	yes	yes	-	yes	yes	h	Topics: 83: On tablets for blood pressure; having treatment to lower blood fat, on tablets/treatment for angina, ever been given treatment for diabetes/sugar trouble.
NSW Child Health Survey See NSW Health Survey Program for future time series of topic.	state-wide NSW	yes in future	one off (01)	sample 0-12 yrs	yes	yes	yes	yes	yes	NSW Health regions	Topics: Asthma: (last month) use of reliever & preventer medication/s & frequency.
NSW Health Survey See NSW Health Survey Program for future time series of topic.	state-wide NSW	yes & in future	annual (97, 98)	sample 16+ yrs	yes	yes	yes	yes	yes	NSW Health regions	Topics: Asthma: (last month) use of reliever & preventer medication/s & frequency; whether medication prescription or over-the-counter.
NSW Health Survey Program – continuous data collection, annual reporting.	state-wide NSW	yes in future	continuous: 03, 06 (annual: 97, 98 adults; 01 children)	sample 2+ yrs	yes	yes	yes	yes	yes	NSW Health regions	Topic: Asthma medications topic planned 3 yearly (03, 06).
Qld Regional Health Survey	state-wide (Qld)	no[##]	93	sample[#] 18+ yrs	yes	yes	yes	yes	yes	a	Topics: Aspirin use.
SA SERCIS Surveys	state-wide SA	yes	more than 1 per year from 97	sample 18+ yrs	yes	yes	yes	yes	yes	a	Topic included 97, 00.
SA Monitoring & Surveillance System (SAMSS)	state-wide SA	yes in future	continuous from 2002	sample all ages	yes	yes	yes	yes	yes	a	Planned topics: Medications: prescription.
University of Newcastle Women's Longitudinal Health Survey	nation-wide	longitudinal	1996 to follow up 20 years	sample 18-75 yrs in 1996	yes	women only	yes	yes	yes	urban/ rural/ remote	Topic: Prescription medications
WA Aboriginal Child Health Survey	state-wide WA	no	one off 00-01	sample Indigenous children 0-17	yes	yes	yes (all)	-	yes	CDs	Topic: use of medications for asthma; currently taking antibiotics

Topics and candidate data sets	Criteria 1	2		3	4 Disaggregations:						Comment
	coverage	time series	frequency	sample/ census	age	sex	Indigenous status	ethnicity **	SES	Geog area	
WANTSA Health & Wellbeing Survey [2000 Collaborative Health & Wellbeing Survey]	3 states WA, NT, SA	no	one off 00	sample 18+ yrs	yes	yes	yes	yes	yes	a	
Health Behaviours: Preventive Dental behaviours											
ABS National Health Survey (NHS)	nation-wide	yes	triennial from 01 89-90, 95	sample all ages	yes	yes	yes	yes	yes	a	Topics: Indicator for preventative dental health not available from 01; 95 asked about reasons for visit to dentist incl 'checkup' response category.
NSW Child Health Survey See NSW Health Survey Program for future time series of topic	state-wide NSW	yes in future	one off (01)	sample 0-12 yrs ages vary see comment	yes	yes	yes	yes	yes	NSW Health regions	Topic: Oral health: Has child ever visited dental profession-al, & how long ago (1-4 yrs only); (last 12 months) had a dental assessment at school, seen a dental professional (5-12 yrs only); type of dental treatment, eligible for public dental treatment (1-12 yrs only); etc.
NSW Health Survey See NSW Health Survey Program for future time series of topic	state-wide NSW	yes & in future	annual (98)	sample 16+ yrs	yes	yes	yes	yes	yes	NSW Health regions	Topic: Oral health: Missing natural teeth; (last 12 mon-ths) frequency of toothache; other problems with teeth/ .gums; when last visited dental professional, & type; dental treatments had; main reason for not visiting dentist (collected 98 only).
NSW Health Survey Program – continuous data collection, annual reporting.	state-wide NSW	yes in future	continuous: 02-07 (annual: 98 adults; 99 65+ yrs; 01 children)	sample all ages	yes	yes	yes	yes	yes	NSW Health regions	Topic: Oral health topic planned for each of 6 yrs. See NSW Child Health, Health, & Older Persons Surveys.
NSW Older Persons Survey See NSW Health Survey Program for future time series of topic	state-wide NSW & ACT	yes in future	one off (99)	sample 65+ yrs	yes	yes	yes	yes	yes	NSW Health regions	Topic: Oral health: Missing natural teeth; (last 12 months) frequency of: toothache, mouth/denture problems, had concerns re appearance of teeth/mouth/dentures, avoided some foods because of teeth/ mouth/denture problems.
Qld Omnibus Survey (2002)	state-wide Qld	no##	one off 02	sample# 18+ yrs	yes	yes	yes	no	yes	d	Topics incl Regular/ occas-ional/ no check-ups.
Qld Reliability & Validity Survey	state-wide (Qld)	no##	99	sample# 18+ yrs	yes	yes	yes	yes	yes	d	
Qld Statewide Health Survey	state-wide Qld	no##	98	sample# 18+ yrs	yes	yes	yes	yes	yes	d	Topics: Visits to dentist.
SA Monitoring & Surveillance System (SAMSS)	state-wide SA	yes in future	continuous from 2002	sample all ages	yes	yes	yes	yes	yes	a	Planned topics: Preventative oral health behaviours.
Victorian Population Health Survey	state-wide Vic	yes in future, but not for all questions	01-04	sample 18+ yrs	yes	yes	yes	yes COB	yes	9 DHS health regions	CATI commencing 01.

Early Life Factors

Topics and candidate data sets	Criteria 1 coverage	2 time series	2 frequency	3 sample/ census	4 Disaggregations: age	sex	Indigenous status	ethnicity **	SES	Geog area	Comment
Early Life Factors: Low birth weight											
AIHW Perinatal Data Collection	nation-wide	yes since 1991	annual	compilat-ion of notified births & perinatal deaths	yes	yes	yes mother only	yes COB only	no	j SLA, p/code	Topic: Birthweight
SA Monitoring & Surveillance System (SAMSS)	state-wide SA	yes in future	continuous from 2002	sample all ages	yes	yes	yes	yes	yes	a	Planned topics: Birthweight.
State Perinatal Data Collections	state-wide (all states)	yes	continuous	census of notified births & perinatal deaths	yes	yes					Topic: Birthweight
WA Aboriginal Child Health Survey	state-wide WA	no	one off 00-01	sample Indigen-ous child-ren 0-17	yes	yes	yes (all)	-	yes	CDs	? Through linked data on births.
WA Child Health Survey	state-wide WA	no	one off 93-94	sample 4-16 yrs	yes	yes	?	?	yes	yes	? Through linked data on births.
Early Life Factors: Intrauterine growth retardation											
State Perinatal Data Collections (SA, ...)	state-wide	yes	? continuous								
Early Life Factors: Low breast feeding rate											
ABS National Aboriginal and Torres Strait Islander Survey	nation-wide	no	one off (94)	sample of ATSI people all ages	yes	yes	yes	n/a	yes	b, m	Topics: Whether & duration breastfed.
ABS National Health Survey (NHS)	nation-wide	yes	triennial from 01 89-90, 95, 01, 04-05	sample all ages	yes	yes	yes	yes	yes	a	Child – 95, 01; mother 89-90, 95, 01.
ABS National Nutrition Survey	nation-wide	no	one off (95)	sample 2+ yrs	yes	yes	no	yes	yes	d	Topics: Whether currently breastfeeding; whether child ever/currently breastfed; whether breastfed at hospital discharge; total length of time breastfed.
NSW Child Health Survey See NSW Health Survey Program for future time series of topic.	state-wide NSW	yes in future	one off (01)	sample 0-23 months only	yes	yes	yes	yes	yes	NSW Health regions	Topics: child ever/currently breastfed & length of time; (mother only) main reasons for breastfeeding; questions on use & frequency of use of breast-milk substitutes (infant formula, cow's milk, etc). Sample of 0-23 month old children only.
NSW Health Survey Program – continuous data collection, annual reporting.	state-wide NSW	yes	continuous: from 03-07 (annual: 01)	sample 0-23 months only	yes	yes	yes	yes	yes	NSW Health regions	Topics: Breastfeeding topics planned in each of five years commencing from 03. See NSW Child Health Survey.
SA SERCIS Surveys	state-wide SA	yes	more than 1 per year from 97	sample 18+ yrs	yes	yes	yes	yes	yes	a	Topic included 97, 98.
SA Monitoring & Surveillance System (SAMSS)	state-wide SA	yes in future	continuous from 2002	sample all ages	yes	yes	yes	yes	yes	a	Planned topics: Breastfeeding.
WA Aboriginal Child Health Survey	state-wide WA	no	one off 00-01	sample Indigen-ous child-ren 0-17	yes	yes	yes (all)	-	yes	CDs	Topic: Duration of breastfeeding..

Topics and candidate data sets	Criteria										Comment
	1	2		3	4 Disaggregations:						
	coverage	time series	frequency	sample/ census	age	sex	Indigenous status	ethnicity **	SES	Geog area	
WA Health and Wellbeing Surveillance System	state-wide WA	yes in future	continuous from 02	sample 16+ yrs	yes	yes	yes p	yes p	yes	11 WA health regions	Proposed topic: breastfeeding
Early Life Factors:	**Poor early childhood development**										
AIHW National Hospital Morbidity Database	nation-wide	yes but see comments	ongoing annual	census of hospital separat'ns	yes	yes	g	yes COB only	no	j SLA	Caution: variables change frequently. Annual financial year reporting
Early Life Factors:	**Abuse, neglect and exposure to domestic violence**										
ABS Women's Safety Survey	Australia	no	one off (96)	sample 18+ yrs	yes	women only	no	no	?	Aust	Topic: Experience of physical & sexual abuse as a child – contextual item only.
AIHW National Child Protection Data Collection	nation-wide	yes	annual	census of notified cases	yes	yes	yes	no	no	b	
Qld Young People's Mental Health Survey	state-wide (Qld)	no	one off (98)	sample 15-24 yrs	yes	yes	yes	cultural diversity	yes	urban/ rural	Topics: Prevalence of adverse life events: sexual/- physical abuse; violence in the home; being bullied.
SA SERCIS Interpersonal Violence & Abuse Survey	state-wide SA	yes	98, 99	sample 18+ yrs	yes	yes	yes	yes	yes	metro & country regions	Sample 6,004 with response rate of 73%.
State Child Protection Data	state-wide	yes									
WA Child Health Survey	state-wide WA	no	one off 93-94	sample 4-16 yrs	yes	yes	?	?	yes	yes	Topic: dysfunctional family relationships

Psychosocial Factors

Topics and candidate data sets	Criteria										Comment
	1	2		3	4 Disaggregations:						
	coverage	time series	frequency	sample/ census	age	sex	Indigenous status	ethnicity **	SES	Geog area	
Psychosocial Factors: Psychosocial stress (life stress)											
ABS General Social Survey (GSS) (forthcoming)	nation-wide	yes in future	4 yearly 02, 06	sample 18+ yrs	yes	yes	no	yes	yes	d	Topics: Family & community: Stressors - incl health-related problems[7]. Crime: Victim of assault; Feelings of safety at home.
ABS National Aboriginal and Torres Strait Islander Survey	nation-wide	no	one off (94)	Sample ATSI all ages	yes	yes	yes	n/a	yes	b, m	Topic: Victims of crime; Family violence; Experiences with justice system; Police relations.
ABS National Health Survey (NHS)	nation-wide	yes	triennial from 01 01	sample all ages	yes	yes	yes	yes	yes	a	Topics: 01 - K10.
ABS Women's Safety Survey	Australia	no	one off (96)	sample 18+ yrs	yes	wom-en only	no	no	?	Aust	Topics: Experience of physical & sexual violence; stalking by men; harassment
Melbourne Collaborative Cohort Study (Monash University & the Cancer Council of Victoria)	capital city Vic: Melbourne	yes	longitudinal, ongoing from 90-94; follow ups 95-98; planned 02-	sample aged 40-69 yrs in 90-94	yes	yes	no	yes	yes	postcode	Topics: self-reported Family events (eg deaths or illness) (at follow-up).
National Drug Strategy Household Survey	nation-wide	yes since 1985	triennial from 01 85, 88, 91, 93, 95, 98, 01, 04, 07	sample 14+ yrs	yes	yes	yes (94 only)	yes	yes	b, d, m (s)	Topics: Alcohol-related abuse, injuries, absences.
National Survey of Mental Health and Wellbeing of adults	nation-wide	no	one-off (97)	sample 18+	yes	yes	no	yes	yes	a	Topic: K10
SA Monitoring & Surveillance System (SAMSS)	state-wide SA	yes in future	continuous from 2002	sample all ages	yes	yes	yes	yes	yes	a	Planned topics: Depression/ Mental health (K10) incl stress, suicidal ideation.
Victorian Population Health Survey	state-wide Vic	yes in future, but not for all questions	01-04	sample 18+ yrs	yes	yes	yes	yes COB	yes	9 DHS health regions	Topic: Psychosocial distress (using K10).
WANTSA Health & Wellbeing Survey [2000 Collaborative Health & Wellbeing Survey]	3 states WA, NT, SA	no	one off 00	sample 18+ yrs	yes	yes	yes	yes	yes	a	Topics: K10; Whether affected by (range of) psychosocial events; Perceived control of life events.
Psychosocial Factors: Psychosocial stress – Interpersonal violence											
Qld Young People's Mental Health Survey	state-wide (Qld)	no	one off (98)	sample 15-24 yrs	yes	yes	yes	cultural diversity	yes	urban/-rural	Topics: Prevalence of adverse life events: physical abuse, being bullied; own violent behaviour; violence in the home.
SA SERCIS Interpersonal Violence & Abuse Survey	state-wide SA	yes	98, 99	sample 18+ yrs	yes	yes	yes	yes	yes	metro & country regions	Sample 6,004 with response rate of 73%.
University of Newcastle Women's Longitudinal Health Survey	nation-wide	longitudinal	1996 to follow up 20 years	sample 18-75 yrs in 1996	yes	women only	yes	yes	yes	urban/ rural/ remote	
WA Aboriginal Child Health Survey	state-wide WA	no	one off 00-01	sample Indigenous children 0-17	yes	yes	yes (all)	-	yes	CDs	

[7] ABS General Social Survey 'stressors' data item includes information on whether different things have been a problem for respondents or someone close to them. These include health related problems such as: serious illness, serious accident, alcohol or drug related problems, mental illness and serious disability. It also includes other problems, such as: not able to get a job, divorce or separation, witness to violence, and gambling problems.

