



Australian Government

**Australian Institute of
Health and Welfare**

Tobacco Indicators Baseline Data

Reporting under the National Tobacco Strategy 2012–2018

Tobacco Indicators Baseline Data

Reporting under the National Tobacco Strategy 2012–2018

Drug statistics series no. 29

The Australian Institute of Health and Welfare is a major national agency which provides reliable, regular and relevant information and statistics on Australia's health and welfare. The Institute's mission is *authoritative information and statistics to promote better health and wellbeing.*

© Australian Institute of Health and Welfare 2015 

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

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

Enquiries relating to copyright should be addressed to the Head of the Digital and Media Communications Unit, Australian Institute of Health and Welfare, GPO Box 570, Canberra ACT 2601.

This publication is part of the Australian Institute of Health and Welfare's drug statistics series. A complete list of the Institute's publications is available from the Institute's website <www.aihw.gov.au>.

ISSN 1442-7230 (PDF)

ISSN 2205-507X (Print)

ISBN 978-1-74249-786-0 (PDF)

ISBN 978-1-74249-787-7 (Print)

Suggested citation

Australian Institute of Health and Welfare 2015. Tobacco Indicators Baseline Data: Reporting under the National Tobacco Strategy 2012–2018. Drug statistics series no. 29. Cat. no. PHE 189. Canberra: AIHW.

Australian Institute of Health and Welfare

Board Chair

Dr Mukesh C Haikerwal AO

Acting Director

Ms Kerry Flanagan PSM

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

Digital and Media Communications Unit

Australian Institute of Health and Welfare

GPO Box 570

Canberra ACT 2601

Tel: (02) 6244 1000

Email: info@aihw.gov.au

Published by the Australian Institute of Health and Welfare

Please note that there is the potential for minor revisions of data in this report.
Please check the online version at <www.aihw.gov.au> for any amendments.

Contents

Acknowledgments	v
Abbreviations	v
Symbols	vi
Summary	vii
Baseline data against the indicators	vii
1 Introduction	1
Smoking in Australia	1
Tobacco control	3
Purpose of the report	3
Reporting framework	4
Conceptual framework	5
Additional indicators	5
Consultation and assessment of data sources	6
Presentation of estimates	8
Reliability of estimates	8
Baseline report structure	9
2 Smoking phases	10
2.1 Exposure	11
Specification and baseline data for Indicator 5.1: Fewer women smoking while pregnant	11
Specification and baseline data for Indicator 5.2: Fewer women smoking while pregnant	14
Specification and baseline data for Indicator 6: Fewer children exposed to second-hand smoke at home	17
Specification and baseline data for Indicator 7: Fewer adults exposed to second-hand smoke at home	19
2.2 Uptake	22
Specification and baseline data for Indicator 9: Young people delaying the onset of tobacco smoking	22
Specification and baseline data for Indicator 10: Fewer people trying cigarettes	24
2.3 Transition	30
Specification and baseline data for Indicator 2: Fewer young people making the transition to established patterns of smoking	30
2.4 Established smoking	35
Specification and baseline data for Indicator 1: Fewer young people smoking regularly	35
Specification and baseline data for Indicator 13: Fewer young people smoking	38
Specification and baseline data for Indicator 3: Fewer adults smoking regularly	41
Specification and baseline data for Indicator 14: Current adult smokers smoking occasionally (weekly or less than weekly)	44
Specification and baseline data for Indicator 8i: Fewer adults smoking regularly among Aboriginal and Torres Strait Islander people	47
Specification and baseline data for Indicator 8ii: Fewer adults smoking regularly among people of low socioeconomic status	51

