



Alcohol and Other Drug Use: A Focus on Employed Australians

Part 1: Prevalence and Consequences

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JUNE 2023

Citation details

McEntee, A., Pointer, S., Pincombe, A., Nicholas, R. and Bowden, J. (2022). Alcohol and other drug use: A focus on employed Australians: Part 1: Prevalence and consequences. Adelaide, South Australia: National Centre for Education and Training on Addiction (NCETA), Flinders Health and Medical Research Institute (FHMRI), Flinders University.
ISBN: 978-1-876897-71-0

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The National Centre for Education and Training on Addiction (NCETA) is based at Flinders University in South Australia and is a collaboration between the University and the Australian Government Department of Health & Aged Care. It is an internationally recognised research and training centre that works as a catalyst for change in the alcohol and other drug (AOD) field. NCETA's areas of expertise include training needs analyses, the provision of training and other workforce development approaches. We have developed training curricula, programs and resources, and provided training programs, to cater for the needs of: specialist AOD workers; frontline health and welfare workers; workers in safety-critical industries; Indigenous workers; community groups; mental health workers; police officers; and employers and employee groups. NCETA focuses on supporting evidence-based change and specialises in change management processes, setting standards for the development of training curriculum content and delivery modes, building consensus models and making complex and disparate information readily accessible to workers and organisations. NCETA aims to advance the capacity of organisations and workers to respond to AOD related problems. Our core business is the promotion of workforce development (WFD) principles, research and evaluation of effective practices; investigating prevalence, and effect of AOD use in society; and the development and evaluation of prevention and intervention programs, policy and resources for workplaces and other organisations.

NCETA respectfully acknowledges the Kurna people as the Traditional Owners of the land and waters on which our Centre is located. We pay our respects to Kurna elders past, present and emerging.

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Acknowledgments

The National Centre for Education and Training on Addiction (NCETA) acknowledges the financial support for this publication provided by the Australian Government Department of Health & Aged Care. The authors would also like to thank the following for their assistance with various aspects of this project:

- Ms Victoria Kostadinov for her invaluable expertise in reviewing, editing and formatting the content.
- Professor Ann Roche and Dr Susan Kim for their contributions in the related manuscripts developed for submission to peer-reviewed journals.
- The Australian Institute of Health & Welfare (AIHW), the data custodians of the National Drug Strategy Household Survey (NDSHS), for access to the dataset via the Australian Data Archive.
- The Melbourne Institute of Applied Economic and Social Research, which manages the Household, Income and Labour Dynamics in Australia (HILDA) survey for access to the dataset.

Executive summary

Most Australians who use alcohol, tobacco and other (illicit) drugs (ATOD) are employed. Employee substance use (in general but also while at work) is associated with numerous negative consequences to the individual (e.g., physical and mental ill health) and the workplace (e.g., increased absenteeism, reduced performance). The workplace is an underutilised yet potentially effective site for ATOD prevention and intervention.

This report aims to provide updated patterns, prevalence and profiles of ATOD use among Australian workers using the National Drug Strategy Household Survey (NDSHS) and the Household, Income and Labour Dynamics in Australia (HILDA) datasets.

The general population

- Daily smoking prevalence and risky drinking among Australians declined significantly between 2010-2019. In 2019, the proportion of Australians smoking tobacco daily and using alcohol at high risk levels was 11% and 32% respectively.
- Prevalence of daily tobacco smoking and risky alcohol use were highest among Australians who had very high levels of psychological distress (25% and 37% respectively).
- Overall, 16% of Australians used an illicit drug in the past year in both 2016 and 2019.
- In 2019, 5.8% of Australians reported use of two illicit drugs in the past year.
- Between 2016 and 2019 the use of cannabis, cocaine, and ecstasy significantly increased, methamphetamine use stabilised, and the use of non-medical pharmaceuticals significantly decreased.
- Prevalence of illicit drug use was significantly higher among males (20% vs females: 13%), 20-29-year-olds (31% vs other age groups: 7-16%), and those with very high psychological distress (34% vs low-high: 12-27%).

Employed Australians

- In 2019, 58% of Australians aged 14+ years were employed. Three industries employed over one-third of Australian workers (health care and social assistance: 19%, education and training: 10%, professional, scientific and technical services: 9%). Among workers, 30% were skilled, 28% professionals, 15% unskilled, 14% trade workers and 12% managers.
- A lower proportion of employed Australians smoked daily among the 40-59-year-old group (13% vs 16%) and the very highly distressed group (21% vs 25%) compared to their Australian counterparts¹.

¹ Although statistical analyses cannot be undertaken between the employed and the total Australian population (as the groups are not mutually exclusive), differences were considered noteworthy when the employed group's confidence intervals did not include the Australian population's prevalence value.

- A higher proportion of employed Australians drank alcohol at risky² levels compared to their Australian counterparts, (38% vs 32%).
- Rates of risky drinking were significantly higher among employed Australians who were male (46% vs female: 28%), had a high SES (39% vs low: 36%) and had high or very high levels of psychological distress (47%, 48% respectively vs low-moderate: 35-41%).
- Illicit drug use prevalence was higher among employed Australians (19%) than among the total Australian population (16%).
- In 2019, the prevalence of cannabis, cocaine and ecstasy use was higher among employed Australians compared to the general population.
- Among employed Australians, 7.5% reported illicit polysubstance use.
- Daily tobacco, risky alcohol use, and cocaine use were higher among full-time than part-time workers.
- Workers who were not a union/professional member generally had higher prevalence of daily tobacco, risky alcohol and illicit drug use (cannabis, cocaine, ecstasy and methamphetamine).

Industry and occupation groups

- Illicit polysubstance use ranged from 2.2%*-13% across the industry groups and 6.3%-9.9% across the occupation groups.

The following table depicts industry and occupation groups whose ATOD prevalence was above, below or equivalent to the employed national average in 2019.

Industry	Daily tobacco	Risky alcohol	Any illicit
Industry			
Construction	↑	↑	↑
Accommodation and Food Services	↑	=	↑
Arts and Recreation Services	↓	↑	↑
Administrative and Support Services	↑	=	=
Electricity, Gas, Water and Waste Services	=*	↑	=*
Manufacturing	=	↑	=
Other Services	↑	=	=
Transport, Postal and Warehousing	↑	=	=
Agriculture, Forestry and Fishing	=	↑	↓*
Rental, Hiring and Real Estate Services	=	=	=
Retail Trade	=	=	=
Mining	=*	=	=
Wholesale Trade	=*	=	=
Financial and Insurance Services	↓*	=	=
Information Media and Telecommunications	↓*	=	=
Professional, Scientific and Technical Services	↓	=	=
Public Administration and Safety	=	=	↓
Education and Training	↓	↓	↓
Health Care and Social Assistance	↓	↓	↓
Occupation			
Trade	↑	↑	↑
Unskilled	↑	=	=
Manager	↓	↑	=
Skilled	=	↓	=
Professional	↓	↓	=

Source: National Drug Strategy Household Survey, 2019.

* Indicates the estimate has a relative standard error of 25% to 50% and should be used with caution.

- ↑ The confidence interval range for the industry group is higher than the national average
- = The confidence interval range for the industry group includes the national average
- ↓ The confidence interval range for the industry group is lower than the national average.

² Risky drinking: more than 10 standard drinks a week and/or more than 4 standard drinks on any one day.

* Indicates the estimate has a relative standard error of 25% to 50% and should be used with caution.

Consequences of use

Absenteeism costs

Workers who consumed alcohol cost workplaces an estimated \$3.9 billion in alcohol-related absenteeism. Male workers accounted for 52% of this cost (\$2.0 billion), 20-29-year-old workers 26% (\$1.0 billion), metropolitan-based workers 75% (\$3.0 billion) and workers with high socio-economic status (SES) 67% (\$2.6 billion).

Illicit drug-related absenteeism cost workplaces at least \$2.9 billion annually. Of this cost, metropolitan workers accounted for 80% (\$2.4 billion), male workers 60% (\$1.8 billion), and 20-29-year-old workers 42% (\$1.3 billion).

Drug-related harms among workers

Among Australian workers overall, 21% and 9.1% experienced verbal abuse by someone under the influence of alcohol or illicit drugs, respectively. Further, 13% were put in fear by someone under the influence of alcohol, and 7.7% were put in fear by someone under the influence of illicit drugs. Public administration and safety workers experienced the highest prevalence of verbal abuse by someone under the influence of alcohol (29%) and illicit drugs (18%). Information media and telecommunications (29%); and accommodation and food services workers (29%) had a similarly high prevalence of having experienced verbal abuse by someone under the influence of alcohol.

At least a fifth to a quarter (21%-28%) of the abuse that workers experienced which was perpetrated by a person under the influence of drugs occurred in the workplace. Fewer workers experiencing abuse by someone under the influence of alcohol reported it having occurred in the workplace (12%-15%).

Few workers reported that they usually used their illicit substance(s) at their workplace whilst 4.3% reported usually using alcohol at their workplace.



Discussion

Between 2010 and 2019, the prevalence of daily smoking and risky drinking among Australians declined markedly. Employed Australians were equally likely to smoke daily but more likely to drink alcohol at risky levels and use illicit drugs compared to the broader Australian community.

There are several industry and occupation groups identified as having ATOD use prevalence above the national average that can be targeted for smoking, risky drinking and illicit drug use interventions.

Alcohol and other drug related absenteeism remains a major cost to the Australian economy. Alcohol-related absenteeism was foremost in this regard (\$3.9 billion). Illicit drug-related absenteeism cost \$2.9 billion.

Further research is required to explore polysubstance use in relation to concurrent use of alcohol, tobacco and illicit substances.

Construction industry employees consistently reported licit and illicit drug use prevalence above the employed national average, whilst trade workers did so for both licit drugs, illicit drugs overall, and each individual drug except for ecstasy and pharmaceuticals. Conversely, the health care and social assistance industry, the education and training industry, and the professional occupation group predominately reported ATOD use below the employed national average.

Both the construction industry and trade occupation groups urgently require targeted interventions to reduce ATOD use and its associated harms. An exploration of the differences between groups with high and low prevalence may help inform the development of more tailored intervention approaches.

Introduction

A note on terminology

This report uses two acronyms to refer to substance use. **AOD** refers to the use of alcohol and other drugs whilst **ATOD** refers to the use of alcohol, tobacco and other drugs. In both instances, other drugs (OD) include those which are illegal to use in Australia such as cocaine, methamphetamine, and the non-medical use of cannabis and pharmaceuticals.

When referring to the use of alcohol, three categories are considered in relation to their compliance with the 2020 Alcohol guidelines:

Abstainer: never consumed or did not consume alcohol in the past year

Low risk alcohol use: no more than 10 standard drinks a week and no more than 4 standard drinks on any one day.

Risky or high-risk alcohol use: more than 10 standard drinks a week and more than 4 standard drinks on any one day.

Australia has largely overlooked the potential for the workplace to implement cost effective strategies to prevent and ameliorate risky alcohol, daily tobacco and illicit drug use among workers. Scope exists to redress this oversight.

Most people who drink alcohol, smoke tobacco, and use illicit drugs are employed (1). High rates of AOD use are apparent among Australian workers, with almost one third consuming alcohol at risky levels and 16% using illicit drugs (1) whilst prevalence of daily tobacco use is similar to the national average. Employee AOD use is associated with numerous negative consequences for both individuals and organisations (2-5), including excess absenteeism which is an area of growing social and economic concern (6). There is also increasing interest in the impact of substance use on employees' wellbeing and performance and the duty of care afforded by employers.

Patterns of ATOD use vary by workplace type and employee characteristics. Enhancing knowledge concerning the correlates of workplace type and employee characteristics; and levels of AOD-related harm, facilitates the development of more targeted strategies. While all working environments should have a comprehensive suite of measures in place to prevent and respond to AOD harm, better understanding of the likely risks associated with specific working environments facilitates the development of more nuanced approaches.

Reducing the harms associated with AOD use is of interest from the perspectives of enhancing employee productivity and welfare, as well as enhancing public health more broadly.

There are multiple reasons why the workplace offers potential for effective prevention and intervention efforts. Most people who use illicit drugs or drink alcohol are employed. In addition, the workplace is a setting where individuals with problematic patterns of AOD use can be identified and helped (7, 8). It also offers access to individuals who may not otherwise be exposed to prevention and intervention efforts (8, 9). Moreover, workers' patterns of AOD use are associated with and shaped by workplace culture and policies and vary according to the policy in place (10).

Efficacious workplace interventions would make a substantial contribution to workplace safety, productivity, and the wellbeing of individual workers. In addition, social contagion theory (11) suggests that improvements to an individual worker's risky drinking patterns would positively impact the wider community.

The available evidence indicates that workplace responses are likely to be effective when a comprehensive and integrated approach is adopted that incorporates policy, treatment, and prevention (12). However, the ability of workplaces to select, adapt, and implement comprehensive and integrated responses to AOD-related harm in the workplace is limited by the lack of research.

Aims

The overall aims of this project were to provide information on the patterns and prevalence of ATOD use among Australian workers, examine the types of responses suitable for different workplaces, and explore the efficacy of these responses.

The results of this project are presented in two parts. This Report, Part 1, provides information on the following aspects of substance use within the workplace:

- Descriptive patterns of ATOD use (cross sectional and time series where feasible) in Australia overall, among employed Australians and by industry and occupation groups
- Profile of use and relationships between ATOD use with key socio-economic factors (e.g., mental health, rurality)
- Consequences of patterns of AOD use for workers and organisations in relation to specific harms and impacts.

The second report, Part 2, provides information on the following aspects of AOD use in the workplace:

- The prevalence of AOD policies in Australian workplaces, and their impact on AOD use across industries
- The efficacy of various intervention models and methodologies on workplace drug testing and other workplace-based AOD interventions
- New and emerging drug issues impacting the workplace
- The implications and recommendations for the design of interventions.

Data sources

Two national surveys are available in Australia that include information on ATOD use among the general population and provide information on occupation and industry: the National Drug Strategy Household Survey (NDSHS) and the Household, Income and Labour Dynamics in Australia (HILDA) survey.

The National Health Survey (NHS) also includes information on alcohol and tobacco use in Australia but does not contain questions on illicit drug use. It also does not provide sufficient data on occupation and industry categories to enable an examination of substance use issues impacting the workplace. For this reason, analysis of the NHS has not been undertaken.

The NDSHS is considered the gold standard for information on Australians' ATOD use, and much of the analysis in this report is based on the NDSHS. The HILDA provides more granular data on employment conditions and its recent inclusion of illicit drug variables provides a point of comparison with the NDSHS. However, illicit drug use information is only available in the 2017 wave of the HILDA survey. These two surveys also differ in their sampling methodology which limits the opportunity to compare and contrast findings concerning ATOD issues and their impact on the workplace. More detailed information about both surveys is provided below and in Appendix A.

National Drug Strategy Household Survey

The NDSHS (13) is a stratified, multistage random sample survey that collects information on ATOD use among the general Australian population. It also collects data on individuals' attitudes and perceptions relating to ATOD use. The survey has been conducted every 2-3 years since 1985 with the most recent being 2019. In addition to attitudes and behaviour regarding ATOD use, the NDSHS collects demographic, socio-economic and health-related information such as age, gender, employment status, location, remoteness, industry of employment, occupation group, health status, chronic conditions and mental health.

Household, Income and Labour Dynamics in Australia

The HILDA survey (14) is a household-based panel study that collects information about economic and personal wellbeing, labour market dynamics and family life. It aims to tell the stories of the same group of Australians over the course of their lives. The HILDA survey has collected data on the use of legal drugs (i.e., tobacco and alcohol) for many waves, and examined illicit drug use in wave 17 (2017). The inclusion of questions on illicit drug use was modelled on the questions used in the NDSHS. According to Wooden et al.: "Apart from pharmaceuticals, the proportion of persons in the HILDA survey reporting drug use, both in the past 12 months and over a lifetime, especially after the application of population weights, aligns very closely with the population estimates from the NDSHS." (15, p.7).

Chapter 2

The general population

The patterns and prevalence of ATOD use change over time in line with prevention, policy change and other factors. It is already established that some specific industries and occupational groups have a higher prevalence of ATOD use than others (7, 16). In order to guide targeted interventions where they are likely to have the greatest impact, more detail concerning the patterns of use is needed.

This Chapter presents data on the patterns and prevalence of ATOD use for Australia overall. The chapter provides a point of comparison for subsequent chapters examining use among employed Australians by industry and occupational groups. Both cross sectional and time series data are utilised where available. This chapter utilises data from the NDSHS. Comparison data for HILDA is provided in Appendix B. Details on these surveys can be found in Appendix A.

Tobacco use

Tobacco use harms

Tobacco use has associations with numerous health harms, including cancer, cardiovascular disease and respiratory diseases (17). Tobacco is the leading preventable cause of premature death (18, 19). In 2018, tobacco was responsible for 13% of all deaths and 8.6% of Australia's total burden of disease (20).

Daily smoking prevalence among Australians declined significantly in the last decade (Table 1). The NDSHS indicates that smoking rates reduced consecutively every three years between 2010 and 2019, from 15.1% of the population to 11%. This 4.1 percentage point drop represents a 27% reduction over this timeframe.

Table 1. Prevalence of tobacco use among Australians aged 14+ years, 2010–2019 (NDSHS)

Tobacco use	Percentage (95% CI)			
	2010	2013	2016	2019
Daily	15.1 (14.7-15.5)	12.8 (12.4-13.2)	12.2 (11.8-12.6)	11.0 (10.6-11.4)
Occasional	2.9 (2.7-3.1)	3.0 (2.8-3.2)	2.7 (2.5-2.9)	2.9 (2.7-3.1)
Ex-smoker	24.0 (23.5-24.5)	24.0 (23.5-24.5)	22.8 (22.3-23.3)	22.9 (22.3-23.5)
Non-smoker	57.9 (57.3-58.5)	60.1 (59.5-60.7)	62.3 (61.7-62.9)	63.1 (62.5-63.7)

Source: National Drug Strategy Household Survey, 2010, 2013, 2016, 2019.

Daily smoking prevalence was significantly higher among Australians who were male (12%), aged 40–59 years (16%), based in non-metropolitan areas (14%), had low socioeconomic status (SES) (16%), and had a certificate or diploma as their highest level of education (14%) (Table 2).

Table 2. Prevalence of tobacco use status among Australians aged 14+ years by demographic factors, 2019 (NDSHS)

	Percentage (95% CI)			
	Daily	Occasional	Ex-smoker	Non-smoker
Gender				
Male	12.2 (11.5-12.9)	3.6 (3.2-4.0)	25.2 (24.3-26.1)	59.0 (58.0-60.0)
Female	9.9 (9.3-10.5)	2.3 (2.0-2.6)	20.7 (19.9-21.5)	67.2 (66.4-68.0)
Age groups				
14-19 years	3.6 (2.5-4.7)	2.5 (1.5-3.5)	1.6 (0.8-2.4)	92.2* (90.5-93.9)
20-29 years	10.7 (9.5-11.9)	5.1 (4.3-5.9)	8.6 (7.5-9.7)	75.6 (73.9-77.3)
30-39 years	11.5 (10.5-12.5)	4.4 (3.7-5.1)	19.1 (17.8-20.4)	65.0 (63.5-66.5)
40-49 years	15.9 (14.7-17.1)	3.3 (2.7-3.9)	25.7 (24.2-27.2)	55.1 (53.4-56.8)
50-59 years	15.8 (14.6-17.0)	2.1 (1.6-2.6)	30.6 (29.1-32.1)	51.5 (49.8-53.2)
60-69 years	10.7 (9.7-11.7)	1.2 (0.9-1.5)	35.2 (33.7-36.7)	52.9 (51.3-54.5)
70+ years	4.6 (3.9-5.3)	0.7 (0.4-1.0)	36.9 (35.4-38.4)	57.9 (56.4-59.4)
State				
New South Wales	9.5 (8.7-10.3)	2.9 (2.5-3.3)	22.4 (21.3-23.5)	65.3 (64.1-66.5)
Victoria	10.1 (9.2-11.0)	3.4 (2.9-3.9)	21.7 (20.5-22.9)	64.7 (63.3-66.1)
Queensland	13.5 (12.4-14.6)	2.9 (2.4-3.4)	24.8 (23.4-26.2)	58.8 (57.2-60.4)
South Australia	11.9 (10.7-13.1)	2.2 (1.6-2.8)	24.7 (23.1-26.3)	61.2 (59.3-63.1)
Western Australia	11.9 (10.5-13.3)	3.1 (2.4-3.8)	22.6 (20.8-24.4)	62.4 (60.3-64.5)
Tasmania	12.9 (10.9-14.9)	1.4* (0.7-2.1)	25.7 (23.1-28.3)	60.0 (57.0-63.0)
Australian Capital Territory	8.3 (6.6-10.0)	1.6* (0.8-2.4)	20.7 (18.2-23.2)	69.4 (66.6-72.2)
Northern Territory	14.7 (12.5-16.9)	3.5 (2.4-4.6)	22.3 (19.8-24.8)	59.6 (56.6-62.6)
Remoteness¹				
Metropolitan	9.7 (9.2-10.2)	2.9 (2.6-3.2)	21.7 (21.0-22.4)	65.7 (64.9-66.5)
Non-metropolitan	14.4 (13.6-15.2)	3.2 (2.8-3.6)	26.0 (25.0-27.0)	56.5 (55.3-57.7)
Socio-economic status²				
Low	15.9 (15.1-16.7)	2.7 (2.4-3.0)	22.7 (21.8-23.6)	58.7 (57.7-59.7)
High	7.8 (7.3-8.3)	3.1 (2.8-3.4)	23.0 (22.3-23.7)	66.0 (65.2-66.8)
Education level				
Year 12 or less	12.6 (11.9-13.3)	2.8 (2.4-3.2)	21.6 (20.7-22.5)	63.0 (61.9-64.1)
Certificate/Diploma	14.2 (13.3-15.1)	3.8 (3.3-4.3)	27.7 (26.6-28.8)	54.3 (53.0-55.6)
Bachelor degree or higher	4.8 (4.3-5.3)	2.5 (2.1-2.9)	20.5 (19.5-21.5)	72.2 (71.1-73.3)

Source: National Drug Strategy Household Survey, 2019.

* Indicates the estimate has a relative standard error of 25% to 50% and should be used with caution.

Notes:

1. Remoteness is based on the ABS Australian Statistical Geography Standard (ASGS) Remoteness Area classification. 'Metropolitan' consists of major cities and 'Non-metropolitan' combines inner regional, outer regional, remote and very remote areas.
2. The Index of Relative Socio-economic Advantage and Disadvantage (IRSAD) was used to report on socioeconomic status (SES). 'Low SES' consists of combined 1st and 2nd IRSAD quintiles; 'High SES' consists of combined 3rd-5th IRSAD quintiles.

The proportion of Australians smoking daily increased significantly as levels of psychological distress increased (ranging from 9.1% among those with low distress through to 25% among those with very high distress) and their level of health decreased (6.6% among those reporting 'very good/excellent' health through to 21% reporting 'fair' health) (Table 3).

Table 3. Prevalence of tobacco use status among Australians aged 14+ years by physical health and psychological distress, 2019 (NDSHS)

	Percentage (95% CI)			
	Daily	Occasional	Ex-smoker	Non-smoker
Self-assessed health status¹				
Fair/poor	21.2 (19.7-22.7)	2.4 (1.8-3.0)	29.0 (27.4-30.6)	47.5 (45.7-49.3)
Good	15.1 (14.3-15.9)	3.5 (3.1-3.9)	25.4 (24.4-26.4)	56.0 (54.8-57.2)
Very good/excellent	6.6 (6.2-7.0)	2.8 (2.5-3.1)	20.3 (19.6-21.0)	70.3 (69.5-71.1)
Psychological distress²				
Low	9.1 (8.6-9.6)	2.4 (2.1-2.7)	23.7 (23.0-24.4)	64.8 (64.0-65.6)
Moderate	11.3 (10.4-12.2)	3.4 (2.9-3.9)	23.4 (22.2-24.6)	61.8 (60.4-63.2)
High	16.1 (14.5-17.7)	4.5 (3.6-5.4)	20.2 (18.4-22.0)	59.2 (57.0-61.4)
Very high	24.9 (22.1-27.7)	5.2 (3.8-6.6)	15.5 (13.2-17.8)	54.5 (51.3-57.7)

Source: National Drug Strategy Household Survey, 2019.

