Population health profile of the

Kimberley

Division of General Practice: supplement

Population Profile Series: No. 108a

PHIDU

March 2007





Australian Government

Australian Institute of Health and Welfare



Copyright

© Commonwealth of Australia 2007

This work may be reproduced and used subject to acknowledgement of the source of any material so reproduced.

National Library of Australia Cataloguing in Publication entry

Population health profile of the Kimberley Division of General Practice: supplement.

ISBN 9 78073089 7033 (web).

 Public health - Western Australia - Kimberley - Statistics.
Health status indicators - Western Australia - Kimberley - Statistics.
Health service areas - Western Australia-Kimberley.
Kimberley (W.A.) - Statistics, Medical.
Public Health Information Development Unit (Australia).
(Series : Population profile series ; no. 108a).

362.1099414

ISSN 1833-0452 Population Profile Series

Public Health Information Development Unit, The University of Adelaide A Collaborating Unit of the Australian Institute of Health and Welfare

This profile was produced by PHIDU, the Public Health Information Development Unit at The University of Adelaide, South Australia. The work was funded under a grant from the Australian Government Department of Health and Ageing. The views expressed in this profile are solely those of the authors and should not be attributed to the Department of Health and Ageing or the Minister for Health and Ageing.

Interpretation of differences between data in this profile and similar data from other sources needs to be undertaken with care, as such differences may be due to the use of different methodology to produce the data.

Suggested citation:

PHIDU. (2007) Population health profile of the Kimberley Division of General Practice: supplement. Population Profile Series: No. 108a. Public Health Information Development Unit (PHIDU), Adelaide.

Enquiries about or comments on this publication should be addressed to:

PHIDU, The University of Adelaide, South Australia 5005 Phone: 08-8303 6236 or e-mail: PHIDU@publichealth.gov.au

This publication, the maps and supporting data, together with other publications on population health, are available from the PHIDU website (<u>www.publichealth.gov.au</u>).

Published by Public Health Information Development Unit, The University of Adelaide

Contributors: Anthea Page, Sarah Ambrose, Kristin Leahy and John Glover

Population health profile of the Kimberley Division of General Practice: supplement

This profile is a supplement to the *Population health profile of the Kimberley Division of General Practice*, dated November 2005, available from <u>www.publichealth.gov.au</u>. This supplement includes an update of the population of the Kimberley Division of General Practice, as well as additional indicators and aspects of the Division's socioeconomic status, use of GP services and health. The contents are:

- Population [updated to June 2005]
- Additional socio-demographic indicators
- Unreferred attendances patient flow/ GP catchment
- Avoidable hospitalisations: hospital admissions resulting from ambulatory care sensitive conditions
- Avoidable mortality

For further information on the way Division totals in this report have been estimated, please refer to the 'Notes on the data' section of the *Population health profile*, November 2005 (www.publichealth.gov.au).

Population

The Kimberley Division had an Estimated Resident Population of 35,748 at 30 June 2005.

Figure 1: Annual population change, Kimberley DGP, country Western Australia, Western Australia and Australia, 1991 to 1996, 1996 to 2001 and 2001 to 2005



Over the five years from 1991 to 1996, the Division's population increased by 2.0% on average each year, above the levels in country Western Australia (1.0%) and Western Australia (1.6%). From 1996 to 2001, the increase was 5.5%, substantially higher than the increases for country Western Australia (1.7%) and Western Australia (1.6%). The Division's population increased by an average of 2.3% each year from 2001 to 2005, compared to smaller increases in country Western Australia (1.1%) and Western Australia (1.4%).

Table	1: Po	pulation	by age.	Kimberley	DGP	and Austra	lia, 2005
		F	-, -, -, -, -, -, -, -, -, -, -, -, -, -				

Age group	Age group Kimberley DGP		Austra	lia
(years)	No.	%	No.	%
0-14	9,366	26.2	3,978,221	19.6
15-24	5,346	15.0	2,819,834	13.9
25-44	12,787	35.8	5,878,107	28.9
45-64	6,590	18.4	4,984,446	24.5
65-74	1,035	2.9	1,398,831	6.9
75-84	464	1.3	954,143	4.7
85+	160	0.4	315,027	1.5
Total	35,748	100.0	20,328,609	100.0

As shown in the accompanying table and the age-sex pyramid below (Figure 2), the Kimberley DGP had markedly more people at ages 0 to 14 years (26.2%) and 25 to 44 years (35.8%), and slightly more aged 15 to 24 years (15.0%) compared Australia as a whole (19.6%, 28.9% and 13.9%) (Table 1). Conversely, the proportions of the Division's population aged 45 years and older were markedly lower than those for Australia.