2.5 Cessation.....	54
Specification and baseline data for Indicator 4: More adult smokers attempting to quit.....	54
Specification and baseline data for Indicator 11: Adult ever-smokers are quitting at a younger age	57
Specification and baseline data for Indicator 12: More adult ever-smokers no longer smoking.....	59
3 Smoking patterns across key factors and groups	62
Smoking patterns across cohorts, life stages, social determinants of health and at-risk groups	62
Cohorts.....	62
Life stages	63
Social determinants of health	63
At-risk groups.....	65
Sub-population groups with a high prevalence of smoking: patterns across the smoking phases	65
Aboriginal and Torres Strait Islander people	65
People living in areas with the lowest socioeconomic status.....	68
People living in remote areas	69
Cessation.....	70
Secondary school students living in outer regional areas	70
Single parent households.....	71
Cessation.....	72
Appendix 1 List of data collections	74
Appendix 2 Indicator specifications	75
Appendix 3 Data quality statements.....	90
2010 National Drug Strategy Household Survey.....	90
2007–08 National Health Survey	96
2008 National Aboriginal and Torres Strait Islander Social Survey	98
National Perinatal Data Collection.....	101
National Prisoner Health Data Collection	104
Australian Secondary Students’ Alcohol and Drug Survey 2011	107
Glossary	112
References.....	114

Acknowledgments

The authors of this report were Simone Brown and Cathy Claydon from the Tobacco, Alcohol and Other Drugs Unit of the Australian Institute of Health and Welfare. Karen Webber and David Whitelaw assisted with data analysis, and Moira Hewitt provided advice and guidance. Amber Jefferson, Lisa McGlynn and Geoff Neideck also provided reviews and guidance.

The AIHW would also like to gratefully acknowledge the Intergovernmental Committee on Drugs National Expert Reference Group on Tobacco and the Cancer Council Victoria for their contributions, comments and advice.

The Department of Health commissioned and funded this project.

Abbreviations

AATSIHS	Australian Aboriginal and Torres Strait Islander Health Survey
ABS	Australian Bureau of Statistics
AIHW	Australian Institute of Health and Welfare
AHS	Australian Health Survey
ASGS	Australian Statistical Geography Standard
ASSAD	Australian Secondary Students' Alcohol and Drug
CCV	Cancer Council Victoria
COAG	Council of Australian Governments
IRSAD	Index of Relative Socio-economic Advantage and Disadvantage
NATSIHS	National Aboriginal and Torres Strait Islander Health Survey
NATSISS	National Aboriginal and Torres Strait Islander Social Survey
NDSHS	National Drug Strategy Household Survey
NHS	National Health Survey
NPDC	National Perinatal Data Collection
NPESU	National Perinatal Epidemiology and Statistics Unit
NPHDC	National Prisoner Health Data Collection
NTS	National Tobacco Strategy
RSE	relative standard error
SEIFA	Socio-Economic Indexes for Areas
SES	socioeconomic status
WHO	World Health Organization

Symbols

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

Summary

This report presents baseline data for the outcome indicators listed under Part Seven of the National Tobacco Strategy (NTS) 2012–2018, and for an additional 6 indicators that were agreed to when the reporting framework was developed (see Chapter 1 of this report for more information) in consultation with the Intergovernmental Committee on Drugs National Expert Reference Group on Tobacco.

As no single tobacco-related data collection is sufficient to inform all the indicators, different data sources and collection years (from 2007–08 to 2011) have been used to report baseline data against these indicators.

Baseline data, against which future data can be compared, will enable progress to be measured and desired outcomes to be assessed. A mid-term review is expected to begin in late 2015 to assess improvements over time and determine whether desired outcomes are being achieved.

