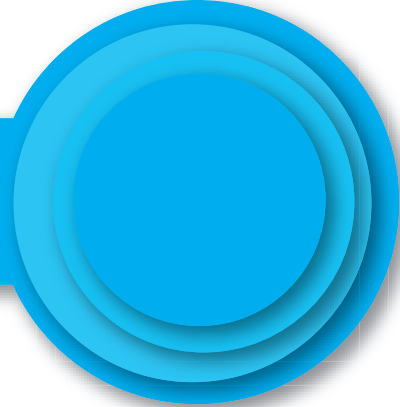


Cocaine and methamphetamine related drug-induced deaths in Australia, 2013



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Funded by	the Australian Government Department of Health
Product of	the National Illicit Drug Indicators Project
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Background

- This bulletin provides interpretation of (1) final data on accidental drug-induced deaths in which methamphetamine and cocaine were mentioned in Australia in 2013, and (2) estimated data for 2014 and 2015.
- The data for 2014 and 2015 are estimates only, and are likely to change. We have not interpreted these figures in any detail. This will be the subject of later bulletins.
- The data in this bulletin refer to deaths where methamphetamine or cocaine were (1) determined to be the underlying cause of death – that is, that they were the primary factor responsible for the person's death; or (2) noted, but another drug was thought to be primarily responsible for death.
- Deaths are coded according to the World Health Organization's (WHO) International Statistical Classification of Diseases and Related Problems, 10th revision (ICD-10).
- The data presented here refer to deaths associated with methamphetamine or cocaine in the following manner :²
 - Accidental deaths where the underlying cause of death is due to poisoning by cocaine or methamphetamine (and no other drug from the same category was mentioned);
 - Accidental deaths where the underlying cause of death is due to issues related to cocaine or methamphetamine use disorders; and
 - Accidental deaths where cocaine or methamphetamine poisoning/use disorders were thought to contribute to the death, but the underlying cause was attributed to other drugs (these are referred to as deaths where methamphetamine or cocaine was mentioned).

Methamphetamine related drug induced deaths

- In 2013 there were a total of 151 accidental "drug induced" deaths in which methamphetamine was mentioned among those aged 15 to 54 years (the ages when most drug related deaths occur) (Table 1), and 156 deaths across all ages.
- The rate of accidental methamphetamine related deaths among those aged 15 to 54 years in 2013 was 11.8 per million persons (10.7 in 2012) (Figure 2).
- Methamphetamine was determined to be the underlying cause of death in approximately one third (30% n=45) of the accidental methamphetamine related deaths in 2013 among Australians aged 15 to 54, and 30% (n=47) across all ages.

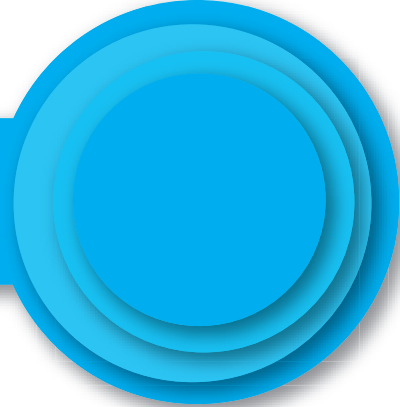
Cocaine related drug induced deaths

- In 2013 there were 20 accidental "drug induced" deaths in which cocaine was mentioned among those aged 15-54 years of age, and 21 across all ages.
- The rate of accidental cocaine related deaths among persons aged 15-54 years was 1.5 per million persons in 2013 (1.5 in 2012; Figure 2).
- Cocaine was determined to be the underlying cause of death in 35% (n=7) of the accidental cocaine related deaths in 2013 among Australians aged 15 to 54.

¹ ICD-10 uses the terminology "amphetamine" to refer to the drug class "methamphetamine". Since the vast majority of "amphetamine" in Australia is actually methamphetamine this is the term that will be used in this report.

² See Appendix for details of codes used.