Notes:

1. In response to the question 'In general, would you say your health is...?'
2. The Kessler 10 Item Psychological Distress Scale (K10) was used to assess psychological distress. 'Low' psychological distress reflects a score of 10-15 on the K10; 'moderate' reflects a score of 16-21; 'high' reflects a score of 22-29, and 'very high' reflects a score of 30-50.

Changes in patterns of tobacco consumption over time

The prevalence of regular cigarette smoking among those aged 18+ in Australia has declined overall, from 35% in 1980 (males 41%, females 30%)³ to 13% in 2019 (males 14%, females 12%)⁴ (21). The Australian Burden of Disease Study 2018, reported that tobacco use was the risk factor that contributed most to the burden of disease and injury in Australia in 2018. Tobacco use was responsible for 8.6% of the burden of disease and injury in that year along with almost 20,500 deaths (13% of all deaths). Tobacco use also contributed the most burden to years of life lost (13%) (20).

3 The 1980 data comprises those aged 18+ who described themselves as 'current smokers' with no frequency specified.

4 The 2019 data comprises those aged 18+ who described themselves as daily or weekly smokers.

Alcohol use

Alcohol use harms

Alcohol is one of the most commonly used drugs in Australia (1). Although most people drink within health guidelines (1), alcohol is nonetheless a significant source of harm to the Australian community (22). More than 200 types of injuries and diseases have been associated with alcohol consumption, including road traffic and domestic accidents, cancer, liver cirrhosis, stroke, alcoholic cardiomyopathy and infectious diseases (23). Alcohol accounted for 4.5% of the total burden of disease in Australia in 2018 (20).

The proportion of Australians aged 14+ years who abstained from alcohol in the previous 12 months significantly increased between 2010 (20%) and 2019 (24%), as did the proportion of those reporting drinking at low risk levels (Table 4). Concomitantly, the proportion of Australians reporting risky drinking significantly reduced from 38% in 2010 to 32% in 2019.

Table 4. Prevalence of recent (past 12 months) alcohol use among Australians aged 14+ years, 2010–2019 (NDSHS)

Alcohol use ¹	Percentage (95% CI)			
	2010	2013	2016	2019
Abstainer	19.9 (19.4-20.4)	21.2 (20.7-21.7)	22.6 (22.1-23.1)	23.7 (23.1-24.3)
Low risk	42.4 (41.8-43.0)	43.6 (43.0-44.2)	44.2 (43.6-44.8)	44.4 (43.7-45.1)
Risky	37.7 (37.1-38.3)	35.2 (34.6-35.8)	33.3 (32.7-33.9)	32.0 (31.3-32.7)

Source: National Drug Strategy Household Survey, 2010, 2013, 2016, 2019.

Notes:

1. Risky alcohol use (yes; no) was assessed against the 2020 National Health and Medical Research Council's (NHMRC) alcohol guidelines and categorised according to Australian Institute of Health and Welfare (AIHW) procedures.

Drinking at risky levels in the previous 12 months was significantly higher among Australians who were male (41%), aged 20-29 years (40%), resided in the Northern Territory (41%), based in non-metropolitan areas (36%), had high SES (33%), had a certificate or diploma as their highest level of education (37%) (Table 5), had high (39%) or very high (37%) psychological distress and good physical health (34%) (Table 6).

Table 5. Alcohol use status among Australians aged 14+ years by demographic factors, 2019 (NDSHS)

	Percentage (95% CI)		
	Abstainer	Low risk	Risky
Gender			
Male	21.5 (20.6-22.4)	37.2 (36.2-38.2)	41.3 (40.3-42.3)
Female	25.7 (24.9-26.5)	51.2 (50.3-52.1)	23.1 (22.3-23.9)
Age group			
14-19 years	55.6 (52.4-58.8)	24.2 (21.4-27.0)	20.2 (17.6-22.8)
20-29 years	22.1 (20.3-23.9)	38.4 (36.3-40.5)	39.5 (37.4-41.6)
30-39 years	21.7 (20.3-23.1)	47.6 (45.9-49.3)	30.7 (29.1-32.3)
40-49 years	17.8 (16.4-19.2)	47.6 (45.8-49.4)	34.6 (32.9-36.3)
50-59 years	16.4 (15.1-17.7)	48.4 (46.6-50.2)	35.2 (33.5-36.9)
60-69 years	19.8 (18.5-21.1)	48.9 (47.2-50.6)	31.3 (29.7-32.9)
70+ years	27.4 (0.0-28.8)	46.7 (0.0-48.3)	25.9 (0.0-27.3)
State			
New South Wales	26.1 (24.9-27.3)	43.3 (41.9-44.7)	30.6 (29.3-31.9)
Victoria	23.8 (22.5-25.1)	46.6 (45.1-48.1)	29.6 (28.2-31.0)
Queensland	19.9 (18.5-21.3)	44.2 (42.4-46.0)	35.9 (34.2-37.6)
South Australia	21.1 (19.5-22.7)	44.9 (42.9-46.9)	34.0 (32.1-35.9)
Western Australia	27.1 (25.1-29.1)	40.0 (37.8-42.2)	32.9 (30.8-35.0)
Tasmania	16.8 (14.4-19.2)	50.1 (46.9-53.3)	33.0 (30.0-36.0)
Australian Capital Territory	19.9 (17.1-22.7)	52.4 (48.8-56.0)	27.6 (24.4-30.8)
Northern Territory	22.0 (19.4-24.6)	36.8 (33.7-39.9)	41.2 (38.1-44.3)
Remoteness¹			
Metropolitan	25.1 (24.4-25.8)	44.6 (43.7-45.5)	30.3 (29.5-31.1)
Non-metropolitan	19.8 (18.8-20.8)	43.8 (42.6-45.0)	36.4 (35.2-37.6)
Socio-economic status²			
Low	27.2 (26.2-28.2)	42.7 (41.6-43.8)	30.1 (29.1-31.1)
High	21.3 (20.6-22.0)	45.5 (44.6-46.4)	33.2 (32.3-34.1)
Education level			
Year 12 or less	29.8 (28.7-30.9)	40.4 (39.3-41.5)	29.7 (28.6-30.8)
Certificate/Diploma	16.6 (15.6-17.6)	46.6 (45.3-47.9)	36.8 (35.5-38.1)
Bachelor degree or higher	19.9 (18.8-21.0)	49.2 (47.9-50.5)	30.9 (29.7-32.1)

Source: National Drug Strategy Household Survey, 2019.

Notes:

1. Remoteness is based on the ABS Australian Statistical Geography Standard (ASGS) Remoteness Area classification. 'Metropolitan' consists of major cities and 'Non-metropolitan' combines inner regional, outer regional, remote and very remote areas.
2. The Index of Relative Socio-economic Advantage and Disadvantage (IRSAD) was used to report on socioeconomic status (SES). 'Low SES' consists of combined 1st and 2nd IRSAD quintiles; 'High SES' consists of combined 3rd-5th IRSAD quintiles.

Table 6. Alcohol use status among Australians aged 14+ years by physical health and psychological distress, 2019 (NDSHS)

	Percentage (95% CI)		
	Abstainer	Low risk	Risky
Self-assessed health status¹			
Fair/poor	26.8 (25.1-28.5)	41.4 (39.5-43.3)	31.8 (30.0-33.6)
Good	21.0 (20.0-22.0)	44.7 (43.5-45.9)	34.3 (33.1-35.5)
Very good/excellent	24.4 (23.6-25.2)	44.9 (43.9-45.9)	30.7 (29.8-31.6)
Psychological distress²			
Low	25.0 (24.2-25.8)	45.2 (44.3-46.1)	29.8 (29.0-30.6)
Moderate	20.5 (19.2-21.8)	44.8 (43.3-46.3)	34.6 (33.1-36.1)
High	20.2 (18.3-22.1)	41.3 (39.0-43.6)	38.5 (36.2-40.8)
Very high	23.3 (20.4-26.2)	39.7 (36.3-43.1)	36.9 (33.6-40.2)

Source: National Drug Strategy Household Survey, 2019.

Notes:

1. In response to the question 'In general, would you say your health is...?.'
2. The Kessler 10 Item Psychological Distress Scale (K10) was used to assess psychological distress. 'Low' psychological distress reflects a score of 10-15 on the K10; 'moderate' reflects a score of 16-21; 'high' reflects a score of 22-29, and 'very high' reflects a score of 30-50.

Changes in patterns of alcohol consumption over time

The amount of alcohol consumed in Australia (as measured in litres of pure alcohol per-capita) has declined from 13.09 in 1974-75 to 9.51 in 2017-18. As well as this overall decline in consumption, patterns of consumption (also measured in litres of pure alcohol per-capita) have changed. Between 1974-75 and 2017-18:

- Beer consumption declined from 9.22 to 3.71 litres
- Wine consumption increased from 2.24 to 3.67 litres
- Spirit consumption increased from 1.71 to 1.89 litres (24).

The COVID-19 pandemic dramatically impacted a range of work and social activities yet the impact of the pandemic on alcohol consumption was not straight-forward. Australian Institute of Health and Welfare data revealed that most Australians reported alcohol consumption stayed at the same level (72%) or decreased (15%) compared to before March 2020, and 13.9% reported drinking more. Females (16%) were more likely than males (12%) to report increased alcohol consumption (24).

The Australian Burden of Disease Study 2018, found that alcohol use was the fifth largest risk factor contributing to the burden of disease and injury in Australia, being responsible for 4.5% of the total burden. Nevertheless, the age-standardised rate of total attributable burden due to alcohol use decreased from 9.5 disability adjusted life years per 1,000 population to 8.5 in 2018 (a 10.5% decline) (20).

While patterns of consumption do vary, it is likely that alcohol will continue to be associated with considerable levels of harm in Australian workplaces for the foreseeable future and should remain a key plank of efforts to reduce AOD harm.

Illicit drug use

Illicit drug use harms

Illicit drug use in Australia can affect communities, families and individuals. Harms stemming from illicit drug use can be health-related (burden of disease, overdose, hospitalisation, death), social (crime and violence) and/or economic (healthcare and law enforcement costs) (25). In 2019, there were 1,865 drug-induced deaths in Australia, equivalent to 7.4 per 100,000 population (25).

Data concerning Australians' use of illicit drugs are reported for the 2016 and 2019 waves of the NDSHS. Changes to the survey methodology and inclusion criteria for the pharmaceutical drugs mean that these data are not considered comparable to previous survey waves.

Between 2016 and 2019, there were significant increases in the proportion of Australians reporting recent use of cannabis, cocaine, and ecstasy (Table 7). By contrast, the use of pharmaceutical drugs (such as pain-killers and opioids) for non-medical purposes significantly decreased and methamphetamine use remained stable. Overall, the proportion of Australians aged 14+ years who used an illicit drug in the previous 12 months was 16% in both 2016 and 2019 (Table 7). In 2019, 5.8% of Australians reported use of at least two illicit drugs in the past year.

Table 7. Prevalence of recent (past 12 months) illicit drug use among Australians aged 14+ years, 2016–2019 (NDSHS)

Type of illicit drug	Percentage (95% CI)	
	2016	2019
Cannabis	10.4 (10.0-10.8)	11.6 (11.2-12.0)
Cocaine	2.6 (2.4-2.8)	4.2 (3.9-4.5)
Ecstasy	2.2 (2.0-2.4)	2.9 (2.7-3.1)
Methamphetamine	1.4 (1.2-1.6)	1.3 (1.1-1.5)
Pharmaceutical drugs ¹	4.7 (4.4-5.0)	4.0 (3.7-4.3)
Any illicit ^{2,3}	15.6 (15.1-16.1)	16.3 (15.8-16.8)

Source: National Drug Strategy Household Survey, 2016 and 2019.

Notes:

1. Pharmaceutical drugs include: pain killers/opiates, tranquilisers/sleeping pills, and methadone.
2. Any illicit drug use refers to use of at least one of the following: cannabis, ecstasy, amphetamines, cocaine, hallucinogens, inhalants, heroin, ketamine, GHB, synthetic cannabinoids, emerging psychedelic substances, painkillers/opioids, tranquilisers/sleeping pills, steroids, methadone/buprenorphine, and any drug which is injected (non-medical use).
3. The NDSHS offers introductory text for each class of drug, including examples of the drugs included. Examples for hallucinogens, inhalants and New and Emerging Psychoactive Substances were changed in 2019, which may have impacted trend results since 2016.

In 2019, a significantly higher proportion of males than females reported recent use of any illicit drug, and all individual drug types. Australians aged 20-29 years were significantly more likely to report illicit drug use overall and use of cannabis, cocaine, ecstasy, and pharmaceutical drugs. The use of cocaine, ecstasy and any illicit drug were more common among Australians living in metropolitan areas. The largest discrepancy in use occurred for cocaine, where use was approximately double in metropolitan compared to non-metropolitan areas (4.9% vs 2.3%) (Table 8).

The proportion of Australians reporting use of cocaine and ecstasy was statistically higher among Australians with higher SES. Illicit drug use was also higher among those with a certificate or diploma level of education (Table 8).

Cocaine and ecstasy use was significantly higher among Australians reporting very good/excellent physical health than fair/poor health. Conversely, pharmaceutical and overall illicit drug use were higher among Australians reporting fair/poor general health. The proportion of Australians using illicit drugs overall and each individual drug explored generally increased as their level of psychological distress increased (Table 9).

Table 8. Prevalence of recent (past 12 months) illicit drug use among Australians aged 14+ years by demographic factors, 2019 (NDSHS)

	Percentage (95% CI)					
	Cannabis	Cocaine	Ecstasy	Meth	Pharma	Any illicit
Gender						
Male	14.6 (13.9-15.3)	5.5 (5.0-6.0)	3.9 (3.5-4.3)	1.8 (1.5-2.1)	4.4 (4.0-4.8)	19.6 (18.8-20.4)
Female	8.6 (8.1-9.1)	3.0 (2.7-3.3)	2.0 (1.8-2.2)	0.8 (0.6-1.0)	3.6 (3.3-3.9)	13.2 (12.6-13.8)
Age groups						
14-19 years	13.3 (11.2-15.4)	1.9 (1.1-2.7)	3.4 (2.3-4.5)	0.9* (0.3-1.5)	2.3 (1.4-3.2)	15.8 (13.5-18.1)
20-29 years	23.6 (22.0-25.2)	11.9 (10.7-13.1)	9.7 (8.6-10.8)	2.4 (1.8-3.0)	5.8 (4.9-6.7)	30.5 (28.7-32.3)
30-39 years	13.5 (12.4-14.6)	6.5 (5.7-7.3)	3.4 (2.8-4.0)	2.0 (1.6-2.4)	3.6 (3.0-4.2)	18.9 (17.6-20.2)
40-49 years	11.4 (10.3-12.5)	3.5 (2.9-4.1)	1.4 (1.0-1.8)	1.9 (1.4-2.4)	4.6 (3.9-5.3)	15.8 (14.6-17.0)
50-59 years	9.1 (8.1-10.1)	1.3 (0.9-1.7)	0.6* (0.3-0.9)	0.8 (0.5-1.1)	3.4 (2.8-4.0)	13.1 (12.0-14.2)
60+ years	2.9 (2.5-3.3)	0.2* (0.1-0.3)	0.1** (0.0-0.2)	0.1* (0.0-0.2)	3.6 (3.2-4.0)	7.2 (6.6-7.8)
State						
New South Wales	11.0 (10.2-11.8)	5.0 (4.4-5.6)	3.1 (2.6-3.6)	1.1 (0.8-1.4)	3.9 (3.4-4.4)	15.9 (14.9-16.9)
Victoria	11.5 (10.6-12.4)	5.2 (4.6-5.8)	3.7 (3.2-4.2)	1.5 (1.2-1.8)	4.4 (3.8-5.0)	17.1 (16.0-18.2)
Queensland	12.8 (11.7-13.9)	3.5 (2.9-4.1)	2.5 (2.0-3.0)	1.2 (0.8-1.6)	3.8 (3.2-4.4)	16.8 (15.6-18.0)
South Australia	10.6 (9.4-11.8)	2.5 (1.9-3.1)	1.2* (0.8-1.6)	1.0 (0.6-1.4)	4.1 (3.3-4.9)	15.4 (14.0-16.8)
Western Australia	11.2 (9.9-12.5)	2.3 (1.7-2.9)	2.9* (2.2-3.6)	2.1 (1.5-2.7)	4.1 (3.3-4.9)	15.5 (13.9-17.1)
Tasmania	12.6 (10.6-14.6)	1.6* (0.8-2.4)	2.4* (1.5-3.3)	0.6* (0.1-1.1)	4.3 (3.1-5.5)	16.6 (14.3-18.9)
Australian Capital Territory	10.4 (8.5-12.3)	3.4 (2.3-4.5)	2.2* (1.3-3.1)	0.3** (0.0-0.6)	3.3 (2.2-4.4)	14.5 (12.3-16.7)
Northern Territory	15.9 (13.7-18.1)	3.1 (2.0-4.2)	3.0* (2.0-4.0)	1.5* (0.8-2.2)	2.7 (1.7-3.7)	19.6 (17.2-22.0)
Percentage (95% CI)						

	Cannabis	Cocaine	Ecstasy	Meth	Pharma	Any illicit
Remoteness¹						
Metropolitan	11.6 (11.1-12.1)	4.9 (4.6-5.2)	3.3 (3.0-3.6)	1.4 (1.2-1.6)	4.0 (3.7-4.3)	16.7 (16.1-17.3)
Non-metropolitan	11.4 (10.7-12.1)	2.3 (1.9-2.7)	2.0 (1.7-2.3)	1.2 (0.9-1.5)	3.9 (3.4-4.4)	15.4 (14.6-16.2)
Socio-economic status²						
Low	12.0 (11.3-12.7)	3.2 (2.8-3.6)	2.4 (2.1-2.7)	1.4 (1.1-1.7)	3.9 (3.5-4.3)	16.4 (15.6-17.2)
High	11.3 (10.8-11.8)	4.8 (4.4-5.2)	3.3 (3.0-3.6)	1.3 (1.1-1.5)	4.0 (3.7-4.3)	16.2 (15.6-16.8)
Education level						
Year 12 or less	11.6 (10.9-12.3)	3.3 (2.9-3.7)	2.7 (2.3-3.1)	1.2 (1.0-1.4)	4.1 (3.7-4.5)	16.1 (15.3-16.9)
Certificate/ Diploma	14.2 (13.3-15.1)	5.4 (4.8-6.0)	3.2 (2.8-3.6)	1.8 (1.5-2.1)	4.6 (4.1-5.1)	19.0 (18.0-20.0)
Bachelor degree or higher	9.5 (8.8-10.2)	4.6 (4.1-5.1)	3.2 (2.8-3.6)	1.0 (0.8-1.2)	3.1 (2.7-3.5)	14.3 (13.4-15.2)

Source: National Drug Strategy Household Survey, 2019.

* Indicates the estimate has a relative standard error of 25% to 50% and should be used with caution.

** Indicates the estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

Notes:

1. Remoteness is based on the ABS Australian Statistical Geography Standard (ASGS) Remoteness Area classification. 'Metropolitan' consists of major cities and 'Non-metropolitan' combines inner regional, outer regional, remote and very remote areas.
2. The Index of Relative Socio-economic Advantage and Disadvantage (IRSAD) was used to report on socioeconomic status (SES). 'Low SES' consists of combined 1st and 2nd IRSAD quintiles; 'High SES' consists of combined 3rd-5th IRSAD quintiles.

Table 9. Prevalence of recent (past 12 months) illicit drug use among Australians aged 14+ years by health status and psychological distress, 2019 (NDSHS)

	Percentage (95% CI)					
	Cannabis	Cocaine	Ecstasy	Meth	Pharma	Any illicit
Self-assessed health status¹						
Fair/poor	13.3 (12.1-14.5)	3.1 (2.5-3.7)	2.1 (1.6-2.6)	2.2 (1.7-2.7)	6.1 (5.2-7.0)	19.6 (18.1-21.1)
Good	12.2 (11.4-13.0)	3.9 (3.4-4.4)	2.6 (2.2-3.0)	1.6 (1.3-1.9)	4.0 (3.5-4.5)	17.0 (16.1-17.9)
Very good / excellent	10.9 (10.3-11.5)	4.6 (4.2-5.0)	3.3 (3.0-3.6)	1.0 (0.8-1.2)	3.6 (3.3-3.9)	15.3 (14.6-16.0)
Psychological distress²						
Low	8.3 (7.8-8.8)	3.0 (2.7-3.3)	2.0 (1.8-2.2)	0.7 (0.6-0.8)	3.0 (2.7-3.3)	12.2 (11.7-12.7)
Moderate	13.9 (12.9-14.9)	5.8 (5.1-6.5)	3.8 (3.2-4.4)	1.8 (1.4-2.2)	4.3 (3.7-4.9)	19.8 (18.6-21.0)
High	20.3 (18.5-22.1)	6.2 (5.1-7.3)	4.6 (3.7-5.5)	2.5 (1.8-3.2)	6.5 (5.4-7.6)	26.8 (24.8-28.8)
Very high	27.7 (24.8-30.6)	9.6 (7.7-11.5)	8.4 (6.6-10.2)	5.0 (3.6-6.4)	10.8 (8.8-12.8)	34.1 (31.0-37.2)

Source: National Drug Strategy Household Survey, 2019.

Notes:

1. In response to the question 'In general, would you say your health is...?'
2. The Kessler 10 Item Psychological Distress Scale (K10) was used to assess psychological distress. 'Low' psychological distress reflects a score of 10-15 on the K10; 'moderate' reflects a score of 16-21; 'high' reflects a score of 22-29, and 'very high' reflects a score of 30-50.

Employed Australians

Data comparisons

Within this chapter, prevalence data for employed Australians are at times compared with results for the total population. As these groups are not mutually exclusive, statistical analyses are not possible. Instead, confidence intervals calculated for the employed group are considered against the national average to determine whether a difference is noteworthy. The same process is also applied to determine whether industry and occupation group prevalence data is different to the employed national average.

This Chapter presents information on the patterns and prevalence of ATOD use among employed Australians by industry, occupation, and employment conditions (such as hours worked, permanency and patterns of work). The employed Australians category includes those who selected their main employment status as employed. Therefore, those who primarily performed other roles while also working (e.g., full-time students who may work part-time) were excluded. In 2019, 58% of Australians aged 14 years and over were employed. Three industries employed over one-third of Australian workers (health care and social assistance: 19%, education and training: 10%, professional, scientific and technical services: 9%). Among workers, 30% were employed as a skilled worker, 28% as a professional, 15% as an unskilled worker, 14% as a trade worker and 12% as a manager.

This chapter utilises data from the NDSHS. Appendix B provides prevalence data using HILDA as background information for some of the crosstabulations presented (e.g., Table 20).

Tobacco use

Tobacco use in the workplace

In addition to its significant costs to individual health and wellbeing, tobacco use is also associated with considerable financial costs to businesses. These costs primarily stem from poorer health and greater absences among employees who smoke. In 2015-16, tobacco smoking cost the Australian community \$137 billion (26), with costs to workplaces estimated at \$5 billion (27). In 2016, the total cost of smoking-related lost productivity was estimated at \$388 billion over the working life of the Australian population (28).

