

National Drug Strategy Household Survey 2022–2023; Data Quality Statement

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National Drug Strategy Household Survey 2022–2023; Data Quality Statement

Identifying and definitional attributes

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Data quality

**Data quality statement
summary:**

The National Drug Strategy Household Survey (NDSHS) provides estimates every three years of the proportion of the population aged 14 years and older using tobacco, alcohol and illicit drugs. The survey also captures information about drug-related attitudes, perceptions and support for government policies.

The 2022–2023 NDSHS survey was the 14th conducted under the National Drug Strategy. The survey was first undertaken in 1985 and has been undertaken every 3 years since 1995. The data collected through these surveys have contributed to the development of policies for Australia's response to drug-related issues.

The Australian Government Department of Health and Aged Care commissioned the Australian Institute of Health and Welfare (AIHW) to manage the 2022–2023 survey, and the AIHW commissioned Roy Morgan Research to collect the data. A Technical Advisory Group comprising experts in tobacco, alcohol and other drug research supported the AIHW in the management of the survey.

The sample is drawn from private dwellings using stratified, multistage random sampling. In each household, the person aged 14 and over who had the most recent birthday was invited to complete the survey. The respondent could elect to complete the survey via a paper form, online or over the telephone.

- Reported findings are based on self-reported data and are not empirically verified by blood tests or other screening measures.
- It is known from past studies of alcohol and tobacco consumption that respondents tend to underestimate actual consumption levels.
- Estimates of illicit drug use and related behaviours are also likely to be underestimates of actual use.
- The exclusion of persons from non-private dwellings, institutional settings, people experiencing homelessness, and the difficulty in reaching marginalised persons are likely to have affected estimates.
- The response rate for the 2022–2023 survey was 43.9%, lower than previous surveys. Given the nature of the topics in this survey, some non-response bias is expected, but this bias has not been measured.
- Both sampling and non-sampling errors should be considered when interpreting results.
- The 2022–2023 survey used a multi-mode completion methodology—respondents could choose to complete the survey via a paper form, an online form or via a telephone interview. This was the third time an online form has been used in the survey series. Changes in mode may have some impact on responses, and users should exercise some degree of caution when comparing data over time.
- The 2022–2023 NDSHS results are disaggregated by the question 'How do you describe your gender' rather than the previous question 'What is your sex'. In tables that disaggregate results by gender, results for 2019 and earlier years are disaggregated by the previous sex question. Caution is advised when considering time series comparisons.
 - The time series for methamphetamine and amphetamine was broken in 2022–2023, as the questions used in 2019 and earlier (meth/amphetamine) also included non-medical use of pharmaceutical amphetamines. Data collected in 2022–2023 are not considered comparable to previous years.

Institutional environment: The Australian Institute of Health and Welfare (AIHW) is an independent corporate Commonwealth entity under the [Australian Institute of Health and Welfare Act 1987](#) (AIHW Act) to provide reliable, regular and relevant information and statistics on Australia's health and welfare. It is an independent statutory authority established in 1987, governed by a [management board](#), and accountable to the Australian Parliament through the Health and Aged Care portfolio.

The AIHW is a nationally recognised information management agency. Its purpose is to create authoritative and accessible information and statistics that inform decisions and improve the health and welfare of all Australians. The AIHW collects and reports information on a wide range of topics and issues, ranging from health and welfare expenditure, hospitals, disease and injury, and mental health, to ageing, homelessness, disability, and child protection.

The Institute also plays a role in developing and maintaining national metadata standards. This work contributes to improving the quality and consistency of national health and welfare statistics. The Institute works closely with governments and non-government organisations to achieve greater adherence to these standards in administrative data collections to promote national consistency and comparability of data and reporting.

One of the main functions of the AIHW is to work with the states and territories to improve the quality of administrative data and, where possible, to compile national datasets based on data from each jurisdiction, to analyse these datasets and disseminate information and statistics.

Compliance with the confidentiality requirements in the AIHW Act, the Privacy Principles in the [Privacy Act 1988](#) (Cth) and AIHW's data governance arrangements ensures that the AIHW is well positioned to release information for public benefit while protecting the identity of individuals and organisations.