Topics and candidate data sets	Criteria										Comment
	1	2		3	4 Disaggregations:						
	coverage	time series	frequency	sample/ census	age	sex	Indigenous status	ethnicity **	SES	Geog area	
WA Child Health Survey	state-wide WA	no	one off 93-94	sample 4-16 yrs	yes	yes	?	?	yes	yes	Topic: dysfunctional family relationships
? No current repeated measure											
Psychosocial Factors: Support and relationships – Low Social Capital											
ABS General Social Survey (GSS) (forthcoming)	nation-wide	yes in future	4 yearly 02, 06	sample 18+ yrs	yes	yes	no	yes	yes	d	Topic: Family & community: no of topics[8]
NSW Child Health Survey	state-wide NSW	yes in future	one off (01)	sample 0-12 yrs	yes	yes	yes	yes	yes	NSW Health regions	Topic: Social capital
NSW Health Survey	state-wide NSW	yes & in future	annual for (97, 98)	sample 16+ yrs	yes	yes	yes	yes	yes	NSW Health regions	Topic: Community participation
NSW Health Survey	state-wide NSW	yes & in future	annual for (97, 98)	sample 16+ yrs	yes	yes	yes	yes	yes	NSW Health regions	Topic: Social capital incl social activity & community participation.
NSW Older Persons Survey	state-wide NSW & ACT	yes in future	one off (99)	sample 65+ yrs	yes	yes	yes	yes	yes	NSW Health regions	Topic: Social capital including perception of safety.
SA Monitoring & Surveillance System (SAMSS)	state-wide SA	yes in future	continuous from 2002	sample all ages	yes	yes	yes	yes	yes	a	Planned topics: Social capital: Literacy, Truancy, Access, Transport, Safety/ trust, Community capacity/involvement; Social suppport.
[Qld] Social Capital Survey	state-wide Qld	no[##]	one off 02	sample[#] 18+ yrs	yes	yes	yes	no	yes	urban/ rural/ remote	Topics incl Social capital (generalised reciprocity, community norms, civic engagement, associational membership, interpersonal & generalised trust, trust in institutions); Efficacy.
Victorian Population Health Survey	state-wide Vic	yes in future, but not for all questions	01-04	sample 18+ yrs	yes	yes	yes	yes COB	yes	9 DHS health regions	Topics: Social networks & support structures; Social & community participation; Civic involvement & empowerment; Trust in people & social institutions, etc
? No current repeated measure											
Psychosocial Factors: Support and relationships – Low Social Support											
ABS General Social Survey (GSS) (forthcoming)	nation-wide	yes in future	4 yearly 02, 06	sample 18+ yrs	yes	yes	no	yes	yes	d	Topic: Family & community: no of topics[9]
National Survey of Mental Health and Wellbeing - child and adolescent component	nation-wide	no	one off (1998)	yes 4-17 yrs	yes	yes	yes	yes	yes	t	Topic: ? Family functioning (self-report by adolescents 13-17 yrs).
NSW Child Health Survey See NSW Health Survey Program for future time series of topic	state-wide NSW	yes in future	one off (01)	sample 0-12 yrs	yes	yes	yes	yes	yes	NSW Health regions	Topic: Family functioning & parent support: agreement/ otherwise on statements about family relationships.

[8] Including: support for children and other relatives outside the household, frequency of face to face contact with family and friends, frequency of telephone, mail and email contact with family and friends, ability to ask small favours, source of support in a time of crisis – includes family, friend, community organisation and government service, and type of unpaid voluntary work.
[9] See previous footnote.

Topics and candidate data sets	**Criteria**										**Comment**
	1	**2**		**3**	**4 Disaggregations:**						
	coverage	**time series**	**frequency**	**sample/ census**	**age**	**sex**	**Indigenous status**	**ethnicity ****	**SES**	**Geog area**	
NSW Health Survey Program – continuous data collection, annual reporting.	state-wide NSW	yes in future	continuous: 03-07; (annual: 01 children)	sample 0-15 yrs	yes	yes	yes	yes	yes	NSW Health regions	Topic: Family functioning & parent support, topic planned for each of 5 years from 03 (sample 0-15 yrs only). See NSW Child Health Survey.
Qld Young People's Mental Health Survey	state-wide Qld	no	one off (98)	sample 15-24 yrs	yes	yes	yes	cultural diversity	yes	urban/-rural	Topics: Help-seeking behaviour; Family, & social & community connectedness; participation in leisure activities.
SA Monitoring & Surveillance System (SAMSS)	state-wide SA	yes in future	continuous from 2002	sample all ages	yes	yes	yes	yes	yes	a	Planned topics: Social capital: Social suppport..
University of Newcastle Women's Longitudinal Health Survey	nation-wide	longitudinal	1996 to follow up 20 years	sample 18-75 yrs in 1996	yes	women only	yes	yes	yes	urban/ rural/ remote	Topic: Social support
Victorian Population Health Survey	state-wide Vic	yes in future, but not for all questions	01-04	sample 18+ yrs	yes	yes	yes	yes COB	yes	9 DHS health regions	Topics: Social networks & support structures
WA Aboriginal Child Health Survey	state-wide WA	no	one off 00-01	sample Indigenous children 0-17	yes	yes	yes (all)	-	yes	CDs	
WA Child Health Survey	state-wide WA	no	one off 93-94	sample 4-16 yrs	yes	yes	?	?	yes	yes	Topic: Supports available from family, friends & neighbours, broader community
WA Health and Wellbeing Surveillance System	state-wide WA	yes in future	continuous from 02	sample 16+ yrs	yes	yes	yes p	yes p	yes	11 WA health regions	Proposed topics: Social support, social connection.
? No current repeated measure											
Psychosocial Factors: Resilience											
SA SERCIS Interpersonal Violence & Abuse Survey	state-wide SA	yes	98, 99	sample 18+ yrs	yes	yes	yes	yes	yes	metro & country regions	Topic: Child abuse & neglect: coping.
[Qld] Social Capital Survey	state-wide Qld	no[##]	one off 02	sample[#] 18+ yrs	yes	yes	yes	no	yes	urban/ rural/ remote	Topics incl Efficacy..
Qld Young People's Mental Health Survey	state-wide (Qld)	no	one off (1998)	yes 15-24 yrs	yes	yes	yes	cultural diversity	yes	urban/-rural	Topics: Internal locus of control, self-actualisation; problem-solving; hopefulness
WA Aboriginal Child Health Survey	state-wide WA	no	one off 00-01	sample Indigenous children 0-17	yes	yes	yes (all)	-	yes	CDs	
WA Child Health Survey	state-wide WA	no	one off 93-94	sample 4-16 yrs	yes	yes	?	?	yes	yes	Topic: Risk and protective factors for children & adolescents.
WA Health and Wellbeing Surveillance System	state-wide WA	yes in future	continuous from 02	sample 16+ yrs	yes	yes	yes p	yes p	yes	11 WA health regions	Proposed topics: resilience, control over life.
WANTSA Health & Wellbeing Survey [2000 Collaborative Health & Wellbeing Survey]	3 states WA, NT, SA	no	one off 00	sample 18+ yrs	yes	yes	yes	yes	yes	a	Topic: Perceived control of life events.
? No current repeated measure											

Environmental Factors

Topics and candidate data sets	Criteria										Comment
	1	2		3	4 Disaggregations:						
	coverage	time series	frequency	sample/ census	age	sex	Indige nous status	ethnici ty **	SES	Geog area	
Environmental Factors: Natural Environment – Exposure to allergens											
No candidate data collections nominated											
Environmental Factors: Natural Environment – Lack of exposure to sunlight											
Australian Secondary Schools Alcohol and Drug Survey (ASSAD)	nation-wide	yes since 1984	triennial 99,. 02	sample 12-17 yrs	yes	yes	yes p	yes	no	q	Topics 99 core survey: sun protection lessons, behaviours, sun exposure.
NSW Health Survey Program – continuous data collection, annual reporting.	state-wide NSW	yes in future	continuous: 04, 07 (annual: 97, 98 adults; 01 children)	sample all ages	yes	yes	yes	yes	yes	NSW Health regions	Topic: Sun protection: Shade policy; Early detection; & Summer sun protection; opics planned for 04, 07. A further Sun protection (Seasonal variation) topic planned for 03.
Qld Regional Health Survey	state-wide Qld	no[##]	93	sample[#] 18+ yrs	yes	yes	yes	yes	yes	a	Topics: Sun exposure: In local area, when outside, is it easy to find shade at range of places; (summer months, winter months) frequency of wearing broad brimmed hat/using umbrella; wearing a long-sleeved shirt; wearing sunscreen; sunglasses; (last weekend) whether got sunburnt; whether & how check skin for changes; when last checked by doctor/nurse.
Qld Sunsafe Survey	state-wide Qld	no[##]	00	sample[#] 18-64 yrs	yes	yes	yes	yes	yes	d	
WA Health Survey	state-wide WA	yes	irregular 95, 00	sample 18+ yrs	yes	yes	yes p	yes p	yes	11 WA health regions	Topic: sun protection incl questions on clothing, shade, & sun cream use.
Environmental Factors: Products and Technology – Exposure to pollution											
ABS Community Housing and Infrastructure Needs Survey (CHINS)	nation-wide	yes	irregular 99, 01	census ATSI communities	n/a	n/a	n/a	n/a	no	b, e	Topics: Sewage overflows or leakages in the 12 months prior to the survey.
Environmental Factors: Products and Technology – Harzardous environs											
No candidate data collections nominated											
Environmental Factors: Products and Technology – Lack of exposure to fluorides											
Child Fluoride Study	3 States SA, ACT, Qld (2 centres)	yes	longitudinal (1991-94) 10 yr follow-up commence 02	sample 5-12/15 yrs	yes	yes	yes	yes	yes	post-code	Research study based on sample from Child Dental Health Survey, reviewed effectiveness of water fluoridation in caries prevention.
Qld Public Health/Media Reach Survey 1996	state-wide Qld	no[##]	96	sample[#] Princ care giver of children <12	yes	yes	yes	yes	yes	d	Response rate=82% Fluoridation sample=1,200 Smoking sample=2,250
PLUS:											
ABS Community Housing and Infrastructure Needs Survey (CHINS)	nation-wide	yes	irregular 99, 01	census ATSI communities	n/a	n/a	n/a	n/a	no	b, e	Topics: Details of infrastructure eg water, power & sewerage systems incl failures, & other facilities including presence of & Environmental Health Worker activities in discrete ATSI communities.
Environmental Health Risk Perception in Australia	Australia all jurisdict'ns	no	one off (00)	sample 18+ yrs	yes	yes	no	COB	yes	Aust & 6 states only	Topic: Perceptions of risk, attitudes & opinions.

Topics and candidate data sets	Criteria										Comment
	1	2		3	4 Disaggregations:						
	coverage	time series	frequency	sample/ census	age	sex	Indigenous status	ethnicity **	SES	Geog area	
NSW Health Survey Program – continuous data collection.	state-wide NSW	yes in future	continuous: 03-07	sample various ages	yes	yes	yes	yes	yes	NSW Health regions	Topic: Environmental risks; new topic module to be developed, planned for each of 5 years from 03 (03-07).

Community Capacity

Topics and candidate data sets	Criteria 1 coverage	2 time series	2 frequency	3 sample/ census	4 Disaggregations: age	sex	Indigenous status	ethnicity **	SES	Geog area	Comment
Community Capacity: Characteristics of communities and families											
ABS Community Housing and Infrastructure Needs Survey (CHINS)	nation-wide	yes	irregular 99, 01	census ATSI comm-unities	n/a	n/a	n/a	n/a	no	b, e	Details of housing & related infrastructure such as water, power & sewerage systems, & other facilities such as education & health services, available in discrete ATSI communities.
ABS General Social Survey (GSS) (forthcoming)	nation-wide	yes in future	4 yearly 02, 06	sample 18+ yrs	yes	yes	no	yes	yes	d	Topics: Family & community: no of topics
ABS Survey of Families in Australia	nation-wide	yes	irregular (82, 92)	sample families	yes	yes	yes	yes	yes	d	Topics: Family formation & dissolution, structure, net-works (across households), lifecycle, support, social & economic circumstances of families. See further information in Table F.1.
ABS Family Characteristics Survey	nation-wide	yes but see Table F.1	irregular 97, 02	sample families of child-ren 0-17	yes	yes	yes	yes	yes	d	
Melbourne Collaborative Cohort Study (Monash University & the Cancer Council of Victoria)	capital city Vic: Melbourne	yes	longitudinal, ongoing from 90-94; follow ups 95-98; planned 02-	sample aged 40-69 yrs in 90-94	yes	yes	no	yes	yes	postcode	Topics: Social life (at recruitment); Lifestyle: social life (at follow up).
[Qld] Social Capital Survey	state-wide Qld	no[##]	one off 02	sample[#] 18+ yrs	yes	yes	yes	no	yes	urban/ rural/ remote	Topics incl Social capital (generalised reciprocity, com-munity norms, civic engage-ment, associational membership).
Qld Statewide Health Survey	state-wide Qld	no[##]	98	sample[#] 18+ yrs	yes	yes	yes	yes	yes	d	Topics: No. of adults (18+) & total no. of people live in household; how many registered MV usually garaged/parked at/near yr home; whether rent, own or purchasing dwelling.
Qld Young People's Mental Health Survey	state-wide (Qld)	no	one off (1998)	yes 15-24 yrs	yes	yes	yes	cultural diversity	yes	urban/-rural	Topics: Parental marital status, (respondent) Marital status, & No. of children.
SA Monitoring & Surveillance System (SAMSS)	state-wide SA	yes in future	continuous from 2002	sample all ages	yes	yes	yes	yes	yes	a	Planned topics: Social capital: Literacy, Truancy, Access, Transport, Safety/ trust, Com-munity capacity/involvement; Social suppport.
Tasmanian Community Capacity Survey	part-state Tas	no	01	sample						SLA	4 SLAs with 2,500 total.
WA Child Health Survey	state-wide WA	no	one off 93-94	sample 4-16 yrs	yes	yes	?	?	yes	yes	Topic: Composition of famil-ies; Supports available from family, friends & neighbours, broader community
WA Aboriginal Child Health Survey	state-wide WA	no	one off 00-01	sample Indigen-ous child-ren 0-17	yes	yes	yes (all)	-	yes	CDs	
Community Capacity: Literacy level											
ABS Survey of Aspects of Literacy	nation-wide	no	? irregular (96)	sample 15-74 yrs	yes	yes	yes	yes	yes	d	Self report & objective measures. May be classified by wide range of variables.
SA Monitoring & Surveillance System (SAMSS)	state-wide SA	yes in future	continuous from 2002	sample all ages	yes	yes	yes	yes	yes	a	Planned topics: Social capital: Literacy.
Community Capacity: Health literacy											