The workplace has potential to play an important role in smoking cessation, particularly smoke-free workplace policies (29-33). Other important workplace initiatives include cessation programs, counselling, health promotion programs, access to health professionals, and assistance with cessation medication (34). These policies have been found to improve air quality, decrease smoking-related ill health (for both those who smoke and co-workers), reduce exposure to second-hand smoke, reduce smoking initiation and increase smoking cessation (35).

The pattern of tobacco use for employed Australians mirrors that of the total Australian population, with significant reductions in those reporting daily smoking (2010: 16% vs 2019: 11%) and an increase in non-smokers over time (Figure 1). Daily smoking rates reduced consecutively in each reporting period, resulting in a 32% total reduction in daily smoking among the employed over this timeframe.

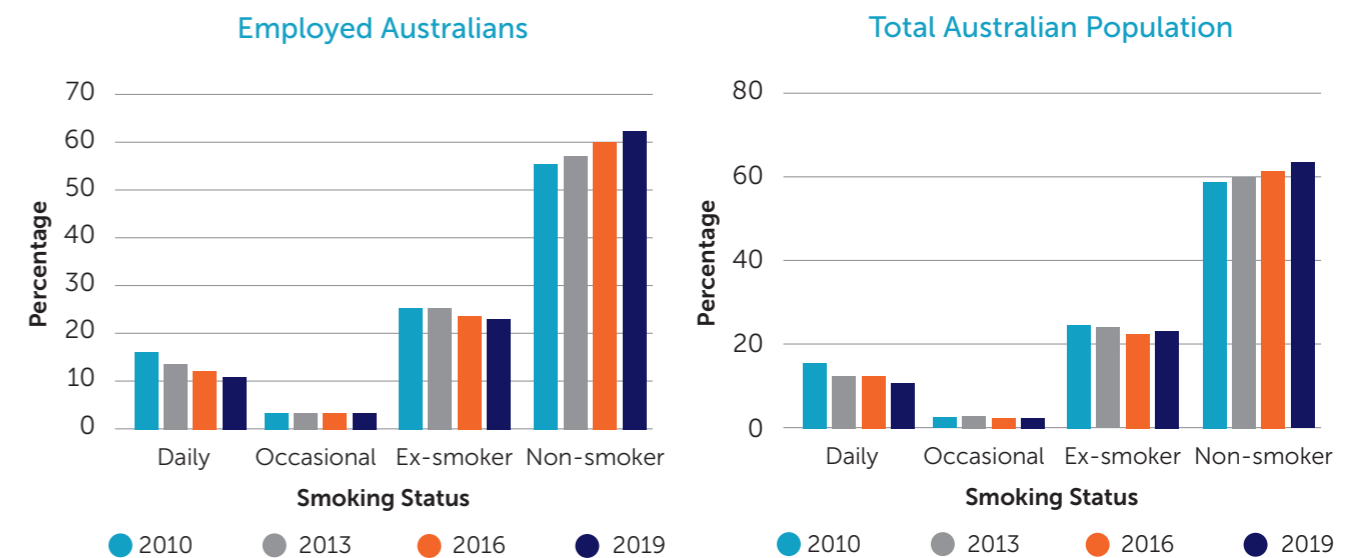


Figure 1. Prevalence (%) of tobacco use among employed Australians and all Australians aged 14+ years, 2010–2019 (NDSHS)

Source: National Drug Strategy Household Survey, 2010, 2013, 2016, 2019.

Notes:

1. Analysis only includes those who selected their main employment status as employed (e.g., excludes full-time students who work part time).
2. See Appendix C: Supplementary tables 3 & 4 for data underpinning these charts.

The prevalence of daily smoking among employed Australians was 11% which was the same as found for the Australian population. A notable difference was a smaller proportion of employed daily smokers aged 40–49 and 50–59 (13% each) (Table 10) compared with the similarly aged Australian population (16% each) (Table 2).

Daily tobacco use was significantly higher among employed Australians who were male, aged 40–59 years, based in non-metropolitan locations, of low SES (Table 10), and reported their health as fair to poor (Table 11).

A higher proportion of Australians experiencing very high levels of psychological distress reported daily tobacco use (21%) than their less psychologically distressed counterparts. While this was a similar pattern to all Australians, a lower proportion of employed Australians with very high levels of distress reported daily smoking (21%) (Table 11), compared to their Australian counterparts (25%) (Table 3).

Table 10. Tobacco use status among employed Australians aged 14+ years by demographic factors, 2019 (NDSHS)

	Percentage (95% CI)			
	Daily	Occasional	Ex-smoker	Non-smoker
Gender				
Male	12.0 (11.1-12.9)	4.6 (4.0-5.2)	23.8 (22.7-24.9)	59.6 (58.3-60.9)
Female	9.8 (9.1-10.5)	2.7 (2.3-3.1)	22.0 (21.0-23.0)	65.4 (64.2-66.6)
Age groups				
14-19 years	5.8* (2.8-8.8)	4.7* (2.0-7.4)	4.5** (1.8-7.2)	85.0 (80.4-89.6)
20-29 years	9.6 (8.2-11.0)	6.1 (5.0-7.2)	9.0 (7.6-10.4)	75.3 (73.2-77.4)
30-39 years	10.3 (9.2-11.4)	4.4 (3.6-5.2)	19.8 (18.3-21.3)	65.4 (63.7-67.1)
40-49 years	12.8 (11.5-14.1)	3.2 (2.5-3.9)	27.0 (25.3-28.7)	57.1 (55.2-59.0)
50-59 years	12.5 (11.2-13.8)	2.1 (1.5-2.7)	32.7 (30.9-34.5)	52.7 (50.7-54.7)
60-69 years	11.1 (9.5-12.7)	1.2* (0.6-1.8)	36.9 (34.4-39.4)	50.8 (48.2-53.4)
70+ years	5.2 (2.5-7.9)	1.2** (-0.1-2.5)	35.4 (29.5-41.3)	58.1 (52.0-64.2)
State				
New South Wales	9.4 (8.3-10.5)	4.0 (3.3-4.7)	22.9 (21.4-24.4)	63.6 (61.8-65.4)
Victoria	10.2 (9.0-11.4)	4.2 (3.4-5.0)	22.3 (20.7-23.9)	63.2 (61.4-65.0)
Queensland	13.0 (11.5-14.5)	3.4 (2.6-4.2)	24.4 (22.5-26.3)	59.3 (57.1-61.5)
South Australia	13.1 (11.3-14.9)	2.9 (2.0-3.8)	23.1 (20.8-25.4)	60.9 (58.3-63.5)
Western Australia	11.7 (9.8-13.6)	3.2 (2.2-4.2)	22.1 (19.6-24.6)	63.1 (60.2-66.0)
Tasmania	14.1 (10.9-17.3)	2.0* (0.7-3.3)	24.8 (20.9-28.7)	59.1 (54.6-63.6)
Australian Capital Territory	9.4 (7.1-11.7)	2.1* (1.0-3.2)	21.9 (18.7-25.1)	66.6 (62.9-70.3)
Northern Territory	15.3 (12.7-17.9)	4.2 (2.7-5.7)	22.7 (19.6-25.8)	57.9 (54.3-61.5)
Remoteness¹				
Metropolitan	9.7 (9.1-10.3)	3.6 (3.2-4.0)	22.2 (21.3-23.1)	64.5 (63.4-65.6)
Non-metropolitan	14.6 (13.5-15.7)	3.9 (3.3-4.5)	25.3 (23.9-26.7)	56.2 (54.6-57.8)
Socio-economic status²				
Low	15.8 (14.7-16.9)	3.3 (2.7-3.9)	21.7 (20.4-23.0)	59.2 (57.7-60.7)
High	8.4 (7.8-9.0)	3.9 (3.5-4.3)	23.7 (22.8-24.6)	63.9 (62.8-65.0)
Education level				
Year 12 or less	14.5 (13.3-15.7)	4.3 (3.6-5.0)	23.4 (21.9-24.9)	57.8 (56.1-59.5)
Certificate/Diploma	14.6 (13.5-15.7)	4.0 (3.4-4.6)	27.0 (25.6-28.4)	54.4 (52.8-56.0)
Bachelor degree or higher	4.8 (4.2-5.4)	3.1 (2.6-3.6)	19.4 (18.2-20.6)	72.7 (71.4-74.0)

Source: National Drug Strategy Household Survey, 2019.

* Indicates the estimate has a relative standard error of 25% to 50% and should be used with caution.

** Indicates the estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

Notes:

1. Remoteness is based on the ABS Australian Statistical Geography Standard (ASGS) Remoteness Area classification. 'Metropolitan' consists of major cities and 'Non-metropolitan' combines inner regional, outer regional, remote and very remote areas.
2. The Index of Relative Socio-economic Advantage and Disadvantage (IRSAD) was used to report on socioeconomic status (SES). 'Low SES' consists of combined 1st and 2nd IRSAD quintiles; 'High SES' consists of combined 3rd-5th IRSAD quintiles.

Table 11. Tobacco use status among employed Australians aged 14+ years by physical health and psychological distress, 2019 (NDSHS)

	Percentage (95% CI)			
	Daily	Occasional	Ex-smoker	Non-smoker
Self-assessed health status¹				
Fair/poor	20.5 (17.8-23.2)	2.4* (1.4-3.4)	26.8 (23.8-29.8)	50.2 (46.8-53.6)
Good	16.4 (15.2-17.6)	4.4 (3.7-5.1)	25.1 (23.7-26.5)	54.1 (52.5-55.7)
Very good/excellent	7.3 (6.7-7.9)	3.5 (3.1-3.9)	21.6 (20.6-22.6)	67.6 (66.5-68.7)
Psychological distress²				
Low	9.5 (8.8-10.2)	3.2 (2.8-3.6)	23.3 (22.4-24.2)	64.0 (62.9-65.1)
Moderate	11.8 (10.6-13.0)	4.3 (3.5-5.1)	24.4 (22.7-26.1)	59.6 (57.7-61.5)
High	15.7 (13.4-18.0)	5.8 (4.3-7.3)	20.7 (18.2-23.2)	57.8 (54.7-60.9)
Very high	20.9 (16.8-25.0)	5.2* (3.0-7.4)	15.3 (11.7-18.9)	58.6 (53.6-63.6)

Source: National Drug Strategy Household Survey, 2019.

* Indicates the estimate has a relative standard error of 25% to 50% and should be used with caution.

Notes:

1. In response to the question 'In general, would you say your health is...?.'
2. The Kessler 10 Item Psychological Distress Scale was used to assess psychological distress. 'Low' psychological distress reflects a score of 10-15; 'moderate' reflects a score of 16-21; 'high' reflects a score of 22-29, and 'very high' reflects a score of 30-50.

Tobacco summary

Daily smoking prevalence was significantly higher among employed Australians who were male (12%), aged 40-59 years, non-metropolitan based (15%), had low SES (16%), had a certificate/diploma or lower level of qualification (15%), had fair to poor health (21%) and very high (21%) levels of psychological distress.

Alcohol use

Alcohol use in the workplace

Alcohol consumption patterns are influenced by the workplace environment (4, 36). Risky drinking may be promoted and facilitated in some workplace contexts, for example in jobs with permissive social and cultural norms in regard to drinking, high availability of alcohol, and lack of constraints (36, 37). Physical conditions can also influence consumption: hot, dusty environments, lack of supervised settings and stressful work are all associated with more problematic consumption (38).

Some groups of employees are more susceptible to risky drinking than others, such as young people entering the workforce for the first time (39). Industry type can also play a role in shaping alcohol consumption. Workers in male-dominated industries (both men and women) tend to drink in riskier ways (37). Other population and industry groups at high risk have also been identified, for example middle-aged men in construction (40). Alcohol consumption has significant negative consequences for the workplace. Alcohol use is associated with greater absenteeism and presenteeism, with associated financial costs for businesses (6). Risky drinking can also create unsafe working conditions which can lead to occupational injuries or fatalities (2). Intoxication, hangover effects and alcohol withdrawal may result in aggression, antisocial behaviour, and inter-personal conflict among employees (3-5).

The pattern of alcohol use for employed Australians is similar to that of the total Australian population, with the largest proportion of both groups reporting low risk drinking (Figure 2). In comparison with the broader Australian population, there were smaller proportions of employed Australians reporting abstinence from alcohol and larger proportions reporting drinking at risky levels. As with the reduction in risky alcohol use in the Australian sample, risky drinking prevalence among employed Australians significantly declined between 2010 (44%) and 2019 (38%) (Figure 2).

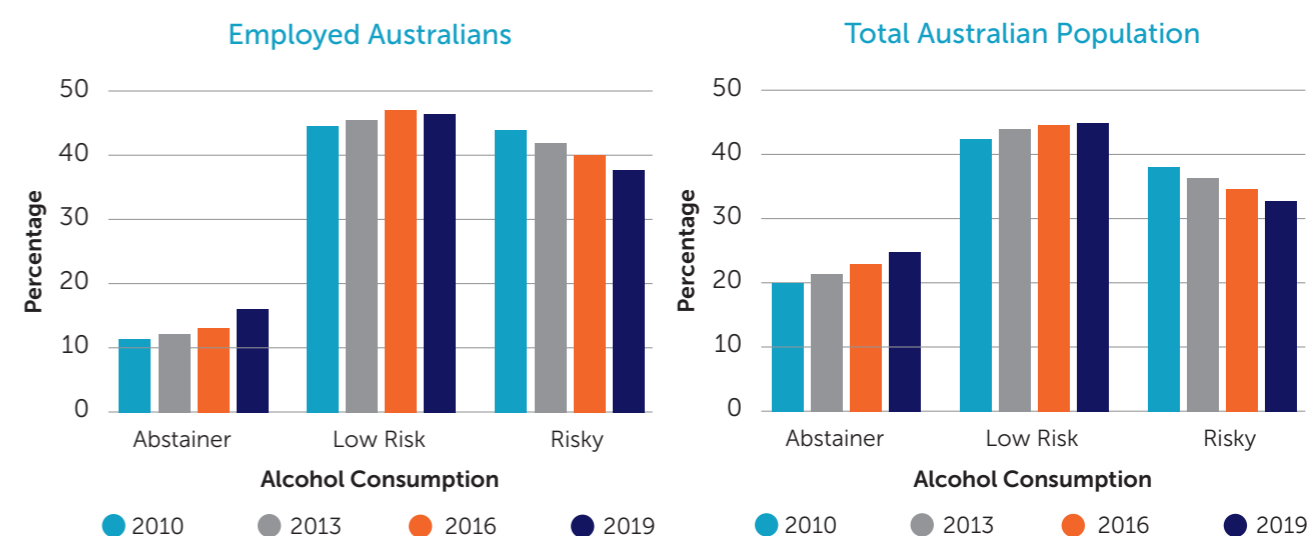


Figure 2. Prevalence (%) of alcohol use among employed Australians and all Australians aged 14+ years, 2010–2019 (NDSHS)

Source: National Drug Strategy Household Survey, 2010, 2013, 2016, 2019.

Notes:

1. Analysis only includes those who selected their main employment status as employed (excludes full-time students who work part time).
2. See Appendix C: Supplementary tables 3 & 4 for data underpinning these charts.

Across all demographic categories there were smaller proportions of abstainers among the employed group (Table 12) compared with the Australian population. For example, among the total Australian female population, 26% reported abstinence from alcohol compared with 16% of employed females. There were larger proportions of employed Australians drinking at risky levels in every demographic category (Table 12) compared with the Australian population.

Table 12. Alcohol use among employed Australians aged 14+ years by demographic factors, 2019 (NDSHS)

Demographics	Percentage (95% CI)		
	Abstainer	Low risk	Risky
Gender			
Male	15.5 (14.5-16.5)	38.2 (36.8-39.6)	46.3 (44.9-47.7)
Female	16.1 (15.1-17.1)	55.7 (54.3-57.1)	28.2 (27.0-29.4)
Age groups			
14-19 years	27.5 (21.2-33.8)	31.4 (24.9-37.9)	41.1 (34.2-48.0)
20-29 years	16.6 (14.7-18.5)	39.8 (37.2-42.4)	43.6 (41.0-46.2)
30-39 years	17.3 (15.8-18.8)	48.1 (46.1-50.1)	34.6 (32.7-36.5)
40-49 years	15.1 (13.6-16.6)	48.2 (46.1-50.3)	36.8 (34.8-38.8)
50-59 years	12.5 (11.1-13.9)	49.0 (46.9-51.1)	38.5 (36.4-40.6)
60-69 years	14.4 (12.5-16.3)	50.3 (47.6-53.0)	35.3 (32.7-37.9)
70+ years	19.2 (14.1-24.3)	43.1 (36.6-49.6)	37.7 (31.4-44.0)
State			
New South Wales	18.4 (16.9-19.9)	44.5 (42.5-46.5)	37.2 (35.3-39.1)
Victoria	15.6 (14.1-17.1)	49.5 (47.4-51.6)	34.9 (32.9-36.9)
Queensland	12.5 (10.9-14.1)	46.1 (43.6-48.6)	41.4 (39.0-43.8)
South Australia	13.2 (11.2-15.2)	46.1 (43.2-49.0)	40.7 (37.9-43.5)
Western Australia	17.6 (15.2-20.0)	42.9 (39.7-46.1)	39.6 (36.5-42.7)
Tasmania	9.4 (6.5-12.3)	49.8 (44.8-54.8)	40.8 (35.9-45.7)
Australian Capital Territory	14.5 (11.2-17.8)	55.9 (51.3-60.5)	29.6 (25.3-33.9)
Northern Territory	16.9 (14.0-19.8)	37.7 (34.0-41.4)	45.5 (41.7-49.3)
Remoteness¹			
Metropolitan	17.1 (16.2-18.0)	46.9 (45.7-48.1)	36.0 (34.9-37.1)
Non-metropolitan	11.9 (10.8-13.0)	44.7 (43.0-46.4)	43.4 (41.7-45.1)
Socio-economic status²			
Low	18.8 (17.5-20.1)	45.0 (43.3-46.7)	36.2 (34.6-37.8)
High	14.1 (13.3-14.9)	47.0 (45.8-48.2)	38.9 (37.7-40.1)
Education level			
Year 12 or less	16.9 (15.5-18.3)	43.1 (41.2-45.0)	40.0 (38.1-41.9)
Certificate/Diploma	13.7 (12.5-14.9)	45.1 (43.4-46.8)	41.1 (39.4-42.8)
Bachelor degree or higher	16.6 (15.4-17.8)	50.3 (48.7-51.9)	33.1 (31.6-34.6)

Source: National Drug Strategy Household Survey, 2019.

Notes:

1. Remoteness is based on the ABS Australian Statistical Geography Standard (ASGS) Remoteness Area classification. 'Metropolitan' consists of major cities and 'Non-metropolitan' combines inner regional, outer regional, remote and very remote areas.
2. The Index of Relative Socio-economic Advantage and Disadvantage (IRSAD) was used to report on socioeconomic status (SES). 'Low SES' consists of combined 1st and 2nd IRSAD quintiles; 'High SES' consists of combined 3rd-5th IRSAD quintiles.

Alcohol use among employed Australians varied by self-reported physical health and psychological distress levels.

Risky alcohol use was less common among Australian workers reporting very good/excellent health. Risky alcohol use tended to increase as levels of psychological distress increased. (Table 13).

Employed Australians who reported poor health and very high levels of psychological distress were more likely to drink at risky levels (41% and 48%, respectively) than Australians in the general population (32% and 37%, respectively) (Table 13).

Table 13. Alcohol use among employed Australians aged 14+ years by physical health and psychological distress, 2019 (NDSHS)

	Percentage (95% CI)		
	Abstainer	Low risk	Risky
Self-assessed health status¹			
Fair/poor	18.6 (15.8-21.4)	40.5 (36.9-44.1)	40.9 (37.3-44.5)
Good	14.1 (12.9-15.3)	44.9 (43.1-46.7)	41.0 (39.3-42.7)
Very good/excellent	16.2 (15.3-17.1)	47.7 (46.4-49.0)	36.0 (34.8-37.2)
Psychological distress²			
Low	17.1 (16.2-18.0)	47.6 (46.4-48.8)	35.2 (34.0-36.4)
Moderate	12.8 (11.4-14.2)	46.5 (44.4-48.6)	40.7 (38.6-42.8)
High	13.1 (10.8-15.4)	39.5 (36.2-42.8)	47.4 (44.0-50.8)
Very high	13.6 (9.7-17.5)	38.6 (33.1-44.1)	47.7 (42.1-53.3)

Source: National Drug Strategy Household Survey, 2019.

Notes:

1. In response to the question 'In general, would you say your health is...?.'
2. The Kessler 10 Item Psychological Distress Scale (K10) was used to assess psychological distress. 'Low' psychological distress reflects a score of 10-15 on the K10; 'moderate' reflects a score of 16-21; 'high' reflects a score of 22-29, and 'very high' reflects a score of 30-50.

Alcohol summary

Rates of risky drinking were significantly higher among employed Australians who were male (46%), based in non-metropolitan areas (43%), and with a high SES (39%). Employed Australians who drank at risky levels were equally likely to rate their health as fair/poor or good (41% each) and reported high (47%) or very high levels of psychological distress (48%).

Illicit drug use

Illicit drug use in the workplace

Workplace culture, working conditions, and individual behaviours and beliefs all interact to shape workers' drug use. Drug use can directly impact the workplace when employees attend work intoxicated or hungover/coming down.

Such employees may:

- have difficulty completing tasks, operating machinery safely, and cooperating with co-workers, management, and the public;
- make more mistakes and increase the likelihood of an accident, a workplace injury, and/or damaging equipment or vehicles;
- reduce team productivity and morale.

They may also have poor mental and physical health, and be more likely to be absent from work (41). It has been estimated that drug-related absenteeism costs Australian businesses \$1 billion annually (42).

Comparisons over time (2010-2019) between employed Australians and the general population have been limited to four drugs: cannabis, cocaine, ecstasy and methamphetamine. As mentioned in Chapter 1, the drugs included within the category of 'pharmaceutical drugs' changed considerably in 2016. The pharmaceutical drugs and any illicit drugs categories have been omitted from Figure 3, but data are reported in Appendix C. The pharmaceutical drugs and any illicit drug categories are however included when 2019 data is reported on.

Among employed Australians, 19% reported recent illicit drug use, which was higher than found among the general population (16%). The pattern of illicit drug use for employed Australians is similar to that of the total Australian population, with cannabis the most common illicit drug used by both groups. There has been a steady rise in cannabis use over time among employed Australians; this differs from the broader Australian population where a sharp rise is seen only for the most recent survey year (Figure 3).

The prevalence of cannabis, cocaine, ecstasy and methamphetamine use was higher among employed Australians compared to the general population, however prevalence was similar regarding methamphetamine use. The biggest difference was seen in cocaine use where 6.2% of employed Australians reported recent use compared with 4.2% of the broader Australian population (Figure 3). In 2019, 7.5% of employed Australians reported use of at least two illicit drugs in the past year.