For further information see the AIHW website www.aihw.gov.au, which includes details about the AIHW's governance (www.aihw.gov.au/about-us/our-governance) and our role and strategic goals (www.aihw.gov.au/about-us/our-vision-and-strategic-goals).

The AIHW has analysed and reported data from the NDSHS since 1998. In addition, the AIHW has managed the survey process since 2001.

Roy Morgan Research

Roy Morgan Research (RMR) is an Australian market research company founded in 1941. RMR has experience in conducting all forms of research, particularly public opinion polling, attitude studies, social surveys, and large consumer and industrial market surveys.

RMR take pride in maintaining comprehensive in-house production facilities and maintaining the highest quality assurance standards (to AS/NZS/ISO 9001 and ISO 20252 standard for all business processes) in the industry. RMR adheres to the standards set out in the Code of Professional Behaviour of the Australia Market and Social Research Society of Australia.

All RMR staff are familiar with, and adhere to the Information Privacy Principles under the *Privacy Act 1988* (Cwlth). As in previous waves, all personnel involved in the 2022–2023 NDSHS project, including interviewers, signed an AIHW Confidentiality Undertaking.

Further details about RMR are available at:

www.roymorgan.com/about/about-roy-morgan

The AIHW has commissioned RMR to undertake at least part of the data collection since 1998.

Timeliness: The NDSHS is conducted approximately every 3 years over a 5- to 6-month period. The 2022–2023 data was exceptional as the fieldwork was split into two stages, the first from 20 July to 18 December 2022, and the second from 20 March to 31 May 2023.

A preliminary data set was received by the AIHW in mid-July 2023, with the cleaning and initial checks of the data set being completed by the first week of September 2023. The final data set was delivered by the second week of September 2023.

The 2022–2023 NDSHS report and related material were released on 29 February 2024.

Accessibility: Results from the 2022–2023 NDSHS are available on the AIHW website. Full published results can be found at [National Drug Strategy Household Survey 2022–2023](#), which contains the 2022–2023 NDSHS web report, detailed findings web articles, state and territory summaries, interactive data visualisations, supplementary data tables and technical notes.

Users can request data not available online by submitting a data request through the [AIHW custom data request service](#). Requests are charged for on a cost-recovery basis.

A confidentialised unit record file will be available for 3rd party analysis through the [Australian Data Archive](#). Access to the master unit record file may be requested through the [AIHW Ethics Committee](#).

Interpretability: Information to aid in interpretation of 2022–2023 NDSHS results may be found in the online Technical Notes, available at www.aihw.gov.au/reports/Illicit-use-of-drugs/national-drug-strategy-household-survey/contents/technical-notes.

In addition, a code book and other supporting documentation will be available through the Australian Data Archive website or may be requested from AIHW at aod@aihw.gov.au.

Relevance: **Scope and coverage**

The 2022–2023 NDSHS collected self-reported information on tobacco, alcohol and illicit drug use and attitudes from persons aged 14 years and over. It contains two sets of estimates. One set reports statistics for households (for example, the proportion of households where residents are exposed to tobacco smoke), and the other reports statistics for people in Australia (for example, the proportion of people who smoke tobacco daily). The scope for these two sets of estimates is:

- Residential households in Australia containing at least one person aged 14 years or over who resides at that household permanently.
- People aged 14 and over who reside in in-scope households (only one person may be selected in each household).

Excluded from sampling were institutional settings such as hospitals and nursing homes, non-permanent addresses such as hotels, motels, and other environments such as Defence Force barracks or prisons, as well as the people residing in those settings. It also excludes people without a permanent address, such as those experiencing homelessness.

It is not possible to achieve full coverage of this scope within Australia. In the 2022–2023 NDSHS, any SA1 where the standard NDSHS placement procedures could not be followed was removed from the sample and replaced, due to being out of coverage. This includes Aboriginal and Torres Strait Islander (First Nations) communities where First Nations languages are the primary spoken language. Residential households outside the 15 sample strata and households in SA1s that have fewer than 50 total residences were also excluded, as were the people who reside in those households.

