



Australian Government

Australian Institute of  
Health and Welfare

# National Drug Strategy Household Survey 2016

## Detailed findings





# National Drug Strategy Household Survey 2016

Detailed findings





**The Australian Institute of Health and Welfare is a major national agency whose purpose is to create authoritative and accessible information and statistics that inform decisions and improve the health and welfare of all Australians.**

© Australian Institute of Health and Welfare 2017 

This product, excluding the AIHW logo, Commonwealth Coat of Arms and any material owned by a third party or protected by a trademark, has been released under a Creative Commons BY 3.0 (CCBY 3.0) licence. Excluded material owned by third parties may include, for example, design and layout, images obtained under licence from third parties and signatures. We have made all reasonable efforts to identify and label material owned by third parties.

You may distribute, remix and build upon this work. However, you must attribute the AIHW as the copyright holder of the work in compliance with our attribution policy available at <[www.aihw.gov.au/copyright/](http://www.aihw.gov.au/copyright/)>. The full terms and conditions of this licence are available at <<http://creativecommons.org/licenses/by/3.0/au/>>.

This publication is part of the Australian Institute of Health and Welfare's Drug Statistics series. A complete list of the Institute's publications is available from the Institute's website <[www.aihw.gov.au](http://www.aihw.gov.au)>.

ISSN 2205-507X (PDF)

ISSN 1442-7230 (Print)

ISBN 978-1-76054-194-1 (PDF) ISBN

978-1-76054-195-8 (Print)

DOI 10.25816/5ec5bc1bed176

#### **Suggested citation**

Australian Institute of Health and Welfare 2017. National Drug Strategy Household Survey 2016: detailed findings. Drug Statistics series no. 31. Cat. no. PHE 214. Canberra: AIHW.

#### **Australian Institute of Health and Welfare**

Board Chair Director

Mrs Louise Markus Mr Barry Sandison

Any enquiries relating to copyright or comments on this publication should be directed to:

Australian Institute of Health and Welfare

GPO Box 570

Canberra ACT 2601

Tel: (02) 6244 1000

Email: [info@aihw.gov.au](mailto:info@aihw.gov.au)

Published by the Australian Institute of Health and Welfare.

**Please note that there is the potential for minor revisions of data in this report.  
Please check the online version at <[www.aihw.gov.au](http://www.aihw.gov.au)> for any amendments.**



# Contents

|  |             |
|--|-------------|
| <b>Acknowledgments .....</b>   | <b>vii</b>  |
| <b>Abbreviations.....</b>  | <b>viii</b> |
| <b>Symbols .....</b>   | <b>ix</b>   |
| <b>Summary .....</b>   | <b>x</b>    |
| <b>Revisions for physical abuse estimates—updated April 2020 .....</b> | <b>xii</b>  |
| <b>1 Introduction .....</b>  | <b>1</b>    |
| Background.....  | 2           |
| The National Drug Strategy.....  | 3           |
| About the 2016 survey .....  | 3           |
| Report structure .....   | 4           |
| <b>2 Overview .....</b>  | <b>6</b>    |
| Use and attitudes among the general population .....                   | 7           |
| Tobacco smoking .....  | 7           |
| Alcohol use .....  | 8           |
| Illicit use of drugs .....   | 8           |
| Polydrug use.....  | 9           |
| Population groups and trends.....                                      | 11          |
| Young people (aged under 30) .....                                     | 11          |
| Middle age and older people (40 or older).....                         | 12          |
| Social determinants and at-risk populations .....                      | 14          |
| State and territory comparisons .....                                  | 14          |
| <b>3 Tobacco.....</b>  | <b>20</b>   |
| Current tobacco use and trends .....                                   | 21          |
| Tobacco smoking by age and sex .....                                   | 21          |
| Age distribution of daily smokers.....                                 | 23          |
| Age first smoked .....   | 24          |
| Number of cigarettes smoked.....                                       | 25          |
| Tobacco products.....  | 26          |
| Manufactured and roll-your-own cigarettes.....                         | 26          |
| Electronic cigarettes.....   | 27          |
| Exposure to second-hand smoke.....                                     | 28          |
| Illicit tobacco .....  | 29          |
| Unbranded illicit tobacco .....  | 29          |
| Illicit branded tobacco .....  | 29          |
| Changes to smoking behaviour .....                                     | 30          |
| Motivators for change to behaviour .....                               | 32          |
| Smokers who do not want to quit .....                                  | 32          |



|  |            |
|--|------------|
| <b>4 Alcohol .....</b>   | <b>.33</b> |
| Current alcohol use and trends.....                                    | .35        |
| Alcohol use by age and sex .....                                       | .36        |
| Alcohol risk .....   | .37        |
| Current risky drinking and trends.....                                 | .37        |
| Risky consumption by age and sex .....                                 | .38        |
| Very high alcohol consumption .....                                    | .40        |
| Age comparisons over time .....  | .41        |
| Age first tried alcohol .....  | .43        |
| Alcohol use by population group.....                                   | .44        |
| Alcohol consumption—what, where and how .....                          | .44        |
| Drinking reduction.....  | .45        |
| Health and harm .....  | .46        |
| Perceptions of health effects .....                                    | .47        |
| Alcohol-related incidents and harm .....                               | .47        |
| <b>5 Illicit use of drugs .....</b>                                    | <b>.51</b> |
| Illicit use of any drug .....  | .53        |
| Trends in lifetime use.....  | .53        |
| Trends in recent use.....  | .55        |
| Age and sex comparisons .....  | .56        |
| Age distribution of illicit drug users.....                            | .57        |
| Average age people first used drugs.....                               | .58        |
| Average age of illicit drug users .....                                | .58        |
| Frequency of use.....  | .59        |
| Unable to stop or reduce use.....                                      | .60        |
| Use of selected illicit drugs .....                                    | .61        |
| Cannabis.....  | .61        |
| Cocaine.....   | .63        |
| Ecstasy.....   | .65        |
| Meth/amphetamines .....  | .67        |
| Emerging psychoactive substances.....                                  | .71        |
| Other illicit drugs.....   | .73        |
| Drug sources and locations of use.....                                 | .73        |
| Motivations/factors that influence decision to use illicit drugs ..... | .74        |
| Illicit drug related harm .....  | .75        |
| Victims of drug-related harm .....                                     | .75        |
| Harmful activities undertaken .....                                    | .76        |
| Suffered injuries or overdose .....                                    | .76        |
| Missed work due to illicit drug use.....                               | .76        |



|   |            |
|---|------------|
| <b>6 Misuse of pharmaceuticals.....</b>                               | <b>77</b>  |
| Misuse of pharmaceuticals .....                                       | 78         |
| Lifetime misuse .....   | 79         |
| Recent misuse .....   | 80         |
| Age and sex comparisons .....   | 81         |
| Frequency of use.....   | 82         |
| Unable to stop or reduce use.....                                     | 82         |
| Types of Pain-killers/opioids misused.....                            | 82         |
| <b>7 State and territory.....</b>                                     | <b>84</b>  |
| Smoking .....   | 85         |
| Alcohol .....   | 88         |
| Illicit use of drugs .....  | 89         |
| Trends .....  | 89         |
| Age and sex comparisons .....   | 90         |
| Drug use across Primary Health Networks areas.....                    | 93         |
| <b>8 Specific population groups .....</b>                             | <b>95</b>  |
| Social determinants of health .....                                   | 97         |
| Drug use in geographic areas .....                                    | 97         |
| Socioeconomic areas.....  | 101        |
| Employment status .....   | 104        |
| Other at-risk groups.....   | 105        |
| Indigenous Australians .....  | 105        |
| People identifying as homosexual/bisexual.....                        | 109        |
| People with mental health conditions.....                             | 111        |
| High or very high levels of psychological distress .....              | 111        |
| Diagnosed or treated for mental illness.....                          | 111        |
| Tobacco and alcohol use .....   | 113        |
| Pregnant women .....  | 114        |
| Questionnaire changes.....  | 114        |
| Trends in alcohol use.....  | 115        |
| <b>9 Perceptions and policy support .....</b>                         | <b>118</b> |
| Perceptions and attitudes towards drug use.....                       | 120        |
| Perception of drugs that cause a drug problem.....                    | 120        |
| Drugs perceived to be associated with mortality.....                  | 121        |
| Drug of most concern for the general community.....                   | 123        |
| Approval of regular adult drug use .....                              | 124        |
| Social characteristics, perceptions and attitudes towards drugs ..... | 126        |



|   |            |
|---|------------|
| Support for policy.....   | 126        |
| Support for measures to reduce problems associated with tobacco.....    | 127        |
| Support for measures to reduce problems associated with alcohol .....   | 127        |
| Support for cannabis measures.....                                      | 128        |
| Support for measures to reduce problems associated with injecting ..... | 129        |
| Support for other illicit drug measures.....                            | 130        |
| Actions taken against people found in possession of drugs .....         | 130        |
| Budget distribution for education, treatment and law enforcement.....   | 131        |
| <b>10 Explanatory notes.....</b>  | <b>133</b> |
| Methodology .....   | 134        |
| Sample design .....   | 134        |
| Survey mode.....  | 134        |
| Mode effects.....   | 136        |
| Weighting .....   | 136        |
| Response rates.....   | 137        |
| Non-response bias and non-sampling error .....                          | 138        |
| Sampling error .....  | 139        |
| Significance testing .....  | 140        |
| Sample representativeness.....  | 140        |
| Comparison to 2013 sample.....  | 141        |
| New strategies employed in 2016 .....                                   | 141        |
| Questionnaire.....  | 142        |
| Terminology .....   | 144        |
| Unbranded and illicit branded tobacco.....                              | 144        |
| Alcohol risk .....  | 144        |
| Licit drugs—illicit use .....   | 145        |
| Emerging psychoactive substances.....                                   | 145        |
| Presentation of estimates .....   | 146        |
| Population estimates.....   | 146        |
| Age-standardisation.....  | 146        |
| Access to the confidentialised unit record file (CURF) .....            | 146        |
| <b>Appendix: Membership of the Technical Advisory Group .....</b>       | <b>147</b> |
| <b>Glossary .....</b>   | <b>148</b> |
| <b>References .....</b>   | <b>151</b> |
| <b>Related publications.....</b>  | <b>153</b> |



# Acknowledgments

## Authorship

The authors of this report are Cathy Claydon, Karen Webber and Josh Sweeney of the Tobacco, Alcohol and Other Drugs Unit at the Australian Institute of Health and Welfare. Moira Hewitt, Matthew James, Louise York, Geoff Neideck and David Whitelaw provided reviews and guidance.

## Contributors

The AIHW particularly acknowledges the efforts and insight of the 2016 survey's Technical Advisory Group on the development of this project (see Appendix for members).

## Funding

The Australian Government Department of Health commissioned and funded this work.

## Participants

The AIHW very gratefully acknowledges the 23,772 people across Australia who volunteered their time to complete the 2016 survey.

## Fieldwork

The AIHW thanks David Erickson, Bruce Packard, Kate Fritsch and Peta McDonald from Roy Morgan Research, who conducted the fieldwork component of this project.

## Questionnaire

Thanks to Professor Ronald C Kessler of the Department of Health Care Policy, Harvard Medical School, for the use of research on the K10 funded by US Public Health Service Grants R01 MH46376, R01 MH52861, R01 MH49098 and K05 MH00507 and by the John D and Catherine T MacArthur Foundation Research Network on Successful Midlife Development (Dr Orville Gilbert Brim, Director).



# Abbreviations

|         |  |
|---------|--|
| AATSIHS | Australian Aboriginal and Torres Strait Islander Health Survey |
| ABS     | Australian Bureau of Statistics                                |
| ACT     | Australian Capital Territory                                   |
| ADA     | Australian Data Archive  |
| AIHW    | Australian Institute of Health and Welfare                     |
| ASGS    | Australian Statistical Geography Standard                      |
| CATI    | computer-assisted telephone interview                          |
| CURF    | confidentialised unit record file                              |
| EPS     | emerging psychoactive substances                               |
| ERP     | estimated resident population                                  |
| GST     | Goods and Services Tax   |
| IRSAD   | Index of Relative Socio-Economic Advantage and Disadvantage    |
| K10     | Kessler 10 scale   |
| MoE     | margin of error  |
| MCDS    | Ministerial Council on Drug Strategy                           |
| NATSISS | National Aboriginal and Torres Strait Islander Social Survey   |
| NDS     | National Drug Strategy   |
| NDSHS   | National Drug Strategy Household Survey                        |
| NHMRC   | National Health and Medical Research Council                   |
| NSW     | New South Wales  |
| NT      | Northern Territory   |
| OTC     | over the counter   |
| PHN     | Primary Health Network   |
| Qld     | Queensland   |
| RSE     | relative standard error  |
| SA      | South Australia  |
| SE      | standard error   |
| Tas     | Tasmania   |
| Vic     | Victoria   |
| WA      | Western Australia  |



# Symbols

- nil or rounded to zero
- .. not applicable
- n.a. not available
- n.p. not publishable because of small numbers, confidentiality or other concerns about the quality of the data
- <0.1 non-zero estimate less than 0.1%
- \* relative standard error between 25% and 50%
- \*\* relative standard error greater than 50
- # statistically significant change between 2013 and 2016



# Summary

This report expands on the key findings from the 2016 National Drug Strategy Household Survey (NDSHS) that were released on 1 June 2017. It presents more detailed analysis including comparisons between states and territories and for population groups. Unless otherwise specified, the results presented in this report are for those aged 14 or older.

## **1 in 8 Australians smoke daily and 6 in 10 have never smoked**

- Smoking rates have been on a long-term downward trend since 1991, but the daily smoking rate did not significantly decline over the most recent 3 year period (was 12.8% in 2013 and 12.2% 2016).
- Among current smokers, 3 in 10 (28.5%) tried to quit but did not succeed and about 1 in 3 (31%) do not intend to quit.
- People living in the lowest socioeconomic areas are more likely to smoke than people living in the highest socioeconomic area but people in the lowest socioeconomic area were the only group to report a significant decline in daily smoking between 2013 and 2016 (from 19.9% to 17.7%).

## **8 in 10 Australians had consumed at least 1 glass of alcohol in the last 12 months**

- The proportion exceeding the lifetime risk guidelines declined between 2013 and 2016 (from 18.2% to 17.1%); however, the proportion exceeding the single occasion risk guidelines once a month or more remained unchanged at about 1 in 4.
- Among recent drinkers: 1 in 4 (24%) had been a victim of an alcohol-related incident in 2016; about 1 in 6 (17.4%) put themselves or others at risk of harm while under the influence of alcohol in the last 12 months; and about 1 in 10 (9%) had injured themselves or someone else because of their drinking in their lifetime.
- Half of recent drinkers had undertaken at least some alcohol moderation behaviour. The main reason chosen was for health reasons.
- A greater proportion of people living in *Remote or very remote* areas abstained from alcohol in 2016 than in 2013 (26% compared with 17.5%) and a lower proportion exceeded the lifetime risk guidelines (26% compared with 35%).



## About 1 in 8 Australians had used at least 1 illegal substance in the last 12 months and 1 in 20 had misused a pharmaceutical drug

- In 2016, the most commonly used illegal drugs that were used at least once in the past 12 months were cannabis (10.4%), followed by cocaine (2.5%), ecstasy (2.2%) and meth/amphetamines (1.4%).
- However, ecstasy and cocaine were used relatively infrequently and when examining the share of Australians using an illegal drug weekly or more often in 2016, meth/amphetamines (which includes 'ice') was the second most commonly used illegal drug after cannabis.
- Most meth/amphetamine users used 'ice' as their main form, increasing from 22% of recent meth/amphetamine users in 2010 to 57% in 2016.

## Certain groups disproportionately experience drug-related risks

- Use of illicit drugs in the last 12 months was far more common among people who identified as being homosexual or bisexual; ecstasy and meth/amphetamines use in this group was 5.8 times as high as heterosexual people.
- People who live in *Remote and very remote* areas, unemployed people and Indigenous Australians continue to be more likely to smoke daily and use illicit drugs than other population groups.
- The proportion of people experiencing high or very high levels of psychological distress increased among recent illicit drug users between 2013 and 2016—from 17.5% to 22% but also increased from 8.6% to 9.7% over the same period for the non-illicit drug using population (those who had not used an illicit drug in the past 12 months).
- Daily smoking, risky alcohol consumption and recent illicit drug use was lowest in the Australian Capital Territory and highest in the Northern Territory.

## The majority of Australians support policies aimed at reducing the acceptance and use of drugs, and the harms resulting from drug use

- There was generally greater support for education and treatment and lower support for law enforcement measures.



## Revisions for physical abuse estimates—updated April 2020

Estimates of physical abuse by someone under the influence of alcohol or illicit drugs have been revised following a review of the methodology for their calculation in 2019. The revised estimates have resulted in slightly fewer people reporting that someone under the influence of alcohol or illicit drugs had physically abused them.

Logic edits are applied to the NDSHS data to resolve conflicts in responses to questions arising from inconsistencies in how people respond to questionnaire instructions and skip patterns. These are particularly an issue for questions completed in paper mode as skips are built-in and automatically applied in the online and telephone modes.

In the NDSHS, respondents are asked if they have been physically abused in the previous 12 months by someone under the influence of alcohol or illicit drugs. They are subsequently asked if any of the incidents of physical abuse involved sexual abuse.

A conflict in responses results when a respondent answers 'no' or does not answer the question about physical abuse in the previous 12 months, and answers 'no' to whether that incident of physical abuse involved sexual abuse. If they answer this secondary question as 'no', there is some uncertainty around whether an incident of physical abuse had occurred. Previously, to resolve this conflict, the logic edit recoded their response to the first question to record 'yes' for physical abuse.

In 2019, following a review of the methodology and consultation with the Technical Advisory Group, a decision was made to revise this edit and the response provided at the sexual abuse question was changed from 'no' to 'not relevant (not physically abused)' where the respondent answered 'no' to the first question about physical abuse or to 'missing/ not answered' if no response was provided to the physical abuse question. The response to the first question was only recoded to record 'yes' for physical abuse if the response to the second question was 'yes'.

These revisions ensure that the application of the edit methodology is consistent across all modes of completion of the survey and gives primacy to responses to the first question rather than the secondary dependent question.

The change in methodology for calculating these estimates is applicable to data from the 2010, 2013, and 2016 surveys. Revised estimates relating to physical abuse will not match previously published data for 2013 and 2016. Revised estimates are not available for 2010 and the previously published 2010 estimates should not be used.

# 1

# INTRODUCTION

National Drug Strategy Household Survey collected information from almost 24,000 people across Australia on their tobacco, alcohol and illicit drug use, attitudes and opinions. The AIHW released key national findings from the survey on 1 June 2017. This report expands on the key findings and presents more detailed analysis including comparisons between states and territories and for other population groups.



## Background

Drug use is a serious and complex problem, which contributes to thousands of deaths, substantial illness, disease and injury, social and family disruption, workplace concerns, violence, crime and community safety issues (MCDS 2011). The use and misuse of licit and illicit drugs is widely recognised in Australia as a major health problem, and one that has wider social and economic costs, and imposes a heavy financial burden on the Australian community.

Tobacco continues to cause more ill health and premature death than any other drug, and alcohol-related hospital separations are higher than those related to illicit drugs (including heroin, cannabis, methamphetamine and cocaine) (Roxburgh et al. 2013). The AIHW estimated that in 2011, 18,762 deaths were attributable to tobacco, 6,570 were attributable to alcohol and 1,926 were attributable to illicit drugs (AIHW 2016).

In 2011, tobacco smoking was the leading risk factor contributing to death and disease in Australia and was responsible for 9% of the total burden of disease and injury. This includes the risks associated with past tobacco use, current use, and exposure to second-hand smoke. It was estimated that 80% of lung cancer burden and 75% of chronic obstructive pulmonary disease burden were attributable to tobacco smoking (AIHW 2016).

Alcohol use was responsible for 5.1% of the total burden of disease and injury in Australia in 2011. It was responsible for 28% of the burden due to road traffic injuries (motor vehicle occupants), 24% of the burden due to chronic liver disease, 23% of the burden due to suicide and self-inflicted injuries, and 19% of the burden due to stroke (AIHW 2016).

Illicit drug use contributed to 1.8% of the total burden of disease and injury in Australia in 2011 (AIHW 2016). This included the impact of injecting drug use, and cocaine, opioid, amphetamine and cannabis dependence. Globally, illicit drug use contributed 0.8% of the total burden of disease in 2010 and has increased since 1990—moving from the 18th to the 15th ranking risk factor (IHME 2016).

Australian governments have strategies in place to minimise drug-related harm, including law enforcement, drug programs and treatment services, and media and education campaigns. In 2009–10, the Drug Policy Modelling Program estimated Australian government spending on illicit drug programs to be around 1.7 billion, with around 64% spent on law enforcement, 22% on treatment, 9.7% on prevention and 2.2% on harm reduction (Ritter et al. 2013).



# The National Drug Strategy

Since 1985, the National Drug Strategy (NDS) has provided an overarching framework for a consistent and coordinated approach to dealing with licit and illicit drug use in Australia. The NDS is guided by the principle of harm minimisation. Harm minimisation encompasses 3 components (pillars): demand reduction, supply reduction and harm reduction.

The NDS 2017–2026 is the seventh iteration of the strategy. The strategy represents the agreement of the Australian, state and territory governments on the key policy priorities for the next 10 years (2017–2026). The purpose of the 2017–2026 Strategy is to provide a national framework which identifies national priorities relating to alcohol, tobacco and other drugs; guides action by governments in partnership with service providers and the community; and outlines a national commitment to harm minimisation through balanced adoption of effective demand, supply and harm reduction strategies (DoH 2017).

The Strategy provides a national framework for action that is able to accommodate new and emerging alcohol, tobacco and other drug issues when they arise, and provides a guide for jurisdictions in developing their individual responses to local alcohol, tobacco and other drug issues. In addition to providing a national framework to guide coordinated action to minimise the harms to all from alcohol, tobacco and other drugs, the 2017–2026 iteration includes a number of sub-strategies that were developed to give direction and context for specific issues (DoH 2017).

## About the 2016 survey

The NDSHS is the leading survey of licit and illicit drug use in Australia. The 2016 survey was the 12th conducted under the auspices of the NDS. Previous surveys were conducted in 1985, 1988, 1991, 1993, 1995, 1998, 2001, 2004, 2007, 2010 and 2013. The data collected through these surveys have contributed to the development of policies for Australia's response to drug-related issues.

The Australian Government Department of Health commissioned the Australian Institute of Health and Welfare (AIHW) to manage the 2016 survey, and the AIHW commissioned Roy Morgan Research to collect the data. A Technical Advisory Group comprising experts in tobacco, alcohol and other drug data collection and research (see Appendix 1 for Technical Advisory Group members) supported the AIHW in the management of the survey.

In 2016, 23,772 people aged 12 or older gave information on their drug use patterns, attitudes and behaviours (Table 1.1). The sample was based on households, so people who were homeless or institutionalised were not included in the survey (consistent with the approach in previous years). Most of the analyses are based on the population aged 14 or older (unless specified), as this allows consistent comparison with earlier survey results.

See Chapter 10 for more information on the sample, the methodology, response rate and limitations of the survey results.



**Table 1.1: National Drug Strategy Household Survey sample sizes**

| Survey year | Respondents |
|-------------|-------------|
| 2016        | 23,772      |
| 2013        | 23,855      |
| 2010        | 26,648      |
| 2007        | 23,356      |
| 2004        | 29,445      |
| 2001        | 26,744      |
| 1998        | 10,030      |
| 1995        | 3,850       |
| 1993        | 3,500       |

## Report structure

This report outlines the results of the 2016 NDSHS. Some of the data presented in this report were published earlier in the year (1 June 2017) as part of the key findings (see <<https://www.aihw.gov.au/reports/illicit-use-of-drugs/ndshs-2016-key-findings/>>) and these tables are highlighted in the online tables.

Following this introductory chapter, an overview of the use of both licit and illicit drugs is given (Chapter 2), which includes summary information on state and territory data and specific population groups.

Chapters 3 and 4 give information on the use of tobacco and alcohol and chapters 5 and 6 cover the use of illicit drugs and pharmaceutical misuse. Chapter 7 presents state and territory data and, for the first time, analysis by Primary Health Network. Chapter 8 presents data for selected population groups (for example, by remoteness area, socioeconomic status and for Indigenous people). In Chapter 9 there is a discussion of the survey results on perceptions and acceptability of drug use, as well as people's attitudes towards policy initiatives aimed at reducing harm associated with drug use.

Chapter 10, 'Explanatory notes', details the survey methodology, response rates, reliability, limitations of the NDSHS and gives definitions for terminology used throughout the report. The demographic characteristics of the NDSHS sample are presented in tables 10.5 and 10.6 and are compared with the Australian Bureau of Statistics (ABS) 2011 Census data (see Chapter 10 'Explanatory notes' tables <<http://www.aihw.gov.au/reports/illicit-use-of-drugs/ndshs-2016-detailed/data>>).



Each chapter has a set of supplementary (Excel) tables that support that chapter (see <http://www.aihw.gov.au/reports/illicit-use-of-drugs/ndshs-2016-detailed/data>). The 2016 tables include a number of new analyses—including analysis of new questions, new disaggregations and analysis of longstanding questions. Tables have been grouped into topics/categories for each chapter. For example, in the illicit drug chapter, all cannabis tables are grouped together and in the alcohol chapter, all alcohol-related harm tables are grouped together. Not all tables are referred to in the report. Tables that have been mentioned in the report have a green tab in the supplementary Excel tables; all other tables have a grey tab.

The report presents estimates derived from survey responses weighted to the appropriate Australian population. Proportions are shown as percentages rounded to 1 decimal place when less than 20% and rounded to a whole number when 20% or higher. Data presented in the body of the report have not been age-standardised (unless indicated). All increases or decreases in estimates over time mentioned in the report are statistically significant unless specified otherwise.

This chapter presents a summary of tobacco, alcohol, and illicit use of drugs among the Australian population. The chapter also highlights key attitudes and beliefs relating to tobacco, alcohol and other drug use. Most of the data presented in this chapter are included in the supplementary data tables for their respective chapters. New analyses are available in the Overview supplementary tables <<http://www.aihw.gov.au/reports/illicit-use-of-drugs/ndshs-2016-detailed/data>>.



## Use and attitudes among the general population

### Tobacco smoking

While smoking rates have been on a long-term downward trend, for the first time in more than 2 decades, the daily smoking rate did not significantly decline over the most recent 3-year period (12.8% in 2013 and 12.2% 2016) (Table 2.1). However, the rate has halved since 1991 (24%). The proportion of people who reported never smoking continued to rise from 60% in 2013 to 62% in 2016. Among smokers, there was only a slight and non-significant decline in the number of cigarettes smoked per week in 2016 (from 96 in 2013 to 94).

People were less likely to view tobacco as a drug that causes the most deaths (decreasing from 32% in 2013 to 24% in 2016) or think that tobacco was of most concern to the general community (declining from 14.5% in 2013 to 9.4% in 2016).

The majority of those who had ever used unbranded tobacco (16.5%) no longer smoke it, with only 3.8% smoking unbranded loose tobacco at the time of the 2016 survey. The majority of people who tried electronic cigarettes (also known as e-cigarettes) also no longer used them, with 31% of smokers having tried them in their lifetime but only 4.4% currently using them.

Despite small declines, support for measures aimed at reducing tobacco-related harm generally remained high in 2016. Stricter enforcement of the law and penalties for supplying to minors continued to receive the highest levels of support (86% and 84%, respectively). New policy support measures about e-cigarettes received relatively high support with about two-thirds supporting restrictions on the use of e-cigarettes in public places and on where and when they may be advertised. More than 3 in 4 supported prohibiting the sale of e-cigarettes to people under the age of 18.

About 3 in 4 smokers attempted to make a change to their smoking behaviour in the last year (for example, tried to quit or cut back). The main reasons smokers gave for trying to quit or change their smoking behaviour were because it was costing too much money or it was affecting their health.

About one-third of smokers did not intend to quit in 2016. The main reason cited was that they enjoy it or that it relaxes them. Of those who do not intend to quit smoking, 4 in 10 (42%) said ill health would motivate them and a little over 1 in 4 (27%) said they would be motivated by an increase in cost.



## Alcohol use

The proportion of the population aged 14 or older who consumed alcohol daily declined between 2013 (6.5%) and 2016 (5.9%). The proportion of people exceeding lifetime risk guidelines also declined (from 18.2% to 17.1%) but the proportion of people exceeding single occasion risk guidelines or consuming 11 or more drinks at least once a month did not change. Almost half (48%) of recent drinkers (consumed at least 1 serve of alcohol in last 12 months) took action to reduce their alcohol intake in 2016 and the main reason for doing this was due to concern for their health.

About 1 in 6 (17.4%) recent drinkers aged 14 or older put themselves or others at risk of harm while under the influence of alcohol in the previous 12 months; driving a vehicle was the most common activity undertaken (9.9% of recent drinkers).

More than 1 in 5 (22%) Australians aged 14 and over (equivalent to 4.4 million people) had been a victim of an alcohol-related incident in 2016, although this proportion significantly declined from 2013 (down from 26%). There were significant declines in the proportion of the population that experienced verbal abuse (22% to 18.7%), being put in fear (12.6% to 11.4%) and physical abuse (7.1% to 5.9%).

In 2016, 2.8% of drinkers had been injured while under the influence of alcohol and required medical attention and 1.3% required admission to hospital for their injuries. Among recent drinkers, 9% had injured themselves or someone else because of their drinking in their lifetime and 2.3% had done so in the last 12 months.

In 2016, there were 13 (out of 18) measures to reduce problems associated with alcohol that received less support than in 2013. Reducing the trading hours for pubs and clubs received the largest proportional decrease in support, from 47% in 2013 to 39% in 2016. The policy with the most support to reduce alcohol harm was to establish ‘more severe penalties for drink driving’ (84%), followed by the ‘stricter enforcement of law against supplying alcohol to minors’ (81%).

In 2016, alcohol continued to be the most commonly mentioned drug that people thought caused the most deaths (35%) but excessive use of alcohol was no longer the drug people feel is of most concern to the general community (declining from 43% to 28%), with meth/amphetamine overtaking alcohol and more than doubling since 2013 (from 16.1% to 40%).

## Illicit use of drugs

There was no change in recent use of most illicit drugs in 2016, and use of any illicit drug remained stable between 2013 and 2016 (Table 2.1). However, there was a significant decline for a few specific drugs over the last three years including meth/amphetamines (from 2.1% to 1.4%), hallucinogens (1.3% to 1.0%) and synthetic cannabinoids (1.2% to 0.3%).

While use of meth/amphetamine in the previous 12 months significantly declined, ice (or crystal methamphetamine) was the predominant form used in 2016 and increased from 22% of recent meth/amphetamine users in 2010 to 50% in 2013 and to 57% in 2016. The overall use of ice across the population rose from 2010 to 2016 (from 0.4% to 0.8%) but showed little change from 2013 to 2016. Use of powder significantly decreased between 2013 and 2016—from 29% to 20%.



Although the increase in cocaine was not significant, it is now at the highest level seen over the last 15 years (from 1.3% in 2001 to 2.1% in 2013 to 2.5% in 2016) and was the second most commonly used illegal drug after cannabis.

More people reported being a victim of an illicit drug-related incident in 2016, increasing from about 1.6 million in 2013 to 1.8 million in 2016. The proportion of people reporting that they were physically abused slightly declined, from 2.1% in 2013 to 1.8% in 2016 but was not statistically significant, while the proportion being put in fear significantly increased, from 5.0% to 6.0%.

Community tolerance has increased for cannabis use, with higher proportions of people supporting legalisation and a lower proportion supporting penalties for sale and supply. More people also supported cannabis being used in clinical trials to treat medical conditions (from 75% in 2013 to 87%) and supported a change in legislation permitting the use of cannabis for medical purposes (from 69% in 2013 to 85%).

In 2016, there was a clear shift in people's perception of drugs, with meth/amphetamine nominated for the first time as the drug most likely to be associated with a 'drug problem' (the proportion more than doubled between 2013 and 2016, from 22% to 46%). People also considered meth/amphetamines to be more of a concern to the general community than any other drug (including alcohol) and the proportion who nominated it as a drug that caused the most deaths also increased in 2016 (see perceptions and policy support chapter).

When asked about appropriate action for people found in possession of small quantities of drugs, for all drugs except cannabis, most support was for referral to treatment or an education program, while for cannabis the most popular action was a caution, warning or no action and support for this increased in 2016 (from 42% to 47%).

## Polydrug use

In this report, polydrug use is defined as the use of more than 1 illicit or licit drug in the previous 12-month period. Table 2.2 shows the proportion of users for each type of drug who also used 1 or more additional illicit drug in the 12 months before the survey (but not necessarily at the same time).

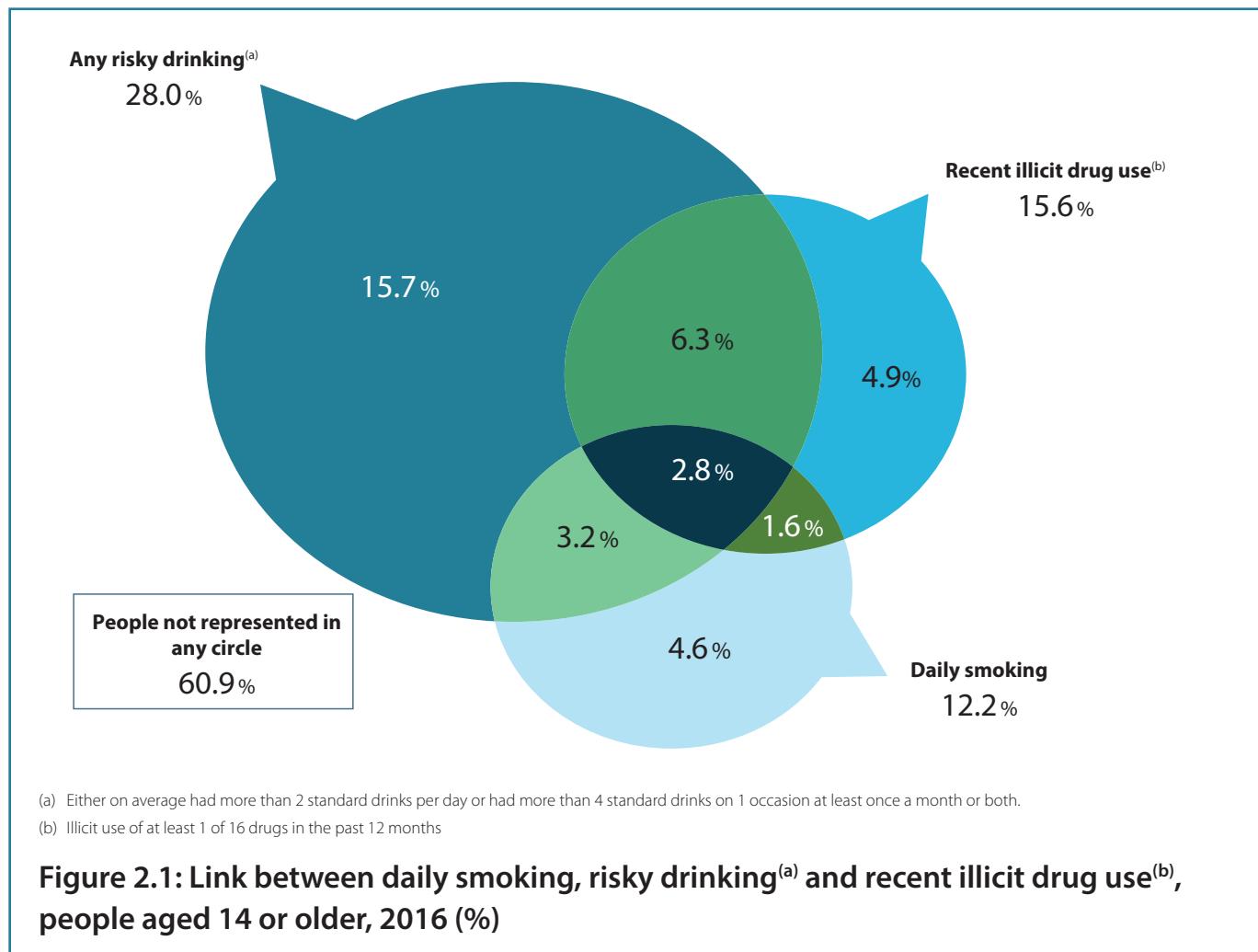
In 2016, just under 4 in 10 (39%) of Australians either smoked daily, drank alcohol in ways that put them at risk of harm or used an illicit drug in the previous 12 months; 2.8% engaged in all 3 of these behaviours (Figure 2.1). Furthermore:

- almost half (49%) of daily smokers had consumed alcohol at risky quantities, either more than 2 standard drinks a day on average or more than 4 on a single occasion at least once a month
- over one-third (36%) of daily smokers had used an illicit drug in the previous 12 months
- nearly 6 in 10 (58%) recent illicit drug users also drank alcohol in risky quantities (either for lifetime or single occasion harm) and 28% smoked daily.



Among recent illicit drug users, cannabis was the drug most often used in addition to other illicit drugs in the previous 12 months, and use was particularly high among users of hallucinogens (88%), ecstasy (79%), synthetic cannabinoid (78%) and meth/amphetamines (74%). However, cannabis users and people who misused pharmaceuticals were the most likely to only use those substances in the same 12-month period and not use any other illicit drug, while users of other psychoactive substances had used at least 1 other illicit drug, with quite high usage among this group—over half had used cannabis, ecstasy and hallucinogens.

Risky drinking (monthly risk of single occasion harm) was particularly prevalent among recent users of stimulants such as ecstasy (84%), cocaine (82%), hallucinogens (78%) and meth/amphetamines (73%). Among drug users, daily smoking was highest among recent users of meth/amphetamines (52%).



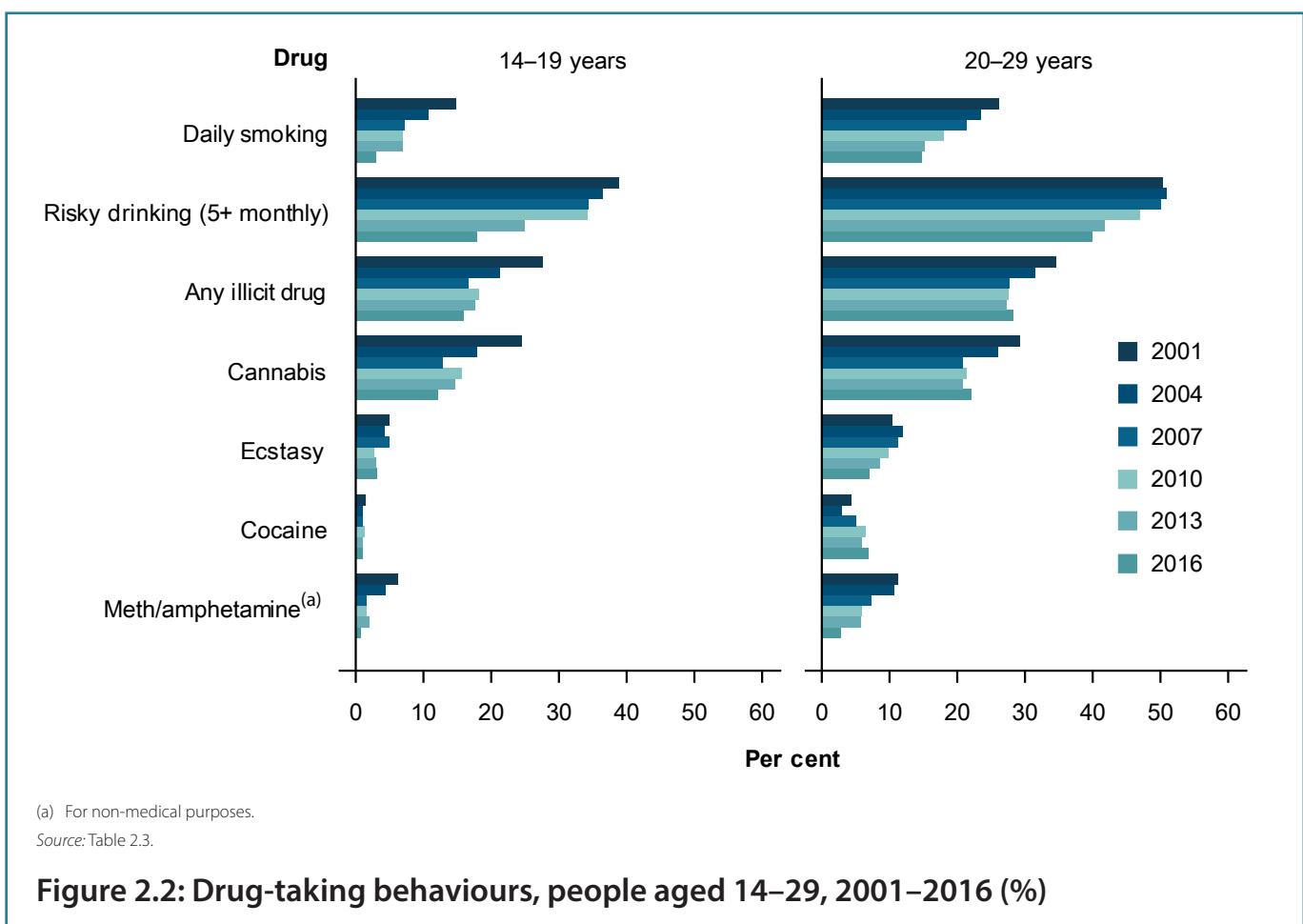


## Population groups and trends

### Young people (aged under 30)

Fewer young people are taking up smoking. The proportion of people aged 12–17 and 14–19 who have never smoked increased between 2013 and 2016 (from 95% to 98% and 89% to 94%, respectively). Since 2001, the proportion of 14–19 year olds who had never smoked increased from 75% to 94%, while daily smokers decreased from 14.9% in 2001 to 3.0% in 2016. The proportion of 14–19 year olds consuming 5 or more drinks at least monthly significantly declined between 2013 and 2016 (from 25% to 18%) and has more than halved since 2001 (39%). While there were no significant declines among 14–19 year olds in recent illicit drug use between 2013 and 2016, use was considerably lower than in 2001—use of cannabis has halved, use of ecstasy and cocaine declined by one-third, and use of meth/amphetamines considerably dropped from 6.2% to 0.8%.

Among people in their 20s, the only drug to significantly decline between 2013 and 2016 was recent use of meth/amphetamines (from 5.7% to 2.8%). Over the longer term, daily smoking, risky drinking, and recent use of cannabis and ecstasy were all significantly and considerably lower than for previous generations (when in their 20s). While this is positive for people in their 20s, use did not decline over the last 3 years and they are still far more likely to drink alcohol in risky quantities, and use cannabis, ecstasy or cocaine in the previous 12 months than any other age group (Figure 2.2).



## Middle age and older people (40 or older)

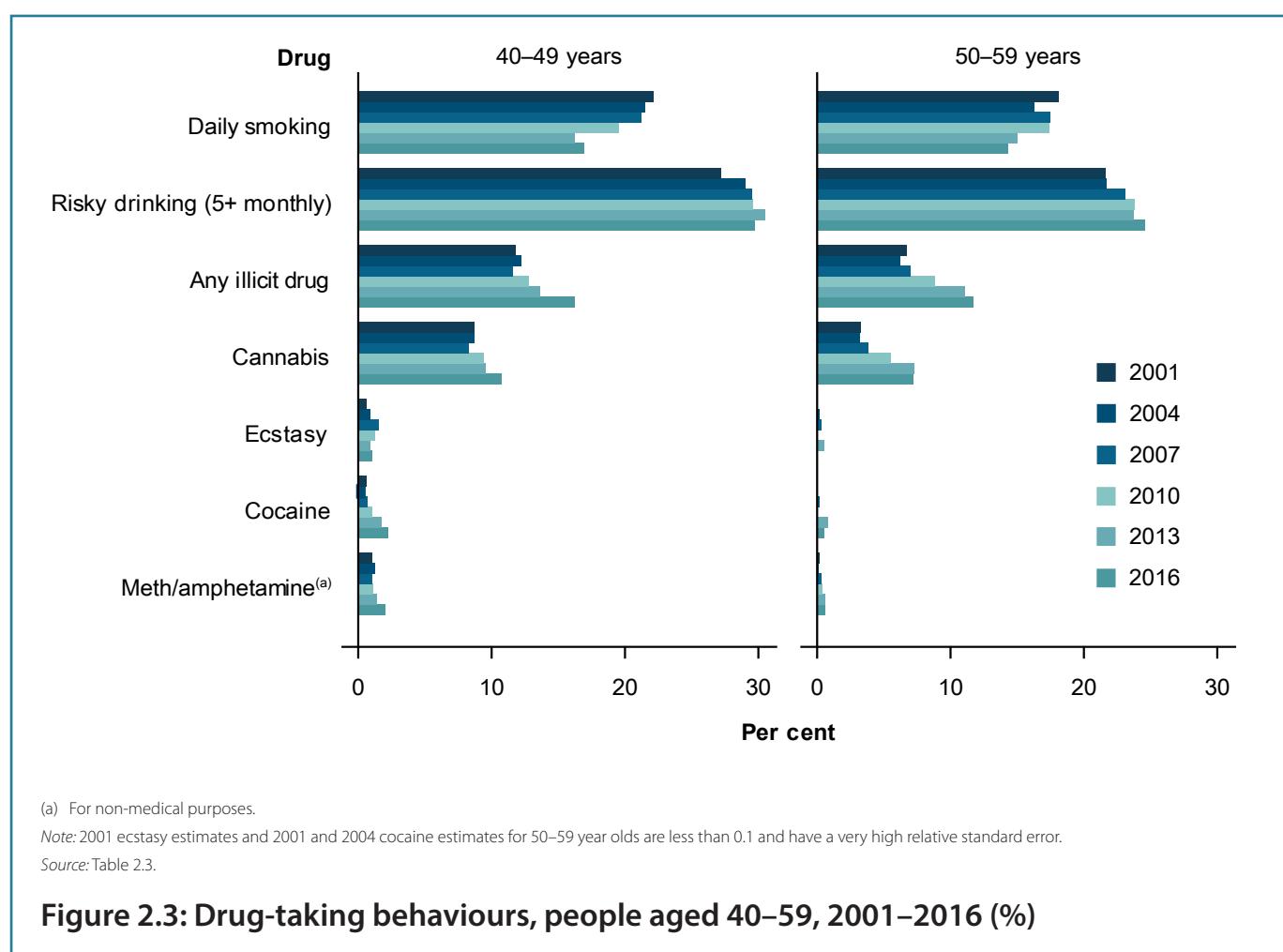
In recent years, people in their 40s have shown an increase in illicit use of drugs and were the only age group to show a statistically significant increase in use between 2013 and 2016 (from 13.6% to 16.2%). Since 2001, recent use of any illicit drugs has increased by over a third for people in their 40s (was 11.8% in 2001). People in their 50s generally have some of the lowest rates of illicit drugs use but this cohort has shown the largest rise in illicit use of drugs since 2001 (from 6.7% to 11.7% in 2016), although there was little change between 2013 and 2016 (11.1% to 11.7%). The increase seems to be driven by an increase in both recent use of cannabis and misuse of pharmaceuticals (for both age groups) (Figure 2.3).

People in their 40s were the most likely age group to smoke daily in 2016 and their rate did not improve between 2013 and 2016 (16.2% and 16.9%) but is significantly lower than the 22% reported in 2001. There was a similar story for people in their 50s with no change in the rate of daily smoking over the 3-year period but rates have declined since 2001 (18.1%).



There were no significant differences in the proportion of people in their 40s and 50s drinking alcohol at risky levels (lifetime or single occasion risk) between 2013 and 2016, but consumption of 5 or more standard drinks at least once a month has been trending upwards since 2001. For example, consumption of 5 or more standard drinks at least monthly has increased from 22% in 2001 to 25% in 2016 for people in their 50s. There was also a significant increase in the proportion of 50–59 year olds consuming 11 or more standard drinks on a single occasion at least once in the past year (from 9.1% in 2013 to 11.9% in 2016).

People who were using drugs in their late 20s in 2001 would now be in their early 40s in 2016. In 2001, people in this cohort had high consumption of alcohol and use of illicit drugs. The increase now seen among people in their 40s in their consumption of alcohol and illicit drugs may be partly explained by a 'cohort' effect as the group has aged.





## Social determinants and at-risk populations

Patterns of drug use differ by population characteristics depending on the drug type of interest (Figure 2.5). In general, a relatively high proportion of Aboriginal and Torres Strait Islander people smoked tobacco, drank alcohol at risky levels, and used cannabis and meth/amphetamines in the last 12 months compared with non-Indigenous Australians. There were also no significant changes in drug use among Indigenous Australians between 2013 and 2016 but changes are difficult to detect among Indigenous people in the NDSHS due to the small Indigenous sample (see Chapter 8 or Table 8.6 for more information).

People living in *Remote* and *Very remote* areas were more likely to smoke, drink at risky levels, and use cannabis and meth/amphetamines, but less likely to use illicit drugs such as cocaine and ecstasy compared with those in *Major cities*. There were no significant changes in daily smoking or illicit drug use among people living in *Remote* and *Very remote* areas but, similar to the national trend, lifetime risky alcohol consumption declined. Among people living in *Major cities*, lifetime risky alcohol consumption also declined, as did recent use of meth/amphetamines but recent use of cocaine significantly increased (see Chapter 8 or Table 8.1 for more information).

Other differences in daily smoking, risky alcohol intake and use of illicit drugs were apparent for people who were unemployed, identified as homosexual/bisexual, and had high levels of psychological distress. Drug-taking behaviours are becoming an increasing concern among homosexual/bisexual people, who consistently have the highest illicit drug use in the previous 12 months and there has been no improvement among this group since 2010.

Since 2007, the proportion of women consuming alcohol during pregnancy has declined and the proportion abstaining has increased and most pregnant women tend to change their drinking behaviour once they find out they are pregnant.

## State and territory comparisons

As with national data, all increases or decreases over time mentioned in the report are statistically significant unless specified otherwise. Similar to the national trend, for most jurisdictions there were slight but non-significant declines in the daily smoking rate between 2013 and 2016.

For two jurisdictions there was a significantly lower proportion of people exceeding the lifetime alcohol risk guidelines and the single occasion alcohol risk guidelines in 2016 than in 2013—Western Australia and Australian Capital Territory (Figure 2.4). There were more people in the Northern Territory abstaining from alcohol in 2016 but a large proportion still continue to exceed the lifetime risk and single occasion risk guidelines.

There was no change in use of any illicit drug in the previous 12 months. The only jurisdiction to report a significant decline in recent meth/amphetamine use was New South Wales with the proportion halving since 2013 (from 1.4% to 0.7%). Western Australia (2.7%), Tasmania (2.1%) and South Australia (1.9%) all reported higher rates than the national average of 1.4%.



The Australian Capital Territory had the lowest daily smoking rate, the lowest proportion of people exceeding the lifetime risk and single occasion (at least monthly) alcohol risk guidelines, and the lowest proportion who had used illicit drugs in the last 12 months. On the other end of the spectrum, people in the Northern Territory had the highest rates across all these measures of drug use.

A range of factors influences drug use prevalence including population demographics, national and jurisdictional legislation and policies, policing and local drug markets.

In New South Wales, there was a slight rise in recent illicit drug use but this increase was not significant (from 14.2% to 14.7%). People in New South Wales were more likely to use cocaine (3.4%) and far less likely to use meth/amphetamines (significantly declined from 1.4% in 2013 to 0.7% in 2016) than other jurisdictions.

In Western Australia, the daily smoking rate did not change between 2013 and 2016 (about 12%) but the proportion exceeding the lifetime risk and single occasion risk alcohol guidelines significantly declined in 2016. Use of any illicit drug in previous 12 months remained stable at about 1 in 6 and was only slightly higher than the national average of 15.6%.

People in South Australia reported slight but non-significant declines in the rates of daily smoking (from 12.8% in 2013 to 10.8% in 2016) and risky alcohol consumption (both lifetime and single occasion risk) but there was a significant decline in the proportion that had used ecstasy in the previous 12 months (from 2.8% in 2013 to 1.6% in 2016).

Apart from synthetic cannabinoids, there were no significant changes in licit or illicit drug use across the remaining jurisdictions in 2016 (Victoria, Queensland, Tasmania and the Northern Territory).