Topics and candidate data sets	Criteria 1	2		3	4 Disaggregations:						Comment
	coverage	time series	frequency	sample/ census	age	sex	Indigenous status	ethnicity **	SES	Geog area	
Australian Secondary Schools Alcohol and Drug Survey (ASSAD) - ACT record	state-wide supplementary: ACT	yes	triennial 96, 99	sample 11-18 yrs	yes	yes	yes	yes	yes	ACT schools	See also Australian Secondary Schools Alcohol and Drug Survey.
Qld Omnibus Survey (2002)	state-wide Qld	no##	one off 02	sample# 18+ yrs	yes	yes	yes	no	yes	d	Topics incl Sources of health information.
SA Monitoring & Surveillance System (SAMSS)	state-wide SA	yes in future	continuous from 2002	sample all ages	yes	yes	yes	yes	yes	a	Planned topics: Social capital: Literacy; Protective: Education.
? WA Child Health Survey	state-wide WA	no	one off 93-94	sample 4-16 yrs	yes	yes	?	?	yes	yes	Topic: Parents' knowledge & skills in parenting.
Community Capacity: Housing											
ABS Community Housing and Infrastructure Needs Survey (CHINS)	nation-wide	yes	irregular 99, 01	census ATSI communities	n/a	n/a	n/a	n/a	no	b, e	Topics: details of housing & related infrastructure eg water, power & sewerage systems available in discrete ATSI communities.
ABS General Social Survey (GSS) (forthcoming)	nation-wide	yes in future	4 yearly 02, 06	sample 18+ yrs	yes	yes	no	yes	yes	d	Topics: Household tenure type; Landlord type; Rent/mortgage payments
ABS Indigenous Social Survey (ISS) (forthcoming)	nation-wide	yes in future	6 yearly 02, 08	sample ATSI 15+ yrs	yes	yes	no	no	yes	d	Topics: additional to GSS: No. of bedrooms; Access to a telephone; Household facilities; & Maintenance.
ABS National Aboriginal and Torres Strait Islander Survey	nation-wide	no	one off (94)	Sample ATSI all ages	yes	yes	yes	n/a	yes	b, m	Topics: Type of dwelling; rented/being bought; no. of bedrooms, toilets, etc; break-downs of toilets, electricity etc; whether on sealed road.
ABS Survey of Disability, Ageing and Carers	nation-wide	yes	six yearly from 03 88, 93, 98 03, 09,...	sample all ages see note 1	yes	yes	no g (98)	yes	yes	d, k	Topic: Housing.
SA Monitoring & Surveillance System (SAMSS)	state-wide SA	yes in future	continuous from 2002	sample all ages	yes	yes	yes	yes	yes	a	Planned topics: Economic: No. of bedrooms; Household size/structure.
WA Aboriginal Child Health Survey	state-wide WA	no	one off 00-01	sample Indigenous children 0-17	yes	yes	yes (all)	-	yes	CDs	
Community Capacity: Community services eg support, transport etcetera											
ABS Community Housing and Infrastructure Needs Survey (CHINS)	nation-wide	yes	irregular 99, 01	census ATSI communities	n/a	n/a	n/a	n/a	no	b, e	Topics: details of infrastructure including access to schools, health services, postal services, telephones, broadcasts, available in discrete ATSI communities
ABS Disability, Ageing and Carers Survey	nation-wide	?	(81, 88, 93)	yes	yes	yes	yes	yes	yes	a?	Topic: Availability of public transport
ABS General Social Survey (GSS) (forthcoming)	nation-wide	yes in future	4 yearly 02, 06	sample 18+ yrs	yes	yes	no	yes	yes	d	Topics: Access to motor vehicles, Perceived level of difficulty with transport; Travel time to work.
ABS Indigenous Social Survey (ISS) (forthcoming)	nation-wide	yes in future	6 yearly 02, 08	sample ATSI 15+ yrs	yes	yes	no	no	yes	d	Topics: Access to motor vehicles, Perceived level of difficulty with transport.
ABS Women's Safety Survey	Australia	no	one off (96)	sample 18+ yrs	yes	women only	no	no	?	Aust	Topic: General feelings of safety in selected situations such as using public transport after dark, etc.
NSW Health Survey	state-wide NSW	yes & in future	annual for (97, 98)	sample 16+ yrs	yes	yes	yes	yes	yes	NSW Health regions	Topic: Shade availability.

Topics and candidate data sets	**Criteria**										**Comment**
	1	**2**		**3**	**4 Disaggregations:**						
	coverage	**time series**	**frequency**	**sample/ census**	**age**	**sex**	**Indigenous status**	**ethnicity ****	**SES**	**Geog area**	
NSW Health Survey Program – continuous data collection.	state-wide NSW	yes in future	continuous from 02	sample all ages	yes	yes	yes	yes	yes	NSW Health regions	Topic: Shade availability.
NSW Older Persons Survey	state-wide NSW & ACT	yes in future	one off (99)	sample 65+ yrs	yes	yes	yes	yes	yes	NSW Health regions	Topic: Transport.
SA Monitoring & Surveillance System (SAMSS)	state-wide SA	yes in future	continuous from 2002	sample all ages	yes	yes	yes	yes	yes	a	Planned topics: Social capital: Access, Transport , Safety/ trust, Community capacity/ involvement; Social suppport.
WA Aboriginal Child Health Survey	state-wide WA	no	one off 00-01	sample Indigenous children 0-17	yes	yes	yes (all)	-	yes	CDs	
WA Child Health Survey	state-wide WA	no	one off 93-94	sample 4-16 yrs	yes	yes	?	?	yes	yes	Topic: Supports available from broader community, access & entitlements to child care & other benefits

Many of the collections listed above also collect socioeconomic factor indicators. Others, such as the AIHW National Mortality Database, include area of residence which is used as a proxy for socioeconomic status (SES). Only selected collections are listed below.

Socioeconomic Factors

Topics and candidate data sets	Criteria										Comment
	1	2		3	4 Disaggregations:						
	coverage	time series	frequency	sample/ census	age	sex	Indigenous status	ethnicity **	SES	Geog area	
Socioeconomic Factors: Education											
ABS Census of Population and Housing	nation-wide	yes	5 yearly ..., 96, 01, 06	census all ages	yes	yes	yes from 71	yes	yes	CD	Available in CDATA.
ABS General Social Survey (GSS) (forthcoming)	nation-wide	yes in future	4 yearly 02, 06	sample 18+ yrs	yes	yes	no	yes	yes	d	Topics: Educational attainment; Field of study; etc
ABS National Aboriginal and Torres Strait Islander Survey	nation-wide	no	one off (94)	sample of ATSI people all ages	yes	yes	yes	n/a	yes	b, m	Topics incl: Schooling being undertaken; Age & yr left school; Qualifications; Current study
ABS National Health Survey (NHS)	nation-wide	yes	triennial from 01 89-90, 95, 01, 04-05	sample all ages	yes	yes	yes	yes	yes	a	
ABS Survey of Income and Housing Costs	nation-wide	yes from July 1994	annual to 00-01 biennial from 01-03	sample 15+ yrs	yes	yes	no	no	yes	b	
ABS Women's Safety Survey	Australia	no	one off (96)	sample 18+ yrs	yes	women only	no	no	?	Aust	
DHAC national evaluation surveys for the National Tobacco Campaign	Australia	yes since 1997	annual 97, 98, 99, 00, 01	sample 18-40 yrs	yes	yes	no	yes	yes	Aust.	Topic: educational attainment
Melbourne Collaborative Cohort Study (Monash University & the Cancer Council of Victoria)	capital city Vic: Melbourne	yes	longitudinal, ongoing from 90-94; follow ups 95-98; planned 02-	sample aged 40-69 yrs in 90-94	yes	yes	no	yes	yes	postcode	Topics: Background: Education.
National Drug Strategy Household Survey	nation-wide	yes since 1985	triennial from 01 85, 88, 91, 93, 95, 98, 01, 04, 07	sample 14+ yrs	yes	yes	yes (94 only)	yes	yes	b, d, m (s)	Topics: Highest educational qualification.
National Survey of Mental Health and Wellbeing of adults	nation-wide	no	one-off (97)	sample 18+ yrs	yes	yes	no	yes	yes	a	Topics: Highest qualification, current study
NHF Australia's Risk Factor Prevalence Study	capital cities	yes past series	irregular (80, 83, 89)	sample 20-64/69 yrs	yes	yes	-	yes	yes	h	Topic: Highest level of education completed
NSW Child Health Survey	state-wide NSW	yes in future	one off (01)	sample 0-12 yrs	yes	yes	yes	yes	yes	NSW Health regions	Topic: School attendance.
NSW Health Survey	state-wide NSW	yes & in future	annual for (97, 98)	sample 16+ yrs	yes	yes	yes	yes	yes	NSW Health regions	Topic: Highest level of education completed.
NSW Health Survey Program – continuous data collection.	state-wide NSW	yes in future	continuous from 02	sample all ages	yes	yes	yes	yes	yes	NSW Health regions	Topic: School attendance.
Qld Chronic Diseases Survey	state-wide Qld	no##	00	sample# 18+ yrs	yes	yes	yes	yes	yes	d	Topic: Highest level of education completed.
Qld Colorectal Cancer Survey	state-wide Qld	no##	99	sample# 40-80 yrs	yes	yes	yes	yes	yes	d	

Topics and candidate data sets	Criteria										Comment
	1	2		3	4 Disaggregations:						
	coverage	time series	frequency	sample/ census	age	sex	Indigenous status	ethnicity **	SES	Geog area	
Qld Health Status Survey (SF-36)	state-wide Qld	no##	94	sample# 18+ yrs	yes	yes	yes	yes	yes	a	
Qld Omnibus Survey (2001)	state-wide Qld	no##	one off 01	sample# 18+ yrs	yes	yes	yes	yes	yes	d	Topic: Highest level of education completed.
Qld Omnibus Survey (2002)	state-wide Qld	no##	one off 02	sample# 18+ yrs	yes	yes	yes	no	yes	d	Topic: Highest level of education completed.
Qld Public Health/Media Reach Survey 1996	state-wide Qld	no##	96	sample# Princ care giver of children <12	yes	yes	yes	yes	yes	d	
Qld Public Health/Media Reach Survey 1997	state-wide Qld	no##	97	sample# Princ care giver of children 1-4 yrs	yes	yes	yes	yes	yes	d	
Qld Regional Health Survey	state-wide (Qld)	no##	93	sample# 18+ yrs	yes	yes	yes	yes	yes	a	Topics: Highest level of education reached.
[Qld] Social Capital Survey	state-wide Qld	no##	one off 02	sample# 18+ yrs	yes	yes	yes	no	yes	urban/ rural/ remote	Topics incl Highest level of education completed.
Qld Statewide Health Survey	state-wide Qld	no##	98	sample# 18+ yrs	yes	yes	yes	yes	yes	d	Topics: Highest level of education completed; whether main income earner in household has formal educational qualification since leaving school.
Qld Young People's Mental Health Survey	state-wide (Qld)	no	one off (1998)	yes 15-24 yrs	yes	yes	yes	cultural diversity	yes	urban/-rural	Topics: Educational status.
SA SERCIS Surveys	state-wide SA	yes	more than 1 per year from 97	sample 18+ yrs	yes	yes	yes	yes	yes	a	Topic: Highest educational qualification obtained.
SA Monitoring & Surveillance System (SAMSS)	state-wide SA	yes in future	continuous from 2002	sample all ages	yes	yes	yes	yes	yes	a	Planned topics: Education
Victorian Population Health Survey	state-wide Vic	yes in future, but not for all questions	01-04	sample 18+ yrs	yes	yes	yes	yes COB	yes	9 DHS health regions	Topic: Highest level of education completed.
WA Aboriginal Child Health Survey	state-wide WA	no	one off 00-01	sample Indigenous children 0-17	yes	yes	yes (all)	-	yes	CDs	
WA Child Health Survey	state-wide WA	no	one off 93-94	sample 4-16 yrs	yes	yes	?	?	yes	yes	Topic: Academic competence.
WA Health and Wellbeing Surveillance System	state-wide WA	yes in future	continuous from 02	sample 16+ yrs	yes	yes	yes p	yes p	yes	11 WA health regions	Proposed topic: Education
Socioeconomic Factors: Income											
ABS Census of Population and Housing	nation-wide	yes	5 yearly ..., 96, 01, 06	census all ages	yes	yes	yes from 71	yes	yes	CD	Available in CDATA.
ABS General Social Survey (GSS) (forthcoming)	nation-wide	yes in future	4 yearly 02, 06	sample 18+ yrs	yes	yes	no	yes	yes	d	Topic: Income: (personal, income unit, household); etc.
ABS Indigenous Social Survey (ISS) (forthcoming)	nation-wide	yes in future	6 yearly 02, 08	sample ATSI 15+ yrs	yes	yes	no	no	yes	d	Topic: Income: (personal, income unit, household).
ABS Household Expenditure Survey	nation-wide	yes	5 yearly ...88-89, 93-94, 98-99	sample 15+ yrs	yes	yes	yes	yes	yes	m	

Topics and candidate data sets	Criteria										Comment
	1	2		3	4 Disaggregations:						
	coverage	time series	frequency	sample/ census	age	sex	Indigenous status	ethnicity **	SES	Geog area	
ABS National Aboriginal and Torres Strait Islander Survey	nation-wide	no	one off (94)	sample of ATSI people all ages	yes	yes	yes	n/a	yes	b, m	Topics incl: Personal & household income, main source of income, household income after housing costs.
ABS National Health Survey (NHS)	nation-wide	yes	triennial from 01 89-90, 95, 01, 04-05	sample all ages	yes	yes	yes	yes	yes	a	
ABS Survey of Income and Housing Costs	nation-wide	yes from July 1994	annual to 00-01 biennial from 01-03	sample 15+ yrs	yes	yes	no	no	yes	b	Topics: sources of income, amounts received.
National Drug Strategy Household Survey	nation-wide	yes since 1985	triennial from 01 85, 88, 91, 93, 95, 98, 01, 04, 07	sample 14+ yrs	yes	yes	yes (94 only)	yes	yes	b, d, m (s)	Topics: Personal & household annual income, before tax, all sources.
National Survey of Mental Health and Wellbeing - child and adolescent component	nation-wide	no	one off (1998)	yes 4-17 yrs	yes	yes	yes	yes	yes	t	Topic: Weekly household income.
National Survey of Mental Health and Wellbeing of adults	nation-wide	no	one-off (97)	sample 18+	yes	yes	no	yes	yes	a	Topic: Main source of income.
Qld Chronic Diseases Survey	state-wide Qld	no##	00	sample# 18+ yrs	yes	yes	yes	yes	yes	d	Topics: Total gross annual household income from all sources.
Qld Colorectal Cancer Survey	state-wide Qld	no##	99	sample# 40-80 yrs	yes	yes	yes	yes	yes	d	
Qld Health Status Survey (SF-36)	state-wide Qld	no##	94	sample# 18+ yrs	yes	yes	yes	yes	yes	a	
Qld Omnibus Survey (2001)	state-wide Qld	no##	one off 01	sample# 18+ yrs	yes	yes	yes	yes	yes	d	Topics: Total gross annual household income from all sources.
Qld Omnibus Survey (2002)	state-wide Qld	no##	one off 02	sample# 18+ yrs	yes	yes	yes	no	yes	d	Topics incl Annual gross household income.
Qld Public Health/Media Reach Survey 1996	state-wide Qld	no##	96	sample# Princ care giver of children <12	yes	yes	yes	yes	yes	d	
Qld Public Health/Media Reach Survey 1997	state-wide Qld	no##	97	sample# Princ care giver of children 1-4 yrs	yes	yes	yes	yes	yes	d	
Qld Regional Health Survey	state-wide (Qld)	no##	93	sample# 18+ yrs	yes	yes	yes	yes	yes	a	Topics: Total gross annual household income from all sources.
[Qld] Social Capital Survey	state-wide Qld	no##	one off 02	sample# 18+ yrs	yes	yes	yes	no	yes	urban/ rural/ remote	Topics incl Annual gross household income.
Qld Statewide Health Survey	state-wide Qld	no##	98	sample# 18+ yrs	yes	yes	yes	yes	yes	d	Topics: Total gross annual household income from all sources.
SA SERCIS Surveys	state-wide SA	yes	more than 1 per year from 97	sample 18+ yrs	yes	yes	yes	yes	yes	a	Topic: Annual gross income of household.
SA Monitoring & Surveillance System (SAMSS)	state-wide SA	yes in future	continuous from 2002	sample all ages	yes	yes	yes	yes	yes	a	Planned topics: Income