For the first time, in 2022–2023 NDSHS, respondents had the option to complete the survey online in a language other than English. The survey form was translated into Arabic, Mandarin/Simplified Chinese, Cantonese/Traditional Chinese, Greek, Italian and Vietnamese.

Other survey materials, including the approach letter, the Roy Morgan webpage, and the Frequently Asked Questions (FAQ) section of the AIHW web page, were

translated into the same languages, and indicated that the online survey could be completed in languages other than English.

The 2022–2023 NDSHS was designed to provide reliable estimates at the national level. The survey was not specifically designed to obtain reliable national estimates for Aboriginal and Torres Strait Islander (First Nations) people. In 2022–2023, the sample proportion of First Nations people aged 14 years and older was similar to population estimates (2.6% compared with 2.8%), however most estimates for First Nations people are based on a sample size of 551 people so results should be interpreted with caution.

Reference period

The fieldwork was conducted in two periods, the first from 20 July to 18 December 2022, and the second from 20 March to 31 May 2023. Respondents to the survey were asked questions relating to their behaviours, beliefs and experiences covering differing time periods, predominantly over the previous 12 months.

Geographic detail

In the 2022–2023 NDSHS, data were coded to the statistical areas level 1 (SA1). Data are generally published at the national level with a selection of data published at the State/Territory, Remoteness Area, Primary Health Network, and Statistical Area Level 4 (SA4) levels.

Statistical standards

Data on tobacco and alcohol consumption were collected in accordance with World Health Organization (WHO) standards and alcohol risk data were reported in accordance with the current 2020 National Health and Medical Research Council's *Australian Guidelines to Reduce Health Risks from Drinking Alcohol*.

Australian and New Zealand Standard Classification of Occupations (ANZSCO) and Australian and New Zealand Standard Industrial Classification (ANZSIC) codes were used as the code-frame for questions relating to occupation and industry.

The Standard Australian Classification of Countries (SACC) codes were used as the code-frame for the question relating to country of birth.

Types of estimates available

Weighted estimates of drug use prevalence, attitudes and beliefs are most commonly reported. In addition, some population numbers and age-standardised data are available for some aspects of the collection. Time series data are presented for most estimates in the 2022–2023 NDSHS supplementary tables.

Other cautions

The 2022–2023 NDSHS fieldwork was conducted in two stages, and this may have had an impact on the recent use of methamphetamine and amphetamine, and ecstasy.

2022–2023 NDSHS data users are advised:

- Drug use statistics for all major drug types, including methamphetamine and amphetamine, should combine data from the entire survey fieldwork period (that is, both 2022 and 2023 results should be included in key findings).
- In key findings and general reporting, use of ecstasy should incorporate data from both 2022 and 2023, with a footnote indicating that it is aggregated over two periods with different levels of use.

For further information, please visit the online Technical Information, available at www.aihw.gov.au/reports/illegal-use-of-drugs/national-drug-strategy-household-survey/contents/technical-notes.

Sample design

The sample was stratified by region (15 strata in total – capital city and rest of state for each state and territory, with the exception of the Australian Capital Territory

Accuracy:

which operated as one stratum). To produce reliable estimates for the smaller states and territories, sample sizes were boosted in Tasmania (Tas), the Australian Capital Territory (ACT) and the Northern Territory (NT). The sample size allocated to Western Australia (WA) and South Australia (SA) was proportional to the population living in each state, as a fraction of the Australian population. In 2022–2023, an additional 1,509 questionnaires were purchased by SA to improve reliability of results.

The remaining sample was allocated between New South Wales (NSW), Victoria (Vic), and Queensland (Qld), in proportion to the population living in each state. This results in an under sampling of these three jurisdictions (proportional to their share of the Australian population) due to the over sampling in Tas, ACT and NT.

For capital city strata, statistical areas level 1 (SA1s) were selected with probability proportional to the number of private households calculated from the Australian Bureau of Statistics Household and Family Projections, 2016 to 2041 (ABS 2019). As in 2019, six large urban areas were identified for sample selection in the same way as major cities. These regional centres of Newcastle and Illawarra in NSW, Geelong in Vic, Gold Coast, Sunshine Coast, and Cairns in Qld also used this SA1 selection process, to reduce geographical clustering within the sample.

