Diabetes: AustralianFacts

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National Centre for Monitoring Diabetes

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Feedback

The Institute welcomes feedback from users on any aspect of this publication. Comments, suggestions or requests for further information may be directed to:

National Centre for Monitoring Diabetes
Australian Institute of Health and Welfare
GPO Box 570
Canberra ACT 2601

Phone: (02) 6244 1000
Fax: (02) 6244 1299
E-mail: diabetes@aihw.gov.au

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Preface

Diabetes affects the health of many Australians. The disease may cause a range of complications that lead to disabilities, reduced quality of life and shortened life expectancy. As well as the personal health costs, the disease inflicts a large public health burden.

It is estimated that around a million Australians (7.5% of Australians aged 25 years or over) have diabetes and the number is expected to increase over the coming decades. Rates of Type 2 diabetes in some Aboriginal and Torres Strait Islander communities may be among the highest in the world.

Factors such as ageing and genetic predisposition increase the risk of developing Type 2 diabetes, which is the most common form of diabetes. However, prevention of Type 2 diabetes is possible, as lifestyle factors, such as obesity and physical inactivity, contribute to the development of the disease.

Diabetes: Australian Facts 2002 is the first report by the National Centre for Monitoring Diabetes to present available data across the spectrum of the disease: its levels in the population, the factors that contribute to it, and treatment and preventive programs. Importantly, the information presented aims to represent the challenges posed to the health system by the growing diabetes epidemic. It informs the interested public, academics, health professionals and policy makers about:

- Type 1 diabetes, Type 2 diabetes and gestational diabetes, and associated health burden;
- risk factors for the disease and its complications;
- complications of diabetes; and
- management and care.

A variety of data sources have been used in this report. However, at times limitations in the data have restricted the content and coverage of issues that are essential to a comprehensive understanding of diabetes. Therefore, this report also highlights the need for further investigation and data development in many areas.

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Contributors

The National Centre for Monitoring Diabetes has prepared this publication with assistance from other staff within the Cardiovascular Disease and Diabetes Monitoring Unit at the Australian Institute of Health and Welfare. The following people were responsible for the preparation of this report:

Justine Boland
Louise Catanzariti
Joanne Davies
Tracy Dixon
Bonnie Field
Gabrielle Hodgson
Toni Hunt
Susana Senes
Kathryn Webbie

The following individuals from the Australian Institute of Health and Welfare and its collaborating units also contributed to sections of this publication:

Tim Armstrong
Stan Bennett
Kuldeep Bhatia
Ilona Brockway
Paul Magnus
Cid Mateo
Sushma Mathur
Paul Meyer
Natasha Nassar
George Phillips
Kaye Roberts-Thomson
Nicola Tatham
Wen Xingyan

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Robert C Atkins	Monash Medical Centre
Maureen Bourne	Department of Health and Community Care, Australian Capital Territory
Esther Briganti	Monash Medical Centre
Joan Burns	Centre for General Practice Integration Studies, University of New South Wales
Annabelle Chan	Department of Human Services, South Australia
N Wah Cheung	Department of Diabetes and Endocrinology, Westmead Hospital
Donald Chisholm	Garvan Institute of Medical Research, St Vincents Hospital
Stephen Colagiuri	Department of Endocrinology, Diabetes and Metabolism, Prince of Wales Hospital
Ed Davis	Juvenile Diabetes Research Foundation
Trish Dyck	Commonwealth Department of Health and Ageing
Jeff Flack	Diabetes Centre, Bankstown-Lidcombe Hospital
Vivien Gee	Department of Health, Western Australia
Marilyn Harrington	Juvenile Diabetes Research Foundation
Mark Harris	Centre for General Practice Integration Studies, University of New South Wales
Rosemary Knight	Commonwealth Department of Health and Ageing
Tony Lawrence	Commonwealth Department of Health and Ageing
Danielle Penn	Centre for General Practice Integration Studies, University of New South Wales
Pat Phillips	Chair, Australian Diabetes Society Retinopathy Sub-committee
Joe Proietto	University of Melbourne, Department of Medicine, Royal Melbourne Hospital
Merilyn Riley	Department of Human Services, Victoria
Emma Rooney	Commonwealth Department of Health and Ageing
Sheila Royles	Juvenile Diabetes Research Foundation
Meredith Shallcross	Queensland Health
Jonathan Shaw	International Diabetes Institute
George Streitberg	Juvenile Diabetes Research Foundation
Robyn Tapp	International Diabetes Institute
Lee Taylor	Department of Health, New South Wales
Peter White	Diabetes Australia