Figure 2: Population in Kimberley DGP and Australia, by age and sex, 2005

The age distribution of the Division's population (when compared to Australia overall) is strikingly different. The most notable differences are:

- at younger ages substantially higher proportions of children aged 0 to 14 years (particularly females);
- from 20 to 44 years noticeably higher proportions of males and females; and
- from 45 to 74 years lower proportions of both males and females.

Figure 3: Population projections for Kimberley DGP, by age and sex, 2005 and 2020



The population projections for the Division show a number of changes in age distribution, with the 2020 population projected to have:

- at younger ages relatively fewer children and young people, aged 0 to 19 years;
- from 20 to 44 years relatively fewer males and females; and
- from 45 years of age relatively more males and females, particularly between the ages of 55 to 69 years.

Additional socio-demographic indicators

Please refer to the earlier *Population health profile of the Kimberley Division of General Practice*, dated November 2005, available from <u>www.publichealth.gov.au</u>, for other socio-demographic indicators.



Figure 4: Index of Relative Socio-Economic Disadvantage, Kimberley DGP, 2001

One of four socioeconomic indexes for areas produced at the 2001 ABS Census is the Index of Relative Socio-Economic Disadvantage.

The Kimberley DGP has an index score of 898, below the score for Australia of 1000: this score varies over a wide range, from a very low 568 in the most disadvantaged areas in the Division to 1072 in the least disadvantaged areas.

Note: each 'quintile' comprises approximately 20% of the population of the Division.

A new indicator, produced for the first time at the 2001 ABS Census, shows the number of jobless families with children under 15 years of age. There were markedly more jobless families in the Kimberley DGP (22.8%), compared to country Western Australia as a whole (17.6%) (Figure 5, Table 2).

With the introduction of the 30% rebate for private health insurance premiums, there was a once-off registration process, providing information of the postcode and residence of those who had such insurance (these data are not available at this area level for later dates). In 2001, the Division had a substantially lower proportion of the population with private health insurance (10.3%), compared to country Western Australia (30.3%) (Figure 5, Table 2).

Figure 5: Socio-demographic indicators, Kimberley DGP, country Western Australia, Western Australia and Australia, 2001

Jobless families with children under 15 years old





Table 2: Socio-demographic indicators, Kimberley DGP, country Western Australia,Western Australia and Australia, 2001

Indicator	Kimberley DGP		Country	Country WA		Western Australia		Australia	
	No.	%	No.	%	No.	%	No.	%	
Jobless families with children under 15 years old	818	22.8	10,142	17.6	34,396	16.8	357,563	17.4	
Private health insurance (30 June)	3,808	10.3	148,821	30.3	708,743	39.4	8,671,106	46.0	

Details of the distribution of jobless families (Map 1) and of the population covered by private health insurance (Map 2) are shown by Statistical Local Area (SLA) in Maps 1 and 2, respectively.



Map 2: People covered by private health insurance by SLA, Kimberley DGP, 30 June 2001





[#] data were not mapped: see 'Mapping' note under Methods



[#] data were not mapped: see 'Mapping' note under Methods

GP services to residents of the Kimberley DGP

The following tables include information, purchased from Medicare Australia, of the movement of patients and GPs between Divisions. Note that the data only include unreferred attendances recorded under Medicare: unreferred attendances not included are those for which the cost is met by the Department of Veterans' Affairs or a compensation scheme; or are provided by salaried medical officers in hospitals, community health services or Aboriginal Medical Services, and which are not billed to Medicare. At any attendance, one or more services may have been provided.

Almost four fifths (79.5%) of GP unreferred attendances to residents of Kimberley DGP were provided in the Division (ie. by a GP with a provider number in the Division): this represented 42,460 GP unreferred attendances (Table 3). A further 24.0% of unreferred attendances were provided in other Divisions, and not just Divisions in the remote areas. This indicates the mobility of the Division's population.