In 2022–2023, if SA1s with fewer than 50 households (based on Household and Family Projections, 2016 to 2041, ABS 2019) were selected, they were replaced with other SA1s with similar characteristics with respect to region, remoteness status and Socio-Economic Indexes for Areas (SEIFA) status based on the Index of Relative Socioeconomic Advantage and Disadvantage (IRSAD), within the same SA2 where possible.

In all other areas in the 'rest of state' strata, statistical areas level 2 (SA2s) were selected for the first stage, as this had considerable efficiency benefits. SA2s for each stratum were selected with probability proportional to the number of households calculated from Household and Family Projections, 2016 to 2041 (ABS 2019). Within each selected SA2, SA1s were selected with probability proportional to the number of private households calculated in the same way.

An additional 6 SA1s were selected using the same process (that is, beginning from the SA2 selection stage) but were limited to those SA1s classified by the ABS Australian Statistical Geography Standard (ASGS) Volume 5 - Remoteness Structure as *Remote Australia* or *Very Remote Australia*, in an effort to increase the proportion of *Remote* and *Very Remote* households in the sample.

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

As in previous surveys, interviewers made 3 attempts to establish face-to-face contact with the selected dwellings. The selected respondent was the household member aged 14 or older who most recently celebrated their birthday. This was a departure from samples from 2004–2016, where the selected respondent was a household member aged 12 or older. In 2019, it was decided upon advice from the NDSHS Technical Advisory Group to remove 12- and 13-year-olds from the sample. There were some concerns over the reliability of the data collected as the majority of 12- and 13-year-olds reported that their parents were present while completing the survey and that this affected the honesty of their responses. This population group is also captured through other drug and alcohol surveys such as the Australian Secondary Schools Alcohol and other Drug survey. If the selected respondent was aged 14 or 15, permission was sought from a responsible adult for them to complete the survey.

The over-sampling of lesser populated states and territories produced a sample that was not proportional to the state/territory distribution of the Australian population aged 14 years or older. Weighting was applied to adjust for imbalances arising from execution of the sampling and differential response rates, and to ensure that the results relate to the Australian population.

Sampling error

All proportions that are calculated from survey data are estimates rather than true

population proportions. This means they have a margin of error due to only a sample of the population being surveyed. This is called sampling error.

There are different ways of measuring sampling error associated with an estimate from a sample survey. The 2022–2023 NDSHS uses both relative standard error and margin of error; these are included in the supplementary tables.

Relative standard error

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

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

Margin of error

The Margin of Error (MoE) describes the distance from the estimated value that the population value is likely to be within, at the 95% level of confidence. This means that the “true” proportion for the entire population would be within the MoE around the reported estimate for 95% of possible samples.

Non-sampling error

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

Mode effects

The 2022–2023 survey was conducted using a multi-mode completion methodology, similar to the 2016 and 2019 surveys. Selected individuals could choose to complete the survey via a paper form, an online form, or a telephone interview. In 2022–2023, 28% of respondents chose to complete the survey online, an increase from the 25% of respondents that did so in 2019. Between 2019 and 2022–2023, respondents choosing to complete the survey via paper form dropped from 74% to 72%, while those completing the survey via telephone dropped from 0.3% to 0.1%.

Survey modes have changed over time with survey waves. Changes to the methodology should be taken into consideration when making comparisons over time. See Table 1 in the Technical Information, available at www.aihw.gov.au/reports/illegal-use-of-drugs/national-drug-strategy-household-survey/contents/technical-notes for a summary of the data collection methodologies and fieldwork timing since 1998, when AIHW began managing the survey.

Like the 2016 and 2019 surveys, respondents who elected to use the online form had different demographic characteristics to respondents who used the paper form. Not only do demographic characteristics of respondents affect their choice of survey mode, they are also related to their likelihood of reporting drug use. For example, young people were more likely to have used e-cigarettes in the previous 12 months and were also more likely to complete the survey online. Due to this fact, if online completions and paper completions were simply compared, online respondents would appear to be more likely to use e-cigarettes than paper respondents. As a result, comparisons between modes require adjustments to be made based on demographic differences between the people using the different modes.