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Highlights

Diabetes is one of the leading threats to the health of Australians...

- It is estimated that almost a million Australians (940,000 people aged 25 years or over) have diabetes, yet half of these people are unaware of it—there is evidence that for every case of diabetes there is an undetected case.
- In 2000, diabetes was the underlying cause of 3,006 deaths (2.3% of all deaths) and an associated cause in a further 7,124 deaths. Diabetes is twice as likely to be regarded as an associated cause of death rather than the underlying cause. There were 10,130 deaths (7.9% of all deaths) with diabetes as either the underlying cause of death or as an associated cause.
- In terms of premature deaths, diabetes was estimated to be responsible for almost 70,000 years of life lost in 1996—5.3% of the estimated years of life lost by all causes in Australia that year.

whether it be Type 1 diabetes...

- Type 1 diabetes accounts for around 10–15% of people with diabetes.
- Based on self-reported information, in 1995 there were about 39,400 people of all ages with Type 1 diabetes in Australia (220 per 100,000 population). In persons aged 25 years or over, the prevalence of Type 1 diabetes was estimated at 298 per 100,000 for 1999–2000. This corresponds to 37,000 people aged 25 years or over.
- Incidence rates are around 19 per 100,000 population for both males and females aged 0–14 years, based on 743 new cases diagnosed in 2000.

Type 2 diabetes...

- Type 2 diabetes represents about 85–90% of cases of diabetes. In 1999–2000, it is estimated that 7.2% of Australians aged 25 or over had Type 2 diabetes. This represents more than 850,000 Australians 25 years or over.

or gestational diabetes.

- The incidence of gestational diabetes is estimated to be around 5%. The incidence rates may be as high as 20% in Aboriginal and Torres Strait Islander women and in women from high-risk populations such as from India, Asia and the Pacific Islands.

The rates of diabetes in the Australian community are increasing...

- The number of adults with the condition has risen significantly since 1981.

and the epidemic is fed mostly by Type 2 diabetes which is potentially preventable.

- Lifestyle factors such as obesity, physical inactivity, high blood pressure and poor diet are major modifiable risk factors for development of the disease or its complications.
- In 1999–2000 over seven million Australians aged 25 or over (60%) were overweight or obese. These people were at increased risk of developing Type 2 diabetes.
- In 2000, 44% of Australians aged 18–75 years (around 5.8 million people) did not undertake physical activity at high enough levels to get health benefits. Almost 15% of people did no leisure time physical activity at all, increasing their risk of developing Type 2 diabetes.

People with diabetes are more prone to certain problems and diseases...