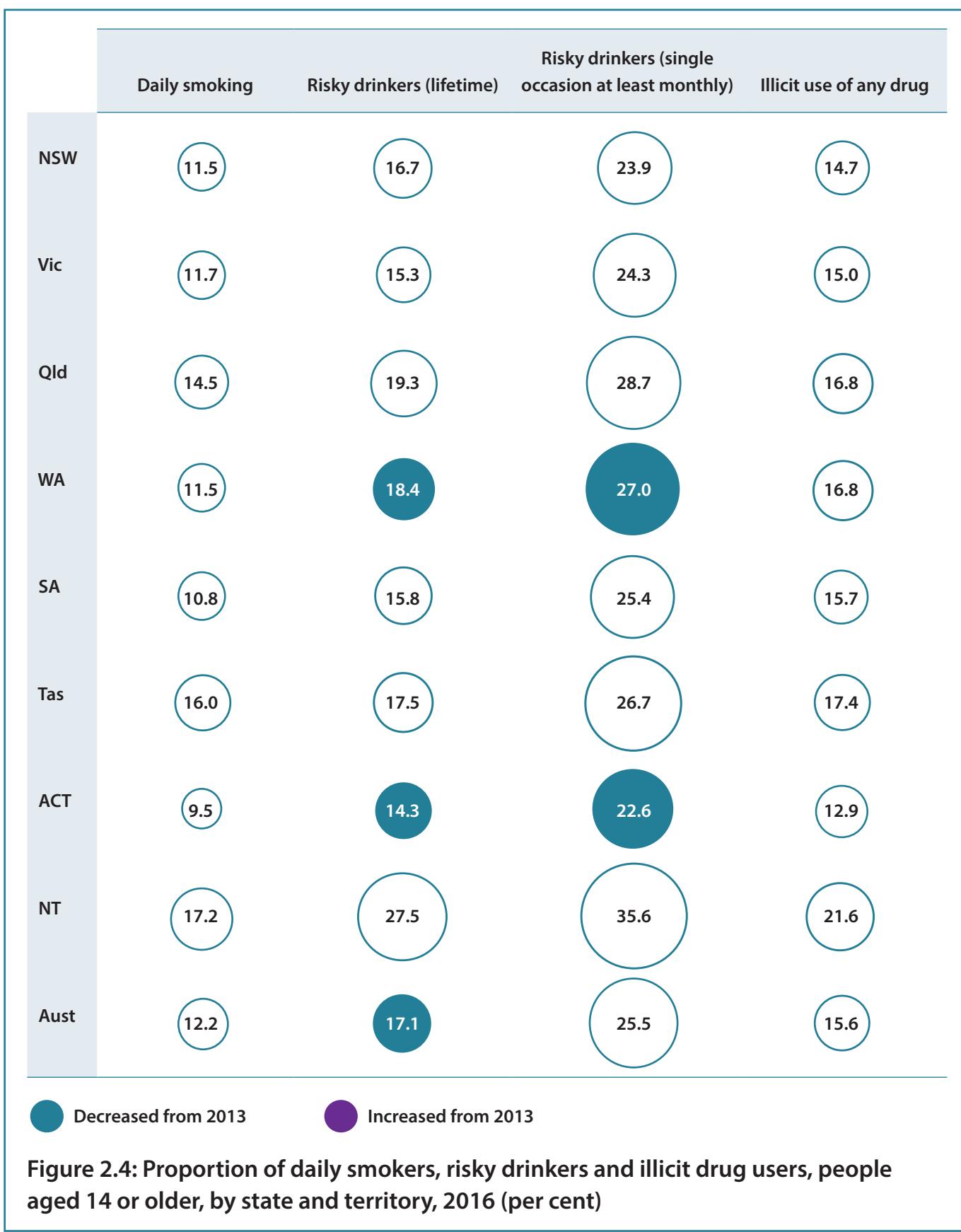
**Table 2.1: Recent drug use, people aged 14 or older, 2001–2016 (%)**

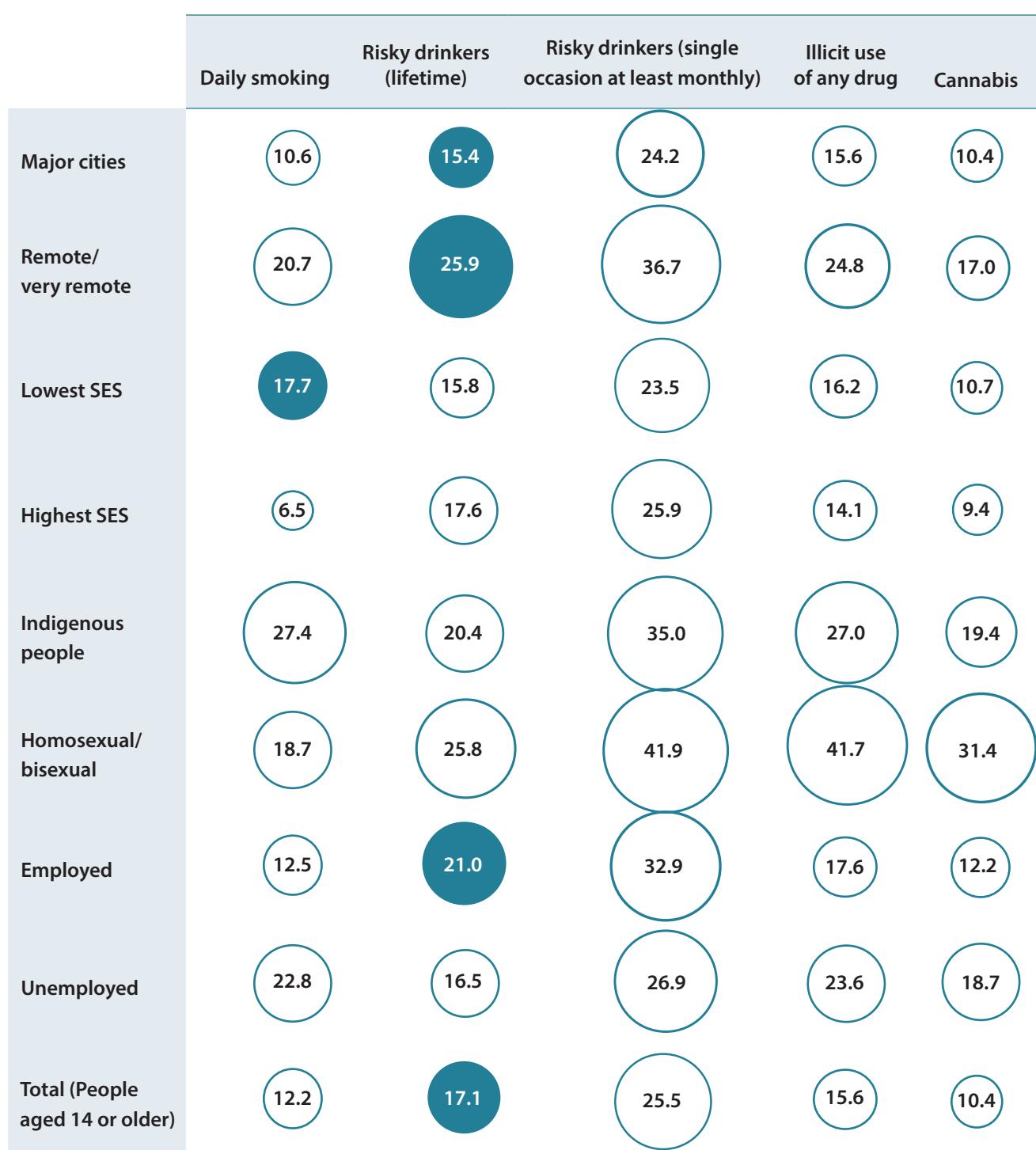
| Drug/Behaviour  | 2001        | 2004        | 2007        | 2010        | 2013        | 2016        |
|---|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>Tobacco</b>  |             |             |             |             |             |             |
| Current smoker <sup>(a)</sup>   | 23.2        | 20.7        | 19.4        | 18.1        | 15.8        | 14.9        |
| Daily smoker  | 19.4        | 17.5        | 16.6        | 15.1        | 12.8        | 12.2        |
| <b>Alcohol</b>  |             |             |             |             |             |             |
| Recent use <sup>(a)</sup>   | 82.4        | 83.6        | 82.9        | 80.5        | 78.2        | 77.5        |
| Risk of lifetime harm <sup>(b)</sup>  | 20.5        | 20.8        | 20.7        | 20.5        | 18.2        | 17.1#       |
| Monthly risk of single occasion harm <sup>(c)</sup>                               | 29.2        | 29.5        | 29.3        | 29.0        | 26.4        | 25.5        |
| Monthly risk of single occasion harm and risk of lifetime harm <sup>(b)(c)</sup>  | n.a.        | n.a.        | n.a.        | 17.7        | 15.6        | 14.7#       |
| <b>Illicit drugs (excluding pharmaceuticals)</b>                                  |             |             |             |             |             |             |
| Marijuana/cannabis  | 12.9        | 11.3        | 9.1         | 10.3        | 10.2        | 10.4        |
| Ecstasy <sup>(d)</sup>  | 2.9         | 3.4         | 3.5         | 3           | 2.5         | 2.2         |
| Meth/amphetamine (speed) <sup>(e)</sup>   | 3.4         | 3.2         | 2.3         | 2.1         | 2.1         | 1.4#        |
| Cocaine   | 1.3         | 1.0         | 1.6         | 2.1         | 2.1         | 2.5         |
| Hallucinogens   | 1.1         | 0.7         | 0.6         | 1.4         | 1.3         | 1.0#        |
| Inhalants   | 0.4         | 0.4         | 0.4         | 0.6         | 0.8         | 1.0         |
| Heroin  | 0.2         | 0.2         | 0.2         | 0.2         | 0.1         | 0.2         |
| Ketamine  | n.a.        | 0.3         | 0.2         | 0.2         | 0.3         | 0.4         |
| GHB   | n.a.        | 0.1         | 0.1         | 0.1         | *<0.1       | *0.1        |
| Synthetic cannabinoids  | n.a.        | n.a.        | n.a.        | n.a.        | 1.2         | 0.3#        |
| New and emerging psychoactive substances  | n.a.        | n.a.        | n.a.        | n.a.        | 0.4         | 0.3         |
| Injected drugs  | 0.6         | 0.4         | 0.5         | 0.4         | 0.3         | 0.3         |
| Any illicit <sup>(f)</sup> excluding pharmaceuticals                              | 14.2        | 12.6        | 10.9        | 12.0        | 12.0        | 12.6        |
| <b>Pharmaceuticals</b>  |             |             |             |             |             |             |
| Pain-killers/analgesics and opioids <sup>(e)</sup> (includes OTC <sup>(g)</sup> ) | 3.3         | 3.2         | 2.7         | 3.3         | 3.5         | n.a         |
| Pain-killers/analgesics and opioids <sup>(e)</sup> (excludes OTC <sup>(g)</sup> ) | n.a.        | n.a.        | n.a.        | n.a.        | 2.3         | 3.6         |
| Tranquillisers/sleeping pills <sup>(e)</sup>                                      | 1.1         | 1.0         | 1.4         | 1.5         | 1.6         | 1.6         |
| Steroids <sup>(e)</sup>   | 0.2         | —           | —           | 0.1         | *0.1        | *0.1        |
| Methadone/buprenorphine <sup>(h)</sup>  | 0.1         | 0.1         | 0.1         | 0.2         | 0.2         | 0.1         |
| Misuse of pharmaceuticals <sup>(i)</sup> (includes OTC <sup>(g)</sup> )           | 3.9         | 3.8         | 3.7         | 4.2         | 4.7         | n.a         |
| Misuse of pharmaceuticals <sup>(i)</sup> (excludes OTC <sup>(g)</sup> )           | n.a.        | n.a.        | n.a.        | n.a.        | 3.6         | 4.8         |
| <b>Illicit use of any drug<sup>(j)</sup></b>                                      | <b>16.7</b> | <b>15.3</b> | <b>13.4</b> | <b>14.7</b> | <b>15.0</b> | <b>15.6</b> |



**Table 2.1 Notes:**

- # Statistically significant change between 2013 and 2016.
- \* Estimate has a relative standard error of between 25% and 50% and should be used with caution.
- (a) Used in the previous 12 months. For tobacco and alcohol, recent/current use means daily, weekly and less than weekly smokers and drinkers.
- (b) On average, had more than 2 standard drinks per day.
- (c) Had more than 4 standard drinks on 1 occasion at least once a month.
- (d) Included 'designer drugs' before 2004.
- (e) For non-medical purposes.
- (f) Illicit use of at least 1 of 12 classes of drugs (excluding pharmaceuticals) in the previous 12 months in 2016. The number and type of illicit drugs used has changed over time.
- (g) OTC refers to paracetamol, aspirin and other non-opioid over-the-counter pain-killers/analgesics.
- (h) For non-medical purposes and did not include buprenorphine before 2007.
- (i) Included barbiturates up until 2007; did not include methadone in 1993 and 1995; did not include other opiates from 1993 to 1998.
- (j) Illicit use of at least 1 of 16 classes of drugs in the previous 12 months in 2016. The number and type of illicit drugs used has changed over time.





**Figure 2.5: Proportion of daily smokers, lifetime risky drinkers and illicit drug users, people aged 14 or older, by selected characteristics, 2016 (per cent)**

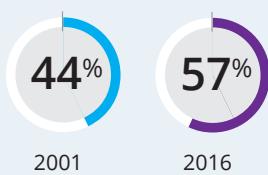


### Daily Smoking

Halved since 1991 but did not significantly decline between 2013 and 2016



Share of daily smokers age 40+ has increased



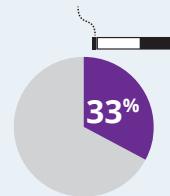
More than **1 in 3** adult smokers smoked 20+ cigarettes per day



Daily smoking declined among those in the lowest socioeconomic areas



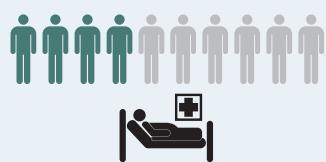
One third of daily smokers do not want to quit



Main reasons for not quitting



But **4 in 10** would be motivated to give up by ill health

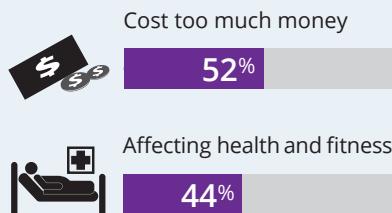


**1 in 4** would be motivated to give up by increase in cost



### Main reasons for quitting

The main reasons smokers attempted to quit or change their smoking behaviour in 2016



### Roll-your-own cigarettes

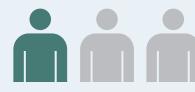


Adult smokers shifting away from manufactured cigarettes with more opting for roll-your-own cigarettes

Young adult (18–24) smokers most likely to smoke roll-your-own



### Electronic cigarettes



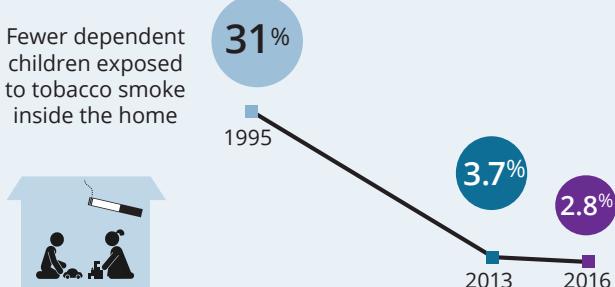
**1 in 3** smokers tried in their life time



Only 4.4% of smokers use them

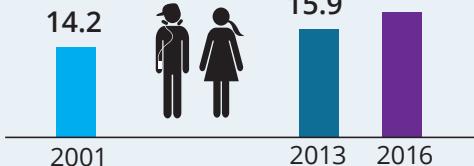
### Dependent children exposed to tobacco

Fewer dependent children exposed to tobacco smoke inside the home



### First full cigarette

Average age 14–24 year olds first tried smoking a full cigarette has increased over time



Note: findings relate to people aged 14 or older unless specified. An adult is a person aged 18 or older.

All data presented in this chapter are available in the tobacco smoking tables  
<http://www.aihw.gov.au/reports/illicit-use-of-drugs/ndhs-2016-detailed/data>.



## Current tobacco use and trends

In 2016, about 3 million Australians (or 14.9%) aged 14 or older were current smokers (either daily, weekly or less often than weekly) and 2.4 million smoked daily (12.2%). Since 1998, about 1 in 4 people had reported that they were ex-smokers but this declined between 2013 and 2016 (from 24% to 23%) (Table 3.1).

While smoking rates have been on a long-term downward trend since 1991, the daily smoking rate between 2013 and 2016 did not significantly decline and only decreased slightly from 12.8% to 12.2%.

The decline in daily smoking tends to be driven by people never taking up smoking rather than smokers quitting. Between 1991 and 2016:

- the daily smoking rate halved (from 24% to 12.2%)
- the ex-smoking rate fluctuated between 21% in 1991, up to 26% in 2004 and has since declined to 23% in 2016
- the never smoking rate has increased by 13 percentage points to the highest levels seen over the 25-year period (from 49% to 62%).

## Tobacco smoking by age and sex

Although no significant decline was reported in the daily smoking rate between 2013 and 2016, most age groups made considerable progress over the last 15 years for males and females. However, the daily smoking rate for older age groups is not declining at the same rate as that for younger age groups and there are some noticeable differences between the sexes. Table T3.1 shows that between 2001 and 2016:

- males were generally more likely to smoke daily than females across nearly all age groups but males in their 50s made better progress than females in their 50s over this period and these two groups now have a similar daily smoking rate of 14%
- young adults were far less likely to smoke daily with both males and females halving their smoking rates by 2016
- females in their 30s halved their daily smoking rate while males in their 30s reduced it by over one-third.



**Table T3.1: Proportion of and per cent change of people smoking daily, by age and sex, 2001, 2013 and 2016**

| Age group | Males |      |      |                     | Females |      |      |                     |
|-----------|-------|------|------|---------------------|---------|------|------|---------------------|
|           | 2001  | 2013 | 2016 | % change since 2001 | 2001    | 2013 | 2016 | % change since 2001 |
| 12–17     | n.a.  | *4.0 | *1.6 | n.a.                | n.a.    | 2.8  | *1.3 | n.a.                |
| 18–24     | 24.5  | 14.0 | 12.3 | -50%                | 23.5    | 12.7 | 10.8 | -54%                |
| 25–29     | 30.9  | 17.3 | 19.3 | -38%                | 23.0    | 15.0 | 12.2 | -47%                |
| 30–39     | 26.9  | 17.1 | 17.0 | -37%                | 24.2    | 10.3 | 11.1 | -54%                |
| 40–49     | 23.4  | 17.9 | 19.1 | -18%                | 20.6    | 14.5 | 14.8 | -28%                |
| 50–59     | 20.1  | 16.7 | 14.4 | -28%                | 16.0    | 13.4 | 14.1 | -12%                |
| 60–69     | 12.7  | 12.9 | 11.5 | -9.4%               | 10.1    | 10.3 | 9.2  | -8.9%               |
| 70+       | 7.0   | 6.6  | 7.3  | 4.2%                | 4.6     | 5.2  | 4.9  | 6.5%                |
| 14+       | 20.9  | 14.5 | 13.8 | -34%                | 17.9    | 11.2 | 10.7 | -40%                |
| 18+       | 21.8  | 15.1 | 14.6 | -33%                | 18.3    | 11.6 | 11.2 | -39%                |

Note: The 2001 survey did not include 12–13 year olds.

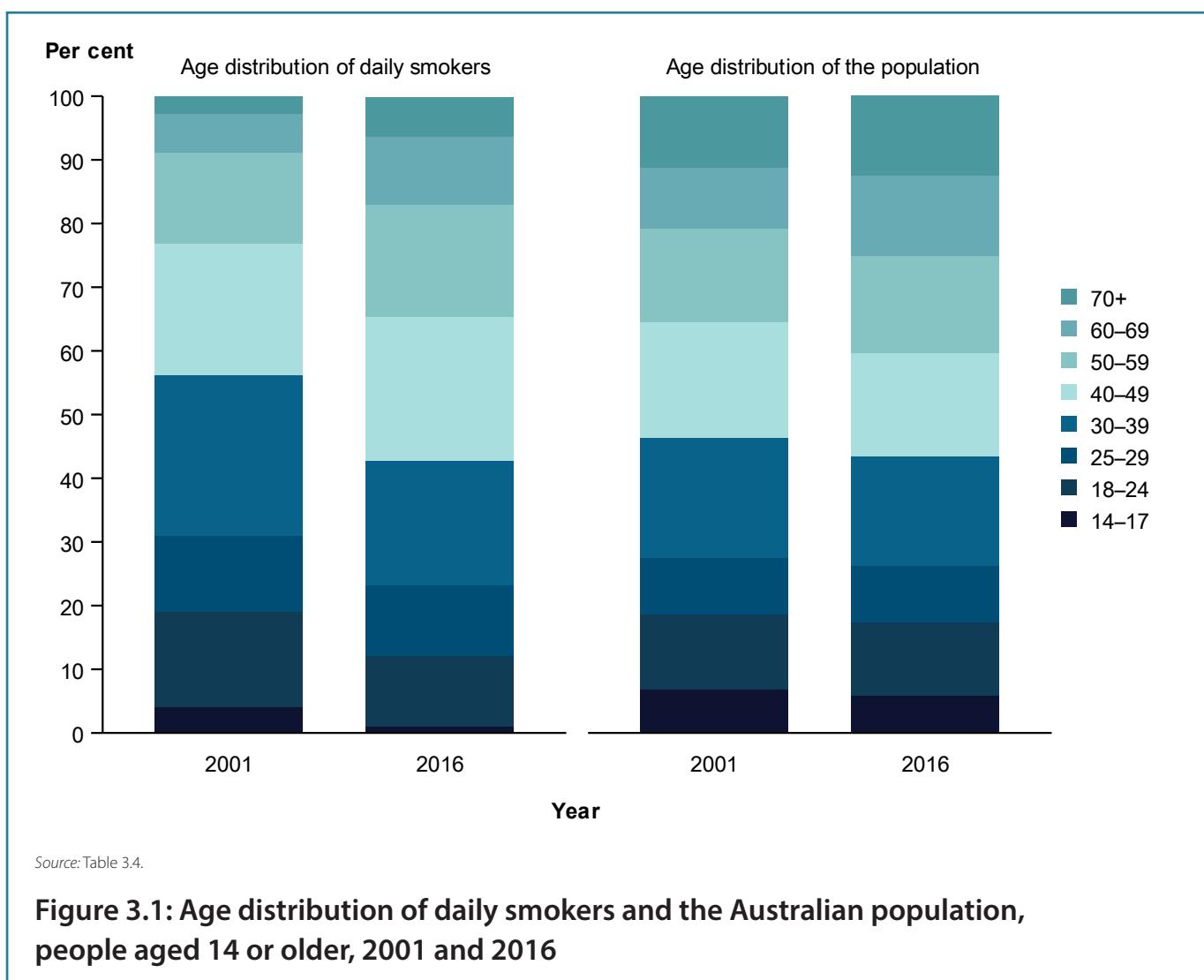
There was a greater proportion of people never taking up smoking in 2016 compared with 2013, mainly driven by an increase in never smoking among males (Table 3.2). For females, there was a significant increase in the proportion of never smokers only for those aged 25–29 but there was a significant increase in never smokers among males across a number of age groups including 12–17 year olds (93% to 97%), 25–29 year olds (60% to 67%), 50–59 year olds (45% to 49%) and 60–69 year olds (44% to 48%) (Table 3.3).



## Age distribution of daily smokers

Figure 3.1 presents the age distribution of daily smokers since 2001 (that is, what proportion of each age group make up the daily smokers) and compares it to the distribution of the Australian population. It shows that between 2001 and 2016, the share of daily smokers aged 40 or older grew at a faster rate than the share of the Australian population who are aged 40 or older.

In 2001, daily smokers were more likely to be aged under 40 than aged 40 or older (56% compared with 44%). But as these cohorts have aged over time and as more young people are not taking up smoking, the majority of daily smokers in 2016 consisted of people aged 40 or over (57% compared with 43% for people under 40).



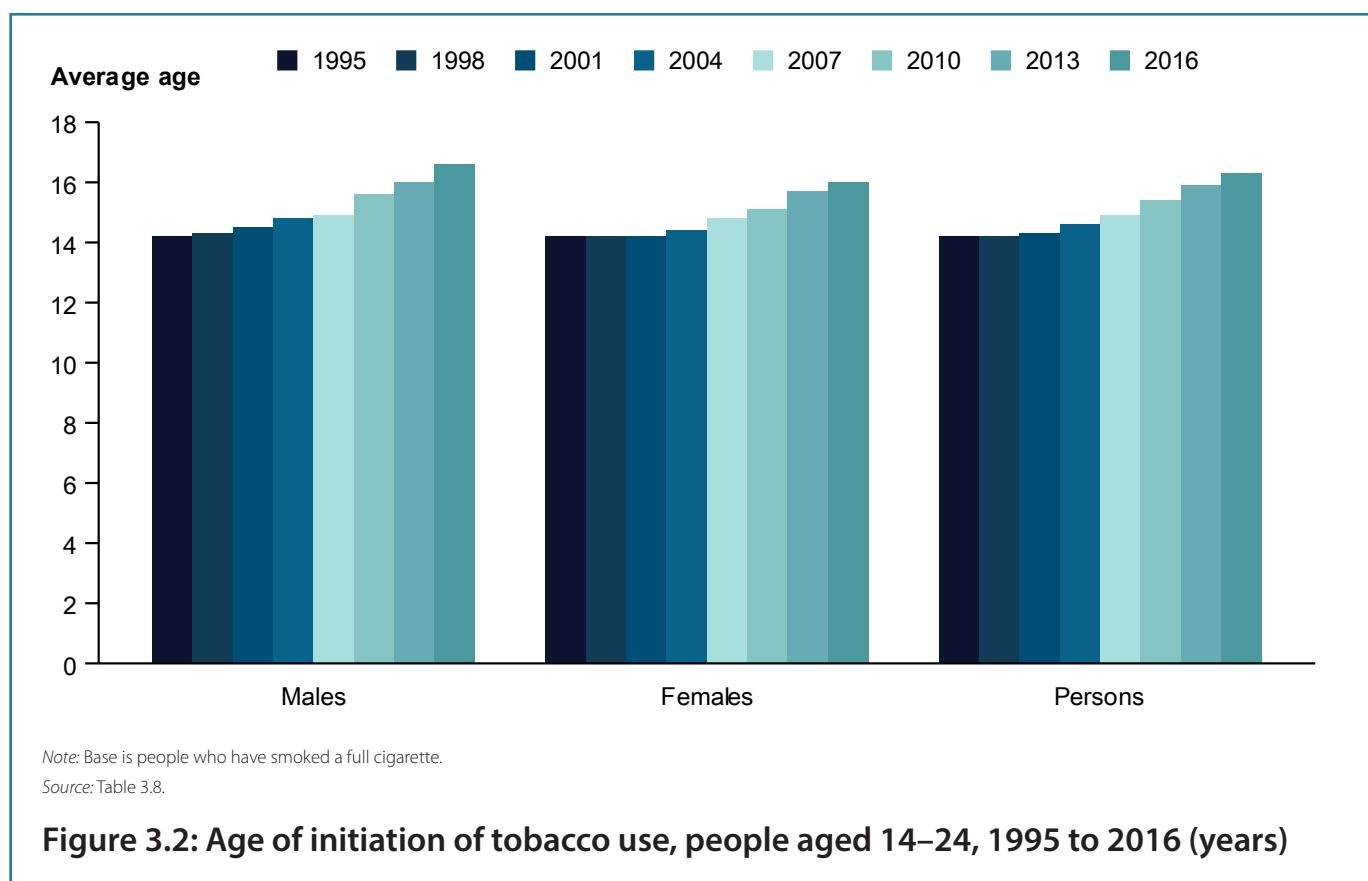


## Age first smoked

People who try smoking during their early adolescent years are more likely to smoke daily later in life. Tables 3.6 and 3.7 present a subset of the 2016 NDSHS sample and examines the smoking patterns among adults aged 18–49 (the analysis was restricted to these age groups as younger age groups may still be transitioning to smokers and the responses for older age groups may be less accurate due to the length of time since they first smoked). In 2016, among adults aged 18–49 who have smoked a full cigarette in their lifetime:

- about 7 in 10 (69%) smoked their first full cigarette before the age of 18
- just under 1 in 5 (18%) smoked a full cigarette at age 13 or younger but this has declined from 29% in 2001
- people who smoked their first full cigarette by the age of 13 were 1.6 times as likely to smoke daily as someone who tried it in their adult years.

Results from the survey show that the average age at which young people aged 14–24 smoked their first full cigarette has steadily risen since 1995 (Figure 3.2), for both males and females. Young people in 2016 who tried smoking their first full cigarette were about 2 years older than they were in 1995 (16.3 years compared with 14.2 years). Between 2013 and 2016, the average age of initiation significantly increased from 15.9 years to 16.3 years but the increase was only significant for males, from 16.0 years to 16.6 years (Table 3.8). Females generally smoked their first full cigarette at a slightly younger average age than males (16.0 years in 2016 compared with 16.6 years for males).

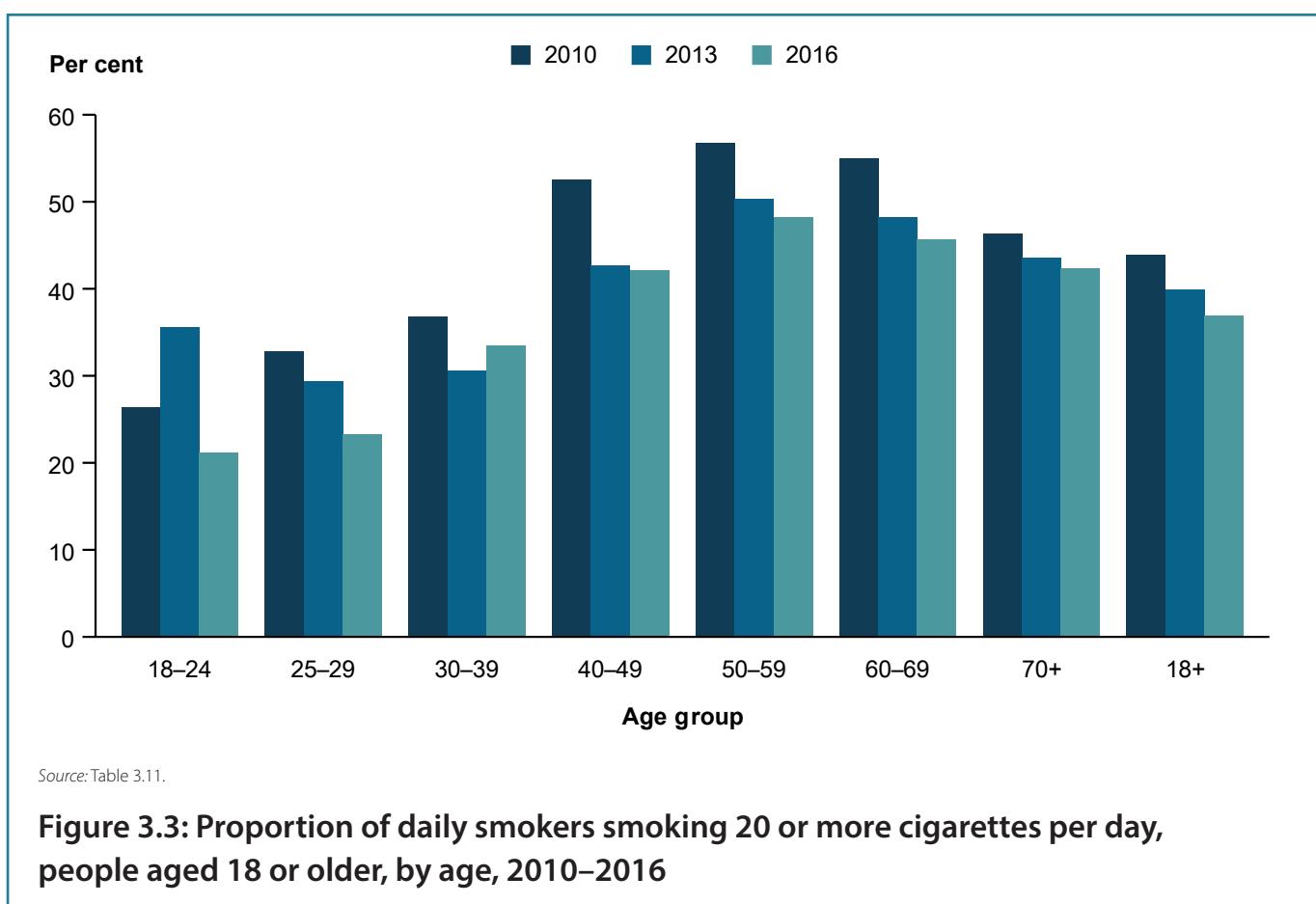




## Number of cigarettes smoked

In 2016, the average number of cigarettes smokers smoked per week was similar to the average number smoked in 2013 (94 cigarettes compared with 96). Smokers aged 18–24 were the only age group to report a significant decline in the number of cigarettes smoked per week over the 3-year period (from 84 to 68 cigarettes) but smokers in most age groups reported smoking fewer cigarettes than in 2010 and earlier years (Table 3.10).

A pack-a-day smoker is considered to be someone who smokes 20 or more cigarettes per day. In 2016, over one-third (37%) of daily smokers were smoking a pack-a-day and this was highest among smokers in their 50s with almost 1 in 2 (48%) smoking 20 or more cigarettes per day (Figure 3.3). Fewer young adult smokers smoked a pack a day in 2016 than in 2013 (21% compared with 36%).



Source: Table 3.11.

**Figure 3.3: Proportion of daily smokers smoking 20 or more cigarettes per day, people aged 18 or older, by age, 2010–2016**



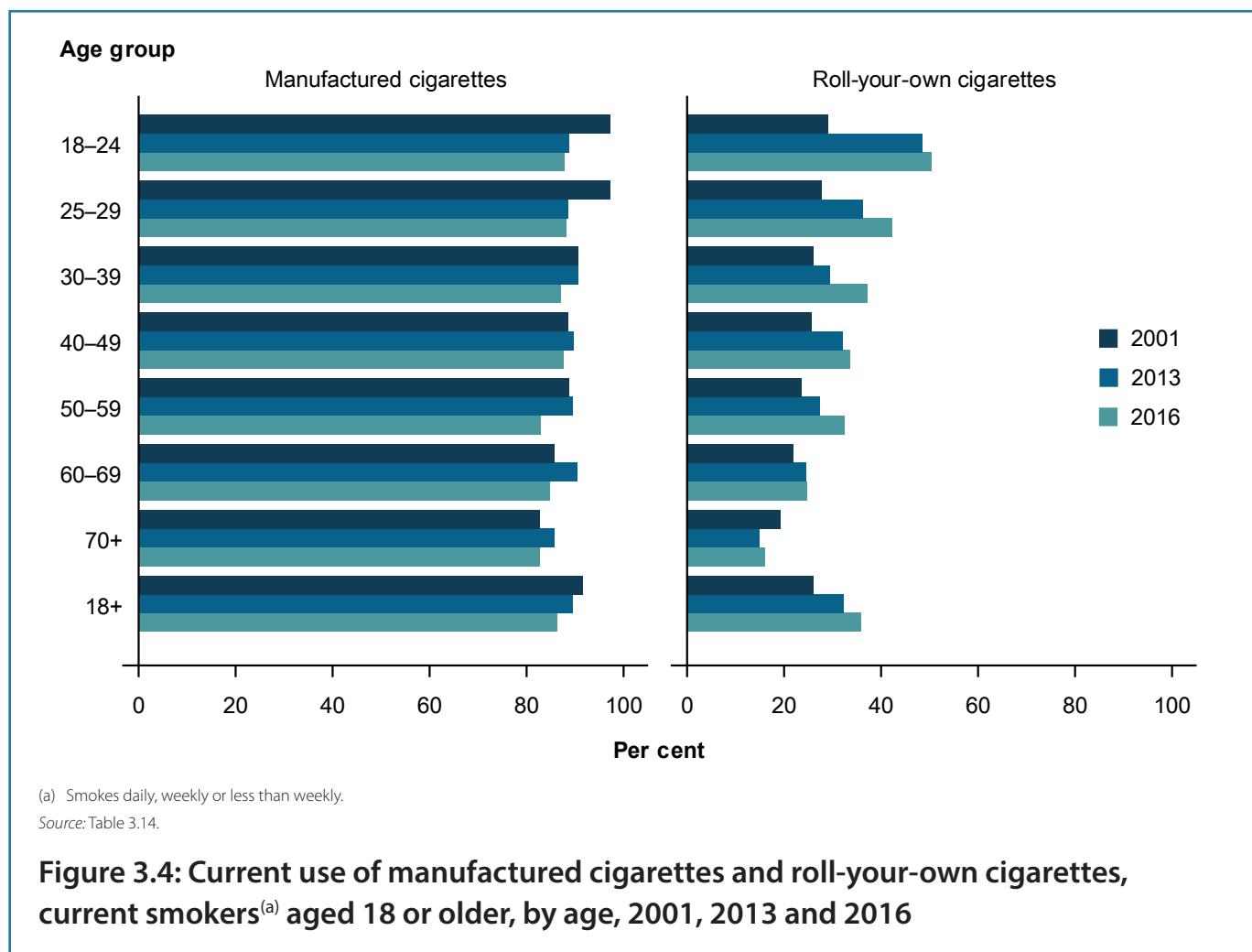
## Tobacco products

Tobacco smokers choose to smoke a variety of tobacco products including cigarettes, cigars and cigarillos. In 2016:

- the vast majority of smokers aged 14 or older (86%) smoked manufactured cigarettes, while over 1 in 3 (36%) smoked roll-your-own cigarettes (Table 3.12)
- about 1 in 10 had smoked cigarillos (11.7%) and 6.8% had smoked cigars
- water pipe tobacco, e-cigarettes and pipe tobacco were used less commonly than other tobacco products with fewer than 1 in 20 using these products (4.9%, 4.4% and 2.0%, respectively) (tables 3.12 and 3.18).

### Manufactured and roll-your-own cigarettes

Among adult smokers, smoking manufactured cigarettes significantly declined between 2013 and 2016 (from 89% to 86%). In contrast, smoking roll-your-own cigarettes significantly increased from 32% in 2013 to 36% in 2016 (Figure 3.4).





Among smokers, the use of roll-your-own cigarettes has increased across all age groups since 2001, except for people aged 70 or older, and significantly increased among smokers aged in their 30s between 2013 and 2016. Young adult smokers (50%) were the age group most likely to smoke roll-your-own cigarettes in 2016; use of roll-your-own cigarettes then declined as age increased.

## Electronic cigarettes

Electronic cigarettes (also known as e-cigarettes, electronic nicotine delivery systems, or personal vaporisers) are devices designed to produce a vapour that the user inhales. Most e-cigarettes contain a battery, a liquid cartridge and a vaporisation system and are used in a manner that simulates smoking (ACT Department of Health 2017).

The 2013 survey was the first time respondents were asked about their use of e-cigarettes. In 2016, a number of changes were made to the questionnaire to better capture the use of e-cigarettes, including adding questions about frequency and duration of use, and modifying the question about lifetime use and current use of e-cigarettes (see questionnaire changes for more information).

These changes mean that 2016 and 2013 data are not fully comparable. However, data may still be used to give an indication of the change in use of e-cigarettes between 2013 and 2016.

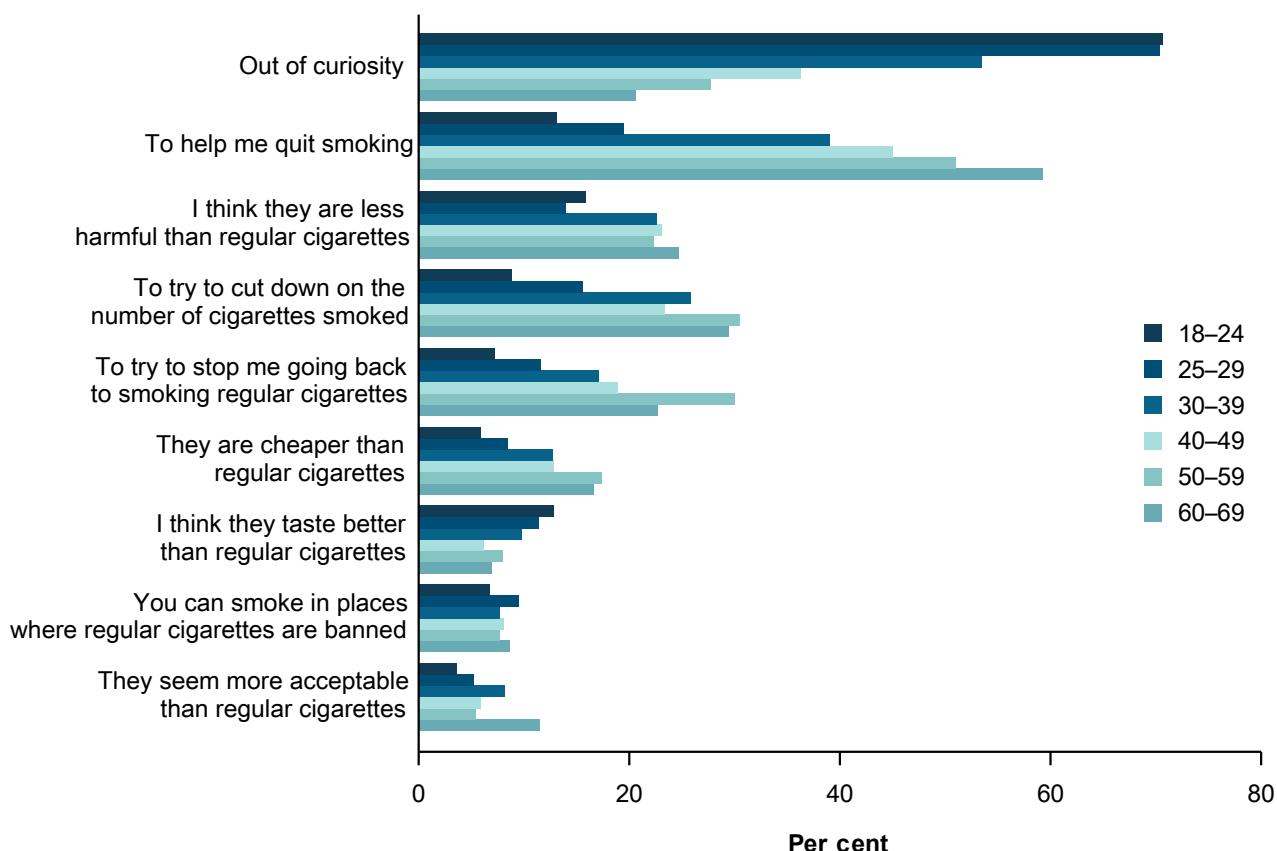
In this report, a smoker is defined as someone who has smoked at least 100 cigarettes or the equivalent amount of tobacco in their life. Therefore, an e-cigarette user may not necessarily be regarded as a smoker. Smoking cigarettes and other combustible tobacco products was most common among people in their 40s. By contrast, current e-cigarette use was most common among smokers aged 18–24 at 6.8% (Table 3.19).

Current use of e-cigarettes was relatively low in the general population with only 1.2% of people aged 14 or older reporting that they currently use e-cigarettes (Table 3.18). More specifically, in 2016:

- almost one-third (31%) of smokers had tried e-cigarettes in their lifetime (Table 3.16)
- 1 in 20 (4.4%) smokers currently use e-cigarettes and only 1.5% use them daily (Table 3.18)
- 1.2% of ex-smokers currently use e-cigarettes and only 0.6% of never smokers use e-cigarettes (Table 3.18)
- younger smokers were more likely to have tried an e-cigarette in their lifetime and to currently use them compared with older smokers (49% and 6.8%, respectively, for smokers aged 18–24 compared with 18.7% and 2.9% for those aged 60–69).

E-cigarettes are a relatively new product and therefore most people aged 12 or older who had smoked a full cigarette in their lifetime (98.3%) tried smoking traditional cigarettes before e-cigarettes (Table 3.20).

The most common reason for trying e-cigarettes was curiosity (55%) but people's reason varied by age (Figure 3.5). People aged under 30 were about 3 times as likely to nominate curiosity as people aged 60 or older. Older people (aged 50 or older) were more likely to use e-cigarettes as a cessation device with more than half specifying that they used them to help them quit smoking. About 1 in 5 (19%) used e-cigarettes because they thought they were less harmful than regular cigarettes.



Note: 12–17 year olds and people aged 70 or older are not presented in this figure due to the low proportion people in these age groups trying e-cigarettes.  
Source: Table 3.21.

**Figure 3.5: Reasons for using e-cigarettes, people who have tried an e-cigarette, by age, 2016 (%)**

## Exposure to second-hand smoke

Results from the survey show that parents and guardians are choosing to reduce their children's exposure to tobacco smoke at home. The proportion of households with dependent children where someone smoked inside the home has fallen from 31% in 1995 to just 2.8% in 2016 (this was a significant decline from 3.7% in 2013) (Table 3.25).

Between 2013 and 2016, the proportion of adult non-smokers being exposed to tobacco inside the home remained unchanged at 2.9% but was significantly lower than the 2010 rate of 5.1% (Table 3.26).



## Illicit tobacco

Illicit tobacco includes both unbranded tobacco and branded tobacco products on which no excise, customs duty or Goods and Services Tax (GST) was paid.

The NDSHS has 2 sections that aim to capture respondents' use of illicit tobacco:

- unbranded illicit tobacco—finely cut, unprocessed loose tobacco that has been grown, distributed and sold without government intervention or taxation (ANAO 2002)
- illicit branded tobacco—tobacco products that are smuggled into Australia without payment of the applicable customs duty.

Consumers may not be aware of the legality of the tobacco products they purchase; they might not know what country they came from, how they were imported or if the appropriate taxes were paid by the retailer. For this reason, questions in the NDSHS focus on the appearance of the product. Tobacco products without a brand name or which do not have plain packaging with the graphic health warnings visible to the consumer can be one of a number of indicators that the product falls outside the legal supply chain.

### Unbranded illicit tobacco

About 1 in 3 smokers were aware of unbranded tobacco in 2016 and this proportion did not change from 2013 (33% and 34%, respectively) (Table 3.27). Between 2013 and 2016, there was no change in the proportion of smokers who smoked unbranded tobacco in their lifetime (16.5% for both years) or who currently use it (3.6% in 2013 and 3.8% in 2016) but lifetime and current use has declined since 2007 (27% and 6.1%, respectively).

### Illicit branded tobacco

Revisions were made in 2016 to add 'in Australia' to the wording of the question which specifically asks about whether people have seen tobacco products which do not have the plain packaging/graphic health warnings (see questionnaire changes for further information). This change may have had an impact on these results but the extent of the impact is unclear as it is not known how many people surveyed in 2013 may have been thinking of cigarette packets they saw or purchased overseas rather than in Australia.

In relation to illicit branded tobacco, the 2016 survey asked whether, in the last 3 months in Australia, respondents had seen or purchased any packs of cigarettes or tobacco without plain brown packaging and graphic health warnings. While not being definitive characteristics of illicit tobacco, the absence of the required Australian health warnings on the tobacco product packaging, and packaging that does not comply with Australia's plain packaging legislation, could be an indication that the product is illicit.



Findings showed that:

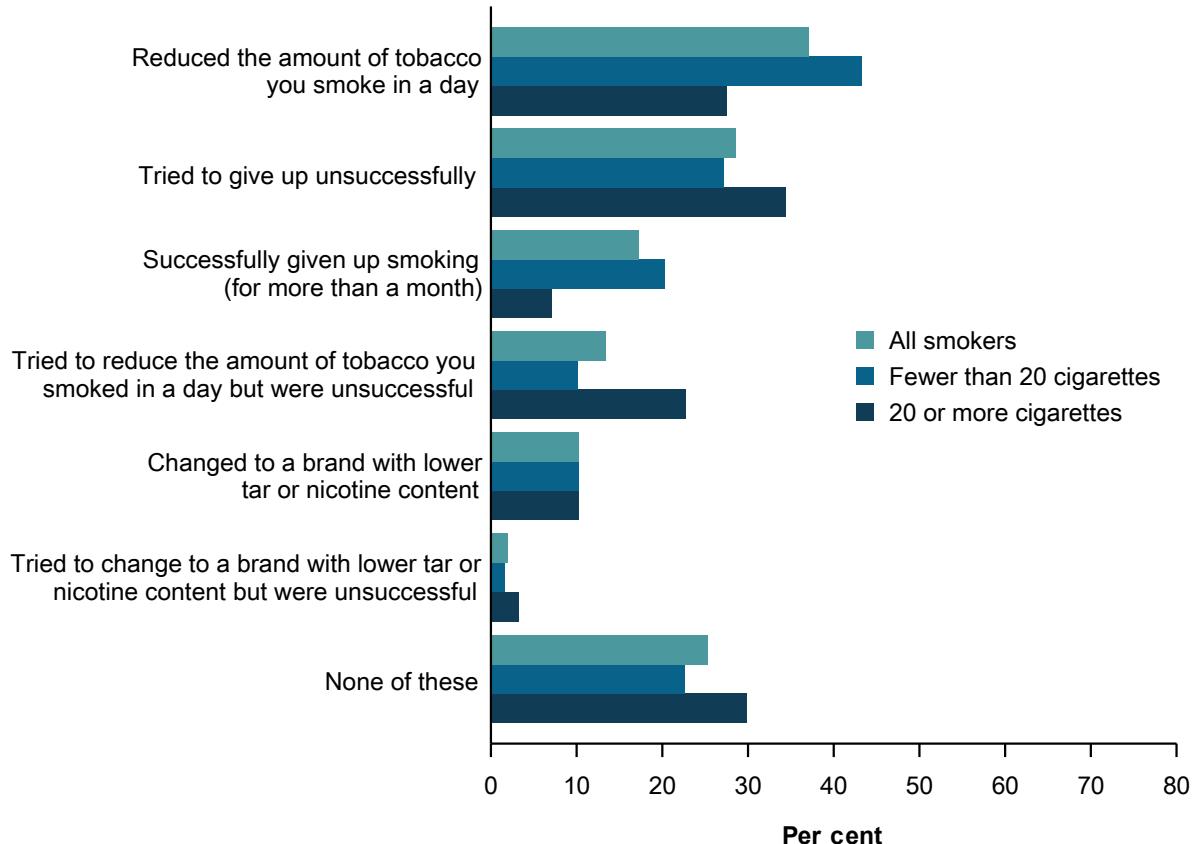
- fewer smokers had seen tobacco products without plain packaging in the previous 3 months (decline from 18.5% in 2013 to 13.0% in 2016) and fewer smokers had purchased these products (from 9.6% in 2013 to 5.5%) (Table 3.28)
- of those who had seen these products, less than half (44%) had purchased them and about 1 in 10 (11.3%) bought 15 or more of these packets (Table 3.29)
- of smokers who purchased these products, 37% said they bought them from a supermarket, convenience or grocery store and one-quarter (25%) purchased them from a tobacconist; a further 22.5% did not know where they were purchased from (Table 3.28).

## Changes to smoking behaviour

A wide variety of factors can influence a decision to change or reduce tobacco smoking including legislative, health, educational and economic factors. Between 2013 and 2016, there were significantly fewer smokers who succeeded in giving up smoking for at least a month before the survey (declined from 20% to 17.2%) (Table 3.30). Other 2016 findings show:

- 3 in 10 (28.5%) smokers tried to quit but did not succeed
- 1 in 4 (25%) did not attempt to make any changes to their smoking behaviour in the previous 12 months
- smokers who smoked fewer than 20 cigarettes per day were more likely to succeed at making changes to their smoking behaviour (gave up for at least a month or reduced the amount smoked per day) than pack-a-day smokers
- pack-a-day smokers were more likely to attempt changes without success (tried to give up or tried to cut back but were unsuccessful) (Figure 3.6).

In 2016, 6 in 10 (61%) daily smokers and 1 in 2 (51%) occasional smokers reported they have undertaken activities to help them quit or cut back in the previous 12 months (Table 3.35). The most common activities undertaken in the last 12 months were: trying to quit by going cold turkey (25%); discussing smoking and health at home (20%); and using nicotine gum, nicotine patch or nicotine inhaler (15.7%).



(a) Reported smoking daily, weekly or less than weekly.

Source: Table 3.31.

**Figure 3.6: Changes to smoking behaviour, current smokers<sup>(a)</sup> aged 14 or older, by number of cigarettes smoked, 2016**



## Motivators for change to behaviour

When looking at broad reasons for changes to smoking behaviour, the main reasons smokers attempted to quit or change their smoking behaviour in 2016 were because smoking was costing too much money or they were worried it was affecting their health (Table 3.32). More smokers nominated cost as a factor in 2016 (52% compared with 47% in 2013 and up from 36% in 2007) and this was the reason most frequently reported. A number of factors significantly declined between 2013 and 2016, including:

- health warnings on tobacco packets (declined from 11.1% to 8.5%)
- TV, press or radio ads by government (declined from 9.2% to 6.6%) or pharmaceutical companies for quit smoking products (declined from 4.2% to 3.0%)
- wanting to get fit (decline from 34% to 31%).

Of smokers that attempted a change to their behaviour, two-thirds (65%) were motivated to by health reasons (wanting to get fit; was pregnant or starting a family; was affecting their health or fitness; their doctor advised them to give up) (Table 3.33). Smoking costing too much money was one of the key reasons for trying to quit smoking across all age groups—at least 50% reported this as a reason across all age groups except for the 60–69 year olds where 43% reported this reason (Table 3.33).

## Smokers who do not want to quit

In 2016, 1 in 3 (33%) daily smokers and 1 in 4 (26%) occasional smokers were not planning to quit smoking (Table 3.36)—and these intentions were highest among smokers aged 70 or older (49%) (Table 3.37).

The main reason smokers do not want to quit were because they enjoy it (59%) or because it relaxes them (40%) (Table 3.38). About 1 in 4 (24%) daily smokers said they do not intend to quit because they are addicted to nicotine and 1 in 5 (19%) said they had tried to quit before but it had not worked.

Of those who do not intend to quit smoking, 4 in 10 (42%) said ill health would motivate them to quit and a little over 1 in 4 (27%) said they would be motivated to quit by an increase in cost (Table 3.40). People in their 50s and 60s are less likely to be motivated to quit by increasing cost than people 40 or younger.

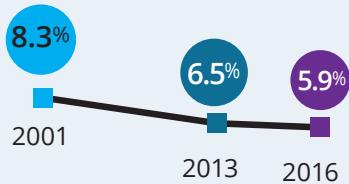


### Alcohol consumption

In 2016, **3 in 4** (77%) drank alcohol in the past 12 months



The proportion drinking daily continued to decline

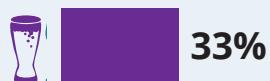


### Drink preferences

**12-17 year olds:**  
Pre-mixed spirits



**Adult males:** Beer

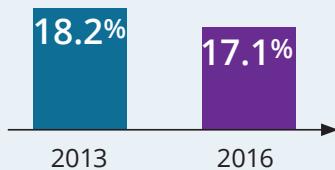


**Adult females:** Wine

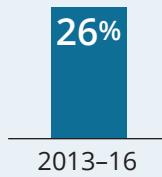


### Alcohol risk

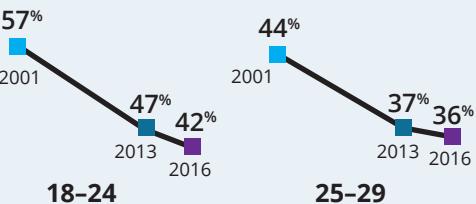
Decline in drinking in excess of lifetime risk guidelines



...but those exceeding single occasion risk guidelines (at least monthly) remained stable



Young adults were less likely to drink 5+ standard drinks on a single occasion at least monthly



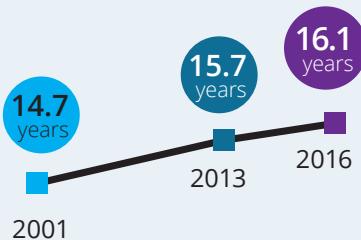
### Improvements in young people

**More teenagers** aged 12-17 **abstained** in 2016



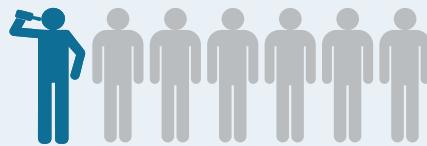
**Younger people are delaying drinking**

average age of 14-24 year olds trying alcohol for the first time increased



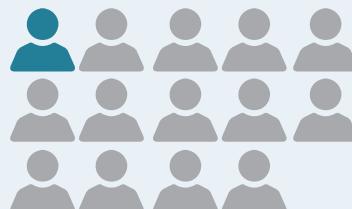
### Consumed 11 or more standard drinks

Around **1 in 7** (15.4%) had **11+ drinks** on a **single drinking occasion** in the past 12 months



**1 in 14**

(7.1%) had done so at least monthly



**Young adults aged 18-24** were the most likely age group to drink 11+

**At least yearly**

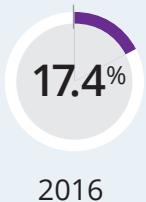


**At least monthly**



## Alcohol related harm

Recent drinkers undertaking **risky activities** while under the influence of alcohol continues to decline



**Driving a vehicle was the most common activity undertaken** also declining since 2007



Fewer people were victims of an **alcohol-related incident** (verbally abused, physically abused or being put in fear) in 2016



In comparison to low-risk drinkers, **single occasion risky drinkers** (at least monthly) were:

**7.5 times** as likely to **miss work** due to their alcohol use



**8.1 times** as likely to **injure themselves or someone else** in the last 12 months

**3.4 times** as likely to be **physically abused**

**3.4 times** as likely to **drive a vehicle while under the influence of alcohol.**

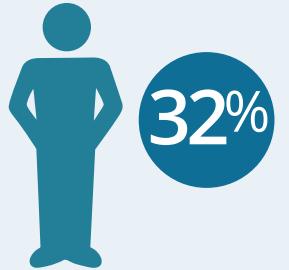
## Drinking reduction



About **1 in 2** recent drinkers had undertaken moderating behaviour (such as reducing the number of days they drank). Concern for their health was the main reason for doing this.

## Perceptions of health effects of alcohol

**More males than females** thought they could drink 3 or more drinks every day without putting their health at risk



**Note:** findings relate to people aged 14 or older unless specified. An adult is a person aged 18 or older.

All data presented in this chapter are available in the alcohol tables  
[<http://www.aihw.gov.au/reports/illicit-use-of-drugs/ndhs-2016-detailed/data>](http://www.aihw.gov.au/reports/illicit-use-of-drugs/ndhs-2016-detailed/data).

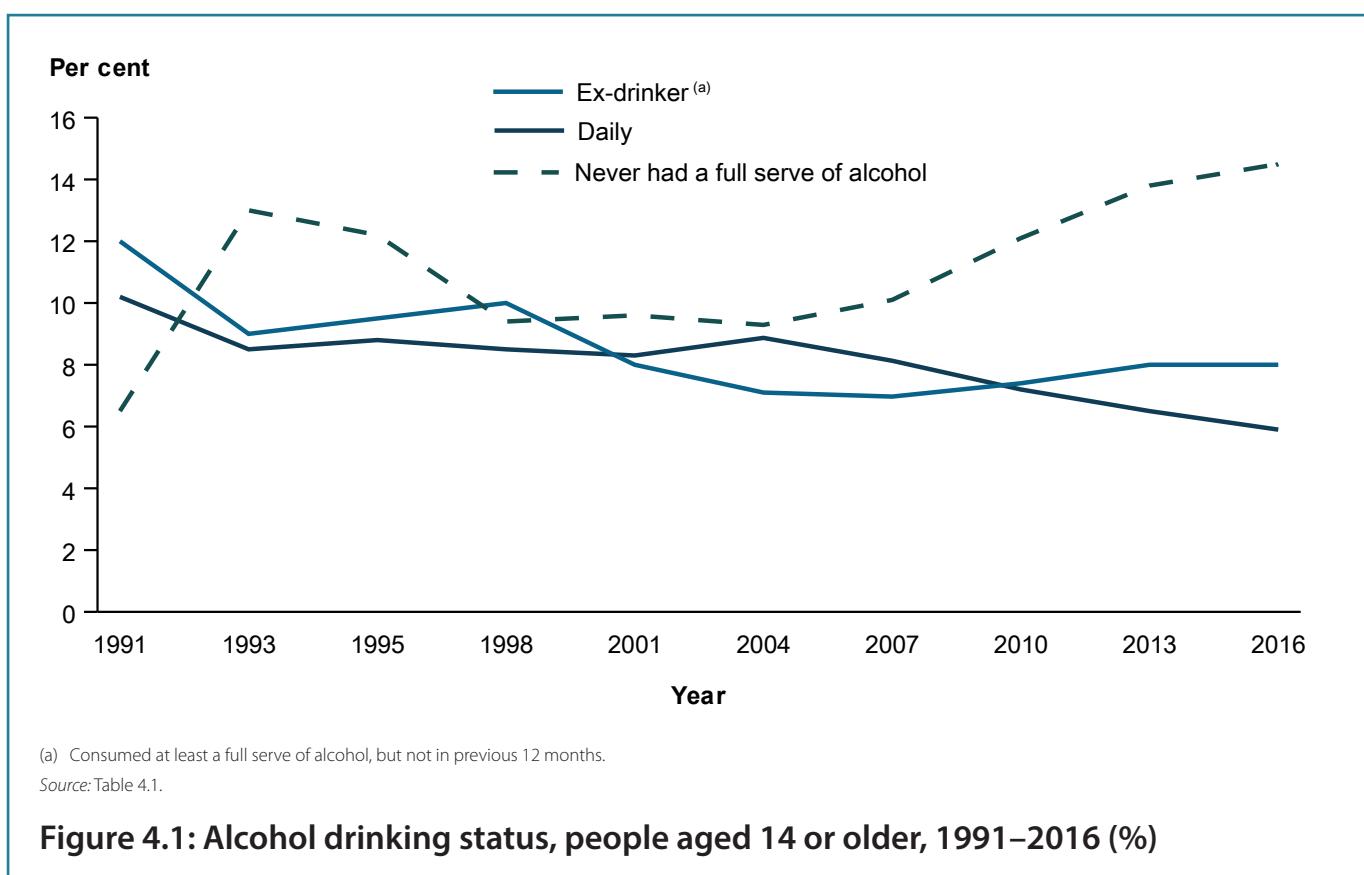


## Current alcohol use and trends

Between 2013 and 2016, the proportion of people aged 14 or older who drank alcohol daily declined (6.5% to 5.9%). The proportion of Australians who drank daily has continued to decline since 2004 (Figure 4.1).

Compared with 2013, people drank less frequently in 2016 with a significantly lower proportion of people that drank at least weekly and a significantly higher proportion drank less often than weekly (2 to 3 days a month, once a month, or less often than once a month) (Table 4.1).

Of the population aged 14 or older, around three-quarters (77%) had consumed a full serve of alcohol in the previous 12 months, and 23% had not consumed alcohol. While there was little change in these proportions between 2013 and 2016, there was a small but not significant increase in the proportion of never drinkers (from 13.8% to 14.5%) (Figure 4.1).