Baseline data against the indicators

Indicator 1: Fewer young people smoking regularly	<ul style="list-style-type: none">• In 2011, among secondary school students aged 12–17, 6.7% smoked tobacco at least once in the previous week.
Indicator 2: Fewer young people making the transition to established patterns of smoking	<ul style="list-style-type: none">• In 2011, 3.5% of secondary school students aged 12–17 had smoked more than 100 cigarettes in their lifetime.• In 2010, nearly 3 in 10 (29%) young adults aged 18–24 had smoked more than 100 cigarettes in their lifetime.
Indicator 3: Fewer adults smoking regularly	<ul style="list-style-type: none">• In 2007–08, nearly 1 in 5 (18.9%) adults (aged 18 or older) smoked tobacco daily.
Indicator 4: More smokers attempting to quit	<ul style="list-style-type: none">• In 2010, almost half (45%) of adult smokers had made an attempt to quit smoking in the previous 12 months.
Indicator 5.1: Fewer women smoking while pregnant	<ul style="list-style-type: none">• Of women who gave birth in 2011, 13.2% smoked during their pregnancy.
Indicator 5.2: Fewer women smoking while pregnant	<ul style="list-style-type: none">• Of women who gave birth in 2011, 12.9% smoked during the first 20 weeks of their pregnancy.
Indicator 6: Fewer children exposed to second-hand smoke at home	<ul style="list-style-type: none">• In 2010, nearly 1 in 16 (6.1%) households had dependent children who lived with a daily smoker who smoked inside the home.
Indicator 7: Fewer adults exposed to second-hand smoke at home	<ul style="list-style-type: none">• In 2010, 4.0% of households with a non-smoking adult had a daily smoker who smoked inside the home.
Indicator 8i: Fewer adults smoking regularly among Aboriginal and Torres Strait Islander people	<ul style="list-style-type: none">• In 2008, almost half (48%) of Aboriginal and Torres Strait Islander adults smoked tobacco daily.
Indicator 8ii: Fewer adults smoking regularly among people of low socioeconomic status	<ul style="list-style-type: none">• In 2007–08, more than a quarter (28%) of people aged 18 or older living in the lowest socioeconomic status areas smoked tobacco daily.
Indicator 9: Young people delaying the onset of tobacco smoking	<ul style="list-style-type: none">• In 2010, young people aged 14–24 smoked their first full cigarette when they were aged, on average, 15.4.
Indicator 10: Fewer people trying cigarettes	<ul style="list-style-type: none">• In 2011, nearly a quarter (23%) of secondary school students aged 12–17 tried at least a few puffs of a cigarette in their lifetime.• In 2010, almost two-thirds (63%) of adults smoked a full cigarette in their lifetime.
Indicator 11: Adult ever-smokers are quitting at a younger age	<ul style="list-style-type: none">• In 2010, the average age at which ex-smokers aged 18 or older quit smoking tobacco was 35.3.
Indicator 12: More adult ever-smokers no longer smoking	<ul style="list-style-type: none">• In 2010, almost half (47%) of adult ever-smokers (smoked more than 100 cigarettes in their lifetime) did not smoke tobacco in the previous 12 months.
Indicator 13: Fewer young people smoking	<ul style="list-style-type: none">• In 2011, almost 1 in 10 (8.9%) secondary school students aged 12–17 smoked tobacco at least once in the previous month.
Indicator 14: Current adult smokers smoking occasionally (weekly or less than weekly)	<ul style="list-style-type: none">• In 2007–08, about 1 in 10 (9.0%) current adult smokers smoked weekly or less than weekly.



1 Introduction

Smoking in Australia

Tobacco smoking is a leading risk factor for chronic disease and death, including many types of respiratory disease and heart disease (AIHW & AACR 2012). It is the major cause of cancer, accounting for about 20–30% of cancer cases (AIHW & AACR 2012).

In Australia in 2004–05, about 15,000 deaths per year were attributable to smoking, with tobacco smoking costing the Australian society an estimated \$31.5 billion (Collins & Lapsley 2008). In 2010, tobacco smoking was estimated to be the third highest risk factor for chronic disease and death in Australasia, and was responsible for 8.3% of the total burden of disease (IHME 2014).

Smoking is one of the major causes of inequality in mortality and morbidity. A recent Australian study estimated that smokers aged 45–75, on average, died about 10 years earlier than non smokers. Additionally, up to two-thirds of deaths in current smokers can be attributed to their smoking. The study also found that the mortality rates of past smokers did not differ significantly from those who never smoked if they quit before the age of 45 (Banks et al. 2015).

