



Incidence of insulin-treated diabetes, 2019

An estimated 1 in 20 (4.9% or 1.2 million) Australians had diabetes in 2017–18. This estimate is based on self-reported data from the Australian Bureau of Statistics 2017–18 National Health Survey, so it is likely that there are many more Australians who have diabetes but have not been diagnosed.

Many people with diabetes rely on insulin to manage their condition. This fact sheet presents the latest data on new cases of type 1 diabetes and insulin-treated type 2 diabetes for 2019 from the National (insulin-treated) Diabetes Register (NDR).

What is diabetes?

Diabetes is a chronic condition marked by high levels of glucose (sugar) in the blood. It is caused either by the inability of the body to produce insulin (a hormone made by the pancreas to control blood glucose levels) or by the body not being able to use insulin effectively, or both.

There are 3 main types of diabetes: type 1, type 2 and gestational. All people with type 1 diabetes, and a proportion of people with type 2 and gestational diabetes, will require insulin replacement therapy.

Type 1 diabetes

In 2019, just under 3,100 people were diagnosed with type 1 diabetes—13 cases per 100,000 population, or around 1 in every 8,000 Australians. The incidence rate was higher in males than in females (15 per 100,000 males compared with 11 per 100,000 females). Around six in 10 (57%, or 1,800) people diagnosed with type 1 diabetes were aged under 25, with the highest incidence rate among those aged 10–14 (32 cases per 100,000 population) (Figure 1).

There were 130 new cases of type 1 diabetes among Aboriginal and Torres Strait Islander people. After adjusting for differences in the age structures between the populations, the incidence rate was similar among Indigenous Australians and non-Indigenous Australians (13 and 12 cases per 100,000 population, respectively).

Incidence rates were lower in *Remote and very remote* areas (10 cases per 100,000 population) than other areas (12–16 cases per 100,000 population). Rates across socioeconomic areas ranged from 12 to 14 cases per 100,000 population.

Quick facts

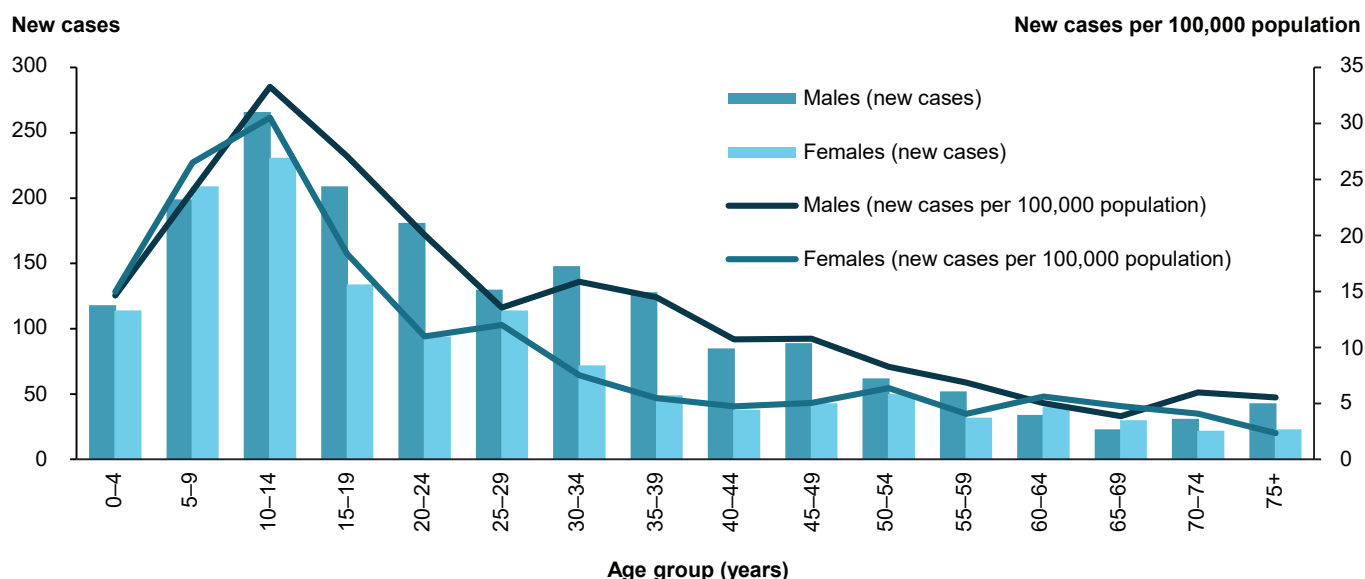
In 2019, **30,800** people began using insulin to treat their diabetes.