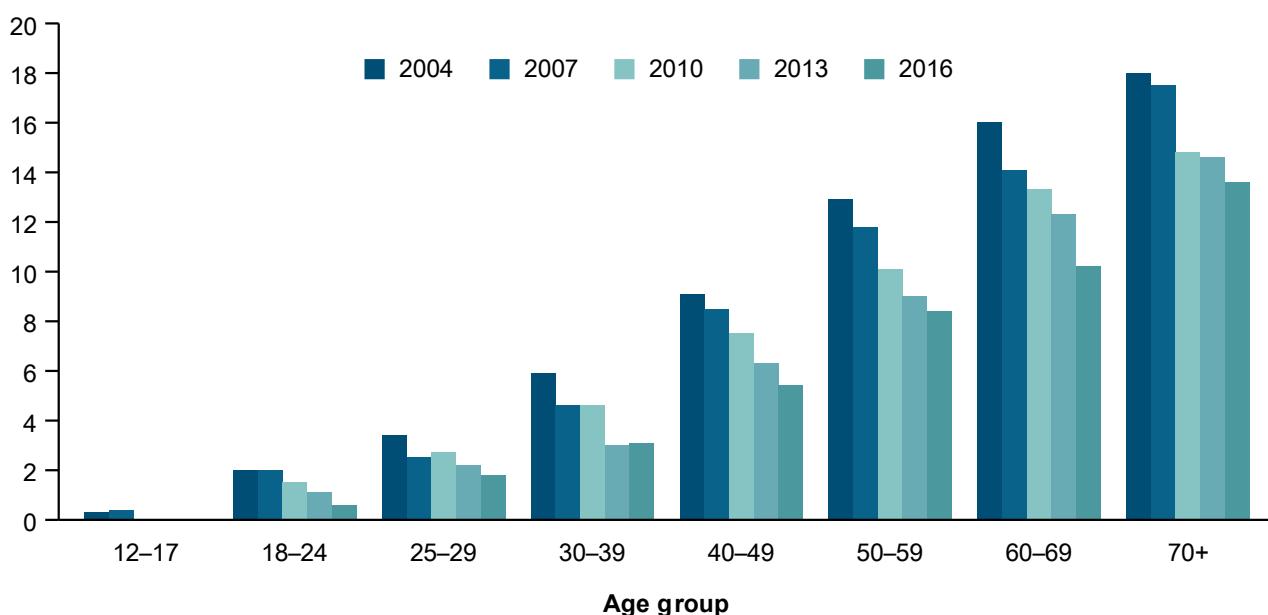
## Alcohol use by age and sex

Changes to the pattern of alcohol use from 2013 to 2016 appear to be driven by a significant decline in the proportion of males drinking daily (from 8.5% to 7.6%) and at least weekly (from 43% to 41%) (Table 4.2). There were no significant changes to the drinking status of females in 2016. By age, the only group to experience a significant decline in daily drinking between 2013 and 2016 was people aged 60–69 (12.3% to 10.2%). For most other age groups, there were slight declines in daily drinking but these were not significant (Figure 4.2).

Other noticeable patterns of alcohol use that varied between males and females and different age groups include:

- males aged 14 or older were almost twice as likely (7.6%) as females aged 14 or older (4.2%) to drink daily in 2016
- females were 1.7 times as likely as males to have never consumed a full glass of alcohol in 2004, but this reduced to 1.2 times in 2016 (16.1% for females compared with 12.9% for males) (Table 4.2)
- those aged 70 or older continue to be the age group most likely to drink daily, for both males (19.5%) and females (8.7%) (Table 4.3).

Per cent



Source: Table 4.4.

**Figure 4.2: Daily drinking, people aged 12 or older, 2004–2016 (%)**



## Alcohol risk

The *Australian guidelines to reduce health risks from drinking alcohol* aims to assist Australians with decisions about whether to drink alcohol and, if so, how much (See Box 4.1). Furthermore, under these guidelines, pregnant women and young people (aged under 18) are advised not to drink at all (NHMRC 2009).

### **Box 4.1: The Australian guidelines to reduce health risks from drinking alcohol**

The alcohol risk data presented in this report are reported against guideline 1 and guideline 2 of *The Australian guidelines to reduce health risks from drinking alcohol* released in March 2009 by the National Health and Medical Research Council.

#### **Guideline 1: Reducing the risk of alcohol-related harm over a lifetime**

The lifetime risk of harm from drinking alcohol increases with the amount consumed.

For healthy men and women, drinking no more than two standard drinks on any day reduces the lifetime risk of harm from alcohol-related disease or injury.

#### **Guideline 2: Reducing the risk of injury on a single occasion of drinking**

On a single occasion of drinking, the risk of alcohol-related injury increases with the amount consumed.

For healthy men and women, drinking no more than four standard drinks on a single occasion reduces the risk of alcohol-related injury arising from that occasion. This report mainly presents the proportion of people exceeding the single occasion risk guidelines once a month or more often (at least monthly).

## Current risky drinking and trends

Many drinkers consume alcohol responsibly; however, a substantial proportion of drinkers consume alcohol at a level that is considered to increase their risk of alcohol-related harm, according to the NHMRC guidelines.

In 2016, the consumption of alcohol in quantities that placed Australians at risk of an alcohol-related disease, illness or injury, continued a downward trend since 2010 (Table 4.6). Between 2013 and 2016, for those aged 14 and over:

- there was a significant decline in the proportion of people exceeding the NHMRC guidelines for lifetime risk by consuming more than 2 standard drinks per day on average, from 18.2% to 17.1%
- there were fewer people exceeding the lifetime risk guidelines (declined from 3.5 million in 2013 to 3.4 million in 2016)
- the proportion of people that consumed 5 or more standard drinks on a single drinking occasion at least once a month remained unchanged in 2016 at 26%—about 5 million people
- a higher proportion abstained from drinking alcohol (rising from 22% in 2013 to 23% in 2016), although this change was not significant.



## Risky consumption by age and sex

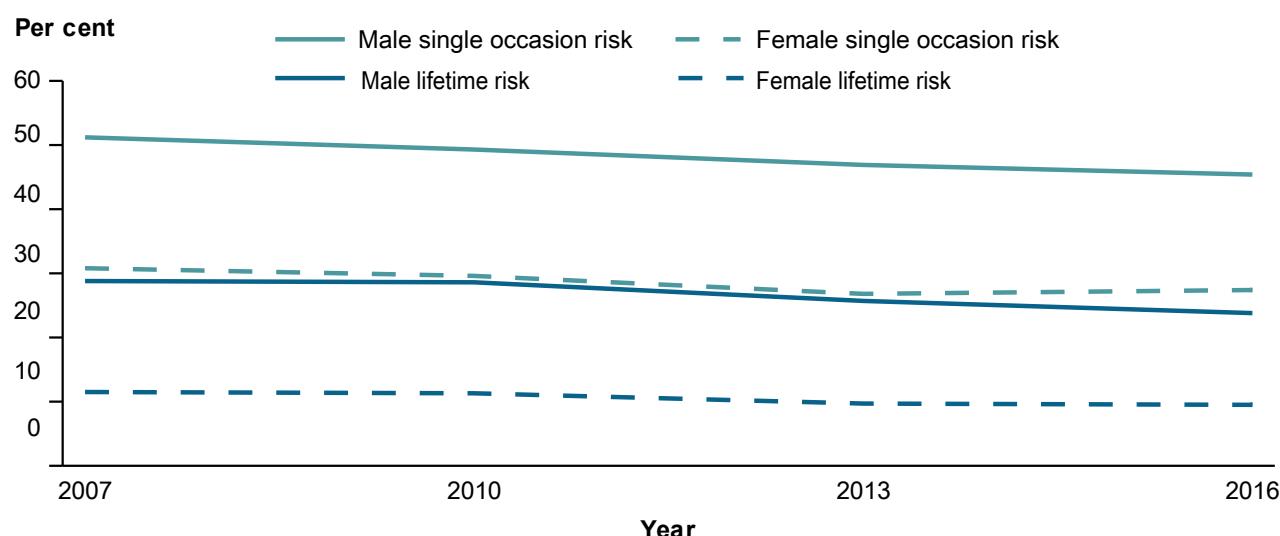
Age is an important determinant of health risks related to alcohol. Younger people experience harm from alcohol-related accident or injury disproportionately. Results from the survey indicate that younger people are more likely to consume alcohol that exceed the NHMRC single occasion risk guidelines and at risky levels well beyond the guidelines (11 or more standard drinks on a single occasion). Younger people are also more likely to be victims of alcohol-related incidents in the previous 12 months.

### Lifetime risk

In 2016, most people in Australia aged 12 and older drank at levels that did not place them at risk of harm over their lifetime—they either drank at low-risk levels (58%) or abstained (25%). For most age groups, about 1 in 5 people drank at levels that exceeded the lifetime risk guidelines. Drinkers who consumed alcohol in a way that increased their lifetime risk of alcohol-related harm were more likely to have certain demographic characteristics. For example:

- males were twice as likely as females to drink at risky levels (24% and 9.5%, respectively)
- males in their 40s (aged 40–49) were the most likely age group to drink at risky levels (29%)
- among females, those aged in their 50s (13.0%) are now the most likely to drink at risky levels, in place of those aged 18–24 (12.8%), who previously had the highest levels of risky drinking (Table 4.8).

Overall, the lifetime risk of alcohol-related harm declined in 2016, due primarily to a decline in the proportion of males drinking at risky levels (from 26% in 2013 to 24%) (Figure 4.3). For females, the proportion drinking at risky levels in 2016 was consistent with 2013 (9.5% and 9.7%, respectively).



Sources: Tables 4.8 and 4.10.

**Figure 4.3: People aged 12 or older, drinking alcohol at levels that place them at risk of harm over their lifetime and on a single occasion, by sex, 2007–2016 (%)**

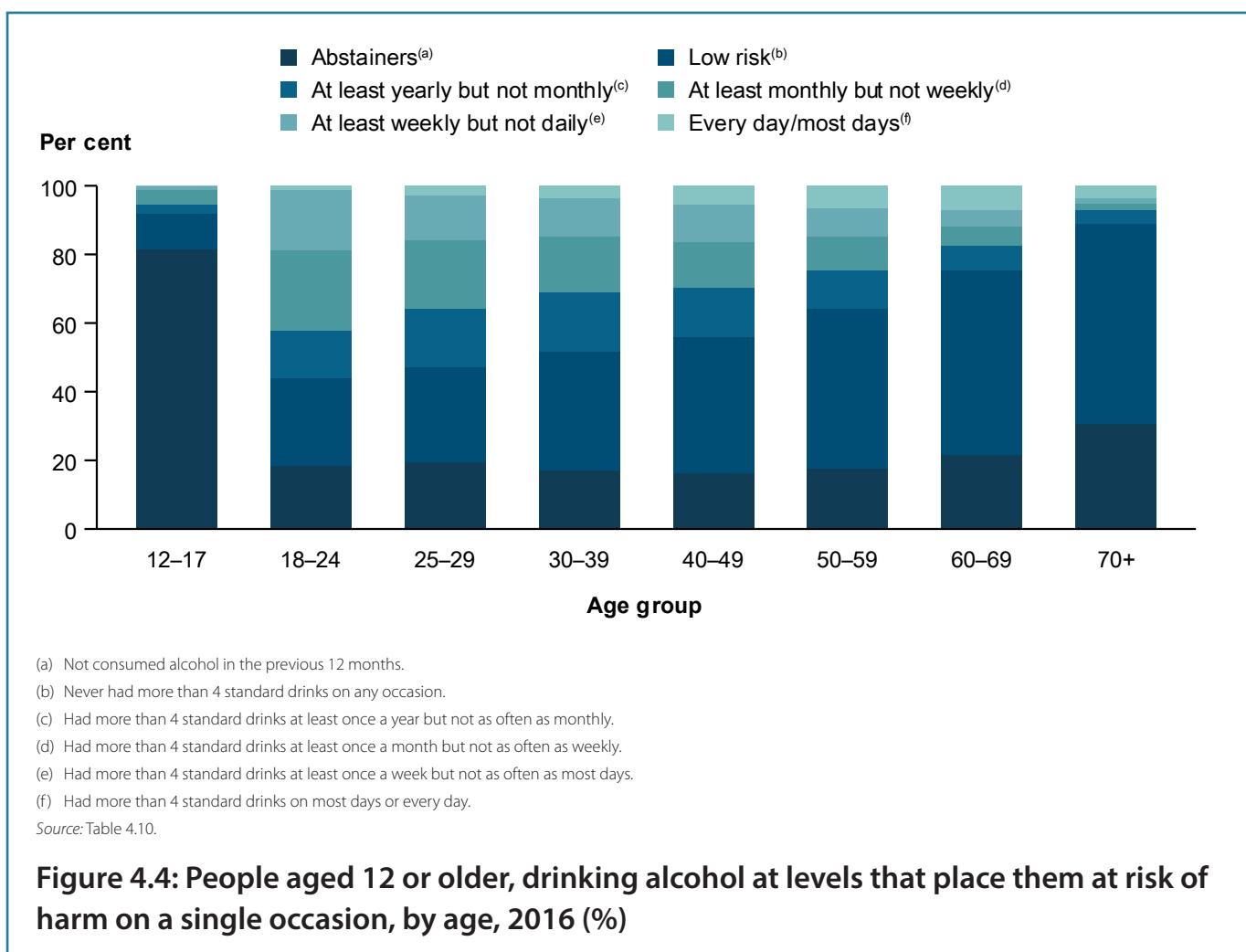


## Single occasion risk

Among people in Australia aged 12 and older in 2016, more than 1 in 3 (36%) had consumed 5 or more standard drinks on a single occasion at least once in the past year, therefore exceeding the NHMRC single occasion risk guidelines. Almost 1 in 4 (25%) did so at least once a month, and 1 in 7 (13%) did so at least once a week (Figure 4.4). Differences in risky alcohol intake on a single occasion were evident by sex.

In 2016:

- males were far more likely than females to drink alcohol in quantities that placed them at risk from a single occasion of drinking at least once in the past year (45% compared with 27% for women)
- males were also more likely to consume alcohol in quantities that exceeded the guidelines more often than women, with 19% of males consuming these quantities at least weekly (compared with 7% of females) (Table 4.12).



**Figure 4.4: People aged 12 or older, drinking alcohol at levels that place them at risk of harm on a single occasion, by age, 2016 (%)**



The NHMRC drinking guidelines also advise that for anyone aged under 18, not drinking alcohol is the safest option. Alcohol use among adolescents in Australia was prevalent in 2016, with 9.1% of males and 6.8% of females aged 12–17 exceeding the adult guidelines for single occasion risk. However, these proportions were lower than in 2013, when 13.5% of males and 11.3% of females aged 12–17 exceeded these guidelines. In addition, there were significant increases in the proportion of males (71% to 83%) and females (73% to 80%) aged 12–17 that abstained from drinking in 2016 (Table 4.10).

Overall, people aged 18–24 (56%) were more likely than any other age group to exceed the single occasion risk guidelines. As people age they are less likely to drink at risky quantities on a single occasion. People aged 70 and over were the least likely to consume alcohol in risky quantities with only 1 in 10 (11.0%) consuming 5 or more standard drinks on a single occasion in the past year.

People in their 60s were the age group most likely to consume 5 or more standard drinks on at least 5 days per week (7.0% in 2016 up from 5.7% in 2013). In comparison, people aged 18–24 were most likely to exceed single occasion risk guidelines weekly or monthly.

### Lifetime and single occasion risk combined

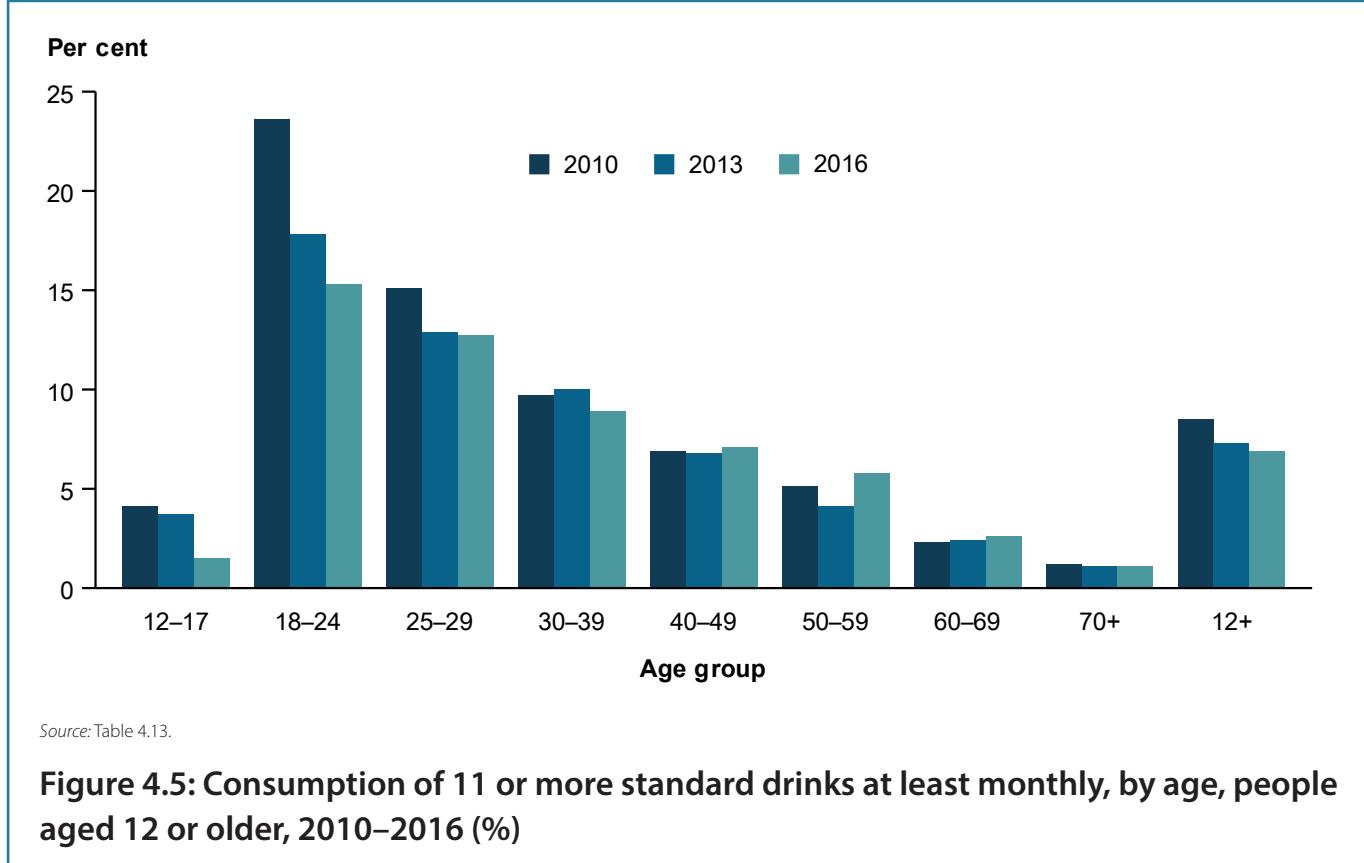
Two in 5 (37%) people in Australia aged 12 or older drank at levels considered low risk of harm, that is, from any single drinking occasion (at least once a year) and over a lifetime (Table 4.12). But a similar proportion also drank at levels that placed them at harm either in the short or long term (38%) in the previous 12 months. Males were far more likely than females (22% compared with 8.3%) to have shown drinking patterns that simultaneously placed them at risk of lifetime harm and single occasion harm at least once a year (Table 4.12).

## Very high alcohol consumption

While it is important to measure the proportion of the population drinking at risky levels according to the NHMRC 2009 alcohol guidelines, it is also important to explore drinking patterns among these drinkers further and examine those who are drinking well in excess of the guidelines. In 2016:

- around 1 in 7 (15.0%) people aged 12 or older had consumed 11 or more standard drinks on a single drinking occasion in the past 12 months and around 1 in 15 (6.9%) had done so in the last month, down slightly (but not significantly) from 2013 (Table 4.13)
- people in their late teens and early 20s (15.3%) were more likely to consume 11 or more standard drinks at least monthly than people in other age groups (Figure 4.5)

The proportion of people in their 50s (9.1% to 11.9%) and 60s (4.7% to 6.1%) consuming 11 or more standard drinks on a single drinking occasion in the past 12 months significantly increased between 2013 and 2016 (Table 4.13). This was also the case for people in their 50s in the last month (4.1% in 2013 to 5.8% in 2016) (Figure 4.5).

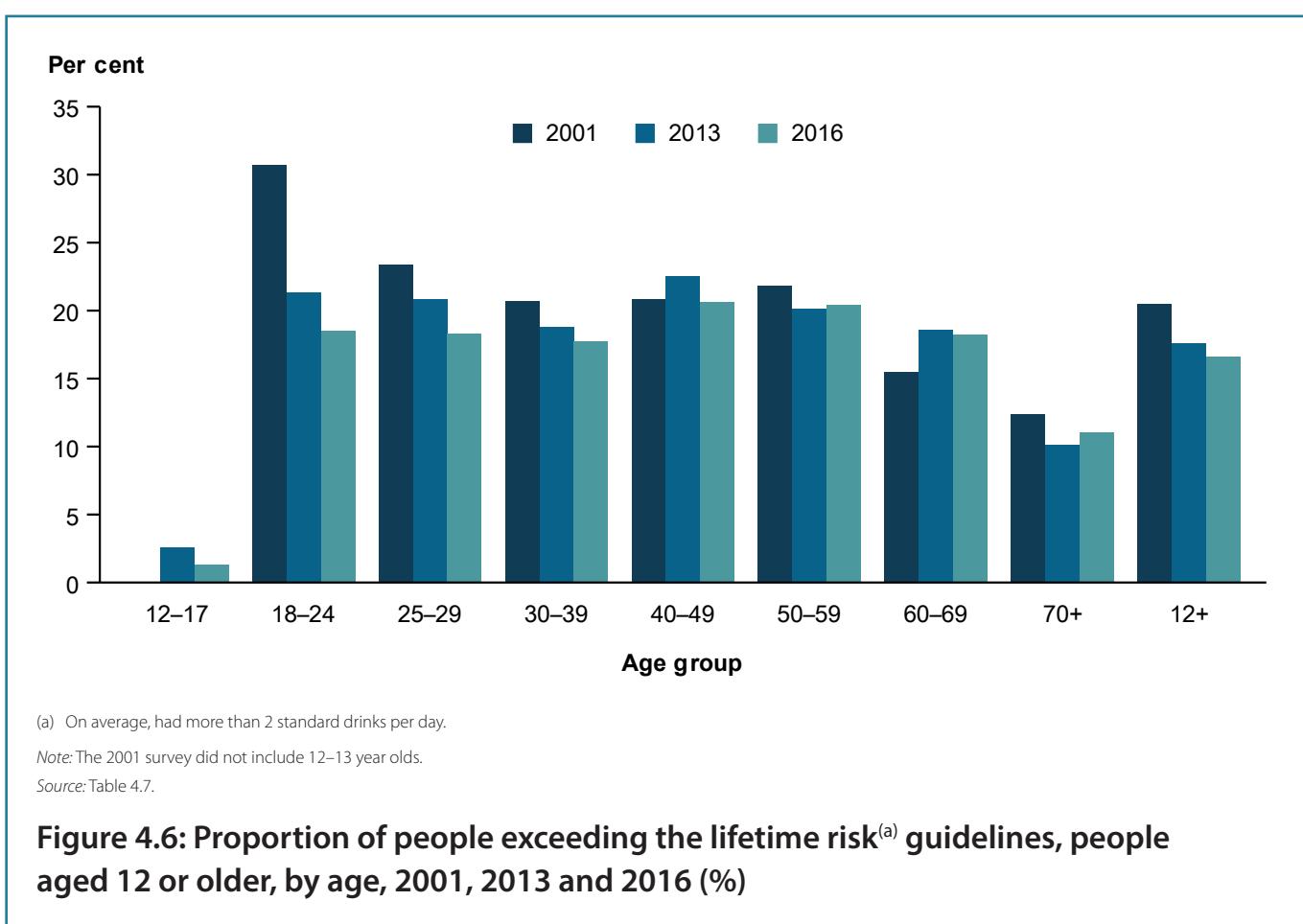


## Age comparisons over time

Drinking alcohol in adolescence can be harmful to young people's physical and psychosocial development. Importantly, the survey results indicate that the proportion of young people, aged 12–17, abstaining from drinking significantly increased from 2013 to 2016 (72% to 82%)—up from 54% in 2004 (Table 4.7). In general, younger age groups reduced their level of alcohol consumption at risky levels from 2013 to 2016, while for older age groups, levels remained stable or increased slightly.

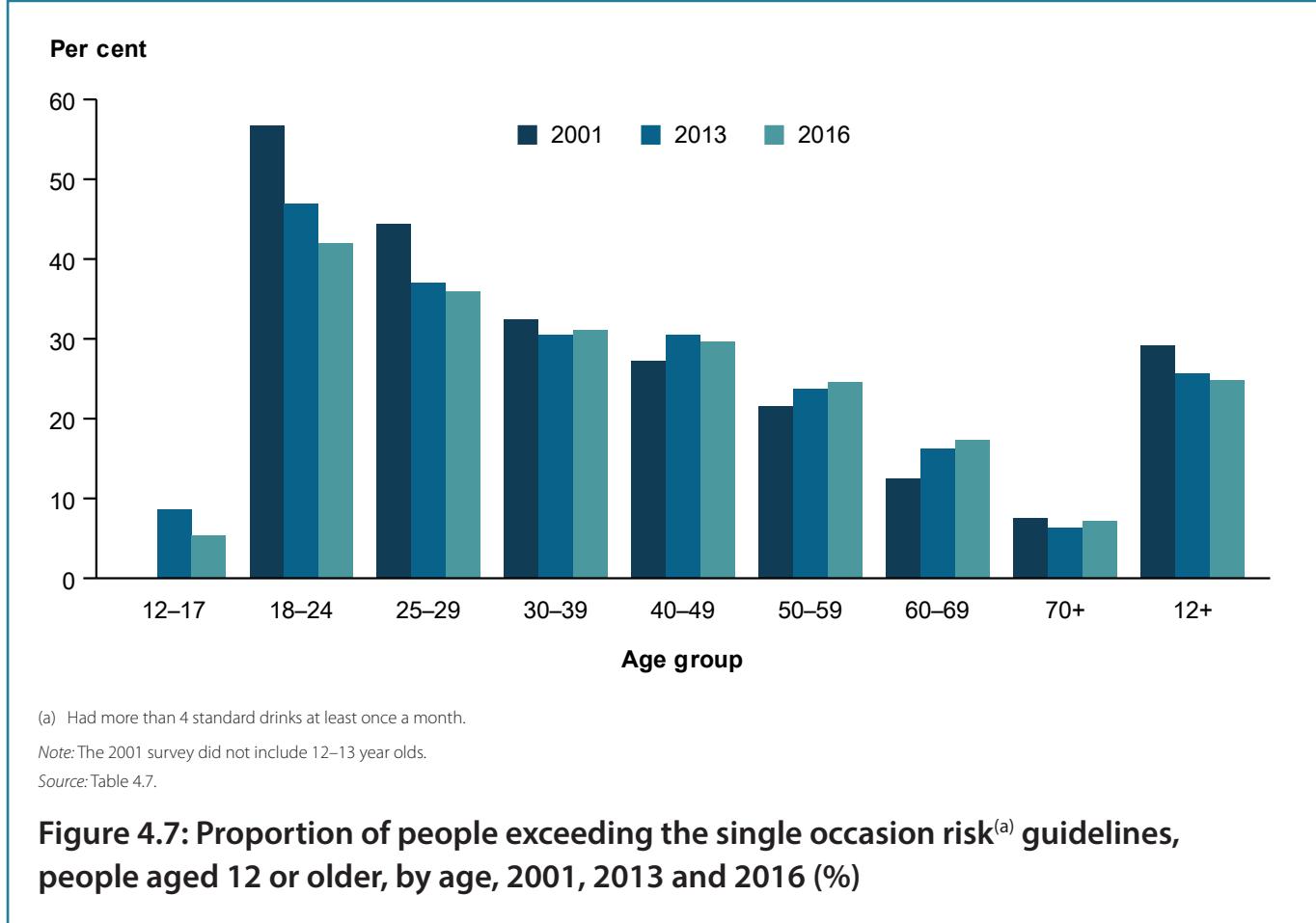
## Lifetime risk

Between 2001 and 2010, people in their late teens and 20s were more likely to consume more than 2 standard drinks per day on average than other age groups (Table 4.7). However, since 2010, the proportion of people drinking at risky levels for people aged 18–24 (31% in 2010 to 18.5% in 2016) and 25–29 (24% in 2010 to 18.3% in 2016) declined significantly. In 2013, people aged 40–49 recorded the highest level of risky drinking and this has continued in 2016 (23% and 21%, respectively). In 2016, people aged 50–59 recorded the second highest level of risky drinking (20%) (Figure 4.6). Overall, lifetime risky drinking patterns of people aged 40 or over have remained relatively stable since 2004 (Table 4.7).



## Single occasion risk

The reduction in people exceeding the single occasion risk guideline (at least monthly) appears to be mainly due to the proportion of people under 30 reducing their alcohol use (Figure 4.7). For example, the proportion of young people aged 12–17 (8.7% to 5.4%) and 18–24 (47% to 42%) drinking quantities of alcohol on a single occasion that exceeded single occasion risk guidelines significantly fell from 2013 to 2016. While people aged 30 or older were generally less likely to exceed the guidelines, most age groups 30 or older recorded no improvement or a slight increase in the level of risky drinking on a single occasion. But adults aged under 30 continue to have the highest proportion exceeding the single occasion risk guidelines.



## Age first tried alcohol

Findings from the survey suggest that most people try alcohol during adolescence. The NHMRC guidelines state that for young people aged 15–17, the safest option is to delay the initiation of drinking for as long as possible. Results from the NDSHS survey indicate that more young people are following this advice as the age at which people first tried alcohol has been increasing over time. More specifically:

- the average age at which young people aged 14–24 first tried alcohol has steadily risen since 1998 from 14.4 to 16.1 in 2016 (Table 4.14)
- the average age of initiation was similar for males and females aged 14–24, and between 2013 and 2016, increased for both sexes—from 15.7 to 16.2 for males and from 15.6 to 16.0 for females.

Of all drinkers aged 14 or older, the age at which they first tried alcohol significantly increased in 2016 to 17.3 (from 17.2 in 2013) (Table 4.15).

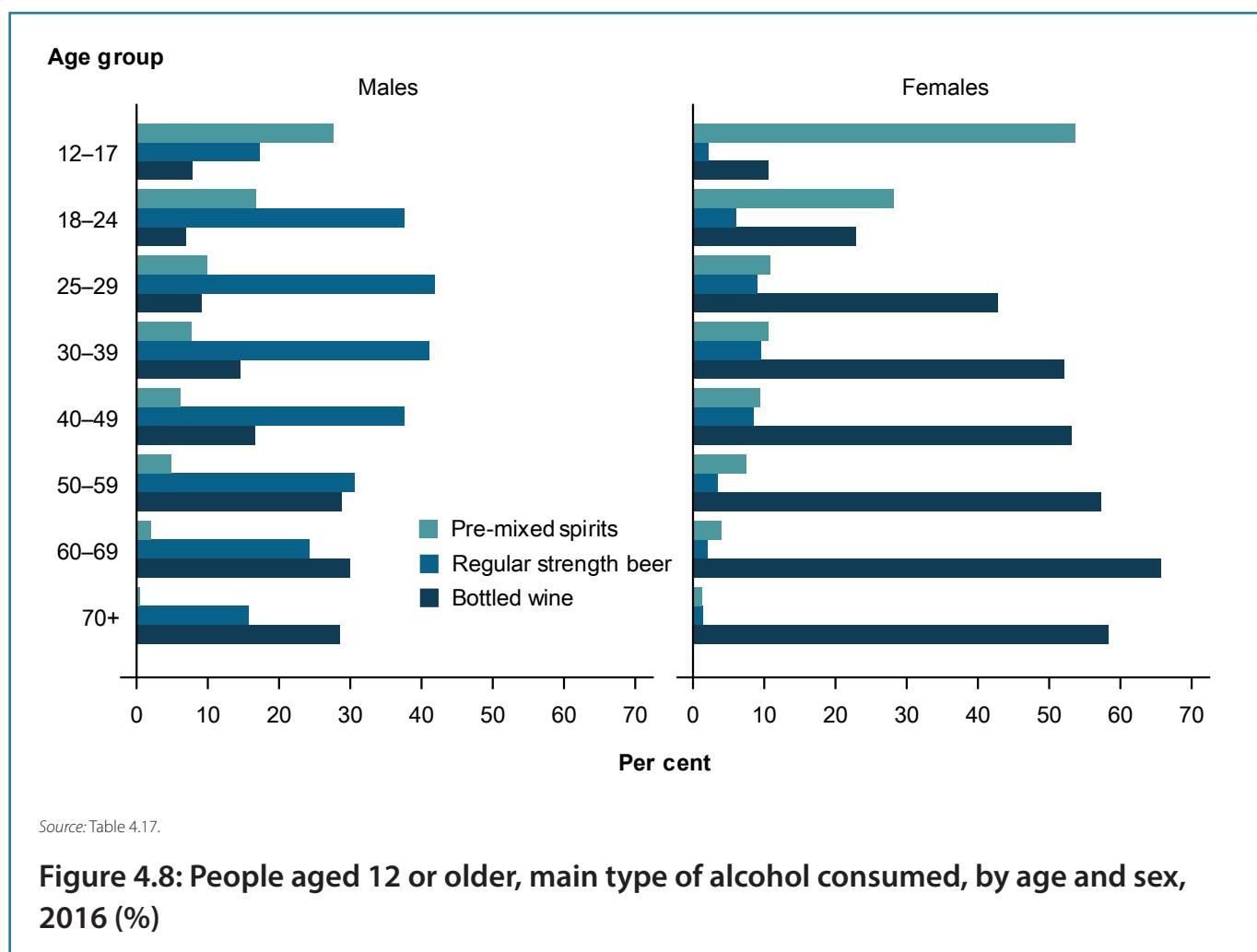


## Alcohol use by population group

Some population groups in the 2016 NDSHS were far more likely to report having used alcohol at risky levels than the general population. For example, people living in *Remote* and *Very remote* areas were more likely than people in *Major cities* to drink alcohol in quantities that placed them at risk of alcohol-related harm from a single occasion of drinking (37% compared with 24%). For other populations such as pregnant and/or breastfeeding women aged 14–49, the proportion that did not drink alcohol increased (see Chapter 8 for more information).

## Alcohol consumption—what, where and how

Consistent with findings in 2010 and 2013, overall the most consumed alcohol was bottled wine. Regular strength beer was the main drink consumed by male drinkers while for female drinkers it was bottled wine. The exception to this was for people aged 12–17 and females aged 18–24 where, for these groups, pre-mixed spirits was the main drink consumed (Table 4.16 and Figure 4.8).





Nearly half (47%) of people (aged 12 or older) had their first glass of alcohol supplied by a friend and almost one-quarter (24%) were supplied their first glass by their parent. Younger people were slightly more likely to say their parents supplied their first alcoholic drink while older people (aged 40 or older) were more likely to report buying their first serve themselves—findings that were consistent with 2013 (Table 4.19).

Underage drinkers (those aged 12–17) were more likely to consume alcohol at private parties (61%) (Table 4.22) than adults. Their usual supply of alcohol was through a friend (43%) or a parent (32%).

Adults (aged 18 or older), on the other hand, tended to mainly drink in their own home (79%) and buy alcohol themselves (87%) (Table 4.20).

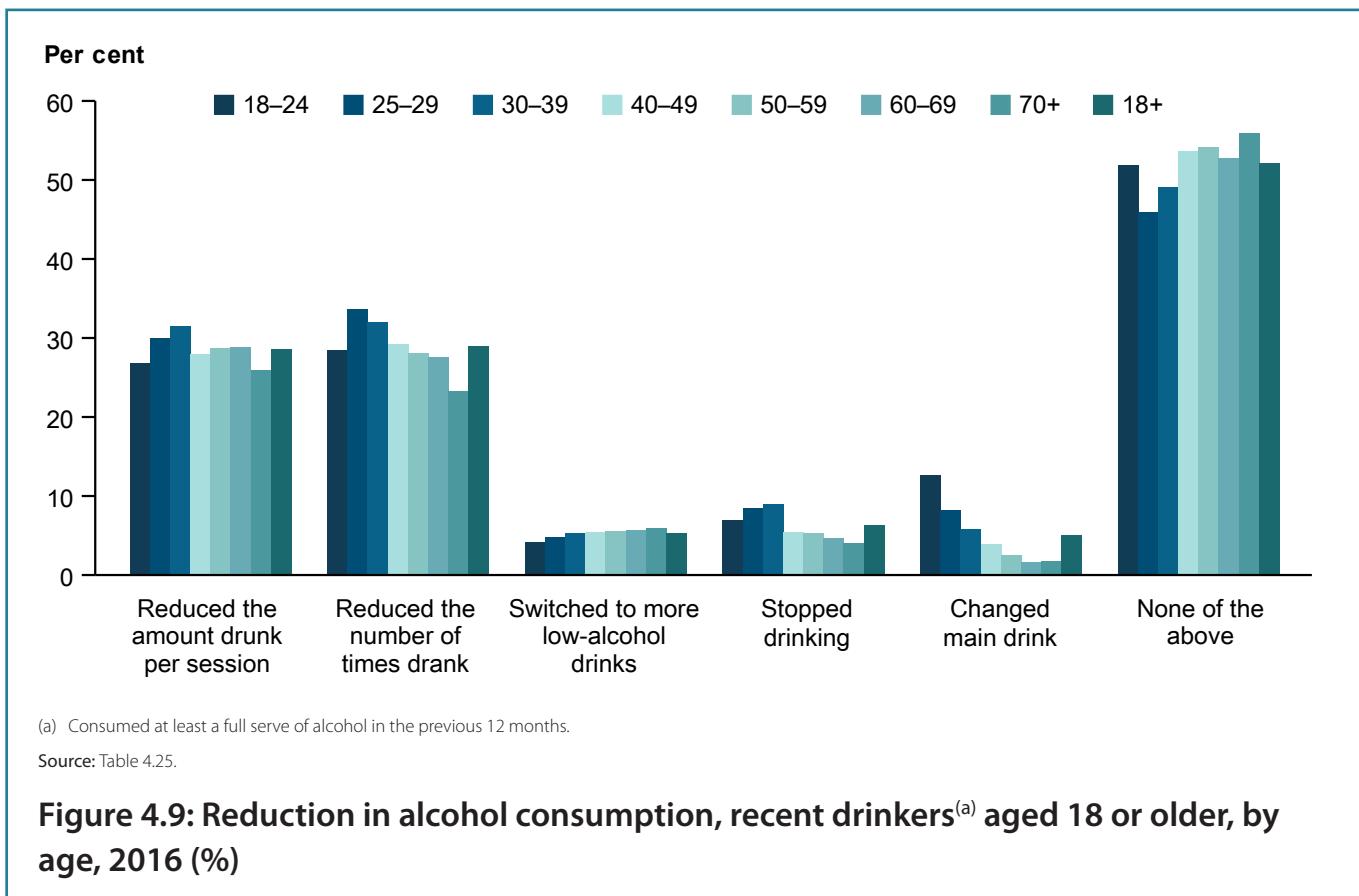
## Drinking reduction

More than 3 in 4 (77%) people aged 14 or older were recent drinkers in 2016 (Table 4.1) and a substantial number have taken action to reduce their drinking. Nearly half (48%) of recent drinkers (those who had consumed at least 1 full drink of alcohol in the last 12 months) in 2016 had taken action/s to reduce their consumption (Table 4.24). The most common intake reduction actions were to reduce the number of drinking occasions (29%) and/or to reduce the amount of alcohol consumed at one time (28%).

Among recent drinkers, some age groups were more likely to take certain actions to reduce their use than others. Specifically:

- people aged 25–29 were the most likely to take any action to reduce their alcohol use, while people aged 70 or older were the least likely (Figure 4.9)
- people in their 30s were the most likely to reduce the amount they drank per session (32%)
- people aged 25–29 were the most likely to reduce the number of times they drank (34%) than other age groups.

The main reasons recent drinkers, aged 14 or older, changed their drinking behaviour in 2016 was for health reasons (50%) (Table 4.27). In 2016, drinkers were less likely to be motivated by lifestyle reasons, such as work commitments or starting a family, declining from 37% in 2013 to 35% in 2016). The proportion of people citing pregnancy and/or breastfeeding as a reason for reducing alcohol consumption also fell (from 5.8% to 4.9%), primarily because of a decline in this reason for people in their 30s (Table 4.27). Social reasons (27%) were also a common reason for reducing alcohol consumption, particularly for recent drinkers aged under 25.



## Health and harm

The excessive intake of alcohol not only affects the drinker's health by putting them at risk of an alcohol-related disease, illness or injury, but also affects other people around them. Results from the 2016 NDSHS show that risky drinkers (lifetime and single occasion risk) were more likely to:

- believe they can consume above the recommended guidelines without affecting or putting their health at risk (tables 4.30–4.33)
- lose their memory after drinking (Table 4.35)
- experience verbal or physical abuse by someone under the influence of alcohol (Table 4.42)
- take part in risky behaviours such as driving while under the influence (Table 4.39).

These results are explained in detail in the following paragraphs.



## Perceptions of health effects

Risky drinkers were less likely to be aware of the number of standard drinks an adult could drink before putting their health at risk than low-risk drinkers—55% of male lifetime risky drinkers (Table 4.30) and 24% of female lifetime risky drinkers (Table 4.31) thought they could consume 3 or more standard drinks per day without adversely affecting their health (compared with 21% and 6.4% of low-risk drinkers). A similar pattern was observed for single occasion risky drinkers: 75% of male risky drinkers (Table 4.32) and 50% of female risky drinkers (Table 4.33) thought they could consume 5 or more standard drinks in a 6-hour period before putting their health at risk (compared with 52% and 27% of low-risk drinkers).

However, in 2016 there were some general improvements in perceptions of the number of standard drinks an adult could consume before putting their health at risk. Compared with 2013:

- a significantly higher proportion of males (from 13.6% to 15.7%) thought that no amount of alcohol was safe to drink without putting their health at risk over a lifetime (Table 4.30)
- the proportion of males that thought 1–2 standard drinks was safe to drink on a single occasion significantly increased 9.7% to 11.5% (Table 4.32)
- the proportion of females that thought no amount of alcohol was safe to drink on a single occasion significantly increased (4.2% to 5.5%) (Table 4.33).

In general, most people, regardless of their drinking patterns, regarded themselves to be an occasional, light or social drinker (Table 4.34).

## Alcohol-related incidents and harm

### Harmful behaviours undertaken

The NDSHS explores and reports on experiences of alcohol-related incidents and harm for Australians. In 2016, almost 1 in 6 (17.4%) recent drinkers aged 14 or older put themselves or others at risk of harm while under the influence of alcohol in the previous 12 months (Table 4.35). Driving a motor vehicle was the most likely risky activity undertaken while under the influence of alcohol (9.9% of recent drinkers), followed by swimming (6.5%). Risky drinkers were far more likely to engage in risky behaviours or harmful activities than low-risk drinkers (Table 4.36).

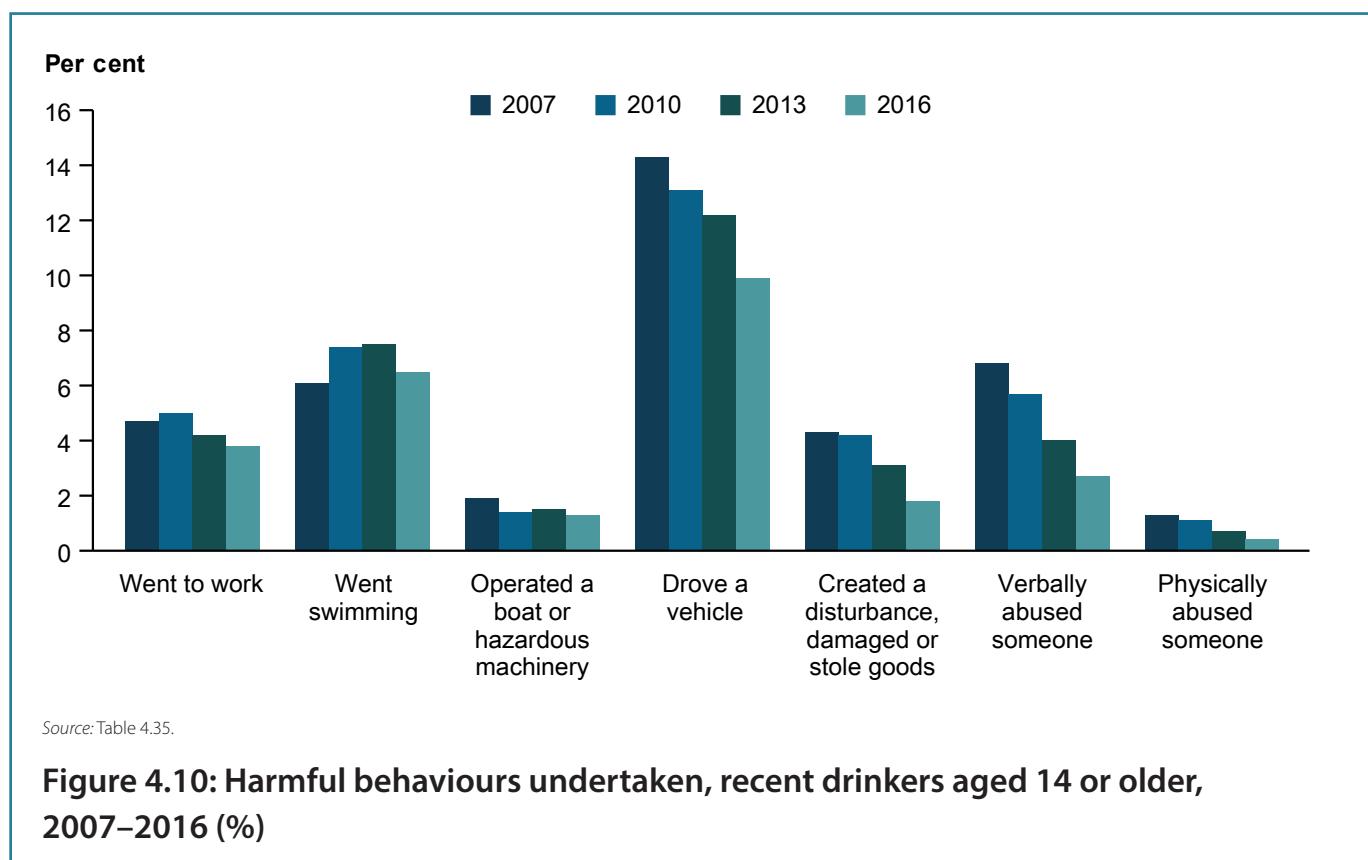
For example:

- lifetime risky drinkers were 3.3 times as likely as low-risk drinkers to drive a vehicle while under the influence of alcohol (21% compared with 6.6%)
- single occasion risky drinkers (at least monthly) were 11 times as likely to verbally abuse someone while under the influence as low-risk drinkers (6.8% compared with 0.6%).



However, risky drinkers were less likely to engage in these activities in 2016 than in 2013 with most of these behaviours/activities significantly declining between 2013 and 2016. Memory loss was also more common among recent drinkers that consumed alcohol at lifetime risky levels than low-risk drinkers (54% compared with 15%) (Table 4.37).

Compared with 2013, there were significantly less recent drinkers that took part in at least 1 potentially harmful activity (21% to 17.4%). There were also significant declines in the proportion of the population that undertook the following activities in 2016: went swimming (7.5% to 6.5%); drove a vehicle (12.2% to 9.9%); created a disturbance, damaged or stole goods (3.1% to 1.8%); verbally abused someone (4.0% to 2.7%); and physically abused someone (0.7% to 0.4%). This continues a general trend of decline since 2007 in the proportion of the population undertaking potentially risky activities while under the influence of alcohol (Figure 4.10).





## Effects of alcohol

In 2016, 2.8% of recent drinkers had been injured while under the influence of alcohol and required medical attention and 1.3% required admission to hospital for their injuries. Requiring medical attention and/or hospitalisation because they were so intoxicated was reported by just 1.0% of drinkers (Table 4.39). People who consumed alcohol in risky quantities (lifetime or single occasion risk) were far more likely to require medical attention or admission to hospital due to injuries sustained while drinking or due to intoxication. This was even higher among people consuming 11 or more standard drinks at least monthly with 8.4% requiring medical attention for their injuries (Table 4.38).

Of all age groups, recent drinkers aged 18–24 were the most likely to require medical attention or admission to hospitalisation due to injury—5.3% required medical attention and 2.5% were admitted to hospital. Intoxication requiring medical attention and/or hospitalisation was similar across age groups—around 1% (Table 4.39).

Risky drinkers were more likely to miss at least 1 day of work in the past 3 months due to their alcohol use than low-risk drinkers were. About 1 in 10 (10.3%) drinkers who consumed 11 or more standard drinks in a month reported missing at least 1 day of work due to their alcohol use in comparison to just 0.8% for single occasion low-risk drinkers (Table 4.41).

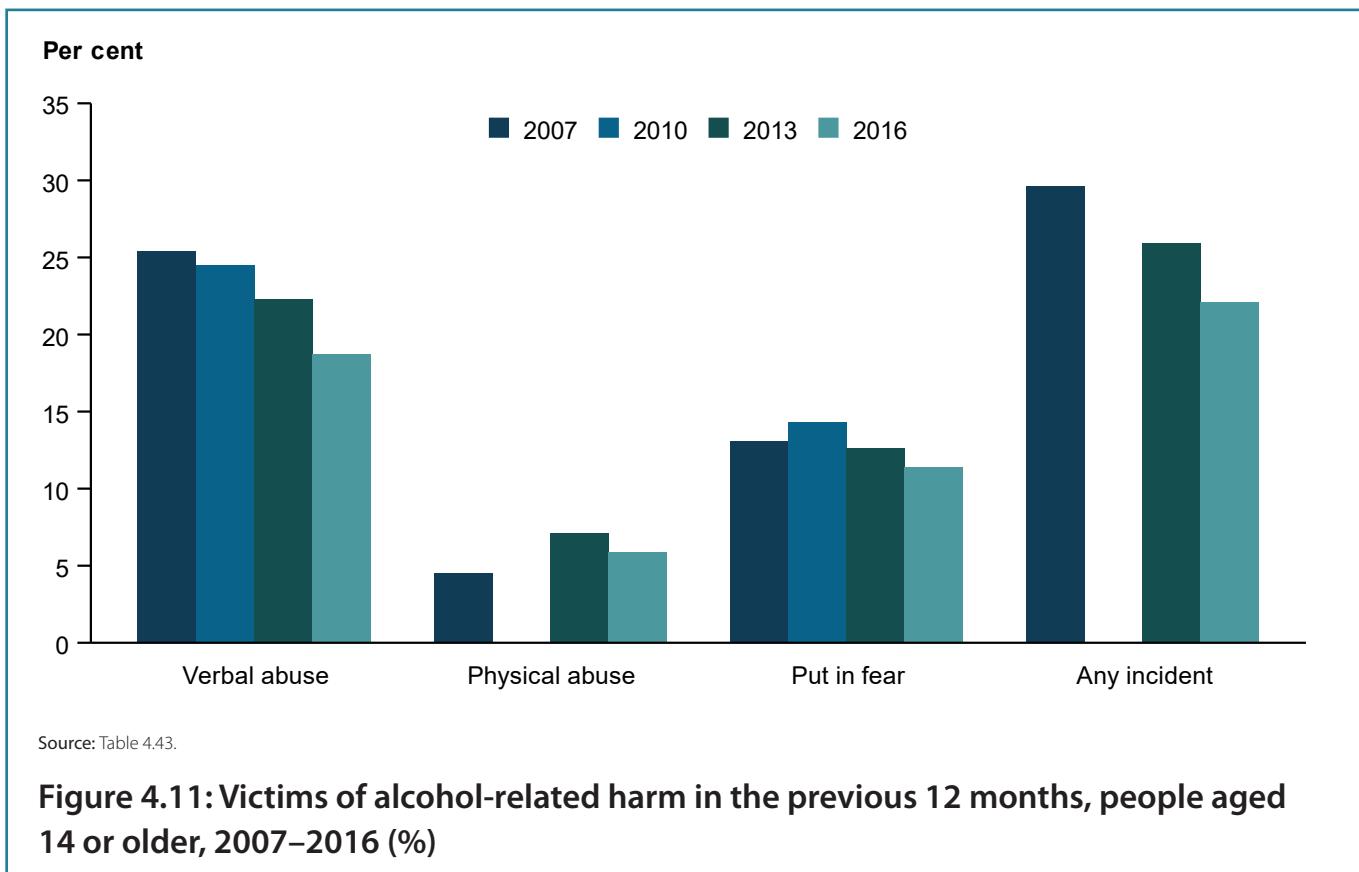
Among recent drinkers, 6.7% had injured themselves or someone else because of their drinking in their lifetime and 2.3% had done so in the last 12 months. Very high risk drinkers that consumed 11 or more standard drinks in a month were about 5 times as likely as recent drinkers to have injured themselves or someone else due to their drinking in the last 12 months (11.3% compared with 2.3%). They were also more than 4 times as likely to have someone else concerned about their drinking in the last 12 months (23% compared with 5.7% for recent drinkers) (Table 4.40).

## Victims of harm

Respondents were asked if they had been verbally or physically abused, or put in fear, in the past 12 months, by persons affected by or under the influence of alcohol. More than 1 in 5 (22%) Australians aged 14 and over (equivalent to 4.4 million people) had been a victim of an alcohol-related incident in 2016, although this proportion significantly declined from 2013 (down from 26%) (Table 4.43). Similarly, since 2013 there have been significant declines in the proportion of the population that experienced verbal abuse (22% to 18.7%), being put in fear (12.6% to 11.4%) and physical abuse (7.1% to 5.9%).

For verbal abuse and being put in fear, this continues a general downward trend since 2007 (Figure 4.11).

These declines were mostly driven by significant falls in the proportions of males that experienced verbal abuse (26% to 20%), being put in fear (11.3% to 9.3%) and physical abuse (8.8% to 6.8%). Females were also significantly less likely in 2016 to have experienced verbal abuse (18.9% in 2013 to 17.2%) (Table 4.43). The proportion of recent drinkers that experienced verbal abuse (24% to 20%), being put in fear (13% to 11.6%) and physical abuse (7.8% to 6.4%) also fell significantly in 2016 (Table 4.45).



Certain groups were also more likely to have experienced alcohol-related incidents than others. For example:

- males were more likely than females to experience verbal (20% compared with 17.2%) or physical abuse (6.8% compared with 5.0%) in the past 12 months, but a greater proportion of females were put in fear (13.5% compared with 9.3%) (Table 4.43)
- people in their late teens and 20s were more likely than other age groups to have experienced verbal abuse, physical abuse or to be put in fear by someone under the influence of alcohol (Table 4.44)
- risky drinkers were more likely, compared with both low-risk drinkers and abstainers, to have suffered verbal abuse, physical abuse or to be put in fear by someone affected by alcohol (Table 4.42).

Of people who had been physically abused by someone under the influence of alcohol, bruising or abrasions (57%) was the most frequent injury sustained, and 8.8% of all injuries were serious enough to require hospital admission (Table 4.46).

Females were more likely than males to report their abuser being their current or former spouse or partner, while males were more likely to report their abuser being a stranger (Table 4.48).