Division		Unreferred a	attendances
Number	Name	No.	% ³
610	Kimberley DGP	42,460	79.5
609	Great Southern DGP	2,463	4.6
801	Top End DGP	1,094	2.0
601	Perth & Hills DGP	1,036	1.9
604	Canning DGP	781	1.5
603	Osborne DGP	708	1.3
614	Pilbara DGP	543	1.0
602	GP Coastal DGP	525	1.0
605	Fremantle Regional DGP	480	0.9
612	Mid West DGP	457	0.9
Other		2,890	5.4
Total		53,437	100.0

Table 3: Patient flow – People living ¹ in Kimberley DGP by Division where
attendance occurred ² , 2003/04

¹ Based on address in Medicare records

² Division of GP based on provider number

³ Proportion of all unreferred attendances of patients with an address in Division 610 by Division in which attendance occurred

Just over three quarters (76.0%) of unreferred attendances provided by GPs with a provider number in Kimberley DGP were to people living in the Division (ie. their Medicare address was in the Division) (Table 4). However, a further 24.0% of unreferred attendances provided by the Division's GPs were to people living in other Divisions.

Table 4: GP catchment – Unreferred attendances provided by GPs¹ in Kimberley DGP by Division of patient address², 2003/04

Division		Unreferred attendances			
Number	Name	No.	% ³		
610	Kimberley DGP	42,460	76.0		
609	Great Southern DGP	2,701	4.8		
801	Top End DGP	1,029	1.8		
601	Perth & Hills DGP	878	1.6		
603	Osborne DGP	857	1.5		
Other		7,931	14.2		
Total		55,856	100.0		

¹ Division of GP based on provider number

² Based on address in Medicare records

³ Proportion of all unreferred attendances to GPs with a provider number in Division 610 by Division of patient address

Avoidable hospitalisations: hospital admissions resulting from ambulatory care sensitive conditions

The rationale underlying the concept of avoidable hospitalisations is that timely and effective care of certain conditions, delivered in a primary care setting, can reduce the risk of hospitalisation. Admissions to hospital for these ambulatory care sensitive (ACS) conditions can be avoided in three ways. Firstly, for conditions that are usually preventable through immunisation or nutritional intervention, disease can be prevented almost entirely. Secondly, diseases or conditions that can lead to rapid onset problems, such as dehydration and gastroenteritis, can be treated. Thirdly, chronic conditions, such as congestive heart failure, can be managed to prevent or reduce the severity of acute flare-ups to avoid hospitalisation.

This measure does not include other aspects of avoidable morbidity, namely potentially preventable hospitalisations (hospitalisations resulting from diseases preventable through population based health promotion strategies, e.g. alcohol-related conditions; and most cases of lung cancer) and hospitalisations avoidable through injury prevention (e.g. road traffic accidents).

For information on the ambulatory care sensitive conditions and ICD codes included in the analysis in this section, please refer to the *Atlas of Avoidable Hospitalisations in Australia: ambulatory care-sensitive conditions*, available from <u>www.publichealth.gov.au</u>.

In 2001 to 2002, the 1,775 admissions from ambulatory care sensitive (ACS) conditions accounted for 14.8% of all admissions in the Kimberley DGP (Table 5, Figure 6), substantially above the levels in Western Australia (8.8) and Australia (8.7%).

Table 5: Avoidable¹ and unavoidable hospitalisations, Kimberley DGP, Western Australia, and Australia, 2001/02

Category	Kimberley DGP			West	ern Austral	ia	Australia		
	No.	Rate ²	%	No.	Rate ²	%	No.	Rate ²	%
Avoidable ¹	1,775	7,602.9	14.8	55,102	3,062.4	8.8	552,786	2,847.5	8.7
Unavoidable	10,200	40,038.4	85.2	568,402	31,010.0	91.2	5,818,199	29,970.7	91.3
Total	11,975	47,348.8	100.0	623,504	34,070.5	100.0	6,370,985	32,818.2	100.0

¹ Admissions resulting from ACS conditions

² Rate is the indirectly age-standardised rate per 100,000 population





The rate of avoidable hospitalisations in Kimberley DGP is substantially higher, a rate of 7,602.9 admissions per 100,000 population, compared to both Western Australia (a rate of 3,062.4) and Australia (2,847.5).