Topics and candidate data sets	**Criteria**										**Comment**
	1	**2**		**3**	**4 Disaggregations:**						
	coverage	**time series**	**frequency**	**sample/ census**	**age**	**sex**	**Indigenous status**	**ethnicity ****	**SES**	**Geog area**	
Victorian Population Health Survey	state-wide Vic	yes in future, but not for all questions	01-04	sample 18+ yrs	yes	yes	yes	yes COB	yes	9 DHS health regions	Topic: Household approx annual income from all sources.
WA Aboriginal Child Health Survey	state-wide WA	no	one off 00-01	sample Indigenous children 0-17	yes	yes	yes (all)	-	yes	CDs	
WA Child Health Survey	state-wide WA	no	one off 93-94	sample 4-16 yrs	yes	yes	?	?	yes	yes	Topic: Family income
WA Health Survey	state-wide WA	yes	irregular 95, 00	sample 18+ yrs	yes	yes	yes p	yes p	yes	11 WA health regions	Planned survey program will allow for time series analysis.
WA Health and Wellbeing Surveillance System	state-wide WA	yes in future	continuous from 02	sample 16+ yrs	yes	yes	yes p	yes p	yes	11 WA health regions	Proposed topic: Income
Socioeconomic Factors: Ownership of resources											
ABS General Social Survey (GSS) (forthcoming)	nation-wide	yes in future	4 yearly 02, 06	sample 18+ yrs	yes	yes	no	yes	yes	d	Topic: Assets & liabilities.
ABS Household Expenditure Survey	nation-wide	yes	5 yearly ...88-89, 93-94, 98-99	sample 15+ yrs	yes	yes	yes	yes	yes	m	
Socioeconomic Factors: Housing (tenure, costs)											
ABS Australian Housing Survey	nation-wide	yes	5 yearly 94, 99	sample 15+ yrs	yes	yes	yes	yes	yes	b, d	Topics: Characteristics, affordability & adequacy of dwellings; demographics, tenure & housing costs of persons & households.
ABS Census of Population and Housing	nation-wide	yes	5 yearly ..., 96, 01, 06	census all ages	yes	yes	yes from 71	yes	yes	CD	Available in CDATA.
ABS Community Housing and Infrastructure Needs Survey (CHINS)	nation-wide	yes	irregular 99, 01	census ATSI communities	n/a	n/a	n/a	n/a	no	b, e	Topics: Characteristics of community owned/managed dwellings, incl dwelling condition, & occupied temporary dwellings, in discrete ATSI communities.
ABS General Social Survey (GSS) (forthcoming)	nation-wide	yes in future	4 yearly 02, 06	sample 18+ yrs	yes	yes	no	yes	yes	d	Topic: Housing
ABS National Health Survey (NHS)	nation-wide	yes	triennial from 01 89-90, 95, 01, 04-05	sample all ages	yes	yes	yes	yes	yes	a	Topics: Housing structure, tenure
ABS Survey of Income and Housing Costs	nation-wide	yes from July 1994	annual to 00-01 biennial from 01-03	sample 15+ yrs	yes	yes	no	no	yes	b	Topic: Housing costs.
National Survey of Mental Health and Wellbeing of adults	nation-wide	no	one-off (97)	sample 18+ yrs	yes	yes	no	yes	yes	a	Topics: Living arrangements, housing structure, tenure
NSW Health Survey	state-wide NSW	yes & in future	annual for (97, 98)	sample 16+ yrs	yes	yes	yes	yes	yes	NSW Health regions	Topic: Housing arrangements (tenure).
NSW Health Survey Program – continuous data collection.	state-wide NSW	yes in future	continuous from 02	sample all ages	yes	yes	yes	yes	yes	NSW Health regions	Topic: Housing arrangements (tenure)0.
Qld Statewide Health Survey	state-wide Qld	no[##]	98	sample[#] 18+ yrs	yes	yes	yes	yes	yes	d	Topics: Whether rent, own or purchasing dwelling.
Qld Young People's Mental Health Survey	state-wide (Qld)	no	one off (98)	yes 15-24 yrs	yes	yes	yes	cultural diversity	yes	urban/- rural	Topics: Living arrangements

Topics and candidate data sets	Criteria 1	2		3	4 Disaggregations:						Comment
	coverage	time series	frequency	sample/ census	age	sex	Indigenous status	ethnicity **	SES	Geog area	
SA Monitoring & Surveillance System (SAMSS)	state-wide SA	yes in future	continuous from 2002	sample all ages	yes	yes	yes	yes	yes	a	Planned topics: Housing tenure.
SA SERCIS Surveys	state-wide SA	yes	more than 1 per year from 97	sample 18+ yrs	yes	yes	yes	yes	yes	a	Topic: Housing tenure (asked 97, 98, 99, 00, 01).
Victorian Population Health Survey	state-wide Vic	yes in future, but not for all questions	01-04	sample 18+ yrs	yes	yes	yes	yes COB	yes	9 DHS health regions	Topic: Housing tenure.
WA Aboriginal Child Health Survey	state-wide WA	no	one off 00-01	sample Indigenous children 0-17	yes	yes	yes (all)	-	yes	CDs	
Socioeconomic Factors: Area of residence											
ABS Census of Population and Housing	nation-wide	yes	5 yearly ..., 96, 01, 06	census all ages	yes	yes	yes from 71	yes	yes	CD	Available in CDATA.
As most data sets collect this variable, they have not been listed separately here.											
Socioeconomic Factors: Occupation including employment status, relations and conditions											
ABS Census of Population and Housing	nation-wide	yes	5 yearly ..., 96, 01, 06	census all ages	yes	yes	yes from 71	yes	yes	CD	Topic: Occupation, unemployment.
ABS General Social Survey (GSS) (forthcoming)	nation-wide	yes in future	4 yearly 02, 06	sample 18+ yrs	yes	yes	no	yes	yes	d	Topic: Work: no of topics incl Job security
ABS National Aboriginal and Torres Strait Islander Survey	nation-wide	no	one off (94)	sample of ATSI people all ages	yes	yes	yes	n/a	yes	b, m	Topics incl: LF status, hours worked, industry, occupation.
ABS National Health Survey (NHS)	nation-wide	yes	triennial from 01 89-90, 95, 01, 04-05	sample all ages	yes	yes	yes	yes	yes	a	Topics: occupation, unemployment.
ABS Survey of Disability, Ageing and Carers	nation-wide	yes	(93) ? 03, 09,...	sample all ages see note 1	yes	yes	no	yes	yes	d, k	Topic: Cause of main disabling condition (93).
AIHW & USyd Bettering the Evaluation and Care of Health (BEACH & SAND)	nation-wide	yes since April 1998	continuous	sample of patients from HIC records of active recognised GPs	yes	yes	yes	yes NESB status	no	State & RRMA	Topic: GP management of patient health problems: work-related.
DHAC national evaluation surveys for the National Tobacco Campaign	Australia	yes since 1997	annual 97, 98, 99, 00, 01	sample 18-40 yrs	yes	yes	no	yes	yes	Aust.	Topics: Employment status, occupational status.
Melbourne Collaborative Cohort Study (Monash University & the Cancer Council of Victoria)	capital city Vic: Melbourne	yes	longitudinal, ongoing from 90-94; follow ups 95-98; planned 02-	sample aged 40-69 yrs in 90-94	yes	yes	no	yes	yes	postcode	Topics: Background: Occupation (at recruitment); Employment status (at follow up)..
National Drug Strategy Household Survey	nation-wide	yes since 1985	triennial from 01 85, 88, 91, 93, 95, 98, 01, 04, 07	sample 14+ yrs	yes	yes	yes (94 only)	yes	yes	b, d, m (s)	Topics: Current employment status; industry/business/service of main/last employer.
National Survey of Mental Health and Wellbeing - child and adolescent component	nation-wide	no	one off (1998)	yes 4-17 yrs	yes	yes	yes	yes	yes	t	Topic: Employed/not in paid employment.

Topics and candidate data sets	Criteria										Comment
	1	2		3	4 Disaggregations:						
	coverage	time series	frequency	sample/ census	age	sex	Indigenous status	ethnicity **	SES	Geog area	
National Survey of Mental Health and Wellbeing of adults	nation-wide	no	one-off (97)	sample 18+ yrs	yes	yes	no	yes	yes	a	Topics: LF status, hours usually worked per week, occupation, duration of employment.
NHF Australia's Risk Factor Prevalence Study	capital cities	yes past series	irregular (80, 83, 89)	sample 20-64/69 yrs	yes	yes	-	yes	yes	h	Topics: 83: Current employment status; occupation status; occupation; hours usually worked each work by those employed.
NSW Health Survey	state-wide NSW	yes & in future	annual for (97, 98)	sample 16+ yrs	yes	yes	yes	yes	yes	NSW Health regions	Topic: Occupation.
NSW Health Survey Program – continuous data collection.	state-wide NSW	yes in future	continuous from 02	sample all ages	yes	yes	yes	yes	yes	NSW Health regions	Topic: Occupation.
Qld Chronic Diseases Survey	state-wide Qld	no##	00	sample# 18+ yrs	yes	yes	yes	yes	yes	d	Topic: Current employment status.
Qld Omnibus Survey (2001)	state-wide Qld	no##	one off 01	sample# 18+ yrs	yes	yes	yes	yes	yes	d	Topics incl Current employment status; whether permanently unable to work because of illness/disability; whether unemployed & how long; whether currently seeking work; etc.
Qld Omnibus Survey (2002)	state-wide Qld	no##	one off 02	sample# 18+ yrs	yes	yes	yes	no	yes	d	Topics incl Employment status.
Qld Regional Health Survey	state-wide Qld	no##	93	sample# 18+ yrs	yes	yes	yes	yes	yes	a	Topics: Current employment status; Main job; How long unemployed.
[Qld] Social Capital Survey	state-wide Qld	no##	one off 02	sample# 18+ yrs	yes	yes	yes	no	yes	urban/ rural/ remote	Topics incl Employment status.
Qld Statewide Health Survey	state-wide Qld	no##	98	sample# 18+ yrs	yes	yes	yes	yes	yes	d	Topics: Main occupation of main income earner in household; current employment status..
Qld Young People's Mental Health Survey	state-wide Qld	no	one off (98)	yes 15-24 yrs	yes	yes	yes	cultural diversity	yes	urban/- rural	Topics: Employment status; & type.
SA SERCIS Surveys	state-wide SA	yes	more than 1 per year from 97	sample 18+ yrs	yes	yes	yes	yes	yes	a	
SA Monitoring & Surveillance System (SAMSS)	state-wide SA	yes in future	continuous from 2002	sample all ages	yes	yes	yes	yes	yes	a	Planned topics: Occupation; Work status; Time working.
State Injury Surveillance Systems, eg VISS (Vic)	state-wide	yes	continuous		yes	yes	some				
Victorian Population Health Survey	state-wide Vic	yes in future, but not for all questions	01-04	sample 18+ yrs	yes	yes	yes	yes COB	yes	9 DHS health regions	Topic: Employment status.
WA Aboriginal Child Health Survey	state-wide WA	no	one off 00-01	sample Indigenous children 0-17	yes	yes	yes (all)	-	yes	CDs	
WA Child Health Survey	state-wide WA	no	one off 93-94	sample 4-16 yrs	yes	yes	?	?	yes	yes	Topic: Resources available to the family: Employment
WA Health Survey	state-wide WA	yes	irregular 95, 00	sample 18+ yrs	yes	yes	yes p	yes p	yes	11 WA health regions	Topics: occupation, employment status.
WA Health and Wellbeing Surveillance System	state-wide WA	yes in future	continuous from 02	sample 16+ yrs	yes	yes	yes p	yes p	yes	11 WA health regions	Proposed topic: employment status

Topics and candidate data sets	Criteria 1	2		3	4 Disaggregations:						Comment
	coverage	time series	frequency	sample/ census	age	sex	Indigenous status	ethnicity **	SES	Geog area	
WA Tobacco alcohol and illicit drug consumption survey	state-wide WA	yes since 1984	84, 85, 87; 91, 94; 97, ?02	sample 18+ yrs	yes	yes	no	no	yes	r	Topics: occupational status & type
Socioeconomic Factors: Parents occupation at time of birth											
? No current repeated measure.											
Socioeconomic Factors: Food security											
ABS General Social Survey (GSS) (forthcoming)	nation-wide	yes in future	4 yearly 02, 06	sample 18+ yrs	yes	yes	no	yes	yes	d	Topic: incl category 'went without meals' in Cash flow problems/Financial Stress topic.
ABS Household Expenditure Survey	nation-wide	yes	5 yearly ...88-89, 93-94, 98-99	sample 15+ yrs	yes	yes	yes	yes	yes	m	ABS advise: Provides an indication of food security.
ABS National Aboriginal and Torres Strait Islander Survey	nation-wide	no	one off (94)	sample of ATSI people all ages	yes	yes	yes	n/a	yes	b, m	Topic: Whether worries about, reasons for, & no. of days went without food.
ABS National Health Survey (NHS)	nation-wide	yes	triennial from 01 01	sample all ages	yes	yes	yes	yes	yes	a	Topic: (last 12 months) any times you ran out of food & couldn't afford to buy more.
ABS National Nutrition Survey	nation-wide	no	one off (95)	sample 2+ yrs	yes	yes	no	yes	yes	d	Topic: (last 12 months) any times you ran out of food & couldn't afford to buy more. ABS advise: topic not captured well.
NSW Child Health Survey See NSW Health Survey Program for future time series of topic	state-wide NSW	yes in future	one off (01)	sample 0-12 yrs	yes	yes	yes	yes	yes	NSW Health regions	Topic: Any times ran out of food & couldn't afford to buy more (last 12 months); coping strategies when this happens; agreement/otherwise on statements describing food situation.
NSW Health Survey Program – continuous data collection, annual reporting.	state-wide NSW	yes in future	continuous: 02-07; (annual: 99, 01)	sample all ages	yes	yes	yes	yes	yes	NSW Health regions	Topic: Food security topic planned for each of 6 years. See NSW Child Health & Older Persons Surveys.
NSW Older Persons Survey See NSW Health Survey Program for future time series of topic	state-wide NSW & ACT	yes in future	one off (99)	sample 65+ yrs	yes	yes	yes	yes	yes	NSW Health regions	Topic: Any times ran out of food & couldn't afford to buy more (last 12 months).
Qld Regional Health Survey	state-wide (Qld)	no[##]	93	sample[#] 18+ yrs	yes	yes	yes	yes	yes	a	Topics: (last 12 months) were there times household ran out of food & there wasn't money to buy more food; has anyone in household eaten less than they should because couldn't afford enough food.
Socioeconomic Factors: Economic capacity (the $2,000 question)											
ABS General Social Survey (GSS) (forthcoming)	nation-wide	yes in future	4 yearly 02, 06	sample 18+ yrs	yes	yes	no	yes	yes	d	Topic: Financial stress: no of topics incl ability to raise $2,000 within a week.
WA Aboriginal Child Health Survey	state-wide WA	no	one off 00-01	sample Indigenous children 0-17	yes	yes	yes (all)	-	yes	CDs	Topic: Financial stress
Socioeconomic Factors: Wealth											
ABS General Social Survey (GSS) (forthcoming)	nation-wide	yes in future	4 yearly 02, 06	sample 18+ yrs	yes	yes	no	yes	yes	d	Topics: Income; Assets & liabilities.