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Notes on methods and findings

- Please refer to Roxburgh and Burns (2017) for detailed notes on changes in the way the Australian Bureau of Statistics collects and records deaths data.
- These findings should be interpreted in conjunction with the ABS Technical Note 2 Causes of Death Revisions 2013, available on the ABS website:

<http://www.abs.gov.au/AUSSTATS/abs@.nsf/Latestproducts/3303.0Technical%20Note22015?opendocument&tabname=Notes&prodno=3303.0&issue=2015&num=&view=>

Conclusions

- Deaths where methamphetamine is recorded as the underlying cause of death increased again in 2013 from 30 in 2012 to 45.
- Projected estimates for 2014 and 2015 for accidental methamphetamine deaths suggest a continued upward trend from 45 to 63 in 2014, and to 67 in 2015, which is consistent with other data.
- Accidental cocaine-related deaths are very low in Australia, and the number of deaths where cocaine is recorded as the underlying cause remains relatively unchanged at less than 10 deaths per year over the past ten years.

Table 1. Number of accidental drug-induced deaths mentioning cocaine or methamphetamine among 15–54 year olds, 1997–2013

	Cocaine underlying cause of death	*Cocaine total mentions	Methamphetamine underlying cause of death	*Methamphetamine total mentions
1997	0	20	4	25
1998	3	36	6	48
1999	4	33	15	79
2000	3	27	15	99
2001	2	28	13	51
2002	1	15	1	55
2003	5	15	17	50
2004	5	20	17	75
2005	10	15	26	68
2006	6	18	23	99
2007	7	15	27	74
2008	2	16	16	82
2009	5	23	20	86
2010	np**	15	18	88
2011	9	12	21	101
2012	8	19	30	136
2013	7	20	45	151

*Refers to deaths where methamphetamine / cocaine is either the underlying or a contributory cause of death

**np – not published to protect confidentiality

Cocaine and methamphetamine related drug-induced deaths in Australia, 2013

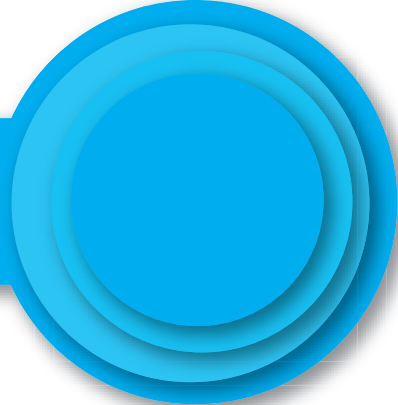


Figure 1. Number of accidental drug-induced deaths mentioning cocaine or methamphetamine among those aged 15–54 years in Australia, 1997–2013