About **4 in 10**  
(43%) people had ever  
illicitly used a drug

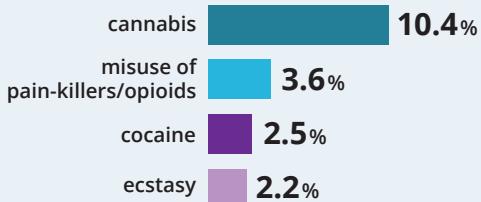


**1 in 6** (15.6%)  
had done so recently

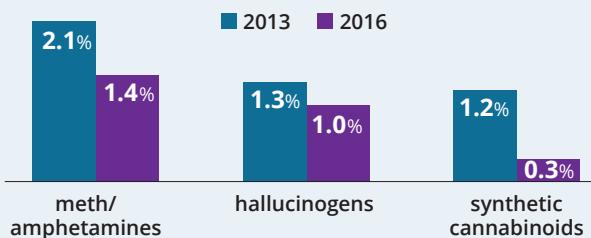


Last 12  
months

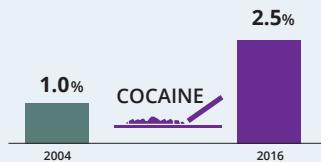
The most commonly used illicit drugs in the past 12 months were:



Use of most illicit drugs remained stable but **use of 3 illegal drugs declined between 2013 and 2016**:



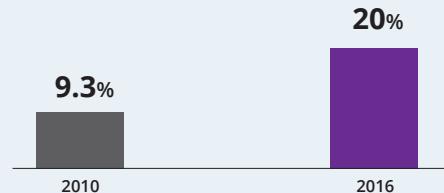
Recent cocaine use has been increasing since 2004, and is at the **highest rate in 15 years**



Most meth/amphetamine users used 'ice' as their main drug form in 2016

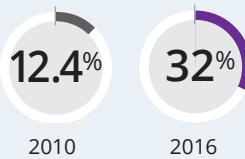


Between 2010 and 2016, **daily or weekly use of meth/amphetamines more than doubled** among recent meth/amphetamine users

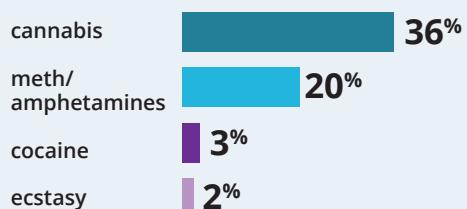


### Frequency of use

Daily or weekly use was even higher among those who mainly use 'ice'



Cannabis and meth/amphetamine users were much more likely to use **weekly or more often** than ecstasy and cocaine users



More females in their 30s used illicit drugs in 2016 than in 2013—recent use of cannabis, ecstasy and cocaine increased



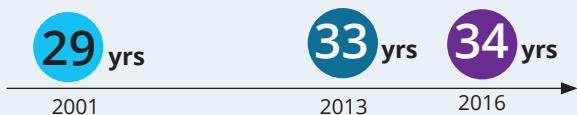
More people in their 40s used illicit drugs in 2016 than in 2013. Since 2001, recent illicit drug use has increased for people in their 40s, 50s and 60 or older



People in their 20s continue to be the most likely age group to have used illicit drugs in the last 12 months but use has declined since 2001

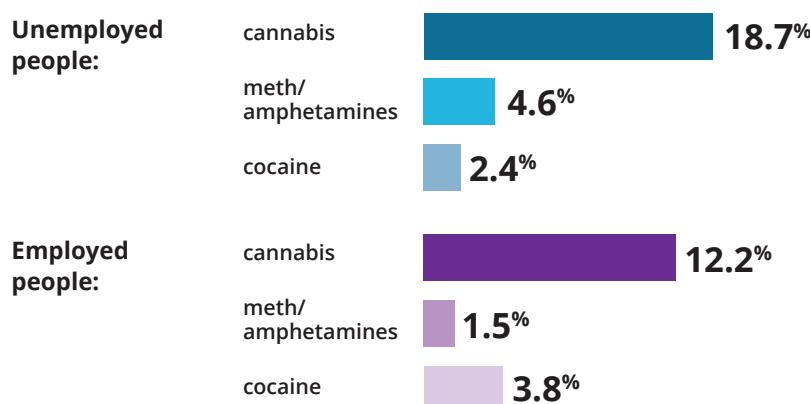


The average age of illegal drug users has risen since 2001

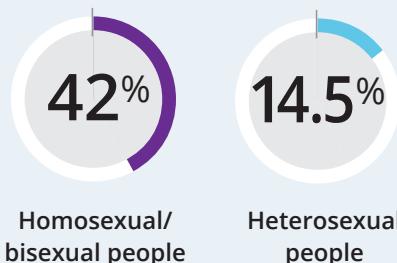


## Population groups

**Unemployed people were more likely than employed people to use cannabis and meth/amphetamines but less likely to use cocaine**

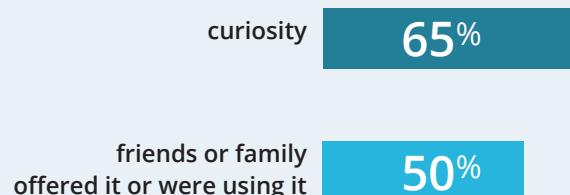


**Homosexual/bisexual people had much higher rates of illicit drug use than heterosexual people**

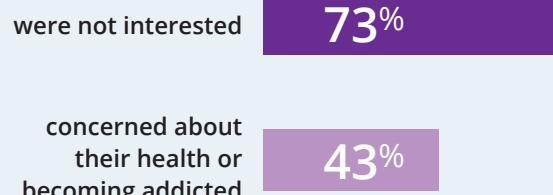


## Reasons for using or not using an illicit drug

**Most common reason why an illicit drug was first used:**



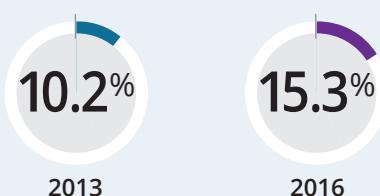
**Most common reasons people didn't try illicit drugs:**



**Most common reason for continuing drug use:**

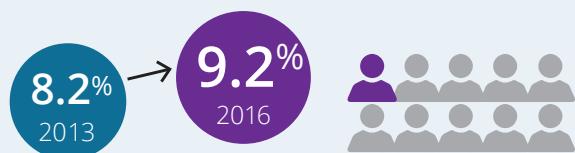


More drug users continued to use illicit drugs to improve their mood or stop feeling unhappy

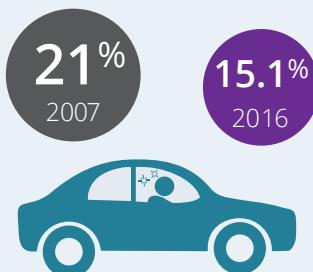


## Illicit drug-related harm

**1 in 10** people were victims of an illicit drug-related incident, increasing from 2013



Driving under the influence of illicit drugs declined from 2007



**Note:** findings relate to people aged 14 or older and use in the previous 12 months unless specified.

All data presented in this chapter are available in the illicit use of drugs tables  
[<http://www.aihw.gov.au/reports/illicit-use-of-drugs/ndshs-2016-detailed/data>](http://www.aihw.gov.au/reports/illicit-use-of-drugs/ndshs-2016-detailed/data).



## Illicit use of any drug

This chapter presents data on illicit use of drugs not including tobacco and alcohol. When referring to illicit use of any drug this includes:

- use of illegal drugs
- misuse or use for non-medical purposes of pharmaceuticals
- inappropriate use of other substances (see Box 5.1 for more information).

The first part of the chapter focuses on combined illicit use of any drug (including pharmaceutical misuse) and the second part focuses on use of selected illegal drugs not including pharmaceuticals (see Chapter 6 for more detailed information on pharmaceutical misuse).

### Box 5.1: Definition of illicit use of drugs

'Illicit use of a drug' or 'illicit drug use' (used interchangeably in this report) can encompass a number of broad categories including:

- illegal drugs—a drug that is prohibited from manufacture, sale or possession in Australia—for example cannabis, cocaine, heroin and amphetamine-type stimulants
- pharmaceuticals—a drug that is available from a pharmacy, over the counter or by prescription, which may be subject to misuse—for example opioid-based pain-relief medications, opioid substitution therapies, benzodiazepines, over-the-counter codeine and steroids
- other psychoactive substances—legal or illegal, potentially used in a harmful way—for example kava, synthetic cannabis and other synthetic drugs, or inhalants such as petrol, paint or glue (MCDS 2011).

## Trends in lifetime use

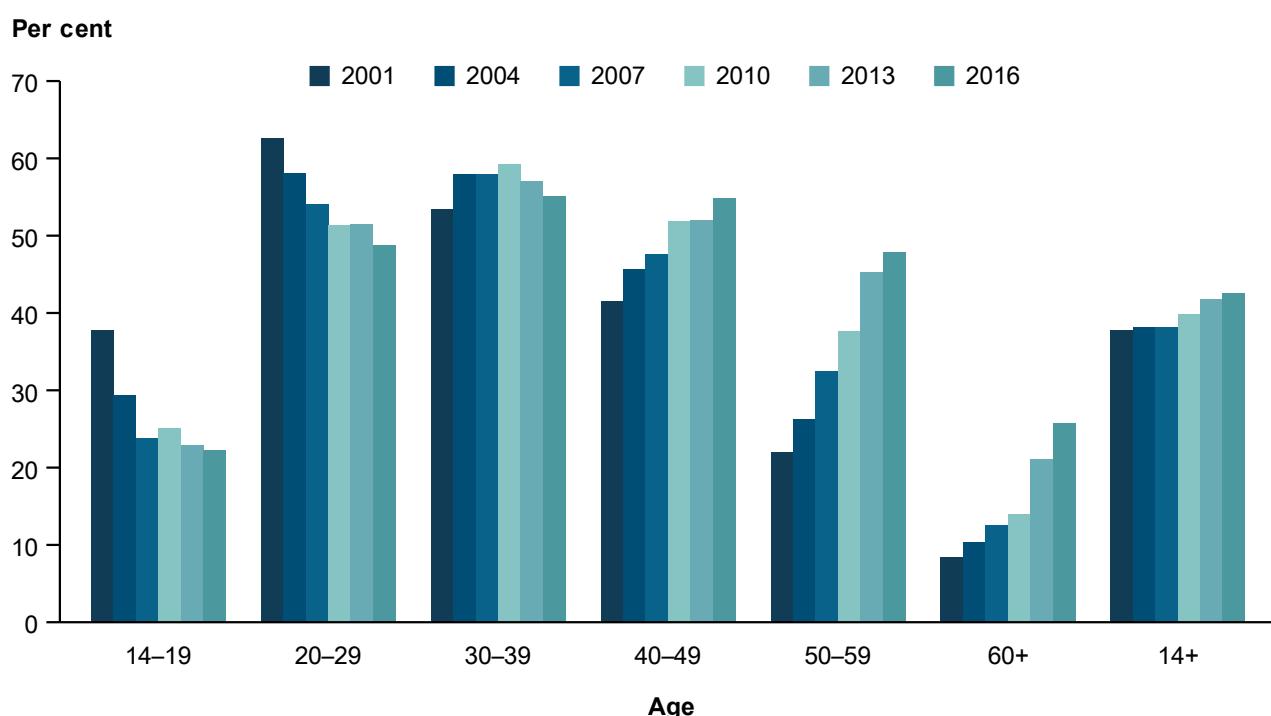
In 2016, 8.5 million (or 43%) people aged 14 and older in Australia had illicitly used a drug at some point in their lifetime (Table 5.1). This was similar to the proportion in 2013 (42%) but lifetime use has been gradually increasing since 2001 (38%). There were a number of changes in lifetime use of specific drugs between 2013 and 2016, including:

- significant increases in cocaine (from 8.1% to 9.0%), synthetic cannabis (1.3% to 2.8%), and other psychoactive substances (0.4% to 1.0%)
- a significant decrease in meth/amphetamines (from 7.0% to 6.3%) (Table 5.2).



Comparing lifetime use of illicit drugs showed that:

- males were more likely to have ever used illicit drugs than females (46% and 40%, respectively)
- people aged 30–39 and 40–49 (55% for both) were most likely to have ever used any illicit drug in 2016; this is different from 2001 when it was people in their 20s that reported the highest lifetime use (63%) (Figure 5.1)
- there were more males and females aged 60 or older who had used illicit drug in their lifetime in 2016 than in 2013—significantly increased from 25% to 30% for males and from 18% to 22% for females) (Table 5.3)
- people aged 14–29 in 2016 were less likely to have experimented with illicit drugs than people aged 14–29 in 2001.



(a) Used at least 1 of 17 illicit drugs in 2016—the number and type of drug used varied between 2001 and 2016.

Source: Table 5.3.

**Figure 5.1: Lifetime<sup>(a)</sup> use of any illicit drug, by age, people aged 14 or older, 2001–2016 (%)**

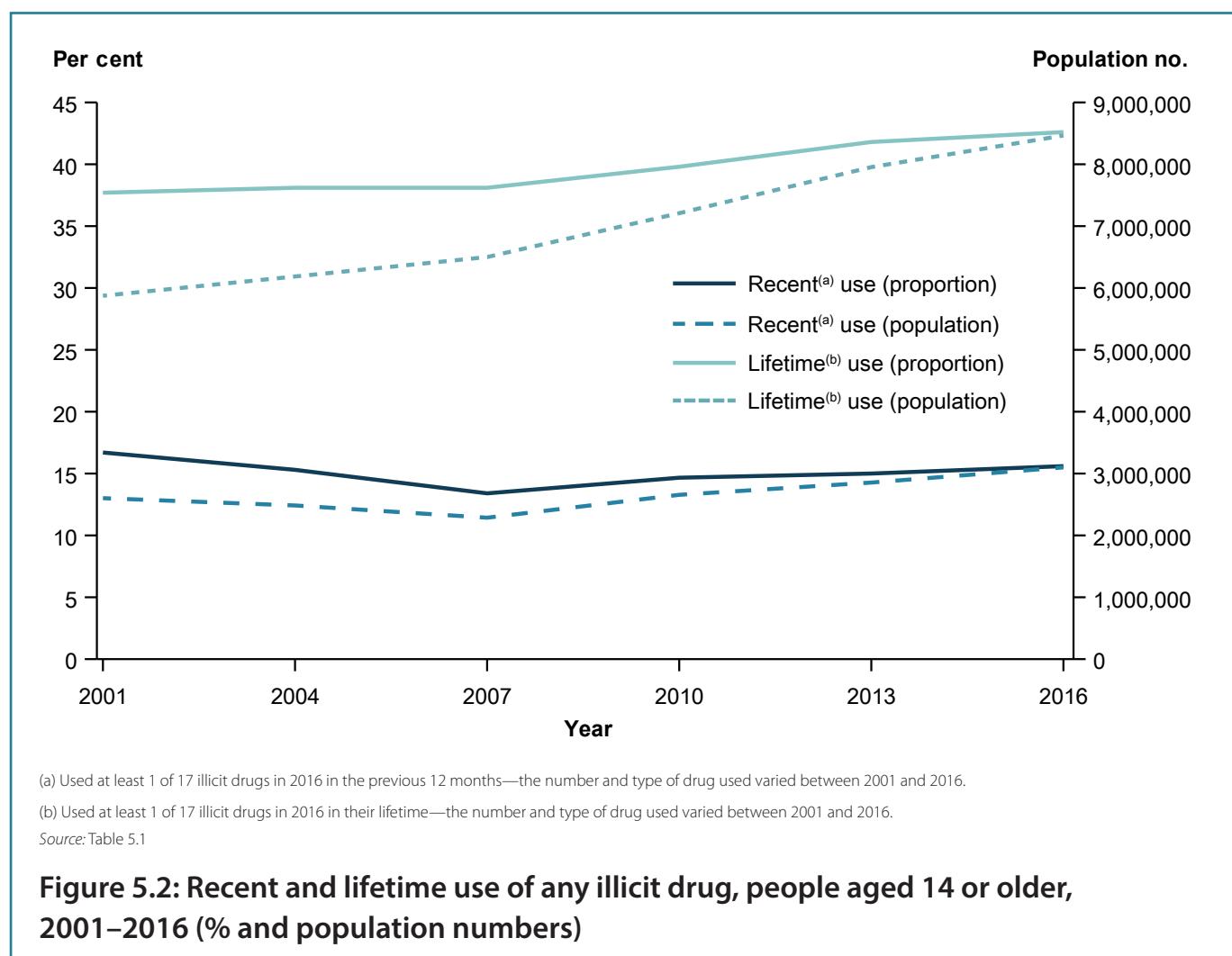


## Trends in recent use

About 3.1 million (or 15.6%) people aged 14 or older reported having used an illicit drug in the last 12 months and this level of use has remained relatively stable since 2004. Monthly or weekly use of illicit drugs was reported by fewer than 1 in 10 people—8.6% of the population had used an illicit drug in the last month while 5.6% had done so in the last week (Table 5.1). There was no change in recent use of most illicit drugs, but there were significant declines for the following drugs between 2013 and 2016 (Table 5.4):

- meth/amphetamines (from 2.1% to 1.4%)
- hallucinogens (from 1.3% to 1.0%)
- synthetic cannabis (from 1.2% to 0.3%).

There were no significant increases in the use of specific illicit drugs between 2013 and 2016.

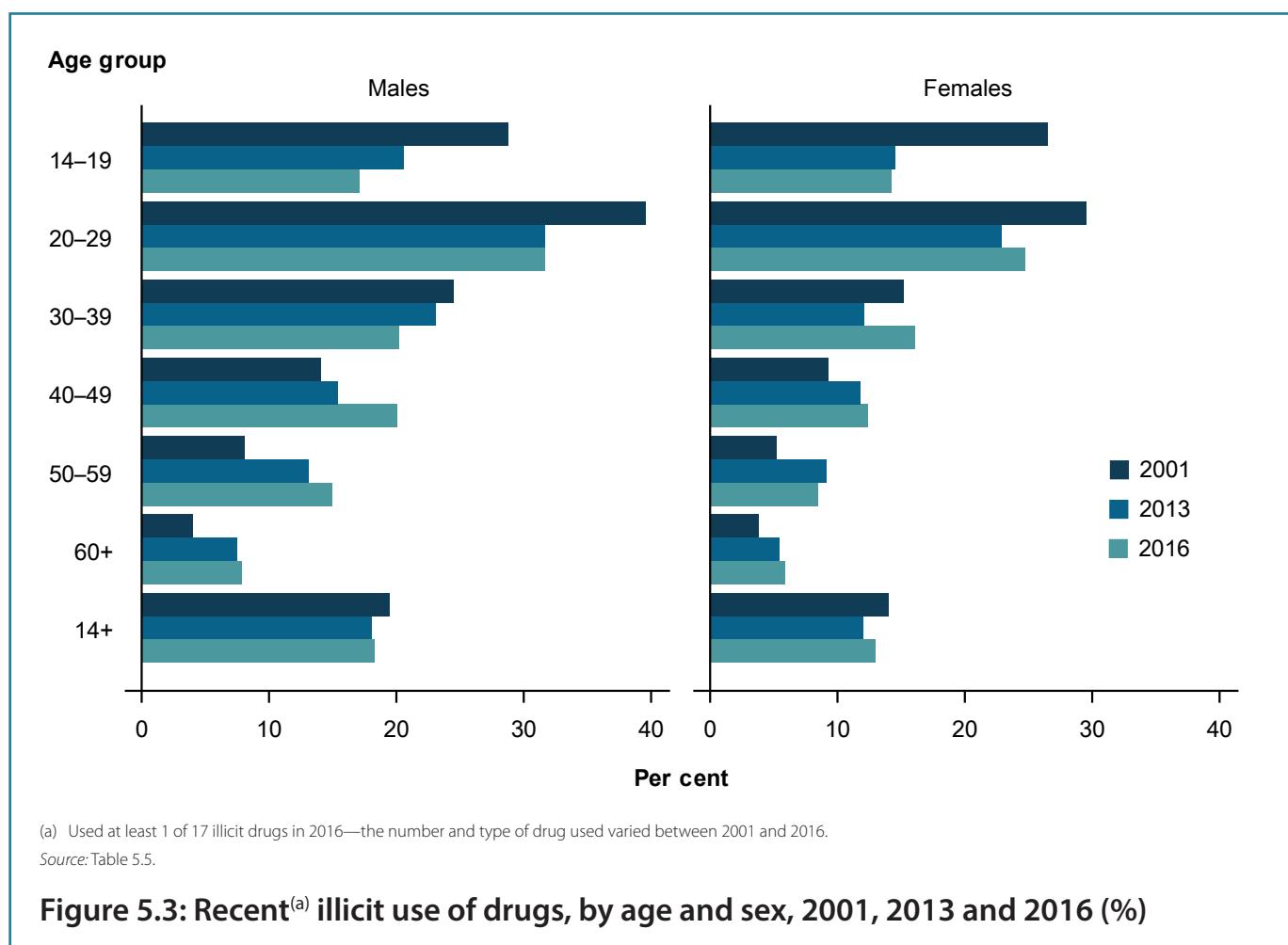




## Age and sex comparisons

The use of any illicit drug (including pharmaceuticals) in the last 12 months varied with different age groups and for males and females (Figure 5.3). More specifically:

- males were about 1.4 times as likely to have recently used an illicit drug as females in 2016 (18.3% compared with 13.0%) and this ratio has remained fairly similar over time (since 2001)
- people in their 20s continue to be the most likely age group to have used illicit drugs in the last 12 months (28% in 2016) but this has declined from 35% in 2001 (Table 5.5)
- between 2013 and 2016, there was a significant increase among people in their 40s using any illicit drug in the last 12 months (from 13.6% to 16.2%) mainly driven by an increase among males (from 15.4% to 20%)
- compared with 2013, there were more females in their 30s that used an illicit drug in the last 12 months than in 2016 (12.1% to 16.1%)
- between 2001 and 2016, recent use of any illicit drug has nearly doubled among males in their 50s (from 8.1% to 15.0% in 2016) and males aged 60 or older (from 4.0% to 7.9%), while use among people aged 14–19 considerably decreased from 28% to 16% over the same period (Table 5.5).



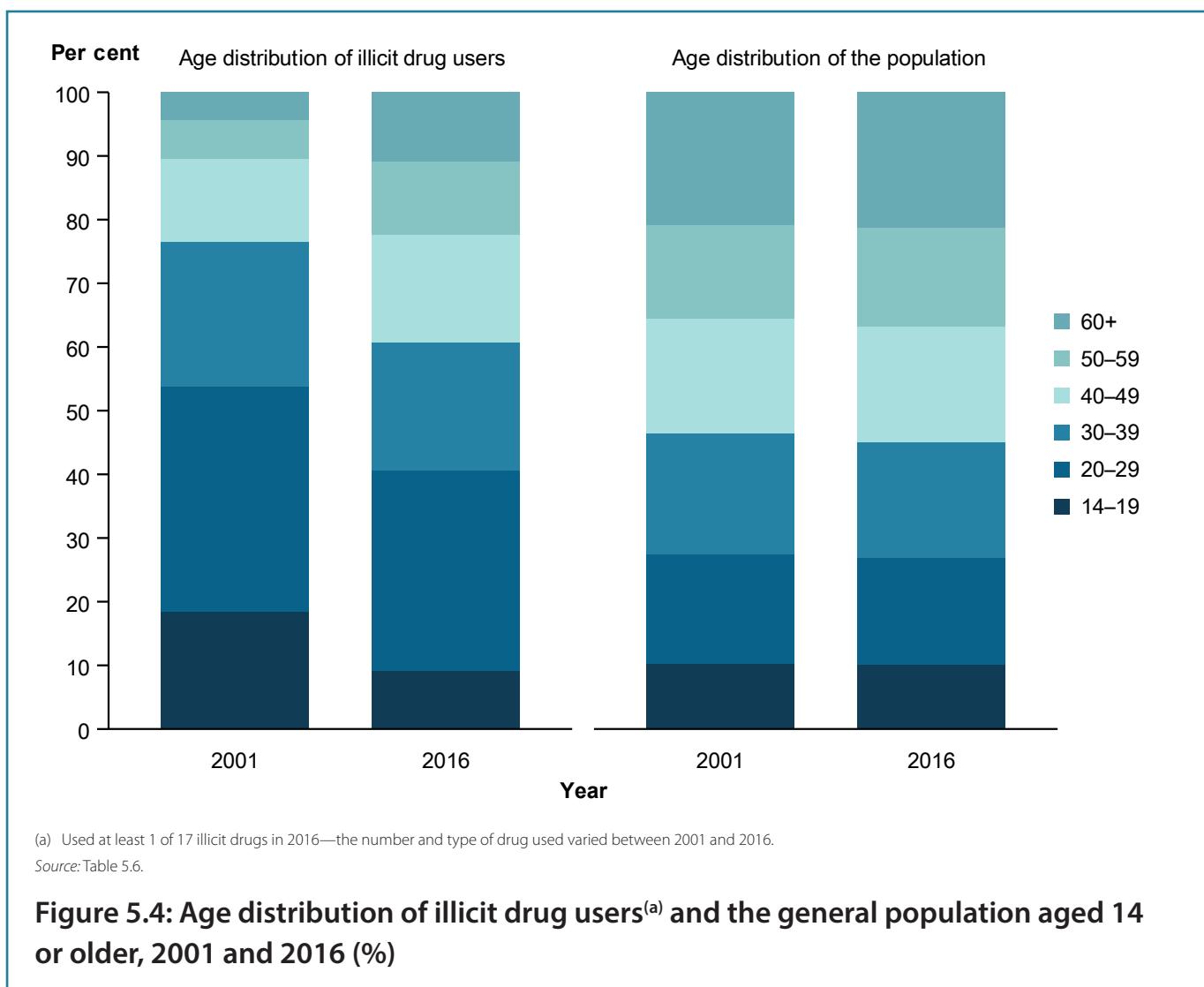


## Age distribution of illicit drug users

Figure 5.4 presents the age distribution of recent illicit drug users for 2001 and 2016 (that is, what proportion of each age group make up illicit drug users) and compares it to the distribution of the Australian population.

In 2001, proportional to the population, the 20–29 year old age group was the most over-represented age group with 35% of illicit drug users being in their 20s. This group is still over-represented in 2016 and makes up the largest proportion (32%) of illicit drug users (Figure 5.4). Over the 15-year period there were some noticeable changes among the oldest and youngest age groups; for example:

- in 2001, 18% of illicit drug users were aged 14–19 but by 2016, only 9% of illicit drug users were in this age group and the distribution of the population remained very similar over this period
- people in their 50s and aged 60 or older make up a much greater proportion of illicit drug users in 2016 than in 2001 (increased from 6.1% to 11.5% for people in their 50s and from 4.4% and 10.9% for people aged 60 or older).



(a) Used at least 1 of 17 illicit drugs in 2016—the number and type of drug used varied between 2001 and 2016.

Source: Table 5.6.

**Figure 5.4: Age distribution of illicit drug users<sup>(a)</sup> and the general population aged 14 or older, 2001 and 2016 (%)**



## Average age people first used drugs

The average age at which people aged 14 or older used their first illicit drug has fluctuated between 18.9 and 19.8 since 1995. However in 2016, the age at which people first tried an illicit drug was older, increasing (slightly but significantly) from 19.4 in 2013 to 19.8 in 2016 (Table 5.11) and was the oldest average age since 1995. More specifically:

- users tend to be older when they first use pharmaceutical drugs than other illicit drugs: 25.3 for pharmaceuticals compared with 18.9 for other illicit drugs (excluding pharmaceuticals)
- average age of first use rose for cannabis, meth/amphetamines and hallucinogens with all these drugs showing an older age of first use in 2016.

Among people aged 14–29, the age of initiation into illicit drug use remained stable at about 16.7 years (Table 5.12). More specifically, the age at which people first used cannabis rose from 16.9 years in 2013 to 17.3 years in 2016 but a younger average age of first use was reported by heroin and steroid users; however, these results should be interpreted with caution due to the wide margin of error.

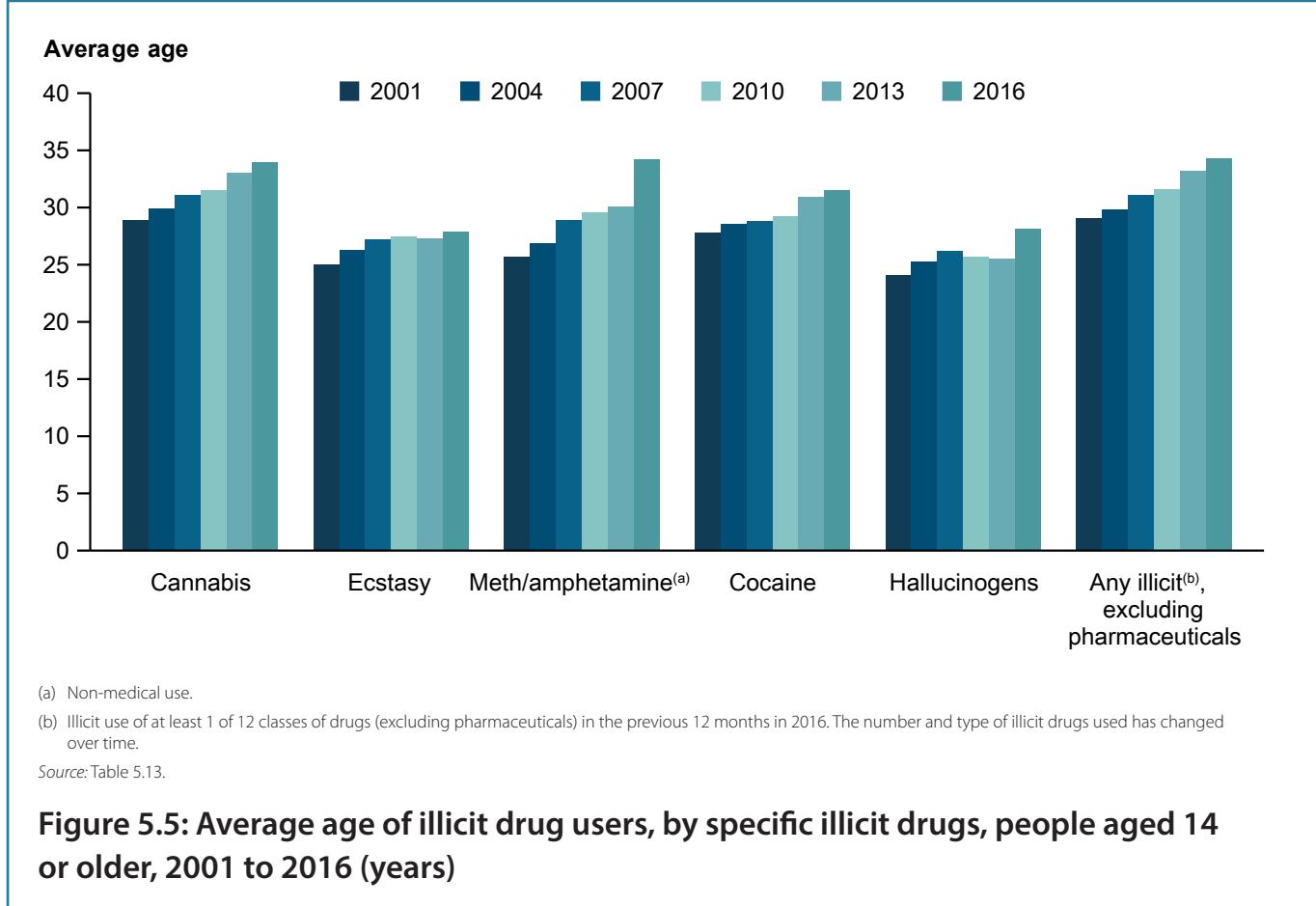
## Average age of illicit drug users

Drug users in Australia appear to be ageing. The average (mean) age of drug users has risen since 2001 for most illicit drugs (Figure 5.5) and a number also increased between 2013 and 2016.

For example:

- the average age of cannabis users was 29 in 2001 and increased to 34 in 2016
- the average age of cocaine users was 28 in 2001 and rose to 31 in 2016
- there appears to be an ageing cohort of meth/amphetamine users—they were significantly older in 2016 than they were in 2013 (34 years compared with 30 years) and 8 years older than they were in 2001.

People using ecstasy and hallucinogens in the past 12 months were generally younger than people using cannabis and meth/amphetamines (late-20s compared with mid-30s).

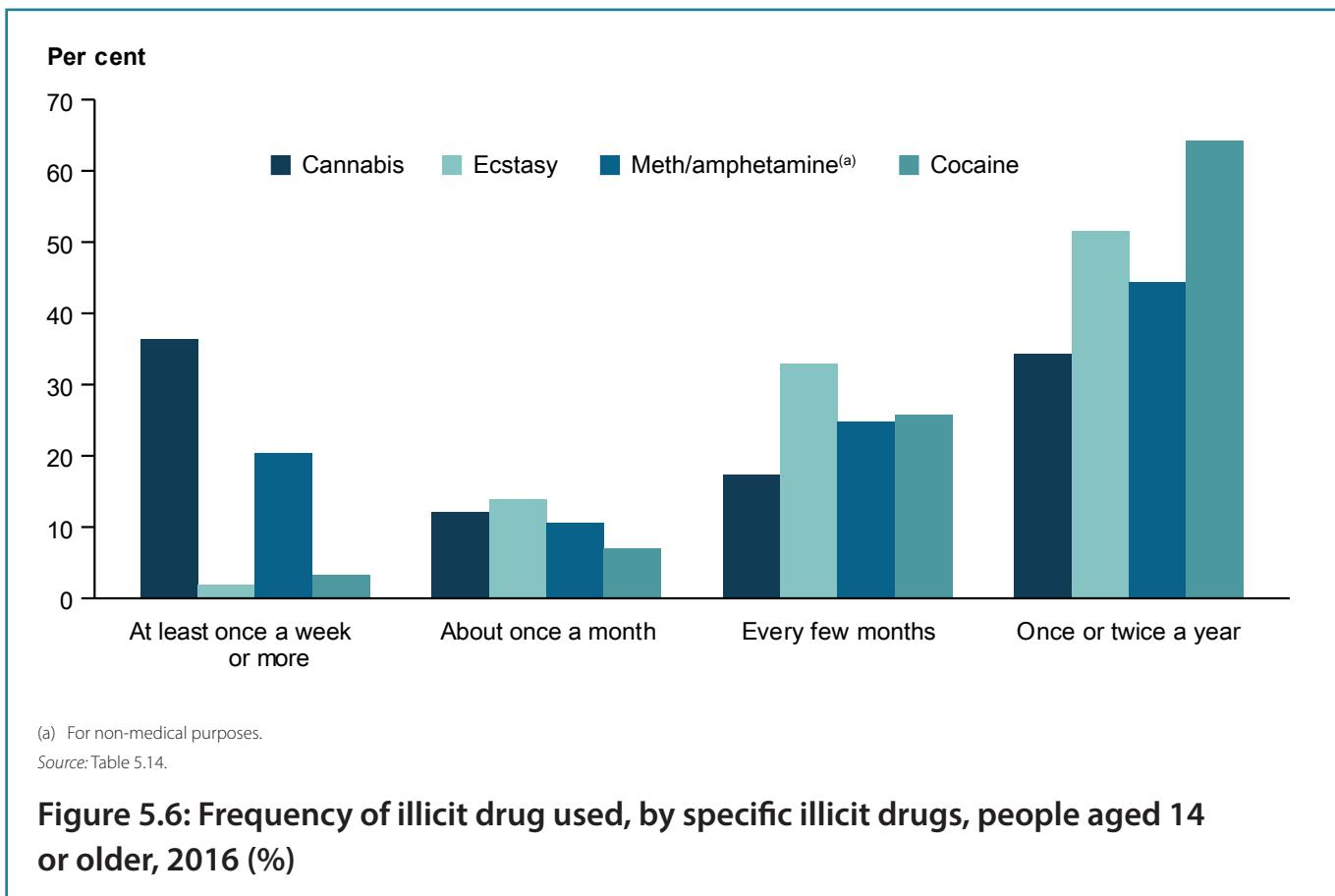


**Figure 5.5: Average age of illicit drug users, by specific illicit drugs, people aged 14 or older, 2001 to 2016 (years)**

## Frequency of use

Some illicit drugs are used more frequently than others. Cocaine and ecstasy tend to be used less frequently than cannabis and meth/amphetamine (Figure 5.6). More specifically:

- the majority of recent cocaine and ecstasy users only use these drugs once or twice a year (64% and 51%, respectively)
- cannabis and meth/amphetamine users were much more likely to use the drug regularly with 36% and 20%, respectively, using it as often as weekly or more (compared with ecstasy and cocaine users where only 2% and 3%, respectively, used as often as weekly or more)
- males were more likely than females to use cannabis (41% compared with 29%) and meth/amphetamines weekly (24% compared with 15.2%)
- people who used cocaine did so more often in 2016 than in 2013—a higher proportion used it every few months (from 18% to 26%) and a lower proportion used once or twice a year (from 71% to 64%).



## Unable to stop or reduce use

For most illicit drugs, the survey asks drug users if, during the last 12 months, they found they could not stop or cut down on their use of a particular drug even though they wanted to or tried. Table 5.16 indicates that some drugs may be more difficult to stop using than others. People using heroin and methadone/buprenorphine had the highest proportion saying they tried to stop or cut down but could not (44% and 20%, respectively) and ecstasy and cocaine users had the lowest proportion (1.7% and 2.0%, respectively, although these estimates should be interpreted with caution due to the small sample size).



## Use of selected illicit drugs

This next section of the chapter focuses on illegal drugs (such as cannabis), emerging/novel psychoactive substances (such as synthetic cannabinoids) and other substances used inappropriately (such as inhalants). Refer to Chapter 6 for more information on misuse of pharmaceuticals.

### Cannabis

#### For people aged 14 or older in Australia in 2016

- 35%** (or 6.9 million) used cannabis in their lifetime  
**10.4%** (or 2.1 million) used cannabis in the last 12 months  
**18.7 years** was the average age people first tried cannabis  
**21%** had the opportunity to use cannabis in the previous 12 months.  
**22%** of people in their 20s had recently used cannabis

#### Among recent cannabis users aged 14 or older in 2016

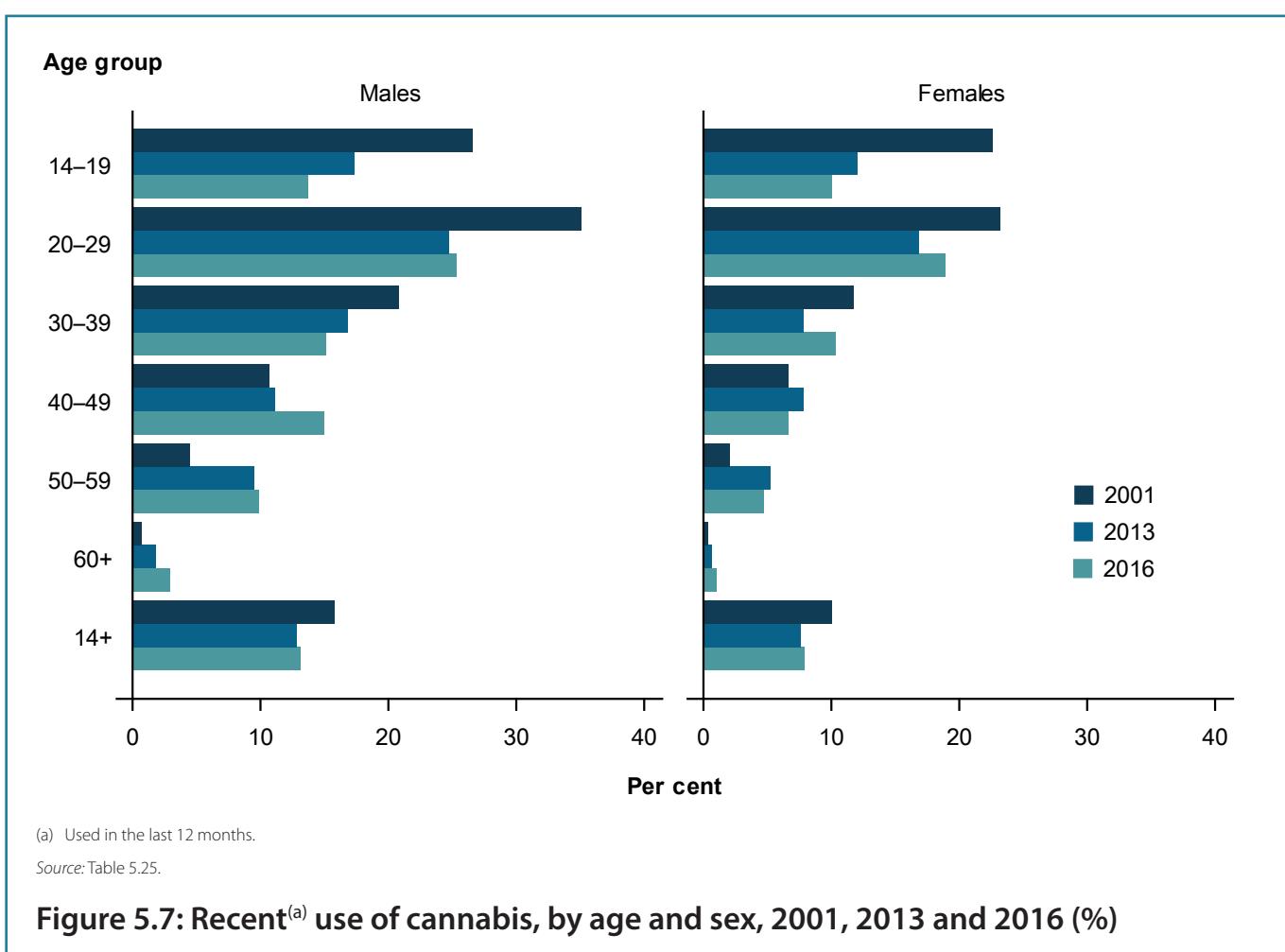
- 34 years** was the average age of recent cannabis users  
**14.4%** used cannabis every day.

### Age and sex comparisons over time

Recent and lifetime use of cannabis has remained relatively stable over the past decade but there were some significant changes among different age groups (Tables 5.23 and 5.24). Since 2001, recent cannabis use has generally declined among the younger age groups (those aged 14–39), but either increased or remained stable for the older age groups (40 or older). Compared with those in other age groups, people in their 20s continue to be the most likely to use cannabis but this declined from 29% in 2001 to 22% in 2016. Between 2013 and 2016 there was a slight but significant increase among people aged 60 or older using cannabis (from 1.2% to 1.9%).

In comparison to 2013:

- a significantly greater proportion of males in their 40s used cannabis in 2016 (from 11.1% to 15.0%) (Figure 5.7)
- there were more males aged 60 or older using cannabis in 2016 (significantly increased from 1.8% to 2.9%)
- recent use of cannabis among males in their 40s and 50s, and those aged 60 or older is at the highest rate seen over the last 15 years, indicating there may be an ageing cohort of cannabis users
- more females in their 30s used cannabis in the previous 12 months in 2016 (significantly increased from 7.8% in 2013 to 10.3%).



### Cannabis use by population groups

Socioeconomic status and education had little influence on a person's recent cannabis use. People who were unemployed, were Indigenous, or homosexual/bisexual were more likely to use cannabis than their counterparts (see Table 5.27 or Chapter 8 for more information).



## Cocaine

### For people aged 14 or older in Australia in 2016

- 9%** (or 1.8 million) used cocaine in their lifetime  
**2.5%** (or 500,000) used cocaine in the last 12 months  
**5.6%** had the opportunity to use cocaine in the previous 12 months  
**6.9%** of people in their 20s had recently used cocaine  
**23.9 years** was the average age people first tried cocaine.

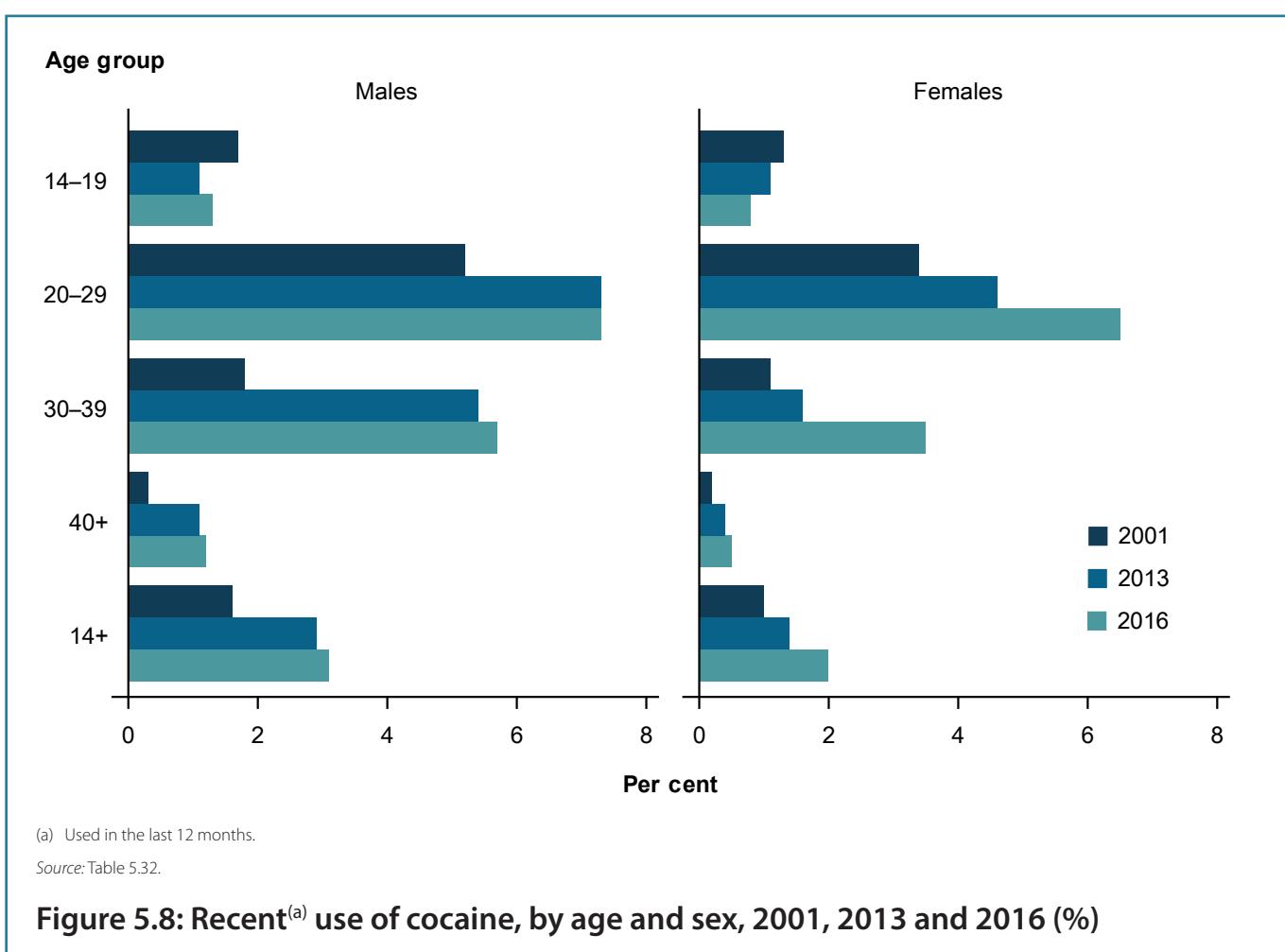
### Among recent cocaine users aged 14 or older in 2016

- 31 years** was the average age of recent cocaine users  
**64%** used cocaine once or twice a year.

### Age and sex comparisons over time

While use of drugs such as cannabis, ecstasy and meth/amphetamines has generally declined since 2004, the proportion of people using cocaine has been increasing since 2004. Between 2001 and 2016, lifetime cocaine use increased across all age groups except for 14–19 year olds, and significantly increased between 2013 and 2016 for people in their 30s and 40s (Table 5.30). Recent use of cocaine has increased across most age groups and for both sexes since 2001 and is at the highest rate seen over the last 15 years. More specifically:

- more females in their 20s are using cocaine—recent use significantly increased from 4.6% in 2013 to 6.5% in 2016 and has almost doubled since 2001 (3.4%) (Figure 5.8)
- females in their 30s reported a significant increase in recent use from 1.6% in 2013 to 3.5% in 2016 and 3.2 times higher than the rate in 2001
- there were no significant changes among any of the male age groups between 2013 and 2016 but recent use was at the highest rate across most age groups since 2001
- people in their 40s in 2016 were far more likely to use cocaine than people in their 40s in 2001 (2.2% compared with 0.6%)
- average age of use has increased from 28 in 2001 to 31 in 2016 (Table 5.13).



## Cocaine use by population groups

In contrast to use of illicit drugs such as cannabis and meth/amphetamines, recent cocaine use was highest among those who were employed (3.8%) and lived in *Major cities* (3.2%) or high socioeconomic areas (3.3% and 4.0% in the highest and second highest socioeconomic areas, respectively) (Table 5.32) (see Chapter 8 population groups).



## Ecstasy

### For people aged 14 or older in Australia in 2016

- 11.2%** (or 2.2 million) used ecstasy in their lifetime  
**2.2%** (or 400,000) used ecstasy in the last 12 months  
**6.4%** had the opportunity to use ecstasy in the previous 12 months  
**21.7 years** was the average age people first tried ecstasy  
**7.0%** of people in their 20s had recently used ecstasy.

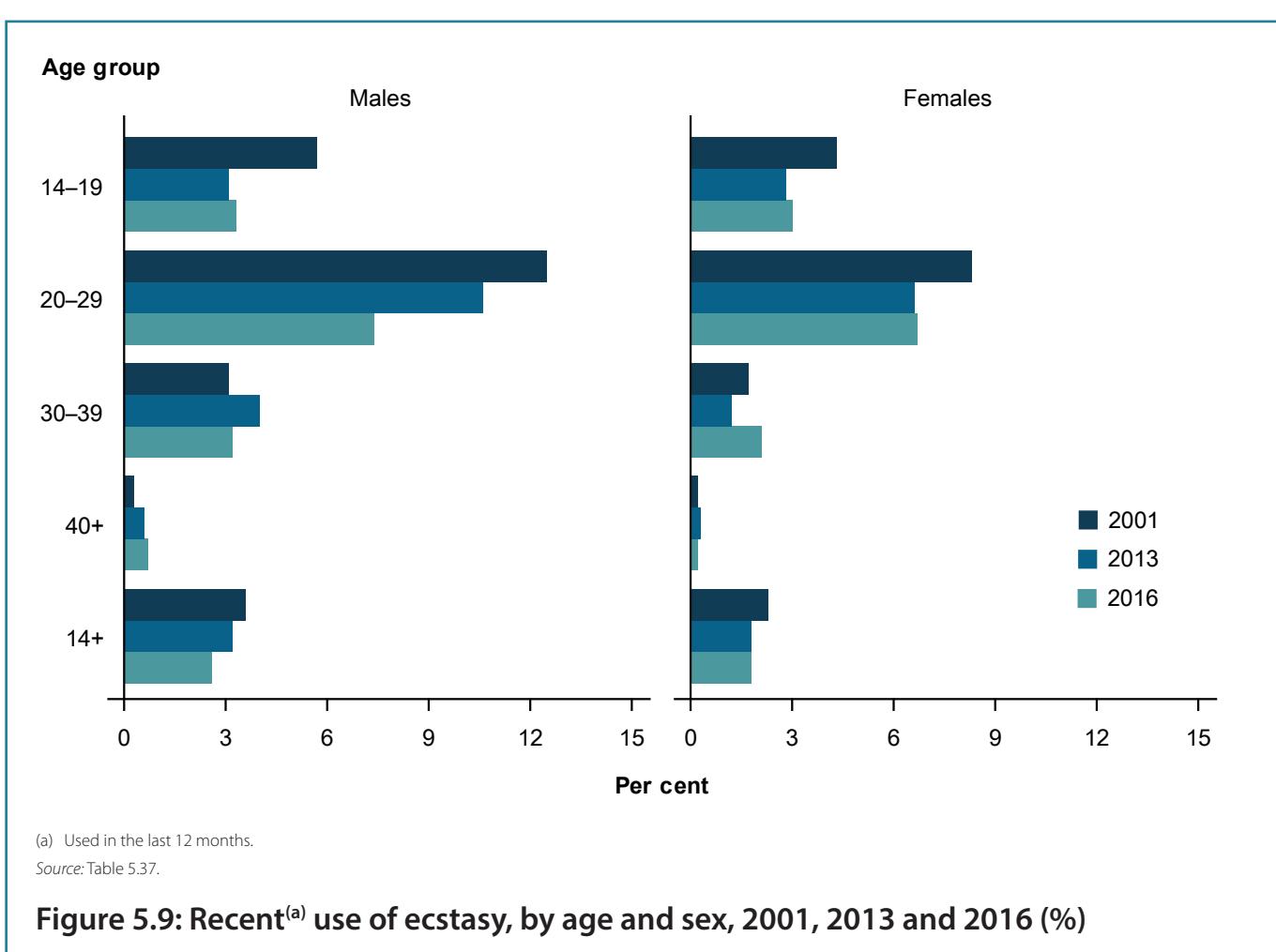
### Among recent ecstasy users aged 14 or older in 2016

- 28 years** was the average age of recent ecstasy users  
**51%** used ecstasy once or twice a year.

### Age and sex comparison over time

Between 2013 and 2016, lifetime use of ecstasy increased for people in their 40s and 50s but decreased for people in their 20s (Table 5.35).

Recent ecstasy use has been declining since peaking in 2007. There was a small non-significant decline among people using ecstasy in the previous 12 months between 2013 and 2016 (from 2.5% to 2.2%), mainly driven by a significant decline among males in their 20s (from 10.6% to 7.5%). Use remained relatively unchanged between 2013 and 2016 in most other male and female age groups except in females in their 30s, who reported a significant increase from 1.2% to 2.1% (Figure 5.9). Since 2001, recent use has generally decreased among the younger age group (14–29) but remained similar over the same period for people aged 30 or older.



### Forms of ecstasy used

The 2016 survey was the first time people were asked about what forms of ecstasy they had used. The most common form used by ecstasy users in their lifetime was pill/tablet form (90%), followed by capsules (69%) (Table 5.39). Pills/tablets were the predominant form of ecstasy used in the last 12 months with 1 in 2 (51%) recent ecstasy users reporting that they used pills/tablets as their main form. About 1 in 3 reported they used capsules as their main form and 1 in 10 (11.6%) used crystal. Teenagers and people in their 20s were more likely to use capsules as their main form than people aged 30 or older.



## Meth/amphetamines

### For people aged 14 or older in Australia in 2016

- 6.3%** (or 1.3 million) used meth/amphetamines in their lifetime  
**1.4%** (or 280,000) used meth/amphetamines in the last 12 months  
**2.8%** of people in their 20s had recently used meth/amphetamines  
**5.5%** had the opportunity to use meth/amphetamines in the previous 12 months.

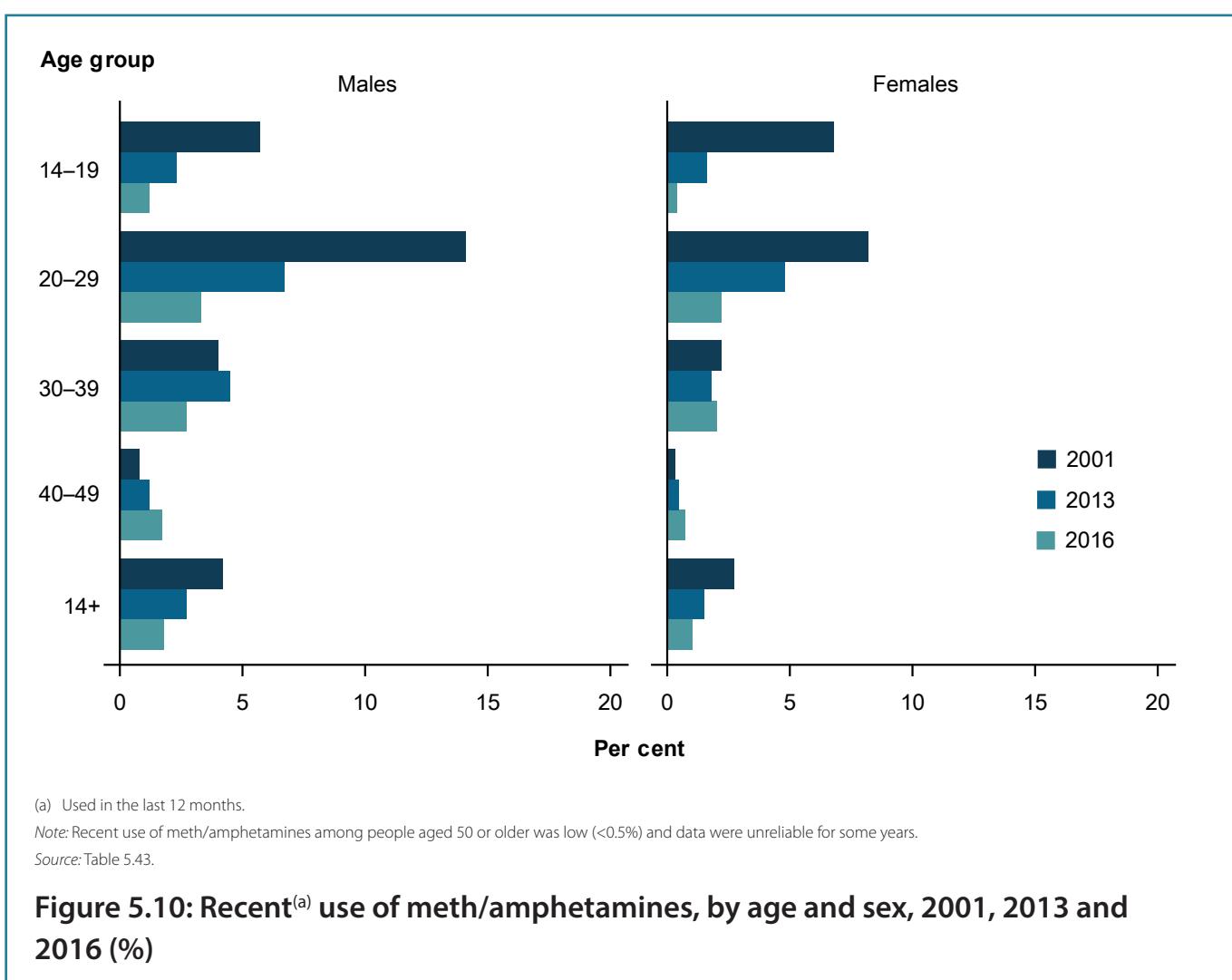
### Among recent meth/amphetamine users aged 14 or older in 2016

- 20%** used meth/amphetamines at least weekly  
**62%** had used crystal/ice in the previous 12 months  
**11.9%** injected meth/amphetamines in the previous 12 months  
**34 years** was the average age of recent meth/amphetamine users.

### Age and sex comparisons over time

Meth/amphetamine use has been declining since it peaked at 3.4% in 2001 (Table 5.42) and significantly declined between 2013 and 2016. This decline was mainly driven by a substantial decline among people in their 20s—recent use of meth/amphetamines halved among this age group between 2013 and 2016 (from 5.7% to 2.8%) for both males (6.7% to 3.3%) and females (4.8% to 2.2%) (Figure 5.10). Males in their 30s also reported a significant decline over the same period (4.5% to 2.7%) but there was a slight but non-significant increase among females in their 30s (from 1.8% to 2.0%), and a significant increase among females in their 40s (from 0.9% to 1.6%).

In 2001, people in their 20s were 11 times as likely to use meth/amphetamines in the previous 12 months as people in their 40s (11.2% compared with 1.0%) but meth/amphetamines no longer appear to be the drug of choice among this demographic, and in 2016, people in their 20s were only 1.4 times as likely to use it as people in their 40s (2.8% compared with 2.0%) (Table 5.42).



