

Opioid-, amphetamine-, and cocaine-induced deaths in Australia: August 2018



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Background

- This bulletin reports on opioid-, amphetamine-, and cocaine-induced deaths in Australia up until 2016, as provided by the Australian Bureau of Statistics (ABS) using data from the National Coronial Information System (NCIS). Data for 2015 and 2016 are not final as the ABS applies a revisions process to coroner certified deaths.
- This bulletin has changed from previous versions, now reporting on deaths of accidental, intentional, and undetermined intent (previously accidental only). Data reported here relate to opioid-, amphetamine-, and cocaine-induced deaths (i.e., directly attributable to drug use, e.g., overdose).
- A new accompanying visualisation has additional data by jurisdiction. It also reports on drug-induced deaths where amphetamine or cocaine are contributory (capturing where cocaine or methamphetamine contributed to, but another drug caused, death).
- The visualisation also allows viewers to look at trends over time by drug, opioid class, jurisdiction, sex, age group, intent, and adjust the display to show different disaggregation of data.
- Full details of methods are available for download; this document and the ABS Explanatory Notes 50-58 should be read alongside this bulletin and use of the online interactive data visualisation.

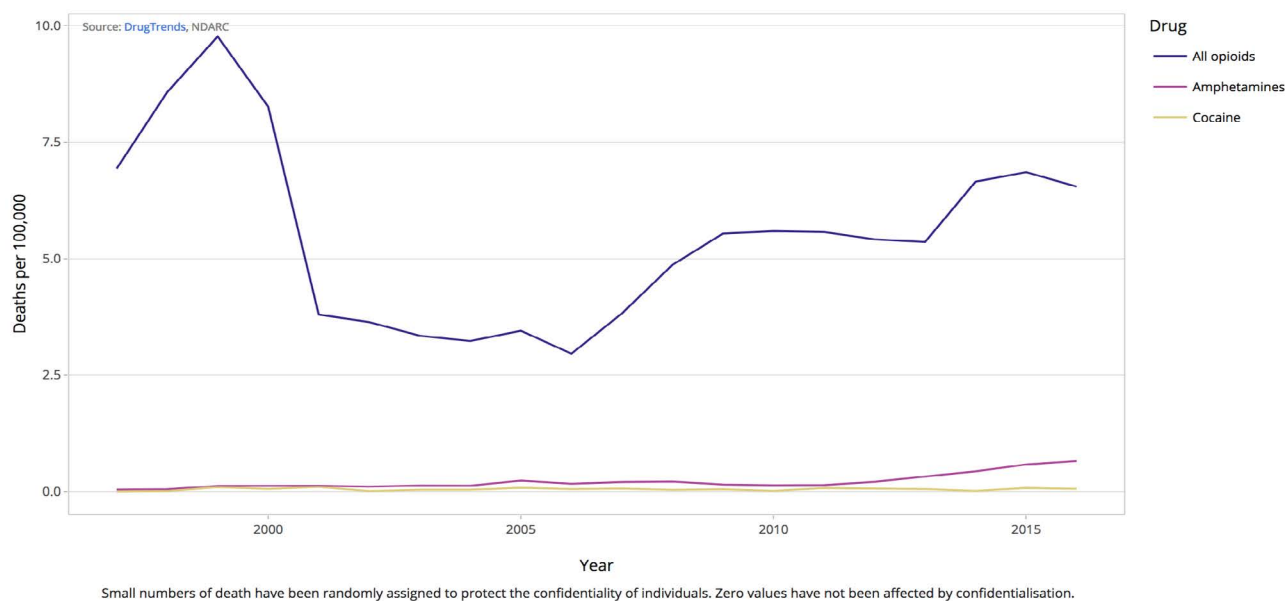
Opioids

- In 2016, there were 1,045 opioid-induced deaths among Australians aged 15-64 years (6.6 per 100,000 people) compared to 1,083 in 2015 (6.9 per 100,000 people). This represents an increase over the last 10 years from 3.8 per 100,000 people in 2007, although lower than rates recorded in the late 1990s (Figure 1).
- Increased opioid-induced deaths have also been observed over the last ten years in the UK and the US. Australian rates have not reached those seen in North America. The US now reports more deaths attributable to illicit fentanyl than heroin. There is little evidence of illicit fentanyl deaths occurring in large numbers in Australia; only single case studies of deaths have been identified.
- The majority (85%, n=890) of deaths in 2016 were considered accidental; one-tenth (12%; n=123) intentional; and a minority (3%, n=32) undetermined intent. This pattern has been consistent over the last 10 years.

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Figure 1: Rate of opioid-, amphetamine-, and cocaine-induced deaths in Australia 1997-2016



Small numbers of death have been randomly assigned to protect the confidentiality of individuals. Zero values have not been affected by confidentialisation.

Opioid-induced deaths by opioid

- In 2016, two-thirds (65%, n=679) of deaths were attributed to pharmaceutical opioids only; one-quarter to heroin only (24%, n=247); and 11% (n=111) to both pharmaceutical opioids and heroin. There were 498 deaths attributed to natural and semi-synthetic opioids (e.g. morphine, codeine, and oxycodone), 357 deaths attributed to heroin, 214 deaths attributed to synthetic opioid analgesics (e.g. fentanyl and tramadol), and 205 deaths to methadone (these numbers are not additive) (Figure 2).
- The percentage of opioid-induced deaths attributed to heroin only has increased from 19% in 2007 to 23% in 2016, however there has been a larger increase in the percentage of deaths attributed to both heroin and pharmaceutical opioids from 4% in 2007 to 11% in 2016.
- The rate of deaths attributed to opioids overall has increased since 2007.
- Rates of death attributed to heroin have increased (from 0.9 per 100,000 people in 2007 (n=126) to 2.2 per 100,000 people in 2016 (n=357)).
- The rate of deaths attributed to synthetic opioid analgesics (e.g. fentanyl and tramadol) has also increased from 0.11 per 100,000 people in 2007 (n=15) to 1.34 per 100,000 people in 2016 (n=214).

