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Contents

Acknowledgments	v
Abbreviations	vi
Symbols	vi
Summary and key findings	vii
1 Introduction	1
Background	2
Purpose and structure of the report	2
2 How many people have diabetes?	7
Introduction	8
Prevalence of diabetes	8
Incidence of diabetes	11
Type 1 diabetes	12
Type 2 diabetes	15
Gestational diabetes	16
3 Risk factors for diabetes and its complications	19
Introduction	20
Impaired glucose regulation	21
Physical inactivity	23
Unhealthy diet	24
Overweight	26
Tobacco smoking	29
High blood pressure	30
High cholesterol and high triglycerides	31
4 Complications of diabetes	33
Introduction	34
Cardiovascular disease	34
Eye disease	38
Kidney disease	40
Nerve damage	42
Foot complications	44
Oral complications	46
Complications in pregnancy	47

5 Population groups.....	49
Aboriginal and Torres Strait Islander people	50
Socioeconomic position.....	54
Geographical location.....	58
Overseas-born.....	63
6 Use of health services.....	69
Introduction.....	70
Medical and allied health services.....	70
Hospitalisations.....	72
Medicines use.....	74
Pathology and other tests	77
Programs and services	77
7 Impact	79
Introduction.....	80
Quality of life.....	80
Burden of disease.....	83
Costs	84
8 Mortality.....	87
Diabetes as the underlying cause of death.....	88
Diabetes as an underlying or associated cause of death	90
Diabetes-related deaths	91
Causes of death commonly listed with diabetes	91
Deaths of people on the National Diabetes Register	92
Appendixes.....	93
Appendix 1: Methods, definitions and main data sources	94
Appendix 2: Diabetes indicator data reference table	102
Glossary	105
References	109
List of tables.....	117
List of figures	118

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Abbreviations

ABS	Australian Bureau of Statistics
AIHW	Australian Institute of Health and Welfare
ANDIAB	Australian National Diabetes Information Audit and Benchmarking
ANZDATA	Australia and New Zealand Dialysis and Transplant Registry
APEG	Australasian Paediatric Endocrine Group
AusDiab	Australian Diabetes, Obesity and Lifestyle study
BEACH	The Bettering the Evaluation and Care of Health study
BMI	body mass index
CHD	coronary heart disease
CVD	cardiovascular disease
DoHA	Australian Government Department of Health and Ageing
DDD	defined daily dose
ESKD	end-stage kidney disease
GDM	gestational diabetes mellitus
GP	General Practitioner
HbA1c	glycosylated haemoglobin
HDL	high-density lipoprotein
ICD-10	International Statistical Classification of Diseases and Related Health Problems, 10th revision
ICD-10-AM	International Statistical Classification of Diseases and Related Health Problems, 10th revision, Australian modification
IFG	impaired fasting glucose
LDL	low-density lipoprotein
NATSIHS	National Aboriginal and Torres Strait Islander Health Survey
NDR	National Diabetes Register
NDS	National Diabetes Strategy
NDSS	National Diabetes Services Scheme
NHS	National Health Survey
OGTT	oral glucose tolerance test
PVD	peripheral vascular disease
WHO	World Health Organization

Symbols

\$	Australian dollars, unless otherwise specified	n.a.	not available
–	nil or rounded to zero	>	greater than
%	per cent	≥	greater than or equal to
g	gram	<	less than
kJ	kilojoule	≤	less than or equal to
mmHg	millimetres of mercury	n.r	not reported
mmol/L	millimoles per litre		

Summary and key findings

Diabetes: Australian facts 2008 is the second in the series of national reports providing an overview of diabetes, a serious chronic disease affecting many Australians. The report contains the most recent national data on prevalence, incidence, risk factors, and complications of diabetes. In this edition, a separate chapter on diabetes in specific population groups is also included.

Some of the main findings about the impact of diabetes on the Australian community are given below.

Its prevalence continues to rise. The most recent national data show that the prevalence of diagnosed diabetes more than doubled between 1989–90 and 2004–05. Diabetes and its complications were responsible for around 8% of the total burden of disease in Australia in 2003.