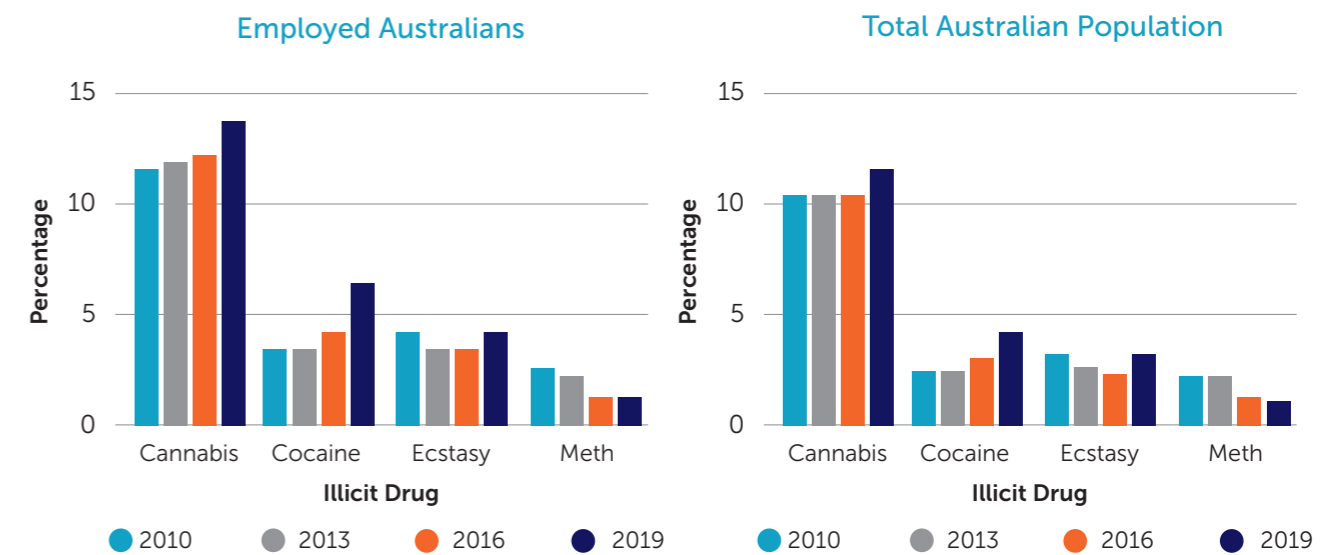


Figure 3. Prevalence (%) of illicit drug use among employed Australians and all Australians aged 14+ years, 2010-2019 (NDSHS)

Source: National Drug Strategy Household Survey, 2010, 2013, 2016, 2019.

Notes:

1. Analysis only includes those who selected their main employment status as employed (e.g., excludes full-time students who work part time).
2. Drug types included within the 'pharmaceutical drugs' category changed considerably between 2013 and 2016. This category is therefore not included in this chart. Data for pharmaceutical drug use are available separately in Appendix C.
3. See Appendix C: Supplementary tables 3 & 4 for data underpinning these charts.

Across all demographic categories there were similar or slightly larger proportions of employed Australians using illicit drugs (Table 14) compared with the total Australian population. With respect to age, there were larger proportions of employed young people aged 14-19 years using cannabis (22%) or any illicit drug (28%) compared with the general population aged 14-19 years (cannabis: 13%; illicit drugs: 16%). The other notable difference according to age was the larger proportion of employed people over 60 years reporting recent cannabis use (5.7%) compared to 60+ year-olds in the general population (2.9%).

Differences in drug use were also apparent by education level: a larger proportion of employees with a year 12 or lower level of education reported cannabis, cocaine or any illicit drug use (Table 14) compared with their Australian counterparts.

A larger proportion of employees who reported poor health used illicit drugs (Table 15) compared with the overall Australian population. The difference was greatest for recent cannabis use, with 17% of Australian employees who reported fair to poor health using cannabis compared with 13% of their Australian counterparts.

Use of each illicit drug and overall illicit drug use amongst employed Australians increased as their levels of psychological distress increased (Table 15). Among workers with very high psychological distress, cannabis was the drug most commonly reported (31%), followed by cocaine (15%). Overall, 38% of employed Australians who had very high levels of psychological distress used an illicit drug.

Table 14. Recent (past 12 months) illicit drug use among employed Australians aged 14+ years by demographic factors, 2019 (NDSHS)

Demographics	Percentage (95% CI)					
	Cannabis	Cocaine	Ecstasy	Meth	Pharma	Any illicit ^{1,2}
Gender						
Male	16.7 (15.7-17.7)	7.5 (6.8-8.2)	4.7 (4.1-5.3)	2.0 (1.6-2.4)	4.7 (4.1-5.3)	22.0 (20.9-23.1)
Female	9.7 (9.0-10.4)	4.6 (4.1-5.1)	2.6 (2.2-3.0)	1.0 (0.8-1.2)	3.8 (3.3-4.3)	15.0 (14.1-15.9)
Age groups						
14-19 years	22.4 (17.0-27.8)	4.6* (1.9-7.3)	7.9* (4.4-11.4)	0.8** (0.0-1.9)	4.1* (1.5-6.7)	28.1 (22.3-33.9)
20-29 years	24.9 (22.8-27.0)	14.8 (13.1-16.5)	10.6 (9.1-12.1)	2.8 (2.0-3.6)	6.8 (5.6-8.0)	33.0 (30.8-35.2)
30-39 years	13.5 (12.2-14.8)	7.5 (6.5-8.5)	3.8 (3.1-4.5)	1.9 (1.4-2.4)	3.7 (3.0-4.4)	19.5 (18.0-21.0)
40-49 years	10.2 (9.1-11.3)	3.7 (3.0-4.4)	1.3 (0.9-1.7)	1.4 (1.0-1.8)	4.3 (3.5-5.1)	14.6 (13.3-15.9)
50-59 years	8.0 (6.9-9.1)	1.6 (1.1-2.1)	0.7* (0.4-1.0)	0.8* (0.4-1.2)	3.0 (2.3-3.7)	11.5 (10.2-12.8)
60+ years	5.7 (4.6-6.8)	0.7* (0.3-1.1)	0.0** (0.0-0.0)	0.1** (0.0-0.2)	3.6 (2.7-4.5)	9.3 (7.9-10.7)
State						
New South Wales	12.8 (11.6-14.0)	7.7 (6.7-8.7)	4.1 (3.4-4.8)	1.4 (1.0-1.8)	4.1 (3.4-4.8)	18.4 (17.0-19.8)
Victoria	13.4 (12.1-14.7)	7.3 (6.3-8.3)	4.7 (3.9-5.5)	1.8 (1.3-2.3)	5.3 (4.4-6.2)	20.1 (18.6-21.6)
Queensland	14.5 (12.9-16.1)	5.2 (4.2-6.2)	3.0 (2.2-3.8)	1.3* (0.8-1.8)	4.2 (3.3-5.1)	18.9 (17.1-20.7)
South Australia	13.2 (11.4-15.0)	3.4 (2.4-4.4)	1.3* (0.7-1.9)	1.1* (0.5-1.7)	3.6 (2.6-4.6)	17.8 (15.7-19.9)
Western Australia	13.3 (11.3-15.3)	3.4 (2.3-4.5)	3.6 (2.5-4.7)	2.4 (1.5-3.3)	3.6 (2.5-4.7)	17.2 (15.0-19.4)
Tasmania	15.0 (11.7-18.3)	2.4* (1.0-3.8)	2.9* (1.4-4.4)	0.4** (0.0-1.0)	5.0* (3.0-7.0)	19.7 (16.1-23.3)
Australian Capital Territory	11.4 (8.9-13.9)	4.7 (3.0-6.4)	2.9* (1.6-4.2)	0.1** (0.0-0.3)	3.5 (2.1-4.9)	16.4 (13.5-19.3)
Northern Territory	16.3 (13.6-19.0)	3.7 (2.3-5.1)	3.0* (1.7-4.3)	1.3* (0.5-2.1)	2.4* (1.3-3.5)	19.7 (16.8-22.6)

Demographics	Percentage (95% CI)					
	Cannabis	Cocaine	Ecstasy	Meth	Pharma	Any illicit ^{1,2}
Remoteness³						
Metropolitan	13.5 (12.7-14.3)	7.1 (6.5-7.7)	4.2 (3.8-4.6)	1.6 (1.3-1.9)	4.5 (4.0-5.0)	19.2 (18.3-20.1)
Non-metropolitan	13.4 (12.3-14.5)	3.5 (2.9-4.1)	2.5 (2.0-3.0)	1.2 (0.8-1.6)	3.9 (3.3-4.5)	17.7 (16.5-18.9)
Socio-economic status⁴						
Low	14.0 (12.9-15.1)	5.0 (4.3-5.7)	3.2 (2.6-3.8)	1.6 (1.2-2.0)	4.1 (3.5-4.7)	18.9 (17.7-20.1)
High	13.2 (12.4-14.0)	6.8 (6.2-7.4)	4.1 (3.7-4.5)	1.5 (1.2-1.8)	4.4 (3.9-4.9)	18.7 (17.8-19.6)
Education level						
Year 12 or less	15.2 (13.9-16.5)	6.1 (5.3-6.9)	4.1 (3.4-4.8)	1.4 (1.0-1.8)	4.4 (3.7-5.1)	20.4 (19.0-21.8)
Certificate/Diploma	15.6 (14.4-16.8)	7.2 (6.4-8.0)	3.9 (3.3-4.5)	2.1 (1.6-2.6)	5.3 (4.6-6.0)	21.3 (20.0-22.6)
Bachelor degree or higher	10.5 (9.6-11.4)	5.6 (4.9-6.3)	3.5 (3.0-4.0)	1.1 (0.8-1.4)	3.4 (2.9-3.9)	15.6 (14.5-16.7)

Source: National Drug Strategy Household Survey, 2019.

* Indicates the estimate has a relative standard error of 25% to 50% and should be used with caution.

** Indicates the estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

Notes:

1. Any illicit drug use refers to use of at least one of the following illicit drugs: cannabis, ecstasy, amphetamines, cocaine, hallucinogens, inhalants, heroin, ketamine, GHB, synthetic cannabinoids, emerging psychedelic substances, painkillers/opioids, tranquilisers/sleeping pills, steroids, methadone/buprenorphine, and any drug which is injected (non-medical use).
2. The NDSHS offers introductory text for each class of drug, including examples of the drugs included. Examples for hallucinogens, inhalants and New and Emerging Psychoactive Substances were changed in 2019, which may have impacted trend results since 2016.
3. Remoteness is based on the ABS Australian Statistical Geography Standard (ASGS) Remoteness Area classification. 'Metropolitan' consists of major cities and 'Non-metropolitan' combines inner regional, outer regional, remote and very remote areas.
4. The Index of Relative Socio-economic Advantage and Disadvantage (IRSAD) was used to report on socioeconomic status (SES). 'Low SES' consists of combined 1st and 2nd IRSAD quintiles; 'High SES' consists of combined 3rd-5th IRSAD quintiles.

Table 15. Recent (past 12 months) illicit drug use among employed Australians aged 14+ years by physical health and psychological distress, 2019 (NDSHS)

	Percentage (95% CI)					
	Cannabis	Cocaine	Ecstasy	Meth	Pharma	Any illicit ^{1,2}
Self-assessed health status³						
Fair/poor	16.5 (14.0-19.0)	5.9 (4.3-7.5)	3.5* (2.3-4.7)	2.7 (1.6-3.8)	5.8 (4.2-7.4)	22.5 (19.7-25.3)
Good	14.6 (13.4-15.8)	5.7 (4.9-6.5)	3.2 (2.6-3.8)	1.7 (1.3-2.1)	4.1 (3.4-4.8)	19.8 (18.5-21.1)
Very good / excellent	12.6 (11.8-13.4)	6.4 (5.8-7.0)	4.1 (3.6-4.6)	1.3 (1.0-1.6)	4.3 (3.8-4.8)	17.9 (17.0-18.8)
Psychological distress⁴						
Low	10.4 (9.7-11.1)	4.5 (4.0-5.0)	2.8 (2.4-3.2)	1.0 (0.8-1.2)	3.4 (3.0-3.8)	14.9 (14.1-15.7)
Moderate	16.6 (15.2-18.0)	8.3 (7.2-9.4)	4.9 (4.1-5.7)	2.1 (1.5-2.7)	4.5 (3.7-5.3)	22.8 (21.2-24.4)
High	20.7 (18.2-23.2)	9.6 (7.8-11.4)	4.9 (3.6-6.2)	2.9 (1.9-3.9)	7.7 (6.0-9.4)	28.7 (25.9-31.5)
Very high	30.9 (26.2-35.6)	14.8 (11.2-18.4)	11.0 (7.8-14.2)	4.1* (2.1-6.1)	11.7 (8.5-14.9)	38.1 (33.2-43.0)

Source: National Drug Strategy Household Survey, 2019.

* Indicates the estimate has a relative standard error of 25% to 50% and should be used with caution.

Notes:

1. Any illicit drug use refers to use of at least one of the following illicit drugs: cannabis, ecstasy, amphetamines, cocaine, hallucinogens, inhalants, heroin, ketamine, GHB, synthetic cannabinoids, emerging psychedelic substances, painkillers/opioids, tranquilisers/sleeping pills, steroids, methadone/buprenorphine, and any drug which is injected (non-medical use).
2. The NDSHS offers introductory text for each class of drug, including examples of the drugs included. Examples for hallucinogens, inhalants and New and Emerging Psychoactive Substances were changed in 2019, which may have impacted trend results since 2016.
3. In response to the question 'In general, would you say your health is...?'
4. The Kessler 10 Item Psychological Distress Scale (K10) was used to assess psychological distress. 'Low' psychological distress reflects a score of 10-15 on the K10; 'moderate' reflects a score of 16-21; 'high' reflects a score of 22-29, and 'very high' reflects a score of 30-50.

Illicit drugs summary

Use of any illicit drug was significantly higher among employed Australians who were male (22%), aged 14–29 years (14-19: 28%, 20-29 years: 33%), had a certificate or diploma level of education (21%) or lower (i.e., year 12 or less: 20%), and had low levels of psychological distress

Of the illicit drugs explored in this report, cannabis was the most frequently used drug by employed Australians, followed by cocaine; methamphetamine use was least prevalent among both the employed population and the general population. Socioeconomic status played no role in the use of illicit drugs overall by employed Australians. However, workers with high SES were more likely to use cocaine and ecstasy. Use of illicit drugs overall, cannabis, and pharmaceutical drugs was less common among workers with at least a degree level qualification.

Industry groups

Industry groups and ATOD use

'Industry' refers to the main goods and services that are produced by a person's employer. Australian and international researchers have examined the relationship between industry group and ATOD use via nationally representative workforce samples (16, 43). In Australia, the relationship between ATOD use and industry group has been examined at various timepoints using NDSHS data (44, 45).

This section provides information on the most recent findings from the NDSHS on patterns and prevalence of ATOD use among employed Australians by 19 industry groups. The employed Australians category includes those who selected their main employment status as employed; those who primarily perform other roles while also working (e.g., students who work part-time) are therefore excluded. Due to small sample sizes and changes in coding of industries over time, only 2019 data is reported here.

Tobacco use

Five of the 19 industry groups had daily smoking prevalence above the national employed average of 11% (Figure 4).⁵

The industry with the highest prevalence of workers who smoked tobacco daily in 2019 was transport, postal and warehousing (18%), followed by administrative and support services (17%), other services (16%), accommodation and food services (15%) and construction (14%). Daily smoking was least prevalent among workers in the financial and insurance services (5.1%*), education and training (5.1%), and professional, scientific and technical services (5.3%) industries.

⁵ Although statistical analyses cannot be undertaken between the industry groups and the total employed population (as the groups are not mutually exclusive), differences were considered noteworthy when the industry group's confidence intervals did not include the employed population's prevalence value.

* Indicates the estimate has a relative standard error of 25% to 50% and should be used with caution.

The industry with the highest prevalence of ex-smokers was the electricity, gas, water and waste services industry, with 34% of workers reporting to be ex-smokers. Non-smokers were more likely to be found in the education and training (72%), health care and social assistance (67%), and financial and insurance service (67%) industries (Table 16).

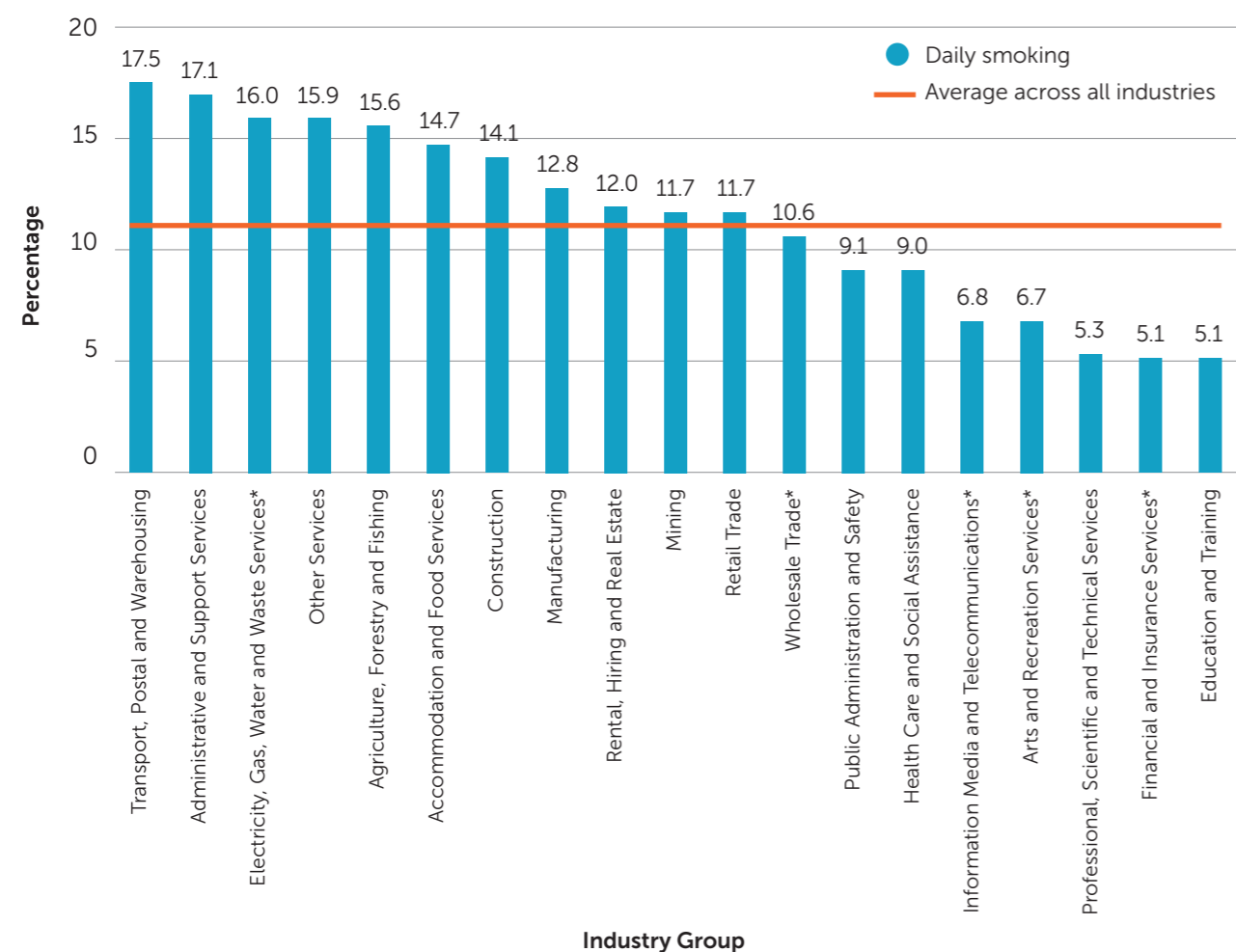


Figure 4. Prevalence of daily tobacco use among employed Australians aged 14+ years by industry of employment, 2019 (NDSHS)

Source: National Drug Strategy Household Survey, 2019.

* Indicates the estimate has a relative standard error of 25% to 50% and should be used with caution.

Notes:

1. Analysis only includes those who selected their main employment status as employed (e.g., excludes full-time students who work part time).
2. Australian and New Zealand Standard Industrial Classification (ANZSIC) codes were used to classify industry.

Table 16. Prevalence (%) of tobacco use among employed Australians aged 14+ years by industry of employment, 2019 (NDSHS)

Industry	Percentage (95% CI)			
	Daily	Occasional	Ex-smoker	Non-smoker
Transport, Postal & Warehousing	17.5 (13.9-21.1)	4.9* (2.9-6.9)	23.1 (19.1-27.1)	54.5 (49.8-59.2)
Administrative & Support Services	17.1 (12.9-21.3)	3.5* (1.4-5.6)	28.1 (23.1-33.1)	51.3 (45.7-56.9)
Electricity, Gas, Water & Waste Services	16.0* (8.5-23.5)	0.6** (0.0-2.2)	34.0 (24.3-43.7)	49.4 (39.1-59.7)
Other Services	15.9 (12.0-19.8)	2.4* (0.8-4.0)	19.5 (15.3-23.7)	62.2 (57.0-67.4)
Agriculture, Forestry & Fishing	15.6 (9.8-21.4)	0.7** (0.0-2.0)	24.2 (17.3-31.1)	59.5 (51.6-67.4)
Accommodation & Food Services	14.7 (11.7-17.7)	5.9 (3.9-7.9)	13.8 (10.8-16.8)	65.6 (61.5-69.7)
Construction	14.1 (11.5-16.7)	5.9 (4.2-7.6)	27.8 (24.5-31.1)	52.2 (48.5-55.9)
Manufacturing	12.8 (9.9-15.7)	3.7* (2.1-5.3)	27.6 (23.7-31.5)	56.0 (51.7-60.3)
Rental, Hiring & Real Estate Services	12.0 (6.8-17.2)	3.1** (0.3-5.9)	21.6 (15.0-28.2)	63.3 (55.5-71.1)
Mining	11.7* (5.6-17.8)	2.3** (0.0-5.1)	31.6 (22.8-40.4)	54.3 (44.9-63.7)
Retail Trade	11.7 (9.2-14.2)	5.2 (3.4-7.0)	21.9 (18.6-25.2)	61.2 (57.3-65.1)
Wholesale Trade	10.6* (6.0-15.2)	4.1 (1.2-7.0)	26.4 (19.9-32.9)	58.8 (51.5-66.1)
Public Administration & Safety	9.1 (7.0-11.2)	2.0* (1.0-3.0)	26.3 (23.1-29.5)	62.6 (59.1-66.1)
Health Care & Social Assistance	9.0 (7.7-10.3)	2.6 (1.9-3.3)	21.6 (19.8-23.4)	66.8 (64.7-68.9)
Information Media & Telecommunications	6.8* (2.7-10.9)	5.8* (2.0-9.6)	30.2 (22.7-37.7)	57.2 (49.1-65.3)
Arts & Recreation Services	6.7* (3.1-10.3)	5.6* (2.3-8.9)	28.6 (22.1-35.1)	59.2 (52.1-66.3)
Professional, Scientific & Technical Services	5.3 (3.8-6.8)	4.4 (3.0-5.8)	24.8 (21.9-27.7)	65.6 (62.4-68.8)
Financial & Insurance Services	5.1* (2.5-7.7)	3.8* (1.6-6.0)	24.3 (19.3-29.3)	66.7 (61.2-72.2)
Education & Training	5.1 (3.8-6.4)	2.5* (1.6-3.4)	20.7 (18.2-23.2)	71.8 (69.1-74.5)

Source: National Drug Strategy Household Survey, 2019.

* Indicates the estimate has a relative standard error of 25% to 50% and should be used with caution.

** Indicates the estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

Notes:

1. Analysis only includes those who selected their main employment status as employed (e.g., excludes full-time students who work part time).
2. Australian and New Zealand Standard Industrial Classification (ANZSIC) codes were used for questions relating to industry.

Alcohol use

Five of 19 industry groups had risky drinking proportions above the national employed average of 38% (Figure 5).⁶ More than half of workers from the electricity, gas, water and waste services (57%) and construction (52%) industries consumed alcohol at risky levels. The other three industries with risky drinking prevalence above the national employed average were agriculture, forestry and fishing (48%), manufacturing (46%) and arts and recreation services (46%). Risky alcohol use was less prevalent among workers from the health care and social assistance industry (28%) (Figure 6; see Appendix C: Supplementary tables for corresponding data).

The health care and social assistance industry had the largest proportion of low-risk drinkers (54%) as well as the second largest proportion of abstainers (18%). In contrast, people employed in the arts and recreation services had the smallest proportion of abstainers (7.9%) (Table 17).