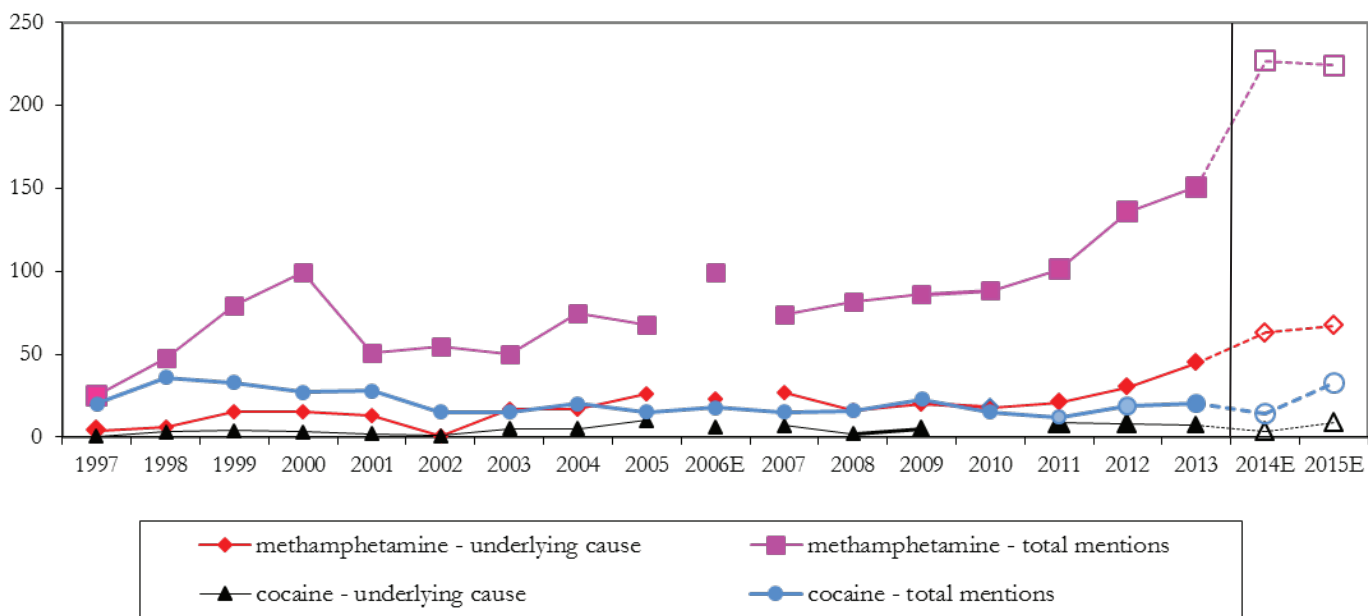
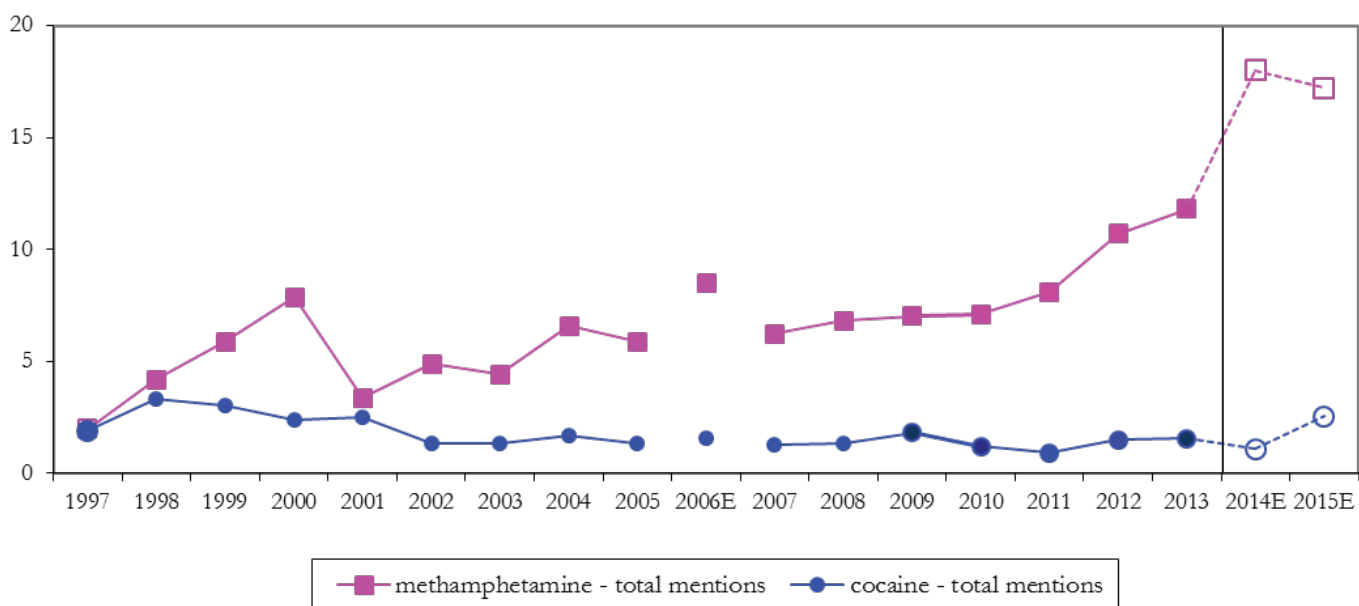
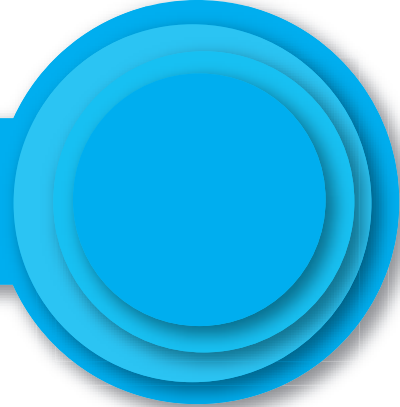