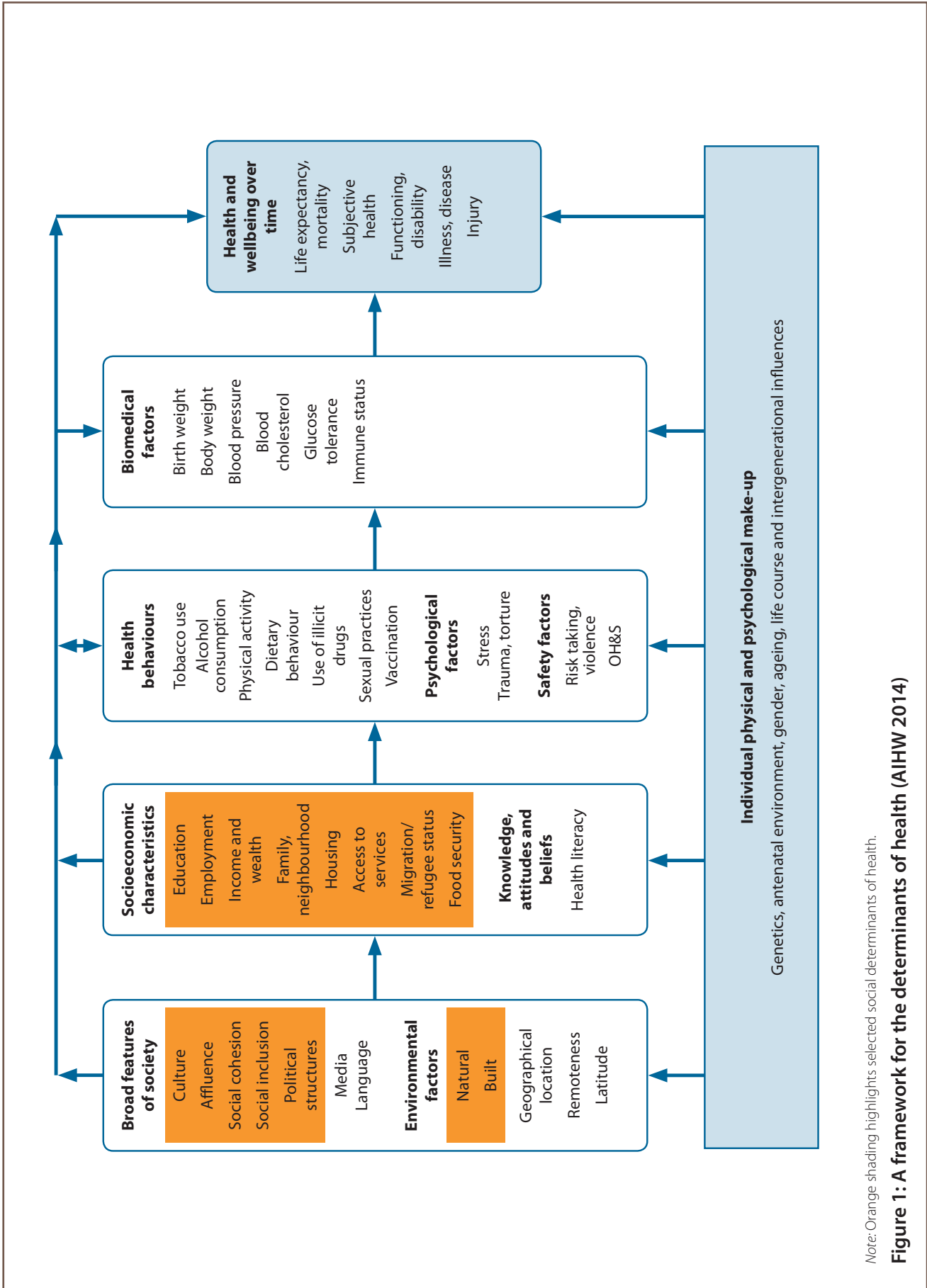
The health and wellbeing of an individual is influenced by a multitude of biological, social, economic, environmental and lifestyle factors, which interact in complex ways to create a broad causal pathway affecting health (AIHW 2014). Together, these factors are known as ‘health determinants’ (see Figure 1).

Determinants fit into 4 main groups that have a path of influence from left to right (that is, from background factors to more immediate influences). For example, an individual’s social context might influence their socioeconomic characteristics, such as education and income, which might influence their health behaviours, such as smoking. By demonstrating the interplay of influences on health, this framework assists in understanding the pathways leading to, and the complexity of, tobacco smoking behaviours.

Some health determinants (for example, socioeconomic status (SES) or remoteness area) might be associated with higher proportions of smoking uptake among certain population groups. Tobacco smoking is strongly associated with low SES, and it is well established that people with lower incomes and/or lower levels of completed education are more likely to smoke (AIHW 2011).