## Frequency and form of meth/amphetamines

Meth/amphetamines comes in many forms including powder/pills (speed), crystal methamphetamine (crystal meth or ice) and a sticky paste (base). Crystal/ice is usually the most pure form, followed by base then speed. The 'high' experienced from ice and base is much more intense, and with intense reactions come powerful responses including comedown, the potential for dependence (addiction) and chronic physical and mental problems (DoHA 2013).

In 2013 there was a change in the main form of meth/amphetamines used, with ice replacing powder as the preferred form of the drug. In 2016, this trend continued with 57% of meth/amphetamine users reporting that crystal/ice was the main form of meth/amphetamines used in the previous 12 months (slight increase from 50% in 2013 and significantly up from 22% in 2010). Over the same period, use of powder significantly decreased from 51% in 2010 to 29% in 2013 and down to 22% in 2016 (Table 5.43).



It is possible to estimate the proportion of the total population using crystal/ice between 2007 and 2016 by examining the proportion of recent meth/amphetamine users by the main form used in the last 12 months (Table 5.45). However, this is likely to be an underestimate as it only accounts for those people who reported that they used crystal/ice as their main form in the previous 12 months. While overall recent meth/amphetamine use declined between 2013 and 2016, the proportion using crystal/ice remained relatively stable between 2013 and 2016 (1% and 0.8%, respectively) and has increased since 2010 (0.4%). Use of forms other than crystal/ice has fallen since 2007 and significantly declined between 2013 and 2016 (from 1% to 0.6%).

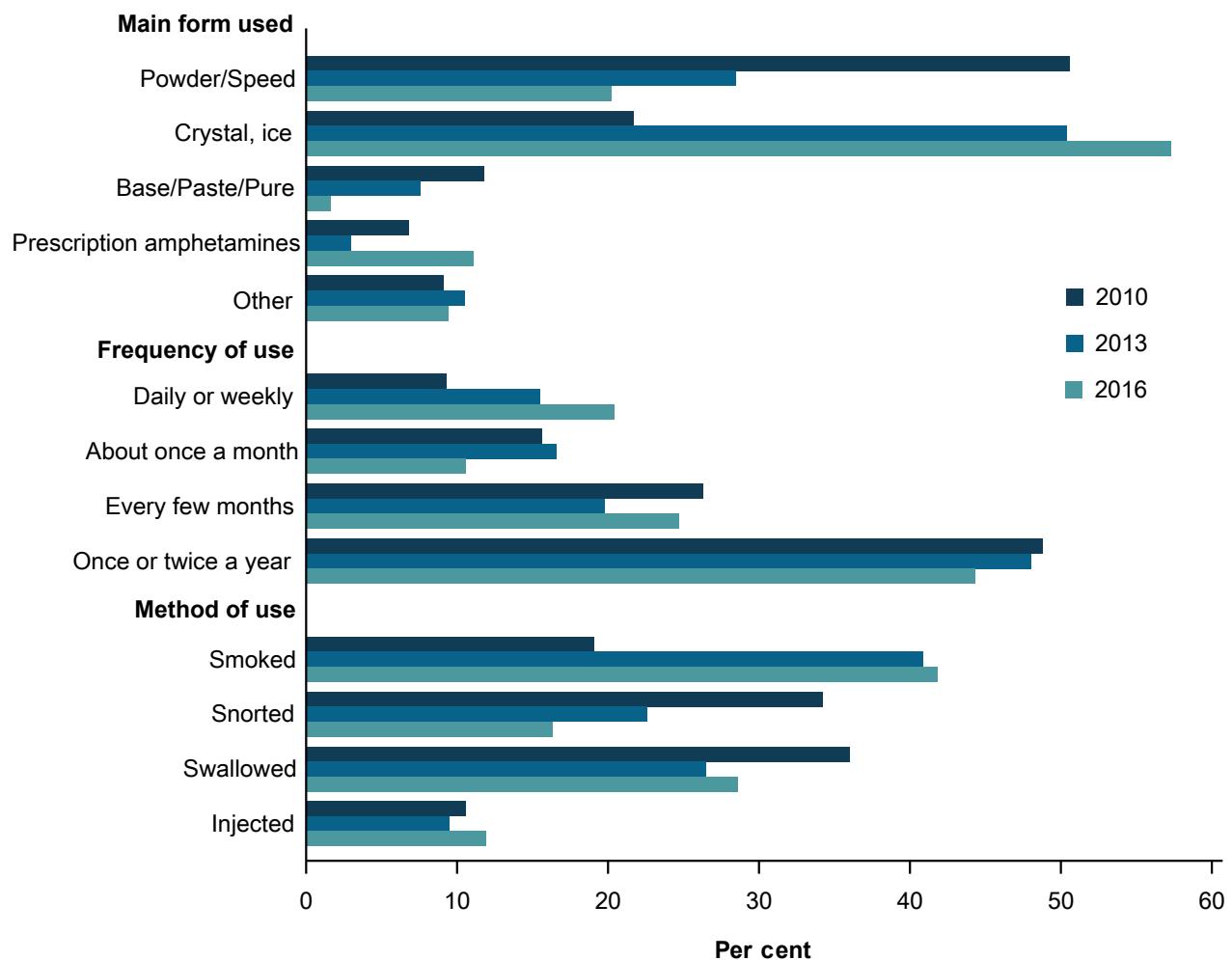
The 2016 survey was the first time meth/amphetamine users were asked to report all the forms of meth/amphetamines used in the previous 12 months. Just over 6 in 10 (62%) users reported they had used crystal/ice in the previous 12 months, indicating that most meth/amphetamine users who use crystal/ice, use it as their main form.

Results indicate that those using meth/amphetamine, particularly crystal/ice, are doing so with increased frequency (Figure 5.11). Between 2010 and 2016:

- daily and weekly use of meth/amphetamines more than doubled, from 9.3% to 20%
- daily and weekly use among people who reported mainly using crystal/ice was even higher in 2016, increasing from 12.4% in 2010 to 25% in 2013 and to 32% in 2016.

### ***Method of use***

Powder/speed are generally snorted or ingested and crystal/ice is usually smoked or injected. In 2010, snorting meth/amphetamines was a more common method of use than smoking (34% compared with 19%), but in 2016, smoking was more common than snorting (42% compared with 16%) (Figure 5.11). These trends in method of use for meth/amphetamines are parallel to the trends seen in the main form of use where between 2010 and 2013 there was a substantial change in the main form of meth/amphetamine used—from powder/speed to crystal/ice. Among meth/amphetamine users who mainly used crystal/ice, the proportion injecting meth/amphetamines doubled from 9.4% in 2013 to 19.2% in 2016 (Table 5.47).



(a) Used in the last 12 months.

Sources: Tables 5.43, 5.44, 5.47.

**Figure 5.11: Main form used, frequency of use and method of use, recent<sup>(a)</sup> users of meth/amphetamines, 2010–2016 (%)**



### Box 5.1 Demographic differences between powder/speed and crystal/ice users

Meth/amphetamine users who reported that they mainly used crystal/ice had different demographic characteristics and usage patterns to those mainly using powder/speed. In comparison to speed/powder users, crystal ice users were:

- less likely to be currently employed (49% compared with 80% for speed users)
- more likely to live in *Outer regional, Remote* and *Very remote* areas (22% compared with 6.4%)
- more likely to be single—either never married (57% compared with 47%) or divorced/separated/widowed (12% compared with 3.4%)
- less likely to have completed a bachelor degree or higher (12.8% compared with 30.1%)
- far more likely to use the drug regularly (32% used weekly compared with only 5.6% of powder/speed users).

Some of these estimates, particularly for speed/powder users, have wide margins of error and should be interpreted with caution (see tables 5.44 and 5.49).

### Meth/amphetamine use by population groups

Some population groups in the 2016 NDSHS were far more likely to report having used meth/amphetamines recently than the general population. For example, meth/amphetamine use was 3.1 times higher among unemployed people than employed people, and single people with dependent children were 4 times as likely to have recently used the drug as couples with dependent children (Table 5.48) (see Chapter 8 for more information).

## Emerging psychoactive substances

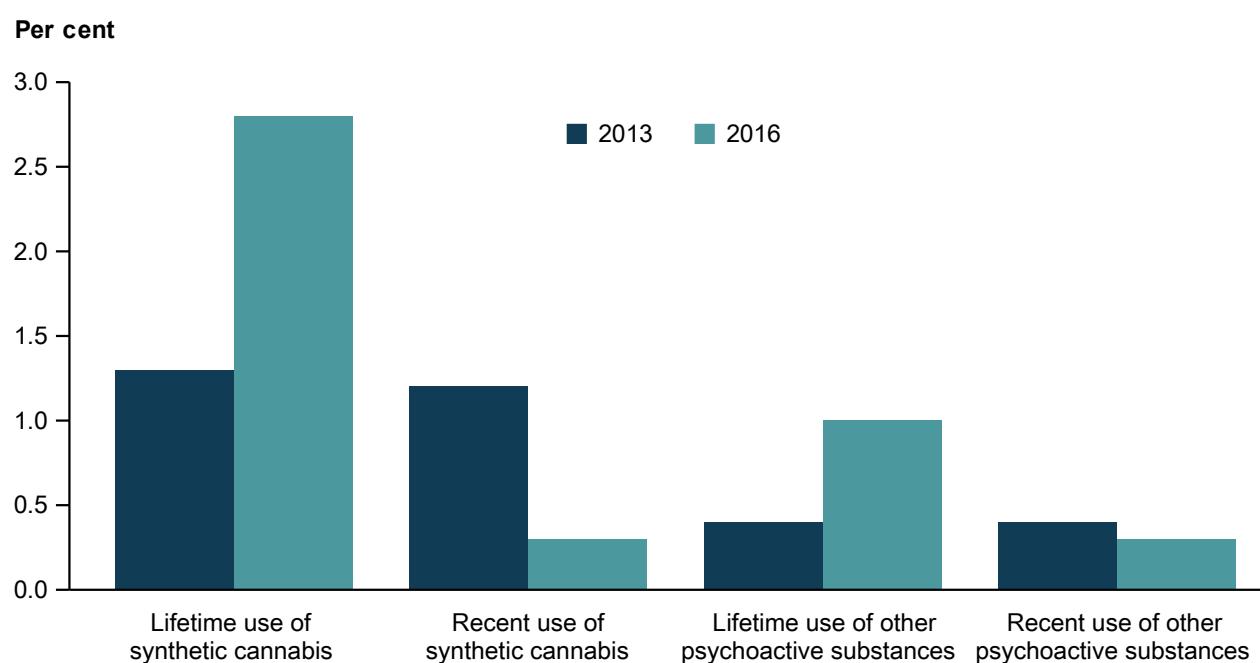
### What are they?

Novel, new or emerging psychoactive substances, or EPS, is a term used to describe drugs with mind-altering effects that are relatively new to the recreational drug market. EPS often mimic the effects of existing illicit psychoactive drugs such as cannabis, ecstasy (MDMA) and hallucinogens, or have chemical structures very similar to those substances. Other names given to this group of drugs include: research chemicals, analogues, legal highs, herbal highs, bath salts, party pills and synthetic drugs (NDARC 2016). Some examples of psychoactive substances include those known as meow meow, DMT, kronic and BZP.



## Lifetime use and current use

The 2016 survey indicates that most people who used synthetic cannabis no longer use it. Although lifetime use of the synthetic cannabis more than doubled between 2013 and 2016 (from 1.3% to 2.8%), recent use dropped dramatically from 1.2% to 0.3%, indicating that experimentation had increased over the 3-year period but most people had not used the drug in the last 12 months (Figure 5.12). Lifetime use of other psychoactive substances such as meow meow and DMT also increased over this period (from 0.4% to 1.0%) but recent use remained stable at about 0.3% in 2016.



(a) Used in the last 12 months.

Source: Table 5.52.

**Figure 5.12: Lifetime and recent<sup>(a)</sup> use of synthetic cannabis and other psychoactive substances, people aged 14 or older, 2013 and 2016 (%)**



## Other illicit drugs

This section presents information on the use of other illicit drugs surveyed, including heroin, hallucinogens, ketamine, GHB and inhalants, as well as on drug-taking behaviour such as injecting drug use.

Injecting drug use is a major risk factor for transmitting bloodborne viruses, including HIV, hepatitis B and hepatitis C. Needle and syringe sharing among people who inject drugs is partly responsible for transmitting infection among drug users, although unsafe sexual behaviours also play a role (AIHW 2012).

Overall, the proportion of use of these drugs was small within Australia and generally stable between 2013 and 2016 except for recent use of hallucinogens, which significantly declined from 1.3% to 1.0%, mainly driven by a decline among males (1.9% to 1.4%) (Table 5.53). Over the longer term, use of inhalants has been gradually increasing and increased from 0.4% in 2001 to 1% in 2016.

Recent use of ketamine and GHB by people aged 14 or older was very low—0.4% of people had used ketamine in the previous 12 months, and only 0.1% had used GHB—and the rate has not changed much over the last 15 years.

### Heroin and injecting drug use

The proportion of the population aged 14 or older who had used heroin (a drug that is commonly injected) or injected illicit drugs in the previous 12 months was low over the period 2001 to 2016.

Injecting drug use fluctuated between 2001 and 2016 from a low of 0.3% in 2013 and 2016, to a high of 0.6% in 2001, while recent use of heroin has remained stable at about 0.2%. Although use of heroin is low, frequency of use is much higher than other drugs, with 49% of users using heroin as often as weekly (Table 5.55). Among injecting drugs users, 41% inject twice a week or more often.

Injecting drug users generally sourced their needles and syringes from pharmacies (44%) or needle and syringe programs (41%) (Table 5.56). Positively, there was a reduction among recent injecting drug users who had shared needles in their lifetime (from 47% to 29%) (Table 5.57).

### Drug sources and locations of use

Most people sourced cannabis (65.5%), ecstasy (63%), meth/amphetamines (55%) and cocaine (78%) from a friend (Table 5.59). Meth/amphetamine and ecstasy users were more likely than other drug users to source it from a dealer (33% and 31%, respectively). The majority of people misusing pharmaceutical analgesics and opioids bought them from a pharmacy (52%) and about 1 in 5 obtained it with a prescription or by doctor shopping.



Ecstasy users were more likely to use the drug in a public venue (for example raves, pubs or clubs), while cannabis (87%), meth/amphetamine (78%) and cocaine (58%) users were more likely to use the drug in a private home (Table 5.60). Meth/amphetamine users were also less likely to use the drug at private parties in 2016 (from 47% in 2013 to 37% in 2016). In 2010, when the main form of meth/amphetamine used was speed/powder and most people ingested the drug, 40% of meth/amphetamine users were using the drug at a public establishment such as a pub or club, but as the main form and method changed (to crystal/ice and smoking) this declined to 22% in 2016.

## Motivations/factors that influence decision to use illicit drugs

The decision to use drugs for the first time and to continue using them is influenced by a number of factors. Most people use drugs because they want to feel better or different. There are different categories of drug use including experimental use (try it once or twice out of curiosity), recreational use (for enjoyment, to enhance a mood or social occasion), situational use (cope with the demands of a situation) and dependent use (need it consistently to feel normal or avoid withdrawals) (ADF 2013). People may not be aware of the underlying reasons they take drugs or may answer in a way they deem to be more socially acceptable.

In 2016, similar to 2013, the most common reason that an illicit substance was first used was curiosity (65%), followed by friends or family offered it or were using it (50%) (Table 5.61); these were the main 2 reasons for both recent and ex-illicit drug users. Ex-illicit drug users were less likely to specify recreational reasons (such as improve mood or enhance experience) as their reasons for first trying illicit drugs than recent illicit drug users. Almost half (46%) of ex-illicit drug users said they only tried illicit drugs once (Table 5.62). Among those who continued to use drugs:

- the most common reason for continuing drug use was that they wanted to enhance experiences (32%) (Table 5.63)
- more drug users continued to use illicit drugs to improve their mood or stop feeling unhappy (from 10.2% in 2013 to 15.3% in 2016)
- fewer drug users nominated excitement as a reason in 2016 (declined from 17.5% to 13.6%)
- 14–19 year olds were more likely to be influenced by friends and family than those in other age groups.

Most people who have never used illicit drugs have not tried them simply because they are just not interested (73%) (Table 5.64). A further 43% said they never tried them as they were concerned about their health or becoming addicted and about 1 in 3 (31%) were worried about the legal consequences and did not want to break the law.

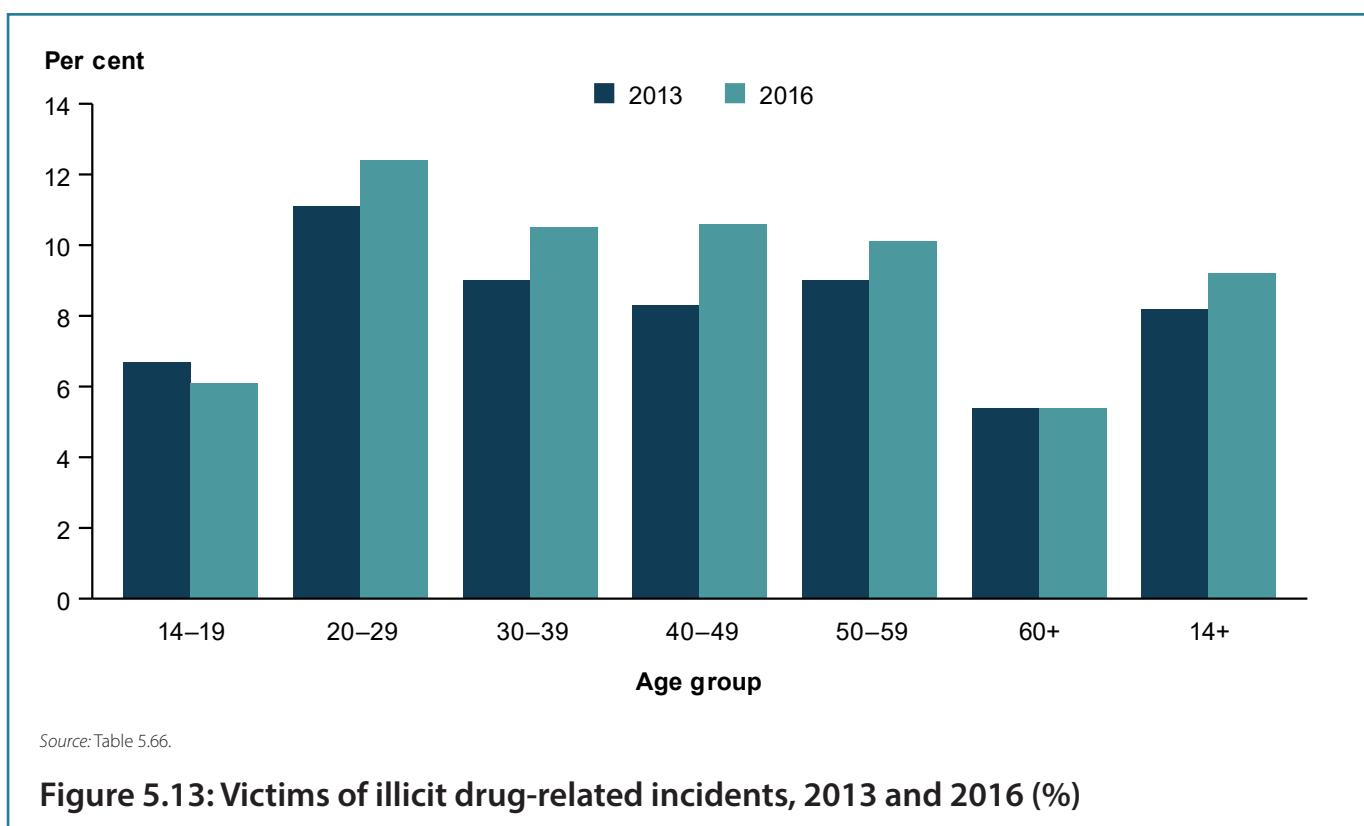


## Illicit drug-related harm

### Victims of drug-related harm

Figure 5.13 presents information about people aged 14 or older who were victims of an incident related to illicit drugs in the previous 12 months. These showed mixed results in 2016 with more people being put in fear but no change in the proportion being physically abused. More specifically:

- 1 in 10 people (9.2%) had been a victim of an illicit drug-related incident, up from 8.2% in 2013
- a similar proportion had been physically abused by someone under the influence of illicit drugs, 2.1% in 2013 to 1.8% in 2016, but significantly decreased among males (from 2.3% to 1.8%) (Table 5.65)
- verbal abuse was the most frequently reported incident overall (7.0%) and a significantly greater proportion of people in their 40s reported being verbally abused in 2016 (increasing from 6.5% in 2013 to 8.2% in 2016) (Table 5.66)
- people in their 20s were most likely to experience an incident caused by someone under the influence of illicit drugs, with 9.4% reporting they had been verbally abused and 3.0% physically abused (Table 5.66).





## Harmful activities undertaken

The most common activity undertaken while under the influence of illicit drugs was driving, with 15.1% of recent illicit drug users admitting they had done this in the last 12 months (similar proportion to 2013 of 15.9%) (Table 5.67). A significantly lower proportion reported that they had: created a disturbance, damaged property or stolen goods (declined from 4.5% to 3.1%); verbally abused someone (from 4.3% to 2.8%); or physically abused someone (from 1.6% to 0.6%).

## Suffered injuries or overdose

The 2016 survey was the first time illicit drug users were asked whether they had been injured while under the influence of illicit drugs and required medical attention or admission to hospital. They were also asked whether they had overdosed and required medical attention or admission to hospital. Most of these data have a high relative standard error and should be interpreted with caution. Among recent illicit drugs users aged 14 or older, 1.1% reported that they had injured themselves while under the influence of illicit drugs and required medical attention and 0.4% said their injury was serious enough to require hospitalisation (Table 5.69). Less than 1% of recent illicit drug users reported that they had overdosed and required medical attention (0.5%) or hospitalisation (0.3%) but this was higher among people who had used meth/amphetamines in the previous 12 months (2.9% had overdosed and required medical attention or hospitalisation) (Table 5.68).

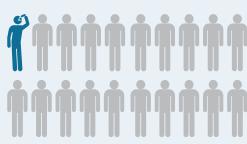
## Missed work due to illicit drug use

In 2016, 38% of employed people report missing at least 1 day of work in the previous 3 months due to illness or injury (regardless of drug use) (Table 5.70). Overall, 1.9% of recent illicit drug users missed 1 day of work in the last 3 months due to their drug use, with recent meth/amphetamines users (7.8%) and ecstasy users (6.2%) more likely to report they had missed work than cannabis and pain-killer/opiate users.



**1 in 20** (4.8%) people misused a pharmaceutical in the last 12 months

Last 12 months



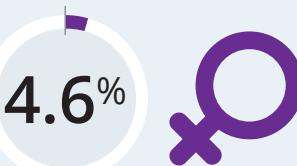
**1 in 8** (12.8%) had misused a pharmaceutical in their lifetime

Life-time



## Pharmaceutical misuse

Males and females misused pharmaceuticals at similar rates



Pain-killers/opioids most commonly misused pharmaceutical, followed by Tranquillisers/sleeping pills

3.6%

Pain-killers/ opioids

1.6%

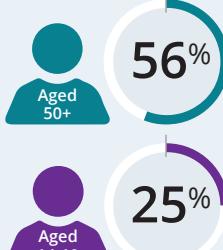
Tranquillisers/ sleeping pills

## Among misusers of pharmaceuticals

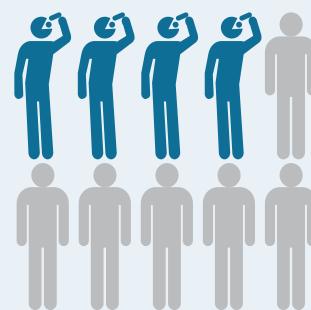
Pharmaceutical misusers were older than illegal drug users; mean age was 45 compared with 34 for users of other illicit drugs



Those aged 50 or older were most likely to misuse pharmaceutical drugs once a month or more. Those aged 14–19 were least likely to use monthly or more often



Almost **4 in 10** (39%) misusers of pharmaceuticals also used an illegal drug



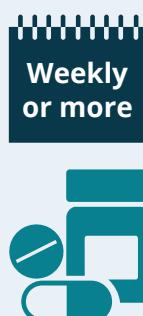
## Among misusers of pain-killers/opioids

**3 in 4** (75%) recent pain-killer/opioid misusers had misused an over-the-counter codeine product

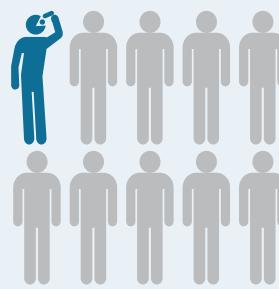
Last 12 months



**29%** used pain-killers/opioids



**1 in 10** (10.7%) misusers could not stop using or cut down even though they wanted to



Note: findings relate to people aged 14 or older unless specified.

All data presented in this chapter are available in the misuse of pharmaceuticals tables <<http://www.aihw.gov.au/reports/illicit-use-of-drugs/ndhs-2016-detailed/data>>.



## Misuse of pharmaceuticals

In the context of illicit drug use, a pharmaceutical is 'a drug that is available from a pharmacy, over-the-counter (OTC) or by prescription, which may be subject to misuse' (MCDS 2011).

Misuse includes use for non-medical purposes or in doses or frequencies other than those prescribed.

In the 2016 NDSHS, pharmaceuticals included pain-killers/analgesics and opioids, tranquillisers/sleeping pills, methadone/buprenorphine and steroids. All pharmaceutical use in this chapter relates to use for non-medical purposes, which may include using medications in doses or frequencies other than prescribed to:

- induce or enhance a drug experience
- enhance performance
- use for cosmetic purposes.

The pharmaceutical use questions in the survey are designed to help respondents differentiate between legitimate, medical use and non-medical use. For each class of pharmaceuticals, the respondent was asked: firstly, if they have ever used the drugs in question and secondly, if they have used them for 'non-medical purposes' or when 'not supplied to you medically'. Only those who answer 'yes' to the second question are counted as using misusing pharmaceutical. However, the questions rely on the respondent's selfreported behaviour and the respondent understanding that they have misused pharmaceuticals.



### Box 6.1: Updated pain-killers/analgesics/other opioids section

In 2016, the way the NDSHS captures non-medical use of pain-killers/analgesics and other opioids changed to better reflect how these substances are used and understood in the community.

Specifically:

- OTC non-opioid analgesics, such as paracetamol and aspirin, were removed from the section because they are not known to be misused for cosmetic purposes, to induce or enhance a drug experience, or enhance performance
- the previously separate 'pain-killers/analgesics' and 'other opiates/opioids' sections of the survey were combined to avoid capturing users of prescription pain-killer/opiates such as oxycodone in two sections
- categories of analgesics are defined by their most psychoactive ingredient rather than their brand name, and brand names are only presented as examples. This brings the section in line with other pharmaceuticals captured in the survey.

Heroin (see illicit drugs) and methadone, which are also opioids, continue to be captured separately.

#### Comparability with previous survey results

These changes represent a break in the time series for the both 'pain-killers/analgesics' and 'other opiates/opioids'. As such, significance testing was not performed on changes between 2016 and 2013 data, and making comparisons over time for these drug types is avoided in this chapter. Where time series data are presented, pain-killers/analgesics and opioids data have been combined in older years but are still not directly comparable to 2016.

As pain-killers/analgesics and other opioids are the largest contributing drug type to the pharmaceuticals total, significance testing was not performed on overall pharmaceutical misuse and any comparison across time must be interpreted with caution. There were no changes to the tranquillisers/sleeping pills, steroids or methadone/buprenorphine sections of the questionnaire.

## Lifetime misuse

In 2016, 2.5 million (or 12.8%) people in Australia misused a pharmaceutical drug at some point in their lifetime (Table 6.1). Before the break in time series in 2016, lifetime pharmaceutical misuse had remained stable (around 7.5%) between 2004 and 2010 before increasing significantly to 11.4% in 2013.

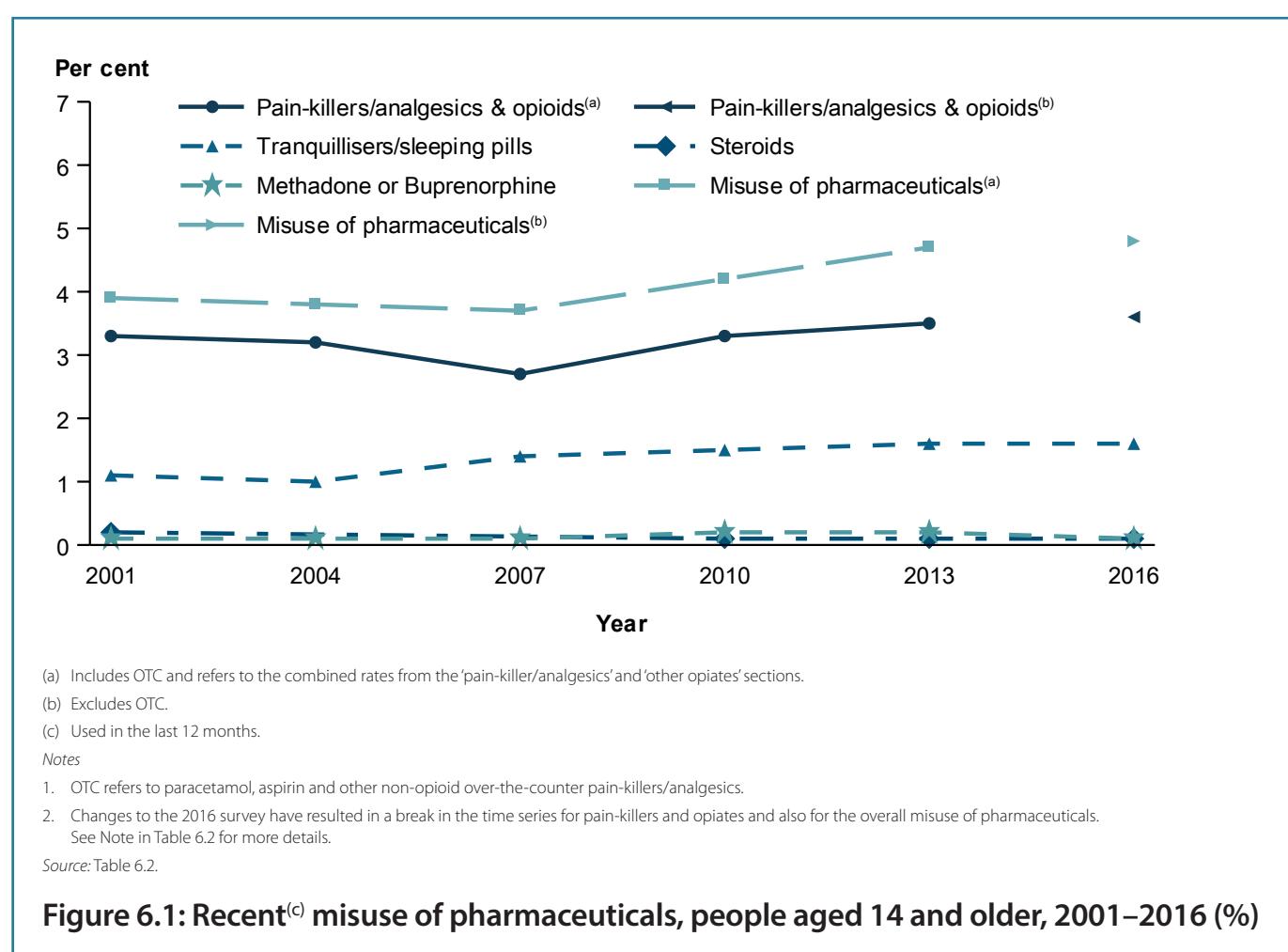


## Recent misuse

Just under 1 in 20 (4.8%) Australians misused a pharmaceutical in the last 12 months. In 2013, before the break in time series, recent misuse of pharmaceutical was 4.7%, having increased steadily from 3.7% in 2007 (Figure 6.1).

In line with previous years, pain-killers/analgesics and opioids' was the most commonly misused class of pharmaceutical (3.6%), making it the second most illicitly used drug, after cannabis, in 2016.

There was no change in the misuse of all other forms of pharmaceuticals between 2013 and 2016. In both years, 1.6% of people misused tranquillisers/sleeping pills and 0.1% misused steroids, and misuse of methadone or buprenorphine remained stable, 0.2% in 2013 to 0.1% in 2016.



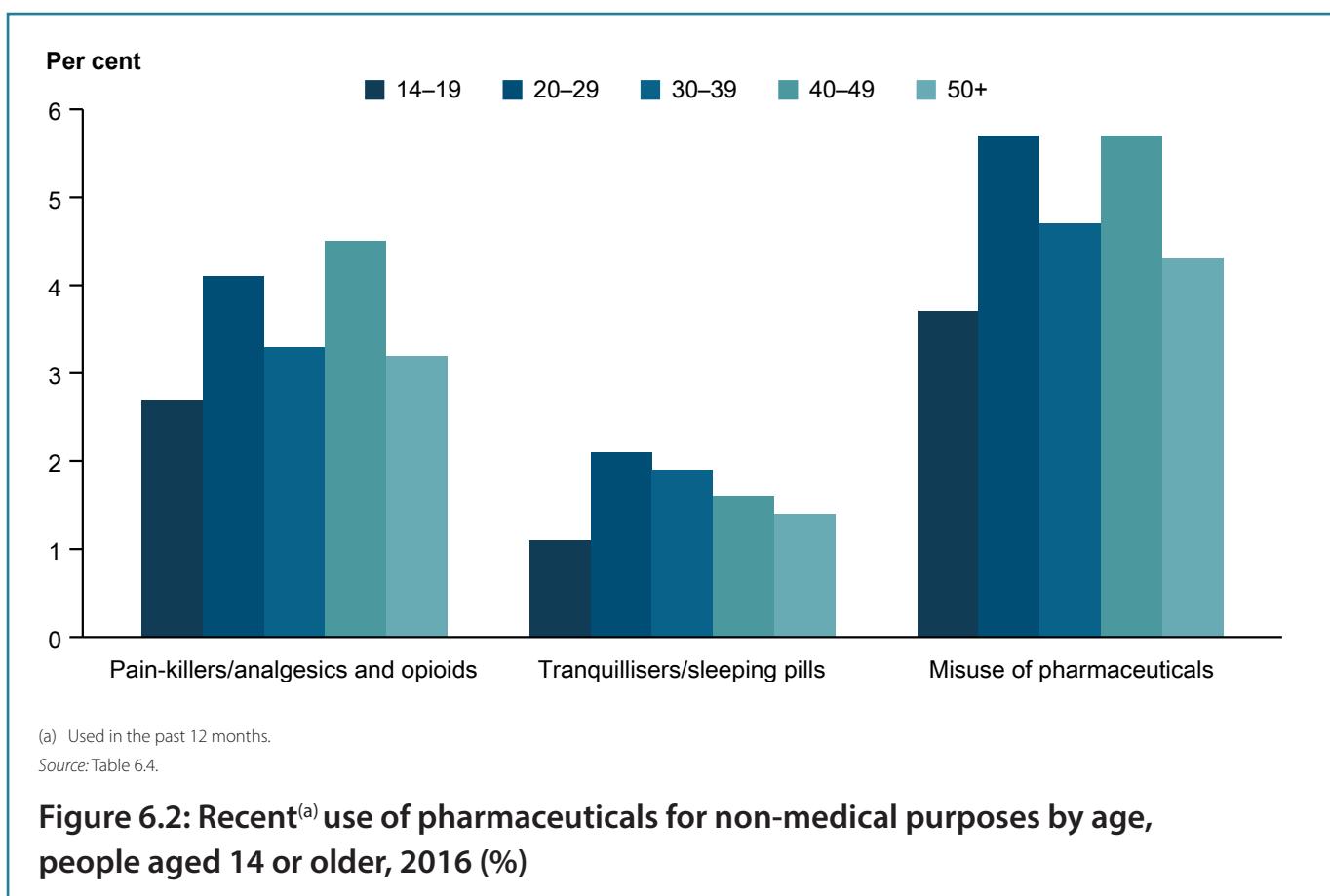


## Age and sex comparisons

Males and females tended to misuse pharmaceuticals at similar rates in 2016 (4.9% for males and 4.6% for females). Unlike other illicit drugs, where use tends to be highest among those in their 20s, pharmaceutical misuse showed little fluctuation with age, with rates for all age groups ranging from 3.7% (14–19 year olds) to 5.7% (people in their 20s and 40s) (Figure 6.2). The highest misuse rate was reported among young adult (18–24 years) males (6.0%) (Table 6.3).

People who misused pharmaceuticals were older than illegal drug users; in 2016, their mean age was 45 compared with 34 for users of illegal drugs. As with illegal drugs, the average age of pharmaceutical misusers steadily increased between 2001 and 2013, from 39 to 43 (Table 5.13).

Use of 'pain-killers/analgesics and opioids' was most common among those in their 40s (4.5%) and least common among those aged 14–19 (2.7%). Those aged 20–29 were most likely to misuse tranquillisers/sleeping pills (2.1%) with those aged 14–19 least likely (1.1%) to misuse this category of pharmaceuticals (Table 6.4).





## Frequency of use

In 2016, pharmaceuticals were among the most frequently misused illicit drugs, with 28% of people using these drugs doing so daily or weekly. This was second to cannabis (36%) and more often than meth/amphetamines (20%). Among recent misusers of pharmaceuticals, more females than males misused pharmaceuticals at least weekly (31% compared with 26%); this was similar to the usage patterns observed for recent ecstasy and cocaine users where females used more often than, or as often as, males. But this was different from cannabis and meth/amphetamines, where males used more frequently (tables 5.14 and 6.5).

Recent pharmaceutical misusers aged 14–19 were the least likely to use more frequently, with 25% using at least once a month or more. Those aged over 50 were the most likely to use once a month or more (56%) (Table 6.6).

Although 'pain-killers/analgesics and opioids' were the most commonly misused pharmaceutical drug in the past year, steroids were misused with the most frequency, with more than 2 in 3 users (67%) using at least weekly. 'Pain-killers/analgesics and opioids' were the next most frequently used, followed by tranquillisers/sleeping pills (with 29% and 20% using at least weekly, respectively). Males were slightly more likely than females to use steroids at least weekly (68% compared with 61%) but females were more likely to use 'painkillers/analgesics and opioids' and tranquilisers weekly or more often (Table 6.5).

## Unable to stop or reduce use

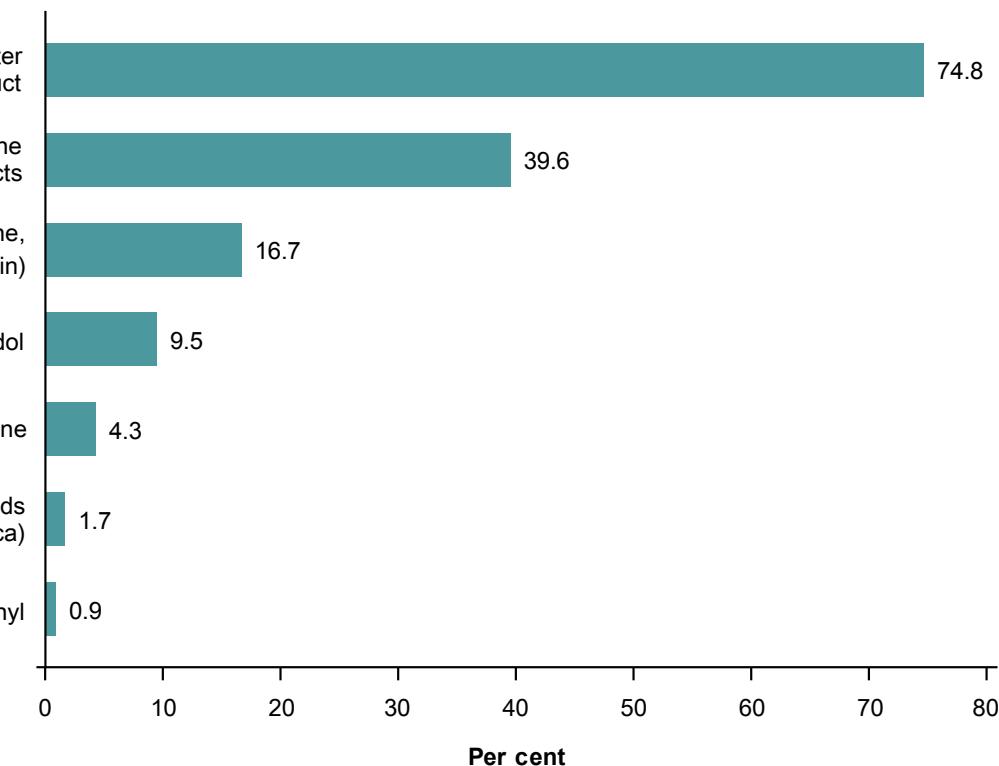
In 2016, 20% of recent users of methadone/buprenorphine, 10.7% of recent users of 'painkillers/analgesics and opioids' and 8.0% of recent users of tranquillisers/sleeping pills said that they could not stop or cut down their use, even if they wanted to (Table 5.16). Compared with users of illegal drugs, the rate for methadone/buprenorphine users that could not stop using or cut down was the second highest after heroin (44%). The rates for recent users of 'pain-killers/analgesics and opioids' and tranquillisers/sleeping pills were similar to those for meth/amphetamines (12.7%) and marijuana/cannabis (9.5%).

## Types of pain-killers/opioids misused

In December 2016, the Therapeutic Goods Administration made a decision that all OTC medicines containing codeine be rescheduled to become prescription-only medicines. This change will come into effect on 1 February 2018 (TGA 2016). Therefore, at the time the survey was conducted in 2016, codeine products such as Nurofen Plus were available on request from behind a counter at a pharmacy. In 2016, 3 in 4 (75%) recent painkiller/opioid misusers reported misusing an OTC codeine product in the past 12 months (Figure 6.3). These were more likely to be misused by teenagers, with 89% of recent users aged 14–19 reporting misusing an OTC codeine product in the past 12 months (Table 6.7).



The next most commonly misused pain-killer/opiate among misusers of pharmaceuticals was prescription codeine products, such as Panadeine Forte (40%). These products were most commonly misused by those in their 20s and 30s (53% and 51%, respectively). Misuse of fentanyl was rare (0.9%) as was misuse of gabapentinoids such as Neurontin or Lyrica (1.7%).



(a) Used in the past 12 months.

Note: Base is recent users of pain-killers and opiates.

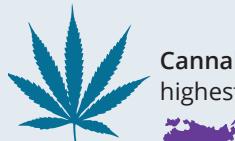
Source: Table 6.7.

**Figure 6.3: Types of pain-killers/opiates misused, recent(a) users of pain-killers/opiates aged 14 and over, 2016 (%)**



## Current use

The types of illicit drugs used in the last 12 months varied across jurisdictions



Cannabis was highest in the NT



10.4%  
National average



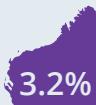
Meth/amphetamines was highest in WA



1.4%  
National average



Ecstasy was highest in WA



2.2%  
National average



Cocaine was highest in NSW



2.5%  
National average



Pain-killers/opiates was highest in SA



3.6%  
National average

## Trends



Similar to the national trend, most jurisdictions reported slight but non-significant declines in the daily smoking rate between 2013 and 2016.



More people abstained from alcohol in WA and NT.



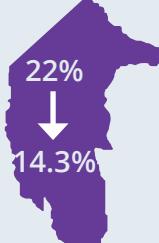
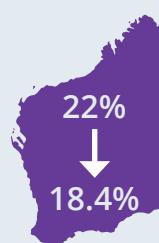
↑  
18.3%



↑  
16.7%



There were improvements in the lifetime alcohol risk guidelines in WA and ACT.



Across all jurisdictions, there was no significant change in recent cannabis use between 2013 and 2016.

**Note:** findings relate to people aged 14 or older unless specified.

All data presented in this chapter are available in the state and territory tables  
<http://www.aihw.gov.au/reports/illicit-use-of-drugs/ndhs-2016-detailed/data>.



This chapter presents summary statistics for states and territories. Some of the results have a relative standard error (RSE) of 50% or greater and have been flagged with a double asterisk (\*\*). Readers should exercise caution when interpreting such results, especially when making statistical comparisons or examining trends.

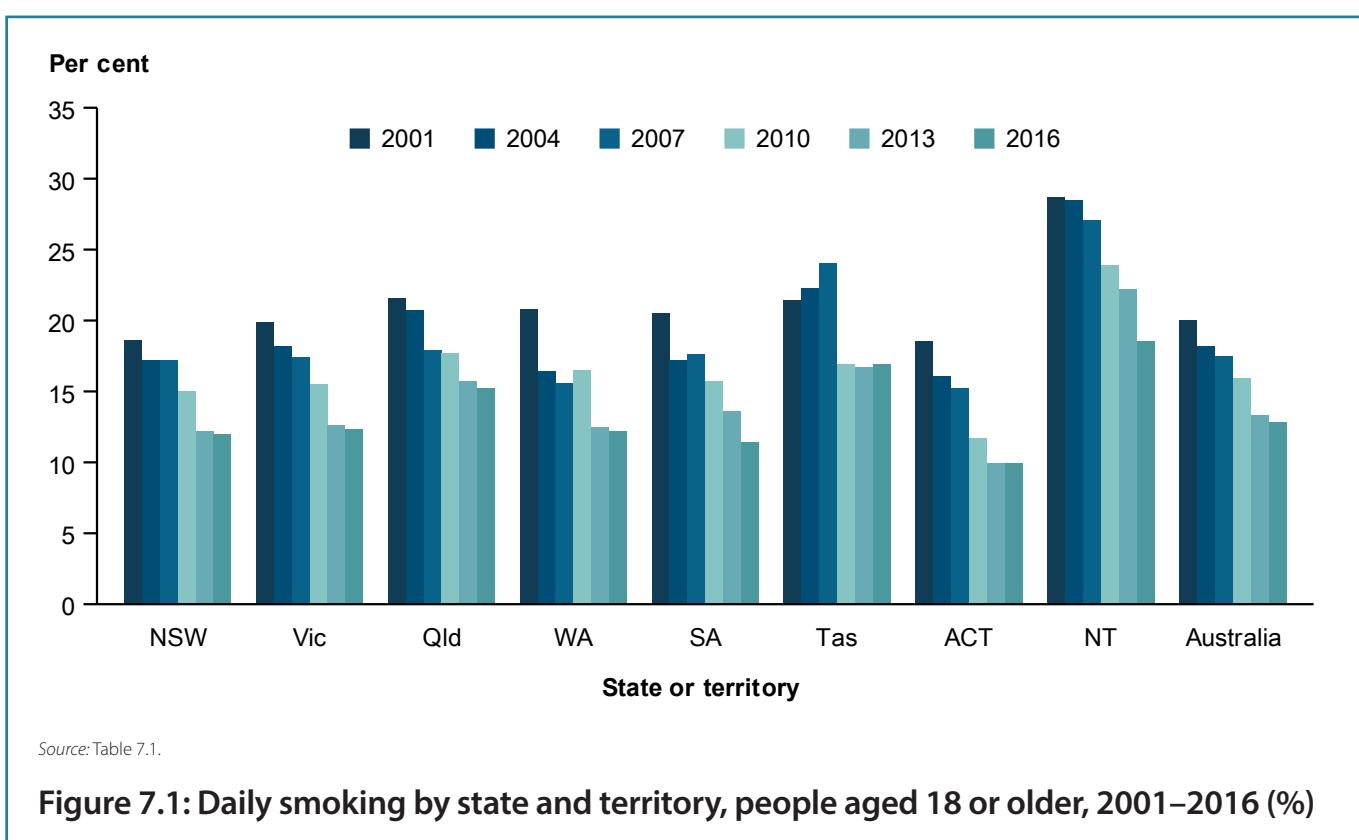
Further, tests of the significance of differences between jurisdictions have not been performed. Readers should use caution in concluding significant differences, even in cases where there are apparently large substantive differences. All proportions that are calculated from survey data are estimates rather than true population proportions. This means they have a margin of error (MoE) due to only a sample of the population being surveyed. MoE describes the distance from the population value that the sample estimate is likely to be within at the 95% level of confidence and can be used to derive confidence intervals. Where the 95% confidence intervals overlap, it cannot be said with certainty there are differences between the population groups being compared.

Due to different age structures in states and territories, state and territory prevalence comparisons should be only be considered using age-standardised percentages. State and territory age-standardised percentages are available through the supplementary tables.

## Smoking

Similar to the national trend, most jurisdictions reported slight but non-significant declines in the daily smoking rate between 2013 and 2016 (Figure 7.1). The Australian Capital Territory continues to have the lowest adult daily smoking rate even though this rate did not change between 2013 and 2016 (9.9% in both years). The Northern Territory and South Australia reported the largest decline over the 3-year period (declining by 17% and 16%, respectively). Findings also showed that:

- since 2001, the greatest improvement in the adult daily smoking rate occurred in the Australian Capital Territory with the rate almost halving by 2016 (from 18.5% to 9.9%)
- the least improvement between 2001 and 2016 occurred in Tasmania (from 21% to 16.9%), which also has the second highest smoking rate after the Northern Territory (18.5% in 2016)
- there were small increases in the proportion of people aged 14 or older never smoking across all jurisdictions but the increase was only significant in Western Australia (from 57% to 63%) (Table 7.3)
- after adjusting for differences in age structure, daily smoking continued to be highest in the Northern Territory and lowest in the Australian Capital Territory (Table 7.4 for age-standardised percentages).



## Tobacco smoking by age and sex

There were some noticeable changes in the smoking patterns among males aged 14 or older in Western Australia between 2013 and 2016—the daily smoking rate significantly decreased from 15.7% to 12.0% and the never smoking rate considerably increased from 49% to 60% (Table 7.3). There was also a significant reduction in the daily smoking rate among females in South Australia, declining from 13.1% in 2013 to 9.1% in 2016. Smoking was more prevalent in some age groups than others and this varied across jurisdictions (Table 7.5). For example:

- people in their 50s in the Northern Territory had the highest daily smoking rate across all age groups in Australia and this was 2.2 times higher than the national average (27% compared with 12.2%)
- Tasmania had the highest proportion of people in their 20s, 30s and 40s who smoked daily
- there was a large and significant improvement among people in their 30s smoking daily in the Northern Territory (down from 28% in 2013 to 15.2% in 2016). People in their 20s in Western Australia also made significant improvements, with the daily smoking rate declining from 15.3% in 2013 to 9.2% in 2016.



**Per cent**

■ 2010 ■ 2013 ■ 2016

NSW Vic Qld WA SA Tas ACT NT Australia

**State or territory**

(a) On average, had more than 2 standard drinks per day.

Source: Table 7.8.

**Figure 7.2: Lifetime risky drinkers<sup>(a)</sup>, by state and territory, people aged 14 or older, 2010–2016 (%)**

**Per cent**

■ 2010 ■ 2013 ■ 2016

NSW Vic Qld WA SA Tas ACT NT Australia

**State or territory**

(a) Had more than 4 standard drinks on a single drinking occasion at least once a month.

Source: Table 7.10.

**Figure 7.3: Single occasion risky drinkers<sup>(a)</sup>, by state and territory, people aged 14 or older, 2010–2016 (%)**



## Alcohol

There was variation in the rate of daily drinking across states and territories. While overall there was a decrease in daily drinking between 2013 and 2016 (from 6.5% to 5.9%), the fall was only significant in the Australian Capital Territory (from 6.6% to 3.6%) but a slight decline was reported in all jurisdictions (Table 7.6). Significant increases were reported in the proportion of people never consuming a full serve of alcohol in Western Australia (from 10.3% to 15.2%) and the Northern Territory (from 8.0% to 14.1%), bringing these proportions more in line with the national average (14.5%).

Consumption of alcohol also differed by state and territory and the prevalence of risky drinking was greater in some jurisdictions than others (Figure 7.2 and 7.3).

Findings showed that:

- two jurisdictions reported a significantly lower proportion of people exceeding the lifetime risk guidelines and the single occasion risk guidelines in 2016 than in 2013—Western Australia and the Australian Capital Territory (figures 7.2 and 7.3)
- there was a considerable increase in the proportion of people abstaining from alcohol in the Northern Territory (from 16.7% to 24%) but a similar proportion continued to exceed the lifetime risk guidelines and the single occasion risk guidelines
- the Australian Capital Territory had the lowest proportion of people exceeding the lifetime risk and single occasion risk guidelines at least monthly (14.3% and 23%, respectively) while the Northern Territory had the highest proportions (28% and 36%, respectively). These differences were still apparent after adjusting for differences in age structure (see tables 7.9 and 7.11).



## Risky alcohol consumption by age and sex

People in certain age groups were more likely to drink at risky levels and this varied by jurisdiction. In New South Wales, the Northern Territory and South Australia, people in their 50s were the most likely to be lifetime risky drinkers. But for people in Queensland, Western Australia and the Australian Capital Territory, the proportion of lifetime risky drinkers was highest among those in their 40s (Table 7.12). People aged 50–59 living in the Northern Territory were more likely than any other age group to drink at levels that placed them at risk of lifetime harm (36% compared with a national average of 17.1%).

Across all jurisdictions, people in their 20s were more likely to drink 5 or more standard drinks at least once a month, ranging from 33% in the Australian Capital Territory to 53% in Tasmania (Table 7.13).

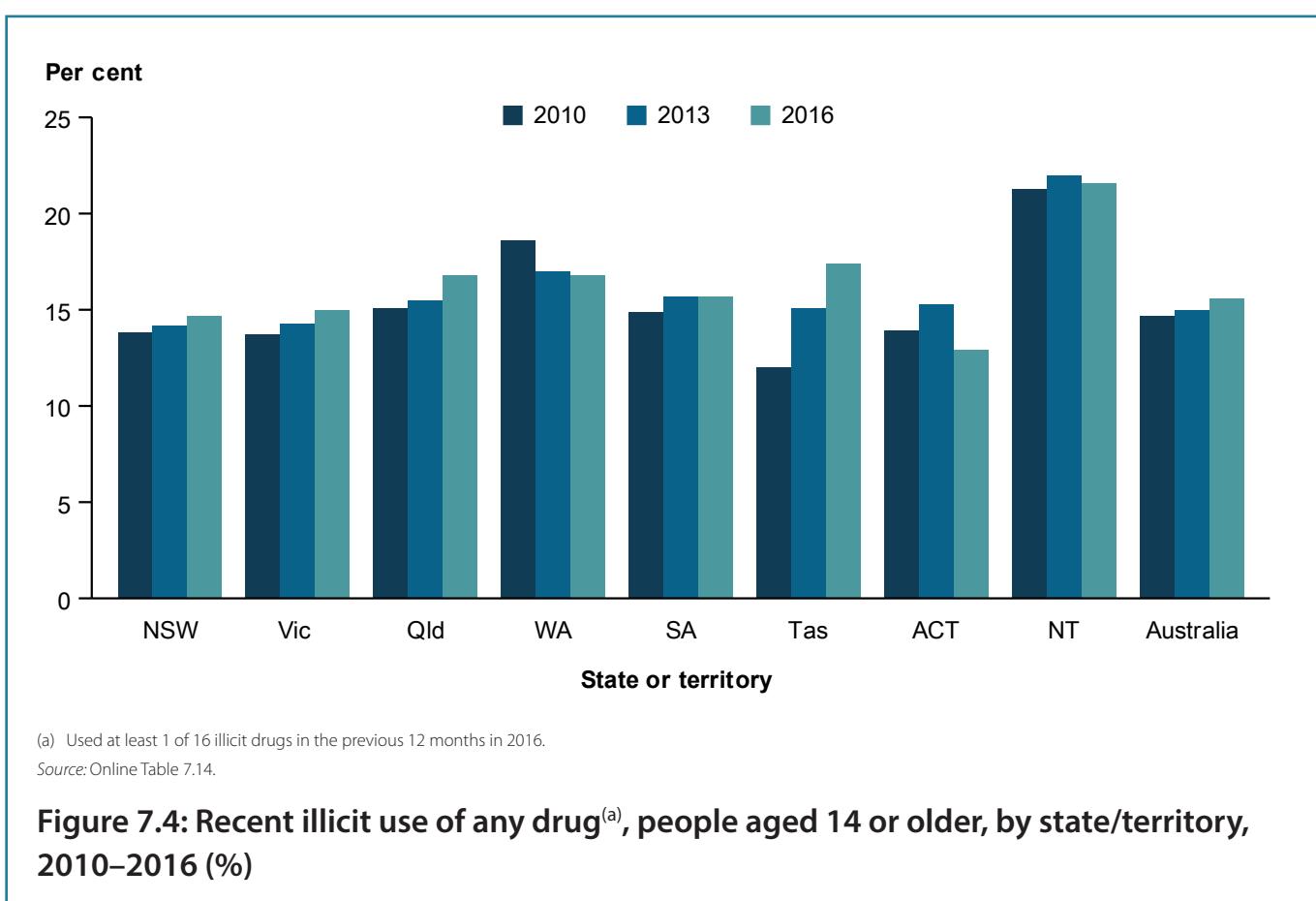
## Illicit use of drugs

### Trends

Comparison of estimates of drug use across states and territories should be interpreted with caution due to the low prevalence of use of certain drugs and smaller sample sizes for some states and territories. There were no significant changes in illicit use of any drug across any jurisdiction between 2013 and 2016. Most jurisdictions have reported declines since 2001 but increasing use of any illicit drug since 2010 (see Figure 7.4 and Table 7.14).

Recent use of illicit drugs increased in Tasmania from 12.0% in 2010 to 17.4% in 2016, which is now higher than the national average (15.6%). Western Australia reported slight declines over the 6-year period but is still above the national average (16.8% compared with 15.6%). People in the Northern Territory continued to have the highest rate of illicit drug use in the previous 12 months. Although use is lower than the rates reported in 2001, there has been little change in recent use since 2007 (about 1 in 5 used an illicit drug in the last 12 months).

