

A Profile of Diabetes in the Hills Mallee Health Region, 2004

This brief report is designed to profile key epidemiological information on the prevalence of diabetes and associated risk factors and complications in the Hills Mallee region. Such information will aid regional health planners and community health workers to make evidence-based decisions about future service provision and interventions for achievement of better health outcomes among people in the Hills Mallee region.

Data sources

Data for this report, collected between July 2002 and June 2004 (n=10,700, ages 16+ years), were taken from the South Australian Monitoring and Surveillance System (SAMSS)¹. This system aims to provide representative, timely and relevant population data on the South Australian community. The questions in SAMSS are related to the priority health areas and main indicators pertinent to the Department of Health policies.

SAMSS collects ongoing data at the population level, and each month approximately 600 people are interviewed. The interviews are conducted by telephone utilising the CATI (Computer-Assisted Telephone Interviewing) system. All households in South Australia with a telephone number listed in the Electronic White Pages are eligible for selection in the sample. Within each household, the person who last had their birthday is selected for interview. There are no replacements for non-contactable persons.

Data for this report were also obtained from the Australian Bureau of Statistics 2001 Census of Population and Housing².

Profile of those with diabetes in the Hills Mallee region

Findings from SAMSS show that:

- The current estimate of adults in this region with diabetes is 4,800 (5.3% of the adult population (95% CI 4.0 – 7.1)). The majority of these people have type 2 diabetes.
- 11.3% of people aged 55 years and over have diabetes in the Hills Mallee region.
- 74.1% of the people in the Hills Mallee region with diabetes are Australian born.
- Of those people with diabetes in this region, 36.0% are male and 64.0% are female.
- 76.4% of people with diabetes are married.
- 42.3% of people with diabetes are retired.
- 33.2% of people with diabetes have completed only some high school education.

Who is at risk for diabetes and related complications?

There are numerous risk factors associated with the development of type 2 diabetes. The current NHMRC (National Health and Medical Research Council) recommendation on testing for type 2 diabetes is based on the criteria for being at high risk for diabetes³ shown in Box 1.

Box 1: NHMRC criteria for being at high risk for diabetes

Testing for undiagnosed type 2 diabetes is recommended for the following high risk individuals:

- Having impaired glucose tolerance or impaired fasting glucose;
- Aboriginal and Torres Strait Islanders aged 35 years and over;
- Certain high risk non-English speaking background groups aged 35 and over (specifically Pacific Islander people, people from the Indian subcontinent or of Chinese origin);
- People aged 45 and over who have either or both of the following risk factors:
 - obesity (BMI ≥ 30);
 - hypertension;
- All people with clinical cardiovascular disease (myocardial infarction, angina or stroke); and
- Women with polycystic ovary syndrome who are obese.

Individuals presenting with the following risk factors are also considered to be at high risk of having undiagnosed type 2 diabetes:

- Women with previous gestational diabetes;
- People aged 55 and over; and
- People aged 45 and over who have a first degree relative with type 2 diabetes.

Data from the Australian Bureau of Statistics² shows that:

- 2.9% of the Hills Mallee region (approximately 3,100 people) are from culturally and linguistically diverse backgrounds.
- 1.5% of the population in this region (approximately 1,600 people) are Indigenous Australians.

As well as the risk factors for developing diabetes there are risk factors for the development and progression of diabetes complications. These risk factors include hypertension, high cholesterol, physical inactivity, obesity and smoking.

Table 1 outlines the prevalence of risk factors for people with diabetes compared to those without diabetes in the Hills Mallee region. It shows that people with diabetes are statistically significantly more likely than those without diabetes to have current high blood pressure, current high cholesterol, and be obese, and statistically significantly less likely to undertake sufficient physical activity. These findings are important to consider when planning for intervention and treatment.

Table 1: Risk factor prevalence rates in the Hills Mallee region for those with and without diabetes

Risk factor	No diabetes %	Diabetes %
<i>Hypertension^a:</i>		
Current high blood pressure	13.1	45.3 ↑
<i>Cholesterol^b:</i>		
Current high cholesterol	10.1	28.0 ↑
<i>Exercise^a:</i>		
No physical activity	26.6	39.6
Insufficient physical activity (less than 150 mins per week)	30.1	38.6
Sufficient physical activity (at least 150 mins per week)	43.3	21.8 ↓
<i>Body weight^b:</i>		
Overweight (BMI 25.0 - 29.9)	37.4	42.1
Obese (BMI ≥ 30.0)	18.1	35.6 ↑
<i>Smoking status^c:</i>		
Non/Ex-smoker	78.6	78.5
Smoker	21.4	21.5

a. Source: SAMSS (July 2003 – June 2004, ages 16+ years)

b. Source: SAMSS (July 2002 – June 2004, ages 18+ years)

c. Source: SAMSS (July 2002 – June 2004, ages 16+ years)

↑ ↓ Statistically significantly higher or lower than those without diabetes (p<0.05).

How many adults with diabetes have cardiovascular complications in the Hills Mallee region?

There are numerous diabetes-related complications that people with diabetes may encounter. These include both macrovascular complications (heart attack, peripheral vascular disease, angina, heart failure and stroke) and microvascular complications (retinopathy, neuropathy and impotence).

Table 2 shows the prevalence of some common cardiovascular complications amongst people with diabetes in the Hills Mallee region. The prevalence and number of people with cardiovascular complications in this region were estimated by applying the overall South Australian age-specific rates to the region's population distribution.

Table 2: Prevalence of cardiovascular complications amongst adults with diabetes in the Hills Mallee region, age standardised

Complication	%	Estimated N
Ever been told by a doctor that you have or have had:		
Heart attack	8.4	7,540
Angina	6.7	6,030
Heart disease	7.5	6,760
Stroke	3.7	3,320

Source: SAMSS (July 2002 to June 2004, ages 16+ years)

Table 2 shows there is a high number of people with diabetes in this region with cardiovascular complications. These complications significantly impact on and burden the individual, by contributing to poorer quality-of-life and premature mortality, and the health care services that manage and provide for these complex and chronic conditions.

References

1. Population Research and Outcome Studies. South Australian Monitoring and Surveillance System (SAMSS) Technical Report No.1/04, August 2004: Survey Methodology. SA Department of Health. <http://www.dh.sa.gov.au/pehs/PROS/samss-tech-paper1-method.pdf>
2. Australian Bureau of Statistics. 2001 Census of Population and Housing.
3. Australian Centre for Diabetes Strategies, for the Diabetes Australia Guidelines Development Consortium. *National Evidence Based Guidelines for the Management of Type 2 Diabetes Mellitus*. NHMRC, 2001. <http://www.nhmrc.gov.au/publications/pdf/cp86.pdf>

INFORMATION

For further information please visit the Diabetes Clearing House web site at <http://www.dh.sa.gov.au/pehs/PROS/diabetes-clearing-house.html> or contact Catherine Chittleborough on 08 8226 0788 or email catherine.chittleborough@health.sa.gov.au



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