Smoking prevalence differs across population groups in Australia, with smoking rates high among the most disadvantaged (people facing combinations of multiple issues such as low income, limited education, unemployment or sole parenthood) (CCV 2013). Compared with non-Indigenous Australians, Aboriginal and Torres Strait Islander people are more likely to die of smoking-related illnesses, such as diseases of the respiratory system and cancers (MCDS 2011). Among Aboriginal and Torres Strait Islander people, smoking is responsible for 1 in 5 of all deaths, and is the most preventable cause of poor health and early death (ABS 2011).

Prison entrants experience some of the highest smoking rates in the Australian population, and are more likely to die of a tobacco-related cause than the general population (CCV 2013).



Note: Orange shading highlights selected social determinants of health.

Figure 1: A framework for the determinants of health (AIHW 2014)

Tobacco smoking is the major cause of lung cancer. Between 2004 and 2008, people in *Remote* areas had 1.3 times the rate of lung cancer of those living in *Major cities* (AIHW & AACR 2012).

Second-hand smoking—also known as passive smoking or environmental tobacco smoke—describes being exposed to tobacco smoke, or the chemicals in tobacco smoke, without actually smoking (USHHS 2006). The effects of second-hand smoking are also of concern. Exposure to second-hand tobacco smoke increases the risk of health problems in children, including chest infections, ear infections, asthma and sudden infant death syndrome (Dunn et al. 2008). For adult non-smokers, exposure to second-hand tobacco smoke can increase the risk of respiratory problems, lung and other cancers and ischaemic heart disease (Öberg et al. 2010).

Smoking during pregnancy has implications for fetal development and infant health. Women who smoke during pregnancy are at increased risk of a wide variety of problems, including ectopic pregnancy, miscarriage and premature labour (SGV 2014), and are twice as likely to give birth to babies of low birth weight than non-smoking mothers (Li et al. 2013).

Tobacco control

Australia has been successful in reducing smoking prevalence over many years (IGCD 2013). Strategies to minimise the harm caused by tobacco smoking have been in place for several decades. The NTS 2012–2018 sets out the current national framework to reduce tobacco-related harm in Australia, aiming ‘to improve the health of all Australians by reducing the prevalence of smoking and its associated health, social and economic costs, and the inequalities it causes’ (IGCD 2013). It is a policy framework for the Australian and state and territory governments to work together and with non-government agencies to improve health and reduce the social and economic costs of tobacco use.

Comprehensive public health approaches, including advertising bans, bans on smoking indoors and increasingly in outdoor public spaces, plain packaging, quitting services and support, price increases, restrictions on sales to minors, public education and media campaigns have contributed to this reduction (IGCD 2013; MCDS 2011). However, smoking rates in the community are still too high (IGCD 2013).

In 2008, through the National Healthcare Agreement (which was updated in 2012), the Australian and state and territory governments committed to the following performance benchmark: ‘By 2018, reduce the national smoking rate to 10% of the population and halve the Aboriginal and Torres Strait Islander smoking rate, over the baseline’ (COAG 2008; COAG 2012). This benchmark is the basis for the targets adopted in the NTS 2012–2018. The strategy complements existing public health policy frameworks and tobacco control policies, and includes a set of outcome indicators for measuring progress in meeting the objectives in the strategy.

Purpose of the report

This report provides baseline data for each of the outcome indicators listed under Part Seven of the NTS 2012–2018 (Box 1), and for an additional 6 indicators (Box 2) agreed on during the development of the reporting framework. This report supports the Intergovernmental Committee on Drugs (established by the Council of Australian Governments) National Expert Reference Group on Tobacco in monitoring progress towards the achievement of the goal, objectives and targets of the NTS 2012–2018. It will set the standard against which future outcomes will be assessed, and will enable achievements to be measured in future progress reports.

Box 1: National Tobacco Strategy outcome indicators

The following indicators are listed in Part Seven of the NTS 2012–2018:

- Fewer young people smoking regularly
- Fewer young people making the transition to established patterns of smoking
- Fewer adults smoking regularly
- More smokers attempting to quit
- Fewer women smoking while pregnant
- Fewer children exposed to second-hand smoke at home
- Fewer adults exposed to second-hand smoke at home
- Fewer adults smoking regularly among:
 - Aboriginal and Torres Strait Islander people
 - people of low socioeconomic status.