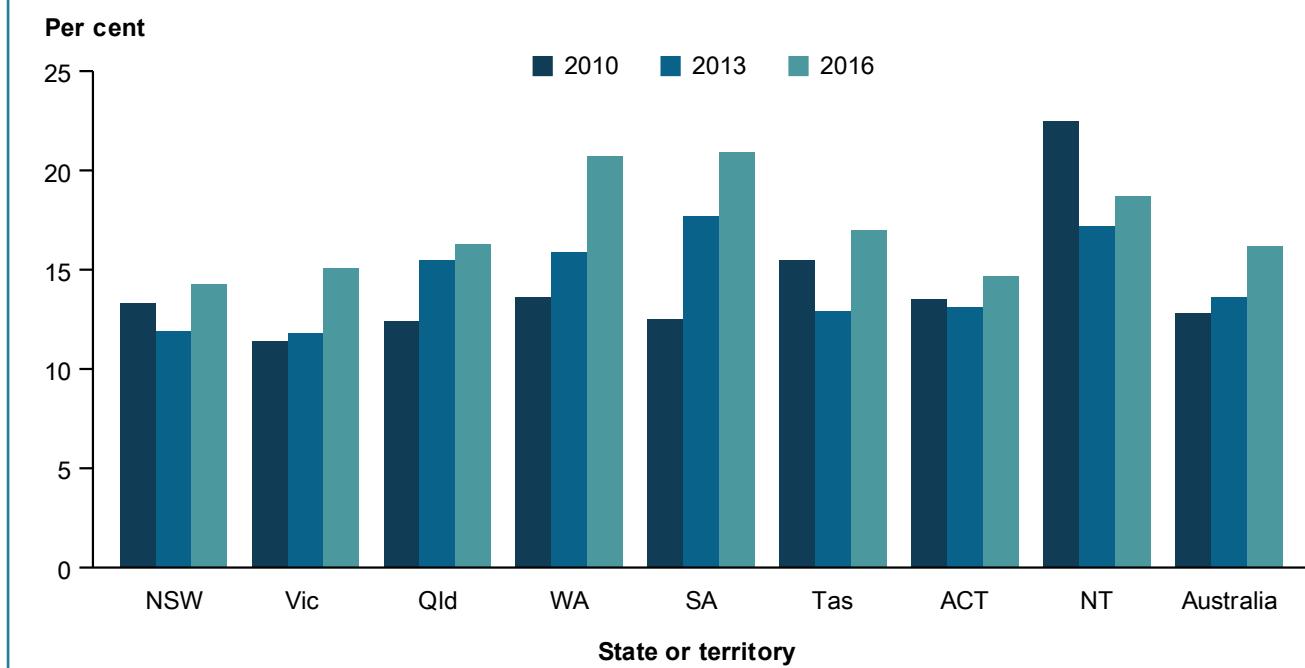
People living in the Australian Capital Territory had the lowest recent illicit drug use (12.9%) and people in the Northern Territory had the highest (22%) and these differences remained after adjusting for age structure (see Table 7.16).



## Age and sex comparisons

Among all the states and territories, patterns of illicit drug use differed by age and sex. Males were more likely than females to have used an illicit drug (Table 7.15) across all jurisdictions and there were no significant changes between the sexes between 2013 and 2016.

Across all jurisdictions, people aged 20–29 were the most likely to use an illicit drug in the past 12 months. People living in Tasmania and Queensland had the highest proportion of people in their 20s who had recently used an illicit drug (33% for both) while people in the Australian Capital Territory had the lowest (22%) (Table 7.17). Across all jurisdictions, there were very few significant changes by age group except for people aged 60 or older living in Tasmania, which considerably increased from 3.7% in 2013 to 10.1% in 2016. Although the increases were not significant, there were consistently higher rates of illicit drug use reported among people in their 40s in 2016 than in 2013, for all jurisdictions (Figure 7.5).



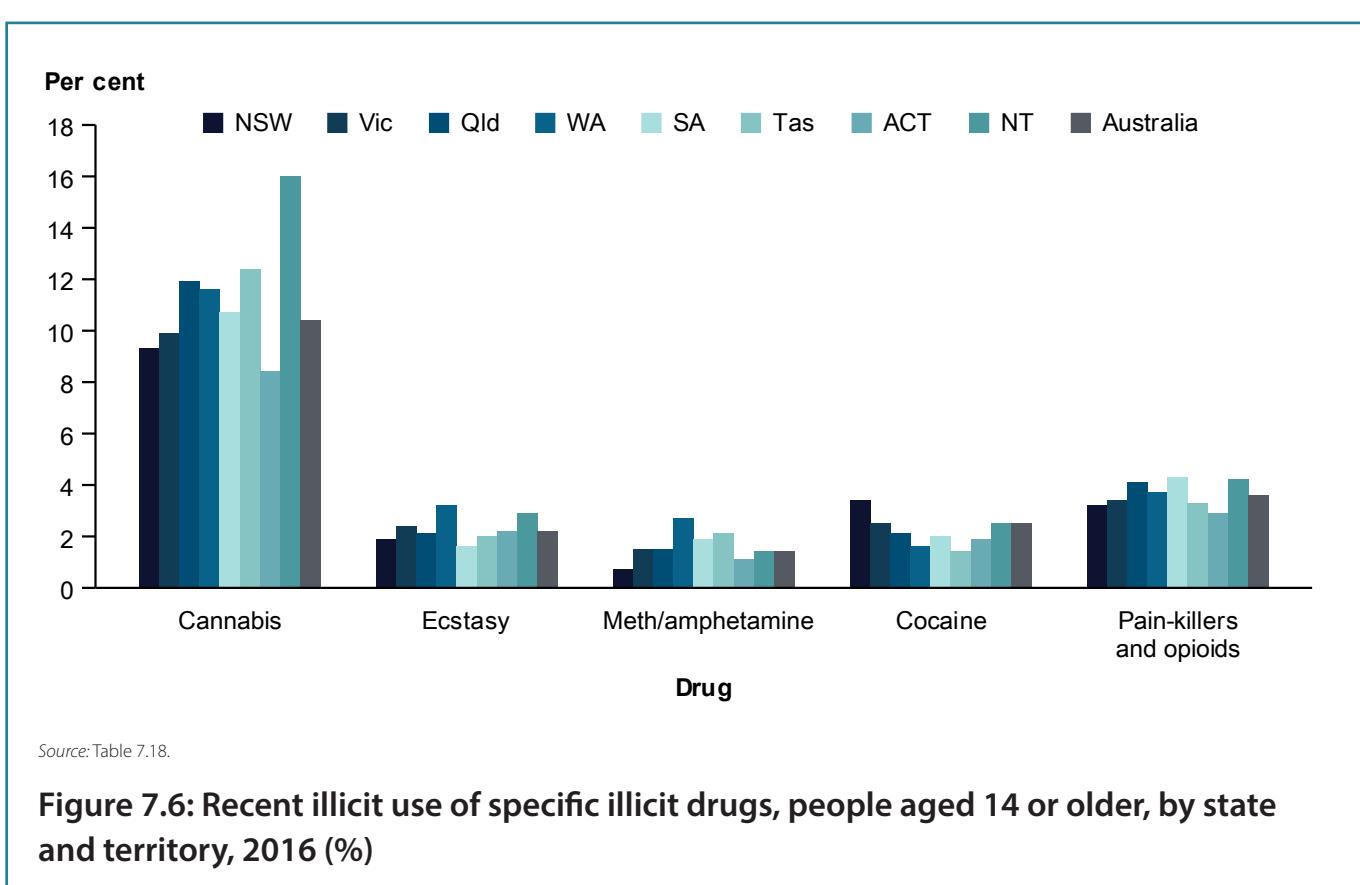
Source: Table 7.17.

**Figure 7.5: People in their 40s using illicit drugs in the previous 12 months, by state and territory, 2010–2016 (%)**

### Types of drugs used illicitly

The type of illicit drug used in the last 12 months varied across jurisdictions (Figure 7.6). For example, among people aged 14 or older:

- the Northern Territory had the highest proportion of people using cannabis in the last 12 months (16.0%)—almost double the usage in the Australian Capital Territory (8.4%)
- people in Western Australia were more likely to use meth/amphetamines (2.7%) and ecstasy (3.2%) than other jurisdictions
- people in New South Wales were more likely to use cocaine (3.4%) than people in other jurisdictions and use was double the rates in Tasmania (1.4%) and Western Australia (1.6%)
- South Australians were more likely to misuse pain-killers/opiates (4.3%) than people in any other state or territory.



### Trends in types of illicit drugs used

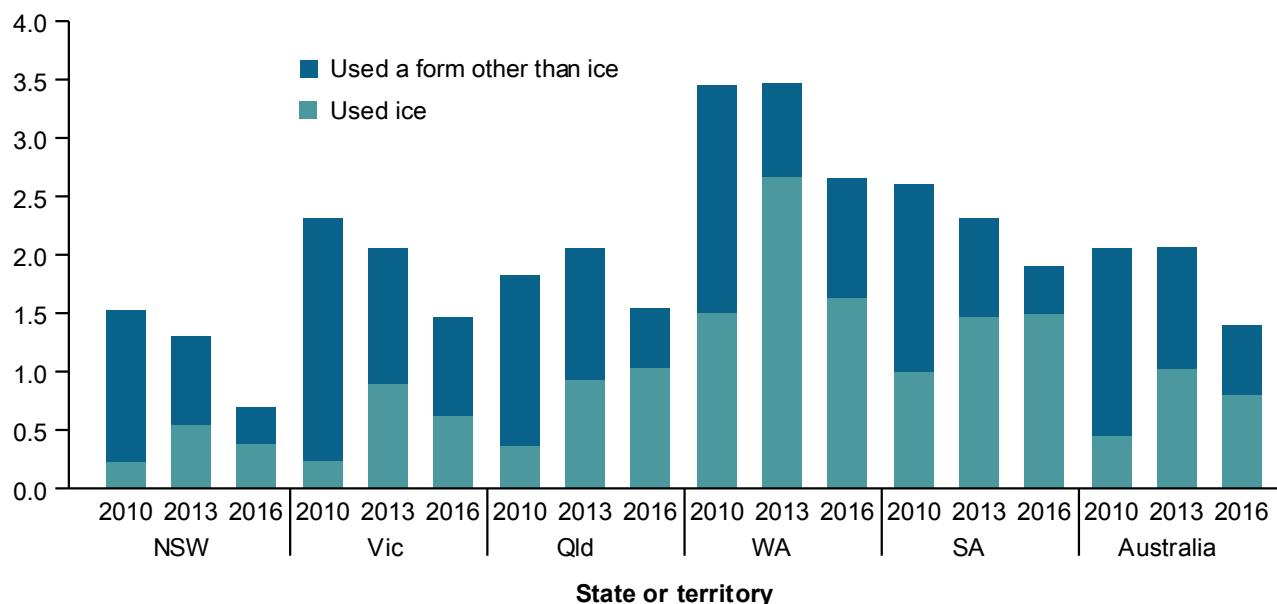
When comparing 2013 and 2016 data for the 4 most commonly used illegal drugs in the last 12 months, only a couple of significant changes were reported—recent ecstasy use significantly declined in South Australia (from 2.8% to 1.6%) and recent meth/amphetamine use declined in New South Wales (from 1.4% to 0.7%) (Table 7.18).

Nationally, recent use of meth/amphetamines significantly declined between 2013 and 2016, but the decline was only significant in New South Wales with the proportion of people reporting they had used meth/amphetamines in the previous 12 month halving from 1.4% to 0.7%. This was much lower than in all other jurisdictions. People living in Western Australia (2.7%), Tasmania (2.1%) and South Australia (1.9%) all reported higher rates than the national average of 1.4%.

Figure 7.7 presents the total proportion of the population using ice or another form of meth/amphetamine. Due to the low prevalence of use and smaller sample sizes for some states/territories leading to unreliable data, Tasmania, the Australian Capital Territory and the Northern Territory have been excluded. The figure shows that while overall recent use of meth/amphetamines is trending downwards across most jurisdictions, use of ice has increased for some jurisdictions between 2010 and 2016. Compared with 2010, the proportion of people reporting that ice was their main form of meth/amphetamine used in the previous 12 months has increased for Victoria, Queensland and South Australia. In Western Australia, a noticeable drop between 2013 and 2016 was reported, but ice use still remained highest among people living in Western Australia.



Per cent



Source: Table 7.28.

**Figure 7.7: Proportion of people who mainly used ice or used a form other than ice, people aged 14 or older, by state, 2010–2016 (%)**

## Drug use across Primary Health Networks areas

Primary Health Networks (PHNs) are organisations that connect health services over local geographic areas, with the boundaries defined by the Department of Health. There are 31 PHNs in Australia. Table S7.1 presents daily smoking rates, lifetime risky drinkers, single occasion risky drinkers and recent illicit drug use rates for the PHN areas across Australia with the 5 highest and 5 lowest rates for each of these measures. For results for all PHNs, see Table 7.37.

There was wide local-level variation in the use of tobacco, alcohol and illicit drugs in 2016. More specifically, for people aged 14 or older:

- the daily smoking rate ranged from 5.4% in Northern Sydney to 21% in the Central Queensland, Wide Bay and Sunshine Coast area
- Country Western Australia had the highest proportion of lifetime risky drinkers (29%) and single occasion risky drinkers (37%) and South Western Sydney had the lowest (6.5% and 11.8%, respectively)
- 6 PHNs had recent illicit drug use rates over 20%—Central and Eastern Sydney, North Coast, Country Western Australia, Western Queensland, Northern Territory, and Gold Coast.



**Table S7.1: Primary Health Networks with the highest and lowest daily smoking rates, lifetime risky drinkers, single occasion risky drinkers (monthly), and recent illicit drug use rates in Australia, people aged 14 or older, 2016**

| <b>Daily smoking</b>  |       |                              |      |
|---|-------|------------------------------|------|
| <b>Highest 5</b>  |       | <b>Lowest 5</b>              |      |
| Central Qld, Wide Bay, Sunshine Coast                         | 21.2  | Adelaide                     | 9.7  |
| Western NSW   | 19.6  | Australian Capital Territory | 9.5  |
| Country WA  | 19.2  | Eastern Melbourne            | 8.8  |
| Gippsland   | 17.8  | Perth North                  | 8.8  |
| Northern Queensland   | 17.7  | Northern Sydney              | 5.4  |
| <i>Australia</i>  | 12.2  |                              |      |
| <b>Lifetime risky drinkers<sup>(a)</sup></b>                  |       |                              |      |
| <b>Highest 5</b>  |       | <b>Lowest 5</b>              |      |
| Country WA  | 28.6  | Eastern Melbourne            | 14.1 |
| Northern Territory  | 27.5  | Perth North                  | 14.0 |
| Western Queensland <sup>(d)</sup>                             | 26.0  | Nepean Blue Mountains        | 12.0 |
| North Coast   | 24.4  | Western Sydney               | 7.8  |
| Western NSW   | *23.1 | South Western Sydney         | 6.5  |
| <i>Australia</i>  | 17.1  |                              |      |
| <b>Single occasion risky drinkers (monthly)<sup>(b)</sup></b> |       |                              |      |
| <b>Highest 5</b>  |       | <b>Lowest 5</b>              |      |
| Country WA  | 37.0  | Australian Capital Territory | 22.6 |
| Northern Territory  | 35.6  | Northern Sydney              | 21.7 |
| Western Queensland(d)   | 34.8  | Nepean Blue Mountains        | 18.4 |
| South Eastern NSW   | 33.9  | Western Sydney               | 12.6 |
| Gold Coast  | 31.9  | South Western Sydney         | 11.8 |
| <i>Australia</i>  | 25.5  |                              |      |
| <b>Recent illicit drug users<sup>(c)</sup></b>                |       |                              |      |
| <b>Highest 5</b>  |       | <b>Lowest 5</b>              |      |
| Central and Eastern Sydney                                    | 23.0  | Gippsland                    | 11.4 |
| North Coast   | 22.8  | Northern Sydney              | 10.7 |
| Country WA  | 22.3  | South Western Sydney         | 9.6  |
| Western Queensland <sup>(d)</sup>                             | 21.8  | Murray                       | 9.5  |
| Northern Territory  | 21.6  | Western Sydney               | 7.5  |
| <i>Australia</i>  | 15.6  |                              |      |

(a) On average, had no more than 2 standard drinks per day.

(b) Had more than 4 standard drinks at least once a month.

(c) Used at least 1 of 16 illicit drugs in the previous 12 months.

(d) Results for this PHN should be interpreted with caution, as all respondents came from the same smaller geographical area within the PHN and the results may not be representative of the whole Western Queensland PHN.



## Alcohol use

Pregnant women abstaining increased



## Improvements

Those in Remote and very remote areas:

Less likely to exceed lifetime risk guidelines



2013



2016

...and increased abstinence



2013



2016

## Recent meth/amphetamine use

Decreased in Major cities



Declined among people in the highest socioeconomic areas



## Recent cannabis use

Declined among people living in Outer regional areas



## Daily Smoking

Declined in the lowest socioeconomic areas



## Increases in drug use were seen among the following groups

Increases in cocaine use were reported for:

## People living in Major cities



People living in the 4th most advantaged areas (out of 5)



## Those experiencing high or very high levels of psychological distress, 18+

Recent meth/amphetamines users



Recent ecstasy users



Illicit and non-illicit drug users



Illicit



Non-illicit

## Diagnosed with, or treated for, a mental illness, 18+

Recent meth/amphetamines users



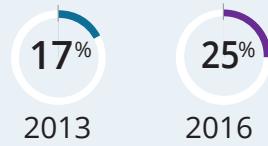
Recent cannabis users



Recent ecstasy users

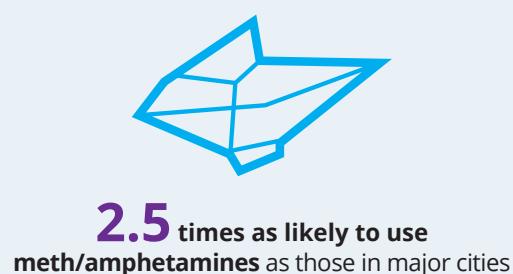


Recent cocaine users

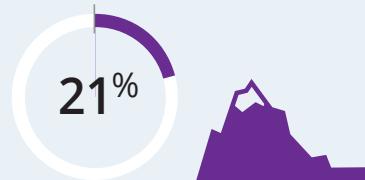


## Disparities in drug use in 2016

### People in remote and very remote areas:



twice as likely to smoke daily as those in Major cities



### People in lowest socioeconomic areas:



were less likely to use cocaine and ecstasy than people in highest socioeconomic areas



Cocaine and Ecstasy

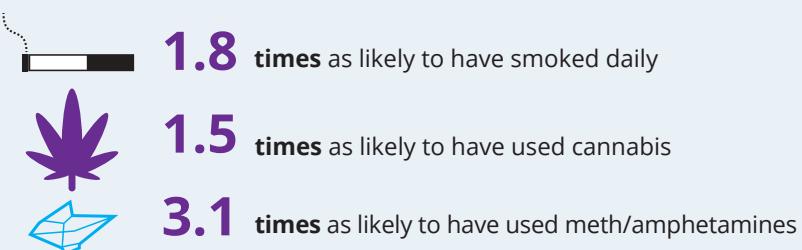


Ecstasy



Cocaine

### Unemployed as compared to employed people were:



### Homosexual/bisexual people:

had **higher rates of illicit drug use** than other population groups  
and were

**5.8 times** as likely to use ecstasy and meth/amphetamines



**Note:** findings relate to people aged 14 or older unless specified.

All data presented in this chapter are available in the specific population group tables  
<<http://www.aihw.gov.au/reports/illicit-use-of-drugs/ndhs-2016-detailed/data>>.



There is scope to highlight many population groups in Australia but this chapter focuses on 7 groups for whom some of the largest disparities in tobacco, alcohol and other drug use were observed—those living in *Remote* areas, socioeconomically disadvantaged people, unemployed people, Indigenous Australians, people who identify as being homosexual or bisexual, people with mental illnesses and high levels of psychological distress, and pregnant women.

Some of the results have a high RSE (see online tables at <<http://www.aihw.gov.au/reports/illicit-use-of-drugs/ndshs-2016-detailed/data>>) and should be interpreted with caution. High RSEs most often arise where there is low prevalence of use and a small respondent population. Readers should exercise caution when interpreting such results, especially when making statistical comparisons or examining trends.

## Social determinants of health

This section of the report focuses on 3 key social determinants of health—remoteness, socioeconomic status and employment. Refer to online tables for results by marital status, household composition, education, and culturally and linguistically diverse populations.

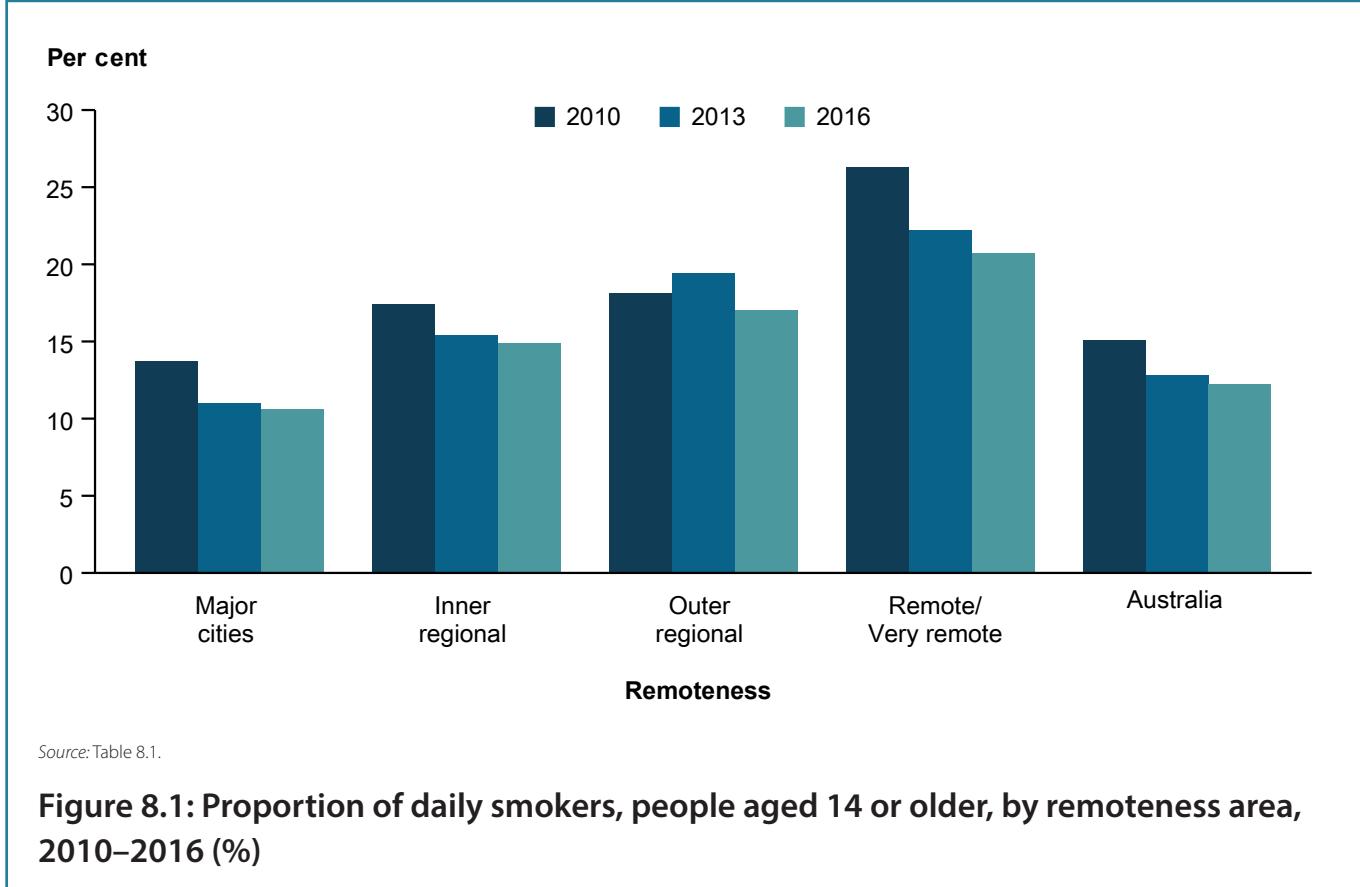
### Drug use in geographic areas

The ABS 2011 Australian Statistical Geography Standard was used to allocate remoteness categories to areas across Australia.

#### Smoking

There was no significant reduction in the proportion of people who smoked daily in any remoteness area, with only minor reductions reported between 2013 and 2016. People in *Remote* and *very remote* areas (Figure 8.1) continued to report the highest daily smoking rate and they were twice as likely to smoke as those in *Major cities* (21% compared with 10.6%).

Although the change was not significant, the average number of cigarettes smokers smoked per week declined among people living in *Remote* and *very remote* areas and was significantly fewer than in 2010 (from 148 cigarettes in 2010 to 126 in 2013 and 111 in 2016).



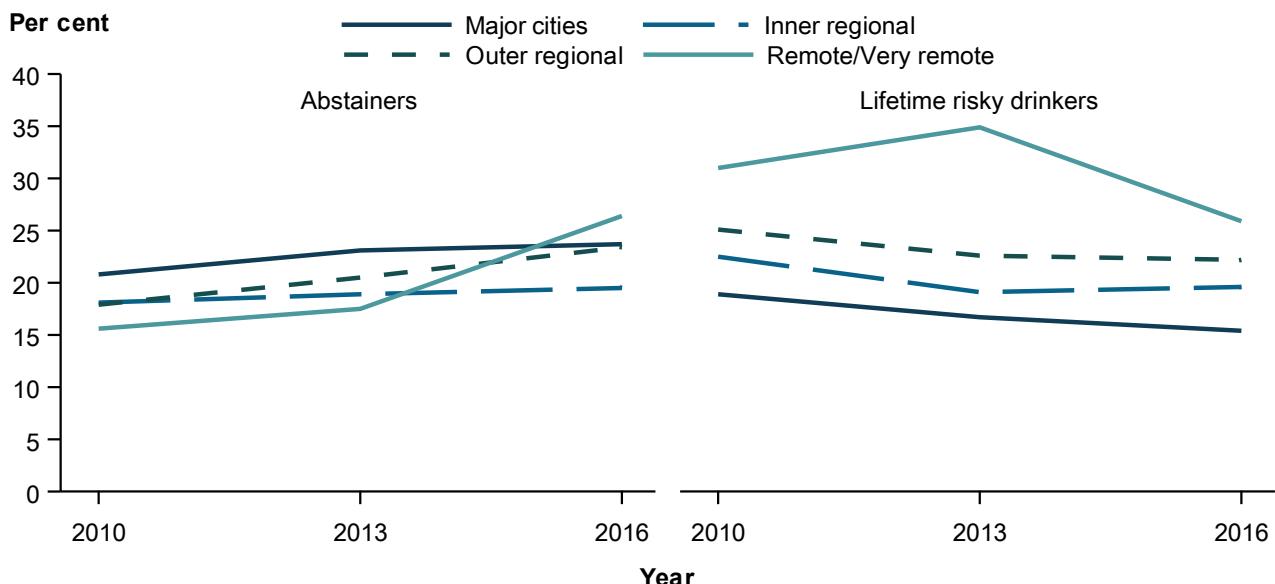
## Alcohol risk

Not only were people in *Remote* and *very remote* areas more likely to smoke, they were also more likely to drink alcohol in quantities that place them at risk of harm from an alcohol-related disease or injury over a lifetime or at risk of alcohol-related injury arising from a single drinking occasion (figures 8.2 and 8.3).

Alcohol consumption was consistently higher in *Remote* and *very remote* areas and the proportion of those drinking at risky levels increased with increasing remoteness. But there were improvements among people living in *Remote* and *very remote* areas with significantly fewer people consuming, on average, more than 2 standard drinks per day (from 35% in 2013 to 26% in 2016) and a significantly higher proportion who abstained from alcohol in 2016 (from 17.5% in 2013 to 26%).

There were no significant changes in the proportion of people exceeding the single occasion risk guideline (at least monthly) between 2013 and 2016. However, there were slight but nonsignificant declines in the proportion of these risky drinkers in *Outer regional* (from 32% to 29%) and *Remote* and *very remote* (from 42% to 37%) areas.

People in *Remote* and *very remote* areas were 1.5 times as likely as people in *Major cities* to consume 5 or more drinks at least monthly. The (rate ratio) gap was even wider for consumption of 11 or more drinks—2.4 times as likely to consume 11 or more drinks (at least monthly) as their *Major cities* counterparts (15.0% compared with 6.3%).

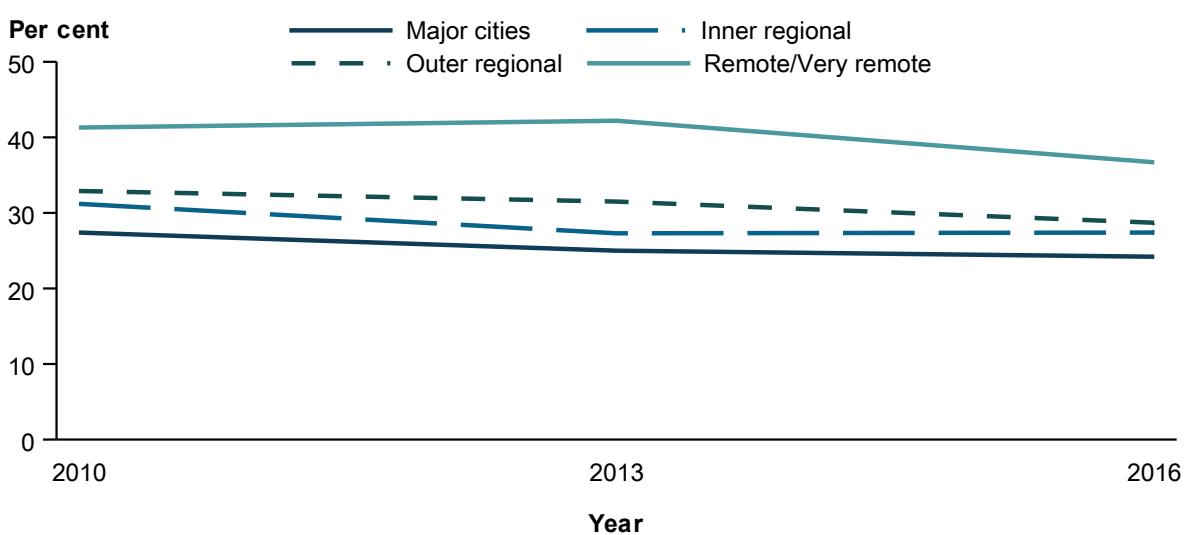


Abstainers: Not consumed alcohol in the previous 12 months.

Lifetime risky drinkers: On average, had more than 2 standard drinks per day.

Source: Table 8.1.

**Figure 8.2: Risk of alcohol-related harm over a lifetime and proportion of people abstaining from alcohol, people aged 14 or older, by remoteness area, 2010–2016 (%)**



(a) Had more than 4 standard drinks at least monthly.

Source: Table 8.1.

**Figure 8.3: Risk of alcohol-related harm from a single drinking occasion (at least monthly)<sup>(a)</sup>, people aged 14 or older, by remoteness area, 2010–2016 (%)**



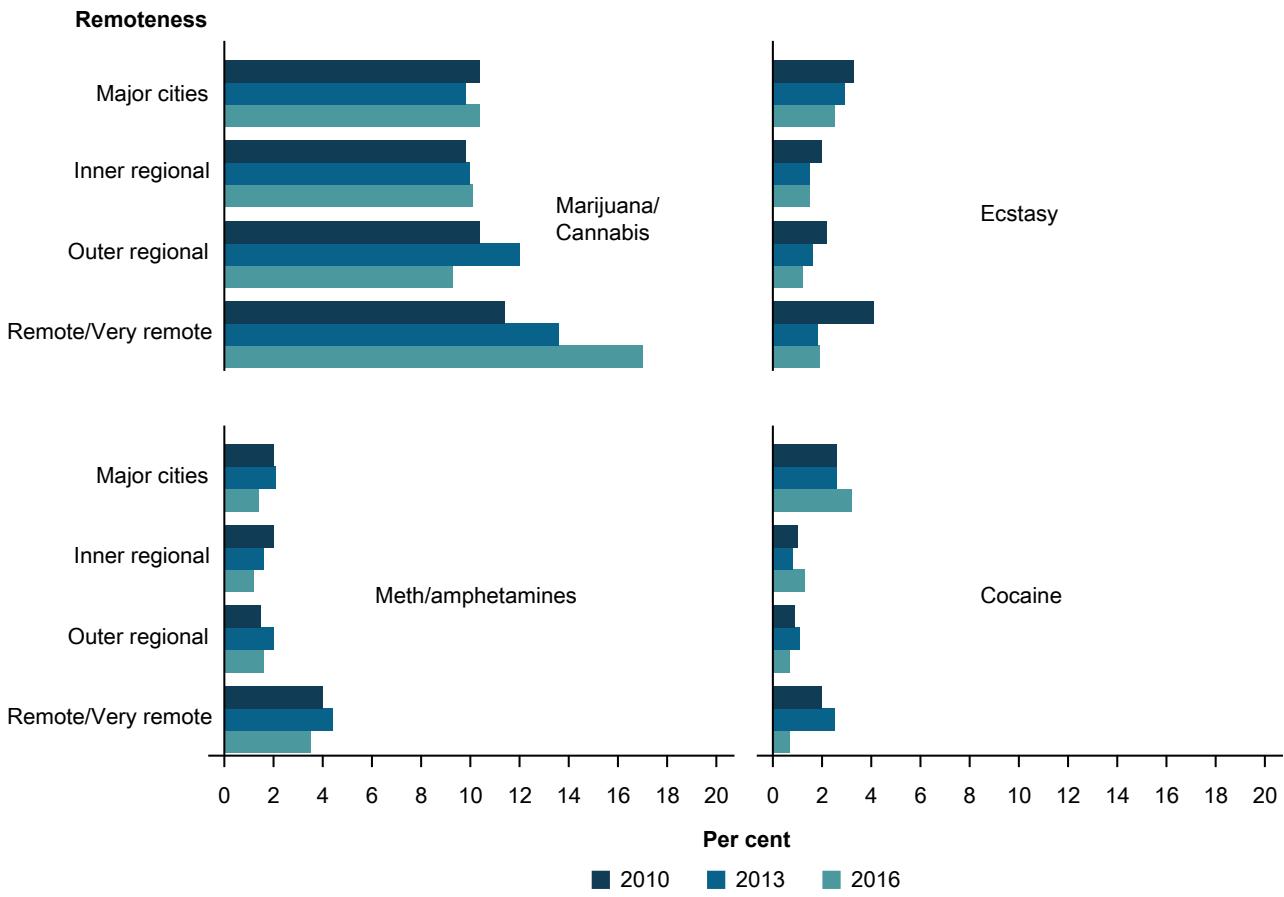
## Illicit drugs

People in *Remote* and *very remote* areas (25%) were more likely to have used an illicit drug in the last 12 months than people in *Major cities* (15.6%), *Inner regional* areas (14.9%) and *Outer regional* areas (14.4%). Recent use also increased among people in *Remote* and *very remote* areas from 18.7% in 2013 to 25% in 2016 but the increase was not significant. Use was relatively stable across all other remoteness areas—changed by less than 1 percentage point for people in *Major cities* and *Inner regional* areas and declined by 2 percentage points for people in *Outer regional* areas.

The following changes were observed between 2010 and 2016 among recent use of specific illicit drugs (Figure 8.4):

- after increasing in 2013, recent cannabis use significantly declined among people living in *Outer regional* areas (from 12.0% in 2013 to 9.3% in 2016)
- recent use of cannabis has been increasing in *Remote* and *very remote* areas since 2010 (from 11.4% to 17.0% in 2016) and was 1.6 times higher than the national average (10.4%)
- there were no significant changes by remoteness area among people using ecstasy in 2016; use was highest in *Major cities*
- recent meth/amphetamine use slightly declined among all remoteness areas but the decrease was only significant in *Major cities* (from 2.1% to 1.4%)
- people living in *Remote* and *very remote* areas continued to be more likely to use meth/amphetamines than people in other remoteness areas
- people living in *Major cities* were far more likely to have used cocaine in the previous 12 months (3.2%) than people living in *Inner regional* (1.3%), *Outer regional* (0.7%) and *Remote* and *very remote* (0.7%) areas
- recent cocaine use also significantly increased among people living in *Major cities* between 2013 and 2016 (from 2.6% to 3.2%).

Pharmaceutical misuse was the second most commonly used illicit drug across all remoteness areas, ranging from 4.6% in *Major cities* to 8.0% in *Remote* and *very remote* areas.



**Figure 8.4: Recent<sup>(a)</sup> use of selected illicit drugs, people aged 14 or older, by remoteness area, 2010–2016 (%)**

## Socioeconomic areas

Although the average overall level of health and wellbeing of the Australian population is high when compared with the populations of other countries, there are substantial differences in the health of specific groups within the population. One of the most important contributors to these differences is socioeconomic area. The Index of Relative Socio-Economic Advantage and Disadvantage (IRSAD) compiled by the ABS was used to derive fifths. In this report, the 20% of areas with the greatest overall level of disadvantage is described as the 'lowest socioeconomic area'. The 20% of areas with the greatest level of advantaged—the top fifth—is described as the 'highest socioeconomic area'.



## Smoking

It is well established that people in the lowest socioeconomic area are more likely to smoke than people living in the highest socioeconomic area. This pattern continued in 2016 but there were some positive changes among this group in 2016.

The proportion of people aged 14 or older smoking daily in the lowest socioeconomic area significantly declined from 19.9% in 2013 to 17.7% in 2016 (Figure 8.5). There was no change in the daily smoking rate among people living in the highest socioeconomic area (remained low at 6.5%) so the gap between people living in the lowest and highest socioeconomic area narrowed—the rate ratio declined from 3.0 in 2013 to 2.7 in 2016.

## Drug use—lowest and highest areas

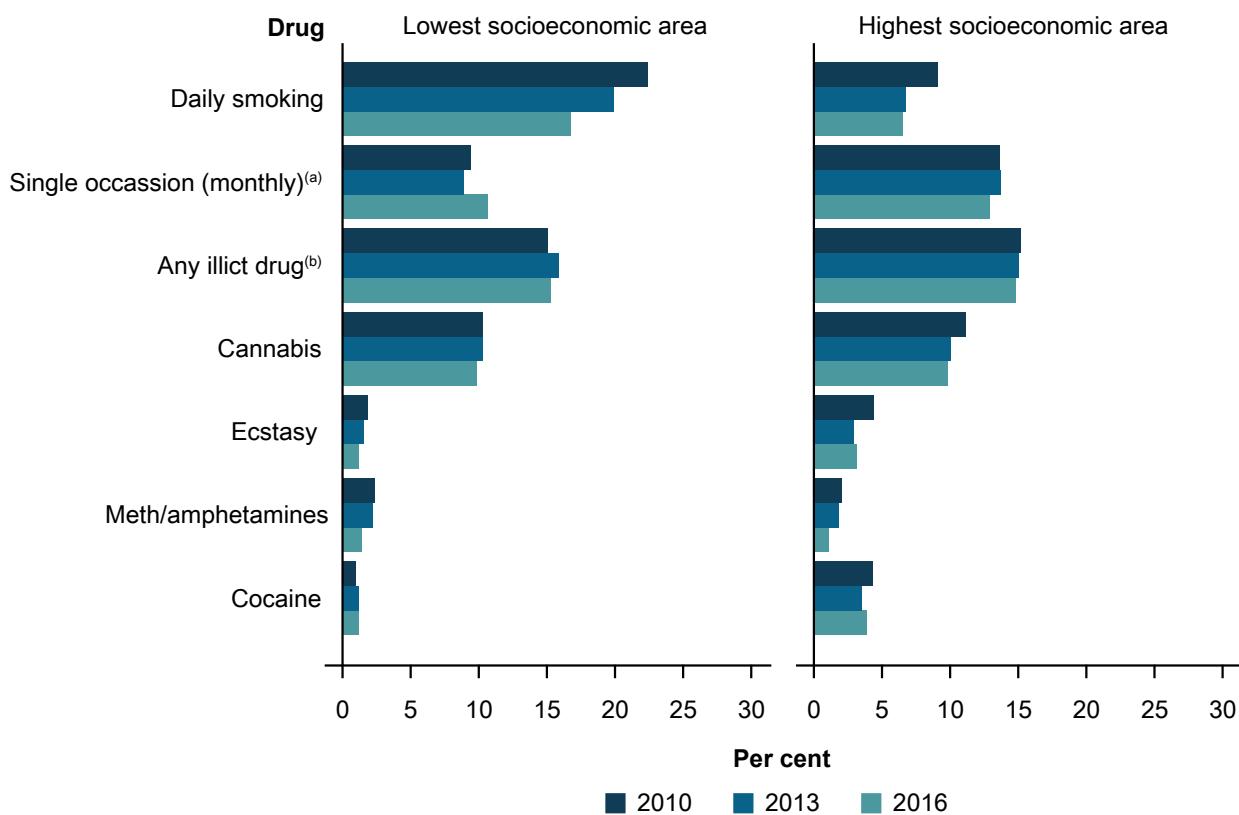
While daily smoking was much higher among people in the lowest socioeconomic area, risky drinking and use of any illicit drug in the last 12 months was similar to people living in the highest socioeconomic area, and use of ecstasy and cocaine was higher among people living in the highest area than the lowest area. More specifically, people in the lowest socioeconomic area were:

- much more likely to abstain from alcohol than people in the highest area (32% compared with 18.2%) but only slightly less likely to exceed the lifetime risk guidelines (15.8% compared with 17.6%) and single occasion risk guidelines (23% compared with 26%)
- slightly more likely than people in the highest socioeconomic area to drink 11 or more drinks monthly or more often (7.6% compared with 6.4%)
- less likely to use cocaine and ecstasy—only 1.2% had used cocaine or ecstasy in the previous 12 month, compared with 3.3% (cocaine) and 2.7% (ecstasy) for people in the highest socioeconomic area.

## Trends in recent use

There were a number of significant changes in the recent use of illicit drugs between 2013 and 2016, for example:

- people living in the 4th area reported an increase in the use of cocaine (from 2.5% to 4.0%)
- recent use of meth/amphetamines significantly declined among people in the middle (2.4% to 1.4%) and highest socioeconomic (1.8% to 0.9%) areas (Table 8.3).



(a) Had more than 4 standard drinks at least monthly.

(b) Used at least 1 of 16 illicit drugs in the previous 12 months in 2016; the number of illicit drugs used has changed over time.

Source: Table 8.3.

**Figure 8.5: Daily smoking, risky alcohol consumption and illicit drug use by people living in the lowest and highest socioeconomic areas, people aged 14 or older, 2010–2016 (%)**



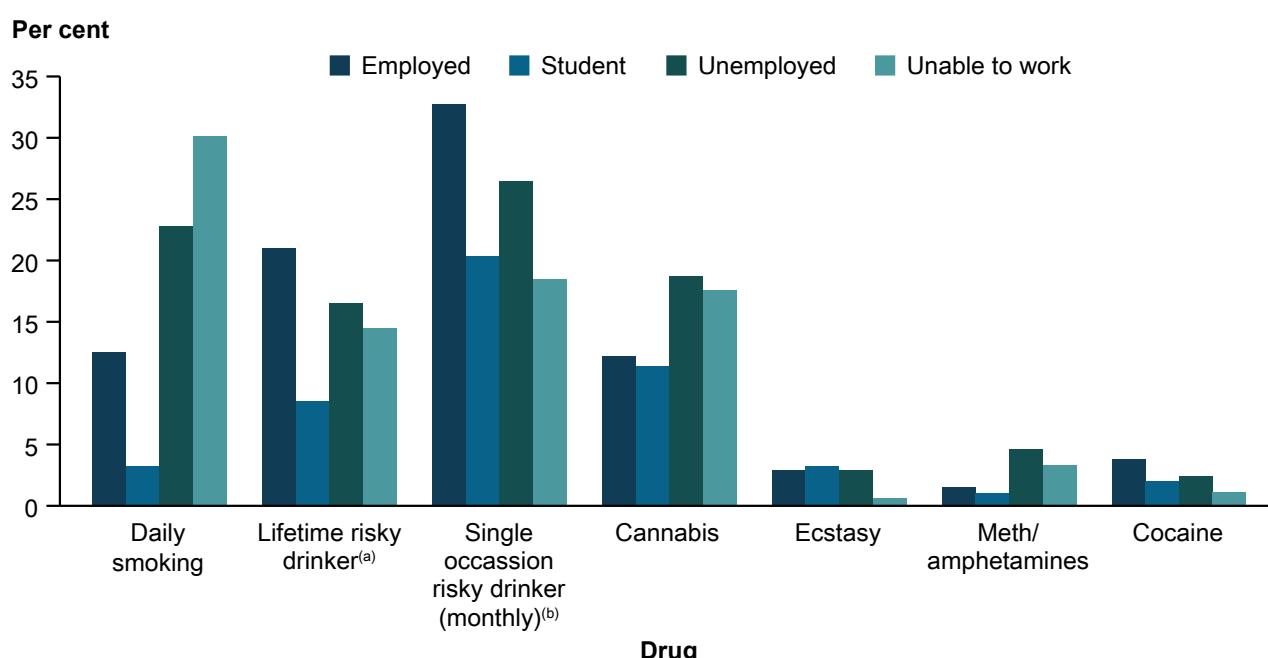
## Employment status

Employment status, and unemployment in particular, is strongly related to health status. Use of some drugs is consistently higher among people who are unemployed than people who are employed.

Figure 8.6 and Table 8.5 show that in 2016, people who were unemployed were:

- 1.8 times as likely to have smoked daily
- 1.5 times as likely to have used cannabis
- 3.1 times as likely to have used meth/amphetamines as employed people.

A similar pattern was also seen among people who were unable to work. But employed people were more likely to use cocaine in the last 12 months than unemployed people or people unable to work. Employed people were also more likely to exceed the lifetime risk and single occasion risk alcohol guidelines than unemployed people. However, the consumption of alcohol well in excess of the guidelines, that is, drinking 11 or more drinks at least monthly, was slightly higher among unemployed people (10.3% compared with 8.9% for employed people). There were also no significant changes between 2013 and 2016 in the drug-taking behaviours of unemployed people and people who were unable to work.



**Figure 8.6: Drug use by employment status, people aged 14 or older, 2016 (%)**



## Other at-risk groups

In addition to the factors already outlined, there are other groups within the population who are at greater risk of misusing substances or who show higher than average drug use when compared with the general population. The *National Drug Strategy 2017–2026* states there are specific priority population groups who have higher risk of experiencing disproportionate harms associated with alcohol, tobacco and other drugs. Policy responses designed to prevent and minimise the harms of alcohol, tobacco and other drugs should have particular reference to these priority populations, to ensure that new efforts will benefit those most at risk of harm, marginalisation and disadvantage (DoH 2017).

This section explores drug use among: Aboriginal and Torres Strait Islander people (Indigenous Australians); people who identify as being homosexual or bisexual; pregnant women and the potential risk placed on their unborn child; and people with mental health problems and high levels of psychological distress.

### Indigenous Australians

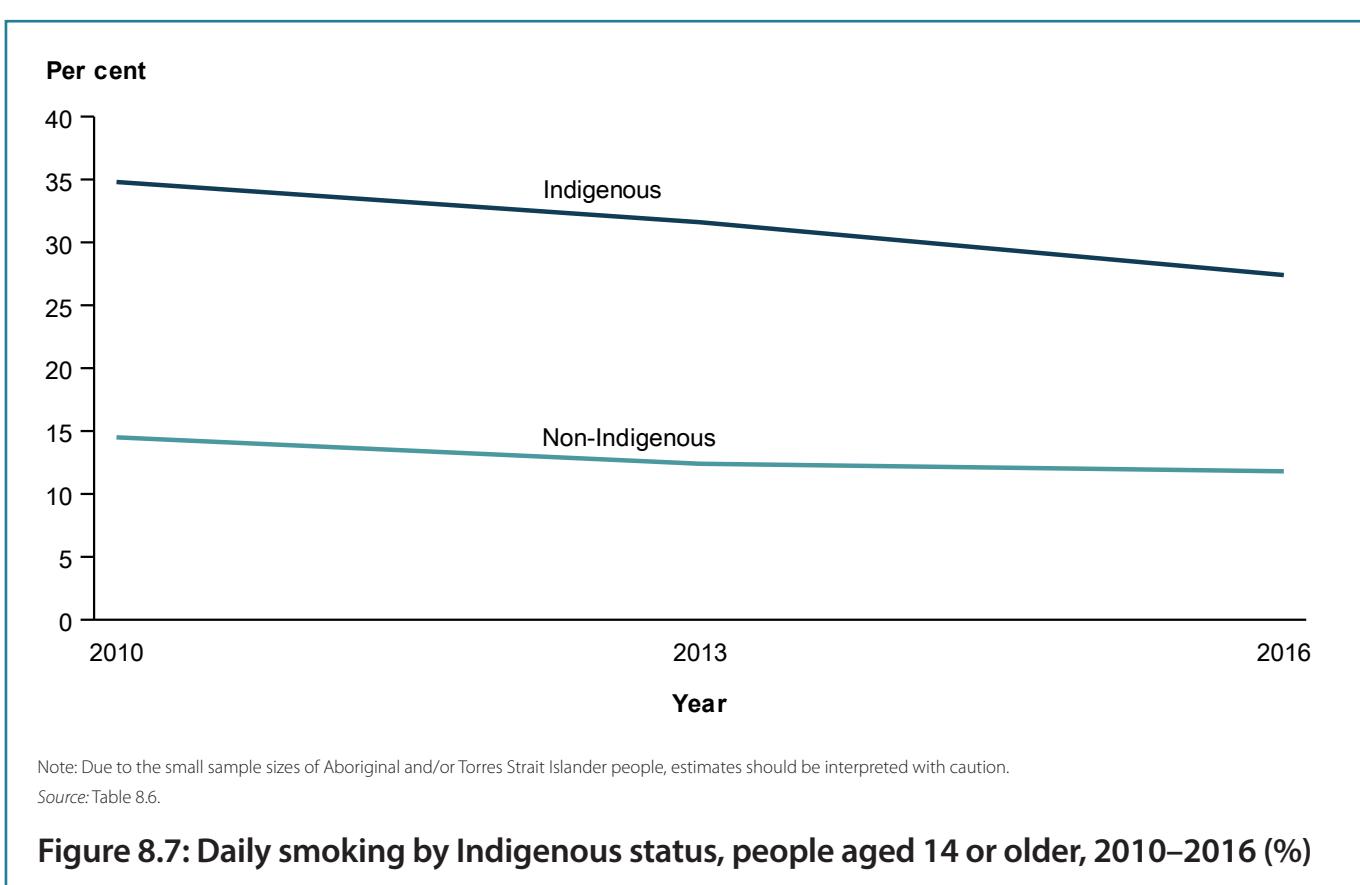
As Indigenous Australians constitute only 2.4 per cent of the 2016 NDSHS (unweighted) sample (or 568 respondents), the results must be interpreted with caution, particularly those for illicit drug use.

#### Smoking

In 2016, the daily smoking rate among Indigenous Australians was considerably higher than non-Indigenous people but has declined since 2010 and 2013 (decreased from 35% in 2010 to 32% in 2013 and to 27% in 2016) (Figure 8.7). The NDSHS was not designed to detect small differences among the Indigenous population, so even though the smoking rate declined between 2013 and 2016, it was not significant.

The Australian Aboriginal and Torres Strait Islander Health Survey (AATSIHS) and the National Aboriginal and Torres Strait Islander Social Survey (NATSISS) were specifically designed to represent Indigenous Australians (see Box 8.1 for further information).

After adjusting for differences in age structures, Indigenous people were 2.3 times as likely to smoke daily as non-Indigenous people in 2016 (Table 8.7).





### Box 8.1: Surveys about Aboriginal and Torres Strait Islander people

There is more than 1 data source for information about tobacco, alcohol and other drug use among Indigenous Australians. The most common data sources are the AATSIHS and the NATSISS. The NDSHS also collects tobacco, alcohol and illicit drug use among Indigenous population but the NDSHS is not specifically designed to obtain reliable national estimates for Indigenous people. The proportion of smokers in the NDSHS is consistently lower than the NATSISS and AATSIHS. This is due to a number of methodological differences between the surveys.

The NDSHS uses a self-completion questionnaire, and requires good comprehension of the English language (as it is not translated into other languages) and the ability to follow instructions. Practicality of the survey design meant that some Aboriginal communities and those with low levels of English literacy were excluded. In 2016, 6 of the 1,764 originally selected SA1s were Aboriginal communities with relatively low levels of English and English literacy and were replaced before the start of fieldwork. The exclusion of these communities makes it difficult to generalise the results in the NDSHS to the whole Indigenous population.

In 2016, 2.4% of the NDSHS (unweighted) sample aged 12 or older (or 568 respondents) identified as being of Aboriginal or Torres Strait Islander origin; this is slightly higher than the proportion in 2013 (2.0%) and 2010 (1.8%). According to the June 2011 estimated resident population (ERP) figures, the Indigenous population aged 12 or older was calculated at 2.5% of the total Australian population. In terms of remoteness, the 2016 NDSHS sample was more representative of the Indigenous population than previous surveys—32% lived in *Major cities*, 18.3% in *Inner regional*, 22% in *Outer regional*, 13% in *Remote areas* and 14% in *Very remote areas* (see Table 10.11).

The June 2011 ERP figures estimated that there are 669,881, Aboriginal and Torres Strait Islanders in the Australian population. At that time, about one-third (35%) of the Aboriginal and Torres Strait Islander population lived in *Major cities*, 22% in *Inner regional* areas, 22% in *Outer regional* areas, 8% in *Remote areas* and 14% in *Very remote areas*. The non-Indigenous population was much more highly concentrated, with 69% living in *Major cities*.

#### Comparability of the smoking data

The 2014–15 NATSISS gives the latest data on Indigenous smoking rates. In 2014–15, 42% of Indigenous Australians aged 15 and over reported being a current smoker (39% smoked daily and 3% less than daily). For Indigenous Australians aged 15 and over, the rate of daily smokers declined by 6 percentage points between 2008 and 2014–15 (from 45% to 39%). For Indigenous Australians aged 15 or older sampled in the NDSHS, even though the rate of daily smoking was much lower than that reported in the NATSISS, it declined by 7 percentage points between 2010 and 2016 (from 35% to 28%) and is declining at a faster rate than the NATSISS smoking rate. According to

*continued*



### Box 8.1 (continued): Surveys about Aboriginal and Torres Strait Islander people

the NATSISS, Indigenous Australians who lived in *Very remote* areas were more likely to be current smokers in 2014–15 (53%) than those living in *Major cities* (36%). Between 2002 and 2014–15, the proportion of current smokers in non-remote areas declined from 50% to 39% but in remote areas, rates remained relatively steady (55% in 2002 and 52% in 2014–15) (AHMAC 2017). These same patterns were not seen in the NDSHS. According to the 2016 NDSHS, Indigenous people living in *Major cities* were more likely to be current smokers than Indigenous people living in *Remote* and *very remote* areas—40% of Indigenous people living in *Major cities* were current smokers, compared with 29% living in *Remote* and *very remote* areas. The lower smoking rate in the NDSHS is partly due to the much lower smoking rate reported by Indigenous people living in *Remote* and *very remote* areas. This may be due to Aboriginal communities not being captured in the NDSHS sample.

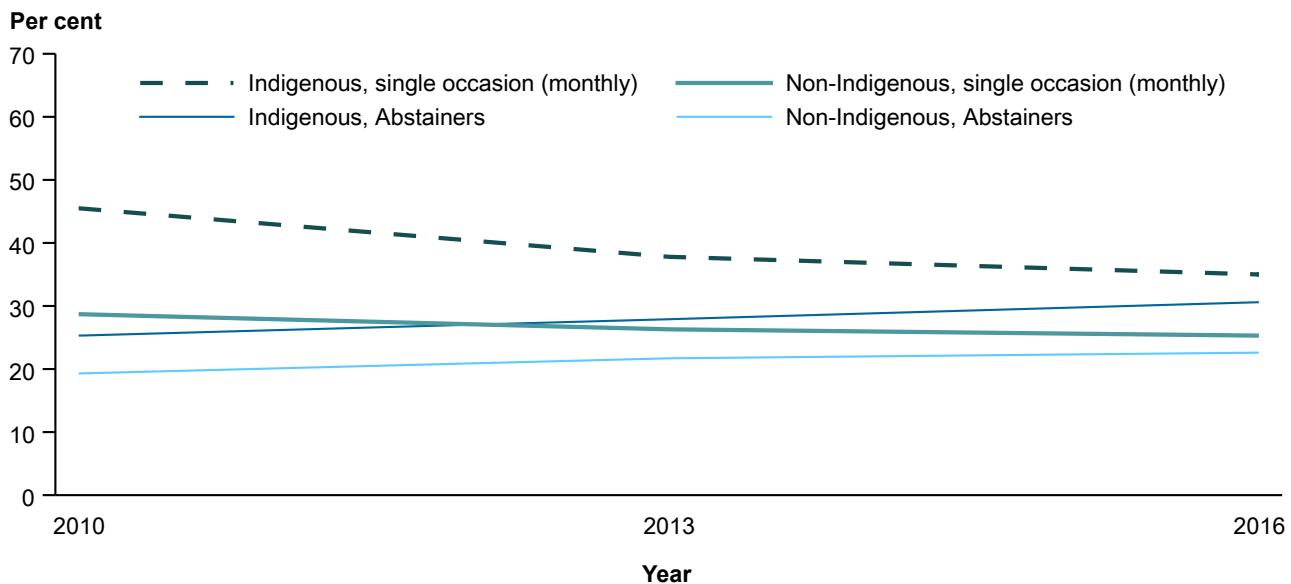
## Alcohol

Overall, Indigenous Australians were more likely to abstain from drinking alcohol than non-Indigenous Australians (31% compared with 23%, respectively) and this has been increasing since 2010 (was 25%) (Figure 8.8). Among those who did drink, a higher proportion of Indigenous Australians drank at risky levels, and placed themselves at harm of an alcoholrelated injury from single drinking occasion, at least monthly (35% compared with 25% for non-Indigenous). The (rate ratio) gap in drinking rates was even greater when looking at the consumption of 11 or more standard drinks at least monthly. Indigenous Australians were 2.8 times as likely as non-Indigenous Australians to drink 11 or more standard drinks monthly or more often (18.8% compared with 6.8%).