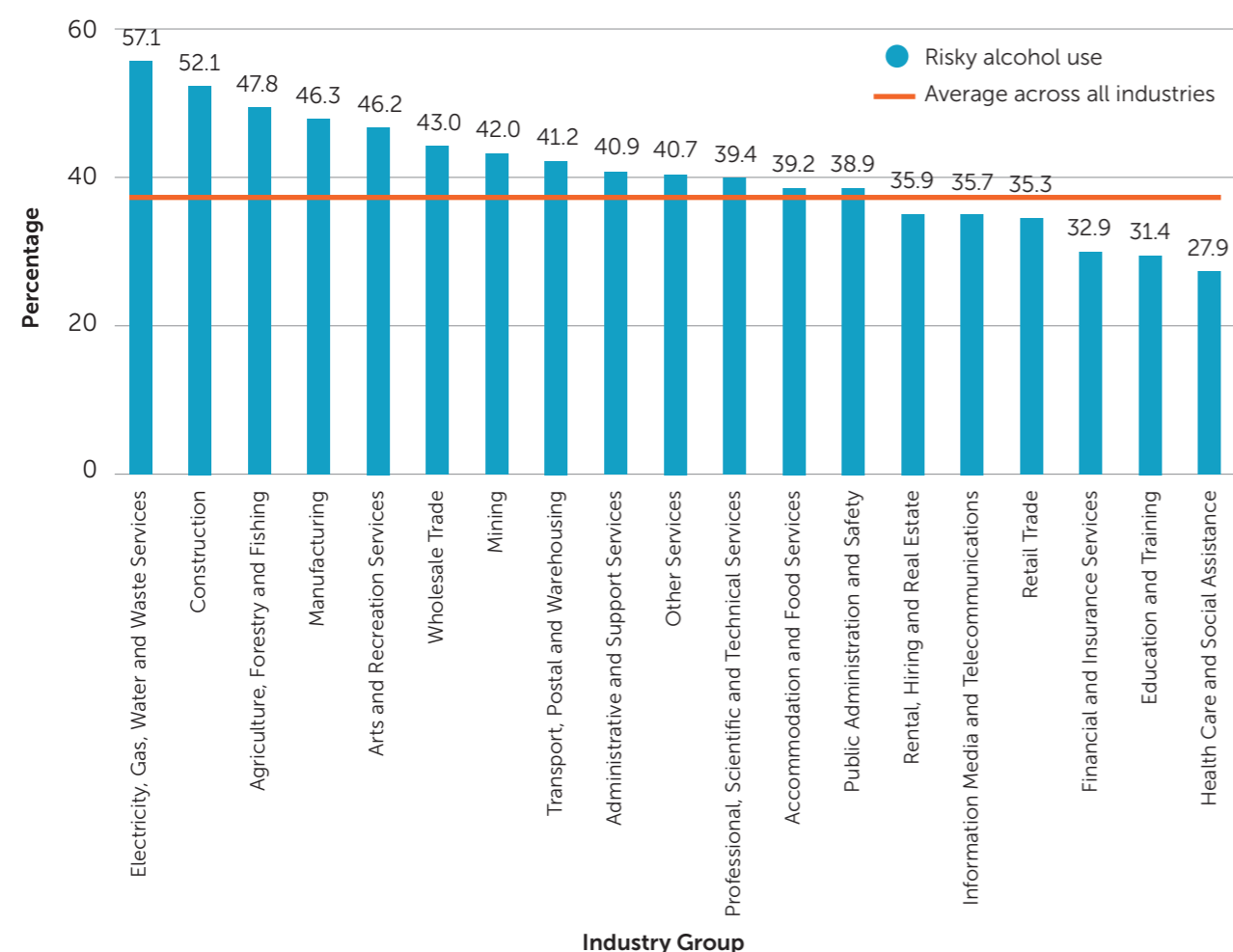


Figure 5. Prevalence (%) of risky alcohol use among employed Australians aged 14+ years by industry of employment, 2019 (NDSHS)

Source: National Drug Strategy Household Survey, 2019.

Notes:

1. Analysis only includes those who selected their main employment status as employed (e.g., excludes full-time students who work part time).
2. Australian and New Zealand Standard Industrial Classification (ANZSIC) codes were used for coding responses relating to industry.

⁶ Although statistical analyses cannot be undertaken between the industry groups and the total employed population (as the groups are not mutually exclusive), differences were considered noteworthy when the industry group's confidence intervals did not include the employed population's prevalence value.

Table 17. Prevalence of alcohol use among employed Australians aged 14+ years by industry of employment, 2019 (NDSHS)

Industry	Percentage (95% CI)		
	Abstainer	Low Risk	Risky
Electricity, Gas, Water & Waste Services	9.9* (3.2-16.6)	33.0 (22.5-43.5)	57.1 (46.0-68.2)
Construction	10.8 (8.4-13.2)	37.0 (33.2-40.8)	52.2 (48.3-56.1)
Agriculture, Forestry & Fishing	18.9 (12.3-25.5)	33.3 (25.4-41.2)	47.8 (39.4-56.2)
Manufacturing	14.1 (10.8-17.4)	39.6 (34.9-44.3)	46.3 (41.5-51.1)
Arts and Recreation Services	7.9 (3.7-12.1)	46.0 (38.3-53.7)	46.2 (38.5-53.9)
Wholesale Trade	8.0* (3.4-12.6)	49.0 (40.6-57.4)	43.0 (34.6-51.4)
Mining	14.5* (6.8-22.2)	43.5 (32.6-54.4)	42.0 (31.2-52.8)
Transport, Postal & Warehousing	16.5 (12.7-20.3)	42.3 (37.3-47.3)	41.2 (36.2-46.2)
Administrative & Support Services	14.9 (10.6-19.2)	44.2 (38.2-50.2)	40.9 (35.0-46.8)
Other Services	16.3(12.0-20.6)	43.0 (37.2-48.8)	40.7 (34.9-46.5)
Professional, Scientific & Technical Services	11.7 (9.3-14.1)	48.9 (45.2-52.6)	39.4 (35.8-43.0)
Accommodation & Food Services	16.8 (13.3-20.3)	44.0 (39.3-48.7)	39.2 (34.6-43.8)
Public Administration & Safety	13.2 (10.5-15.9)	47.9 (43.9-51.9)	38.9 (35.0-42.8)
Rental, Hiring & Real Estate Services	15.5* (9.1-21.9)	48.6 (39.8-57.4)	35.9 (27.5-44.3)
Information Media & Telecommunications	16.5 (9.7-23.3)	47.8 (38.7-56.9)	35.7 (26.9-44.5)
Retail Trade	16.3 (13.1-19.5)	48.4 (44.0-52.8)	35.3 (31.1-39.5)
Financial & Insurance Services	14.1 (9.6-18.6)	53.0 (46.5-59.5)	32.9 (26.8-39.0)
Education & Training	15.5 (13.0-18.0)	53.1 (49.7-56.5)	31.4 (28.2-34.6)
Health Care & Social Assistance	18.2 (16.3-20.1)	53.9 (51.5-56.3)	27.9 (25.7-30.1)

Source: National Drug Strategy Household Survey, 2019.

* Indicates the estimate has a relative standard error of 25% to 50% and should be used with caution.

Notes:

1. Analysis only includes those who selected their main employment status as employed (e.g., excludes full-time students who work part time).
2. Australian and New Zealand Standard Industrial Classification (ANZSIC) codes were used for coding responses relating to industry.

Illicit drug use

Three of 19 industry groups had workers reporting illicit drug use above the national employed average of 19%.⁷ In 2019, the arts and recreation services industry had the highest prevalence of any illicit drug use (35%), followed by the construction (26%) and accommodation and food services (26%) industries (Figure 6). Illicit polysubstance use (e.g., use of at least two illicit drugs in the past year) ranged from 2.2%*-13% among the industry groups. Industries with the highest prevalence of polysubstance use were accommodation and food services (13%), arts and recreation services (12%*) and construction (12%).

Prevalence of cannabis use was above the national employed average among workers from arts and recreation services (27%), information media and telecommunications (21%), accommodation and food services (20%), wholesale trade (20%) and the construction (19%) industries.

Construction, accommodation and food services, and professional, scientific and technical services employees each reported cocaine prevalence above the employed average (9.2-11%, vs 6.2%). Workers in the construction and accommodation and food services industries also reported use of ecstasy (6.2-6.6%) and methamphetamine (3.4%* each) above the employed national average (3.8% and 1.5%, respectively), as did the retail trade industry for ecstasy use (6.3%). Prevalence of pharmaceutical drug use was above the employed national average (4.3%) among construction (6.2%) and public administrative and safety (6.2%) industry employees (Table 18).

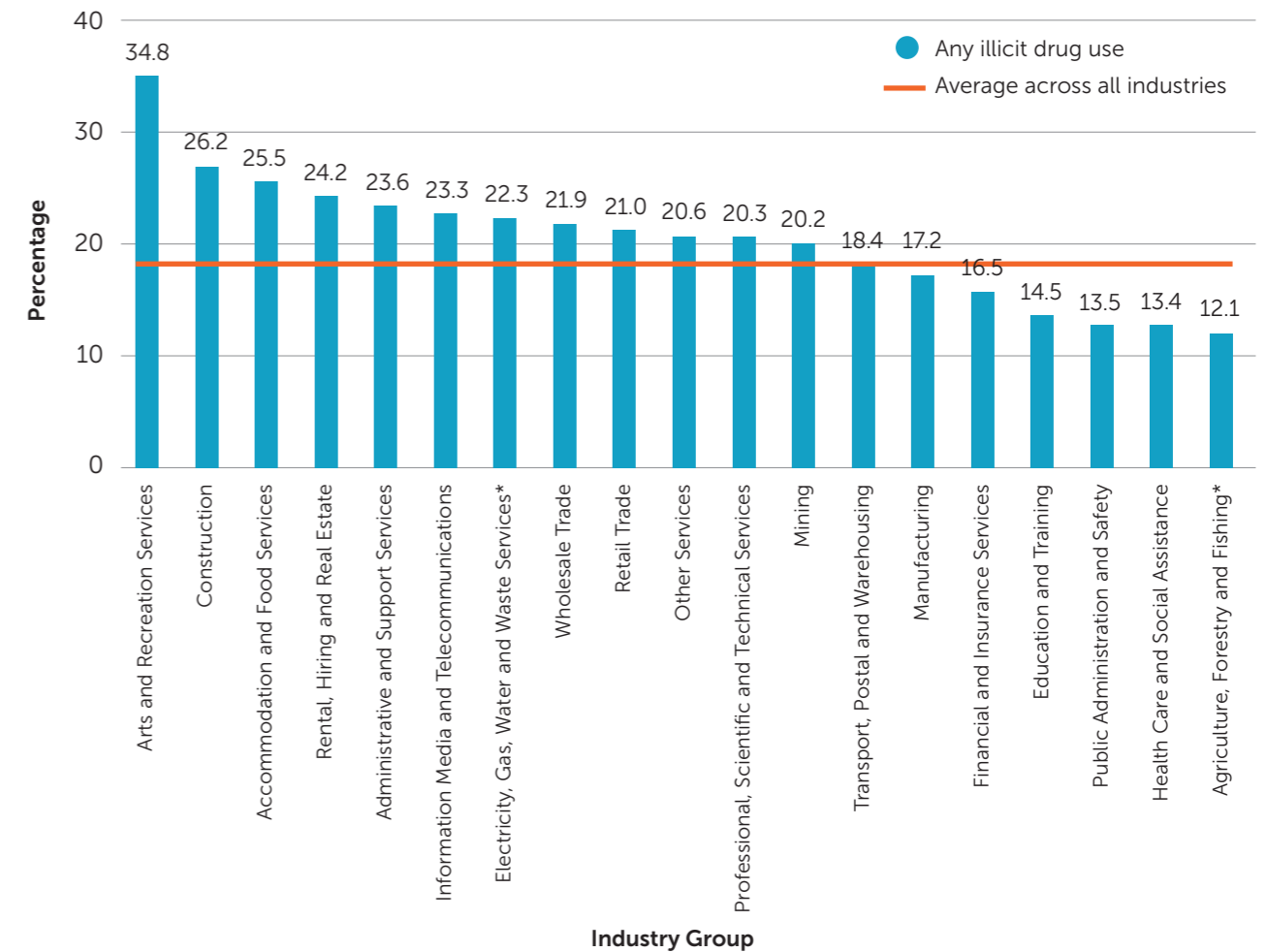


Figure 6. Prevalence (%) of any illicit drug use among employed Australians aged 14+ years by industry of employment, 2019 (NDSHS)

Source: National Drug Strategy Household Survey, 2019.

* Indicates the estimate has a relative standard error of 25% to 50% and should be used with caution.

Notes:

1. The 'any illicit drug' category includes injecting drug use.
2. Analysis only includes those who selected their main employment status as employed (e.g., excludes full-time students who work part time).
3. Australian and New Zealand Standard Industrial Classification (ANZSIC) codes were used for questions relating to industry.

⁷ Although statistical analyses cannot be undertaken between the industry groups and the total employed population (as the groups are not mutually exclusive), differences were considered noteworthy when the industry group's confidence intervals did not include the employed population's prevalence value.

* Indicates the estimate has a relative standard error of 25% to 50% and should be used with caution.

** Indicates the estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

Table 18. Prevalence of illicit drug use among employed Australians aged 14+ years by industry of employment^{1,2}, 2019 (NDSHS)

Industry	Percentage (95% CI)					
	Cannabis	Cocaine	Ecstasy	Meth	Pharma	Any illicit ³
Arts and Recreation Services	26.6 (20.2-33.0)	8.2* (4.2-12.2)	5.2* (2.0-8.4)	0.6** (0.0-1.7)	6.5* (2.9-10.1)	34.8 (27.9-41.7)
Construction	18.6 (15.7-21.5)	10.7 (8.4-13.0)	6.2 (4.4-8.0)	3.4* (2.1-4.7)	6.2 (4.4-8.0)	26.2 (22.9-29.5)
Accommodation & Food Services	20.2 (16.7-23.7)	11.1 (8.4-13.8)	6.6 (4.5-8.7)	3.4* (1.8-5.0)	6.3 (4.2-8.4)	25.5 (21.7-29.3)
Rental, Hiring & Real Estate Services	19.9 (13.5-26.3)	8.5* (4.0-13.0)	4.6** (1.2-8.0)	2.2** (0.0-4.6)	3.1* (0.3-5.9)	24.2 (17.3-31.1)
Administrative & Support Services	17.8 (13.5-22.1)	8.4 (5.3-11.5)	4.5* (2.2-6.8)	2.3* (0.6-4.0)	5.0* (2.6-7.4)	23.6 (18.8-28.4)
Information Media & Telecommunications	20.7 (14.1-27.3)	10.5* (5.5-15.5)	6.7** (2.6-10.8)	2.8** (0.1-5.5)	4.6** (1.2-8.0)	23.3 (16.4-30.2)
Electricity, Gas, Water & Waste Services	16.5* (8.9-24.1)	6.2** (1.2-11.2)	8.8* (3.0-14.6)	3.0** (0.0-6.5)	6.4** (1.3-11.5)	22.3* (13.7-30.9)
Wholesale Trade	19.7 (13.8-25.6)	1.9** (0.0-3.9)	4.0* (1.1-6.9)	1.6** (0.0-3.5)	1.9** (0.0-3.9)	21.9 (15.7-28.1)
Retail Trade	14.2 (11.4-17.0)	7.2 (5.2-9.2)	6.3 (4.4-8.2)	2.1* (1.0-3.2)	3.5* (2.0-5.0)	21.0 (17.8-24.2)
Other Services	17.2 (13.2-21.2)	8.8 (5.8-11.8)	4.7* (2.4-7.0)	1.6* (0.3-2.9)	4.3* (2.1-6.5)	20.6 (16.3-24.9)
Professional, Scientific & Technical Services	13.3 (11.0-15.6)	9.2 (7.3-11.1)	4.9 (3.5-6.3)	1.2* (0.5-1.9)	4.0 (2.7-5.3)	20.3 (17.6-23.0)
Mining	13.2* (6.8-19.6)	5.9* (1.3-10.5)	2.2** (0.0-5.0)	3.1** (0.0-6.4)	6.3* (1.7-10.9)	20.2 (12.6-27.8)
Transport, Postal & Warehousing	13.9 (10.6-17.2)	5.7* (3.5-7.9)	3.3* (1.6-5.0)	1.2* (0.2-2.2)	4.0* (2.1-5.9)	18.4 (14.7-22.1)
Manufacturing	13.3 (10.3-16.3)	3.5* (1.9-5.1)	3.3* (1.7-4.9)	1.0* (0.1-1.9)	4.1* (2.4-5.8)	17.2 (13.9-20.5)
Financial & Insurance Services	10.1 (6.6-13.6)	6.8* (3.9-9.7)	1.7* (0.2-3.2)	0.6** (0.0-1.5)	5.7* (3.0-8.4)	16.5 (12.2-20.8)
Education & Training	9.4 (7.6-11.2)	3.7 (2.6-4.8)	2.2* (1.3-3.1)	0.7* (0.2-1.2)	3.4 (2.3-4.5)	14.5 (12.4-16.6)
Public Administration & Safety	8.2 (6.2-10.2)	2.1* (1.1-3.1)	0.9** (0.2-1.6)	0.2** (0.0-0.5)	6.2 (4.5-7.9)	13.5 (11.0-16.0)
Health Care & Social Assistance	9.1 (7.8-10.4)	4.3 (3.4-5.2)	2.6 (1.9-3.3)	1.1* (0.6-1.6)	3.0 (2.2-3.8)	13.4 (11.9-14.9)
Agriculture, Forestry & Fishing	7.8* (3.5-12.1)	1.3** (0.0-3.1)	2.5** (0.0-5.0)	0.9** (0.0-2.4)	3.5* (0.5-6.5)	12.1* (6.8-17.4)

Source: National Drug Strategy Household Survey, 2019.

* Indicates the estimate has a relative standard error of 25% to 50% and should be used with caution.

** Indicates the estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

Notes:

1. Analysis only includes those who selected their main employment status as employed (e.g., excludes full-time students who work part time).
2. Australian and New Zealand Standard Industrial Classification (ANZSIC) codes were used for coding responses relating to industry.
3. Any illicit drug use refers to use of at least one of the following illicit drugs: cannabis, ecstasy, amphetamines, cocaine, hallucinogens, inhalants, heroin, ketamine, GHB, synthetic cannabinoids, emerging psychedelic substances, painkillers/opioids, tranquilisers/sleeping pills, steroids, methadone/buprenorphine, and any drug which is injected (non-medical use).

Occupation groups

Occupation groups and ATOD use

'Occupation' refers to the type of work a person does, such as a doctor, teacher, or cabinet maker. Most occupations can be found in a number of industries. For example, while many cooks work in the accommodation and food services industry, cooks are also employed in other industries such as health care and social assistance (e.g., in hospitals, childcare centres and aged care facilities).

This section provides information on the most recent findings from the NDSHS on the patterns and prevalence of ATOD use among employed Australians by five occupational groups: professionals, managers, trade, skilled and unskilled workers. The employed Australians category includes those who selected their main employment status as employed; those who primarily perform other roles while also working (e.g., students who work part-time) are therefore excluded. Due to small sample sizes, only 2019 data is reported.

Tobacco use

In 2019, among the five occupation groups examined, two had daily smoking prevalence above the national employed average (11%): trade workers (15%) and unskilled workers (14%). Daily smoking prevalence was lowest among professionals (5.4%) (Figure 7).

Alcohol use

The prevalence of risky alcohol use was above the national employed average (38%) for trade workers (49%) and managers (43%).⁸ Professionals and skilled workers had equal lowest prevalence (35%) of risky alcohol use. Of note is that all of the prevalence of risky alcohol use by occupation are above the national average prevalence reported for all Australians (32%) (Figure 7).

Illicit drug use

Trade workers was the only occupation group to report illicit drug use prevalence above the employed national average of 19% (24%).⁸ Approximately a quarter of trade workers used at least one illicit drug in 2019 (24%) compared to one in five unskilled workers (21%) and one in six managers (17%) (Figure 7). Illicit polysubstance use ranged from 6.3%-9.9% among the occupation groups with trade workers reporting the highest prevalence.

Looking more closely at the different types of illicit drugs, trade workers reported prevalence of cannabis (18%), cocaine (8.4%) and methamphetamine (2.8%) above the national employed average, as did unskilled workers for cannabis (16%) and ecstasy (5.2%). Prevalence of ecstasy use was twice as high among trade (5.0%) and unskilled (5.2%) workers than among managers (2.5%) (Table 19).

⁸ Although statistical analyses cannot be undertaken between the occupations groups and the total employed population (as the groups are not mutually exclusive), differences were considered noteworthy when the occupation group's confidence intervals did not include the employed population's prevalence value.

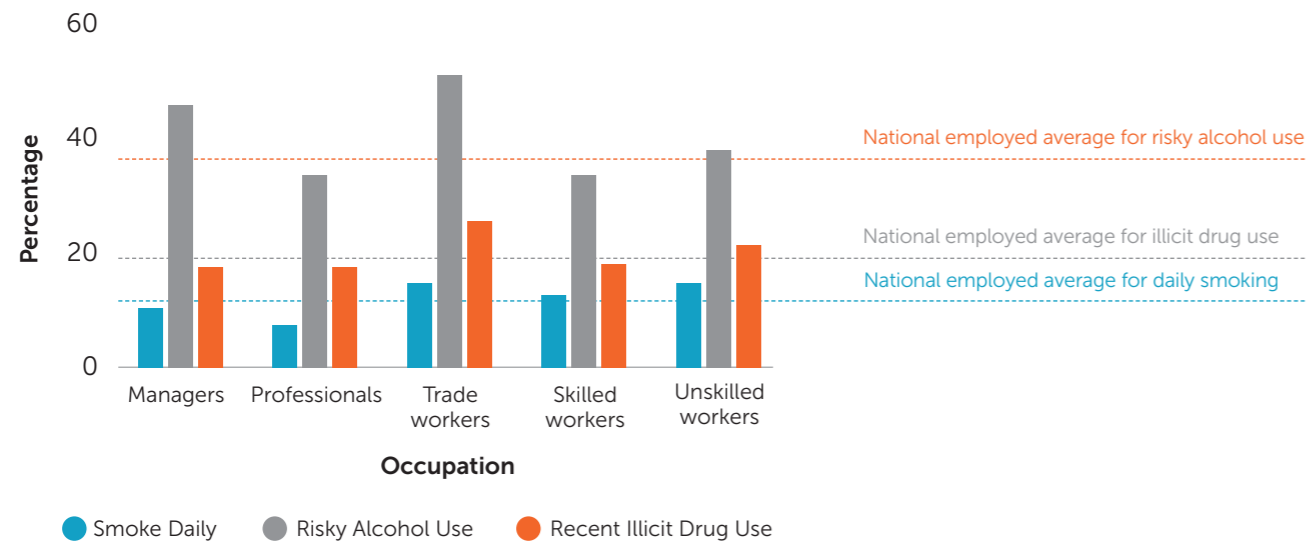


Figure 7. Prevalence (%) of daily smoking, risky alcohol and recent illicit drug use by occupation of employment, 2019 (NDSHS)

Source: National Drug Strategy Household Survey, 2019.

Notes:

1. Any illicit drug use refers to use of at least one of the following illicit drugs: cannabis, ecstasy, amphetamines, cocaine, hallucinogens, inhalants, heroin, ketamine, GHB, synthetic cannabinoids, emerging psychedelic substances, painkillers/opioids, tranquilisers/sleeping pills, steroids, methadone/buprenorphine, and any drug which is injected (non-medical use).
2. Analysis only includes those who selected their main employment status as employed (e.g., excludes full-time students who work part time).
3. Australian and New Zealand Standard Industrial Classification (ANZSCO) codes were used for coding responses relating to occupation group.