Respondents using different modes were significantly different to each other in terms of gender, age, employment status, highest level of education attained,

marital status, main language spoken at home, household status, remoteness, socioeconomic area, and sexual orientation. These demographic characteristics need to be taken into account when assessing potential mode effects.

Variables related to the use of tobacco, alcohol, and other illicit drugs were tested for mode effects. The impacts of the significant socio-demographic variables were first tested to understand their impacts on the responses. Logistic regression analysis was used to test for mode effects, controlling for the known demographics of respondents.

Modelling suggested no statistically significant differences between paper and online completions for the following results, after adjusting for known demographic characteristics:

- recent consumption of alcohol,
- recent non-medical use of pain-killers/pain-relievers and opioids,
- recent non-medical use of pharmaceutical stimulants,
- recent use of cocaine,
- recent use of ecstasy
- recent use of ketamine,
- recent use of inhalants.

However, compared with people who completed the online form, those who completed the paper form were (after adjusting for known demographic characteristics):

- 1.6 times as likely to consume more than 4 standard drinks in a single day at least once a month.
- 1.5 times as likely to have recently used methamphetamine and amphetamine.
- 1.5 times as likely to have recently used tranquillisers/sleeping pills for non-medical purposes.
- 1.4 times as likely to consume alcohol at risky levels and to consume more than 10 standard drinks per week on average.
- 1.4 times as likely to currently smoke.
- 1.3 times as likely to have recently used hallucinogens.
- 1.2 times as likely to have recently used cannabis.

These differences between paper and online responses should be taken into account when considering 2022–2023 estimates of drug use prevalence, especially when comparing them to other years. In 2016, the same multi-mode approach was used, and 22% of people completed the survey online, compared to 25% in 2019, and 28% in 2022–2023 (see Table 1 in Technical Information).

The increase in online respondents may have caused, for example, a slight decline in the prevalence estimates for smoking, although not enough to account for the significant declines seen in daily smoking between 2019 and 2022–2023. Surveys conducted before 2016 used various collection methods, so caution should be exercised when comparing 2022–2023 results to previous years.

Data validation

In an attempt to enhance the reliability of estimates in the survey and maximise data quality, a small number of missing and contradictory responses were imputed through a rigorous menu of cross-validation edit and logic checks. For example, if a respondent failed to indicate a lifetime usage response (missing) or answered 'no —never used', but then provided detailed responses to subsequent questions (e.g. used in the last 12 months, how used, where used, source of supply) the missing or contradictory response was recoded as 'yes'. These logic checks have been applied since 1998.

Statistical Linkage Key (SLK) validity

The NDSHS includes a self-complete Statistical Linkage Key (SLK). Approximately 68% of respondents attempted to complete the SLK and about 56% of respondents appear to have fully completed it, equating to 12,049 people. At the time the report was written, no 'cleaning' of the SLK has been undertaken and it is possible that cleaning some of the incomplete SLKs (12.5%) will result in additional completions.

The quality of the SLK will impact on any future linkage of these data and does not otherwise affect the quality of other data collected in this survey.

Non-response bias and non-sampling error

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

The estimation methods used for the 2022–2023 results take into account non-response and adjust for any under-representation of selected population subgroups in an effort to reduce non-response bias.

A limitation of the survey is that the data are self-reported, and people may not accurately report information relating to illicit drug use and related behaviours because these activities may be illegal. This means that results relating to illicit drugs may be under-reported. For many illicit drugs, any biases are likely to be relatively consistent at the population level over time, so would not have much of an effect on trend analysis. Changes to legislation involving drugs may lead to an increase or decrease in self-reported drug use, not only because of changes in drug taking behaviours, but also due to changes in how likely people may be to report those behaviours. However, legislation protecting people's privacy and the use of consistent methodology over time means that the impact of this issue on prevalence is expected to be limited.

Some behaviours may become less socially acceptable over time which may lead to an increase in socially desirable responses rather than accurate responses. Media reporting stigmatising a drug may lead to under-reporting of use of that drug (Chalmers et al. 2014). Any potential increase in self-reported socially desirable behaviours needs to be considered when interpreting survey results over time.