Of these:

- **16,600** (54%) people had type 2 diabetes
- **10,400** (34%) females had gestational diabetes
- **3,100** (10%) people were newly diagnosed with type 1 diabetes
- **560** (2.0%) people had other forms of diabetes
- for **150** people, the diabetes type was unknown

Figure 1: Incidence of type 1 diabetes, by age at diagnosis and sex, 2019

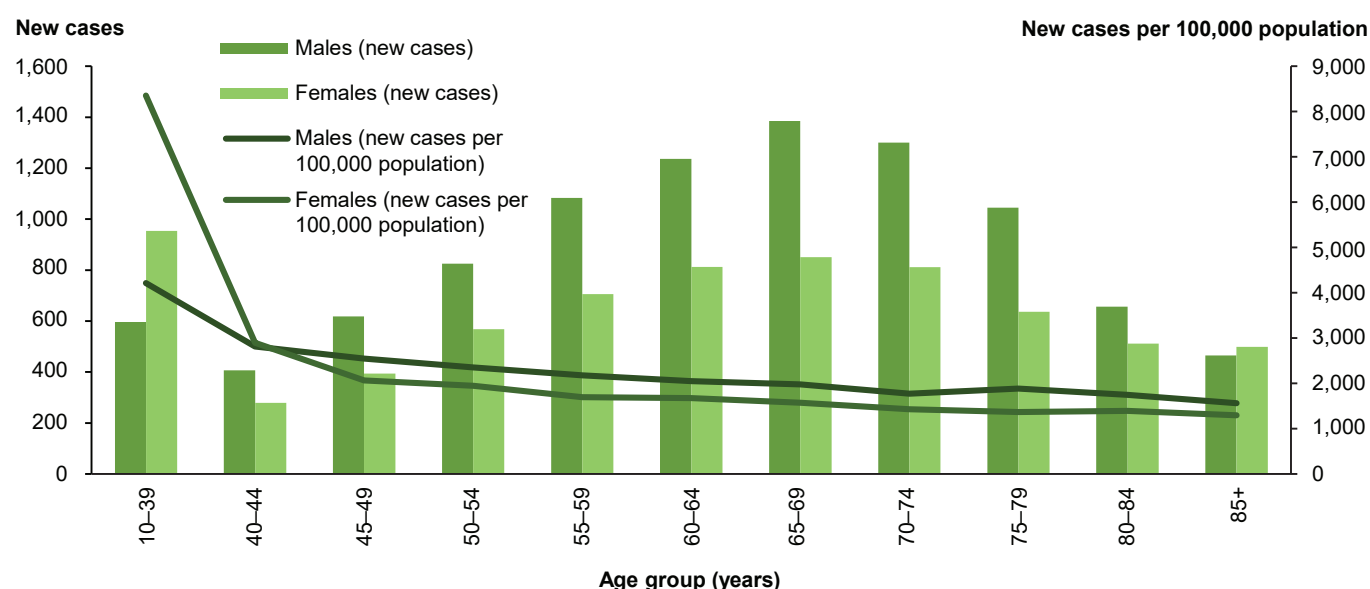


Insulin-treated type 2 diabetes

In 2019, over 16,600 people began using insulin to manage type 2 diabetes for the first time—4,100 cases per 100,000 population with type 2 diabetes not previously using insulin, or around 1 in every 24 (Figure 2).

The incidence rate was 1.6 times higher in females than in males—5,100 per 100,000 females with type 2 diabetes compared with 3,200 per 100,000 males with type 2 diabetes—and nearly twice as high among those living in *Major cities* compared with those in *Remote and very remote* areas (4,300 and 2,400 cases per 100,000 population with type 2 diabetes, respectively). Incidence rates across socioeconomic areas ranged from 4,000 to 4,400 cases per 100,000 population with type 2 diabetes not previously using insulin.

Figure 2: Incidence of insulin-treated type 2 diabetes, by age at first insulin use and sex, 2019



For more information, see the *Incidence of insulin-treated diabetes in Australia data tables* and the *NDR data quality statement*.