Box 2: Additional outcome indicators

The following indicators were identified during the development of the reporting framework. They complement the existing indicators (Box 1) and provide additional supplementary information on the smoking phases:

- Young people delaying the onset of tobacco smoking
- Fewer people trying cigarettes
- Adult ever-smokers are quitting at a younger age
- More adult ever-smokers no longer smoking
- Fewer young people smoking
- Current adult smokers smoking occasionally (weekly or less than weekly).

Reporting framework

A reporting framework was developed to outline the analysis plan and approach that would inform reporting against each of the outcome indicators. The reporting framework includes:

- definitions for each indicator (indicator specifications), including recommended frequency of reporting
- national data sources currently available to inform each of the indicators
- the scope and extent of analysis required
- issues and challenges relating to the collection and reporting of data.

This framework is underpinned by the conceptual framework, described below. The reporting framework was developed in consultation with the National Expert Reference Group on Tobacco and Cancer Council Victoria, and was agreed to by the Department of Health.

Conceptual framework

Particular concepts, or themes, emerge from the outcome indicators. The most prominent is the idea of tobacco smoking phases: exposure; uptake; transition; established smoker and cessation. While the outcome indicators provide data on smoking prevalence and help measure progress towards reducing the overall smoking rate, other phases are also useful to measure.

The concept of smoking phases and the associated concepts of cohorts, life stages, social determinants of health and at-risk groups led to a conceptual framework (see Table 1) that underpins the reporting framework. The conceptual framework guided the analysis and presentation of data in this report. Looking at the data across certain population groups and health determinants within the smoking phases enables a more nuanced understanding of which demographic and socioeconomic characteristics are associated with smoking prevalence and behaviours across the smoking phases—from uptake to cessation. This will provide better insight into smoking patterns and the factors that influence a person's smoking behaviour.

A large number of factors interact to influence smoking behaviour across the phases of smoking. *A framework for the determinants of health* (Figure 1) helped to inform the conceptual framework and highlight variables that should be considered in analysis. The concepts presented in the conceptual framework are not intended to be an exhaustive list of all the possible factors that might affect smoking behaviour across each smoking phase. They intend to capture the key factors that provide an understanding of progress against the objectives of the NTS. Further, not all disaggregations are appropriate for every indicator. Disaggregations are only presented in the results where they were considered appropriate to the indicator and were supported by the data set used in analysis (for example, if data were statistically valid). The data quality statements indicate which disaggregations were appropriate and statistically reliable for inclusion for each indicator (see Appendix 3).

Factors influencing smoking behaviours interact in complex ways. The categories included in the conceptual framework are not mutually exclusive, and often overlap with others. For example, people with low socioeconomic status (SES) often do not have educational qualifications, have low income, and are unemployed or in unskilled or semi-skilled occupations.

The data presented in this report shows associations between these factors and smoking behaviour for specific groups, but due to the complex interaction of multiple factors, it is not possible to determine the individual contribution of specific factors to the smoking behaviour.

The conceptual framework also highlighted the need for additional indicators to be measured and included as part of the indicator set.

Additional indicators

The additional indicators complement the existing indicators, providing supplementary information on the smoking phases described in the conceptual framework—smoking uptake, cessation and established smokers who smoke less often. The rationale for the inclusion of these indicators is discussed in brief below.

Given that first use of tobacco generally occurs during teenage years (AIHW 2011) and that earlier use of tobacco increases the risk of nicotine dependency in adulthood (NCASU 2010), it is important to measure the proportion of young people trying cigarettes and the average age at which they try, with the desired outcome over time being an increase in average age and decrease in proportion. This led to the development of the following two indicators:

- Indicator 9: Young people delaying the onset of tobacco smoking
- Indicator 10: Fewer people trying cigarettes.

Overall quit rates in the population are a function of the percentage of smokers who make an attempt to quit, and the success rate among those who tried to quit (Hyland et al. 2006). However, there is some uncertainty in the relationship of quit attempts to quitting success, so it is also important to measure additional facets of quitting, complementing the data on quitting attempts. Monitoring the proportion of smokers who successfully quit, and the average age at which success occurs will help measure improvements in the proportion of smokers who have progressed from trying to quit to succeeding. This led to the development of the following two indicators:

- Indicator 11: Adult ever-smokers are quitting at a younger age
- Indicator 12: More adult ever-smokers no longer smoking.