Response rates and contact rates

Overall, contact was made with 49,389 in-scope households, from which 21,663 questionnaires were categorised as being complete and usable. This represented a response rate for the 2022–2023 survey of 43.9%. This was the lowest rate seen of all survey waves conducted from 2010 and lower than the previous recorded low response rate for the 2004 survey (47.8%).

The response rate for the NDSHS was calculated using the total number of dwellings where contact was made as the number of eligible reporting units in the sample. If the entire eligible sample for the 2022–2023 NDSHS is used—that is, it includes all cases of non-contact as part of the denominator (70,134 dwellings, plus 715 dwellings where the selected respondent was not available)—the response rate is reduced to 30.6%, meaning that over two-thirds of the sample did not receive, respond to, or return a completed, useable questionnaire. Again, this was the lowest rate observed among all surveys conducted from 2010.

Response rates tend to vary depending on the area that the households are located. This is important to consider when interpreting jurisdictional results. A lower response rate may increase non-response bias, as a higher proportion of people opt out of completing the survey, and there may be differences between those people who refused to participate and the people who agreed to complete the survey.

In 2022–2023, the response rates varied from 33% in Sydney to 58% in Remainder Northern Territory (that is, Northern Territory excluding the capital city of Darwin). Response rates were the lowest recorded over the last five survey waves for Sydney (33%), Melbourne (40%), Brisbane (46%), Perth (41%), Remainder Western Australia (41%), Hobart (46%), Remainder Tasmania (55%), and Darwin (51%). See Table 4 in Technical Information available at <https://www.aihw.gov.au/reports/illicit-use-of-drugs/national-drug-strategy-household-survey/contents/technical-notes-for-further-results>.

Incomplete responses

Some survey respondents did not answer all questions, either because they were unable or unwilling to provide a response. The survey responses for these people were retained in the sample, and the missing values were recorded as not

answered. No attempt was made to deduce or impute these missing values.

Response bias

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

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

However, some behaviours may become less—or more—socially acceptable over time which may lead to an increase in socially desirable responses rather than accurate responses. Any potential changes in self-reported behaviours need to be considered when interpreting survey results over time.

Non-response adjustment

The estimation method used takes into account non-response and adjusts for the under representation of some population subgroups in an effort to reduce non-response bias.

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

First Nations data

The 2022–2023 NDSHS was designed to provide reliable estimates at the national level. The survey was not specifically designed to obtain reliable national estimates for Aboriginal and Torres Strait Islander (First Nations) people. In 2022–2023, the sample proportion of First Nations people aged 14 years and older was similar to population estimates (2.6% compared with 2.8%), however most estimates for First Nations people are based on a sample size of 551 people so results should be interpreted with caution. Surveys in this series commenced in 1985. Over time, modifications have been made to the survey's methodology and questionnaire design. The 2022–2023 survey differs from previous versions of the survey in some of the questions asked and some minor methodological changes, detailed in the technical information, available at www.aihw.gov.au/reports/illicit-use-of-drugs/national-drug-strategy-household-survey/contents/technical-notes.

Coherence:

Comparability with 1998 and early surveys

The survey sample design, questionnaire design and sample size were considerably different in 1998 and earlier years (further details can be found in the [2016 NDSHS Data Quality Statement](#)). Comparisons between pre-2001 and 2001 and later data should be avoided where possible.

Questionnaire

The 2022–2023 questionnaire was modelled on the 2019 version, to maintain maximum comparability. However, some refinements were made to ensure the questions remained relevant and useful. Only substantial changes that had a notable impact on data quality are included here. For a full list of questionnaire changes in 2022–2023 see the 2022–2023 NDSHS technical information, available at <https://www.aihw.gov.au/reports/illicit-use-of-drugs/national-drug-strategy-household-survey/contents/technical-notes>.