Table 19. Prevalence of licit and illicit drug use among employed Australians aged 14+ years by occupation of employment, 2019 (NDSHS)

Substance	Percentage (95% CI)				
	Manager	Professional	Trade	Skilled	Unskilled
Tobacco					
Daily	8.9 (7.4-10.4)	5.4 (4.6-6.2)	15.0 (13.1-16.9)	12.6 (11.5-13.7)	14.4 (12.6-16.2)
Occasional	3.4 (2.5-4.3)	3.1 (2.5-3.7)	5.0 (3.8-6.2)	3.5 (2.9-4.1)	5.1 (3.9-6.3)
Ex-smoker	28.8 (26.5-31.1)	21.4 (20.0-22.8)	24.1 (21.8-26.4)	23.8 (22.4-25.2)	21.1 (19.0-23.2)
Non-smoker	59.0 (56.5-61.5)	70.1 (68.5-71.7)	55.9 (53.2-58.6)	60.1 (58.4-61.8)	59.4 (56.9-61.9)
Alcohol					
Abstainer	11.4 (9.6-13.2)	14.0 (12.7-15.3)	14.6 (12.6-16.6)	16.5 (15.2-17.8)	17.3 (15.2-19.4)
Low risk	45.7 (42.9-48.5)	51.5 (49.6-53.4)	36.6 (33.8-39.4)	49.0 (47.2-50.8)	43.7 (41.0-46.4)
Risky	42.8 (40.0-45.6)	34.5 (32.7-36.3)	48.8 (45.9-51.7)	34.5 (32.8-36.2)	39.0 (36.3-41.7)
Illicit drug use					
Cannabis	10.4 (8.8-12.0)	11.7 (10.6-12.8)	18.2 (16.1-20.3)	13.1 (12.0-14.2)	16.1 (14.2-18.0)
Cocaine	7.0 (5.7-8.3)	6.2 (5.4-7.0)	8.4 (6.9-9.9)	5.3 (4.5-6.1)	5.7 (4.5-6.9)
Ecstasy	2.5 (1.7-3.3)	3.5 (2.9-4.1)	5.0 (3.8-6.2)	3.7 (3.1-4.3)	5.2 (4.1-6.3)
Methamphetamine	0.6* (0.2-1.0)	1.2 (0.8-1.6)	2.8 (1.9-3.7)	1.3 (0.9-1.7)	2.1 (1.4-2.8)
Pharmaceutical drugs	4.6 (3.5-5.7)	3.7 (3.1-4.3)	4.6 (3.5-5.7)	4.7 (4.0-5.4)	4.2 (3.2-5.2)
Any illicit	16.9 (15.0-18.8)	17.4 (16.1-18.7)	23.7 (21.4-26.0)	18.1 (16.8-19.4)	20.6 (18.5-22.7)

Source: National Drug Strategy Household Survey, 2019.

* Indicates the estimate has a relative standard error of 25% to 50% and should be used with caution.

Notes:

1. The 'any illicit drug' category includes injecting drug use.
2. Analysis only includes those who selected their main employment status as employed (excludes full-time students who work part time).
3. Australian and New Zealand Standard Industrial Classification (ANZSCO) codes were used for questions relating to occupation group.

Employment conditions

Conditions of employment and ATOD use

The NDSHS does not provide granular information on the conditions of employment which may influence the patterns and prevalence of ATOD use. This section therefore examines the 2017 wave of HILDA, and in particular, aspects of employment status such as number of hours or jobs worked and patterns of working, for example weekdays or weekends. Certain working conditions are known to be associated with ATOD use including shift/night work and long hours (43, 46). To contextualise the data reported in this chapter, please refer to Appendix B where HILDA data is provided for licit and illicit drugs for the Australian total and employed populations.

Among employed Australians, prevalence of daily tobacco smoking was higher for full-time workers (13%) than part-time workers (10%) (Table 20). Daily tobacco use prevalence was also high among employees who had only one job (12%) as opposed to multiple jobs (7%). Daily smoking prevalence was less common among those who worked on Sundays (10%) than those working Saturdays (14%) or both days of the weekend (13%). Workers who were members of other unions or professional associations were less likely to smoke tobacco daily (6%) than non-members (12%).

Table 20. Prevalence of tobacco use among Australians aged 14+ years by employment factors, 2017 (HILDA)

	Percentage (95% CI)			
	Daily	Occasional	Ex-smoker	Non-smoker
Employment status				
Full time	12.5 (11.7-13.3)	4.4 (3.9-4.9)	24.5 (23.5-25.5)	58.7 (57.5-59.9)
Part time	10.2 (9.2-11.2)	3.6 (3.0-4.2)	21.0 (19.6-22.4)	65.1 (63.5-66.7)
Prefer to work				
Fewer hours	10.5 (9.3-11.7)	4.0 (3.2-4.8)	26.2 (24.4-28.0)	59.3 (57.3-61.3)
About the same	12.0 (11.2-12.8)	4.0 (3.5-4.5)	23.2 (22.1-24.3)	60.8 (59.6-62.0)
More hours	12.9 (11.3-14.5)	4.4 (3.4-5.4)	19.8 (17.8-21.8)	63.0 (60.6-65.4)
Number of jobs				
Employed in 2+ jobs	7.3 (5.4-9.2)	3.2 (1.9-4.5)	20.7 (17.8-23.6)	68.8 (65.5-72.1)
Employed in 1 job	12.1 (11.4-12.8)	4.2 (3.8-4.6)	23.6 (22.7-24.5)	60.1 (59.1-61.1)
Work schedule				
Monday to Friday	11.9 (11.0-12.8)	4.3 (3.8-4.8)	24.5 (23.3-25.7)	59.4 (58.1-60.7)
Other	11.6 (10.7-12.5)	3.9 (3.4-4.4)	22.1 (20.9-23.3)	62.4 (61.0-63.8)
Weekend work				
Usually work Saturday	13.6 (11.5-15.7)	5.0 (3.7-6.3)	19.8 (17.4-22.2)	61.5 (58.5-64.5)
Usually work Sunday	9.7 (6.4-13.0)	7.8 (4.8-10.8)	16.6 (12.4-20.8)	65.9 (60.6-71.2)
Usually work both	13.3 (11.8-14.8)	3.6 (2.8-4.4)	22.5 (20.6-24.4)	60.6 (58.4-62.8)
Belong to other union or trade association				
Yes	5.5 (3.4-7.6)	1.6 (0.4-2.8)	25.8 (21.7-29.9)	67.2 (62.8-71.6)
No	12.3 (11.6-13.0)	4.1 (3.7-4.5)	22.0 (21.1-22.9)	61.6(60.5-62.7)

Source: Household, Income, and Labour Dynamics in Australia (HILDA) Survey, 2017.

Higher prevalence of risky drinking occurred among workers who were: employed full-time (29%) than part-time (23%); and wanted to work fewer hours (29%) than preferring to work more hours (25%). Those who worked Monday-Friday were more likely to use alcohol at risky levels (28%) than those who worked weekends (26%) (Table 21).

Table 21. Prevalence of alcohol use among Australians aged 14+ years by employment factors, 2017 (HILDA)

	Percentage (95% CI)		
	Abstainer	Low risk	Risky
Employment status			
Full time	14.2 (13.4-15.0)	56.5 (55.3-57.7)	29.2 (28.1-30.3)
Part time	21.0 (19.6-22.4)	56.1 (54.4-57.8)	22.9 (21.5-24.3)
Prefer to work			
Fewer hours	14.0 (12.6-15.4)	57.5 (55.5-59.5)	28.5 (26.7-30.3)
About the same	15.9 (15.0-16.8)	56.7 (55.5-57.9)	27.4 (26.3-28.5)
More hours	22.3 (20.3-24.3)	53.2 (50.8-55.6)	24.5 (22.4-26.6)
Number of jobs			
Employed in 2+ jobs	16.4 (13.7-19.1)	56.4 (52.8-60.0)	27.2 (24.0-30.4)
Employed in 1 job	16.5 (15.7-17.3)	56.4 (55.4-57.4)	27.2 (26.3-28.1)
Work schedule			
Monday to Friday	14.1 (13.2-15.0)	57.6 (56.3-58.9)	28.3 (27.1-29.5)
Other	19.2 (18.1-20.3)	54.9 (53.5-56.3)	25.9 (24.7-27.1)
Weekend work			
Usually work Saturday	22.6 (20.1-25.1)	50.8 (47.8-53.8)	26.6 (23.9-29.3)
Usually work Sunday	28.5 (23.5-33.5)	47.8 (42.2-53.4)	23.6 (18.9-28.3)
Usually work both	17.9 (16.2-19.6)	55.5 (53.2-57.8)	26.6 (24.6-28.6)
Belong to other union or trade association			
Yes	11.8 (8.8-14.8)	63.8 (59.3-68.3)	24.4 (20.4-28.4)
No	17.0 (16.2-17.8)	55.9 (54.8-57.0)	27.1 (26.1-28.1)

Source: Household, Income, and Labour Dynamics in Australia (HILDA) Survey, 2017.

Prevalence of cannabis, ecstasy and methamphetamine use varied little by employment status, while recent cocaine use was more prevalent among full-time (5.0%) than part-time (2.9%) workers (Table 22). Workers who preferred to work more hours had higher prevalence of cannabis (16%), ecstasy (6.1%) and methamphetamine (1.9%) than those wanting to work fewer hours (11%, 3.7% and 1.0%, respectively).

Table 22. Prevalence of illicit drug use among Australians aged 14+ years by employment factors, 2017 (HILDA)

	Percentage (95% CI)			
	Cannabis	Cocaine	Ecstasy	Meth
Employment status				
Full time	12.2 (11.4-13.0)	5.0 (4.5-5.5)	4.6 (4.1-5.1)	1.5 (1.2-1.8)
Part time	12.7 (11.6-13.8)	2.9 (2.3-3.5)	4.7 (4.0-5.4)	1.3 (0.9-1.7)
Prefer to work				
Fewer hours	10.5 (9.3-11.7)	4.4 (3.6-5.2)	3.7 (2.9-4.5)	1.0 (0.6-1.4)
About the same	12.2 (11.4-13.0)	4.5 (4.0-5.0)	4.6 (4.1-5.1)	1.4 (1.1-1.7)
More hours	15.7 (13.9-17.5)	3.7 (2.8-4.6)	6.1 (4.9-7.3)	1.9 (1.2-2.6)
Number of jobs				
Employed in 2+ jobs	12.1 (9.8-14.4)	3.6 (2.3-4.9)	5.8 (4.1-7.5)	0.9 (0.2-1.6)
Employed in 1 job	12.4 (11.7-13.1)	4.4 (4.0-4.8)	4.5 (4.1-4.9)	1.5 (1.3-1.7)
Work schedule				
Monday to Friday	11.9 (11.0-12.8)	4.7 (4.1-5.3)	4.1 (3.6-4.6)	1.3 (1.0-1.6)
Other	12.9 (12.0-13.8)	4.0 (3.4-4.6)	5.2 (4.6-5.8)	1.6 (1.2-2.0)
Weekend work				
Usually work Saturday	14.0 (11.9-16.1)	4.2 (3.0-5.4)	4.6 (3.3-5.9)	1.1 (0.5-1.7)
Usually work Sunday	14.4 (10.5-18.3)	7.0 (4.2-9.8)	9.4 (6.1-12.7)	2.9* (1.0-4.8)
Usually work both	13.9 (12.3-15.5)	4.3 (3.4-5.2)	6.0 (4.9-7.1)	1.8 (1.2-2.4)
Belong to other union or trade association				
Yes	11.0 (8.1-13.9)	3.6 (1.9-5.3)	3.8 (2.0-5.6)	1.2 (0.2-2.2)
No	13.1 (12.4-13.8)	4.6 (4.1-5.1)	5.0 (4.5-5.5)	1.4 (1.1-1.7)

Source: Household, Income, and Labour Dynamics in Australia (HILDA) Survey, 2017.

* Indicates the estimate has a relative standard error of 25% to 50% and should be used with caution.

Consequences of use

AOD use can have a range of adverse effects on workers and the workplace more broadly. This spans a range of harms including absenteeism, presenteeism, accidents, mistakes, poor workplace relationships and ill health. In addition, workers can be the subject of verbal abuse, or be in fear as a result of the intoxication-related behaviour of people present in their workplace. The available data does not shed light on all of these harms, but does provide an opportunity to examine the costs of absenteeism and the prevalence of being verbally abused, or placed in fear as a result of intoxication-related behaviour in the workplace. Secondary analysis of the 2019 NDSHS was undertaken to explore the above.

Absenteeism costs: Alcohol

Workers who consumed alcohol reported taking 7.7 days off per year due to injury or illness whilst abstainers reported taking 6.0 days off annually. This 1.7-day higher absence reported by alcohol consumers equated to an extra 15.8 million days off per year (above days taken by abstainers) at a cost of \$6.5 billion in 2020 (Table 23).

Table 23. The adjusted excess workplace absenteeism due to illness/injury for those who used alcohol, and those who abstained from alcohol and associated costs

Alcohol use status	Estimated Population	Mean Days Absent ²	Annual Illness or Injury Absence ¹		
			Difference ³	Excess Days Absent ⁴	2020 Cost \$ ⁵
Abstainer	1,725,519	6.0			
Consumer	9,326,481	7.7	1.7	15,816,835	6,497,302,784

Source: National Drug Strategy Household Survey, 2019; Australian Bureau of Statistics (ABS), 2021.

Notes:

1. Calculations based on unrounded estimates. Data then reported to one decimal place.
2. Calculations based on estimated absenteeism means adjusted for age, gender, marital status, socio-economic status, and occupation.
3. Mean days absent due to illness/injury for alcohol consumer compared to alcohol abstainers.
4. Difference in mean absence multiplied by estimated population.
5. Excess absence multiplied by \$410.784 (2020 average daily wage plus 20% employer on-costs).

Among workers who used alcohol, those who consumed alcohol above the national guidelines reported higher absenteeism specifically due to their alcohol use. In total, workers who consumed alcohol reported taking 3.3 million days absenteeism due to their alcohol use. This equated to a cost of \$1.3 billion (Table 24).

Table 24. The adjusted excess workplace absenteeism specifically attributable to alcohol and associated costs

Alcohol use status	Estimated Population	Annual absence due to alcohol use ¹		
		Mean Days Absent ²	Excess Days Absent ³	2020 Cost \$ ⁴
Low risk	5,075,330	0.3	1,276,029	524,172,427
High risk	4,152,234	0.5	1,996,033	819,938,364
Total	9,227,564	0.4	3,272,062	1,344,110,791

Source: National Drug Strategy Household Survey, 2019; Australian Bureau of Statistics (ABS), 2021.

Notes:

1. Calculations based on unrounded estimates. Data then reported to one decimal place.
2. Calculations based on estimated absenteeism means adjusted for age, gender, marital status, socio-economic status, and occupation.
3. Days in excess of those who do not use alcohol. Mean days absent multiplied by estimated population.
4. Excess absence multiplied by \$410.784 (2020 average daily wage plus 20% employer on-costs)

The final cost attributed to alcohol use averaged the estimates reported in Table 23 and Table 24. This approach was taken because:

- There may be overlap in reported injury/illness absenteeism and absenteeism specifically due to alcohol (e.g., a respondent may double report absenteeism due to a broken ankle in both the injury/illness-related absenteeism and alcohol-specific absenteeism due to their fracture occurring whilst intoxicated).
- Alcohol-attributed absenteeism may be under-reported due to respondents not attributing absenteeism due to their alcohol use. For example, experiencing a headache which kept them away from work may actually be a hangover from their previous night's drinking.
- Injury/illness related absenteeism may be overreported as a higher proportion of people who consume alcohol also use tobacco compared with abstainers. As tobacco is linked to a number of illnesses, it may be tobacco and not alcohol that contributed to the absence and associated cost.

The final cost estimate of absenteeism due to alcohol is \$3.9 billion. This cost however only relates to paid sick leave. It does not cover other costs incurred to businesses such as hiring, training, and paying a replacement worker, or any other costs associated with lost productivity.

The proportionate cost of the total alcohol-related absenteeism estimate was then assigned to demographic subgroups of workers who used alcohol and took at least one day's absence due to their alcohol use and/or alcohol-attributed injury/illness. Male workers accounted for 52% of the cost of alcohol-related absenteeism (\$2.0 billion). Of the age groups, workers aged 20-29 years and 30-39 years each accounted for approximately a quarter of the costs (20-29 years: 26%, \$1.0 billion; 30-39 years: 25%, \$1.0 billion). Workers based in metropolitan locations cost workplaces \$3.0 billion (75%) and workers in New South Wales accounted for 30% of the total cost (\$1.2 billion). Among the SES groups, workers in the high SES group accounted for two-thirds of the cost (67%, \$2.6 billion) (Table 25).

Table 25. Proportion cost of absenteeism due to alcohol use (\$3,920,706,788) by demographics of workers who consume alcohol

Demographic characteristic	Percent within subgroup	Cost as a share of the total
Gender		
Male	52.3	2,050,426,351
Female	47.7	1,870,280,436
Age groups		
14-19 years	4.2	166,293,758
20-29 years	25.7	1,006,976,547
30-39 years	25.3	993,840,317
40-49 years	20.6	806,698,095
50-59 years	17.2	673,969,255
60+ years	7.0	272,928,815
State		
New South Wales	29.9	1,174,135,200
Victoria	27.4	1,074,029,321
Queensland	21.3	835,708,653
South Australia	6.8	268,115,888
Western Australia	8.7	341,449,483
Tasmania	2.1	83,934,502
Australian Capital Territory	2.8	110,450,918
Northern Territory	0.8	32,882,822
Remoteness¹		
Metropolitan	75.4	2,957,257,909
Non-metropolitan	24.6	963,448,879
Socio-economic status²		
Low	33.1	1,299,196,223
High	66.9	2,621,510,564
Education level		
Year 12 or less	27.0	1,058,956,605
Certificate/Diploma	34.5	1,350,860,849
Bachelor degree or higher	38.5	1,510,889,333

Source: National Drug Strategy Household Survey, 2019; Australian Bureau of Statistics (ABS), 2020.

Notes:

1. Remoteness is based on the ABS Australian Statistical Geography Standard (ASGS) Remoteness Area classification. 'Metropolitan' consists of major cities and 'Non-metropolitan' combines inner regional, outer regional, remote and very remote areas.
2. The Index of Relative Socio-economic Advantage and Disadvantage (IRSAD) was used to report on socioeconomic status (SES). 'Low SES' consists of combined 1st and 2nd IRSAD quintiles; 'High SES' consists of combined 3rd-5th IRSAD quintiles.

Workers in very good/excellent physical health accounted for 56% (\$2.2 billion) of the cost of alcohol-related absenteeism and those with low psychological distress accounted for 53% (\$2.1 billion) (Table 26). Workers from the health care and social assistance industry was the industry with the highest cost proportion (19%, \$0.7 billion), followed by education and training (12%, \$0.5 billion). Professional workers accounted for a third of the cost (32%, \$1.3 billion) (Table 27).

It is important to note that most of these cost proportions generally reflect their relative proportions of the total workforce (e.g., high proportion of employed Australians live in metropolitan areas, most employed Australian are in good physical health, health care and social assistance is the largest industry in Australia). It is not necessarily reflective of their patterns of alcohol use.

Table 26. Proportion cost of absenteeism due to alcohol use (\$3,920,706,788) by health characteristics of workers who consume alcohol

Health characteristic	Percent within subgroup	Cost as a share of the total
Physical health status¹		
Fair/poor	8.8	343,728,511
Good	35.2	1,380,074,141
Very good/excellent	56.0	2,196,904,136
Psychological distress²		
Low	52.7	2,067,832,318
Moderate	28.3	1,110,523,019
High	13.0	507,950,668
Very high	6.0	234,400,783

Source: National Drug Strategy Household Survey, 2019; Australian Bureau of Statistics (ABS), 2020.

Notes:

1. In response to the question 'In general, would you say your health is...?.'
2. The Kessler 10 Item Psychological Distress Scale (K10) was used to assess psychological distress. 'Low' psychological distress reflects a score of 10-15 on the K10; 'moderate' reflects a score of 16-21; 'high' reflects a score of 22-29, and 'very high' reflects a score of 30-50.

Table 27. Proportion cost of absenteeism due to alcohol use (\$3,920,706,788) by employment characteristics of workers¹ who consume alcohol

Employment characteristics	Percent within subgroup	Cost as a share of the total
Industry²		
Health Care and Social Assistance	19.0	743,114,380
Education and Training	11.8	462,173,338
Professional, Scientific and Technical Services	9.4	367,148,656
Retail Trade	8.5	332,464,603
Public Administration and Safety	8.1	315,930,129
Construction	7.2	280,848,082
Accommodation and Food Services	7.1	278,559,840
Manufacturing	5.8	227,578,387
Transport, Postal and Warehousing	4.4	173,757,380
Administrative and Support Services	3.5	136,145,208
Financial and Insurance Services	3.1	121,258,019
Wholesale Trade	1.8	71,470,473
Arts and Recreation Services	1.6	63,317,837
Information Media and Telecommunications	1.6	61,442,004
Electricity, Gas, Water and Waste Services	1.2	48,444,834
Agriculture, Forestry and Fishing	1.0	38,565,161
Mining	1.0	40,194,783
Rental, Hiring and Real Estate Services	1.0	39,980,754
Other Services	3.0	118,312,920
Occupation³		
Professionals	32.3	1,266,753,069
Skilled workers	29.7	1,163,564,311
Unskilled workers	14.5	569,039,731
Trade workers	13.0	508,871,524
Managers	10.5	412,478,153

Source: National Drug Strategy Household Survey, 2019; Australian Bureau of Statistics (ABS), 2020.

Notes:

1. Analysis only includes those who selected their main employment status as employed (e.g., excludes full-time students who work part time).
2. Australian and New Zealand Standard Industrial Classification (ANZSIC) codes were used to classify industry.
3. Australian and New Zealand Standard Industrial Classification (ANZSCO) codes were used for coding responses relating to occupation group.

Absenteeism costs: Illicit Drugs

Workers who used an illicit drug in the past year reported taking 10.1 days off per year due to injury or illness whilst illicit drug abstainers reported taking 6.8 days off annually. This 3.4 day higher absence reported by workers who used illicit drugs equated to an extra 7.2 million days off per year (above days taken by illicit drug abstainers) at a cost of \$2.9 billion in 2020 (Table 28).

Workers who use illicit drugs reported a combined 1.1 million days absenteeism due to their drug use. This equated to a cost of \$0.5 billion (Table 29).

Table 28. The adjusted excess workplace absenteeism due to illness/injury for those who used and did not use illicit drugs and associated costs

Recent drug use	Estimated Population	Mean Days Absent ²	Annual Illness or Injury Absence ¹			Cost per worker \$ ⁵
			Difference ³	Excess Days Absent ⁴	Cost \$ ⁵	
No	9,240,619	6.8				
Yes	2,137,239	10.1	3.4	7,179,126	\$2,949,070,054	\$1,379.85

Source: National Drug Strategy Household Survey, 2019; Australian Bureau of Statistics (ABS), 2020.

Notes:

1. Calculations based on unrounded estimates. Data then reported to one decimal place.
2. Calculations based on estimated absenteeism means adjusted for age, gender, marital status, and socio-economic status.
3. Mean days absent due to illness/injury for those who used drugs compared to those who did not.
4. Difference in mean absence multiplied by estimated population.
5. Excess absence multiplied by \$410.784 (2020 average daily wage plus 20% employer on-costs).

Table 29. Adjusted excess workplace absenteeism specifically attributable to illicit drugs and associated costs

Illicit drug use	Estimated Population	Annual Absence due to drug use ¹			
		Mean (person) Days Absent ²	Mean (population) Days Absent ³	Cost \$ ³	Cost per person \$
Use drugs	2,137,240	0.221	1,088,244	\$447,033,416	\$209.16

Source: National Drug Strategy Household Survey, 2019; Australian Bureau of Statistics (ABS), 2020.