Figure 2. Rate of accidental drug-induced deaths with cocaine or methamphetamine mentions per million population aged 15–54 years, Australia 1997–2013



Cocaine and methamphetamine related drug-induced deaths in Australia, 2013



Appendix: ABS data on cocaine and methamphetamine mentions in accidental drug-induced deaths in Australia

The Australian Bureau of Statistics (ABS) is responsible for collecting data every year on persons who have died across Australia. Data on accidental deaths are collected from the Medical Certificates of Cause of Death submitted to each State or Territory's Registrar of Births, Deaths and Marriages and from the National Coroners Information System.

Death certificates typically state the sequence of events that led to a person's death. The ABS then uses its coding rules to establish the underlying cause of death, that is, "the disease or injury that initiated the train of morbid events leading directly to death, or the circumstances of the accident or violence which produced the fatal injury". The ABS also lists the diseases, injuries and health-related factors that contributed to the death but which were not the main cause of death.

The ABS uses an international classification system for classifying deaths, developed by the World Health Organization (WHO). This is called the International Statistical Classification of Diseases and Related Problems (ICD). The ICD edition currently used is the 10th edition (ICD-10). This edition of the classification system has been used since 1997 and provides more detailed information on accidental drug-induced deaths than previous versions.

All data on in this report refer to accidental drug-induced deaths where the underlying cause of death is drug-related and accidental. There are more deaths each year in which drugs are considered to have contributed to a person's death (e.g. general medical conditions, suicides, traffic accidents, drownings), but these deaths are not included.

In this report, the following ICD-10 codes have been used to examine deaths where amphetamine and cocaine were considered to be the underlying cause of death:

In this report, the following ICD-10 codes have been used to examine deaths where amphetamine and cocaine were considered to be the underlying cause of death:

- F14 — Accidental deaths due to cocaine use disorder (including cocaine dependence)
- F15 — Accidental deaths due to methamphetamine use disorder (including methamphetamine dependence)
- X42 with T40.5 — Accidental deaths due to poisoning cross-classified with cocaine poisoning (but excluding any other drug from the X42 category)
- X41 with T43.6 — Accidental deaths due to poisoning cross-classified with methamphetamine poisoning (but excluding any other drug from the X41 category)

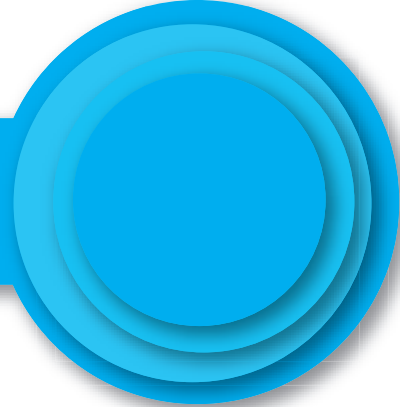
The following codes have also been examined to investigate deaths in which cocaine or amphetamines were mentioned as a contributing cause of an accidental drug-induced death, but in which they may not have been the primary cause of death:

- Accidental deaths due to other drug use disorder (F11-F16, F19, F55) cross-classified with cocaine (T40.5 and F14) or methamphetamine (T43.6 and F15); and
- Accidental deaths due to poisoning by another drug (X40-X44) cross-classified with cocaine (T40.5 and F14) or methamphetamine (T43.6 and F15).

RELATED LINKS:

For more information on NDARC research, go to:	http://ndarc.med.unsw.edu.au/
For more information about the ABS, go to:	www.abs.gov.au
For more information on ICD-10, go to:	www.who.int/whosis/icd10/
For more research from the Drug Trends program go to:	http://www.drugtrends.org.au/

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References

Roxburgh, A., and Burns, L. (2017). Accidental drug-induced deaths due to opioids in Australia, 2013. Sydney: National Drug and Alcohol Research Centre.

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