Topics and candidate data sets	Criteria										Comment
	1	2		3	4 Disaggregations:						
	coverage	time series	frequency	sample/ census	age	sex	Indigenous status	ethnicity **	SES	Geog area	
ABS Indigenous Social Survey (ISS) (forthcoming)	nation-wide	yes in future	6 yearly 02, 08	sample ATSI 15+ yrs	yes	yes	no	no	yes	d	Topics: Income.
ABS Household Expenditure Survey	nation-wide	yes	5 yearly ...88-89, 93-94, 98-99	sample 15+ yrs	yes	yes	yes	yes	yes	m	
Socioeconomic Factors: Poverty											
ABS General Social Survey (GSS) (forthcoming)	nation-wide	yes in future	4 yearly 02, 06	sample 18+ yrs	yes	yes	no	yes	yes	d	Topics: Income; Assets & liabilities.
ABS Indigenous Social Survey (ISS) (forthcoming)	nation-wide	yes in future	6 yearly 02, 08	sample ATSI 15+ yrs	yes	yes	no	no	yes	d	Topics: Income.
ABS Household Expenditure Survey	nation-wide	yes	5 yearly ...88-89, 93-94, 98-99	sample 15+ yrs	yes	yes	yes	yes	yes	m	
WA Child Health Survey	state-wide WA	no	one off 93-94	sample 4-16 yrs	yes	yes	?	?	yes	yes	
Socioeconomic Factors: Systems (eg taxation, social welfare)											
SA Monitoring & Surveillance System (SAMSS)	state-wide SA	yes in future	continuous from 2002	sample all ages	yes	yes	yes	yes	yes	a	Planned topics: Pension status.
WA Aboriginal Child Health Survey	state-wide WA	no	one off 00-01	sample Indigenous children 0-17	yes	yes	yes (all)	-	yes	CDs	Topic: Access & entitlement to child care & other benefits.
WA Child Health Survey	state-wide WA	no	one off 93-94	sample 4-16 yrs	yes	yes	?	?	yes	yes	Topic: Access & entitlement to child care & other benefits.
Socioeconomic Factors: Policies											
AA National Physical Activity	nation-wide	yes	? 97, 99, 00	sample 18-75 yrs	yes	yes	no	no	no	b	Topics: Physical activity campaigns & policy.
National Drug Strategy Household Survey	nation-wide	yes since 1985	triennial from 01 85, 88, 91, 93, 95, 98, 01, 04, 07	sample 14+ yrs	yes	yes	yes (94 only)	yes	yes	b, d, m (s)	Topics: Strength of support/opposition to policies re: excessive alcohol, tobacco, & heroin use; allocation of $$ to reduce drug use.
NSW Health Survey	state-wide NSW	yes & in future	annual for (97, 98)	sample 16+ yrs	yes	yes	yes	yes	yes	NSW Health regions	Topic: Smoking policy – 97 only
NSW Health Survey Program – continuous data collection.	state-wide NSW	yes in future	continuous from 02	sample all ages	yes	yes	yes	yes	yes	NSW Health regions	Topic: Evaluation of campaigns & policies..
Qld Regional Health Survey	state-wide (Qld)	no[##]	93	sample[#] 18+ yrs	yes	yes	yes	yes	yes	a	Topics: Attitudes to smoking restrictions in cafes/restaurants; questions re effectiveness of skin protection campaign.
WA Child Health Survey	state-wide WA	no	one off 93-94	sample 4-16 yrs	yes	yes	?	?	yes	yes	Topic: Environmental factors such as 'family friendly' industrial relations policies..

NOTE that the following sections may be out of scope for a Nation-wide Chronic Disease and Associated Risk Factor Information and Monitoring System but are shown here for the sake of completeness.

Contact with Health System and Disease Management

Topics and candidate data sets	Criteria										Comment
	1	2		3	4 Disaggregations:						
	coverage	time series	frequency	sample/ census	age	sex	Indigenous status	ethnicity **	SES	Geog area	
Health System:	**Contact with health system (including primary care)**										
ABS Community Housing and Infrastructure Needs Survey (CHINS)	nation-wide	yes	irregular 99, 01	census ATSI communities	n/a	n/a	n/a	n/a	no	b, e	Topic: Conduct of health promotion programs, in discrete ATSI communities.
ABS National Aboriginal and Torres Strait Islander Survey	nation-wide	no	one off (94)	sample of ATSI people all ages	yes	yes	yes	n/a	yes	b, m	Topic: Health actions: hospital episodes, doctor/nurse/Aboriginal Health Worker consultations
ABS National Health Survey (NHS)	nation-wide	yes	triennial from 01 89-90, 95, 01, 04-05	sample all ages	yes	yes	yes	yes	yes	a	Topic: Health actions: Services.
AIHW & USyd Bettering the Evaluation and Care of Health (BEACH & SAND)	nation-wide	yes since April 1998	continuous	sample of patients from HIC records of active recognised GPs	yes	yes	yes	yes NESB status	no	State & RRMA	Topic: GP management of patient health problems.
Melbourne Collaborative Cohort Study (Monash University & the Cancer Council of Victoria)	capital city Vic: Melbourne	yes	longitudinal, ongoing from 90-94; follow ups 95-98; planned 02-	sample aged 40-69 yrs in 90-94	yes	yes	no	yes	yes	postcode	Topics: self-report Family medical history; Personal medical history (at recruitment); self-report Hospital admissions; Personal health events; Medical examinations (at follow up).
National Drug Strategy Household Survey	nation-wide	yes since 1985	triennial from 01 85, 88, 91, 93, 95, 98, 01, 04, 07	sample 14+ yrs	yes	yes	yes (94 only)	yes	yes	b, d, m (s)	Topics: Doctor consultations; hospital admissions.
National Survey of Mental Health and Wellbeing - child and adolescent component	nation-wide	no	one off (1998)	yes 4-17 yrs	yes	yes	yes	yes	yes	t	Topics: service utilisation: attended 1 or more services during last 6 months; barriers to service use.
NSW Child Health Survey See NSW Health Survey Program for future time series	state-wide NSW	yes in future	one off (01)	sample 0-12 yrs	yes	yes	yes	yes	yes	NSW Health regions	Topics: Health service use (baby health/early childhood nurse, primary health care, etc); Asthma: frequency of service use (GP, ED).
NSW Health Survey See NSW Health Survey Program for future time series	state-wide NSW	yes & in future	annual (97, 98)	sample 16+ yrs	yes	yes	yes	yes	yes	NSW Health regions	Topics: Health service use, access & satisfaction; Asthma (last 12 months) frequency of service use (GP, ED, hospital admission).
NSW Health Survey Program – continuous data collection, annual reporting.	state-wide NSW	yes in future	continuous: 02-07 (annual: 97, 98 adults; 99 65+ only, 01 children)	sample all ages	yes	yes	yes	yes	yes	NSW Health regions	Topic: Health services access, use & satisfaction; & Asthma: service use; topics planned for each of 6 years. See NSW Child Health, Health & Older Persons Surveys.

Topics and candidate data sets	Criteria										Comment
	1	2		3	4 Disaggregations:						
	coverage	time series	frequency	sample/ census	age	sex	Indigenous status	ethnicity **	SES	Geog area	
NSW Older Persons Survey See NSW Health Survey Program for future time series	state-wide NSW & ACT	yes in future	one off (99)	sample 65+ yrs	yes	yes	yes	yes	yes	NSW Health regions	Topics: Use of health services (last 12 months): visited/ been visited by: GP/local doctor; community nurse/ private nursing service; physiotherapist; podiatrist/ chiropodist; consulted chemist; stayed at least one night in hospital. Ever had hearing tested & when; when eyesight last checked. Diabetes: no. of times feet, eyes, checked by health professional.
Qld Chronic Diseases Survey [2 modules: Asthma management; Diabetes management]	state-wide Qld	no[##]	00	sample 18+ yrs	yes	yes	yes	yes	yes	d	Topics: Diabetes: Main health provider re diabetes; (last 12 months) Whether & main reason had hospital admission; Type of health professionals seen re diabetes; etc. Asthma: Times (last 12 months) visited GP/ hospital ED/been admitted for an attack of asthma; etc.
Qld Health Status Survey (SF-36)	state-wide Qld	no[##]	94	sample[#] 18+ yrs	yes	yes	yes	yes	yes	a	Topics: Hospital admission; GP visit.
Qld Reliability & Validity Survey	state-wide (Qld)	no[##]	99	sample[#] 18+ yrs	yes	yes	yes	yes	yes	d	Topic: Hospital admission
Qld Statewide Health Survey	state-wide Qld	no[##]	98	sample[#] 18+ yrs	yes	yes	yes	yes	yes	d	Topics: Hospital admission; GP visit; visit to dentist.
Qld Young People's Mental Health Survey	state-wide Qld	no	one off (98)	yes 15-24 yrs	yes	yes	yes	cultural diversity	yes	urban/-rural	Topics: Preferred service provider; Barriers to service use; Whether used mental health services after a depressive episode/suicide attempt.
SA Health Omnibus Survey	part-state SA cities > 1,000	yes	annual since 91	sample 15+ yrs	yes	yes	yes	yes	yes	d	Topics included 90, 92, 95, 97.
SA SERCIS Surveys	state-wide SA	yes	more than 1 per year from 97	sample 18+ yrs	yes	yes	yes	yes	yes	a	Topic included 97, 98, 00.
SA Monitoring & Surveillance System (SAMSS)	state-wide SA	yes in future	continuous from 2002	sample all ages	yes	yes	yes	yes	yes	a	Planned topics: Health Service Utilisation: Preventative; Primary; Secondary; Acute/specialist.
Victorian Population Health Survey	state-wide Vic	yes in future, but not for all questions	01-04	sample 18+ yrs	yes	yes	yes	yes COB	yes	9 DHS health regions	Topics: Difficulty accessing medical care; Satisfaction with use of health services; Propensity to seek care.
WA Aboriginal Child Health Survey	state-wide WA	no	one off 00-01	sample Indigenous children 0-17	yes	yes	yes (all)	-	yes	CDs	Topic: Use of hospitals & other services
WA Child Health Survey	state-wide WA	no	one off 93-94	sample 4-16 yrs	yes	yes	?	?	yes	yes	Through data linkage.
WA Data Linkage System – Diabetes Linkage Project	cross jurisdictional	longitudinal	10 yrs								Will link 10 yrs of primary care, hospital & death data & provide a powerful model for chronic disease information/ monitoring.
WA Health Survey	state-wide WA	yes	irregular 95, 00	sample 18+ yrs	yes	yes	yes p	yes p	yes	11 WA health regions	Topics: health service utilisation, incl visits to non-mainstream (acupuncturist, naturopath, osteopath, etc)

Topics and candidate data sets	Criteria										Comment
	1	2		3	4 Disaggregations:						
	coverage	time series	frequency	sample/ census	age	sex	Indigenous status	ethnicity **	SES	Geog area	
WA Health and Wellbeing Surveillance System	state-wide WA	yes in future	continuous from 02	sample 16+ yrs	yes	yes	yes p	yes p	yes	11 WA health regions	Proposed topic: Health service utilisation..
WANTSA Health & Wellbeing Survey [2000 Collaborative Health & Wellbeing Survey]	3 states WA, NT, SA	no	one off 00	sample 18+ yrs	yes	yes	yes	yes	yes	a	
Health System:	**Early Detection & Screening**										
ABS National Health Survey (NHS)	nation-wide	yes	triennial from 01 89-90, 95, 01, 04-05	sample all ages	yes	yes	yes	yes	yes	a	Topic: Health actions: Services: Cancer screening.
NSW Health Survey See NSW Health Survey Program for future time series of topic	state-wide NSW	yes & in future	annual for (97, 98)	sample age range varies see comment	yes	yes	yes	yes	yes	NSW Health regions	Topics: Cancer screening incl mammography (97, 98, women 40-79 yrs only); cervical (98, women 20-69 yrs only), colorectal (97, 98, persons aged 40-80 yrs only); screening for diabetes complications of feet, eyes (sample reporting diabetes only)
NSW Health Survey Program – continuous data collection, annual reporting.	state-wide NSW	yes in future	continuous from 02	sample age range varies see comment	yes	yes	yes	yes	yes	NSW Health regions	Topic: Cancer screening: Mammography and cervical screening topics planned biannually from 02; Prostate & bowel screening topics planned for 03 (sample 16+ yrs only); Diabetes complications & screening topic planned for 04 & 07 (all ages).
NSW Older Persons Survey See NSW Health Survey Program for future time series of topic	state-wide NSW & ACT	yes in future	one off (99)	sample 65+ yrs sample varies, see comment	yes	yes	yes	yes	yes	NSW Health regions	Topics: Screening for - breast cancer: ever, & when last had mammogram/clinical breast examination (sample of women only); diabetes complications: feet, eyes checked, no. of times (last 12 months) (sample reporting diabetes only).
Qld Colorectal Cancer Survey	state-wide Qld	no##	99	sample# 40-80 yrs	yes	yes	yes	yes	yes	d	Topic: Colorectal cancer screening
Qld Regional Health Survey	state-wide (Qld)	no##	93	sample# 18+ yrs	yes	yes	yes	yes	yes	a	Topics: Pap smears, mammography.
Qld Women's Cancer Screening Survey	state-wide Qld	no##	97	sample# 40+ yrs	yes	yes	yes	yes	yes	d	Response rate 77%; sample 1,100
Qld Women's Health Survey	state-wide Qld	no##	96	sample# 18+ yrs	yes	yes	yes	yes	yes	d	Topics: Pap smears (18+ yrs); mammography (40+ yrs)
SA Monitoring & Surveillance System (SAMSS)	state-wide SA	yes in future	continuous from 2002	sample all ages	yes	yes	yes	yes	yes	a	Planned topics: Protective: Screening; Health Service Utilisation: Preventative.
University of Newcastle Women's Longitudinal Health Survey	nation-wide	longitudinal	1996 to follow up 20 years	sample 18-75 yrs in 1996	yes	women only	yes	yes	yes	urban/ rural/ remote	Topic: Cancer screening
Victorian Population Health Survey	state-wide Vic	yes in future, but not for all questions	01-04	sample 18+ yrs	yes	yes	yes	yes COB	yes	9 DHS health regions	Topic: Health care usage for screening tests
WA Health Survey	state-wide WA	yes	irregular 95, 00	sample 18+ yrs	yes	yes	yes p	yes p	yes	11 WA health regions	Topic: Cancer screening incl breast, cervical & colon.
Health System:	**Clinical management**										

