



Diabetes Facts – 2011

Australian Diabetes Council is the leading charity dealing with diabetes

Prevalence

More than 3.5 million Australians have diabetes or pre-diabetes. Worldwide – 285 million people have diabetes (1)

What is diabetes?

Diabetes is a chronic disease that occurs when there is too much glucose in the blood because the body is not producing insulin or not using insulin properly. Insulin is a hormone needed for glucose to enter the cells and be converted to energy.

Two main types of diabetes

Type 1 diabetes (insulin dependent)	Type 2 diabetes (non-insulin dependent)
<ul style="list-style-type: none">◆ Occurs when the pancreas no longer produces the insulin needed◆ Represents 10 to 15% of all cases of diabetes◆ Is one of the most common chronic childhood diseases in developed nations◆ Is not primarily caused by lifestyle factors◆ Type 1 diabetes is increasing at about 3% a year (2)	<ul style="list-style-type: none">◆ Occurs when the pancreas is not producing enough insulin and the insulin is not working effectively◆ Represents 85 to 90% of all cases of diabetes◆ Risk factors include family history, ethnic background and being overweight – particularly around the waist◆ Lifestyle factors such as unhealthy eating and lack of physical activity can contribute to the development of type 2 diabetes
Diagnosis Usually in childhood or young adulthood, although it can occur at any age.	Diagnosis Usually in adults over the age of 45 <u>but it is increasingly occurring at a younger age.</u>
Symptoms Usually abrupt onset. Symptoms can include excessive thirst and urination, unexplained weight loss, weakness and fatigue, irritability.	Symptoms Sometimes symptoms go unnoticed as the disease develops gradually. Symptoms may include any of those for type 1 diabetes plus blurred vision, skin infections, slow healing, tingling and numbness in the feet. Sometimes no symptoms are noticed at all.
Management Lifelong daily insulin injections or use of an insulin pump, regular blood glucose level tests, healthy eating and regular physical activity.	Management Regular physical activity and healthy eating. Over time treatment may progress from lifestyle modification to requiring blood glucose-lowering tablets and/or insulin injections.

Impaired Fasting Glucose or Impaired Glucose Tolerance (previously known as pre-diabetes) (3)

Conditions when blood glucose levels are higher than normal but not yet high enough for a diagnosis of type 2 diabetes. Left untreated they may develop into type 2 diabetes within 5 to 10 years. Treatment involves healthy eating and regular physical activity.

Gestational diabetes (3)

Gestational diabetes is a form of diabetes that occurs in pregnancy and mostly disappears after the birth.

- ◆ The woman's body may not be able to make enough insulin or may not be able to use it correctly during this time.
- ◆ The extra stress of pregnancy on the body can cause high blood glucose levels
- ◆ It is usually found by having a blood test between 24 and 28 weeks of pregnancy
- ◆ Up to 50% of woman may develop type 2 diabetes within five years

Complications

Complications include increased risk of heart disease and stroke, blindness, kidney failure, limb amputation and erectile dysfunction in men.

Diabetes and heart disease/stroke. Diabetes is also often associated with high blood pressure and high blood fats (cholesterol and triglycerides) and causes an increased risk of heart attack and stroke. Close to 80% of people with diabetes will die from a heart attack or stroke (3).

Diabetes and eye disease. Retinopathy is a major long-term complication of diabetes. It affects about 1 in 4 people with diabetes (4). The development of retinopathy is strongly related to the length of time diabetes has been present and the degree of blood glucose control. Regular eye checks and treatment can help prevent vision loss.

Diabetes and kidney disease. Diabetes is the fastest growing cause of kidney failure. It is the leading cause of end stage renal disease (ESRD). About 30% of people with diabetes will develop kidney disease (5).

Diabetes and lower limbs. Neuropathy or peripheral nerve disease and blood vessel damage may lead to leg ulcers and serious foot problems from which limb amputation may result.

Statistics

- ◆ Diabetes is the sixth highest cause of death by disease in Australia (6)
- ◆ People with diabetes are twice as likely to have high blood pressure and also are more likely to have elevated blood fats e.g. cholesterol, triglycerides (2)
- ◆ They are two times more likely to have cardiovascular disease, e.g. heart disease and stroke (2)
- ◆ One in four Australian adults has either diabetes or impaired glucose metabolism (3)

People with diabetes in 2005 (2)

- ◆ 15% were hospitalised with coronary heart disease (2)
- ◆ 38,700 Australians were hospitalised for eye complications caused by diabetes (2)
- ◆ 90% undergoing a lower limb amputation had a history of ulceration (2)
- ◆ 3,400 had amputations (65 a day) (2)
- ◆ 11% of people with diabetes have had a heart attack (2)
- ◆ 23% died from kidney disease (2).

The Human Burden

- ◆ Diabetes is Australia's fastest growing chronic disease (3)
- ◆ An estimated 2.4 million Australians have pre-diabetes (3,6)
- ◆ One person is diagnosed every 5 ½ minutes (7)
- ◆ About 1,200,000 Australians are officially diagnosed with diabetes. However, for every one diagnosed, another is undiagnosed (3,6)
- ◆ Diabetes prevalence has increased approximately 10% per annum for the past decade (7). Based on this, by 2016, Australian Diabetes Council expects the number of people with diagnosable diabetes to total approximately 3.5 million (7)
- ◆ The total number of people with diabetes and pre-diabetes at present is 3.5 million (3,6,7).

High risk categories

People are at risk of developing diabetes if they are:

- ◆ Over 45 years of age and have high blood pressure or high blood fats (cholesterol and/or triglycerides)
- ◆ Over 45 years of age and overweight
- ◆ Over 45 years of age and one of more members of the family has/had diabetes (People with a family history of diabetes have 2 to 6 times the risk of developing type 2)
- ◆ Over 55 years of age
- ◆ Have heart disease or had a heart attack
- ◆ Have/had high blood glucose levels during pregnancy (gestational diabetes)
- ◆ Have (pre-diabetes) Impaired Fasting Glucose (IFG) or Impaired Glucose Tolerance (IGT)
- ◆ Have Polycystic Ovarian Syndrome

- ◆ Over 35 years of age and are an Aboriginal or Torres Strait Islander (Indigenous Australians are 10 times as likely to have diabetes than other Australians (3). In 2000-01, death rates from diabetes among Indigenous Australians were almost 15 times as higher than other Australians (2)
- ◆ Over 35 years of age and from Pacific Islands, Indian subcontinent or Chinese background (Certain overseas born Australians have a higher prevalence of diabetes than people born in Australia (2)

The cost burden (8)

- ◆ Type 2 diabetes costs Australia \$3 billion a year
- ◆ The cost of diabetes to the community for a person with no complications is \$9,625 a year
- ◆ For a person with complications, the cost to the community is \$15,850
- ◆ The 4% of people who have diagnosed diabetes account for 12% of the total health costs in Australia

Diabetes research

There is no cure for either type 1 or type 2 diabetes. The Australian Diabetes Council funds a Chair in Diabetes at the University of Sydney.

Lifestyle changes can prevent or delay type 2 diabetes.

For more information:

Phone: 1300 DIABETES (1300 342 238) Website: www.australiandiabetescouncil.com

References: (1) Diabetes Atlas. IDF, 2009; (2) Diabetes: Australian Facts. AIHW, 2008; (3) AusDiab 2005. IDI, 2006; (4) Vision Australia Foundation; (5) International Diabetes Federation, 2009; (6) Australian Bureau of Statistics, 2006 (7) NDSS, 2011 (8) DiabCost. Diabetes Australia, 2003