- People with diabetes are two to four times more likely to develop cardiovascular disease. In 1999–2000, 12% of Australians aged 25 or over with diabetes had had a heart attack and 9% had had a stroke. These proportions were much greater than among people without diabetes (3% and 2%, respectively).
- Diabetic retinopathy is the most common cause of blindness in people aged 30–69 years. In 1999–2000, 15.4% of people with diabetes had retinopathy. In 1995, 9.9% of people who reported diabetes also reported cataracts, 3.2% reported glaucoma and 4.9% reported blindness. This was more than six times the rate of cataracts, four times the rate of glaucoma and five times the rate of blindness reported among people without diabetes.
- In 1995, 6.1% of people who reported diabetes also reported having kidney disease, more than four times the rate among persons without diabetes. In 1999–2000, 11.2% of Australians aged 25 or over with self-reported diabetes reported being treated for or suffering from kidney disease. In 2000, diabetes was the second most common cause of kidney disease among patients receiving dialysis or a kidney transplant, accounting for more than one in five (22%) new patients.
- In 1999–2000, 10.3% of males and 9.4% of females with diabetes had neuropathy. Also, 30.2% of men with self-reported diabetes reported suffering from or receiving treatment for impotence.
- Among people with diabetes, 19.4% were at risk of foot ulcer in 1999–2000. Diabetes complications may also result in amputation: 2.1% of people with self-reported diabetes in 1995 had limbs absent. This was more than four times the rate reported among persons without diabetes, despite the higher mortality of amputees with diabetes.
- People with Type 2 diabetes are about three times more likely to have destructive periodontal disease than those without diabetes.
- Caesarean delivery is three to four times more frequent in pregnancies involving diabetes.

resulting in disability.

- In 1998, almost 64,000 Australians had a disability caused mainly by diabetes.
- Diabetes and its complications were responsible for more than 53,000 years of equivalent 'healthy' life lost to disability (4.6% of all years of life lost to disability) in 1996.

Diabetes consumes substantial health resources.

- The direct health system cost of diabetes in 1993–94 was estimated at $372 million. When the complications of diabetes were taken into account, the total direct health system costs rose to around $681 million.
- In 2000–01, general practitioners managed diabetes problems (excluding gestational diabetes) at a rate of 2.8 per 100 encounters, representing 1.9% of all problems. This equates to almost 2.9 million consultations for diabetes each year and makes diabetes the seventh most common problem managed in general practice.
- In March 2002, 526,631 people with diabetes were registered for National Diabetes Services Scheme (NDSS) benefits; 169,585 (32%) of these required insulin. The NDSS distributed over 2.2 million packets of test strips and almost 430,000 boxes of syringes and pen needles in 2000–01.
- In 1999–00, diabetes as a principal or additional diagnosis accounted for 336,976 hospitalisations (5.7% of all hospital separations), with an average length of stay of 7.0 days compared with 3.6 days for people without diabetes.
- In 1998, the cost of drugs, to patients and the government, to treat diabetes was $119 million; that is, 4% of government and patient costs for all prescription drugs listed in the Pharmaceutical Benefits Scheme.
- In 1999–00, there were 494,611 diabetes patients identified in the Medicare population (3.4%). Of these patients, 27.0% had two glycosylated haemoglobin tests in 1999–00 (that is, one test in each 6-month period), 18.1% had a microalbumin test in 1999–00, 62.9% had a lipid test in 1999–00 and 70.3% had an eye examination between 1998–99 and 1999–00.

Certain Australians are at greater risk of diabetes.

- The prevalence of Type 2 diabetes is considerably higher among Aboriginal and Torres Strait Islander peoples than for the whole Australian population. It may be as high as 30% in some Aboriginal communities, compared with 7% in the general population.
- During 1998–00, Aboriginal and Torres Strait Islander males died from diabetes as the underlying cause at more than seven times the rate of non-Indigenous males, based on available data. The difference in death rates is even larger for females—Aboriginal and Torres Strait Islander females were more than 14 times as likely to die from diabetes as the underlying cause as non-Indigenous females.
- People from the most socioeconomically disadvantaged areas are more likely to have Type 2 diabetes. Males in the lowest socioeconomic group were almost twice as likely to report Type 2 diabetes than those in the highest socioeconomic group. For females, the rate in the lowest socioeconomic group is 2.5 times that in the highest socioeconomic group.
- In 1995, rates of Type 2 diabetes among people from culturally and linguistically diverse backgrounds were more than 40% higher than rates in the general population.
- During 2000, males from culturally and linguistically diverse backgrounds were almost 30% more likely to die from diabetes as the underlying cause than other males. The difference in death rates was larger for females—females from culturally and linguistically diverse backgrounds were 50% more likely to die from diabetes as the underlying cause than other females.