Topics and candidate data sets	Criteria										Comment
	1	2		3	4 Disaggregations:						
	coverage	time series	frequency	sample/ census	age	sex	Indigenous status	ethnicity **	SES	Geog area	
AIHW & USyd Bettering the Evaluation and Care of Health (BEACH & SAND)	nation-wide	yes since April 1998	continuous	sample of patients from HIC records of active recognised GPs	yes	yes	yes	yes NESB status	no	State & RRMA	Topic: GP management of patient health problems.
NSW Health Survey Program – continuous data collection.	state-wide NSW	yes in future	continuous from 02	sample all ages	yes	yes	yes	yes	yes	NSW Health regions	Topic: Cardiovascular disease, diabetes & asthma management.
Qld Chronic Diseases Survey [2 modules: Asthma management; Diabetes management]	state-wide Qld	no##	00	sample 18+ yrs	yes	yes	yes	yes	yes	d	Topics: Diabetes: Main health provider re diabetes; Presence of comorbidities/ risk factors; Type of health professionals & how often seen; Whether had initial assessment with GP/podiat-rist/dietician/optometrist/diabetes educator etc. Asthma: Whether have written asthma management plan from Dr; Whether & how often used (type of) medication, etc.
WA Data Linkage System – Diabetes Linkage Project	cross jurisdictional	longitudinal	10 yrs								Diabetes: Will link 10 yrs of primary care, hospital & death data.
Health System: Management of complications											
AIHW & USyd Bettering the Evaluation and Care of Health (BEACH & SAND)	nation-wide	yes since April 1998	continuous	sample of patients from HIC records of active recognised GPs	yes	yes	yes	yes NESB status	no	State & RRMA	Topic: GP management of patient health problems.
Health System: Self management											
NSW Health Survey	state-wide NSW	yes & in future	annual for (97, 98)	sample 16+ yrs	yes	yes	yes	yes	yes	NSW Health regions	Topics: Diabetes, Asthma.
Qld Chronic Diseases Survey [2 modules: Asthma, & Diabetes management]	state-wide Qld	no##	00	sample 18+ yrs	yes	yes	yes	yes	yes	d	Topics: Asthma management, eg Whether has written asthma management plan from Dr; Use of (type of) medication, etc. Diabetes management, eg Whether & how often measure blood glucose level before meal; How often high readings; etc..
SA Monitoring & Surveillance System (SAMSS)	state-wide SA	yes in future	continuous from 2002	sample all ages	yes	yes	yes	yes	yes	a	Planned topics: Protective: Self management of conditions.
Health System: Use of complementary medicine											
ABS National Aboriginal and Torres Strait Islander Survey	nation-wide	no	one off (94)	sample of ATSI people all ages	yes	yes	yes	n/a	yes	b, m	Topic: Natural herbal (bush medicine) medications
ABS National Health Survey (NHS)	nation-wide	yes	triennial from 01 89-90, 95, 01	sample all ages	yes	yes	yes	yes	yes	a	Topics: Whether used vitamins/minerals or herbal treatments; visits to alternative health practitioners. 01 - Medications/supplements only linked to NHPA conditions.
SA Health Omnibus Survey	part-state SA cities > 1,000	yes since 1991	annual	sample 15+ yrs	yes	yes	yes	yes	yes	d	Topics included 93, 00.

Topics and candidate data sets	Criteria										Comment
	1	2		3	4 Disaggregations:						
	coverage	time series	frequency	sample/ census	age	sex	Indigenous status	ethnicity **	SES	Geog area	
SA Monitoring & Surveillance System (SAMSS)	state-wide SA	yes in future	continuous from 2002	sample all ages	yes	yes	yes	yes	yes	a	Planned topics: Medications: Alternative.
University of Newcastle Women's Longitudinal Health Survey	nation-wide	longitudinal	1996 to follow up 20 years	sample 18-75 yrs in 1996	yes	women only	yes	yes	yes	urban/ rural/ remote	Topic: Natural herbal medications
WA Health Survey	state-wide	yes	95, 00	yes	yes	yes	yes	yes	yes	health regions	Topics: health service utilisation, incl visits to non-mainstream (acupuncturist, naturopath, osteopath, etc)
WA Health and Wellbeing Surveillance System	state-wide WA	yes in future	continuous from 02	sample 16+ yrs	yes	yes	yes p	yes p	yes	11 WA health regions	Proposed topic: Visits to health practitioners not considered mainstream.

Accessibility

Topics and candidate data sets	Criteria										Comment
	1	2		3	4 Disaggregations:						
	coverage	time series	frequency	sample/ census	age	sex	Indigenous status	ethnicity **	SES	Geog area	
Accessibility:	**To ischaemic heart disease treatments**										
Accessibility:	**To stroke treatments**										
Accessibility:	**To diabetes treatments**										
Accessibility:	**To renal treatments**										
Accessibility:	**To cancer treatments**										
Accessibility:	**To chronic lung disease treatments**										
ABS National Health Survey (NHS)	nation-wide	yes	triennial from 01 89-90, 95, 01, 04-05	sample all ages	yes	yes	yes	yes	yes	a	01 Topic: asthma treatment, management.
Accessibility:	**To oral health treatments**										
Qld Omnibus Survey (2002)	state-wide Qld	no##	one off 02	sample# 18+ yrs	yes	yes	yes	no	yes	d	Topics incl Distance & barriers to dental care.
Accessibility:	**To mental health treatments**										
? AIHW National Community Mental Health Care Database	nation-wide	yes in future	annual from 2000-01	census of mental health clients	yes	yes	yes	yes COB in 01-02	no	yes in 01-02	Note: in early stages of development. Ethnicity incl country of birth & marital status to be collected in 2002-02. SEIFA can be derived for SES.
National Survey of Mental Health and Wellbeing - child and adolescent component	nation-wide	no	one off (1998)	yes 4-17 yrs	yes	yes	yes	yes	yes	t	? Topics: barriers to service use.
National Survey of Mental Health and Wellbeing of adults	nation-wide	no	one-off (97)	sample 18+ yrs	yes	yes	no	yes	yes	a	Topic: Unmet need for services.
Qld Young People's Mental Health Survey	state-wide (Qld)	no	one off (1998)	yes 15-24 yrs	yes	yes	yes	cultural diversity	yes	urban/-rural	? Topic: Barriers to service use.
WA Child Health Survey	state-wide WA	no	one off 93-94	sample 4-16 yrs	yes	yes	?	?	yes	yes	Topic: Access to mental health services.
Accessibility:	**To musculoskeletal disease treatments**										
Accessibility:	**To prevention programs**										
PLUS:											
Accessibility:	**To health services in general (NEW: added by Qld)**										
ABS Community Housing and Infrastructure Needs Survey (CHINS)	nation-wide	yes	irregular 99, 01	census ATSI comm-unities	n/a	n/a	n/a	n/a	no	b, e	Topics: Distance to nearest: hospital, community health centre, first aid clinic, chem-ist/dispensary; Access to health professionals, length of time worked in community, Indigenous health workers; Conduct of health promotion programs; Environmental

Topics and candidate data sets	Criteria 1 coverage	2 time series	2 frequency	3 sample/ census	4 Disaggregations: age	sex	Indigenous status	ethnicity **	SES	Geog area	Comment
											health workers, & activities.
ABS National Aboriginal and Torres Strait Islander Survey	nation-wide	no	one off (94)	sample of ATSI people all ages	yes	yes	yes	n/a	yes	b, m	Topics: Distance to nearest health service, whether uses/reason for not using, whether Indigenous staff available.
NSW Health Survey See NSW Health Survey Program for future time series of topic	state-wide NSW	yes & in future	annual (97, 98)	sample 16+ yrs	yes	yes	yes	yes	yes	NSW regions	Topics: Difficulties getting health care when needed.
Qld Regional Health Survey	state-wide (Qld)	no##	93	sample# 18+ yrs	yes	yes	yes	yes	yes	a	Topics: Access to health services in area: How long to get medical help in emergency, to get to place you go for non-emergency, medical care; any & type of difficulty travelling to that place; how long usually wait to see local doctor/at hospital Outpatients /Casualty; waiting time acceptable/unacceptable; etc.
Qld Women's Health Survey	state-wide Qld	no##	96	sample# 18+ yrs	yes	yes	yes	yes	yes	d	
Accessibility:	**To cancer screening services (NEW: added by Qld)**										
Qld Women's Health Survey	state-wide Qld	no##	96	sample# 18+ yrs	yes	yes	yes	yes	yes	d	

Notes providing an explanation of symbols and abbreviations used in the preceding tables

Symbols

*	Can also be considered a risk factor
**	Ethnicity mostly derived from country of birth – sometimes language spoken at home and/or proficiency in English.
†	Requires further specification
‡	Note: Although the data for some topics or questions is potentially available from a survey, it may not be reliable or valid. For example, a survey that collects Indigenous status or ethnic ity may not have a sufficient sample to produce estimates for these population groups. Surveys of the Indigenous population face the additional problems encountered in collecting data in remote areas. For example, the ABS National Health Survey excludes from its sample the 1% of the population in the most remote areas of Australia – called 'sparsely settled' areas. While not an issue for the non-Indigenous population, it is an issue for Indigenous people, as 18% of Australia's Indigenous population live in these areas. Specific strategies to address this issue include over-sampling to increase the sample take for specific population groups, or for the remote areas. The growing interest in having estimates from survey data available for small areas can be addressed by the production of synthetic estimates, or by the amalgamation of data from subsequent surveys.
#	Qld telephone surveys only collect data from people in households with a fixed telephone, however, given the extensive rate of telephone penetration, this is believed sufficient to be considered representative.
##	Qld has time series on some topics through multiple surveys on the same topics, but comparability depends on sex and age groups targeted and the actual questions asked. While data on some topics has only been collected once to date, as Health Outcomes Plans are rolled out some of these topics will be repeated to allow monitoring.
a	Capital city/rest of state/territory & some regional
b	State/territory
c	Identification of Indigenous people not accurately recorded in all States and Territories; only data recorded in SA, WA and NT reliably identify Indigenous status on death certificates. From 1999 all jurisdictions except Tasmania are of 'acceptable' coverage.
CD	Collection district
COB	Country of birth
d	Capital city/rest of state/territory
e	Disaggregations also available by communities with a population of less than 50, and, more than 50.
f	Perinatal Statistics: SA & Tas have parental occupation; other states will add this item in future.
g	Identification of Aboriginal and Torres Strait Islander people is of variable reliability.
h	Capital cities only
i	National & regional
j	SLA and suburb/locality in some jurisdictions.
k	As b with synthetic estimates for SLAs for some variables.
l	ABS advise: For many conditions the ABS Survey of Disability, Ageing and Carers would have lower prevalence than a condition based survey, because conditions are recorded only where they are a cause of an identified restriction.
m	State, capital city, other urban and rural.
n	Residents of private dwellings urban & rural areas.
n/a	Not applicable
o	Scope limited to usual residents in private dwellings.

p Sample too small for analysis.
q Metro/total state/non metro
r Metro/non metro/within metro (3 regions)
s Some jurisdictions only
SLA Statistical Local Area
t Metro (capital cities only)/non metro in each state & territory except NT where only children living in metropolitan areas were recruited (Sawyer et al. 2000: 62).

Abbreviations and acronyms

AA Active Australia
ABS Australian Bureau of Statistics
ACCV Anti-Cancer Council of Victoria
ACS Australian Cancer Society
AHS Australian Housing Survey
AIHW Australian Institute of Health and Welfare
ARIA Accessibility/Remoteness Index of Australia[3]
ASSAD Australian Secondary Schools Alcohol and Drug Survey
ATSI Aboriginal and Torres Strait Islanders
ATSIC Aboriginal and Torres Strait Islander Commission
AusDiab Australian Diabetes, Obesity and Lifestyle Study
BDQ Brief Disability Questionnaire
BEACH Bettering the Evaluation and Care of Health
BMI Body mass index
CAI Computer Assisted Interviewing
CAPI Computer Assisted Personal Interviewing
CATI Computer Assisted Telephone Interviewing
CBCL Child Behaviour Checklist
CD Collection district
CHINS Community Housing and Infrastructure Needs Survey
CIDI Composite International Diagnostic Interview
COB Country of birth
CPR Cardiopulmonary resuscitation
CVD Cardiovascular disease
DHFS Commonwealth Department of Health and Family Services
Dr Doctor
DSRU Dental Statistics and Research Unit
ED Emergency Department (hospital)
EEWP Extended Electronic White Pages (in use in Qld CATI surveys)
EPQ Eysenck Personality Questionnaire
ERSD End Stage Renal Disease
EWP Electronic White Pages
FFQ Food Frequency Questionnaire
GHQ–12 General Health Questionnaire–12 item scale
GIS Geographical Information Systems
GSS General Social Survey
IALS International Adult Literacy Survey
IDI International Diabetes Institute
incl include, including
IHS Indigenous Health Survey

[3] The ARIA is based on a methodology developed by the National Key Centre for Social Applications of GIS (GISCA). The ARIA is a standard classification and index of remoteness which allows the comparison of information about populations based on their access, by road, to service centres (towns) of various sizes (Glover & Tennant 2002).

ISS	Indigenous Social Survey
K10	Kessler Psychological Distress Scale [10 questions]
LF	Labour Force
LGA	Local Government Area
MMSE	Mini–Mental State Examination
MPS	Monthly Population Survey
MV	Motor Vehicle
NATSIS	National Aboriginal and Torres Strait Islander Survey
NHF	National Heart Foundation
NHPA	National Priority Health Areas
NHS	National Health Survey
NNS	National Nutrition Survey
occ	occupation
OECD	Organisation for Economic Co-operation and Development
p.a.	per annum
PAPI	Paper and Pencil Personal Interviews
RDD	Random Digit Dialing
RRMA	Rural, Remote and Metropolitan Areas Classification[4]
SAL	Survey of Aspects of Literacy
SAND	Supplementary Analysis of Nominated Data (BEACH)
SDAC	Survey of Disability, Ageing and Carers
SEIFA	Socio-Economic Indexes for Areas (ABS)
SERCIS	Social Environmental and Risk Context Information System
SF–12	Short Form–12
SLA	Statistical Local Area
SMHWB	National Survey of Mental Health and Wellbeing of Adults
SUDOR	Service Utilisation and Days Out of Role
yrs	years

[4] In 1994 the then departments of Primary Industries and Energy and of Human Services and Health released the RRMA Classification scheme, based on the results of the 1991 ABS Census, which conceptualises remoteness in terms of low population density and long distances to large population centres (UNSW undated).