Other drugs contributing to opioid-induced deaths

- Almost half (45%, n=475) of opioid-induced deaths recorded benzodiazepines as contributing to the death; 23% (n=246) antidepressants; 14% (n=150) alcohol; 13.5% (n=142) antipsychotics, and 9.9% (n=104) paracetamol. The percentage of opioid-induced deaths where benzodiazepines and antipsychotics contributed to the death has increased since 2007 (from 35% and 7%, respectively).

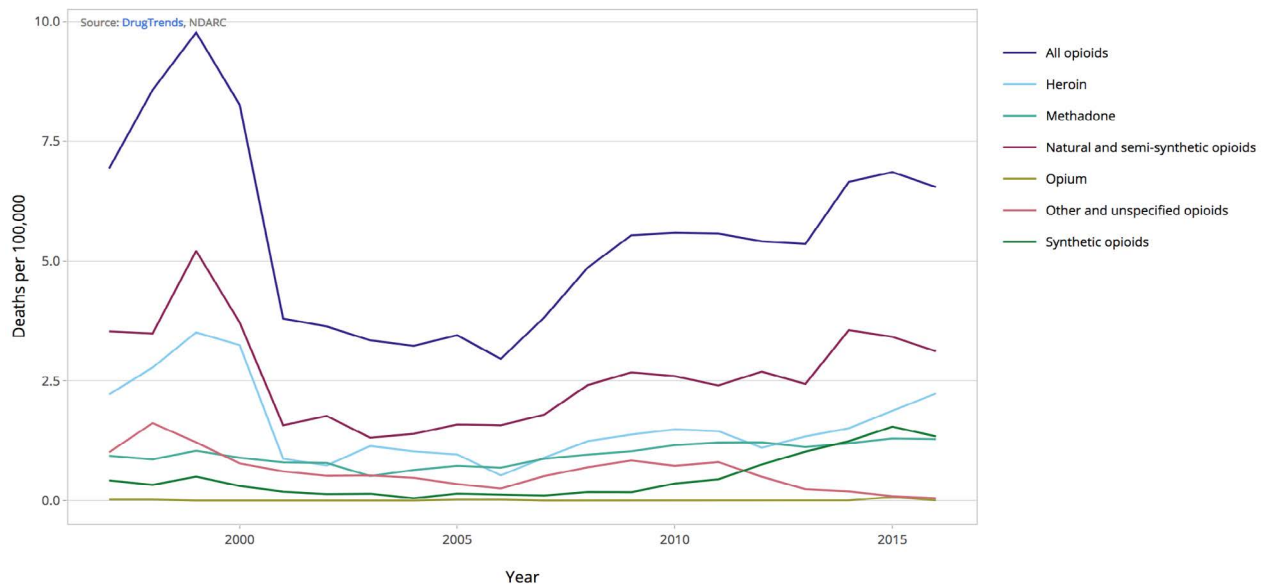
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Opioid-induced deaths by age and sex

- In 2016, the rate of opioid-induced deaths was highest for Australians aged 35-44 years (11.3 per 100,000 people, n=364), and lowest for Australians aged 75-84 years (0.2 per 100,000) followed closely by 15-24 year olds (1.7 per 100,000 people). Since 2007, the rate of opioid-induced deaths has increased among Australians aged between 35 and 64 years, declined slightly among 25-34 year olds, and remained stable among 15-24 year olds.
- Consistent with previous years, the rate of opioid-induced deaths was higher among males (9.0 per 100,000 people, n=714) than females (4.1 per 100,000 people, n=331).

Figure 2: Rate of opioid-induced deaths by opioid in Australia 1997-2016



Small numbers of death have been randomly assigned to protect the confidentiality of individuals. Zero values have not been affected by confidentialisation.

Natural and semi-synthetic opioids include morphine, oxycodone and codeine (ICD-10 Code T40.2).

Synthetic opioid analgesics include fentanyl, tramadol and pethidine (ICD-10 Code T40.4).

Other and unspecified opioids comprise opioid-induced deaths that are not attributed to specific opioids (ICD-10 Code T40.6).

Amphetamines

- There were 105 amphetamine-induced deaths among Australians aged 15-64 years (0.7 per 100,000 people). This represents an increase relative to 2015 (0.6 per 100,000 people), and the highest rate since monitoring commenced.

Cocaine

- In 2016, there were fewer than 20 cocaine-induced deaths among Australians aged 15-64 years. This low number is consistent with previous years.



Acknowledgements

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Related Links:

Data visualisations

<https://drugtrends.shinyapps.io/Deaths>

For more information on NDARC research, go to:

<http://ndarc.med.unsw.edu.au/>

For more information about the ABS, go to:

<http://www.abs.gov.au>

For more information on ICD coding go to:

<http://www.who.int/classifications/icd/en/>

For more research from the Drug Trends program go to:

<https://ndarc.med.unsw.edu.au/program/drug-trends>

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