Diabetes complications, chronic obstructive pulmonary disease, cellulitis, congestive heart failure and influenza and pneumonia were the five conditions with the highest rates of avoidable hospitalisations in the Kimberley DGP: the rates for these and several other conditions were all substantially above the rates in Western Australia (Figure 7, Table 6).

Table 6 shows the number, rate and proportion of avoidable hospitalisations, for the individual ACS conditions, as well as the vaccine-preventable; acute; and chronic sub-categories. The majority of avoidable hospitalisations are attributable to chronic health conditions. The predominance of hospitalisations for chronic conditions in this period can be primarily attributed to the large number of admissions for diabetes complications. Cellulitis and, convulsions and epilepsy, have the highest rates of avoidable hospitalisations for the acute conditions.

Figure 7: Avoidable hospitalisations¹ by condition, Kimberley DGP and Western Australia, 2001/02



¹ Admissions resulting from ACS conditions: excludes nutritional deficiencies as less than ten admissions

Table 6: Avoidable hospitalisations ¹ by condition, Kimberley DGP, Western Australia
and Australia, 2001/02

Sub-category/ condition	Kimberle	ey DGP	Western /	Australia	Austr	alia
	No.	Rate ²	No.	Rate ²	No.	Rate ²
Vaccine-preventable	168	654.8	2,018	110.7	16,573	85.4
Influenza and pneumonia	160	630.7	1,743	96.2	13,021	67.1
Other vaccine preventable	8	24.1	275	14.5	3,552	18.3
Chronic ³	767	4,490.5	33,628	1,915.6	352,545	1,816
Diabetes complications	323	1,920.6	15,323	873.6	141,345	728.1
Iron deficiency anaemia	22	124.3	2,009	113.4	16,451	84.7
Hypertension	32	192.0	510	29.0	6,354	32.7
Congestive heart failure	70	631.9	3,400	202.9	42,447	218.6
Angina	65	432.1	3,452	198.5	49,963	257.4
Chronic obstructive pulmonary disease	106	791.4	4,707	275.9	54,853	282.6
Asthma	149	398.2	4,227	222.3	41,009	211.3
Acute	876	2,800.7	21,021	1,121.4	200,913	1,035
Dehydration and gastroenteritis	94	383.9	3,443	188.7	37,766	194.5
Convulsions and epilepsy	201	567.4	2,779	146.7	31,137	160.4
Ear, nose and throat infections	208	496.9	3,550	185.3	32,075	165.2
Dental conditions	71	191.7	5,623	294.3	43,667	224.9
Perforated/bleeding ulcer	6	37.6	645	37.1	5,795	29.9
Ruptured appendix	15	44.0	566	29.4	3,866	19.9
Pyelonephritis	57	192.7	914	48.7	7,386	38.0
Pelvic inflammatory disease	21	65.0	577	30.2	6,547	33.7
Cellulitis	191	753.2	2,484	135.9	28,204	145.3
Gangrene	<u>1</u> 2	68.3	<u>4</u> 40	25.1	4,470	23.0
Total avoidable hospitalisations ⁴	1,775	7,602.9	55,102	3,062.4	552,786	2,847.5

¹ Admissions resulting from ACS conditions

² Rate is the indirectly age-standardised rate per 100,000 population

³ Excludes nutritional deficiencies as less than ten admissions

⁴ Sub-category and condition numbers and rates do not add to the reported total avoidable admissions: five conditions (influenza & pneumonia, other vaccine preventable, diabetes complications, ruptured appendix and gangrene) are counted in 'any diagnosis', so may be included in more than one condition group

Avoidable mortality

Avoidable and amenable mortality comprises those causes of death that are potentially avoidable at the present time, given available knowledge about social and economic policy impacts, health behaviours, and health care (the latter relating to the subset of amenable causes).

For information on the avoidable and amenable mortality conditions and ICD codes included in the analysis in this section, please refer to the *Australian and New Zealand Atlas of Avoidable Mortality*, available from www.publichealth.gov.au.

Over two thirds (73.7%) of all deaths in Kimberley DGP at ages 0 to 74 years over the period 1997 to 2001 are considered to be avoidable, marginally higher than the proportion for country Western Australia (72.7%) (Table 7). However, the rate in the Division is substantially higher than that in country Western Australia, a differential of 2.20.

Deaths amenable to health care (amenable mortality, a subset of avoidable mortality) accounted for 27.1% of all deaths at ages 0 to 74 years in Kimberley DGP, compared to 27.6% in country Western Australia.