Appendix F References and sources

ABS (1993a) *Disability, Ageing and Carers Australia 1993: Data reference package*. ABS Cat. No. 4432.0. Canberra: ABS.

ABS (1993b) *Disability, Ageing and Carers: Users' Guide*. ABS Cat. No. 4431.0. Canberra: ABS.

ABS (1995a) *National Health Survey: Data Reference Package*. Canberra: ABS.

ABS (1995b) *National Health Survey: Users' Guide*. ABS Cat. No. 4363.0. Canberra: ABS.

ABS (1996a) *Australian Social Trends 1996. Health-risk factors: Health risk factors and Indigenous people*. Canberra: ABS.

ABS (1996b) *National Aboriginal and Torres Strait Islander Survey: An evaluation of the Survey*. ABS Cat. No. 4184.0. Canberra: ABS.

ABS (1996c) *Women's Safety, Australia*. ABS Cat. No. 4128.0. Canberra: ABS.

ABS (1997a) *National Health Survey: Summary of results: Australia*. ABS Cat. No. 4364.0. Canberra: ABS.

ABS (1997b) *Aspects of Literacy: Profiles and Perceptions, Australia, 1996*. ABS Cat. No. 4226.0. Canberra: ABS.

ABS (1997c) *Aspects of Literacy: Assessed Literacy Skills, Australia, 1996*. ABS Cat. No. 4228.0. Canberra: ABS.

ABS (1998a) *Mental Health and Wellbeing: Profile of Adults, Australia, 1997*. ABS Cat. no. 4326.0. Canberra: ABS.

ABS (1998b) *Family Characteristics, Australia.*. ABS Cat. no. 4442.0. Canberra: ABS.

ABS (1999a) *Disability, Ageing and Carers Australia, 1998: Users' Guide*. ABS Cat. No. 4431.0 Canberra: ABS.

ABS (1999b) *National Survey of Mental Health and Wellbeing of Adults: Users' Guide, 1997*. ABS Cat. No. 4327.0. Canberra: ABS.

ABS (1999c) *Mental Health and Wellbeing: Profile of Adults, Western Australia*. ABS Cat. No. 4326.5. Canberra: ABS.

ABS (2000a) *Australian Housing Survey: Housing Characteristics, Costs and Conditions, 1999*. ABS Cat. No. 4182.0. Canberra: ABS.

ABS (2000b) *Household Expenditure Survey, Australia: User Guide 1998–99*. ABS Cat. No. 6527.0. Canberra: ABS.

ABS (2000c) *Housing and Infrastructure in Aboriginal and Torres Strait Islander Communities, Australia, 1999*. ABS Cat. No. 4710.0. Canberra: ABS.

ABS (2000d) '2001 National Health Survey', in *Health Statistics News* (44): 1. Canberra: ABS. http://www.abs.gov.au/852563C300806CB8/0/DB783A0BAC5DF4CECA2569870080DDD4?Open accessed 27 September 2001.

ABS (2001a) *Australian Housing Survey: Aboriginal and Torres Strait Islander Results*. ABS Cat. no. 4712.0. Canberra: ABS.

ABS (2001b) *NCATSIS News: A Newsletter for Aboriginal and Torres Strait Islander Statistical Issues*, Issue 9, May 2001. Darwin: ABS.

ABS (2001c) *Forward Work Program 2001-02 to 2003-04*. Canberra: ABS. http://www.abs.gov.au/websitedbs/d3310114.nsf/4a256353001af3ed4b2562bb00121564/19fe4d5d3ab1189aca2567400012da51/$FILE/FWP_2001.pdf accessed 15 October 2001

ABS (2000d) *How Australia Takes a Census: 2001 Census of Population and Housing*. ABS Cat. No. 2903.0. Canberra: ABS.

ABS (2001d) *Education and Training Statistics National Centre: List of Collections.* Canberra: ABS. http://www.abs.gov.au/CA25670D007E9EA1/0/4784C003D24FE1E6CA256A7E0081EDF2?Openaccessed 19 March 2002.

ABS (2002) *Directory of Census statistics*. ABS Cat. No. 2910.0. Canberra: ABS.

ABS (2002b) Indigenous Health Survey (National). http://www.abs.gov.au/ausstats/abs@.nsf/0/1A8650F3AF9F5C70CA256BD00028807F?Open accessed 21 August 2002.

ABS & AIHW (1999) *The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples*. ABS Cat. No. 4704.0; AIHW Cat. No. IHW 3. Canberra: Australian Bureau of Statistics.

ABS & AIHW (2001) *The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples*. ABS Catalogue no. 4704.0; AIHW Catalogue no. IHW 6. Canberra: ABS. http://www.aihw.gov.au/publications/ihw/hwaatsip01/hwaatsip01-c00.pdf accessed 19 December 2001

AIHW (1998) *Statistics on Drug use in Australia*. Canberra: AIHW. http://www.aihw.gov.au/publications/health/sdua98/sdua99-x01.pdf accessed 12 July 2001

AIHW (1999a) 'From the inside: The Disease Registers Unit', in *ACCESS*, Issue 1, March 1999. http://www.aihw.gov.au/inet/publications/corporate/access/access01/access01-c08.html accessed 15 August 2001

AIHW (1999b) 'From the inside: The Dental Statistics and Research Unit', in *ACCESS* Issue 2 July 1999. http://www.aihw.gov.au/publications/corporate/access/access02/access02-c08.html accessed 12 July 2001

AIHW (1999c) *1998 National Drug Strategy Household Survey: First results*. AIHW Cat. No PHE15 (Drug Statistics Series). Canberra: AIHW.

AIHW (2000) *The National Hospital Morbidity Database*. Canberra: AIHW. http://www.aihw.gov.au/hospitaldata/morbidity.html#nhmd1 accessed 7 January 2002

AIHW (2001a) *Australian hospital statistics 1999–00*. AIHW Cat. No. HSE 14 (Health Services Series no. 17). Canberra: AIHW.

AIHW (2001b) *Hospital Data: The National Hospital Morbidity Database*. Canberra: AIHW. http://www.aihw.gov.au/hospitaldata/morbidity.html#e accessed 19 December 2001

AIHW (2001c) *National Cancer Statistics Clearing House*. [Canberra: AIHW]. http://www.aihw.gov.au/cancer/ncsch/index.html accessed 18 December 2001

AIHW (2001d) *National diabetes register: statistical profile December 2000*. AIHW Cat. No. CVD 18 (Diabetes Series No. 2). Canberra: AIHW.

AIHW (2002(a)) *2001 National Drug Strategy Household Survey: First results.*. AIHW Cat. No. PHE 35 (Drug Statistics Series No. 9). Canberra: AIHW.

AIHW (2002(b)) *Chronic diseases and associated risk factors in Australia 2001*. AIHW Cat No. PHE 33. Canberra: AIHW.

AIHW & AACR (Australasian Association of Cancer Registries) (2001) *Cancer in Australia 1998*. AIHW cat. no. CAN 12 (Cancer Series no. 17). Canberra: AIHW.

AIHW & DHFS (Commonwealth Department of Health and Family Services) (1997) *First report on National Health Priority Areas 1996: Summary*. AIHW Cat. No PHE2. Canberra: AIHW & DHFS.

AIHW DSRU (Dental Statistics and Research Unit) (2000) *Oral Health and Access to Dental Care - 1994-96 and 1999: Research Report March 2001*. AIHW Cat. No. DEN 73. Adelaide: DSRU.

Andrews G, Hall W, Teesson M, & Henderson S (1999) *The Mental Health of Australians.* Canberra: Commonwealth Department of Health and Aged Care.

ANZDATA (Australia and New Zealand Dialysis and Transplant Registry) (2002) Australia and New Zealand Dialysis and Transplant Registry (ANZDATA). http://www.anzdata.org.au/ANZDATA/anzdatawelcome.htm accessed 27 February 2002.

Armstrong T, Bauman A & Davies J (2000) *Physical activity patterns of Australian adults: Results of the National Physical Activity Survey*. Canberra: AIHW.

ATSIC Northern Territory – North Zone (2000) [Submission to] *Inquiry into the Needs of Urban Dwelling Aboriginal & Torres Strait Islander Peoples*. Canberra: House of Representatives Standing Committee on Aboriginal and Torres Strait Islander Affairs. http://www.aph.gov.au/house/committee/atsia/urbandwelling/sub61.pdf accessed 31 August 2001

Baghurst K, Record S, Syrette J, Powis G (1966) *Food and Nutrition in Australia – does five years make a difference: Results from the CSIRO Australian Food and Nutrition Surveys 1988 and 1993*. Adelaide: CSIRO Division of Human Nutrition.

Britt H, Miller GC, Charles J, Knox S, Sayer GP, Valenti L, Henderson J, Kelly Z (2000) *BEACH Bettering the Evaluation and Care of Health: General practice activity in Australia 1999-2000*. AIHW cat. no. GEP 5 (General Practice Series No. 5). Canberra: AIHW.

Britt H, Miller GC, Knox S, Charles J, Valenti L, Henderson J, Kelly Z, Pan Y (2001) *General practice activity in Australia 2000–01*. AIHW Cat. No. GEP 8 (General Practice Series No. 8). Canberra: AIHW.

Bull F, Milligan R, Rosenberg M, and MacGowan H (2000) *Physical Activity Levels of Western Australian Adults 1999*. Perth: Western Australian Government, Health Department of Western Australia and Sport and Recreation Way2Go.

Busselton Health Studies group, Department of Public Health, University of Western Australia (2001) *The Busselton Health Studies*. http://bsn.uwa.edu.au/ accessed 27 October 2001.

CBRC (Centre for Behavioural Research in Cancer) (1999a) *Australian Secondary Schools Alcohol and Drug Survey (ASSAD): Core survey*. Melbourne: Anti-Cancer Council of Victoria.

CBRC (Centre for Behavioural Research in Cancer) (1999b) *Australian Secondary Schools Alcohol and Drug Survey (ASSAD): Victorian supplementary survey*. Melbourne: Anti-Cancer Council of Victoria.

Commonwealth Department of the Environment Sport and Territories (1996) *Australia: State of the Environment*. An independent report presented to the Commonwealth Minister for the Environment by the State of the Environment Advisory Council. Collingwood, Victoria: CSIRO Publishing.

Commonwealth Department of Health and Aged Care (2000) *Australia's National Tobacco Campaign: Evaluation Report*, Volume 2. Canberra: Commonwealth Department of Health and Aged Care.

Commonwealth Department of Human Services and Health (1994) *National Drug Strategy Household Survey. Urban Aboriginal and Torres Strait Islander Peoples Supplement*. Canberra: AGPS.

CPSE (Centre for Population Studies in Epidemiology) (1999) *Social Environmental Risk Context Information System (SERCIS) Surveys: Executive Summaries and Questionnaires 1995-1998*. Adelaide: CPSE, Public and Environmental Health Service, Department of Human Services.

CPSE (Centre for Population Studies in Epidemiology) (1998) *SERCIS*. Adelaide: Department of Human Services. http://www.dhs.sa.gov.au/pehs/CPSE/SERCIS.html accessed 23 May 2001

Cripps R & Carman J (2001) *Falls by the elderly in Australia: Trends and data for 1998*. Injury Research and Statistics Series No. 6; AIHW Cat. No. INJCAT 35. Adelaide: AIHW. http://www.nisu.flinders.edu.au/pubs/reports/2001/eldfalls_injcat35.pdf accessed 19 December 2001

Dal Grande E, Woollacott T, Taylor A, Starr G, Anastassiadis K, Ben-Tovim D, Westhorp G, Hetzel, D, Sawyer M, Cripps D & Goulding S (2001) *Interpersonal Violence and Abuse Survey, September 1999*. Adelaide: Centre for Population Studies in Epidemiology, Public and Environmental Health Service, [South Australian] Department of Human Services.

Daly A, Milligan R, Unwin E & Thomson N (1996) *The 1995 Western Australian Health Survey: Overview*. Perth: Health Department of Western Australia. http://www.health.wa.gov.au/publications/annual_report/63_4.html accessed 15 June 2001

Daly A, Saunders D & Roberts L (2001) *2000 Collaborative Health and Wellbeing Survey: An Overview*. Perth: Health Department of Western Australia. http://www.health.wa.gov.au/Publications/CWHS/wellbeing20001.pdf accessed 17 October 2001

Department of Health and Human Services, Tasmania (1998) *Healthy Communities Survey*. [Hobart]: DHHS, Tasmania. http://www.dhhs.tas.gov.au/services/healthy_living/pdf/hawbu_HCSFinalQ4.pdf accessed 24 July 2001

Department of Health and Human Services, Tasmania (1999) *Health and Wellbeing in Tasmania: Results of the Healthy Communities Survey 1998*. Health and Wellbeing Outcomes Unit Information Series. Hobart: DHHS, Tasmania. http://www.dhhs.tas.gov.au/services/healthy_living/pages/public.html accessed 24 July 2001

Diabetes Australia (2001) *National Diabetes Register*. http://www.diabetesaustralia.com.au/da_register.htm accessed 12 June 2001.

Donald M, Dower J, Lucke J, & Raphael B (2000) *The Queensland Young People's Mental Health Survey Report*. Woolloongabba, Qld: Centre for Primary Health Care, School of Population Health, and Department of Psychiatry, University of Queensland.

Dunstan D, Zimmet P, Welborn T, Sicree R, Armstrong T, Atkins R, Cameron A, Shaw J, & Chadban S on behalf of the AusDiab Steering Committee. (2001) *Diabetes & associated disorders in Australia 2000, The accelerating epidemic: Australian diabetes, obesity & lifestyle report (AusDiab)*. Melbourne: International Diabetes Institute.

Environment Protection Agency Victoria (2001) *Australian Air Quality Forecasting System (AAQFS)*. Melbourne: EPA Victoria. http://www.epa.vic.gov.au/air/aaqfs/ accessed 3 September 2001

Eyeson-Annan M (2001) 'Continuous data collection under the NSW Health Survey Program – What will it mean?' in *Public Health Bulletin*, 12(8): 235-237.

Glover J, Mercer N, Hugo G & Marbach D (1999) *HealthWIZ Strategy Review: draft report*. Adelaide: PHIDU.

Glover J & Tennant S (2002) [Draft] Remote areas statistical geography in Australia: Notes on the Accessibility/Remoteness Index for Australia (ARIA+ version) with a reference to the 'remote and sparsely settled areas' concept. Adelaide: Public Health Information Development Unit, The University of Adelaide.

Harrison J, Miller E, Weeramanthri T, Wakerman J, Barnes T (2001) *Information sources for injury prevention among Indigenous Australians: Status and prospects for improvement*. Injury Research and Statistics Series No. 8; AIHW Cat. No. INJCAT 38. Adelaide: AIHW

Health Department, Western Australia (2001) 'WA Nutrition Monitoring Survey: Survey Sample and Methods 1998', in *Nutrition and Physical Activity Program, Information Bulletin*, No. 10, February 2001. [Perth]: HDWA.