In Australia, mortality rates do not differ significantly for smokers who quit before the age of 45. But smokers who continue to smoke past the age of 45 have an increased risk of mortality (Banks et al. 2015). So, Indicator 11 includes a second measure in addition to the average quit age—the proportion of ever-smokers (smoked more than 100 cigarettes in their lifetime) aged 45–74 who had quit smoking before the age of 45.

Exposure to tobacco smoke, even due to occasional smoking, causes damage to the human body (USHHS 2010). It might be beneficial to not only monitor regular use of tobacco but also less frequent use. This led to the development of the following two indicators:

- Indicator 13: Fewer young people smoking
- Indicator 14: Current adult smokers smoking occasionally (weekly or less than weekly).

Consultation and assessment of data sources

Consultation was held to seek advice on the best data sources to inform the indicators and disaggregations specified in the conceptual framework. A list of potential data collections that included data on tobacco was compiled and assessed to identify the most appropriate data source to inform each indicator. Data collections were selected based on several selection criteria, including: consistency with indicator specifications; collection size and reliability; availability and timing of data; demographic and area level variables available; and data representativeness (for national or specific subgroups of the Australian population—such as Aboriginal and Torres Strait Islander people). Collections used to inform the Council of Australian Governments (COAG) National Healthcare Agreement performance indicators were given precedence.

Following the consultations, indicator specifications were developed for the 14 indicators and included: the definition for each indicator; recommended data source/s to measure the indicator; proposed timing and data points; possible disaggregations; and complementary or related indicators.

Table 1: Conceptual framework

Smoking phases	Exposure		Uptake		Transition > 100 cigarettes	Established smoker		Cessation		
	Pregnancy	Second-hand smoke	Age of initiation	Smoked a full cigarette		Occasional ^(a)	Regular ^(b)	Quit— Attempts	Quit—age at cessation	Quit—no longer smokes
Cohorts	Children	6								
	Young people	5		9	2	13	1			
	Adults		7			14	3	4	11	12
Life stage	Household/marital status									
Relationships	Peers, parents or siblings smoke									
Health/social determinant	Education									
	Socioeconomic status						8ii			
	Employment									
	Income									
	Main language									
	Country of birth									
	Remoteness area									
	Males									
	Aboriginal and Torres Strait Islanders						8i			
	Prisoners			Available for mid point					Available for mid point	
At-risk groups	Living with mental illness									
	Substance use disorder									
	Lesbian gay bisexual transgender and intersex									
	Homeless									

Indicator specified in NTS ■ Additional indicator

Disaggregation included ■ Analysis was not supported or was low priority ■

(a) Occasional smoking is defined as at least monthly for young people and weekly or less than weekly for adults.

(b) Regular smoking is defined as at least weekly for young people and daily for adults.

Note: the numbers in the table refer to the indicator number.

Presentation of estimates

At a national level, no single tobacco-related data collection contains sufficient data to inform all of the outcome indicators. As a result, multiple national data collections have been used in this report. The timing of the data collections differs, and rates supplied in this report range from 2007–08 to 2011.

The baseline year for each collection was influenced by the timing of collection periods and the availability of new data (there is usually a substantial lag between the collection of data and their availability for analysis and reporting, due to administrative and quality-assurance processes). The aim was for the baseline data to be as close as possible to the start of the NTS 2012–2018. Selected baseline years were influenced by the following criteria:

- Data were available for the baseline report at 3 points in time over 2007 and 2018 (1 before the start of the NTS 2012–2018 (pre-2012) and at least 2 discrete years of data collected between 2012 and 2018).
- Data sources were given priority if they were consistent with the data source used to inform the COAG National Healthcare Agreement performance indicators.

As a result, trends in disaggregations across indicators (for example, how a demographic variable affects smoking prevalence across all smoking phases) should be treated with caution. Data collections used to inform the specific disaggregations for each indicator in future progress reports should remain consistent with the data sources recommended, and used in this baseline report to ensure comparability and reliability over time.