Mortality category	Kimberley DGP		Countr	y WA	Western A	Australia	Austr	alia
	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹
Avoidable	464	514.0	5,122	233.8	16,602	201.0	189,845	211.8
% of total	73.7		72.7		71.2	••	71.5	
(Amenable)	(171)	(201.4)	(1,943)	(89.6)	(6,517)	(79.6)	(76,249)	(85.1)
(% of total)	(27.1)	()	(27.6)	()	(28.0)	()	(28.7)	()
Unavoidable	166	190.3	1,925	88.3	6,708	81.6	75,582	84.3
% of total	26.3	••	27.3	••	28.8		28.5	
Total mortality	630	704.6	7,047	322.1	23,310	282.6	265,427	296.1
%	100.0		100.0		100.0		100.0	

Table 7: Avoidable and unavoidable mortality (0 to 74 years) by area, Kimberley DGP, country Western Australia, Western Australia and Australia, 1997 to 2001

¹ Rate is the indirectly age-standardised rate per 100,000 population

Rates of avoidable mortality were higher for males than for females in each of the comparator areas. Kimberley DGP's rate of avoidable mortality for males was 627.1 deaths per 100,000 males, higher than the rate of 408.4 for females. In contrast, the rate of amenable mortality for males in the Division was lower, 192.7, compared to 215.2, for females, a rate ratio of 0.90 (Figure 8, Table 8).





Note: the different scales

-								
Mortality category	Kimberl	ey DGP	Countr	y WA	Western Australia		Austr	alia
and sex	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹
Avoidable								
Males	307	627.1	3,426	297.9	10,850	258.3	123,026	272.6
Females	157	408.4	1,696	169.3	5,752	142.9	66,819	150.1
Total	464	514.0	5,122	233.8	16,602	201.0	189,845	211.8
Rate ratio–M:F ²	••	1.54**	••	1.76**		1.81**		1.82**
Amenable								
Males	88	192.7	1,130	98.6	3,646	87.7	42,568	94.3
Females	83	215.2	813	80.6	2,871	71.3	33,681	75.7
Total	171	201.4	1,943	89.6	6,517	79.6	76,249	85.1
Rate ratio–M:F ²	••	0.90	••	1.22**		1.23**		1.25**

Table 8: Avoidable and amenable mortality (0 to 74 years) by sex, Kimberley DGP, country Western Australia, Western Australia and Australia, 1997 to 2001

¹ Rate is the indirectly age-standardised rate per 100,000 population

² Rate ratio (M:F) is the ratio of male to female rates; rate ratios differing significantly from 1.0 are shown with

p <0.05; ^{**} p <0.01

Another way of measuring premature mortality is to calculate the number of years of life lost (YLL)¹, which takes into account the years a person could have expected to live at each age of death based on the average life expectancy at that age.

The numbers of YLL for Kimberley DGP, country Western Australia, Western Australia and Australia over the period of analysis are shown in Table 9 by mortality category. However, given the substantial variation in the populations of these areas, a comparison of the proportion of YLL for each area is also shown.

YLL from avoidable mortality accounted for 73.8% of total YLL (0 to 74 years) for Kimberley DGP, consistent with the 73.2% for country Western Australia. The proportion of YLL from amenable mortality of 26.1% for Kimberley DGP was marginally lower than the 26.5% for country Western Australia.

Mortality category	Kimberley DGP		Country	Country WA		Western Australia		Australia	
	No.	% of	No.	% of	No.	% of	No.	% of	
		total		total		total		total	
Avoidable	10,040	73.8	95,572	73.2	300,008	71.7	3,327,375	71.9	
(Amenable)	(3,547)	(26.1)	(34,657)	(26.5)	(113,010)	(27.0)	(1,298,430)	(28.0)	
Unavoidable	3,556	26.2	35,020	26.8	118,618	28.3	1,303,289	28.1	
Total	13,597	100.0	130,592	100.0	418,625	100.0	4,630,664	100.0	

Table 9: Years of life lost from avoidable mortality (0 to 74 years), Kimberley DGP, country Western Australia, Western Australia and Australia, 1997 to 2001

¹ Years of life lost were calculated using the remaining life expectancy method (this provides an estimate of the average time a person would have lived had he or she not died prematurely). The reference life table was the Coale and Demeny Model Life Table West level 26 female (for both males and females), with the YLL discounted to net present value at a rate of 3 per cent per year.