Notes:

1. Calculations based on unrounded estimates. Data then reported to one decimal place.
2. Calculations based on estimated absenteeism means adjusted for age, gender, marital status, and socio-economic status.
3. Days in excess of those who do not use illicit drugs. Mean days absent multiplied by estimated population.
4. Mean (population) absence multiplied by \$410.784 (2020 average daily wage plus 20% employer on-costs).

The minimum cost estimate of illicit drug-related absenteeism was \$2.9 billion (injury and illness related absenteeism) with the potential for an extra \$0.5 billion. Of this cost, metropolitan workers accounted for 80% (\$2.4 billion), males 60% (\$1.8 billion), and 20-29-year-old workers 42% (\$1.3 billion) (Table 30).

Table 30. Absenteeism costs due to alcohol use by demographics of workers¹ who consume alcohol

Demographic characteristic	Percent within subgroup	Cost (\$2,949,070,054)
Gender		
Male	59.7	\$1,760,362,380
Female	40.3	\$1,188,707,675
Age groups		
14-19 years	5.6*	\$163,821,577
20-29 years	41.7	\$1,229,390,976
30-39 years	24.7	\$727,943,830
40-49 years	14.8	\$436,454,570
50-59 years	9.7	\$285,142,646
60+ years	3.6	\$106,316,456
State		
New South Wales	30.2	\$890,862,236
Victoria	28.2	\$832,046,305
Queensland	21.9	\$645,385,911
South Australia	5.6	\$163,788,521
Western Australia	8.9	\$263,292,070
Tasmania	1.8	\$52,372,850
Australian Capital Territory	2.5	\$74,354,502
Northern Territory	0.9	\$26,967,660
Remoteness²		
Metropolitan	80.1	\$2,363,112,108
Non-metropolitan	19.9	\$585,957,947
Socio-economic status³		
Low	34.5	\$1,016,704,532
High	65.5	\$1,932,365,522
Education level		
Year 12 or less	30.2	\$890,458,218
Certificate/Diploma	37.5	\$1,106,236,912
Bachelor degree or higher	32.3	\$952,374,924
Health		
Physical health status⁴		
Fair/poor	11.3	\$333,996,448
Good	32.6	\$961,667,605
Very good/excellent	56.1	\$1,653,406,001
Psychological distress⁵		
Low	44.1	\$1,300,832,893
Moderate	30.0	\$883,311,233
High	16.0	\$471,636,598
Very high	9.9	\$293,289,330

Demographic characteristic	Percent within subgroup	Cost (\$2,949,070,054)
Employment characteristics		
Industry⁶		
Health Care and Social Assistance	15.1	\$445,757,513
Professional, Scientific and Technical Services	10.6	\$311,201,517
Retail Trade	10.4	\$307,653,358
Construction	10.2	\$300,530,048
Accommodation and Food Services	8.8	\$260,514,104
Education and Training	7.6	\$223,042,944
Public Administration and Safety	5.1	\$149,477,564
Manufacturing	5.0	\$148,771,335
Transport, Postal and Warehousing	4.2*	\$123,700,269
Administrative and Support Services	4.1	\$121,356,357
Financial and Insurance Services	4.0*	\$118,202,663
Arts and Recreation Services	3.5*	\$102,842,637
Other Services	2.6*	\$77,901,584
Wholesale Trade	2.6*	\$76,308,684
Rental, Hiring and Real Estate Services	1.9*	\$56,235,189
Information Media and Telecommunications	1.8*	\$54,128,420
Electricity, Gas, Water and Waste Services	1.3**	\$38,666,097
Mining	0.7**	\$20,193,141
Agriculture, Forestry and Fishing	0.4**	\$12,586,632
Occupation⁷		
Professionals	30.5	\$899,874,379
Skilled workers	30.5	\$898,017,004
Unskilled workers	16.1	\$473,570,064
Trade workers	13.8	\$407,599,836
Managers	9.2	\$270,008,771

Source: National Drug Strategy Household Survey, 2019.

* Indicates the estimate has a relative standard error of 25% to 50% and should be used with caution.

** Indicates the estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

Notes.

1. Analysis only includes those who selected their main employment status as employed (e.g., excludes full-time students who work part time).
2. Remoteness is based on the ABS Australian Statistical Geography Standard (ASGS) Remoteness Area classification. 'Metropolitan' consists of major cities and 'Non-metropolitan' combines inner regional, outer regional, remote and very remote areas.
3. The Index of Relative Socio-economic Advantage and Disadvantage (IRSAD) was used to report on socioeconomic status (SES). 'Low SES' consists of combined 1st and 2nd IRSAD quintiles; 'High SES' consists of combined 3rd-5th IRSAD quintiles.
4. In response to the question 'In general, would you say your health is...?'
5. The Kessler 10 Item Psychological Distress Scale (K10) was used to assess psychological distress. 'Low' psychological distress reflects a score of 10-15 on the K10; 'moderate' reflects a score of 16-21; 'high' reflects a score of 22-29, and 'very high' reflects a score of 30-50.
6. Australian and New Zealand Standard Industrial Classification (ANZSIC) codes were used to classify industry.
7. Australian and New Zealand Standard Industrial Classification (ANZSCO) codes were used for coding responses relating to occupation group.

Drug-related harms

Among workers, 4.3% reported that they usually use alcohol at their workplace. Few workers reported that they usually use an illicit substance at their workplace (Table 31).

Table 31. Prevalence (%) of employees who usually use licit and illicit drugs at their workplace, 2019 (NDSHS)

Drug	Usually use at my workplace
Alcohol	4.3
Cannabis	0.2*
Cocaine	0.1*
Ecstasy	0.0**
Methamphetamine	0.1*
Pain killers / opioids	0.2*
Tranquilisers / sleeping pills	0.1**

Source: National Drug Strategy Household Survey, 2019.

* Indicates the estimate has a relative standard error of 25% to 50% and should be used with caution.

** Indicates the estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

Note: all employees are included in the denominator.

Based on the 2019 NDSHS data, approximately one in five workers (21%) and one in eleven workers (9.1%) have experienced verbal abuse by someone under the influence of alcohol or illicit drugs, respectively. Being put in fear of someone under the influence of alcohol or illicit drugs was experienced by 13% and 7.7% of workers, respectively. Table 32 presents the proportion of workers across industry type who reported experiencing abuse or fear by someone under the influence of alcohol or illicit drugs, while Table 33 presents the proportion of workers who experienced this abuse or fear in a workplace setting.

Higher proportions of workers from public administration and safety experienced verbal abuse by someone under the influence of alcohol (29%) and illicit drugs (18%) than workers from other industries. Information, media and telecommunication workers (29%); and accommodation and food services workers (29%) had similarly high prevalence of having experienced verbal abuse by someone under the influence of alcohol.

At least a fifth to a quarter (21%-28%) of the abuse perpetrated by a person under the influence of drugs, occurred in the workplace. Fewer workers experiencing abuse by someone under the influence of alcohol reported it having occurred in the workplace (12%-14%).

Health care and social assistance was the industry where the highest proportion of workers experiencing verbal abuse and being placed in fear by persons under the influence of alcohol or drugs, reported it having occurred in the workplace. Verbal abuse by a person under the influence of alcohol was equally prevalent as having occurred in the workplace among workers from accommodation and food services.

Over half of the incidents of verbal abuse by persons under the influence of drugs experienced by health care and social assistance employees occurred within their workplace (53%).

Table 32. Experience of abuse by someone under the influence of alcohol or drugs by industry, 2019 (NDSHS)

Industry	Percentage (95% CI)			
	Verbal Abuse		Put in fear	
	Alcohol	Drug	Alcohol	Drug
Agriculture, Forestry & Fishing	14.0 (8.4-19.6)	7.7* (3.4-12.0)	5.3* (1.6-9.0)	4.1* (0.9-7.3)
Mining	14.6 (7.9-21.3)	10.0* (4.3-15.7)	5.1** (0.9-9.3)	4.0* (0.3-7.7)
Manufacturing	16.9 (13.6-20.2)	7.4 (5.1-9.7)	8.7 (6.2-11.2)	7.1 (4.8-9.4)
Electricity, Gas, Water & Waste Services	21.4 (12.9-29.9)	12.3* (5.5-19.1)	13.2* (6.1-20.3)	12.1* (5.3-18.9)
Construction	17.8 (15.0-20.6)	9.9 (7.7-12.1)	7.8 (5.7-9.9)	5.7 (4.0-7.4)
Wholesale Trade	13.1 (8.0-18.2)	4.6* (1.5-7.7)	9.7* (5.3-14.1)	4.3* (1.3-7.3)
Retail Trade	21.2 (17.9-24.5)	9.0 (6.7-11.3)	16.2 (13.2-19.2)	9.2 (6.9-11.5)
Accommodation & Food Services	28.5 (24.6-32.4)	9.7 (7.1-12.3)	20.3 (16.8-23.8)	9.4 (6.9-11.9)
Transport, Postal & Warehousing	17.4 (13.7-21.1)	8.5 (5.8-11.2)	11.0 (7.9-14.1)	6.4 (4.0-8.8)
Information Media & Telecommunications	28.7 (21.3-36.1)	8.3* (3.7-12.9)	17.2 (11.0-23.4)	7.5* (3.2-11.8)
Financial & Insurance Services	20.5 (15.8-25.2)	6.3* (3.4-9.2)	15.4 (11.2-19.6)	7.1 (4.1-10.1)
Rental, Hiring & Real Estate Services	24.1 (17.2-31.0)	3.1* (0.3-5.9)	15.8* (9.8-21.8)	2.0** (0.0-4.3)
Professional, Scientific & Technical Services	18.5 (15.9-21.1)	6.3 (4.7-7.9)	13.9 (11.6-16.2)	5.7 (4.1-7.3)
Administrative & Support Services	19.1 (14.6-23.6)	7.8 (4.8-10.8)	12.1 (8.4-15.8)	8.7 (5.5-11.9)
Public Administration & Safety	29.1 (25.8-32.4)	18.1 (15.3-20.9)	15.0 (12.4-17.6)	10.7 (8.4-13.0)
Education & Training	20.7 (18.2-23.2)	4.8 (3.5-6.1)	15.9 (13.7-18.1)	7.0 (5.4-8.6)
Health Care & Social Assistance	22.0 (20.1-23.9)	12.5 (11.0-14.0)	15.0 (13.4-16.6)	10.9 (9.5-12.3)
Arts & Recreation Services	26.6 (20.2-33.0)	10.8 (6.3-15.3)	12.6* (7.7-17.5)	13.9* (8.8-19.0)
Other Services	16.5 (12.5-20.5)	10.2 (7.0-13.4)	10.3 (7.0-13.6)	7.6 (4.7-10.5)
Employed Total	20.7 (20.0-21.4)	9.1 (8.6-9.6)	12.9 (12.3-13.5)	7.7 (7.2-8.2)

Source: National Drug Strategy Household Survey, 2019.

* Indicates the estimate has a relative standard error of 25% to 50% and should be used with caution.

** Indicates the estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

Discussion

Table 33. Experience of abuse by someone under the influence of alcohol or drugs in the workplace by industry, 2019 (NDSHS)

Industry	Percentage (95% CI)			
	Verbal Abuse		Put in fear	
	Alcohol	Drug	Alcohol	Drug
Agriculture, Forestry & Fishing	0.0 (0.0-0.0)	0.0 (0.0-0.0)	0.0 (0.0-0.0)	0.0 (0.0-0.0)
Mining	5.2** (0.0-15.5)	7.7** (0.0-25.1)	0.0 (0.0-0.0)	19.6** (0.0-54.4)
Manufacturing	1.5* (0.0-4.0)	10.5** (0.0-21.5)	2.3** (0.0-7.1)	6.9** (0.0-15.8)
Electricity, Gas, Water & Waste Services	11.6** (0.0-25.6)	0.0 (0.0-0.0)	0.0 (0.0-0.0)	0.0 (0.0-0.0)
Construction	1.1** (0.0-2.9)	8.7* (1.7-15.7)	2.0** (0.0-5.9)	9.9** (0.0-19.9)
Wholesale Trade	0.0 (0.0-0.0)	25.2** (0.0-50.9)	0.0 (0.0-0.0)	27.0** (0.0-54.5)
Retail Trade	20.8 (13.6-28.0)	31.4 (19.5-43.3)	15.7* (8.0-23.4)	24.2* (12.6-35.8)
Accommodation & Food Services	28.8 (21.2-36.4)	31.1* (17.4-44.8)	23.7 (14.9-32.5)	23.7* (10.8-36.6)
Transport, Postal & Warehousing	16.9* (8.4-25.4)	35.9* (19.0-52.8)	15.1* (3.9-26.3)	34.4* (15.4-53.4)
Information Media & Telecommunications	15.3* (4.1-26.5)	32.6* (6.1-59.1)	3.5** (0.0-11.4)	5.6** (0.0-19.9)
Financial & Insurance Services	3.0** (0.0-7.5)	15.8* (0.2-31.4)	0.0 (0.0-0.0)	7.9** (0.0-19.2)
Rental, Hiring & Real Estate Services	6.5** (0.0-14.9)	31.5* (0.0-72.2)	7.1** (0.0-19.3)	40.7** (0.0-88.8)
Professional, Scientific & Technical Services	6.5* (2.6-10.4)	15.7* (6.0-25.4)	3.2** (0.0-6.5)	6.8** (0.0-14.3)
Administrative & Support Services	4.2** (0.0-9.8)	11.4* (0.0-25.0)	9.9** (0.0-20.4)	14.3** (0.0-29.6)
Public Administration & Safety	22.0 (16.2-27.8)	44.5 (34.9-54.1)	13.4* (6.8-20.0)	25.8* (15.2-36.4)
Education & Training	5.3* (2.3-8.3)	11.6* (3.4-19.8)	5.6* (1.9-9.3)	5.2** (0.2-10.2)
Health Care & Social Assistance	28.8 (24.5-33.1)	53.3 (46.9-59.7)	26.0 (20.9-31.1)	41.3 (34.3-48.3)
Arts & Recreation Services	18.1* (6.3-29.9)	23.7* (2.9-44.5)	11.6** (0.0-26.4)	0.0 (0.0-0.0)
Other Services	1.9* (0.0-5.4)	0.9** (0.0-4.2)	1.6** (0.0-6.0)	0.0 (0.0-0.0)
Employed Total	13.9 (12.5-15.3)	28.2 (25.4-31.0)	12.4 (10.6-14.2)	21.1 (18.2-24.0)

Source: National Drug Strategy Household Survey, 2019.

* Indicates the estimate has a relative standard error of 25% to 50% and should be used with caution.

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The findings of this report have reaffirmed the importance of the workplace as a setting for interventions to reduce AOD-related harms (in some settings, they can also reinforce social norms around AOD use). The prevention paradox (47) posits that most AOD-related harms in the population occur among low-to-moderate risk drinkers/people who use drugs, simply because they are more prevalent in the population. That said, high risk drinkers/people who use drugs, while less prevalent, have a higher individual risk of experiencing these harms.

Most Australians who use illicit drugs, smoke tobacco daily, or drink alcohol at high risk levels are employed. Therefore, workplaces provide an important opportunity to contact, and potentially influence, many people at risk of experiencing AOD-related harm. This influence could occur directly via information / education and training for employees. It could also occur less directly via a range of organisational policy / cultural settings which seek to control contributory or protective determinants that influence levels of AOD harm impacting the workplace.

The AOD-related public health benefits associated with reducing harm among employed Australians via workplaces, does not obviate the need for more individually focussed workplace approaches. Rather, it points to the need for two distinct workplace preventive approaches to AOD harms: population-based and individual approaches. Population-based strategies seek to reduce AOD harm in the population/workplace as a whole. By contrast, individual preventive strategies seek to support high-risk susceptible workers and offer them individual assistance.

Workplaces represent an important opportunity to implement individual AOD prevention strategies. Workplaces can:

- Represent a springboard for employees to access brief / early interventions, employee assistance programs or other services
- Be an important mechanism through which employees receive feedback on the adverse impact of their AOD use on their working life (absenteeism, presenteeism, accident risk), which can promote behaviour change
- Present AOD issues in the broader context of work health and safety which reduces stigmatisation of workers who may be experiencing AOD problems.

The appropriate implementation of workplace AOD programs is in the best interests of employers and employees. Employee substance use is associated with a number of negative consequences to the individual (e.g., physical and mental ill health) and the workplace (e.g., increased absenteeism, reduced performance).

Having a better understanding of broader patterns of AOD use allows Australian workplaces to more comprehensively assess their AOD-related risk exposure.

Among employed Australians, compared to the broader population:

- A lower proportion smoke daily among the 40-59- year- old group (13% vs 16%) and the very highly distressed group (21% vs 25%)
- A higher proportion drink alcohol at risky levels (38% vs 32%)
- Risky drinking prevalence was significantly higher among males (46%), those aged 20-29 years (44%), those who had a year 12 or less (40%) or certificate/diploma level qualification (41%) and had high (47%) or very high levels of psychological distress (48%)
- In 2019, the prevalence of cannabis, cocaine, and ecstasy use was significantly higher.
- Illicit polysubstance use amongst employed Australians was 7.5% in 2019.

Among employed Australians:

- Five of the 19 industry groups had a daily smoking prevalence that was above the national employed average of 11%.⁹ In descending order these were:
 - transport, postal and warehousing
 - administrative and support services
 - other services
 - accommodation and food services
 - construction (Table 34).
- Two of the five occupation groups had a daily smoking prevalence that was above the national employed average of 11%:
 - trade workers
 - unskilled workers (Table 35).
- Five industry groups had a risky drinking prevalence above the national employed average (38%),⁹ two of which were greater than 50%: electricity, gas, water and waste services (57%) and construction (52%). In descending order, the remaining 3 groups were:
 - agriculture, forestry and fishing
 - manufacturing
 - arts and recreation services (Table 34).
- Two occupation groups had higher than the employed average levels of risky drinking:¹⁰
 - trade workers
 - managers (Table 35).

9 Although statistical analyses cannot be undertaken between the industry groups and the total employed population (as the groups are not mutually exclusive), differences were considered noteworthy when the industry group's confidence intervals did not include the employed population's prevalence value.

10 Although statistical analyses cannot be undertaken between the industry groups and the total employed population (as the groups are not mutually exclusive), differences were considered noteworthy when the industry group's confidence intervals did not include the employed population's prevalence value.

- Three industry groups had a prevalence of illicit drug use that was higher than the average prevalence of all workers.⁹ In descending order these were:
 - arts and recreation services
 - construction
 - accommodation and food services (Table 34).
- Trade workers was the only occupation that had an average prevalence of illicit drug use higher than the employed average (Table 35).¹¹
- Illicit polysubstance use ranged from 2.2%-13% and 6.3%-9.9% among the industry and occupation groups, respectively. Prevalence of polysubstance use was highest among:
 - accommodation and food services industry employees
 - arts and recreation services industry employees
 - construction industry employees¹¹
 - trade workers.¹²

Daily tobacco, risky alcohol, and cocaine use were higher among full-time than part-time workers.

Workers who consumed alcohol cost workplaces an estimated \$3.9 billion in alcohol-related absenteeism. Male workers accounted for 52% of this cost (\$2.0 billion), 20-29-year-old workers 26% (\$1.0 billion), metropolitan-based workers 75% (\$3.0 billion) and high SES workers 67% (\$2.6 billion).

Illicit drug-related absenteeism cost workplaces at least \$2.9 billion annually. Of this cost, metropolitan workers accounted for 80% (\$2.4 billion), male workers 60% (\$1.8 billion), and 20-29-year-old workers 42% (\$1.3 billion).

Public administration and safety workers experienced the highest prevalence of verbal abuse by someone under the influence of alcohol (29%) and illicit drugs (18%).

At least a fifth to a quarter (21%-28%) of the abuse that workers experienced which was perpetrated by a person under the influence of drugs occurred in the workplace. Fewer workers experiencing abuse by someone under the influence of alcohol reported it having occurred in the workplace (12%-15%).

Few workers reported that they usually used their illicit substance(s) at their workplace whilst 4.3% reported usually using alcohol at their workplace.

A limitation of the study is that polysubstance use was considered in relation to self-reported use of two or more illicit substances in the past year. Therefore, use of alcohol or tobacco with an illicit drug use was not included, and prevalence may not reflect concurrent use practices

11 Although statistical analyses cannot be undertaken between the industry groups and the total employed population (as the groups are not mutually exclusive), differences were considered noteworthy when the industry group's confidence intervals did not include the employed population's prevalence value.

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(e.g., use of two substances at the same time such as cocaine and alcohol). As concurrent polysubstance use can have numerous negative health impacts, further research is required to explore concurrent use of alcohol, tobacco and illicit substances.

Construction industry employees consistently reported licit and illicit drug use prevalence above the employed national average, whilst trade workers did so for both licit drugs, illicit drugs overall, and each individual drug except for ecstasy and pharmaceuticals. Construction and trade workers also reported high prevalence of illicit polysubstance use. Conversely, the health care and social assistance industry, the education and training industry, and professional occupation group predominately reported ATOD use below the employed national average. Both the construction industry and trade occupation group urgently require targeted interventions to reduce ATOD use and its associated harms. An exploration of the differences between groups with high and low prevalence may help inform the development of more tailored intervention approaches.

Table 34. Industries with licit and illicit drug use prevalence above, below, or equivalent to the employed national average, 2019 (NDSHS)

Industry	Daily tobacco	Risky alcohol	Cannabis	Cocaine	Ecstasy	Meth	Pharma	Any illicit
Construction	↑	↑	↑	↑	↑	↑*	↑	↑
Accommodation and Food Services	↑	=	↑	↑	↑	↑*	=	↑
Arts and Recreation Services	↓	↑	↑*	=*	=**	=*	=	↑
Administrative and Support Services	=	=	=	=	=*	=*	=*	=
Electricity, Gas, Water and Waste Services	=*	↑	=*	=**	=*	=**	=**	=*
Retail Trade	=	=	=	=	↑	=*	=*	=
Transport, Postal and Warehousing	↑	=	=	=*	=*	=*	=*	=
Other Services	↑	=	=	=	=*	=*	=*	=
Information Media and Telecommunications	↓*	=	↑	=	=**	=**	=**	=
Manufacturing	=	↑	=	↓*	=*	=*	=*	=
Professional, Scientific and Technical Services	↓	=	=	↑	=	=*	=	=
Wholesale Trade	=*	=	↑	↓**	=*	=**	↓**	=
Agriculture, Forestry and Fishing	=	↑	↓*	↓**	=**	=**	=*	↓*
Public Administration and Safety	=	=	↓	↓*	↓**	↓**	↑	↓
Mining	=*	=	=*	=*	=**	=**	=*	=
Rental, Hiring and Real Estate Services	=	=	=	=*	=**	=**	=*	=
Financial and Insurance Services	=*	=	=	=*	=*	=**	=*	=
Education and Training	↓	↓	↓	↓	↓*	↓*	=	↓
Health Care and Social Assistance	↓	↓	↓	↓	↓	=*	↓	↓

Source: National Drug Strategy Household Survey, 2019.

* Indicates the estimate has a relative standard error of 25% to 50% and should be used with caution.

** Indicates the estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

- ↑ The confidence interval range for the industry group is higher than the national average
- = The confidence interval range for the industry group includes the national average
- ↓ The confidence interval range for the industry group is lower than the national average.

Table 35. Occupations with licit and illicit drug use prevalence above, below, or equivalent to the employed national average, 2019 (NDSHS)

Occupation	Daily smoking	Risky alcohol	Cannabis	Cocaine	Ecstasy	Meth	Pharma	Any illicit
Trade	↑	↑	↑	↑	=	↑	=	↑
Unskilled	↑	=	↑	=	↑	=	=	=
Manager	↓	↑	↓	=	↓	=*	=	=
Skilled	=	=	=	↓	=	=	=	=
Professional	↓	↓	↓	=	=	=	=	↓

Source: National Drug Strategy Household Survey, 2019.

* Indicates the estimate has a relative standard error of 25% to 50% and should be used with caution.