About 1 in 5 (20%) Indigenous Australian exceeded the lifetime risk guidelines in 2016; a slight but non-significant decline from 23% in 2013, and significantly lower than the 32% in 2010. The proportion of non-Indigenous Australians exceeding the lifetime risk guidelines in 2016 was 17.0% and significantly declined from 18.1% in 2013.

## Illicit drugs

Other than ecstasy and cocaine, Indigenous Australians aged 14 or older used illicit drugs at a higher rate than the general population (Table 8.6). In 2016, Indigenous Australians were: 1.8 times as likely to use any illicit drug in the last 12 months; 1.9 times as likely to use cannabis; 2.2 times as likely to use meth/amphetamines; and 2.3 times as likely to misuse pharmaceuticals as non-Indigenous people. These differences were still apparent even after adjusting for differences in age structure (Table 8.7). There were no significant changes in illicit use of drugs among Indigenous Australians between 2013 and 2016.



(a) Had more than 4 standard drinks at least monthly.

Note: Due to the small sample sizes of Aboriginal and/or Torres Strait Islander people, estimates should be interpreted with caution.

Source: Table 8.6.

**Figure 8.8: Proportion abstaining from alcohol or exceeding the single occasion risk<sup>(a)</sup> guidelines (at least monthly), by Indigenous status, people aged 14 or older, 2010–2016 (%)**

## People identifying as homosexual/bisexual

Since 2010, the NDSHS has consistently shown relatively high rates of substance use among people who identify as gay, lesbian or bisexual. This section only presents findings on people who identified as gay, lesbian or bisexual as the survey does not capture information on people who are transgender or intersex. Table 8.8 also presents data for people who were undecided or not sure about their sexual orientation and people who were something else other than the response categories presented (see Questionnaire for exact question wording and response options).

Findings for people who identify as homosexual and bisexual were grouped together for data quality purposes but it is important to note that there are differences in substance use between these 2 groups; for example, 13.5% of bisexual people had used ecstasy in the previous 12 months compared with 8.0% of homosexual people. Figure 8.9 shows that:

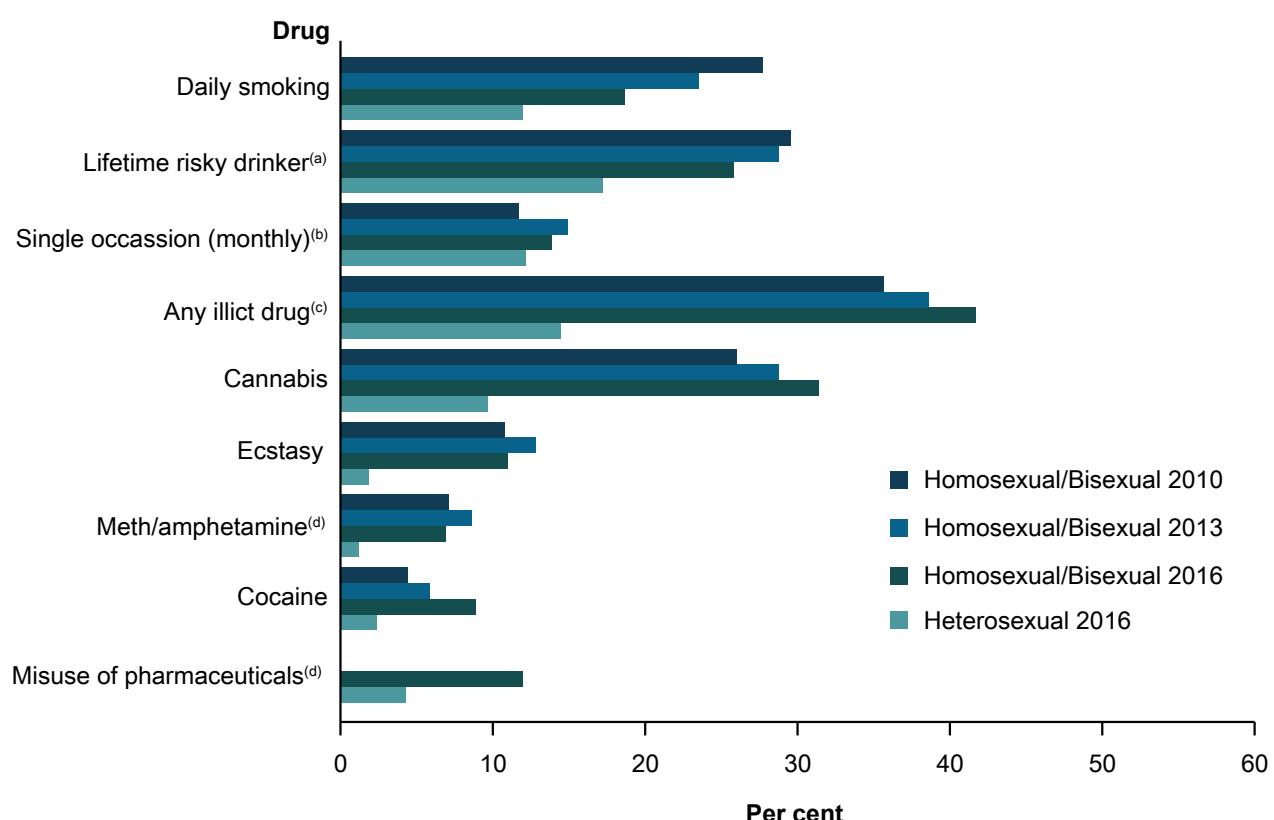
- use of illicit drugs in the last 12 months, daily smoking and risky drinking were far more common among people who identified as being homosexual or bisexual than people who were heterosexual
- the largest differences in use among homosexual/bisexual people were in the use of ecstasy and meth/amphetamines; use was 5.8 times as high as heterosexual people for both



- homosexual/bisexual people were also 3.7 times as likely to use cocaine, 3.2 times more likely to use cannabis, and 2.8 times as likely to misuse pharmaceuticals in the previous 12 months
- intake of alcohol in risky quantities and smoking tobacco daily were also more common but there was less disparity in the use of licit drugs between homosexual/bisexual people and heterosexual people.

After adjusting for differences in age, people who were homosexual or bisexual were still far more likely than others to smoke daily, consume alcohol in risky quantities, use illicit drugs and misuse pharmaceuticals (Table 8.9).

There were no significant changes in drug use among homosexual/bisexual people aged 14 or older between 2013 and 2016. Since 2010, daily smoking has declined from 28% to 18.7% in 2016 but cannabis and cocaine use are increasing—recent cannabis use increased from 26% to 31% in 2016 and cocaine increased from 4.4% to 8.9%.



(a) On average, had more than 2 standard drinks per day.

(b) Had more than 4 standard drinks at least monthly.

(c) Used at least 1 of 16 illicit drugs in the previous 12 months in 2016; the number of illicit drugs used has changed over time.

(d) For non-medical purposes.

Note: Time series data for misuse of pharmaceuticals no longer comparable due to questionnaire changes.

Source: Table 8.6.

**Figure 8.9: Drug use by sexual orientation, people aged 14 or older, 2010–2016 (%)**



## People with mental health conditions

There is a strong association between illicit drug use and mental health issues (Figure 8.10). However, it can be difficult to isolate to what degree drug use causes mental health problems, and to what degree mental health problems give rise to drug use, often in the context of self-medication (Loxley et al. 2004). It is therefore important to note that, by themselves, these findings do not establish a causal link between mental illness and drug use—the mental illness may have preceded the drug use or vice versa (AIHW 2010).

In addition to asking people if they have been diagnosed with or treated for a mental illness in the previous 12 months, the survey also includes the Kessler 10 scale (K10), which was developed for screening populations for psychological distress. The scale consists of 10 questions on non-specific psychological distress and relates to the level of anxiety and depressive symptoms a person may have experienced in the preceding 4-week period. The psychological distress may have preceded the drug use for some and, for others, drug use may have preceded the psychological distress.

### High or very high levels of psychological distress

The proportion of recent drug users experiencing high or very high levels of psychological distress increased across drugs shown in Figure 8.10. Overall, there was an increase in the proportion of adults in the population experiencing high or very high levels of psychological distress between 2016 and 2013 (11.6% compared with 10.0%), and this can be seen even among the non-illicit drug using population—high or very high levels of psychological distress increased from 8.6% to 9.7% among people who had not used illicit drugs in the last 12 months.

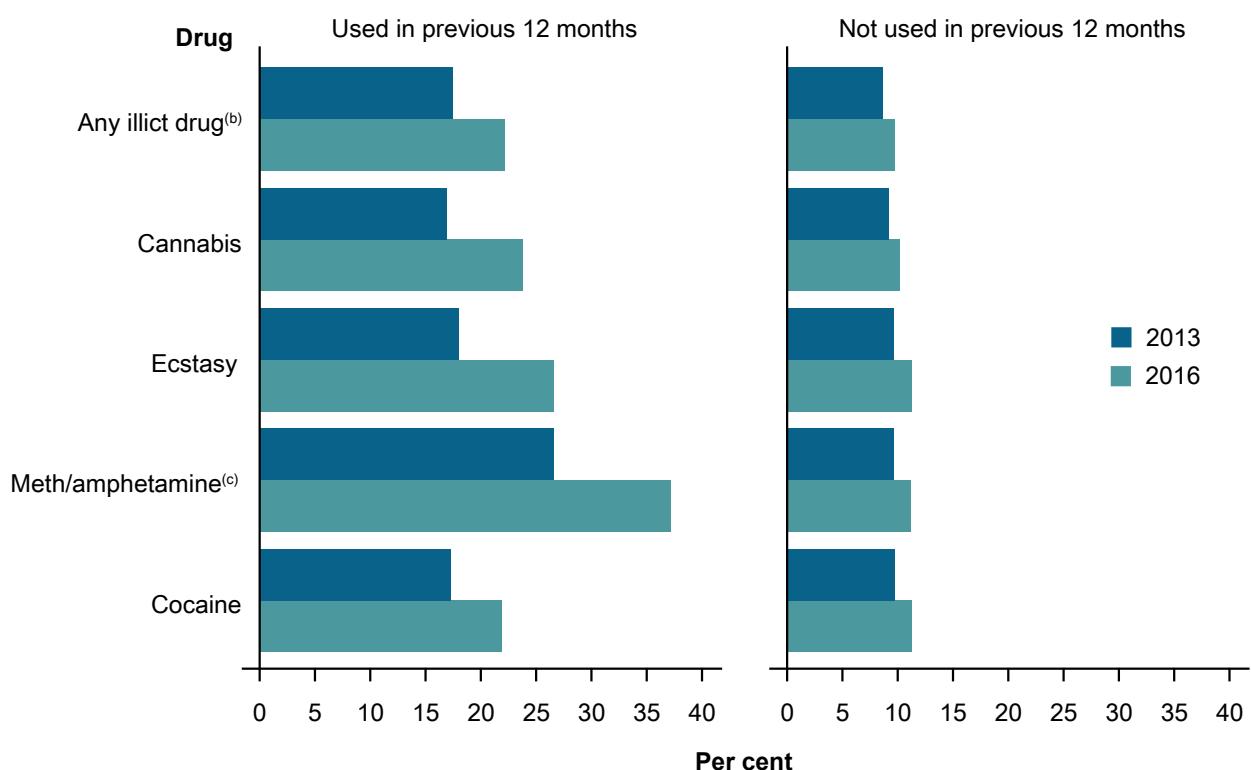
The increase in psychological distress levels was most noticeably seen among people who had used ecstasy in the last 12 months—high or very high levels of psychological distress increased by 48% between 2013 and 2016 (from 18% to 27%). High or very high distress levels also significantly increased among people who had used meth/amphetamines in the previous 12 months—from 27% to 37%—and was 3.3 times as high as people who had not used meth/amphetamines in the previous 12 months.

### Diagnosed with or treated for mental illness

According to the 2016 NDSHS, 15.9% of those aged 14 or older had been diagnosed with or treated for a mental illness in the previous 12 months, significantly increasing from 13.9% in 2013 (Table 8.10). The proportion of people being diagnosed with, or treated for, a mental illness significantly increased across all drugs shown in Figure 8.11. The most noticeable increase was again among recent users of ecstasy (up 48%), followed by recent users of meth/amphetamines (up 46%). People using meth/amphetamines in the past 12 months were more likely than any other drug users to report being diagnosed with or treated for a mental illness and their rate was 3 times as high as the non-illicit drug using population (42% compared with 13.9%).



Again, it is important to note that, by themselves, these findings do not establish a causal link between psychological distress and drug use—the drug use may have preceded the psychological distress, or vice versa.



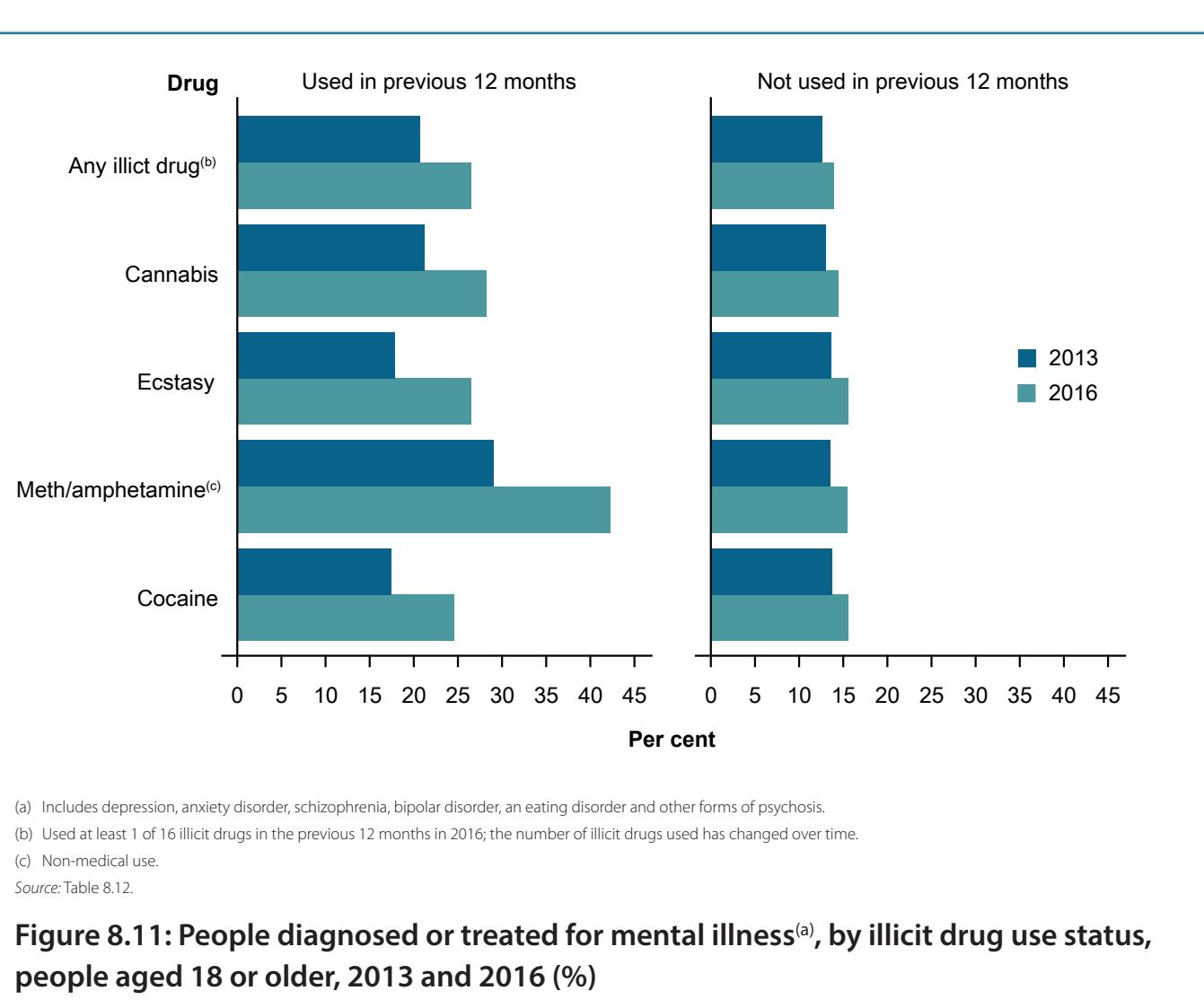
(a) K10 score High: 22–29; Very high: 30–50.

(b) Used at least 1 of 16 illicit drugs in the previous 12 months in 2016; the number of illicit drugs used has changed over time.

(c) Non-medical use.

Source: Table 8.11.

**Figure 8.10: Reported high or very high levels of psychological distress<sup>(a)</sup>, by illicit drug use status, people aged 18 or older, 2013 and 2016 (%)**



## Tobacco and alcohol use

A similar pattern to illicit drug users also emerged for daily smokers:

- people who reported smoking daily were twice as likely to have high/very high levels of psychological distress compared with people who had never smoked (22% compared with 9.7%), and were twice as likely to have been diagnosed with, or treated for, a mental health condition as those who had never smoked (29% compared with 12.4%) (Table 8.13).



The association between alcohol use and high or very high psychological distress and the diagnosis or treatment of a mental health condition was less marked. The 2016 findings showed that:

- people who exceeded the single occasion risk guidelines at least weekly were more likely to have high or very high levels of psychological distress (16.0%) than people drinking at low-risk levels for a single occasion (9.3%) (Table 8.13)
- the diagnosis or treatment for a mental health condition was about 1.2–1.3 times higher among drinking at risky levels (for both lifetime and single occasion risk) than those drinking at low-risk levels or abstaining from alcohol.

## Pregnant women

It is not yet known how much alcohol is safe to drink during pregnancy. However, it is known that the risk of damage to the baby increases the more a pregnant woman drinks and that binge drinking is especially harmful. Therefore, the NHMRC advises that the safest option for pregnant women is to abstain from drinking if they are pregnant, planning a pregnancy or breastfeeding (NHMRC 2009).

### Questionnaire changes

The questions on drug use during pregnancy were updated in 2013 to give a more accurate picture of drinking during pregnancy. However, these extra questions raised issues of interpretation of the way pregnant woman responded in the survey. Each question collects information about slightly different concepts which should be taken into consideration when interpreting these results. There were no changes to the pregnancy questions in 2016.

Since 2004, the NDSHS has asked pregnant women the following question about their alcohol use: 'In the last 12 months when you were pregnant, in general, did you drink more, less or the same amount of alcohol compared with when you were neither pregnant nor breastfeeding?' Pregnant women were able to select 1 of the following options: more, less, same amount, don't drink alcohol.

In the 2013 and 2016 surveys, women were also asked whether they had used alcohol before and/or after knowledge of pregnancy. The way in which pregnant women interpreted and answered these 2 questions differed and, as such, the proportions reporting that they did use alcohol during pregnancy were different.

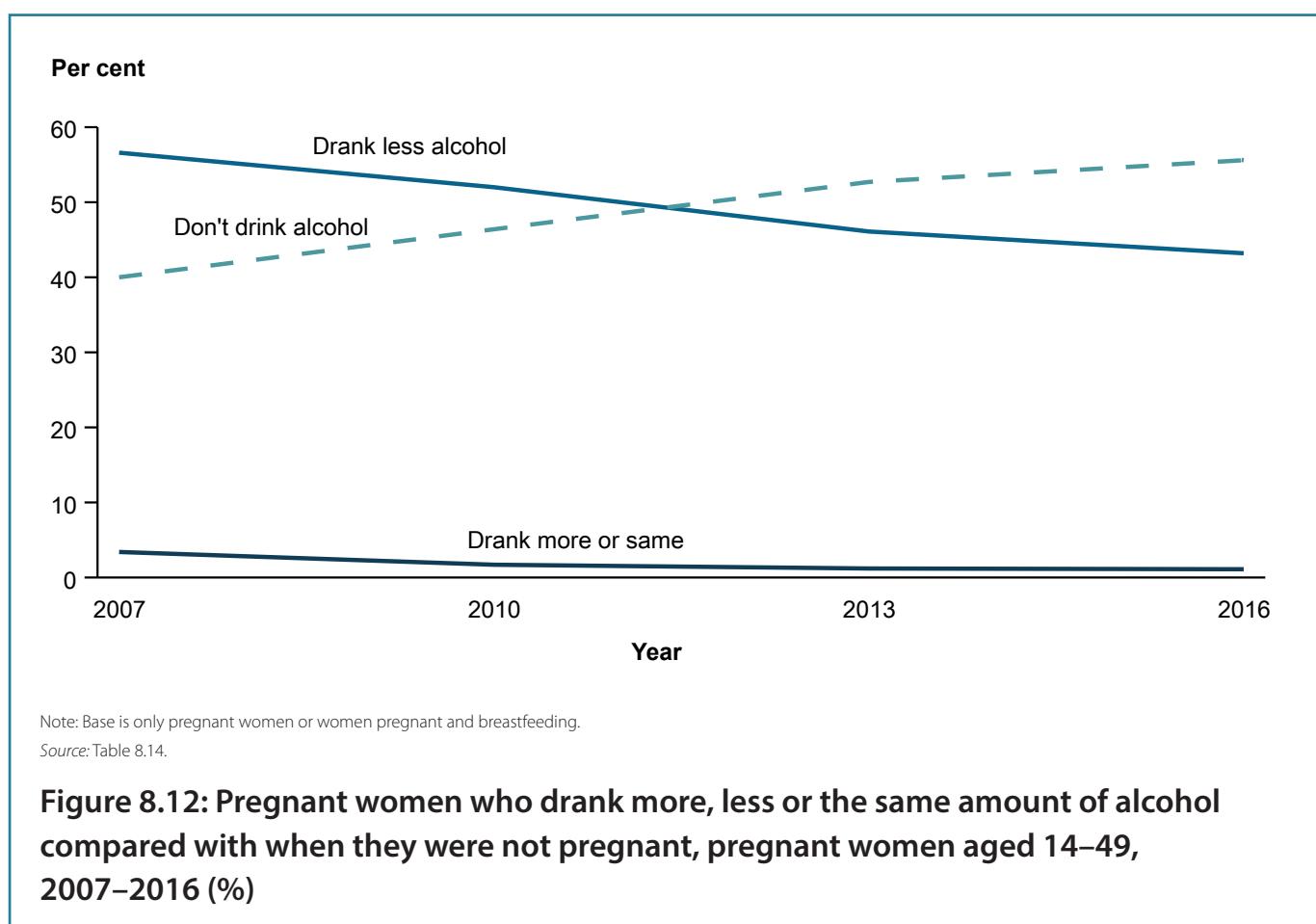
There are 2 plausible reasons as to why these results differ. Faced with a question about drinking 'in the last 12 months' it is not clear how a respondent who abstained for most of their pregnancy but did drink for a part of their pregnancy (before they knew they were pregnant) should respond. The pattern of responses suggests that some women answer in terms of social acceptability—it is more acceptable to acknowledge drinking before knowledge of pregnancy but they felt that this did not 'count' as drinking during pregnancy.



This impacted how some women responded to the question that asked if they drank more, less or the same amount of alcohol. While some women who said they drank alcohol before they knew they were pregnant said that they drank less, other pregnant women answered this question differently and said they 'don't drink alcohol'. Given that some pregnant women interpreted the question differently about whether they drank more, less, or the same amount, compared with when they were not pregnant, the measure about what women consumed before and after knowledge of pregnancy is likely to give the most accurate estimate on the amount of alcohol consumed during pregnancy (see Table 8.16). However, Figure 8.12 and Table 8.14 are useful for monitoring trends over time as this question has remained consistent since 2004.

## Trends in alcohol use

Since 2007, the proportion of women consuming alcohol during pregnancy has declined and the proportion abstaining has risen (Figure 8.12). Between 2013 and 2016, the proportion of pregnant women abstaining from alcohol slightly increased from 53% to 56% but this rise was not statistically significant.





## Alcohol consumption

Questions on the amount of alcohol consumed while pregnant were first included in the 2013 survey. Similar to 2013, the majority of women did not drink alcohol during pregnancy in 2016, and of those who did, most drank infrequently (monthly or less) and consumed 1–2 standard drinks (Table 8.15). Among pregnant women who drank alcohol during pregnancy in 2016:

- about 8 in 10 (81%) drank monthly or less, and 16.2% drank 2–4 times a month
- most (97%) usually consumed 1–2 standard drinks.

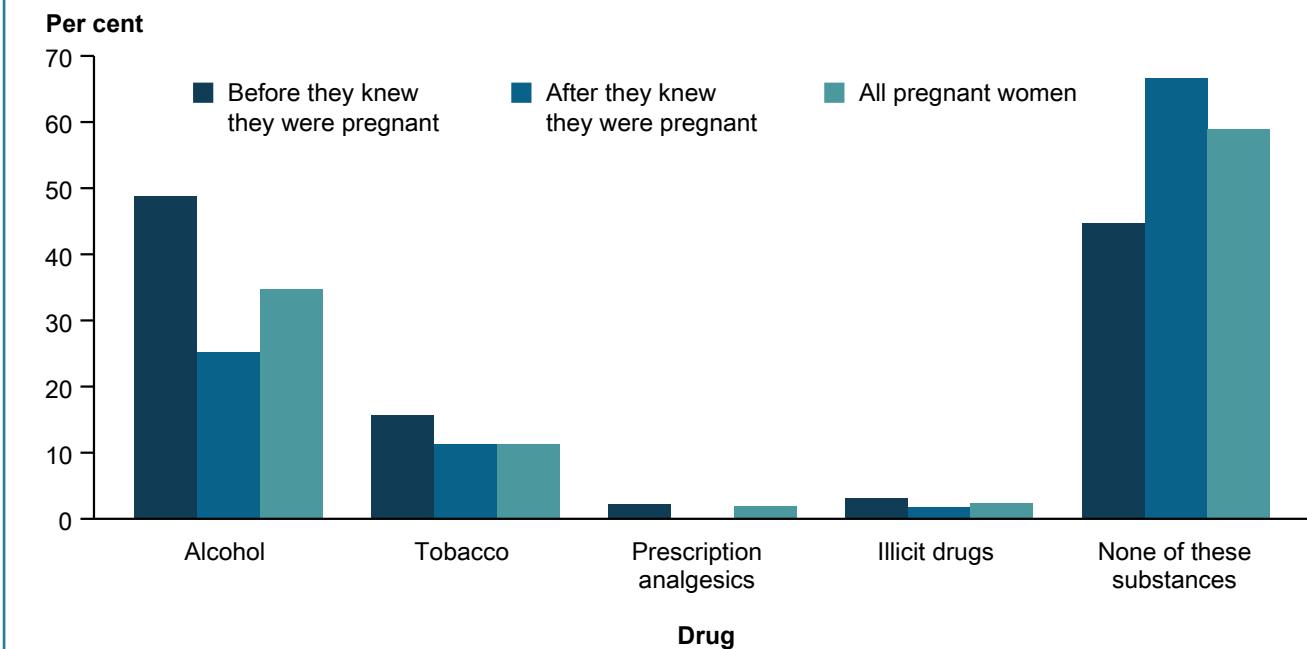
## Behaviour changes

Pregnant women were asked if there was any time during their pregnancy that they were not aware they were pregnant and what their drug-taking behaviours were during this time. Of pregnant women who were unaware of their pregnancy in 2016:

- fewer consumed alcohol before they knew they were pregnant (declined from 56% in 2013 to 49% in 2016) but a similar proportion drank alcohol after they knew they were pregnant (about 1 in 4 in both 2013 and 2016)
- about 1 in 6 (15.7%) women smoked tobacco before they knew they were pregnant, and this dropped to 1 in 10 (11.3%) after they found out they were pregnant (no change from 2013)
- a small minority had used illicit drugs; 3.1% used an illicit drug before knowledge of their pregnancy and 1.8% used illicit drugs after they knew they were pregnant (similar proportions to 2013) (Figure 8.13).

Among all pregnant women, regardless of whether they knew they were pregnant or not:

- there was a decline in the proportion drinking alcohol during pregnancy (from 42% in 2016 to 35% in 2013)
- about 1 in 10 (11.3%) smoked tobacco (a non-significant decline from 15.0% in 2013)
- 2.3% had used an illicit drug such as marijuana and 1.9% had misused prescription analgesics (but these estimates have a high RSE and should be interpreted with caution).



Note: Prescription analgesics and the illicit drugs estimates have a high RSE and should be interpreted with caution.

Source: Table 8.16.

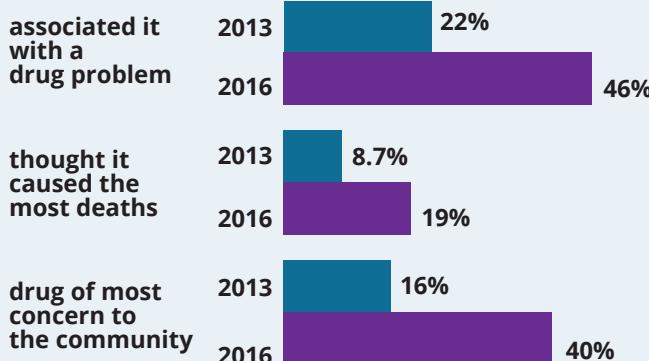
**Figure 8.13: Drug-taking behaviours before and after knowledge of pregnancy, pregnant women aged 14–49, 2016 (%)**



### Community perceptions of drugs

Between 2013 and 2016, people's perceptions of **meth/amphetamines** changed considerably

More people:



**Excessive alcohol use** no longer drug of most concern (declined from 42% in 2013 to 28% in 2016).

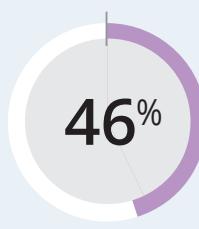
**Alcohol** remained the drug most commonly identified as causing the most deaths in 2016 (35%).

Fewer people thought **tobacco** caused the most deaths.

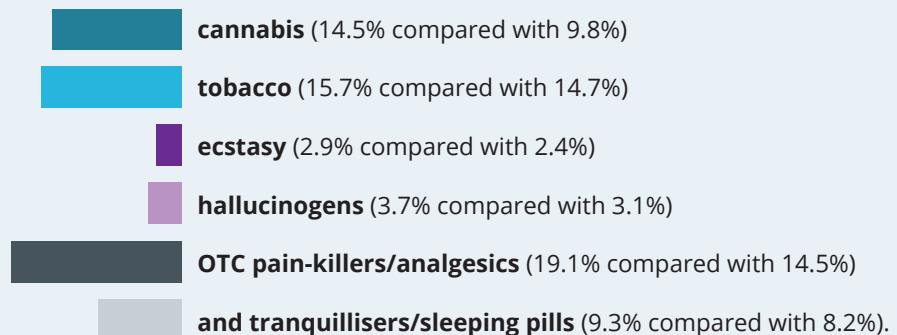


### Approval of regular adult drug use

**46%** of people approved the regular adult use of **alcohol** (remained stable since 2007)



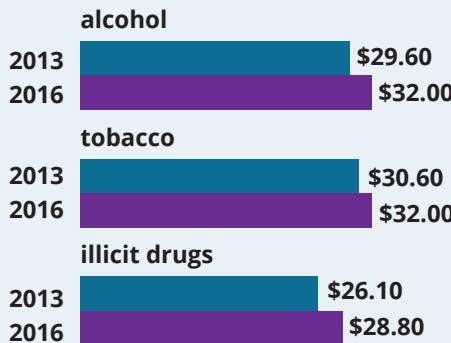
There was higher approval of regular adult use of the following drugs in 2016:



People allocated **more to treatment and education** and less to law enforcement to reduce alcohol misuse, tobacco harm and illicit drug use

### Distribution of \$100 drugs budget

#### Treatment:



#### Law enforcement:



## Policy support to reduce problems with alcohol and tobacco



Between 2013 and 2016, support for **some measures** surveyed to reduce problems associated with **tobacco** declined slightly

Tobacco policies that received the **highest support**:



Tobacco policies that received the **least support**:



In 2016, **most measures** surveyed to reduce problems associated with **alcohol** received **less support** than 2013.

Alcohol policies that received the **highest support**:



Alcohol policies that received the **least support**:



## Changes in support for cannabis

Between 2013 and 2016, **community tolerance increased** for cannabis use.

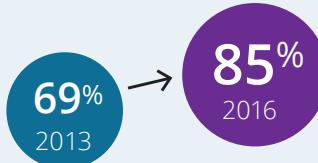
**More people supported:**



**legalisation of cannabis**



**use of cannabis in clinical trials to treat medication conditions**

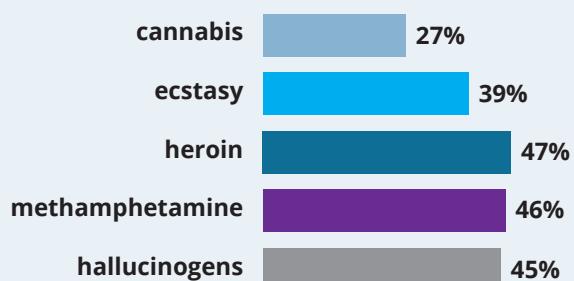


**change in legislation permitting the use of cannabis for medical purposes**

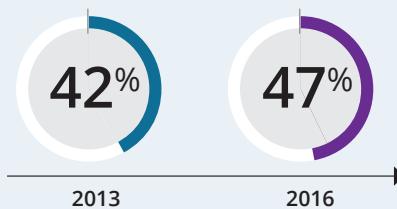
## Actions for people found in possession of drugs

Except for cannabis, the most appropriate perceived action for someone found in possession of small quantities of drugs, was **referral to treatment or an education program**.

**Referral to treatment:**



For cannabis the most popular action was a **caution, warning or no action** and this increased in 2016:



**Note:** findings relate to people aged 14 or older unless specified. An adult is a person aged 18 or older.

All data presented in this chapter are available in the perceptions and policy support tables  
<http://www.aihw.gov.au/reports/illicit-use-of-drugs/ndhs-2016-detailed/data>



## Perceptions and attitudes towards drug use

This section presents findings on the opinions and perceptions of people in Australia on various drug-related issues. There are 3 questions in the NDSHS that ask people about their perceptions of drugs. Each question presents a list of drugs to choose from. The first question asks: 'When people talk about a "drug problem", which is the first drug you think of?' The second question asks: 'Which one of these drugs do you think directly or indirectly causes the most deaths in Australia?' The third question asks: 'Which one of these forms of drug use do you think is the most serious concern for the general community?'

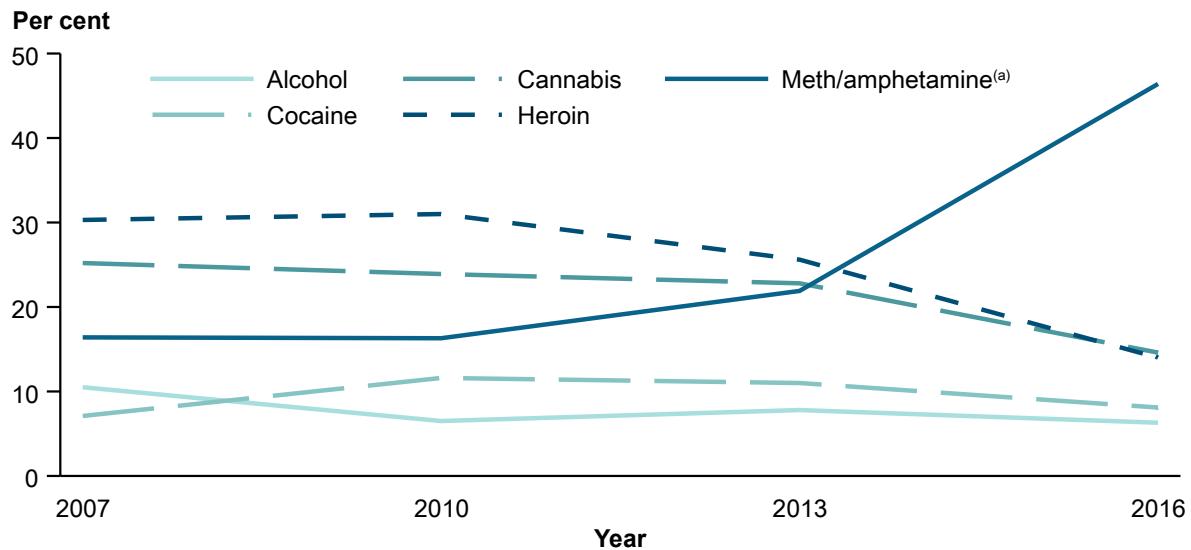
### Perception of drugs that cause a drug problem

In 2016, there was a clear shift in people's perception of drugs, with meth/amphetamine nominated for the first time as the drug most likely to be associated with a 'drug problem' (Figure 9.1). The proportion of the population aged 14 or older that nominated meth/amphetamine as most likely to be associated with a 'drug problem' more than doubled since 2013 (22% to 46% in 2016).

A range of factors such as media coverage and personal experience are likely to influence opinions on this issue.

This shift has meant that heroin, the drug most likely to be associated with a 'drug problem' in 2007, 2010 and 2013, has fallen (from 26% in 2013 to 14.0% in 2016) to be the third most likely drug associated with a 'drug problem' behind meth/amphetamine (46%) and cannabis (14.6%). The proportion of the population that perceived cannabis to be associated with a 'drug problem' also declined from 2013 (23%). In addition:

- between 2013 and 2016 the level of concern expressed about cocaine fell from 11.0% to 8.1%, as did alcohol from 7.8% to 6.3%
- people in their 30s (53%) were the most likely to nominate meth/amphetamine as the drug most likely to be associated with a 'drug problem'; while teenagers aged 12–17 (27%) were the least likely (Table 9.2)
- teenagers (aged 12–17) were far more likely to associate cannabis with a 'drug problem' than other age groups—at nearly double the next highest age group (32% compared with 17.7% for people aged 70 or older)
- males and females generally had similar perceptions about drugs that are most likely to be associated with a 'drug problem' (Table 9.1).



(a) For non-medical purposes.

*Notes*

1. Only the 5 most commonly chosen drugs are presented in this figure.
2. The list of response options changed across survey waves. Comparisons should be interpreted with caution.

*Source:* Table 9.1.

**Figure 9.1: Drug first nominated (top 5) when asked about a specific drug problem, people aged 14 or older, 2007–2016 (%)**

## Drugs perceived to be associated with mortality

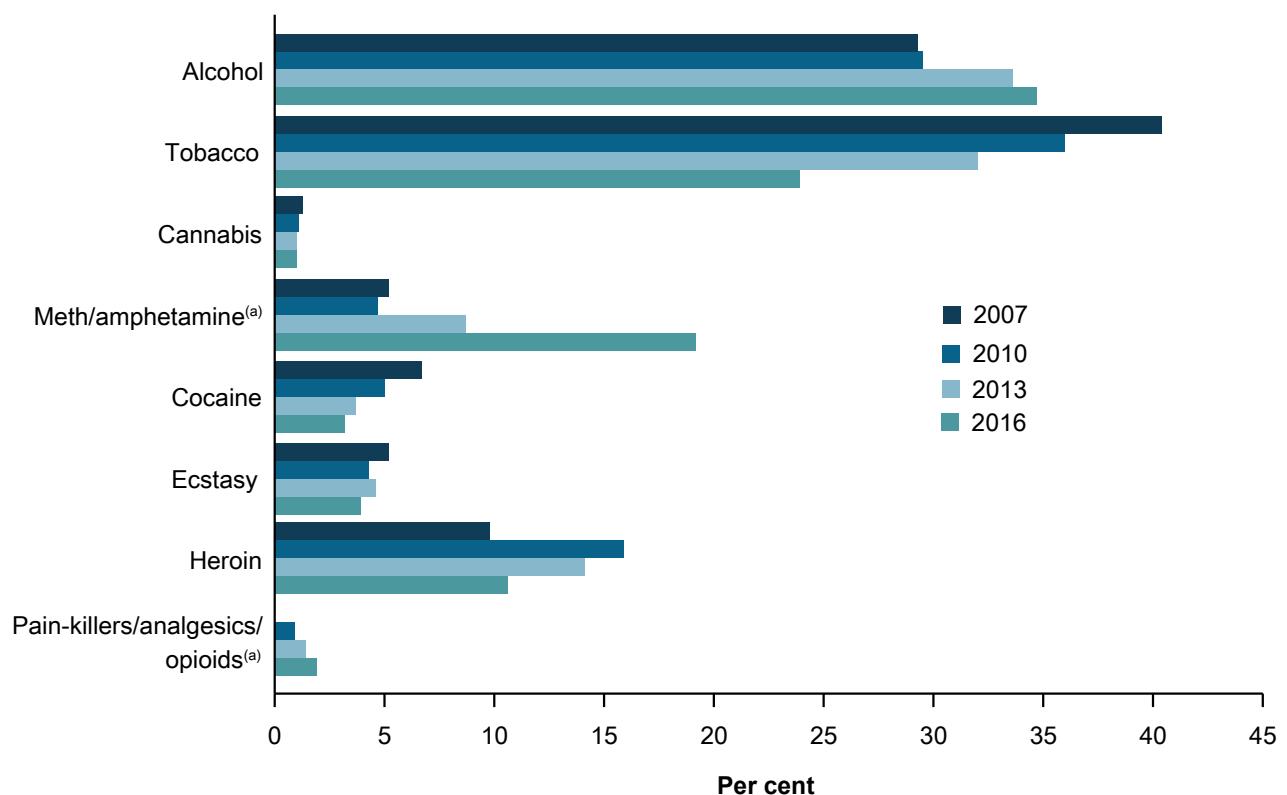
In Australia, tobacco is responsible for more drug-related hospitalisations and deaths than alcohol and illicit drug use combined. The AIHW estimated that in 2011, 18,762 deaths were attributable to tobacco, 6,570 were attributable to alcohol, 1,926 were attributable to illicit drugs (AIHW 2016). However, the proportion of people aged 14 or older who perceive tobacco as the drug that causes the most deaths fell from 2013 to 2016 (from 32% to 24%)—continuing a steady decline since 2007 (40%) (Figure 9.2). This change may be due to a shift in perception about meth/amphetamine, with a sharp increase in the proportion of the population that perceive it to cause the most deaths in Australia (8.7% to 19.2%).

In 2016, alcohol remained as the drug to be most commonly identified as causing deaths (35%), while meth/amphetamine was the illicit drug most commonly identified. Heroin was the second most commonly identified illicit drug, although this significantly declined in 2016 (from 14.1% in 2013 to 10.6%).



Males and females generally had similar views on the drugs most likely to cause deaths; however, males were more likely to nominate tobacco than females (27% compared with 21%) (Table 9.3). Females, on the other hand, were slightly more likely to nominate illicit drugs such as meth/amphetamine (20% compared with 18.1%) and heroin (11.9% compared with 9.4%).

People aged in their 60s were the most likely to nominate tobacco (29%) and people aged 18–24 were the least likely to nominate tobacco (16.2%) (Table 9.4). For alcohol, it was people aged 25–29 that were the most likely to associate this drug with mortality (38%) and people aged 70 or older were the least likely (30%). Similarly, for meth/amphetamine it was people in their late teens and early 20s (18–24) that were most likely to nominate this drug, while people in their 60s were the least likely (24% compared with 17.0%).



(a) For non-medical purposes.

Notes

1. Only the most commonly chosen drugs are presented in this figure.
2. The list of response options changed across survey waves. Comparisons should be interpreted with caution.

Source: Table 9.3.

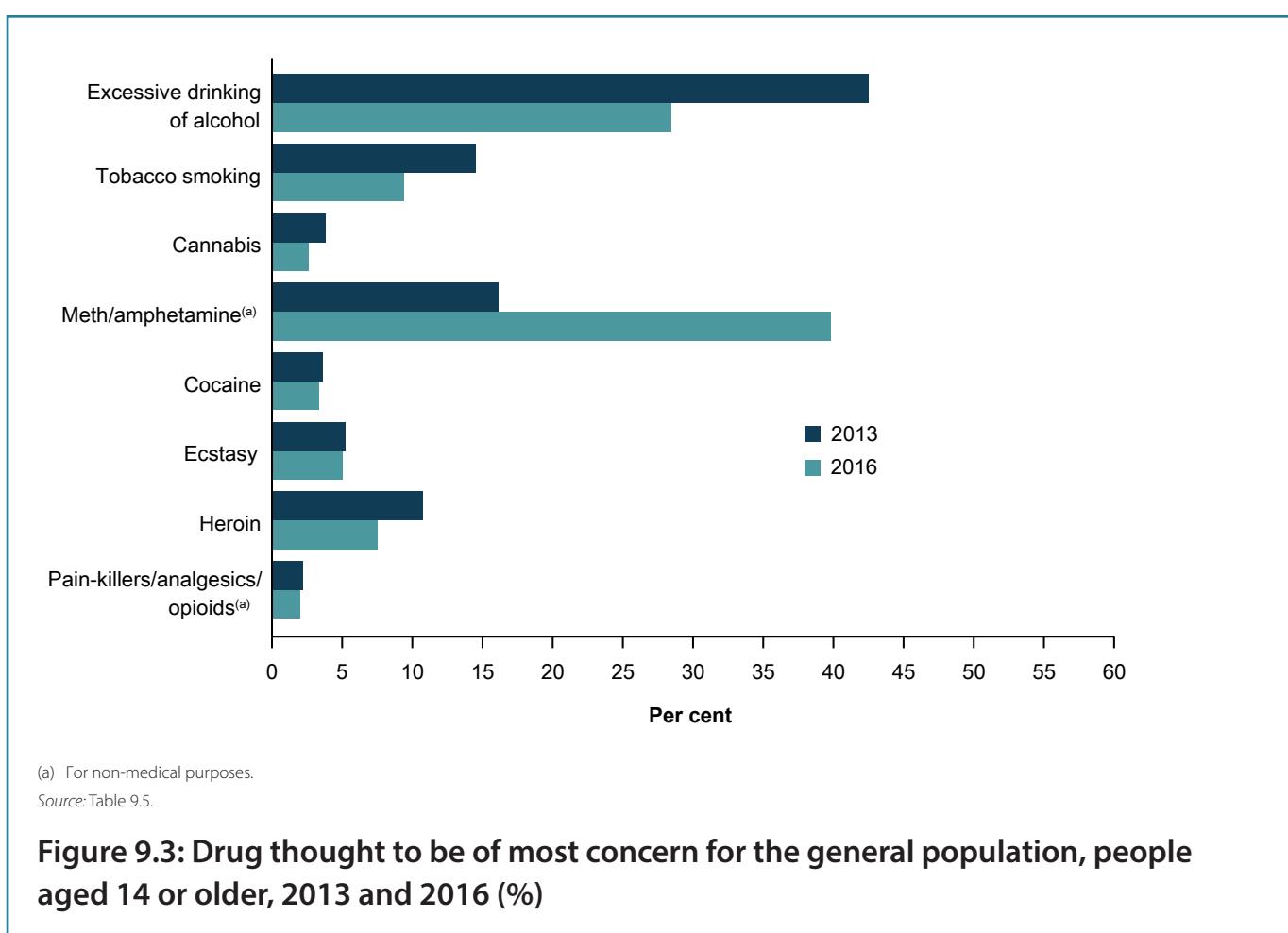
**Figure 9.2: Drug thought to cause the most deaths in Australia, people aged 14 or older, 2007–2016 (%)**



## Drug of most concern for the general community

Survey respondents were also asked their opinion about which drug they thought to be of most serious concern for the general community. Excessive use of alcohol is no longer the drug people feel is of most concern to the general community, with meth/amphetamine overtaking alcohol and more than doubling since 2013 (16.1% compared with 40%) (Figure 9.3). In addition:

- there was a significant decline in the proportion that nominated excessive use of alcohol (from 43% to 28%) and tobacco smoking (from 14.5% to 9.4%)
- males and females generally had similar views on drugs of most concern, although females were slightly more likely to nominate excessive alcohol use (30% compared with 27%) and males more likely to nominate meth/amphetamine (42% compared with 38%)
- levels of concern varied across age groups, with older people more concerned with excessive alcohol use (32% for those aged 70 or older compared with 23% for those aged 18–24) and teenagers (aged 12–17) more concerned about tobacco (23%) than any other age group (Table 9.6)
- people in their 30s were more concerned about meth/amphetamine than teenagers (45% compared with 26%).





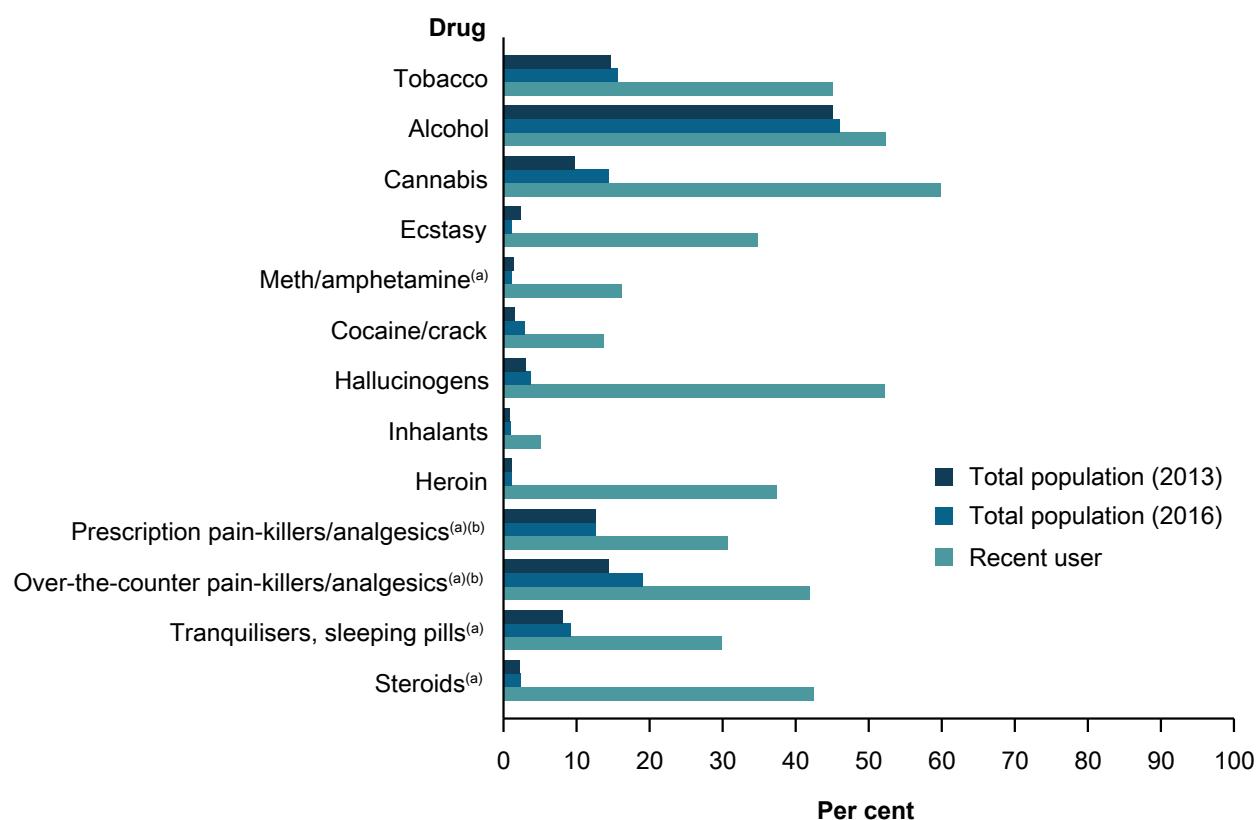
## Approval of regular adult drug use

Respondents were asked what they thought of regular adult use of various drugs. The results presented are for those respondents who said they 'strongly approve' or 'approve' the use of drugs by adults (shown together as 'approve').

Personal approval of regular adult drug use was higher for licit than illicit drugs. Of all drugs used in Australia, alcohol (46%) had the highest level of personal approval, followed by over-the-counter pain-killers/analgesics (19.1%), tobacco (15.7%) and cannabis (14.5%) (Figure 9.4). Further:

- the proportion of people approving the regular use of alcohol has remained stable since 2007 (Table 9.7)
- approval of regular adult use of cannabis was higher in 2016 than in 2013 (14.5% compared with 9.8%), as was the approval of tobacco (15.7% compared with 14.7%), ecstasy (2.9% compared with 2.4%) and hallucinogens (3.7% compared with 3.1%)
- approval of regular adult non-medical use of pharmaceuticals as a group increased in 2016 (28% compared with 23% in 2013), including increases in over-the-counter painkillers/analgesics (19.1% compared with 14.5%) and tranquilisers/sleeping pills (9.3% compared with 8.2%)
- higher levels of approval for regular adult drug use (licit or illicit) were generally among 18–29 year olds, except for over-the-counter pain-killers/analgesics, which was similar across all age groups (Table 9.8).

Not surprisingly, personal approval of regular drug use was consistently higher among individuals who have used that particular drug recently compared with those who have not used the drug in the preceding year. Despite this tendency, even users of inhalants, meth/amphetamines, cocaine and GHB (Table 9.9) did not generally approve the regular use of these drugs (less than 20% personally approved).



(a) Used for non-medical purposes.

(b) Use status refers to any pain-killer/analgesic.

(c) Used in the previous 12 months.

Note: Use status refers to the use of each drug specified.

Sources: Tables 9.7 and 9.9.

**Figure 9.4: Personal approval of the regular use by an adult of selected drugs, people aged 14 or older and recent drug users<sup>(c)</sup>, 2013 and 2016 (%)**



## Social characteristics, perceptions and attitudes towards drugs

People's perceptions and attitudes towards drug use varied by socioeconomic area, Indigenous status, remoteness area and sexual orientation. Specifically:

- among all groups, meth/amphetamine was the most likely to be associated with a drug problem and as the drug of most serious concern for the community—people living in *Remote* and *very remote* areas, non-Indigenous Australians and homosexual/bisexual people were more likely than their counterparts to associate meth/amphetamines with these perceptions (Table 9.10)
- Indigenous Australians were twice as likely as non-Indigenous Australians to associate cannabis with a drug problem (28% compared with 14.2%)
- people in the lowest socioeconomic area and people living in *Remote* and *very remote* areas were more likely to associate cannabis with a drug problem than their counterparts
- people in the lowest socioeconomic area approved regular tobacco use by adults more often than those in the highest socioeconomic area (18.3% compared with 11.7%), but were less likely to approve of regular adult alcohol use than those in the highest socioeconomic area (41% compared with 51%)
- Indigenous Australians were more likely than non-Indigenous Australians to approve the regular use of tobacco (28% compared with 15.4%), cannabis (27% compared with 14.1%) and pharmaceuticals (40% compared with 28%)
- those who identified as being homosexual or bisexual were generally more accepting of regular adult use of drugs than people who were heterosexual; for example, 24% approved the regular use of tobacco (compared with 15.1% for heterosexual people) and 10.8% approved the regular use of cocaine (compared with 2.4% for heterosexual people).

## Support for policy

Australia has had a coordinated national policy for dealing with tobacco, alcohol and other drugs since 1985 when the National Campaign Against Drug Abuse (later renamed the National Drug Strategy) was developed. This section presents findings on the level of support given to different measures that aim to reduce drug use or drug-related harm.

Respondents were asked to indicate how strongly they would support or oppose specific policies, using a 5-point scale. Only responses of 'support' or 'strongly support' are taken as support for specific policies. Responses from those who indicated they did not know enough about the policy to give or withhold support were excluded from the analysis (both numerator and denominator). Survey questions were expressed in terms of reducing problems associated with the use of alcohol, tobacco, cannabis and heroin.



## Support for measures to reduce problems associated with tobacco

In 2016, support for measures aimed at reducing tobacco-related harm generally remained high. Stricter enforcement of the law and penalties for supplying to minors continued to receive the highest level of support, but declined since 2013 (from 88% to 86% in 2016). There were also small (but statistically significant) declines in the reported support for the following policies between 2013 and 2016:

- stricter penalties for sale or supply to minors (from 86% to 84%)
- banning all additives (for example, flavouring) in cigarettes and other tobacco products, to make them less attractive to young people (from 79% to 76%)
- raising the legal age for sale or supply of tobacco, and making it harder to buy tobacco in shops (both declined from 65% to 64%) (Table 9.11).

In addition, people aged 18–24 were the least likely to support measures to reduce problems associated with tobacco and those aged 70 or older were the most likely (Table 9.12).

Three new policy support measures about electronic cigarettes were added to the questionnaire in 2016. These new measures received relatively high support with about twothirds supporting restrictions on the use of e-cigarettes in public places and on where and when they may be advertised. More than 3 in 4 supported prohibiting the sale of e-cigarettes to people under the age of 18 (Table 9.11).