It can have severe complications. Notably a person with diabetes is at greater risk of developing cardiovascular, eye and kidney diseases. In 2004–05 people with diabetes were twice as likely as those without it to have had a heart attack and three times as likely to have

had a stroke in 1999–2000. People with diabetes were twice as likely to have cataracts or glaucoma as those without diabetes and nearly a third of people starting treatment for end stage kidney disease did so because of diabetic nephropathy.

Type 2 diabetes is largely preventable. Control of modifiable risk factors, such as overweight and obesity and physical inactivity, are central to preventing Type 2 diabetes and can help reduce the complications associated with diabetes. However, prevalence of a key risk factor, overweight and obesity, is increasing.

Some population groups are at much higher risk. Aboriginal and Torres Strait Islander peoples are 3 times as likely as non-Indigenous people to have diabetes and have much greater hospitalisation and death rates than other Australians. Diabetes prevalence and death rates for the worst-off fifth of the population are nearly twice as high as for the best-off fifth of the population.

More detailed findings of the report are given in the next section 'Key findings'.

Key findings

Diabetes is one of the leading chronic diseases affecting Australians...

- An estimated 700,000 Australians (3.6% of the population) had diagnosed diabetes in 2004–05.
- In addition, there are many more cases of diabetes that have not been diagnosed. The most recent national data on this indicate one undiagnosed case for every one diagnosed case.
- In 2005, nearly 3% of deaths in Australia were directly due to diabetes and it contributed to another 6% of deaths—nearly 12,000 deaths in total.
- Diabetes was responsible for 5.5% of the total burden of disease in Australia in 2003; 92% of this burden was due to Type 2 diabetes, which is by far the most common type. When the contribution of diabetes to stroke and heart disease is also included, it accounted for 8.3% of the total disease burden.

Diabetes in Australia continues to rise...

- Between 1989–90 and 2004–05, the proportion of people with diagnosed diabetes more than doubled from 1.3% to 3.3%.
- The rise is largely driven by an increase in the prevalence of Type 2 diabetes; however, Type 1 diabetes and gestational diabetes are also on the rise.
- Between 2000–01 and 2004–05, the rates of diabetes hospitalisation increased by 35%, from 1,932 hospitalisations per 100,000 people to 2,608 per 100,000.

It is a serious disease....

- It was treated in over 500,000 hospitalisations in 2004–05.
- More than half (56%) of the people with diagnosed diabetes in 2003 also had a disability. A quarter considered diabetes as the main condition causing their disability.

... which reduces quality of life

- People with diabetes were more likely to rate their own health as fair or poor (48%) than those without diabetes (15%) in 2004–05.
- People with diabetes were more likely than those without diabetes to report high or very high levels of psychological distress (18% compared with 12% respectively).

... and has serious complications

- Heart disease rates are higher in people with diabetes. In 2004–05 people with diabetes were twice as likely as those without it to have had a heart attack (age-standardised rate of 3% and 1.5% respectively) and nearly 3 times as likely to have had a stroke (age-standardised rate of 5% and 2% in 1999–2000).
- People with diabetes are much more likely to suffer eye problems:
 - About 22% of people with previously diagnosed Type 2 diabetes and 6.2% of people with newly diagnosed Type 2 had retinopathy in 1999–2000.
 - Self-reported data for 2004–05 showed that 9% of people with diabetes had cataracts and 6% had glaucoma, twice the rates reported by people without diabetes.
 - Visual disturbances or loss of vision, or complete or partial blindness was reported by 7% of people with diabetes. About 2% of people with diabetes were completely or partially blind.
- In 2005, nearly a third of people starting treatment for end stage kidney disease (ESKD) did so because of diabetic nephropathy. This was an increase of 28% since 2001.
- Nerve damage is a common complication of diabetes and in extreme situations can lead to leg or foot amputations. In 1999–2000, over 10% of males and 9.4% of females with newly diagnosed diabetes had clinical signs of neuropathy.