In each of the areas in Table 11, the majority of avoidable mortality at ages 0 to 74 years occurred in the 65 to 74 year age group (Table 10), with 2,055.2 deaths per 100,000 population in the Kimberley Division. The 45 to 64 year age group accounted for the next highest rate of avoidable death in all of the comparators, with a rate 741.8 in the Kimberley Division.

country	western	Australia	, western F	Australia	and Austral	ia, 1997	to 2001	
Mortality category	Kimberl	ey DGP	Count	ry WA	Western	Australia	Aust	ralia
and age (years)	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹
Avoidable								
0-14	37	84.5	196	32.5	548	27.9	5,669	28.8
15-24	38	157.0	309	96.4	826	60.7	7,045	52.8
25-44	143	271.6	883	110.1	2,479	85.3	24,356	83.9
45-64	164	741.8	1,718	325.2	5,546	275.2	64,282	304.9
65-74	82	2,055.2	2,016	1360.4	7,203	1282.7	88,493	1,358.1
Total	464	514.0	5,122	233.8	16,602	201.0	189,845	211.8
Amenable								
0-24	24	33.3	153	15.6	454	13.8	5,083	15.4
25-44	41	82.1	223	28.3	594	20.5	5,946	20.5
45-64	67	309.0	706	135.1	2,381	118.5	27,464	130.3
65-74	40	1,004.4	861	585.9	3,088	550.9	37,756	579.4
Total	171	201.4	1,943	89.6	6,517	79.6	76,249	85.1

Table 10: Avoidable and amenable mortality by age, Kimberley DC	ЗP,
country Western Australia, Western Australia and Australia, 1997 to	2001

¹ Rate is the indirectly age-standardised rate per 100,000 population

Table 11 shows the number and age-standardised death rate by selected major condition group and selected causes included in the avoidable mortality classification.

The highest rates of avoidable mortality for the selected major condition groups in the Kimberley DGP were for cardiovascular diseases, with a rate of 149.2 deaths per 100,000 population, and cancer, 78.0 deaths per 100,000 population (Table 11, Figure 9). For the selected causes within the condition groups, the two major causes of avoidable mortality were ischaemic heart disease and cerebrovascular diseases, with rates of 89.4 per 100,000 population and 44.0 per 100,000, respectively.

Condition group/	Kimberl	ey DGP	Countr	y WA	Western A	Australia	Austr	alia
selected cause	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹
Cancer	60	78.0	1,488	69.4	5,531	67.8	62,338	69.5
Colorectal cancer	8	10.7	335	15.6	1,189	14.6	13,008	14.5
Lung cancer	20	27.5	515	24.0	1,842	22.8	21,208	23.7
Cardiovascular diseases	109	149.2	1,456	68.1	4,750	58.9	59,945	66.9
lschaemic heart disease	66	89.4	1,075	50.0	3,469	42.9	43,712	48.8
Cerebrovascular diseases	31	44.0	289	13.8	1,000	12.5	12,558	14.0
Respiratory system diseases	18	26.8	278	13.3	871	11.0	11,612	13.0
Chronic obstructive pulmonary disease	16	25.7	238	11.4	748	9.5	10,395	11.6
Unintentional injuries	75	51.7	626	26.8	1,549	17.5	14,224	15.9
Road traffic injuries	55	37.7	439	18.9	918	10.3	8,138	9.1
Intentional injuries Suicide and self inflicted	67 50	46.2 34.6	444 386	18.8 16.4	1,412 1,270	1 5.9 14.3	13,891 12,393	15.5 13.8

Table 11: Avoidable mortality (0 to 74 years) by major condition group and selected cause, Kimberley DGP, country Western Australia, Western Australia and Australia, 1997 to 2001

¹ Rate is the indirectly age-standardised rate per 100,000 population

With the exception of colorectal cancer, rates in the Division for the condition groups and selected causes were above (and sometimes substantially so) the rates for country Western Australia and Australia (Figure 10).

