



## 3.17 Opioid harm

Statistics for Australia show recent increases in the use of opioids, and opioid-related poisonings, overdoses and deaths. This reflects international trends.

Opioids are chemical substances that have a morphine-type action in the body. They are most commonly used for pain relief, but are addictive and can lead to dependence. Opioid drugs can be either illicit (predominantly heroin) or prescription (including codeine, which has been a prescription-only medication in Australia since February 2018). They include:

- opiates—drugs naturally derived from the opium poppy, such as codeine and heroin
- semi-synthetic opiates, such as hydromorphone and oxycodone
- synthetic opioids, such as fentanyl and methadone.

Because opioids are addictive, there is the potential for dependence and misuse for both therapeutic and illicit opioids. Harm from the use of opioids can be social (for example, crime), mental/behavioural and physical. This snapshot focuses on the physical and mental/behavioural harms, in particular poisonings and dependence.

### How common is opioid use and misuse?

#### Prescription opioids

Opioids are medically prescribed for two main reasons: pain management and the treatment of heroin and other opioid dependence—commonly referred to as Opioid Substitution Therapy or pharmacotherapy.

The AIHW's analysis of Pharmaceutical Benefits Scheme data shows that 11.1 million opioid prescriptions were dispensed in 2014–15.

Opioid prescriptions rose by 24% between 2010–11 and 2014–15, from 369 to 456 prescriptions per 1,000 population.

Oxycodone (and oxycodone/naloxone) accounted for 1 in 3 (34%) opioids prescribed in 2014–15, prescriptions for which increased by 68% over the period (from 2.3 million to 3.8 million). Codeine prescriptions were the second most common opioid prescription in 2014–15, accounting for almost 1 in 4 (23%).

#### Misuse and illicit use of opioids

Using self-reported data from the National Drug Strategy Household Survey of people aged 14 and over in 2016:

- 3.6% had recently used pharmaceutical opioids for non-medical purposes
- of those reporting use, over-the-counter codeine products were the most common (2.5%), followed by prescription codeine products (for example, Panadeine Forte) (1.4%). Less common was oxycodone (0.6%), tramadol (0.3%), morphine (0.1%) and fentanyl (<0.1%)
- only a small proportion (1.3%) reported ever using heroin in their life, and 0.2% reported using recently (in the last 12 months). However, 49% of recent users reported using heroin once a week or more.



## Impact

Opioid use and misuse can result in dependence, overdose, physical harm or, in the worst case, death. In 2011, opioid use was responsible for 0.9% of the total burden of disease and injuries. Most of the burden due to opioid use was due to accidental poisoning (63%) and opioid dependence (29%). A further 7.8% of the burden due to opioid use was from suicide and self-inflicted injuries.

The National Hospital Morbidity Database can be used to calculate the rate of hospitalisations with a principal diagnosis of poisoning or mental and behavioural disorders due to opioids. This rate indicates the impact over time on Australia's hospital system of opioid use and misuse. The National Mortality Database can be used to report on deaths from opioid poisoning.

In recent years, opioid-related hospitalisations and deaths have risen:

- In 2015–16, the rate of hospitalisations with an opioid-related principal diagnosis was 37 per 100,000 population, a 12% increase since 2011–12 (33 per 100,000 population).
- Analysis of the National Mortality Database found that, in 2016, more than 1,100 drug-induced deaths mentioned opioid poisoning (one or more times), up 89% from 591 deaths in 2007.



### Of opioid deaths in 2016:

- 550 mentioned **other opioids** (includes prescription painkillers such as oxycodone, morphine and codeine)
- 361 mentioned **heroin**
- 208 mentioned **methadone**
- 234 mentioned **other synthetic narcotics** (for example, fentanyl and tramadol).

## Treatment and management

Some treatment for acute poisoning and overdose is provided in hospitals to admitted patients or by emergency departments and general practitioners to non-admitted patients. There are also specialised Alcohol and Other Drug Treatment Services (AODTS) that provide a range of treatments for clients who use, misuse or are dependent on opioids. These treatments include counselling, information and education, rehabilitation, support and case management, withdrawal management and/or pharmacotherapy. Information about the treatment provided is captured in the AODTS National Minimum Data Set (see Chapter 7.19 'Specialised alcohol and other drug treatment services').

In 2016–17:

- heroin was the fourth most common principal drug of concern (5.2% of closed treatment episodes) and was listed as a drug of concern (principal or additional) in 7.5% of closed treatment episodes
- an opioid pharmaceutical (for example, codeine, oxycodone, fentanyl or methadone) was the principal drug of concern in 3.3% of closed treatment episodes and a drug of concern (principal or additional) in 6.8% of closed treatment episodes.



Opioid pharmacotherapy treatment is one of the main types of treatment used for opioid drug dependence. It involves replacing the opioid drug of dependence with a legally obtained, longer lasting opioid (methadone, buprenorphine or buprenorphine–naloxone) that is taken orally. Clients receive pharmacotherapy treatment for a range of opioid drugs (both prescribed and illegal) to reduce withdrawal symptoms, the desire to take opioids, and the euphoric effect of taking opioids. This treatment type is captured for a particular day (snapshot) in the National Opioid Pharmacotherapy Statistics Annual Data (NOPSAD) collection.

Based on the NOPSAD, on a snapshot day in June 2017, nearly 50,000 people in Australia (20 per 10,000 population) received opioid pharmacotherapy treatment. Of these clients:

- 38% reported heroin as their opioid drug of dependence, followed by oxycodone (5.2%), morphine (4.3%), codeine (4.2%) and methadone (4.1%)
- the median age (across all pharmacotherapy types) was 42
- around two-thirds (65%) were male.

### What is missing from the picture?

In Australia, medicines containing codeine were available over-the-counter until 1 February 2018. Reporting of pharmaceutical prescriptions does not reflect the total amount of codeine obtained before this date.

National data on drug-related ambulance attendances are currently not available. Emergency departments are a key source of treatment for opioid-related poisonings. No data on emergency department presentations are included in this snapshot due to data limitations (which limit the ability to accurately determine the substances involved in poisoning presentations).

This snapshot does not capture harms relating to violence and injury arising from opioid use because data are incomplete; it can also be difficult to attribute these harms to opioids directly.

### Where do I go for more information?

More information on opioid drug use is available at <[www.aihw.gov.au/reports-statistics/beaviours-risk-factors/illicit-use-of-drugs/overview](http://www.aihw.gov.au/reports-statistics/beaviours-risk-factors/illicit-use-of-drugs/overview)>.

More information on opioid treatment services is available at <[www.aihw.gov.au/reports-statistics/health-welfare-services/alcohol-other-drug-treatment-services/overview](http://www.aihw.gov.au/reports-statistics/health-welfare-services/alcohol-other-drug-treatment-services/overview)>.

More information on causes of death in Australia is available at <[www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/3303.0Main+Features12016?OpenDocument](http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/3303.0Main+Features12016?OpenDocument)>.

The following report and other recent releases relating to this topic are available for free download on the AIHW website: *Non-medical use of pharmaceuticals: trends, harms and treatment 2006–07 to 2015–16*.