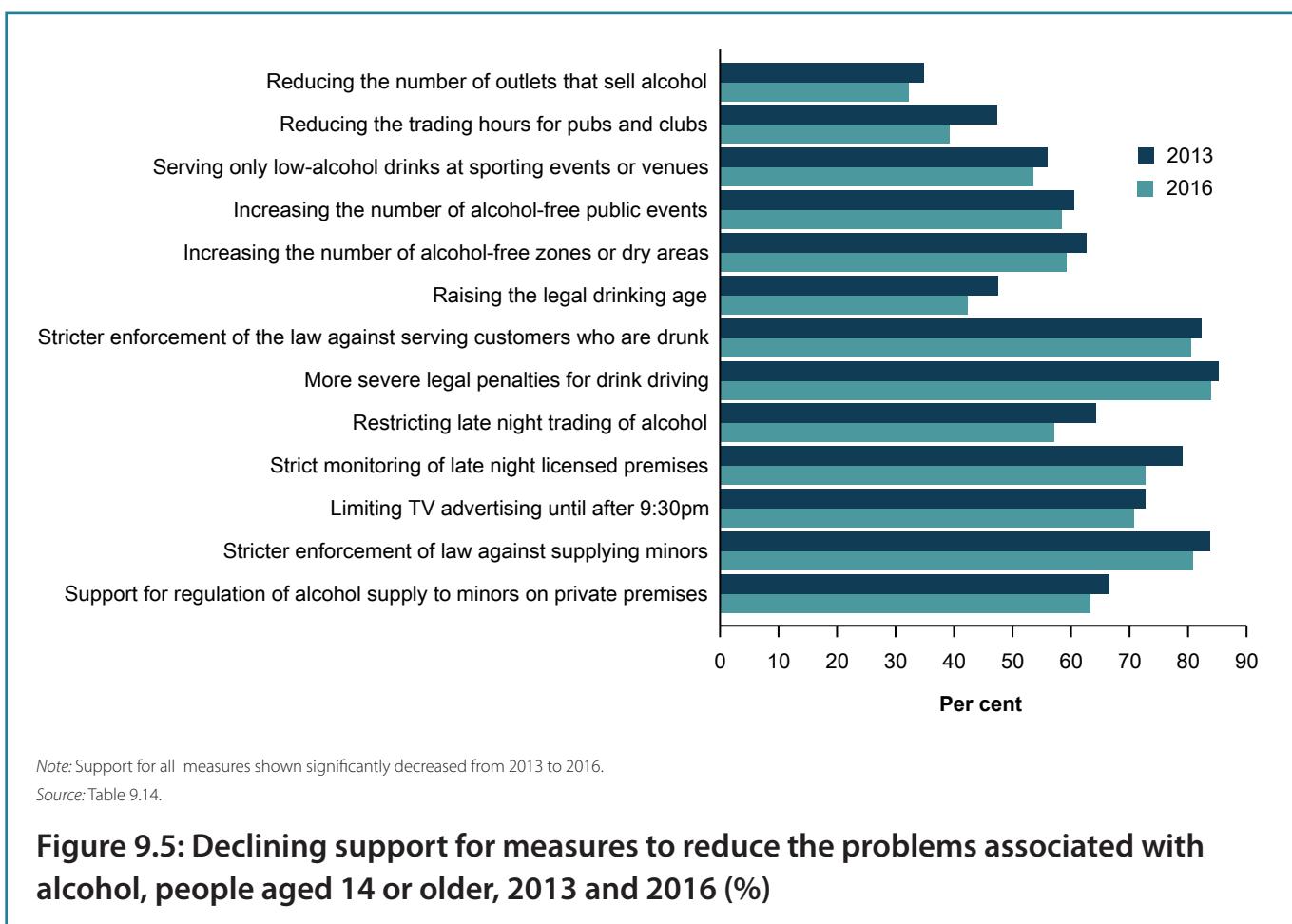
## Support for measures to reduce problems associated with alcohol

In 2016, there were 13 (out of 18) measures to reduce problems associated with alcohol that received less support than in 2013 (Figure 9.5). No measure received higher levels of support in 2016. The policy with the most support to reduce alcohol harm was to establish 'more severe penalties for drink driving' (84%), followed by the 'stricter enforcement of law against supplying alcohol to minors' (81%). The measure with the lowest level of support was for increasing the price of alcohol, at 28% (Table 9.14).

In 2016, the 3 measures to receive the largest proportional decreases in support included:

- 'reducing the trading hours for pubs and clubs' (from 47% to 39%)
- 'restricting late night trading of alcohol' (from 64% to 57%)
- 'raising the legal drinking age' (from 48% to 42%).

Abstainers and those drinking at low-risk levels were more likely than risky drinkers to support policies aimed at reducing alcohol-related harm (Table 9.16). For example, abstainers were almost 8 times as likely to support 'increasing the price of alcohol' as lifetime risky drinkers.



**Figure 9.5: Declining support for measures to reduce the problems associated with alcohol, people aged 14 or older, 2013 and 2016 (%)**

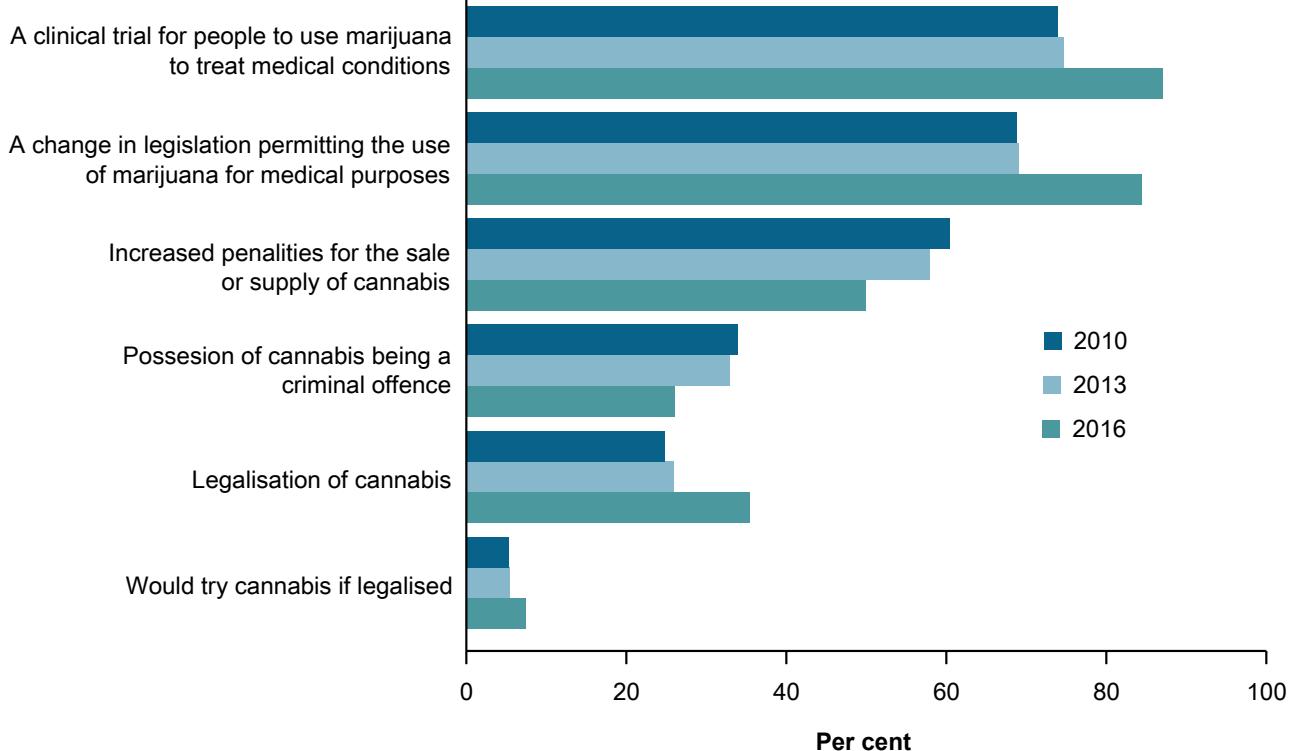
## Support for cannabis measures

Respondents were asked about their support for legalisation, penalties, use of cannabis in medicinal settings and actions taken against people involved with cannabis (Figure 9.6).

In 2016, there were significant changes in people's attitudes towards cannabis:

- more people supported cannabis being used in clinical trials to treat medical conditions (from 75% in 2013 to 87%) and supported a change in legislation permitting the use of cannabis for medical purposes (from 69% in 2013 to 85%) (Table 9.17)
- more people supported the legalisation of cannabis (from 26% in 2013 to 35%) (Table 9.25)
- fewer people thought that the penalties should be increased for the sale or supply of cannabis (from 58% in 2013 to 50%) (Table 9.18) or that possession of cannabis should be a criminal offence (from 33% in 2013 to 26%) (Table 9.28).

If cannabis were to be legalised, the great majority of the population (82%) claimed they would still not use it and 7.4% said they would try it (Table 9.20).



Sources: Tables 9.17, 9.18, 9.20, 9.25, 9.28.

**Figure 9.6: Support for measures relating to cannabis use, people aged 14 or older, 2010–2016 (%)**

## Support for measures to reduce problems associated with injecting

In 2016, most people supported measures to reduce problems associated with injecting drugs.

About two-thirds of the population aged 14 or older supported rapid detoxification therapy (69%), methadone/buprenorphine maintenance programs (68%), needle and syringe programs (67%), treatment with drugs other than methadone (67%) and the use of Naltrexone (66%), which is a medication that blocks the effect of opioids such as heroin. In addition:

- a trial of prescribed heroin received the least support (35%)
- apart from a trial of prescribed heroin and availability of take-home naloxone, higher proportions of females than males supported measures aimed at reducing problems associated with heroin
- support for needle and syringe programs (84%) and a trial of prescribed heroin (68%) was particularly high among recent injecting drug users (Table 9.24)
- in 2016, there was a small but significant decline in the support for use of Naltrexone (from 68% in 2013 to 66%) (Table 9.22).



## Support for other illicit drug measures

While support for the legalisation of drugs remained fairly low in 2016, there was an increase in support for the legalisation of cocaine (from 6.2% to 7.0% in 2016) and ecstasy (from 7.3% to 8.2%), compared with 2013 (Table 9.25). Support for the legalisation of heroin (5.8%) and meth/amphetamine (4.8%) remained stable in 2016. Males were more likely than females to support legalisation of these drugs. A substantially higher proportion of illicit drug users than people who had never used supported legalisation, specifically:

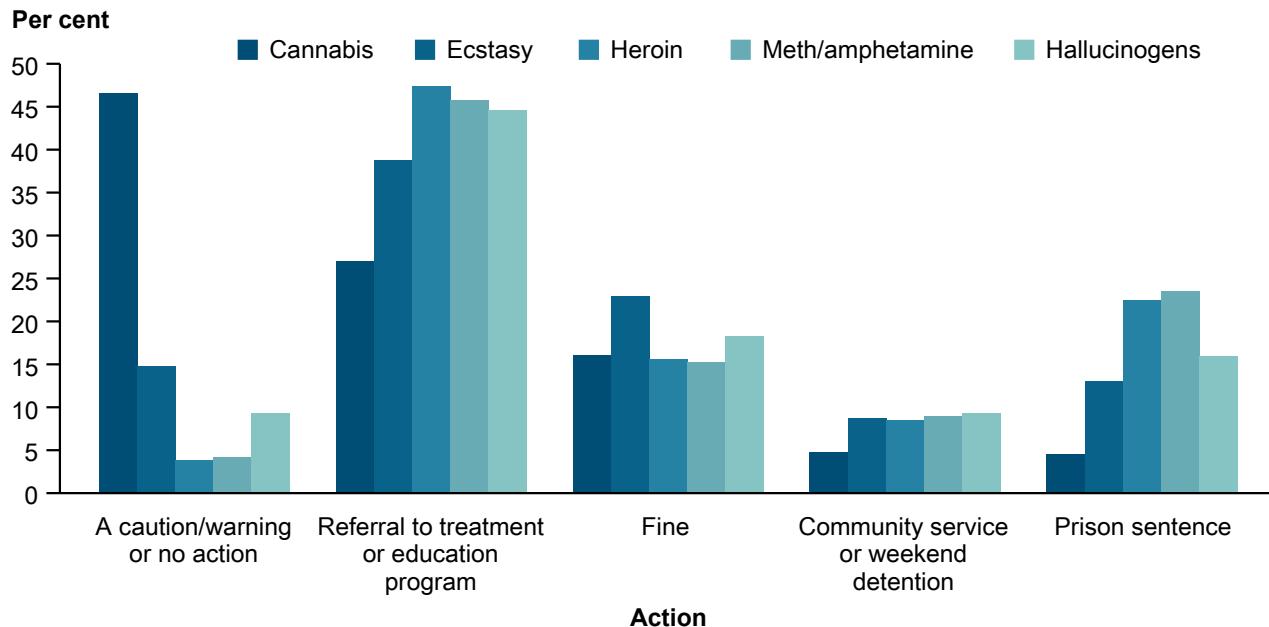
- recent heroin users were almost 11 times as likely to support legalisation of heroin
- recent ecstasy users were 9.8 times as likely to support legalisation of ecstasy
- recent meth/amphetamine users were 6.4 times as likely to support legalisation of meth/amphetamine
- recent cocaine users were more than 5.7 times as likely to support legalisation of cocaine (Table 9.27).

In 2016, there were small but significant declines in the levels of support for increasing the penalties for the sale or supply of heroin (from 84% in 2013 to 83%), cocaine (from 81% to 80%) and ecstasy (from 81% to 79%) (Table 9.28). The support for increased penalties for meth/amphetamine remained stable from 2013 to 2016, despite the shift in perceptions which saw the proportion associating it with a drug problem, causing the most deaths and being the drug of most concern for the general community all doubling in the same period.

## Actions taken against people found in possession of drugs

For people aged 14 or older, support for actions taken against people found in possession of illicit drugs for personal use differed according to drug type (Figure 9.7). In 2016:

- for all drugs except cannabis, most support was for referral to treatment or an education program, while for cannabis the most popular action was a caution, warning or no action and this rose in 2016 (from 42% in 2013 to 47%)
- a higher proportion thought that possession of meth/amphetamine should result in a prison sentence (from 20% in 2013 to 24%)
- teenagers (aged 12–17) were generally more likely to support fines, community service or weekend detention and prison sentences than any other age group, and those aged 50 or older were more likely to support referral to treatment or an education program than other age groups (Table 9.31).

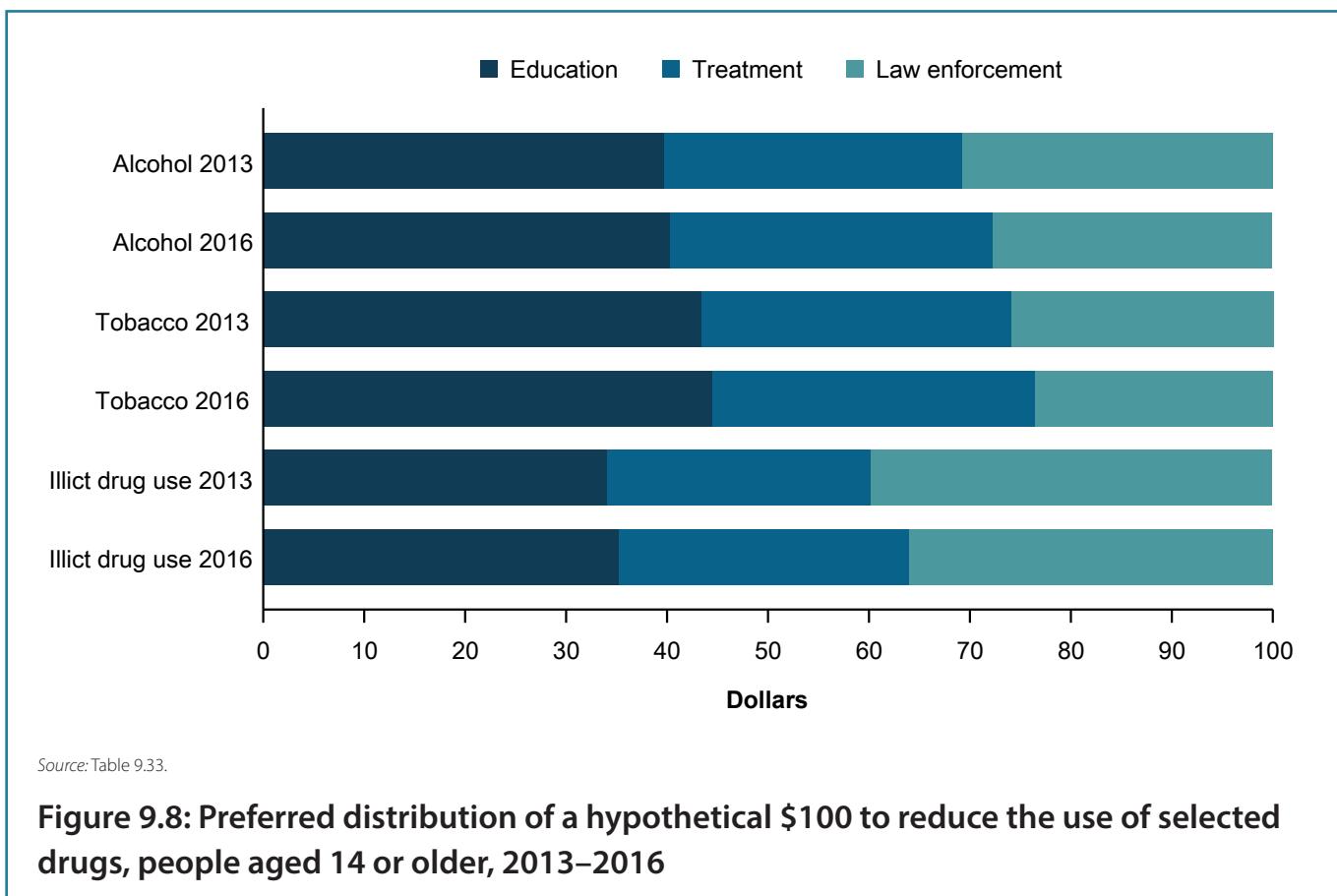


Source: Table 9.32.

**Figure 9.7: Support<sup>(a)</sup> for actions taken against people found in possession of selected illicit drugs for personal use, people aged 14 or older, 2016 (%)**

## Budget distribution for education, treatment and law enforcement

People's priorities (aligning conceptually with the 3 pillars of the NDS) were explored by looking at how a hypothetical \$100 should be split between education, treatment or law enforcement to reduce the harm of alcohol, tobacco and illicit drugs. Irrespective of drug type, people thought that a greater proportion of funds should be allocated to education or treatment in 2016—making up about 64% to 77% of total dollars. Conversely, there was a significant decrease in the allotted dollars for law enforcement for all 3 drug types (Figure 9.8). Overall, education continued to receive the greater proportion of the allotted \$100 for tobacco (\$44.50) and alcohol (\$40.30), while for illicit drugs it was law enforcement (\$36.00).



The estimates for 2016 contained in this publication are based on information obtained from people aged 12 or older or 14 or older (as specified) from all states and territories. Most estimates presented in this report relate to people aged 14 or older with selected estimates for people aged 12 or older and 18 or older, where specified.

The scope of the survey was residential households and excluded institutional settings, hostels, motels and homeless people. Foreign language interviews were not conducted.

See the 2016 NDSHS data quality statement for further information <<http://www.aihw.gov.au/reports/illicit-use-of-drugs/ndshs-2016-detailed/notes>>.



## Methodology

Roy Morgan Research was commissioned by the AIHW to conduct the survey fieldwork. The survey was conducted from 18 June to 29 November 2016.

### Sample design

Consistent with previous surveys, the sample was selected by way of stratified, multistage random sampling. Locations within Australia were stratified by state and territory and part of state. There were 15 strata in total—capital city and rest of state for each state and territory, except for the Australian Capital Territory, which operated as 1 stratum. To produce reliable estimates for the smaller states and territories, sample sizes were boosted in Tasmania, the Australian Capital Territory and the Northern Territory.

For capital cities within each stratum, statistical areas level 1 (SA1s) were selected with probability proportional to the number of private households as at the 2011 Census. In non-capital city areas, statistical areas level 2 (SA2s) were selected for the first stage (previously statistical local areas), rather than SA1s, as this had considerable efficiency benefits. In non-capital city areas, SA2s for each stratum were selected with probability proportional to the number of households as at the 2011 Census. From within each selected SA2, SA1s were selected with probability proportional to the number of private households as at the 2011 Census.

A starting address within each selected SA1 was randomly selected, and interviewing started at the dwelling next door to this. Interviewers followed a comprehensive set of procedures to select a dwelling, including skip intervals, eligible and ineligible addresses, and dealing with blocks of flats and units.

As in previous surveys, interviewers made 3 attempts to establish face-to-face contact with the selected dwellings. The selected respondent was the household member aged 12 or older who most recently celebrated their birthday.

### Survey mode

The 2016 survey was conducted using a multimode completion methodology. Selected individuals could choose to complete the survey via a paper form, an online form or via a telephone interview. The 2016 survey was the first time an online form was used—the 2013 and 2010 surveys consisted solely of a self-completion drop-and-collect method, and in earlier years, both computer-assisted telephone interviews and face-to-face interviews were used. Table 10.1 gives a summary of the data collection methodologies and fieldwork timing between 1998 and 2016. Changes to the methodology should be taken into consideration when making comparisons over time.

For households electing to complete the paper questionnaire, 3 attempts were made to personally collect the questionnaire. Interviewers also made reminder phone calls or sent an SMS to the selected respondent before each pick-up attempt. If they were still unable to pick up the questionnaire after 3 attempts, a reply-paid envelope was left for the respondent to mail the completed questionnaire back to Roy Morgan Research.



For respondents electing to complete online, the survey link was given to the respondent and was accessible immediately by entering the form number provided. Where an email address or mobile phone number was given, an email or SMS invitation was also sent, generally the next day, which linked the respondent directly to their online survey. Up to 3 reminder emails were sent at 3-day intervals to encourage response. A final email or SMS reminder was sent about 1 month after the respondent was selected if the survey had not been completed.

For respondents electing to complete by telephone, the interviewer collected up to 4 separate times that would be suitable to contact the respondent for an interview. If contact was made at the household, but the respondent was not available, or if the time was no longer suitable for the respondent, an alternative time was arranged to conduct the interview.

If no response had been received from respondents electing to complete online or via phone after 3 attempts, the face-to-face interviewer visited the household to remind them to complete the survey, including providing the option to complete by paper. A reply-paid envelope was also left, just in case the respondent preferred to complete by paper.

**Table 10.1: Data collection methodologies and fieldwork timing, 1998–2016**

| Year | Data collection methodology  | Total completed questionnaires | Fieldwork conducted     |
|------|--|--------------------------------|-------------------------|
| 1998 | Personal interviews (40%)<br>Drop and collect (60%)                      | 10,030                         | June–September 1998     |
| 2001 | Personal interviews (8%)<br>Drop and collect (85%)<br>CATI (8%)          | 26,744                         | June/July–November 2001 |
| 2004 | Drop and collect (82%)<br>CATI (18%)                                     | 29,445                         | June/July–November 2004 |
| 2007 | Drop and collect (85%)<br>CATI (15%)                                     | 23,356                         | June/July–November 2007 |
| 2010 | Drop and collect (100%)  | 26,648                         | April–September 2010    |
| 2013 | Drop and collect (100%)  | 23,855                         | July–December 2013      |
| 2016 | Drop and collect, paper form (78%)<br>Online survey (22%)<br>CATI (0.3%) | 23,722                         | June–November 2016      |

Note: percentages are rounded and may not add up to 100%



## Mode effects

Selected individuals could choose to complete the survey via a paper form, an online form or via a telephone interview.

It is possible that the tool (also known as the 'mode') that is used by a respondent could have an impact on the actual information given, introducing a bias in the data and affecting comparability of data obtained via the different methods.

In 2016, respondents who elected to use the online form had different demographic characteristics (such as age and level of education) to respondents who used the paper form (see Table 10.4).

The demographic characteristics of respondents affect their choice of survey mode—completing a paper survey or an online survey, and are also known to affect the likelihood of reporting drug use. Therefore, these demographic characteristics needed to be taken into account when assessing if there is a mode effect.

Regression analysis, which controls for the known demographics of respondents, was used to test whether there could be a mode effect between the three collection modes used in 2016. After adjusting for sociodemographic factors, significant differences in prevalence rates between the online and papers respondents were found in 4 out of the 9 variables studied.

The regression model suggests no significant difference between paper and online completion for drinking status; lifetime risk and single occasion risk status for alcohol consumption; and recent use of meth/amphetamines and tranquillisers.

Estimates for smoking, cocaine, pain-killers/opiates and cannabis may have been impacted by a difference in the mode effect of paper and online forms (online respondents were less likely to be a daily smoker, or use cocaine, pain-killers/opiates or marijuana in the previous 12 months than paper respondents).

This should be taken into account when comparing 2016 estimates with previous survey results.

## Weighting

The sample was designed to give a random sample of households within each geographic stratum. Respondents within each stratum were assigned weights to overcome imbalances arising in the design and execution of the sampling. The main weighting took into account geographical stratification, household size, age and sex.

The population estimates used for the weighting were based on the latest available age-sex profile using the latest published ABS ERP data (Cat. no. 3101.0—Australian Demographic Statistics, June 2016). The 3101.0 series gave the necessary level of age breakdown by state/territory but not by stratum. The stratum level population estimates were projected from the ABS Population by Age and Sex, Regions of Australia series (Cat no. 3235.0—Population by Age and Sex, Regions of Australia, 2015).

All estimates in the report are based on the weighted sample. Table 10.2 gives a comparison of the age and sex profile of both the sample and the ERP.



**Table 10.2: Comparison of the 2016 unweighted sample and estimated population distributions (per cent)**

| Age group          | Unweighted 2016 sample |             |              | Population estimates <sup>(a)</sup><br>(weighted 2016 sample) |             |              |
|--------------------|------------------------|-------------|--------------|---|-------------|--------------|
|                    | Males                  | Females     | Total        | Males   | Females     | Total        |
| 12–17              | 2.5                    | 2.3         | 4.8          | 4.3   | 4.1         | 8.4          |
| 18–24              | 3.3                    | 3.6         | 6.9          | 5.8   | 5.5         | 11.2         |
| 25–29              | 2.6                    | 3.8         | 6.4          | 4.4   | 4.3         | 8.7          |
| 30–39              | 7.1                    | 9.1         | 16.1         | 8.3   | 8.3         | 16.6         |
| 40–49              | 6.9                    | 8.8         | 15.7         | 7.8   | 8.0         | 15.8         |
| 50–59              | 7.0                    | 8.7         | 15.7         | 7.3   | 7.5         | 14.8         |
| 60–69              | 8.6                    | 9.3         | 17.9         | 6.0   | 6.2         | 12.2         |
| 70–79              | 5.4                    | 6.0         | 11.4         | 3.7   | 3.9         | 7.6          |
| 80+                | 2.3                    | 2.8         | 5.1          | 1.9   | 2.7         | 4.6          |
| <b>Total (12+)</b> | <b>45.6</b>            | <b>54.4</b> | <b>100.0</b> | <b>49.4</b>   | <b>50.6</b> | <b>100.0</b> |

(a) The population estimates used for the weighting were based on a customised report of estimated resident population specially requested from the ABS to give population data at the SA1 level. The latest reference period for which the ABS was able to provide for this level of detailed data was 30 June 2016.

## Response rates

Overall, contact was made with 46,487 in-scope households, from which 23,772 questionnaires were categorised as being complete and usable (Table 10.3). This represented a response rate for the 2016 Survey of 51.1%, which was higher than the response rates for 2013 and 2010 Surveys (49.1% and 50.6%, respectively).

There are several ways to calculate a response rate, depending on how partial interviews are considered and how cases of unknown eligibility are handled (AAPOR 2008). The response rate for the NDSHS was calculated using the total number of dwellings where contact was made as the number of eligible reporting units in the sample. If the entire eligible sample for the 2016 NDSHS is used—that is, it includes all cases of non-contact as part of the denominator (68,521 dwellings)—the response rate is reduced to 34.7%, meaning that about two-thirds of the sample did not receive a questionnaire or return a completed, usable questionnaire.



**Table 10.3: Sample disposition and participation rates, by sample, 2010–2016**

| Disposition  | 2010          | 2013          | 2016          |
|--|---------------|---------------|---------------|
|  | Number        |               |               |
| Original sample  | 81,708        | 75,992        | 70,935        |
| Less out-of-scope households   |               |               |               |
| Not residential  | 1,786         | 1,506         | 1,080         |
| Selected respondent not available  | 604           | 789           | 784           |
| Other ineligible   | 175           | 711           | 550           |
| <b>Total out-of-scope households</b>                                     | <b>2,565</b>  | <b>3,006</b>  | <b>2,414</b>  |
| Eligible sample  | 79,143        | 72,986        | 68,521        |
| Less households not contacted  | 26,453        | 24,407        | 22,034        |
| <b>Eligible sample contacted</b>   | <b>52,690</b> | <b>48,579</b> | <b>46,487</b> |
| Less eligible respondents contacted but not willing or able to take part |               |               |               |
| Refusals   | 13,450        | 13,945        | 12,955        |
| Foreign/no English   | 979           | 1,063         | 760           |
| Incapacitated  | 370           | 341           | 237           |
| Other non-response   | 325           | 258           | 797           |
| <i>Total eligible respondents who did not complete</i>                   | <i>15,124</i> | <i>15,607</i> | <i>14,749</i> |
| Less questionnaires not returned/unusable                                | 10,918        | 9,117         | 7,966         |
| <b>Total completes</b>   | <b>26,648</b> | <b>23,855</b> | <b>23,772</b> |
|  | Per cent      |               |               |
| <b>Response rate</b>   | <b>50.6</b>   | <b>49.1</b>   | <b>51.1</b>   |

## Non-response bias and non-sampling error

Survey estimates are subject to non-sampling errors that can arise from errors in reporting of responses (for example, failure of respondents' memories, incorrect completion of the survey form), the unwillingness of respondents to reveal their true responses and higher levels of non-response from certain subgroups of the population.

The estimation methods used take into account non-response and adjust for any under-representation of population subgroups in an effort to reduce non-response bias.



A limitation of the survey is that the data are self-reported and people may not accurately report information relating to illicit drug use and related behaviours because these activities may be illegal. This means that results relating to illicit drugs may be under-reported. However, any biases are likely to be relatively consistent at the population level over time so would not be expected to have much effect on trend analysis. Legislation protecting people's privacy and the use of consistent methodology over time means that the impact of this issue on prevalence is limited.

However, some behaviours may become less socially acceptable over time, which may lead to an increase in socially desirable responses rather than accurate responses. Increases in media reporting stigmatising a drug may increase the tendency to under-report use (Chalmers et al. 2014). Any potential increase in self-reported, socially desirable behaviour/s needs to be considered when interpreting survey results over time.

## **Sampling error**

All proportions that are calculated from survey data are estimates rather than true population proportions. This means they have a MoE due to only a sample of the population being surveyed. This is called sampling error.

There are different ways of measuring sampling error associated with an estimate from a sample survey. The 2016 NDSHS uses both RSE and MoE; these are included in the supplementary tables.

### **Relative standard error**

The standard error (SE) is a measure of the dispersion of estimates calculated from all possible random samples from the same population. This can be estimated using the achieved single sample. The relative standard error (RSE) is the SE expressed as a percentage of the estimate, and gives an indication of the size of the SE relative to the size of the estimate.

Results subject to an RSE of between 25% and 50% should be considered with caution and those with an RSE greater than 50% should be considered unreliable for most practical purposes. Estimates that have an RSE of between 25% and 50% are marked in the supplementary table with \*; those with an RSE greater than 50% but less than 90% are marked with \*\* and those with an RSE greater than 90% have not been published. Only estimates with an RSE of less than 25% are considered sufficiently reliable for most purposes.

### **Margin of error**

Margin of error (MoE) describes the distance from the population value that the sample estimate is likely to be within, at the 95% level of confidence. This means that the 'true' proportion for the entire population would be within the MoE around the reported estimate 95% of the time.



## Significance testing

When comparing two different estimates, it is important to determine whether the difference is likely to reflect a true difference in the underlying population or whether it may be due to sampling error. This process is called 'significance testing'. There are a number of variables that are used to calculate whether two estimates are significantly different—the size of the difference, the variability in the sample collected, which indicates the level of sampling error present, and the size of the sample. In this report, a difference is deemed to be statistically significant if the chance of seeing the observed difference due to sampling error alone was less than 5% ( $p < 0.05$ ).

All time-series tables have been tested for statistically significant changes between 2013 and 2016 but not for other comparisons (such as between sex or age). All increases or decreases described in the key findings are statistically significant at the 95% level of confidence (unless otherwise specified). If a difference is statistically significant, it has been marked with a '#' symbol in this report and in the supplementary tables.

Sometimes, even large apparent differences may not be statistically significant. This is particularly the case in breakdowns of small populations because the small sample size means that sampling error is likely to have a larger effect on the estimates. Conversely, with a sufficiently large sample, small changes are more likely to be statistically significant.

## Sample representativeness

No sample will ever be fully representative of the population, but if carefully designed and implemented, samples will be highly representative for drawing conclusions about characteristics of the population. To assist in understanding the level of representativeness, known population benchmarks for selected demographic characteristics may be used to assess the representativeness of the sample. Tables 10.5 and 10.6 show the weighted and unweighted estimates of respondents obtained from the survey and compare these with the 2011 Census. A comparison between the 2011 Census and the NDSHS sample indicates that:

- a lower proportion of employed people and a higher proportion of unemployed people were captured in the sample
- completion of Year 12 and postgraduate qualifications were over-represented
- couple families were over-represented, while single-person households were underrepresented
- people who did not speak English as their main language at home were underrepresented
- very high socioeconomic tenths were slightly over-represented.



## Comparison to 2013 sample

In comparison to the 2013 sample:

- the IRSAD had a better balance in 2016 and was more representative of the people in the lowest fifth
- a lower proportion of employed people responded to the 2016 survey and a higher proportion of unemployed people responded
- a higher proportion of people who had never been married and a lower proportion of married people responded to the 2016 survey
- a higher proportion of single-person households and one-parent families completed the survey and a lower proportion of couple families completed the survey in 2016.

## New strategies employed in 2016

Several strategies were used to minimise cases of non-contact and non-response by the originally selected respondent, including:

- interviewers conducting call backs at different times on different days
- providing respondents with a letter of introduction and support from the Director of the AIHW
- giving respondents a colour brochure, which outlines information about the survey and frequently asked questions
- leaving calling cards where appropriate
- operating 2 '1800' numbers to answer queries: 1 to the AIHW for questions about the confidentiality of the survey, and 1 to Roy Morgan Research for operational queries
- translating a letter of introduction and frequently asked questions into 5 languages (Italian, Greek, traditional Chinese, Vietnamese and Arabic).

Several new strategies were employed in 2016, including:

- offering respondents a choice of completion modes (paper, online and telephone)
- interviewers showing media articles detailing actions and policies undertaken as a result past NDSHS waves to potential respondents
- interviewers showing to potential respondents the AIHW confidentiality agreement signed by all project staff (including interviewers) and the Roy Morgan Research Privacy Policy in an effort to allay fears in relation to privacy and confidentiality
- sending emails and SMS reminders to those completing online, making up to 3 contact phone calls to those completing by telephone and making up to 3 pick-up visits to collect paper questionnaires (as well as making a final visit to online and telephone completers where necessary)
- providing respondents with a black ballpoint pen; this was to help minimise scanning errors on paper questionnaires (which need to be completed in a black ballpoint pen) but also may have acted as small incentive to complete.



# Questionnaire

The 2016 questionnaire was modelled on the 2013 version, to maintain maximum comparability. However, some refinements were made to ensure the questions remained relevant and useful. The major additions to the questionnaire were:

## Demographics

- inclusion of 'Other (please write in)' in the sex question (DEMOG1)

## Section A (Perceptions)

- changed the response option in questions A1, A2, A3 and A4 from 'Pain-killers/Analgesics/Opioids' to 'Pain-killers/pain-relievers and opioids', and removed 'Non-medical use of Other Opioids/Opiates (for example, Morphine, Pethidine)'.

## Section D (Tobacco)

- removed 'Battery operated electronic cigarettes (e-cigarettes)' from D26. There was enough policy interest in electronic cigarettes to warrant separate questions about their use
- added several new questions on electronic cigarettes, including frequency of use (D27), age first used (D28), reasons for using (D29) and where they were obtained (D30)
- added the words 'in Australia' to the question that asks if people have seen tobacco products which do not have the plain packaging/graphic health warnings (D31). Also added a time period to the question on how many packets of these tobacco products were purchased (D32)
- included a new question (D33) on the kind of outlet respondents purchased product that did not have the plain packaging with the graphic health warnings.

## Section F (Pain-killers, pain-relievers and opioids)

- combined pain-killers/analgesic section and the other opiates section into the 1 section and reworded the section and questions to Pain-killers/Pain-relievers and Opioids
- removed paracetamol and aspirin from the list of examples and specifically excluded them from the description of pain-killers, pain-relievers and opioids. The examples were updated in the description and only include opioid analgesics
- moved F11 to after question F4 (renumbered as F4B) and updated response options.

## Section K (Meth/amphetamine)

- introduced new question on all forms of meth/amphetamine used in the last 12 months (K11B)
- changed response code from 'Powder' to 'Powder/speed' for questions K11A/B/C.

## Section Q (Ecstasy)

- introduced into the survey questions on the forms of ecstasy used (Q10A—Ever used, and Q10B—Main form used).



## **Section TT (Other psychoactive substances)**

- updated section heading from 'Emerging drugs' to 'Other psychoactive substances'. Updated question wording to refer to 'Other psychoactive substances' and also updated examples.

## **Section Y (Harms)**

- introduced 2 new questions about injuries or illnesses sustained while under the influence of alcohol or illicit drugs (Y19A and Y19B).

## **Section YY (Policy support)**

- added 3 new policy measures about electronic cigarettes use to the tobacco policy support question (YY2)
- included new policy measure about take-home naloxone in the injecting drug policy support question (YY3).

Refer to the supplementary table footnotes for selected questionnaire change caveats and other data quality issues.

The 2016 NDSHS technical report contains a complete list of questionnaire changes. A copy of the technical report is available on request.

Not all respondents were asked all questions; the questionnaire <<https://www.aihw.gov.au/reports/illicit-use-of-drugs/ndshs-2016-detailed/related-material>> gives a full description. People aged 12–15 completed the survey with the consent of the adult responsible for them at the time of the survey.

A separate, shorter questionnaire was administered to teenagers aged 12–13 to minimise respondent burden. Those questions that were not asked of respondents aged 12–13 are indicated by the following image:

**NOT ASKED  
12–13**



## Terminology

### Unbranded and illicit branded tobacco

Illicit tobacco includes both unbranded tobacco and branded tobacco products on which no excise, customs duty or GST was paid. Unbranded tobacco (commonly known as chop-chop) is finely cut, unprocessed loose tobacco that has been grown, distributed and sold without government intervention or taxation (ANAO 2002).

Illicit branded tobacco products include overseas-produced cigarettes (or packets of smoking tobacco) designed to comply with packaging laws in countries other than Australia but which make their way into Australia, without payment of customs duty, for sale to consumers in Australia.

### Alcohol risk

The alcohol risk data presented in the snapshots are reported against guidelines 1 and 2 of *The Australian guidelines to reduce health risks from drinking alcohol* released in March 2009 by National Health and Medical Research Council (NHMRC) (see Box for 10.1 for further details).

#### **Box 10.1: The Australian guidelines to reduce health risks from drinking alcohol**

In summary, there are 4 guidelines:

- Guideline 1—reducing the risk of alcohol-related harm over a lifetime. For healthy men and women, drinking no more than 2 standard drinks on any day reduces the lifetime risk of harm from alcohol-related disease or injury.
- Guideline 2—reducing the risk of injury on a single occasion of drinking. For healthy men and women, drinking no more than 4 standard drinks on a single occasion reduces the risk of alcohol-related injury arising from that occasion.
- Guideline 3—children and young people aged under 18. For children and young people aged under 18, not drinking alcohol is the safest option, with those under 15 at greatest risk of harm.
- Guideline 4—pregnancy and breastfeeding. For women who are pregnant, planning a pregnancy or breastfeeding, not drinking is the safest option.



## Licit drugs—illicit use

In the 2016 survey, as in the past, respondents were asked about their use of certain drugs that have legitimate medical uses—pain-killers/analgesics, tranquillisers/sleeping pills, steroids, methadone/buprenorphine, other opioids such as morphine (termed ‘pharmaceuticals’) and meth/amphetamines. The focus of the survey and corresponding data is on the use of these drugs for non-medical purposes.

The term ‘illicit drugs’ in this report includes the following: illegal drugs (such as cannabis), pharmaceutical drugs (such as pain-killers, tranquillisers) when used for non-medical purposes (strictly an illicit behaviour), and other substances used inappropriately such as inhalants (see Box 10.2 for further details). Where each of these licit/illicit drugs is central to the analysis, it is their illicit use that is analysed.

### **Box 10.2: Definition of illicit use of drugs**

‘Illicit use of a drug’ can encompass a number of broad categories including:

- illegal drugs—a drug that is prohibited from manufacture, sale or possession in Australia—for example, cannabis, cocaine, heroin and amphetamine-type stimulants
- pharmaceuticals—a drug that is available from a pharmacy, over the counter or by prescription, which may be subject to misuse—for example, opioid-based pain-relief medications, opioid substitution therapies, benzodiazepines, OTC codeine and steroids
- other psychoactive substances—legal or illegal, potentially used in a harmful way—for example, kava; synthetic cannabis and other synthetic drugs; or inhalants such as petrol, paint or glue (MCDS 2011).

## Emerging psychoactive substances

Emerging psychoactive substances (EPS), or new psychoactive substances, include substances not controlled by the 1961 Convention on Narcotic Drugs or the 1971 Convention of Psychotropic Substances, or substances that are relatively new to the recreational drug market and have mind-altering effects. EPS often mimic the effects of existing illicit psychoactive drugs such as cannabis, ecstasy (MDMA) and LSD, or have a chemical structure very similar to existing illicit substances. Other names given to this group of drugs include: research chemicals, analogues, legal highs, herbal highs, bath salts, novel psychoactive substances and synthetic drugs (NDARC 2016).



## Presentation of estimates

Proportions are shown as percentages rounded to 1 decimal place when less than 20%, and rounded to a whole number when 20% or over. All data presented in the body of the report are raw proportions and have not been age-standardised (unless indicated).

### Population estimates

Population estimates are calculated by applying survey prevalence rates to the relevant population count and were based on the June 2016 ABS ERP (see Table 10.8). Population estimates are shown to the nearest 100,000 or 10,000 in text, depending on the size of the estimate.

### Age-standardisation

The age profile of Australians varies across jurisdictions; other geographic classifications, such as remoteness areas; periods of time; and/or population subgroups (for example, between Indigenous and non-Indigenous populations). Age-standardisation is a process that accounts for the differences in the age compositions of 2 or more populations, to allow comparisons between these populations independent of their age structure.

Age-standardisation is important in this publication, as drug-related behaviours can be age related. Age-standardisation accounts for this by allowing comparisons between groups independent of their differing age profiles. A standard age composition is used, against which subpopulations are standardised; in this case, the age composition of the 30 June 2001 Australian ERP.

Age-standardisation was applied to state and territory data and some social characteristics data. These are presented as age-standardised percentages in Chapter 7 'State and territory comparisons' and Chapter 8 'Specific population groups'. Age-standardisation was not applied to data presented in the body of the report. Age-standardisation was undertaken using the direct method.

### Access to the confidentialised unit record (CURF)

A public-use CURF will be available to researchers through the Australian Data Archive (ADA) at the Australian National University, from October 2017 <<https://www.ada.edu.au/social-science/ndshs>>.

Some transformations will be made to the public-use CURF to protect respondent confidentiality. For a full list of transformations, please check the CURF supplementary material on the ADA website from October 2017.

Application for research access to the master dataset, which contains all of the data items, or selected variables of interest not included in the CURF may be approved subject to the agreement of the AIHW's Ethics Committee. Contact the Tobacco, Alcohol and Other Drugs unit by email at [aod@aihw.gov.au](mailto:aod@aihw.gov.au) for additional information.

# APPENDIX: MEMBERSHIP OF THE TECHNICAL ADVISORY GROUP

| Name                         | Organisation   |
|------------------------------|--|
| Matthew James (Chair)        | AIHW   |
| Moira Hewitt                 | AIHW   |
| Cathy Claydon                | AIHW   |
| Karen Webber                 | AIHW   |
| Josh Sweeney                 | AIHW   |
| Laura Platt                  | Australian Bureau of Statistics (ABS)  |
| Tom Sullivan                 | Australian Institute of Criminology (AIC)  |
| Professor Toni Makkai        | Australian National University   |
| Professor Paul Dietze        | Alcohol and Other Drug Research, Burnet Institute  |
| Professor Melanie Wakefield  | Cancer Council of Victoria   |
| Chris Killick-Moran          | Department of Health   |
| Jenny Trudinger              | Department of Health   |
| Debra Reid                   | Deputy Chair of the National Advisory Group on Aboriginal and Torres Strait Islander Health Information and Data |
| Professor Alison Ritter      | Drug Policy Modelling Program (DPMP), National Drug and Alcohol Research Centre (NDARC)                          |
| Associate Professor Ken Pidd | National Centre for Education and Training on Addiction (NCETA)  |
| Professor Louisa Degenhardt  | National Drug and Alcohol Research Centre (NDARC)  |
| Professor Tanya Chikritzhs   | National Drug Research Institute (NDRI)  |



## Glossary

**Aboriginal or Torres Strait Islander:** a person of Aboriginal and/or Torres Strait Islander descent who identifies as an Aboriginal and/or Torres Strait Islander

**abstainer (alcohol):** has not consumed a full serve of alcohol in the previous 12 months

**Australian Statistical Geography Standard (ASGS) Remoteness Area:** The ABS ASGS Remoteness Area classification allocates 1 of 5 remoteness categories to areas, depending on their distance from a range of 5 types of population centre. These classifications reflect the level of remoteness at the time of the 2011 Census. Areas are classified as *Major cities, Inner regional, Outer regional, Remote* and *Very remote*. For the NDSHS analysis, *Remote* and *very remote* were grouped together.

**branded illicit tobacco:** tobacco products that are smuggled into Australia without payment of the applicable customs duty

**concurrent (12-month) drug use:** use of 2 or more substances during the past 12 months

**current smoker:** reported smoking daily, weekly or less than weekly at the time of the survey

**electronic cigarette (e-cigarette):** devices designed to produce a vapour that the user inhales. Usually contain a battery, a liquid cartridge and a vaporisation system and are used in a manner that simulates smoking

**ever use:** used at least once in lifetime

**ex-drinker:** a person who has consumed a full serve of alcohol in his or her lifetime, but not in the previous 12 months

**ex-smoker:** a person who has smoked at least 100 cigarettes or equivalent tobacco in his or her lifetime, but does not smoke at all now

**ex-user:** a person who has used a substance in his or her lifetime, but not in the previous 12 months

**hospital separation:** The term used to refer to the episode of care, which can be a total hospital stay (from admission to discharge, transfer or death), or a portion of a hospital stay beginning or ending in a change of type of care (for example, from acute to rehabilitation)

**illicit drugs:** illegal drugs, drugs and volatile substances used illicitly, and pharmaceuticals used for non-medical purposes. The survey included questions on the following illicit drugs:

- pain-killers/analgesics/opioids^
- tranquillisers/sleeping pills^
- steroids^
- meth/amphetamines^
- cannabis



- heroin
- methadone or buprenorphine<sup>^^</sup>
- cocaine
- hallucinogens
- ecstasy
- ketamine
- GHB
- synthetic cannabinoids
- other EPS
- inhalants
- (any) injected drug.

*Note*

<sup>^</sup> used for non-medical purposes

<sup>^^</sup> non-maintenance program

*Non-medical and non-maintenance use is noted in the report.*

**injected drugs:** the injection of drugs that were not medically prescribed to inject

**Kessler Psychological Distress Scale (K10):** a survey device that is used to measure for screening populations on psychological distress. The scale consists of 10 questions on non-specific psychological distress, and relates to the level of anxiety and depressive symptoms a person may have felt in the preceding 4-week period. It is only used for people aged 18 or older.

**lifetime risk (alcohol):** the accumulated risk from drinking either on many drinking occasions, or regularly (for example, daily) over a lifetime. The lifetime risk of harm from alcohol-related disease or injury increases with the amount consumed.

**never drinker:** a person who has never consumed a full serve of alcohol in their lifetime

**never smoker:** a person who does not smoke now and has smoked fewer than 100 cigarettes or the equivalent tobacco in his or her lifetime

**non-maintenance:** use of a substance other than as part of a medically supervised maintenance program. In this report, this includes methadone.

**non-medical use:** use of drugs either alone or with other drugs to induce or enhance a drug experience, for performance enhancement or for cosmetic purposes. In this report, this includes pain-killers/analgesics, tranquillisers/sleeping pills, steroids and meth/amphetamines and other opioids such as morphine or pethidine.



**non-smoker:** never smoked or an ex-smoker

**over-the-counter (OTC) drugs:** medicine that you can buy without a prescription from a pharmacy or retail outlet

**recent:** in the previous 12 months

**roll-your-own tobacco/cigarettes:** cigarettes made from loose tobacco and rolling paper

**single occasion risk (alcohol):** a single occasion is defined as a sequence of drinks taken without the blood alcohol concentration reaching zero in between. The risk of an alcohol-related injury arising from a single occasion of drinking increases with the amount consumed.

**smoker:** a person who reported currently smoking daily, weekly or less often than weekly

**socioeconomic status and the Index of Relative Socio-Economic Advantage and Disadvantage:**

The Index of Relative Socio-Economic Advantage and Disadvantage (IRSAD) is 1 of 4 Socio-Economic Indexes for Areas (SEIFA) compiled by the ABS after each Census of Population and Housing. The IRSAD compiled by the ABS was used to derive fifths. In this report, the 20% of the areas with the greatest overall level of disadvantage is described as the 'lowest socioeconomic area'. The 20% of the areas with the greatest overall level of advantaged—the top fifth—is described as the 'highest socioeconomic area'.

**standard drink:** containing 10 grams of alcohol (equivalent to 12.5 millilitres of alcohol); also referred to as a full serve

**unbranded tobacco:** finely cut, unprocessed loose tobacco that has been grown, distributed and sold without government intervention or taxation



## References

- AAPOR (American Association for Public Opinion Research) 2008. Standard definitions: final dispositions of case codes and outcome rates for surveys. 7th edition. AAPOR.
- ABS (Australian Bureau of Statistics) 2014. 2011 Census of population and housing, table builder. Canberra: ABS. Viewed 22 October 2014, <<http://www.abs.gov.au/websitedbs/censushome.nsf/home/tablebuilder?opendocument&navpos=240>>.
- ACT Department of Health 2017. Electronic cigarettes. Viewed 30 May 2017, <<http://www.health.act.gov.au/public-information/public-health/tobacco-and-smoke-free/electronic-cigarettes>>.
- ADF (Australian Drug Foundation) 2013. Drugs: the facts. Viewed 13 June 2014, <<http://www.druginfo.adf.org.au/drug-facts/drugs-the-facts#sthash.dtBnskPY.dpuf>>.
- AHMAC (Australian Health Ministers' Advisory Council) 2017. Aboriginal and Torres Strait Islander health performance framework 2017 Report. Canberra: AHMAC.
- AIHW (Australian Institute of Health and Welfare) 2010. Australia's health 2010. Australia's health series no. 12. Cat. no. AUS 122. Canberra: AIHW.
- AIHW 2012. Australia's health 2012. Australia's health series no. 13. Cat. no. AUS 156. Canberra: AIHW.
- AIHW 2016. Australian burden of disease study: impact and causes of illness and death in Australia 2011. Australian Burden of Disease Study series no. 3. Cat. no. BOD 4. Canberra: AIHW.
- ANAO (Australian National Audit Office) 2002. Administration of tobacco excise. Audit report No. 55, 2001–02 Performance Audit. Canberra: ANAO, Commonwealth of Australia. Viewed 2 April 2014, <[http://www.anao.gov.au/uploads/documents/2001-02\\_Audit\\_Report\\_55.pdf](http://www.anao.gov.au/uploads/documents/2001-02_Audit_Report_55.pdf)>.
- Chalmers J, Lancaster K & Hughes C 2014. The stigmatisation of 'ice' and under-reporting of meth/amphetamine use in general population surveys: a case study from Australia. International Journal of Drug Policy. Vol 36, pp.15–24.
- DoH (Department of Health) 2017. The National Drug Strategy 2017–2026. Canberra: Commonwealth of Australia.
- DoHA (Department of Health and Ageing) 2013. National drugs campaign. Viewed 3 June 2014, <<http://www.drugs.health.gov.au/internet/drugs/publishing.nsf/content/ice2>>.
- IHME (Institute for Health Metrics and Evaluation) 2016. Data visualizations. Seattle: IHME. Viewed 16 May 2017, <<http://www.healthmetricsandevaluation.org/tools/data-visualizations>>.
- Loxley W, Toumbourou J, Stockwell TR, Haines B, Scott K, Godfrey C et al. 2004. The prevention of substance use, risk and harm in Australia: a review of the evidence. Canberra: The National Drug Research Institute and the Centre for Adolescent Health.



MCDS (Ministerial Council on Drug Strategy) 2011. The national drug strategy 2010–2015. Canberra: Commonwealth of Australia.

NDARC (National Drug and Alcohol Research Centre) 2016. New (and emerging) psychoactive substances (NPS) factsheet. Viewed 26 June 2017, <<https://ndarc.med.unsw.edu.au/sites/default/files/ndarc/resources/NDA073%20New%20Psychoactive%20Substances%20%28NPS%29.pdf>>.

NHMRC (National Health and Medical Research Council) 2009. Australian guidelines to reduce health risks from drinking alcohol. Canberra: NHMRC.

Ritter A, McLeod R & Shanahan M 2013. Monograph no. 24: government drug policy expenditure in Australia—2009/10. DPMP Monograph Series. Sydney: National Drug and Alcohol Research Centre, University of New South Wales.

Roxburgh A, Ritter A, Slade T & Burns L 2013. Trends in drug use and related harms in Australia, 2001 to 2013. Sydney: National Drug and Alcohol Research Centre, University of New South Wales.

TGA (Therapeutic Goods Administration) 2016. Codeine containing medicines to move to prescription only: update on the proposal for the rescheduling of codeine products. Canberra: Department of Health. Viewed 2 August 2017, <<https://www.tga.gov.au/media-release/update-proposal-rescheduling-codeine-products>>.



## Related publications

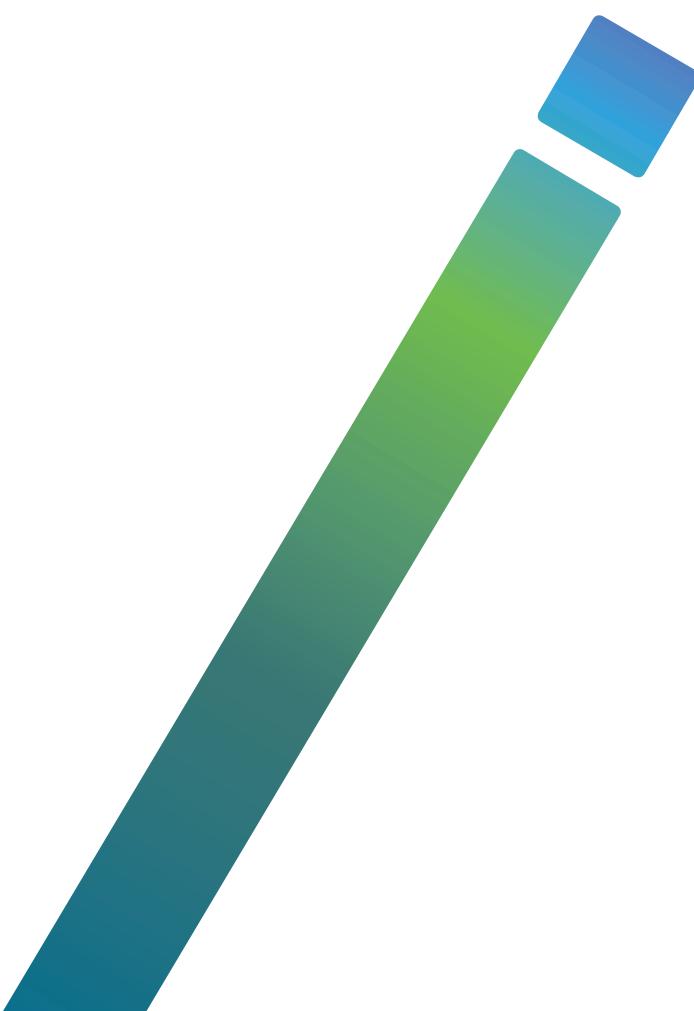
This report, *National Drug Strategy Household Survey 2016: detailed findings*, extends the analysis presented in the *National Drug Strategy Household Survey 2016: key findings* by providing more detailed information on drug use prevalence, drug-related behaviours and incidents, support for drug-related policy and legislation, and includes comparisons between states and territories and for population groups. The 2016 key findings can be downloaded for free from the AIHW website <<http://www.aihw.gov.au/alcohol-and-other-drugs/data-sources/ndshs-2016/key-findings/>>.

The 2016 survey was the 12th conducted under the auspices of the National Drug Strategy and 7th to be managed by the AIHW. The earlier editions of the report for 1998, 2001, 2004, 2007, 2010 and 2013 can also be downloaded for free from the AIHW website.



This 2016 National Drug Strategy Household Survey report shows that:

- the decline in daily smoking slowed in 2016 but improvements were seen among people living in the lowest socioeconomic area
- certain groups disproportionately experience drug-related risks and recent use of illicit drugs was particularly high for people who identified as homosexual or bisexual
- just under 4 in 10 Australians either smoked daily, drank alcohol in ways that put them at risk of harm or used an illicit drug in the previous 12 months.



[aihw.gov.au](http://aihw.gov.au)

**AIHW**

Stronger evidence,  
better decisions,  
improved health and welfare