- In 2004–05 there were 3,394 lower limb amputations among people with diabetes. More males than females had lower limb amputations in that period (70% of amputations were for males).
- In 1999–2000 about 30% of men with self-reported diabetes were suffering from impotence which is likely to be linked to their diabetes.

Diabetes and its complications incur substantial health system costs

- The direct health-care expenditure on diabetes in 2004–05 was \$907 million, which accounted for nearly 2% of the allocatable recurrent health expenditure in that year.

Not all diabetes is the same...

- Type 1 affects 10%–15% of people with diabetes. It requires daily insulin therapy for survival.
- In 2005, nearly 1,700 persons under age 40 years were first diagnosed with Type 1 diabetes in that year. This equates to 23 new cases per 100,000 children aged 0–14 years and 11 new cases per 100,000 for people aged 15–39 years.
- About 83% of self-reported cases of diagnosed diabetes in 2004–05 were Type 2. Type 2 diabetes is more common among people aged 45 years or over and is marked by the inability of the body to use insulin properly (insulin resistance) and reduced levels of insulin.
- Around 1 in 20 pregnant women are affected by gestational diabetes mellitus (GDM)—a form of diabetes that develops during pregnancy in some women and is a strong marker for the later development of Type 2 diabetes.
- Of women giving birth in Australian hospitals in 2004–05, 4.2% (10,900 births) had GDM.

Control of modifiable risk factors is the key to prevention

- Overweight and physical inactivity are the main modifiable risk factors responsible for Type 2 diabetes.
- In 2004–05, an estimated 51% of Australians aged 15 years and over were overweight or obese (based on self-reported information).
- People with diabetes are more likely than those without diabetes to be overweight or obese (69% compared with 51%, respectively, in 2004–05). Being overweight or obese also increases their risk of diabetes complications such as coronary heart disease (CHD), stroke and peripheral vascular disease (PVD).
- An estimated 70% of Australians aged 15 years or over in 2004–05 did insufficient physical activity, as did two out of three people with diabetes.

Some population groups are more susceptible to diabetes than others

Aboriginal and Torres Strait Islander peoples

- In 2004–05, the prevalence of diabetes among Indigenous people was estimated to be over 3 times the rate of non-Indigenous people.
- In the same year, 62% of Indigenous people aged 15 years and over were estimated to be either overweight or obese, compared with 51% of non-Indigenous people.
- Diabetes hospitalisations for Indigenous people were nearly 11 times as high as for other Australians in 2004–05. Hospitalisations for kidney complications among Indigenous people were 29 times as high as for other Australian people.
- The death rate from diabetes among Indigenous people was almost 12 times that experienced by non-Indigenous Australians.

KEY FINDINGS CONTINUED OVERLEAF

- Death rates from renal complications among Indigenous people were 19 times that of non-Indigenous people and deaths from CHD, stroke, PVD and lower limb ulcers were approximately 7 times as high.

People from lower socioeconomic groups

- Diabetes prevalence rates among people in the fifth of the population with the lowest socioeconomic position are nearly twice as high as those in the fifth of the population with the highest socioeconomic position.
- Diabetes death rates increased with decreasing socioeconomic position. During 2003–2005, the diabetes death rate in the lowest socioeconomic group was nearly twice the rate in highest socioeconomic group.

People from different geographical areas

- In 2004–05, the respective hospitalisation rates for diabetes among people living in Remote and Very Remote areas were 2 and 3 times as high as the rate for people living in Major Cities.

- The death rate from diabetes among people living in Remote and Very Remote areas was 2 and 4 times that experienced by people in Major Cities.

People born overseas

- People born in some overseas countries have higher rates of diabetes than those born in Australia: diabetes prevalence was 7% among those born in North Africa and the Middle-East, 6% among those born in South-East Asia and 5% in each of the populations born in Southern and Eastern Europe and Oceanic countries (excludes Australia), while Australian-born people had a prevalence rate of 3%.
- Death rates from diabetes among people born overseas were higher than the rate among Australian-born people. The highest rates were recorded for those born in South-East Europe and North Africa and the Middle-East (60% and 50% as high as the rate for Australian-born).