- ↑ The confidence interval range for the industry group is higher than the national average
- = The confidence interval range for the industry group includes the national average
- ↓ The confidence interval range for the industry group is lower than the national average.

Appendix A:

Data source and notes

National Drug Strategy Household Survey (NDSHS)

The NDSHS is a triennial cross-sectional nationally representative survey of the general Australian population's attitudes, opinions and behaviour regarding tobacco, alcohol and illicit drug use. The NDSHS uses multi-stage stratified sampling techniques, and is weighted within geographic strata by household size, age, and sex to be representative of the total Australian population. Data from four waves (2010, 2013, 2016 and 2019) of the NDSHS were used.

Sample size

The following national and employed sample sizes were used per NDSHS dataset for Australians aged 14+ years:

- 2019: N=22,015, n=11,645 employed
- 2016: N=22,521, n=11,795 employed
- 2013: N=22,360, n=12,221 employed
- 2010: N=25,057, n=13,590 employed.

Response rates ranged from 49.1% to 51.1% across the four surveys.

Weighting

Full sampling and weighting procedure details are available elsewhere (AIHW 2017) See Technical information (https://www.aihw.gov.au/getmedia/559a7cd3-4c73-4f7d-98d6-d155554c7b03/aihw-phe-270-Technical_information.pdf.aspx) for more information on the sample, the methodology, response rate and limitations of the survey results.

Household, Income and Labour Dynamics in Australia (HILDA)

The HILDA survey (14) is a longitudinal survey that began in 2001. It annually collects information from households from all individuals about economic and personal wellbeing, labour market dynamics and family life. HILDA collected illicit drug data for the first time in 2017 and has collected data regarding tobacco and alcohol for multiple waves. The HILDA used a stratified three-stage cluster design in 2001 and undertook a similar process in 2011 to top-up the sample. Data from three waves were used for tobacco and alcohol (2010, 2013 and 2017), and one wave for illicit drugs (2017).

Weighting

Full sampling and weighting procedure details are available elsewhere. See Technical information <https://melbourneinstitute.unimelb.edu.au/assets/documents/hilda-bibliography/hilda-technical-papers/htec212.pdf> for more information.

Sample size

The following national and employed sample sizes were used per HILDA dataset for Australians aged 14+ years and had data for alcohol, tobacco and/or illicit drug use:

- 2017: N=16,021, n=10,174 employed
- 2013: N=15,315, n=9,572 employed
- 2010: N=11,986, n=7,697 employed.

Report notes

There are a number of notes to consider when reading and interpreting findings from this report:

- Data reported here may differ to that reported elsewhere (e.g., journal publications) due to:
 - Different statistical program used to generate the data (STATA for papers, SPSS for the Reports).
 - Different age ranges used.
- Pharmaceutical drugs captured by the NDSHS include: pain killers/opiates, tranquilisers/ sleeping pills, methadone unless specified elsewhere.
- The 2019 NDSHS collected data from 14+ year-olds whilst previous version also included 12 and 13 year-olds. Where 2010-2016 data is reported, data was limited to 14+ years.
- Polydrug use captured by the NDSHS did not include injecting as respondent may only use one drug (e.g., heroin) but would be counted as a poly drug user if their method of use was injecting. However, by excluding them, it misses those who may inject a drug not previously captured elsewhere. For this reason, the sum of the polydrug use categories may be lower than the any illicit drug use estimate.

Appendix B

HILDA comparison data

The general population

The HILDA survey found similar trends to the NDSHS in relation to:

- a significant decline in daily smoking prevalence between 2010 and 2017, with an overall reduction over the three survey periods of 20%.
- a significant increase in the proportions of Australians abstaining from alcohol and a significant decrease in those drinking at risky levels between 2013 and 2017.

The HILDA survey asked participants about illicit drug use for the first time in 2017. Cannabis (11%) was the most commonly reported illicit drug used by HILDA participants, with 12% of the sample reporting use of any illicit drug in the previous 12 months.

Supplementary Table 1. Prevalence of licit and illicit drug among Australians aged 14+ years, 2010–2017 (HILDA)

Drug use	2010	2013	2017
Tobacco			
Daily	15.7 (15.0-16.4)	14.2 (13.6-14.8)	12.5 (12.0-13.0)
Occasional	3.5 (3.2-3.8)	3.7 (3.4-4.0)	3.5 (3.2-3.8)
Ex-smoker	26.8 (26.0-27.6)	26.0 (25.3-26.7)	25.2 (24.5-25.9)
Non-smoker	54.0 (53.1-54.9)	56.0 (55.2-56.8)	58.9 (58.1-59.7)
Alcohol risk¹			
Abstainer	NA	22.9 (22.2-23.6)	23.8 (23.1-24.5)
Low risk	NA	47.9 (47.1-48.7)	48.2 (47.4-49.0)
Risky	NA	29.2 (28.5-29.9)	28.0 (27.3-28.7)
Past year illicit drug use			
Cannabis	NA	NA	10.8 (10.3-11.3)
Cocaine	NA	NA	3.1 (2.8-3.4)
Ecstasy	NA	NA	3.4 (3.1-3.7)
Methamphetamine	NA	NA	1.5 (1.3-1.7)
Pharmaceutical drugs ²	NA	NA	NA
Any illicit ³	NA	NA	12.0 (11.5-12.5)

Source: Household, Income and Labour Dynamics in Australia, 2013, 2017

Notes:

- Risky alcohol use (yes; no) was assessed against the 2020 National Health and Medical Research Council's (NHMRC) alcohol guidelines and categorised according to Australian Institute of Health and Welfare (AIHW) procedures. Three questions were used to determine categorisation. One of these questions was not asked in even years and thus alcohol use was only assessed for 2013 and 2017 for comparison with the NDSHS.
- Illicit use of pharmaceutical drugs was not reported.
- Any illicit drug use refers to use of at least one of the following: cannabis, cocaine, ecstasy, methamphetamine, hallucinogens, inhalants, and 'other illicit'.

Employed Australians

The HILDA survey found similar trends to the NDSHS in relation to:

- a significant decline in daily smoking prevalence among employed Australians between 2010 and 2017.
- a significant increase in the proportions of employed Australians abstaining from alcohol and a significant decrease in those drinking at risky levels between 2013 and 2017.

Cannabis (12%) was the most commonly reported illicit drug used by employed participants who completed HILDA. Among employed Australians, 14% reported use of any illicit drug in the previous 12 months.

Supplementary Table 2. Prevalence (%) of licit and illicit drug use among employed Australians aged 14+ years, 2010-2017 (HILDA)

Drug use	2010	2013	2017
Tobacco			
Daily	16.2 (15.4-17.0)	13.5 (12.8-14.2)	11.8 (11.2-12.4)
Occasional	3.7 (3.3-4.1)	4.4 (4.0-4.8)	4.1 (3.7-4.5)
Ex-smoker	25.1 (24.1-26.1)	24.8 (23.9-25.7)	23.4 (22.6-24.2)
Non-smoker	54.9 (53.8-56.0)	57.3 (56.3-58.3)	60.8 (59.8-61.8)
Alcohol risk¹			
Abstainer	NA	16.0 (15.3-16.7)	16.8 (16.1-17.5)
Low risk	NA	52.3 (51.3-53.3)	52.5 (51.5-53.5)
Risky	NA	31.7 (30.8-32.6)	30.7 (29.8-31.6)
Past year illicit drug use²			
Cannabis	NA	NA	12.4 (11.8-13.0)
Cocaine	NA	NA	4.3 (3.9-4.7)
Ecstasy	NA	NA	4.6 (4.2-5.0)
Methamphetamine	NA	NA	1.4 (1.2-1.6)
Pharmaceutical drugs	NA	NA	NA
Any illicit ³	NA	NA	14.2 (13.5-14.9)

Source: Household, Income and Labour Dynamics in Australia, 2010, 2013, 2017.

Notes:

1. Risky alcohol use (yes; no) was assessed against the 2020 National Health and Medical Research Council's (NHMRC) alcohol guidelines and categorised according to Australian Institute of Health and Welfare (AIHW) procedures. Three questions were used to determine categorisation. One of these questions was not asked in even years and thus alcohol use was only assessed for 2013 and 2017 for comparison with the NDSHS.
2. Illicit use of pharmaceutical drugs was not reported.
3. Any illicit drug use refers to use of at least one of the following: cannabis, cocaine, ecstasy, methamphetamine, hallucinogens, inhalants, and 'other illicit'.

Supplementary tables

Supplementary Table 3. Prevalence (%) of licit and illicit drug use among Australians aged 14+ years, 2010-2019 (NDSHS)

Drug use	2010	2013	2016	2019
Tobacco				
Daily	15.1 (14.7-15.5)	12.8 (12.4-13.2)	12.2 (11.8-12.6)	11.0 (10.6-11.4)
Occasional	2.9 (2.7-3.1)	3.0 (2.8-3.2)	2.7 (2.5-2.9)	2.9 (2.7-3.1)
Ex-smoker	24.0 (23.5-24.5)	24.0 (23.5-24.5)	22.8 (22.3-23.3)	22.9 (22.3-23.5)
Non-smoker	57.9 (57.3-58.5)	60.1 (59.5-60.7)	62.3 (61.7-62.9)	63.1 (62.5-63.7)
Alcohol				
Abstainer	19.9 (19.4-20.4)	21.2 (20.7-21.7)	22.6 (22.1-23.1)	23.7 (23.1-24.3)
Low risk	42.4 (41.8-43.0)	43.6 (43.0-44.2)	44.2 (43.6-44.8)	44.4 (43.7-45.1)
Risky	37.7 (37.1-38.3)	35.2 (34.6-35.8)	33.3 (32.7-33.9)	32.0 (31.3-32.7)
Past year illicit drug use				
Cannabis	10.3 (9.9-10.7)	10.2 (9.8-10.6)	10.4 (10.0-10.8)	11.6 (11.2-12.0)
Cocaine	2.1 (1.9-2.3)	2.1 (1.9-2.3)	2.6 (2.4-2.8)	4.2 (3.9-4.5)
Ecstasy	3.0 (2.8-3.2)	2.5 (2.3-2.7)	2.2 (2.0-2.4)	2.9 (2.7-3.1)
Methamphetamine	2.1 (1.9-2.3)	2.1 (1.9-2.3)	1.4 (1.2-1.6)	1.3 (1.1-1.5)
Pharmaceuticals	NA	NA	4.7 (4.4-5.0)	4.0 (3.7-4.3)
Any illicit	14.7 (14.3-15.1)	15.0 (14.5-15.5)	15.6 (15.1-16.1)	16.3 (15.8-16.8)

Source: National Drug Strategy Household Survey, 2010, 2013, 2016 and 2019.

Supplementary Table 4. Prevalence (%) of licit and illicit drug use among employed Australians aged 14+ years, 2010–2019 (NDSHS)

Drug use	2010	2013	2016	2019
Tobacco				
Daily	16.1 (15.5-16.7)	13.5 (12.9-14.1)	12.5 (11.9-13.1)	11.0 (10.4-11.6)
Occasional	3.4 (3.1-3.7)	3.7 (3.4-4.0)	3.5 (3.2-3.8)	3.7 (3.4-4.1)
Ex-smoker	25.5 (24.8-26.2)	25.5 (24.7-26.3)	23.8 (23.0-24.6)	23.0 (22.2-23.8)
Non-smoker	55.5 (54.7-56.3)	57.2 (56.3-58.1)	60.2 (59.3-61.1)	62.3 (61.4-63.2)
Alcohol				
Abstainer	11.4 (10.9-11.9)	12.4 (11.8-13.0)	13.2 (12.6-13.8)	15.8 (15.0-16.5)
Low risk	44.5 (43.7-45.3)	45.7 (44.8-46.6)	46.9 (46.0-47.8)	46.3 (45.4-47.3)
Risky	44.1 (43.3-44.9)	41.9 (41.0-42.8)	40.0 (39.1-40.9)	37.9 (37.0-38.9)
Past year illicit drug use				
Cannabis	11.5 (11.0-12.0)	11.9 (11.3-12.5)	12.2 (11.6-12.8)	13.5 (12.8-14.1)
Cocaine	3.0 (2.7-3.3)	3.0 (2.7-3.3)	3.8 (3.5-4.1)	6.2 (5.7-6.6)
Ecstasy	3.8 (3.5-4.1)	2.9 (2.6-3.2)	2.9 (2.6-3.2)	3.8 (3.4-4.1)
Methamphetamine	2.6 (2.3-2.9)	2.3 (2.0-2.6)	1.5 (1.3-1.7)	1.5 (1.3-1.7)
Pharmaceuticals	NA	NA	4.9 (4.5-5.3)	4.3 (4.0-4.7)
Any illicit	15.8 (15.2-0.0)	16.8 (16.1-0.0)	17.6 (16.9-18.3)	18.8 (18.1-19.5)

Source: National Drug Strategy Household Survey, 2010, 2013, 2016 and 2019

Glossary

Abstainer (alcohol):

A person who has not consumed 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 5 types of population centre. These classifications reflect the level of remoteness at the time of the 2016 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.

Current smoker:

Reported smoking daily, weekly or less than weekly at the time of the survey.

Daily smoker:

Reported smoking tobacco at least once a day (includes manufactured (packet) cigarettes, roll-your-own cigarettes, cigars or pipes). Excludes chewing tobacco, electronic cigarettes (and similar) and smoking of non-tobacco products.

Emerging psychoactive substances:

Are drugs that often mimic the effects of more established illegal drugs. These are sometimes referred to as research chemicals, analogues, or bath salts. Some of the more well-known substances include Mephedrone, NBOMe, Methyone, Flakka, MDPV, 2C-I, BZP, Carfentanyl and Krokodil.

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.

High risk or risky alcohol use:

Current Australian alcohol guidelines state that healthy men and women's risk of alcohol-related disease or injury is increased if they drink more than 10 standard drinks a week and more than 4 standard drinks on any one day.

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/pain-relievers and opioids
- tranquilisers/sleeping pills
- Steroids
- meth/amphetamines
- cannabis
- heroin
- methadone or buprenorphine
- cocaine
- hallucinogens
- ecstasy
- ketamine
- GHB
- synthetic cannabinoids
- emerging psychoactive substances
- inhalants
- (any) injected drug.

Injected drugs:

The injection of drugs that were not medically prescribed to inject.

Kessler Psychological Distress Scale (K10):

A survey device that is used 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 used only for people aged 18 and over.

Low risk alcohol use:

Current Australian alcohol guidelines state that healthy men and women's risk of alcohol-related disease or injury is reduced if they drink no more than 10 standard drinks a week and no more than 4 standard drinks on any one day.

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, tranquilisers/sleeping pills, steroids, methadone or buprenorphine and meth/amphetamines and other opioids such as morphine or pethidine.

Polydrug use:

Unless otherwise specified, the following drugs were assessed for polydrug use: cannabis, ecstasy, amphetamines, cocaine, hallucinogens, inhalants, heroin, ketamine, GHB, synthetic cannabinoids, emerging psychedelic substances, painkillers/opioids, tranquilisers/sleeping pills, steroids, methadone/buprenorphine

Recent:

In the previous 12 months.

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 advantage—the top fifth—is described as the 'highest socioeconomic area'.

Symbols

- N.A. not available
- n.p. not publishable because of small numbers, confidentiality or other concerns about the quality of the data
- * Estimate has a relative standard error of 25% to 50% and should be used with caution.
- ** Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

References

1. AIHW. National Drug Strategy Household Survey 2019. Canberra: Australian Institute of Health and Welfare; 2020.
2. Kaila-Kangas L, Koskinen A, Pensola T, Mäkelä P, Leino-Arjas P. Alcohol-induced morbidity and mortality by occupation: a population-based follow-up study of working Finns. *Eur J Public Health*. 2016;26(1):116-22.
3. French MT, Maclean JC, Sindelar JL, Fang H. The morning after: alcohol misuse and employment problems. *Appl Econ*. 2011;43(21):2705-20.
4. Frone MR. Prevalence and distribution of alcohol use and impairment in the workplace: a U.S. national survey. *J Stud Alcohol*. 2006;67(1):147-56.
5. Bhattacharya A. Financial headache: the cost of workplace hangovers and intoxication to the UK economy. London: Institute of Alcohol Studies; 2019.
6. Roche AM, Pidd K, Berry JG, Harrison JE. Workers' drinking patterns: the impact on absenteeism in the Australian work-place. *Addiction*. 2008;103(5):738-48.
7. Pidd K. The Workplace as an AOD-Related Harm Prevention and Intervention Setting. *Drug and Alcohol Research Connections* 2014.
8. Roman PM, Blum TC. The workplace and alcohol problem prevention. *Alcohol Research & Health*. 2002;26(1):49.
9. Ames GM, Bennett JB. Prevention Interventions of Alcohol Problems in the Workplace. *Alcohol Research & Health*. 2011;34:175 - 87.
10. Frone MR, Brown AL. Workplace substance-use norms as predictors of employee substance use and impairment: a survey of U.S. workers. *J Stud Alcohol Drugs*. 2010;71(4):526-34.
11. Coronges K, Stacy AW, Valente TW. Social network influences of alcohol and marijuana cognitive associations. *Addict Behav*. 2011;36(12):1305-8.
12. Pidd K, Kostadinov V, Roche A. Do workplace policies work? An examination of the relationship between alcohol and other drug policies and workers' substance use. *International Journal of Drug Policy*. 2016;28:48-54.
13. AIHW. National Drug Strategy Household Survey: Online data tables 2020 [Available from: <https://www.aihw.gov.au/about-our-data/our-data-collections/national-drug-strategy-household-survey>].
14. Melbourne Institute. HILDA Survey [Available from: <https://melbourneinstitute.unimelb.edu.au/hilda>].
15. Wooden M, La N, Macalalad N, Summerfield M, Watson N. HILDA Project Discussion Paper Series: The Measurement of Illicit Drug Use in Wave 17 of the HILDA Survey. Melbourne: The Melbourne Institute; 2018.
16. Bush DM, Lipari RN. Substance Use and Substance Use Disorder by Industry. The CBHSQ Report. Rockville (MD): Substance Abuse and Mental Health Services Administration; 2015.
17. WHO. Tobacco Fact Sheet. Geneva: World Health Organization; 2021.
18. AIHW. Burden of Tobacco Use in Australia: Australian Burden of Disease Study 2015. Canberra: Australian Institute of Health and Welfare; 2019.
19. Reid JL, Hammond D, Boudreau C, Fong GT, Siahpush M. Socioeconomic disparities in quit intentions, quit attempts, and smoking abstinence among smokers in four western countries: findings from the International Tobacco Control Four Country Survey. *Nicotine & Tobacco Research*. 2010;12 Suppl:S20-33.
20. AIHW. Australian Burden of Disease Study 2018: Impact and causes of illness and death in Australia. Canberra: Australian Institute of Health and Welfare; 2021.
21. Greenhalgh E, Scollo M, Winstanley M. Tobacco in Australia: Facts and issues. Melbourne: Cancer Council Victoria; 2020.
22. Bonomo Y, Norman A, Biondo S, Bruno R, Daglish M, Dawe S, et al. The Australian drug harms ranking study. *Journal of Psychopharmacology*. 2019;33(7):759-68.
23. WHO. Global status report on alcohol and health 2018. Geneva: World Health Organization; 2018.
24. AIHW. Alcohol, tobacco and other drugs in Australia 2022.
25. AIHW. Australia's Health 2020. Canberra: Australian Institute of Health and Welfare; 2020.
26. Whetton S, Tait RJ, Scollo M, Banks E, Chapman J, Dey T, et al. Identifying the Social Costs of Tobacco Use to Australia in 2015/16. Perth, Australia: NDRI; 2019.
27. Pidd K, Roche A, Chapman J, McEntee A, Tait RJ, Whetton S. Chapter 7: Workplace - Costs of absenteeism & presenteeism. Identifying the Social Costs of Tobacco Use to Australia in 2015/16. Perth, WA: National Drug Research Institute; 2019. p. 74-9.
28. Owen AJ, Maulida SB, Zomer E, Liew D. Productivity burden of smoking in Australia: A life table modelling study. *Tobacco Control*. 2019;28:297-304.
29. Chapman S, Borland R, Scollo M, Brownson RC, Dominello A, Woodward S. The impact of smoke-free workplaces on declining cigarette consumption in Australia and the United States. *American Journal of Public Health*. 1999;89(7):1018-23.
30. Ham DC, Przybeck T, Strickland JR, Luke DA, Bierut LJ, Evanoff BA. Occupation and workplace policies predict smoking behaviors: analysis of national data from the current population survey. *J Occup Environ Med*. 2011;53(11):1337-45.
31. Fichtenberg CM, Glantz SA. Effect of smoke-free workplaces on smoking behaviour: systematic review. *BMJ*. 2002;325(7357):188.
32. Syamlal G, King BA, Mazurek JM. Workplace smoke-free policies and cessation programs among U.S. working adults. *Am J Prev Med*. 2019;56(4):548-62.
33. National Institute for Occupational Safety and Health. Current Intelligence Bulletin 67: Promoting Health and Preventing Disease and Injury Through Workplace Tobacco Policies. 2015.
34. Golechha M. Health Promotion Methods for Smoking Prevention and Cessation: A Comprehensive Review of Effectiveness and the Way Forward. *International journal of preventive medicine*. 2016;7:7-.

35. Chapman S, Borland R, Scollo M, Brownson RC, Dominello A, Woodward S. The impact of smoke-free workplaces on declining cigarette consumption in Australia and the United States. *American journal of public health*. 1999;89(7):1018-23.
36. Pidd K, Roche A. Changing workplace cultures: an integrated model for the prevention and treatment of alcohol-related problems. In: Dietze DMP, editor. *Drugs and public health: Australian perspectives on policy and practice* Oxford University Press; 2008. p. 49-59.
37. Roche AM, Lee NK, Battams S, Fischer JA, Cameron J, McEntee A. Alcohol use among workers in male-dominated industries: A systematic review of risk factors. *Safety science*. 2015;78:124-41.
38. José BS, van de Mheen H, van Oers JAM, Mackenbach JP, Garretsen HFL. Adverse Working Conditions and Alcohol Use in Men and Women. *Alcoholism: Clinical and Experimental Research*. 2000;24(8):1207-13.
39. Pidd K, Roche A, Kostadinov V. Trainee chefs' experiences of alcohol, tobacco and drug use. *Journal of Hospitality and Tourism Management*. 2014;21.
40. Roche AM, Chapman J, Duraisingam V, Phillips B, Finnane J, Pidd K. Construction workers' alcohol use, knowledge, perceptions of risk and workplace norms. *Drug and alcohol review*. 2020;39(7):941-9.
41. NCETA. *Your WorkLife Factsheet: Illicit Drugs*. Adelaide: National Centre for Education and Training on Addiction, Flinders University; 2020.
42. Roche A, Pidd K, Kostadinov V. Alcohol- and drug-related absenteeism: a costly problem. *Aust N Z J Public Health*. 2016;40(3):236-8.
43. Nicholson PJ, Mayho G. Alcohol, drugs, and the workplace: an update for primary care specialists. *Br J Gen Pract*. 2016;66(652):556-7.
44. Berry JG, Pidd K, Roche AM, Harrison JE. Prevalence and patterns of alcohol use in the Australian workforce: findings from the 2001 National Drug Strategy Household Survey. *Addiction*. 2007;102(9):1399-410.
45. Pidd K, Roche AM, Buisman-Pijlman F. Intoxicated workers: findings from a national Australian survey. *Addiction*. 2011;106(9):1623-33.
46. Richter K, Peter L, Rodenbeck A, Weess HG, Riedel-Heller SG, Hillemacher T. Shiftwork and alcohol consumption: a systematic review of the literature. *European addiction research*. 2021;27(1):9-15.
47. Rose G, Khaw, K., & Marmot, M. . *Rose's Strategy of Preventive Medicine*: Oxford University Press; 2008.