Methamphetamine and amphetamine

The NDSHS asked about the use of methamphetamine and amphetamine

(including the street names speed, crystal and ice) in 2022–2023. In 2019 and prior years, the NDSHS asked about the use of “Meth/amphetamines”, which also included the non-medical use of pharmaceutical amphetamines, such as Ritalin (methylphenidate) and pseudoephedrine based cold and flu tablets.

This change was implemented to improve national estimates for use of methamphetamine and amphetamine and improve the understanding of the questions among people who had used methamphetamine and amphetamine.

The change represents a break in the time series. Results for methamphetamine and amphetamine in 2022–2023 should not be compared to meth/amphetamines results from previous survey waves.

Sex and gender

In the 2022–2023 NDSHS survey, two questions from the *Standard for Sex, Gender, Variations of Sex Characteristics and Sexual Orientation Variables* (ABS 2020) were included in the opening demographics section. The question about the participant’s sex recorded at birth, and another about how they describe their gender, were used to replace the question from previous survey waves asking about the participant’s sex at the time of the survey.

These questions were incorporated to ensure that respondents would be able to respond to the survey accurately and feel represented. Their inclusion also allows for results to be presented for *cisgender* and *trans and gender diverse* populations.

This represents a substantial change to a key variable in the NDSHS, as the previously included question (‘what is your sex’) was used for many disaggregations in 2019 and earlier survey years. The 2022–2023 NDSHS results are instead disaggregated by gender. In tables that disaggregate results by gender, results for 2019 and earlier years are disaggregated by the previous ‘What is your sex’ question. Caution is advised when considering time series comparisons.

Results for cisgender and trans and gender diverse people

The ‘two-step method’ outlined in the *Standard for Sex, Gender, Variations of Sex Characteristics and Sexual Orientation Variables* (ABS 2020) to derive the cisgender and trans and gender diverse classification was used to generate 2022–2023 NDSHS results. This classification was based on Questions 1a and 1b in the 2022–2023 NDSHS questionnaire.

Analysis

Re-analysis of data between 2001 and 2019

In 2022–2023, all data tables involving trend data from 2001 to 2019 were reanalysed. A small number of discrepancies were discovered during the re-analysis of past data sets, and some other estimates have been updated or revised. Results in 2022–2023 should be considered correct in cases where they conflict with previously published results.

Analysis of the impact of split fieldwork periods on drug use statistics

The 2022–2023 NDSHS fieldwork was conducted in two stages, the first from 20 July to 18 December 2022, and the second from 20 March to 31 May 2023. This represents a change from previous NDSHS waves and needs to be assessed for changes to the data.

A binomial logistic regression was run on all ‘recent use of drugs’ results, similar to the method used to assess mode effects. This method takes other variables (most notably strata) into account, to ensure that any differences seen between 2022 and 2023 were not due to other factors, such as the different areas being surveyed in each year.

The results show that people responding in 2023 were slightly more likely to report use of most drugs, but the only substantial changes were seen in recent use of methamphetamine and amphetamine, and ecstasy. This indicates that most drug types are comparable across fieldwork periods.

Further analysis showed that the differences in use of methamphetamine and amphetamine are to be expected from the general seasonality of the data. Ecstasy showed a more prominent difference between 2022 and 2023, for both use in the last 12 months and use in the last month. It is possible that this is a real difference at the national level, as opportunities to use ecstasy in mid-to-late 2022 (e.g. events) were still limited by the impacts of health restrictions implemented in response to the COVID-19 pandemic. See the technical notes for more information, available at www.aihw.gov.au/reports/illicit-use-of-drugs/national-drug-strategy-household-survey/contents/technical-notes.

Comparison with other collections

There are a number of nationally representative data sources available to analyse tobacco, alcohol and illicit drug data. Comparisons of data from previous waves of the NDSHS, the National Health Survey, and the Australian School Student's Alcohol and other Drug Survey show variations in estimates. Differences in scope, collection methodology and design may account for this variation and comparisons between collections should be made with caution.

The most common data sources used for reporting the use of tobacco, alcohol and other drugs by First Nations people are the National Aboriginal and Torres Strait Islander Social Survey (NATSISS), the National Aboriginal and Torres Strait Islander Health Survey (NATSIHS), and the Australian Aboriginal and Torres Strait Islander Health Survey (AATSIHS). All these data sources are collected by the Australian Bureau of Statistics, and while they are not directly comparable due to differences in the methodology, sampling frame, data collection mode, age groups surveyed and the sample size, some analysis has been completed to examine the overall trends in smoking rates provided by each survey (ABS 2017).