Health Department, Western Australia (2001) 'WA Nutrition Monitoring Survey: Survey Sample and Methods 1995', in *Nutrition and Physical Activity Program, Information Bulletin*, No. 1, February 2001. [Perth]: HDWA.

Health Department, Western Australia. (2001) 'WA Nutrition Monitoring Survey: Attitudes towards breast feeding in WA, 1998', in *Nutrition and Physical Activity Program, Information Bulletin*, No. 18, February 2001. [Perth]: HDWA.

Health Outcomes Assessment Unit (2000) *2000 Collaborative Health & Wellbeing Survey: Design and Methodology*. Perth: Health Information Centre, Health Department of Western Australia. http://www.health.wa.gov.au/Publications/CWHS/Designmethod.pdf accessed 16 October 2001

Henderson S, Andrews G, Hall W (2000) 'Australia's mental health: an overview of the general population survey' in *Australian and New Zealand Journal of Psychiatry* 34 (2): 197-205.

HIC (Health Insurance Commission) (2001a) *About HIC*. Canberra: HIC. http://www.hic.gov.au/CA256995000C9DAE/page/About+HIC?OpenDocument&1=15-About+HIC~&2=~&3=~

HIC (Health Insurance Commission) (2001b) *Annual Report 2000-01*. Canberra: HIC. http://www.hic.gov.au/annualreport/index.htm accessed 14 January 2001

Hill D, White V & Letcher T (1999) 'Tobacco use among Australian secondary students in 1996', in *Australian and New Zealand Journal of Public Health* 23(3): 252-259.

Hill D, Willcox S, Gardner G & Houston J (1986) *Cigarette and Alcohol Consumption among Australian Secondary Schoolchildren in 1984*. Melbourne: Centre for Behavioural Research in Cancer, Anti-Cancer Council of Victoria.

Hill DJ, White VM, Williams RM & Gardner GJ (1993) 'Tobacco and alcohol use among Australian secondary school students in 1990', in *The Medical Journal of Australia* 158: 228-234.

Jablensky A, McGrath J, Herrman H, Castle D, Gureje O, Morgan V & Korten A (1999) *People Living with Psychotic Illness: An Australian Study 1997–98*. Canberra: Commonwealth Department of Health and Aged Care.

Jablensky A, McGrath J, Herrman H, Castle D, Gureje O, Evans M, Carr V, Morgan V, Korten A, Harvey C (2000) 'Psychotic disorders in urban areas: an overview of the Study on Low Prevalence Disorders', in *Australian and New Zealand Journal of Psychiatry* 34(2): 221-36.

Jorm AF (1999) 'Association between smoking and mental disorders: Results from an Australian National Prevalence Survey' in *Australian and New Zealand Journal of Public Health* 23 (3): 245-48.

Knox SA, Britt H (2002) 'A comparison of general practice encounters with patients from English-speaking
and non-English-speaking backgrounds', in *Medical Journal of Australia* 177(2): 98-101.

La Trobe University & Central Sydney Area Health Service ([2001]) *Australian Study of Health and Relationships*. http://www.latrobe.edu.au/ashr/ accessed 29 November 2001

Letcher T & White V (1999) *Australian secondary students' use of over-the-counter and illicit substances in 1996*. Monograph series No. 33. Carlton South, Victoria: Centre for Behavioural Research in Cancer, Anti-Cancer Council of Victoria. http://www.health.gov.au/pubhlth/publicat/document/mono33.pdf accessed 19 December 2001

MUNCCI (Monash University National Centre for Coronial Information) (2001) *National Coroners Information System.* Melbourne: MUNCCI. http://www.vifp.monash.edu.au/ncis/index2.html accessed 18 October 2001

National Heart Foundation of Australia (1983) *Risk Factor Prevalence Study*. [Sydney]: National Heart Foundation.

NHPC (National Health Performance Committee) (2000) *Fourth National Report on health sector performance indicators*. Canberra: NHPC

NPHP (National Public Health Partnership) (2001) *Preventing Chronic Disease: A Strategic Framework – Background Paper*. Melbourne: NPHP.

NSW Health (2000a) *NSW Health Survey 1997/1998*. Sydney: NSW Health Department.

NSW Health (2000b) *NSW Health Surveys 1997 and 1998: Methods.* Sydney: NSW Health Department. www.health.nsw.gov.au/public-health/index.htm accessed 18 May 2001

NSW Health (2000c) *New South Wales Older People's Health Survey 1999*. Sydney: NSW Health Department. www.health.nsw.gov.au/public-health/ophs99 accessed 15 July 2001

NSW Health (2000d) *Report on the 1997 and 1998 NSW Health Surveys*. Sydney: NSW Health Department. http://www.health.nsw.gov.au/public-health/nswhs/calloutcomes.htm accessed 10 June 2001

NSW Health (2002a) *NSW Health Survey Program.* [pamphlet] Sydney: Epidemiology and Surveillance Branch, NSW Health Department.

NSW Health (2002b) New South Wales Child Health Survey 2001, in *N S W Public Health Bulletin* 13(S-4).

NWAHS (North Western Adelaide Health Service) (2000) *North West Adelaide Health Study*. [Information package, including Information Brochure, Participant Information Sheet, Questionnaire.] Woodville, Adelaide: North Western Adelaide Health Service. http://www.nwadelaidehealthstudy.org/ accessed 12 August 2001.

Parsons J, Wilson D & Scardigno A (2000) *The impact of diabetes in South Australia: the evidence*. Adelaide: South Australian Diabetes Clearing House on behalf of the Diabetes Health Priority Area Advisory Group.

Public Health Division, Department of Human Services, Government of Victoria (1998) *Victorian Population Health Survey*. Melbourne: Victorian Government Department of Human Services. http://hna.ffh.vic.gov.au/phd/hce/epid/vphs.htm accessed 3 August 2001

Public Health Division, Department of Human Services, Government of Victoria (2000) *Victorian Population Health Survey 1999: A Demonstration Survey. Selected Key Findings*. Melbourne: Victorian Government Department of Human Services. http://hna.ffh.vic.gov.au/phd/0009074/index.htm accessed 3 August 2001

Public Health Division, Department of Human Services, Government of Victoria (2001) *Draft Victorian Population Health Survey 2001*. Melbourne: Victorian Government Department of Human Services.

Queensland Health (2001) Queensland Health Pap Smear Register (PSR). [Brisbane]: Queensland Health. http://www.health.qld.gov.au/PapSmearRegistry/home.htm accessed 30 August 2001.

Queensland Health, Epidemiology and Health Information Branch (1993) *Regional Health Surveys for Queensland Health: Background and Methodology*. [Brisbane]: Queensland Health.

Queensland Health, Epidemiology and Health Information Branch (1993) *Regional Health Surveys for Queensland Health: Peninsula and Torres Strait Region Full Scale Pilot Questionnaire, March 1993*. [Brisbane]: Queensland Health.

Queensland Health, Health Information Centre (1998) *Statewide Health Survey: Questionnaire and Methodology*. [Brisbane]: Queensland Health.

Queensland Health, Health Information Centre, Epidemiology Services Unit (2000) *2000 Chronic Diseases Surveys: General Population Section, Questionnaire and Primary Results*. [Brisbane]: Queensland Health.

Queensland Health, Health Information Centre, Epidemiology Services Unit (2000) *2000 Chronic Diseases Surveys: Asthma Management Report*. [Brisbane]: Queensland Health.

Queensland Health, Health Information Centre, Epidemiology Services Unit (2000) *2000 Chronic Diseases Surveys: Diabetes Management Report*. [Brisbane]: Queensland Health.

Queensland Health, Health Information Centre, Epidemiology Services Unit (2001) *Omnibus 2001 Survey: Questionnaire and Primary Results*. [Brisbane]: Queensland Health.

Queensland Health, Statewide Health Promotion Unit (2000) *The Healthy Food Access Basket Survey 2000*. Brisbane: Queensland Health.

Reid J (2000) *Australia's Health in the information age - statistics and the people*. Presented at the Australia's Health 2000 conference, Thursday 22 June 2000, Manning Clark Theatre, Australian National University, Canberra. [Canberra: AIHW.] http://www.aihw.gov.au/conferences/ah00/ah00-s01.html accessed 19 December 2001

SADHS (South Australia Department of Human Services) (1999) *SA Physical activity survey 1998 summary findings.* Adelaide: Government of South Australia, Department of Human Services.

Saunders D & Daly A (2001) *2000 Collaborative Health and Wellbeing Survey: Psychological distress in the Western Australian population*. Perth: Health Department of Western Australia. http://www.health.wa.gov.au/Publications/CWHS/distress.pdf accessed 17 October 2001

Sawyer MG, Kosky RJ, Graetz BW, Arney F, Zubrick SR, Baghurst P (2000) 'The National Survey of Mental Health and Wellbeing: the child and adolescent component', in *Australian and New Zealand Journal of Psychiatry*.34(2): 214-220.

Sawyer MG, Arney FM, Baghurst PA, Clark JJ, Graetz BW, Kosky RJ, Nurcombe B, Patton GC, Prior MR, Raphael B, Rey J, Whaites LC & Zubrick SR. (2000) *Mental Health of Young People in Australia: Child and Adolescent Component of the National Survey of Mental Health and Well-Being*. Canberra: Commonwealth Department of Health and Aged Care. http://www.mentalhealth.gov.au/resources/young/pdf/young.pdf accessed 24 September 2001

Sayer GP, Britt H, Horn F, Bhasale A, McGeechan K, Charles J, Miller G, Hull B, Scahill S (2000) *Measures of health and health care delivery in general practice in Australia: SAND Supplementary Analysis of Nominated Data 1998-99*. AIHW cat. no. GEP 3 (General Practice Series No. 3). Canberra: AIHW.

Silburn SR & Zubrick SR. (1996) *The WA Child Health Survey: Methodology and Policy Implications.* Paper presented at Fifth Australian Family Research Conference 'Family Research: Pathways to Policy' in Brisbane, 27-29 November 1996. http://www.aifs.org.au/institute/afrcpapers/silburn.html accessed 3 September 2001

SSDA (Social Science Data Archives) (undated) *D0942: National Aboriginal and Torres Strait Islander Survey, 1994, Abstract*. Canberra: Australian National University. http://ssda.anu.edu.au/studies/D0942.html accessed 24 August 2001

Starr G, Langley A & Taylor, A (2000) *Environmental Health Risk Perception in Australia. A Research Report to the Commonwealth Department of Health and Aged Care*. [Adelaide]: Centre for Population Studies in Epidemiology, South Australian Department of Human Services. http://www.health.gov.au/pubhlth/publicat/document/metadata/envrisk.htm accessed 23 August 2001

Statistical Clearing House (1999) *Community Housing and Infrastructure Needs Survey, Quarter Ending October 1999*. Commonwealth of Australia. http://www.sch.abs.gov.au/SCH/a1610103.nsf/0/07B9ABF1DF5B3A56CA256753001BDFEF?OpenDocument accessed 30 August 2001

Taylor A, Dal Grande E, Gill T, Delfabbro P, Glenn V, Goulding S, Weston H, Barton S, Rogers N, Stanley A, Blandy R, Tolchard B & Kingston R (2001) *Gambling patterns of South Australians and associated health indicators, May 2001*. Adelaide: South Australian Department of Human Services. http://www.dhs.sa.gov.au/pehs/CPSE/gambling-patterns-sa.pdf accessed 31 August 2001

Taylor A, Dal Grande E, Woollacott T, Parsons J, Wilson D, Hetzel D, Anastassiadis K, Phillips P, Popplewell P ([1998]) *South Australian Health Goals and Targets - Health Priority Areas Survey - September-October 1997*. Adelaide: Centre for Population Studies in Epidemiology.

Taylor A, Dal Grande E, Woollacott T, Starr G, Wilson D, Hetzel D, Anastassiadis K, Westhorp G, Peck R & Cheok F (1998) *South Australian Health Goals and Targets: Violence and Abuse Health Priority Area, May 1998*. Adelaide: South Australian Department of Human Services.

Taylor A, Dal Grande E, Woollacott T, Starr, G (1998) *South Australian Health Goals and Targets Health Monitoring Indicators Report 1 July 1998*. Adelaide: South Australian Department of Human Services.

Taylor A, Gill T, Dal Grande E, Pengelly A, Fletcher J. (2001) *Older person survey October 2000: Prepared for Strategic Planning and Policy, Department of Human Services, South Australia*. Adelaide: South Australian Department of Human Services. http://www.dhs.sa.gov.au/pehs/CPSE/older-persons-survey00.pdf accessed 3 August 2001

Taylor A, Starr G, Williams M, Dal Grande E, Chittleboroug, C, Wilson D, McNamara M, Booth S. (1998) *Physical Activity of Adults in South Australia October 1998*. Adelaide: South Australian Department of Human Services. http://www.health.sa.gov.au/pehs/cpse/physical-activity-sa-adults.pdf accessed 6 December 2001

The University of Western Australia (2002) *Data Linkage Unit: The Data Linkage System.* Perth: Department of Public Health, University of WA. http://www.meddent.uwa.edu.au/dph_new/etc/subview.cfm?SubpageID=82&PageID=36&SectionID=3 accessed 12 March 2002.

University of New South Wales (undated) RHED Classification. http://notes.med.unsw.edu.au/rural/home.nsf/pages/classification?OpenDocument accessed 17 August 2002.

Welborn TA, Cumpston GN, Cullen KJ, Curnow DH, McCall MG, Stenhouse NS (1969) 'The prevalence of coronary heart disease and associated factors in an Australian rural community', in *American Journal of Epidemiology* 89: 521-536.

White V, Hill D, Gardner G & Pain M ([1988]) *Cigarette and Alcohol Consumption among Australian Secondary Schoolchildren in 1987*. Melbourne: Centre for Behavioural Research in Cancer, Anti-Cancer Council of Victoria.

Williamson M, Baker D & Jorm L (2001) *The NSW Health Survey Program: Overview and methods, 1996-2000*. Sydney: NSW Department of Health.

Woollacott T, Anastassiadis K, Hetzel D, Dal Grande E & Taylor A (1999) *Getting Better Information From Country Consumers For Better Rural Health Service Responses*. National Rural Health Alliance: 5th National Rural Health Conference, Adelaide, March 1999. http://www.ruralhealth.org.au/fifthconf/woollacottpaper.htm accessed 12 July 2001

Zubrick SR, Silburn SR, Eades S & Read A (2001) *The Western Australian Aboriginal Child Health Survey: Current Development*. Perth: TVW Telethon Institute for Child Health Research.

Zubrick SR, Silburn SR, Eades S & Read A (2001) *WA Aboriginal Child Health Survey Instruments: Overview of Survey Forms.* Perth: TVW Telethon Institute for Child Health Research.

Zubrick, S (2001) *Western Australian Aboriginal Child Health Survey, Project Profile*. Perth: TVW Telethon Institute for Child Health Research http://ichr.uwa.edu.au/project/pop_001.html accessed 11 August 2001.