Figure 9: Avoidable mortality (0 to 74 years) by major condition group and selected cause, Kimberley DGP, country Western Australia and Australia, 1997 to 2001

Kimberley DGP		Country	/ WA				Austra	lia
Condition group/ selected cause			Rate	per 10	00,00)		
Cancer					 	 	1	
Colorectal cancer								
Lung cancer								
Cardiovascular diseases					1			
Ischaemic heart disease			, 	- - -				
Cerebrovascular diseases								
Respiratory system diseases Chronic obstructive pulmonary disease								
Unintentional injuries								
Road traffic injuries								
Intentional injuries Suicide and self inflicted injuries								
	0 2	0 40	60	80	100	120	140	160

Notes on the data

Data sources and limitations

General

References to 'country Western Australia' relate to Western Australia excluding the Perth Statistical Division.

Data sources

Table 12 details the data sources for the material presented in this profile.

Section	Source
Population	
Figures 1 and 2; Table 1	Estimated Resident Population, ABS, 30 June for the periods shown
Figure 3	Estimated Resident Population, ABS, 30 June 2005; Population Projections, ABS, 30 June 2020 (unpublished) ¹
Additional socio-demographi	ic indicators
Figure 4	ABS SEIFA package, Census 2001
Table 2; Figure 5; Map 1	Jobless families, ABS, 2001 (unpublished)
Table 2; Figure 5; Map 2	Private health insurance, from Hansard
GP services – patient flow/ G	P catchment
Tables 3 and 4	Medicare Australia, 2003/04
Avoidable hospitalisations: h	ospital admissions resulting from ambulatory care sensitive conditions
Tables 5 and 6; Figures 6 and 7	National Hospital Morbidity Database at Australian Institute of Health & Welfare, 2001/02; data produced in HealthWIZ by Prometheus Information (not available in public release dataset)
Avoidable mortality	
Tables 7, 8, 9, 10 and 11; Figures 8 and 9	ABS Deaths 1997-2001; data produced in HealthWIZ by Prometheus Information (not available in public release dataset)

Table 12: Data sources

¹ The projected population at June 2020 is based on the 2002 ERP. As such, it is somewhat dated, and does not take into account more recent demographic trends: it is however the only projection series available at the SLA level for the whole of Australia.

Methods

For background information on the additional prevalence estimates presented in this profile, please refer to the 'Notes on the data' section of the *Population health profile*, November 2005 (www.publichealth.gov.au).

Please also refer to the November 2005 profile for information on the data converters.

Mapping

In some Divisions the maps may include a very small part of an SLA which has not been allocated any population; or has a population of less than 100 or has less than 1% of the SLAs total population; or there were less than five cases (i.e. jobless families, people with health insurance): these areas are mapped with a pattern.

Statistical geography of the Kimberley DGP

For information on the postcodes in the Division, please refer the Department of Health and Ageing website <u>http://www.health.gov.au/internet/wcms/publishing.nsf/Content/health-pcd-programs-divisions-divspc.htm</u>; also included in table format in the 'Notes on the data' section of the *Population health profile*, November 2005 (www.publichealth.gov.au).

The Division comprises the same area as the ABS Kimberley Statistical Division: this Statistical Division is comprised of two Subdivisions, Ord Statistical Subdivision (comprising the SLAs of Halls Creek and Wyndham-East Kimberley) and Fitzroy Statistical Subdivision (comprising the SLAs of Broome and Derby-West Kimberley).

SLA code	SLA name	Per cent of the SLA's population in the Division [*]	Estimate of the SLA's 2005 population in the Division
50980	Broome	100.0	14,519
52800	Derby-West Kimberley	100.0	9,128
53920	Halls Creek	100.0	4,351
59520	Wyndham-East Kimberley	100.0	7,750

Table 13: SLAs and population in Kimberley DGP, 2005 on 2001 bound
--

^{*} Proportions are approximate and are known to be incorrect in some cases, due to errors in the concordance used to allocate CDs to form postal areas

Acknowledgements

.

Funding for these profiles was provided by the Population Health Division of the Department of Health and Ageing (DoHA).

Further developments and updates

When the re-aligned boundaries are released and DoHA have made known their geographic composition, PHIDU will examine the need to revise and re-publish these profiles (*Population health profile*, dated November 2005, and the *Population health profile*: supplement, dated March 2007).

PHIDU contact details

For general comments, data issues or enquiries re information on the web site, please contact PHIDU:

Phone: 08-8303 6236 or e-mail: PHIDU@publichealth.gov.au