The 2018–19 NATSIHS provides the latest data on rates of smoking, alcohol risk and other drug use among First Nations people. The results of the NATSIHS are different to the results obtained for First Nations people from the NDSHS. For example, in the 2018–19 NATSIHS, 37% of First Nations people aged 15 and over smoked daily, a decrease from 41% in 2012–13. NDSHS results were generally lower, but followed a similar trend, with the proportion of First Nations people aged 14 and over who smoked daily declining from 32% in 2013 to 27% in 2019.

These differences are likely due to limited data collected from remote communities in the NDSHS, while in the NATSIHS, they are deliberately oversampled. Daily smoking rates were substantially higher in remote areas in the NATSIHS than in non-remote areas.

Additionally, the NATSIHS results are weighted by age, gender and geography to give results that are representative of First Nations people at the national, state/territory and non-remote and remote areas. NDSHS results, in contrast, are weighted to give reliable estimates at the national and state/territory level for all people living in Australian households. These two weighting approaches are likely to give different results for First Nations people.

The Australian Secondary School Students Alcohol and Drug (ASSAD) survey was conducted in 2022 and 2023 (Department of Health and Aged Care 2024). This survey includes responses from 10,314 secondary school students aged 12–17 with representation across all Australian states and territories. In contrast, the NDSHS received responses from fewer than 1,000 people aged 14–17 in 2022 and 2023 but includes all people in this age range residing in private households in Australia. The NDSHS and ASSAD also report on quite different variables, however both show similar trends. For example:

- In the ASSAD survey, the prevalence of students aged 12–17 smoking in the past month dropped from 7.5% in 2017 to 3.4% in 2022–2023 (ASSAD). In the NDSHS, the proportion of people aged 14–17 who smoked daily or occasionally dropped from 3.1% in 2016 to 1.6% in 2022–2023 (estimates based on a small sample size and may not be reliable).
- Similarly, the prevalence of students aged 12–17 ever vaping in the ASSAD survey increased from 13.5% in 2017 to 29.9% in 2022–2023. In the NDSHS, the proportion of people aged 14–17 who reported vaping in their lifetime increased from 9.2% in 2016 to 28% in 2022–2023.

These examples demonstrate that while estimates are not directly comparable between the ASSAD survey and the NDSHS due to differences in the sampling

frames, the trends for young people in Australia did generally follow the same patterns over time across the 2 surveys.

References

ABS (Australian Bureau of Statistics) (2017). Aboriginal and Torres Strait Islander Peoples: smoking trends, Australia, 1994 to 2014–15. ABS cat. no. 4737.0. Canberra: ABS. Viewed 18 June 2020.

ABS (2019) [Household and Family Projections, Australia](#), ABS website, accessed 8 January 2024.

ABS (2020) [Standard for Sex, Gender, Variations of Sex Characteristics and Sexual Orientation Variables](#), ABS website, accessed 8 November 2022.

Chalmers J, Lancaster K & Hughes C (2014) *The stigmatisation of 'ice' and under-reporting of meth/amphetamine use in general population surveys: a case study from Australia*, International Journal of Drug Policy Vol 36:15–24.

Department of Health and Aged Care (2024) [Australian secondary school students alcohol and drug survey](#), Department of Health and Aged Care website, accessed 7 February 2024.

NHMRC (National Health and Medical Research Council) (2020) [Australian guidelines to reduce health risks from drinking alcohol](#), Canberra: NHMRC, accessed 8 January 2024.

Data products

Implementation start date: 20/07/2022

Source and reference attributes

Submitting organisation: Australian Institute of Health and Welfare

Steward: [Australian Institute of Health and Welfare](#)

Relational attributes

Related metadata references: Supersedes [National Drug Strategy Household Survey 2019; Data Quality Statement](#)

[AIHW Data Quality Statements](#), Superseded 29/02/2024