



Epilepsy in Australia

Every year, thousands of Australians are hospitalised for epilepsy. This chronic neurological condition affects about 151,000 people and, in 2018–19, accounted for about \$333 million in health expenditure.

Around 7 in 10 people become seizure free with medication. However, this means that 3 in 10 people do not find an effective or suitable pharmaceutical treatment. Whether under control or not, an epilepsy diagnosis means lifelong management, and many sufferers experience difficulties with their work, education and health as a result. About half of all people with epilepsy also have physical or psychiatric conditions, which can lead to poorer health outcomes, increased health care needs, decreased quality of life and greater social exclusion.

This fact sheet highlights the main findings from a new web report, *Epilepsy in Australia*, the first AIHW report on epilepsy.

What is epilepsy?

Epilepsy is one of the most common and disabling chronic neurological conditions. It is characterised by recurrent seizures, which are caused by a temporary disruption of the electrical activity in the brain. The causes of the condition are still not well understood and never identified for many sufferers. Known causes include injury and stroke, prolonged oxygen deprivation, brain infections and tumours, neurodegenerative conditions (such as dementia) and congenital abnormalities.

Epilepsy involves many different types of seizures, including changes to sensation, awareness, behaviour or movement. Not all seizures involve convulsions.

Who is most likely to have epilepsy?

Although epilepsy affects people of all ages, it is most common in people aged 65 and over. According to the 2017–18 National Health Survey, 0.9% (31,800 people) of people in this age group self-reported a diagnosis of epilepsy. In 2018–19, Aboriginal and Torres Strait Islander Australians were twice as likely to report having epilepsy as non-Indigenous Australians (1.2% and 0.6%, respectively).

How does epilepsy affect a person's life?

People living with epilepsy may experience poor health or die prematurely as a result of their condition. Both the fatal (dying prematurely) and non-fatal (living with poor health or disability) impact of epilepsy can be measured by burden of disease analysis. According to the Australian Burden of Disease Study, in 2018, the burden of disease for epilepsy was highest among:



15–19 year olds
for years of
healthy life lost
(3,600 years)



5–9 year olds for
years living with a
disability
(3,000 years)



35–39 year olds
for years of life
lost
(930 years)

Quick facts

- Epilepsy affects about 1 in 160 Australians.
- In 2018–19, there were 31,400 hospitalisations and more than 20,600 emergency department presentations associated with epilepsy.
- In 2019, epilepsy contributed to about 1,100 deaths in Australia.

What treatments are available?

Around two-thirds of people with epilepsy can control their seizures with anti-epileptic medications. In 2019–20, 3.1 million prescriptions for antiepileptic medications were dispensed to around 388,000 people in Australia – an average of 8 prescriptions per person. However, epileptic medications can also be used for other purposes, so these data may not relate entirely to epilepsy.

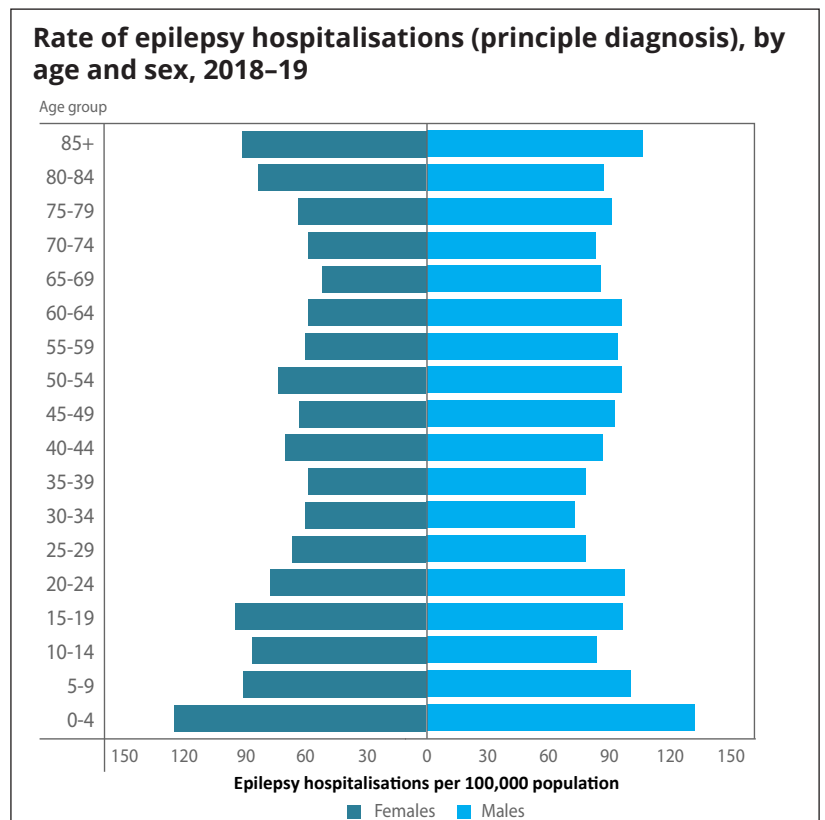
There are also surgical options for people who cannot control their seizures with medications. In 2018–19, about 450 epilepsy-related surgical procedures were performed in hospitals around Australia.

How do hospitalisation rates vary?

There were 31,400 hospitalisations associated with epilepsy in 2018–19 – in two-thirds of these cases, epilepsy was recorded as the principal, or main, diagnosis.

Children aged 0–4 years were the most likely to be hospitalised with a principal diagnosis of epilepsy (132 hospitalisations per 100,000 people for males and 125 for females). Hospitalisations with a principal and/or an additional diagnosis of epilepsy were most common for people aged 85 and over (221 and 175 hospitalisations per 100,000 people for males and females, respectively).

Rates of hospitalisations were higher in Remote and Very remote areas than other geographic areas, and increased with increasing socioeconomic disadvantage.



Hospitalisations among Indigenous Australians were 3.5 times as high as among non-Indigenous Australians (390 and 113 hospitalisations per 100,000 people, respectively).

There were over 20,600 emergency department presentations associated with epilepsy in 2018–19, with males more likely to present to the emergency department than females (92.4 and 72.4 presentations per 100,000 people, respectively).

How do death rates vary?

In 2019, epilepsy contributed to about 1,100 deaths, or 0.7% of all deaths that occurred in Australia that year. In 8 of 10 cases, epilepsy was an associated cause of death, meaning that it was not the main cause of death.

‘All cause’ death rates for epilepsy (those where epilepsy is the main or associated cause of death) fell from 4.6 deaths per 100,000 in 1997 to 3.7 per 100,000 in 2019. Over this time, males have continually had higher death rates than females (about 1.5 times as high).

In 2019, all cause death rates increased with age, remoteness and disadvantage, and were more than 3 times as high among Indigenous Australians as non-Indigenous Australians (12.1 and 3.5 deaths per 100,000, respectively).

For more information, see the full report [Epilepsy in Australia](#).