Data are reported at the national level for all indicators. But during the development of the reporting framework, it was agreed that indicators that were similar to indicators reported in other National Agreements (Indicators 3, 5 and 8i) would include state and territory disaggregation as well as national estimates. For these indicators, state and territory top line data are provided, and national and jurisdictional estimates are presented as raw proportions and age-standardised percentages. Additional disaggregations for these indicators are only reported at the national level, and estimates are only presented as raw proportions (not age-standardised). For all other indicators, estimates are only presented as raw proportions (not age-standardised) and at the national level.

While most indicator data are presented as a proportion of the total population or the total smoking population, some are presented as mean age. Proportions are shown as percentages rounded to 1 decimal place when less than 20% and rounded to a whole number when 20% or higher.

Reliability of estimates

Data sources include survey data, census data and administrative data. All survey data are based on weighted estimates using the relevant population weights for that data source. Survey data are subject to sampling error. These data have been tested for data quality issues. Estimates have only been presented if the relative standard error (RSE) is less than 50%. Estimates that have an RSE greater than 25% but less than 50% are marked in the supplementary tables with an asterisk (*). These data need to be interpreted with caution as the reliability of estimates decreases as the RSE increases.

Census data and administrative data are subject to different types of quality issues than survey data. Unlike survey data, which are collected for statistical purposes, administrative data are collected as part of a program agency's routine operations. Common data quality concerns with administrative data include incomplete data, incorrect data format and mistyped data (National Statistician's Office 2014). Census data is subject to similar data quality issues as survey data including respondent error, processing error, and partial or non-response. See Appendix 3 for further information.

Baseline report structure

This report is based on data from a range of sources (see Appendix 1). It provides baseline data on smoking rates framed around core indicators (from the NTS 2012–2018) and additional indicators that were agreed to by the Department of Health and the National Expert Reference Group on Tobacco.

This chapter provides background and context to this report.

Chapter 2 provides further disaggregations for each indicator where sample size is sufficient to support analysis. These disaggregations include selected demographic and area-level characteristics of the smoker.

Chapter 3 presents data on smoking patterns across key factors outlined in the conceptual framework and subgroups of the population (Aboriginal and Torres Strait Islander people, and people of low socioeconomic status). Other groups identified through the analysis presented in Chapter 2 that showed high prevalence of smoking across multiple smoking phases are also discussed in this chapter.

Chapters 2 and 3 have online (Excel) tables that support those chapters, see www.aihw.gov.au/publication-detail/?id=60129552715.

2 Smoking phases

This chapter presents indicator specifications and accompanying baseline data for the smoking phases outlined in the conceptual framework (see Table 1) with the indicators organised under each smoking phase (Table 2). Each indicator in Chapter 2 is structured as follows:

- a headline result (represented by the orange shading in Table 1)
- indicator definition and specifications
- disaggregations by different cohorts, life stages, social health determinant and at-risk groups as specified in the conceptual framework (represented by the dark blue shading in Table 1).

State and territory data are only presented for indicators 3, 5 and 8i.

Table 2: Indicators relevant to each smoking phase

Smoking phase	Brief description of indicator	Indicator number
Exposure	Pregnancy	Indicator 5.1 and 5.2
	Second hand smoke	Indicator 6
		Indicator 7
Uptake	Age of initiation	Indicator 9
	Smoked a full cigarette	Indicator 10
Transition	Smoked at least 100 cigarettes	Indicator 2
Established smoker	Occasional smoker	Indicator 13
		Indicator 14
	Regular smoker	Indicator 1 Indicator 3, 8i, 8ii
Cessation	Quit—attempts	Indicator 4
	Quit—age at cessation	Indicator 11
	Quit—no longer smokes	Indicator 12

2.1 Exposure

Specification and baseline data for Indicator 5.1: Fewer women smoking while pregnant

Of women who gave birth in 2011, 13.2% smoked during their pregnancy.

KEY FINDING

Women were most likely to smoke at any time during pregnancy if they were younger, from low socioeconomic status areas, Aboriginal or Torres Strait Islander, or single.

Description:	The number of women who gave birth and smoked at any time during the pregnancy, expressed as a percentage of all women who gave birth.
Numerator:	The number of women who gave birth and reported smoking during pregnancy.
Denominator:	The number of women who gave birth and whose smoking status during pregnancy was known.
Data source:	2011 National Perinatal Data Collection (NPDC).

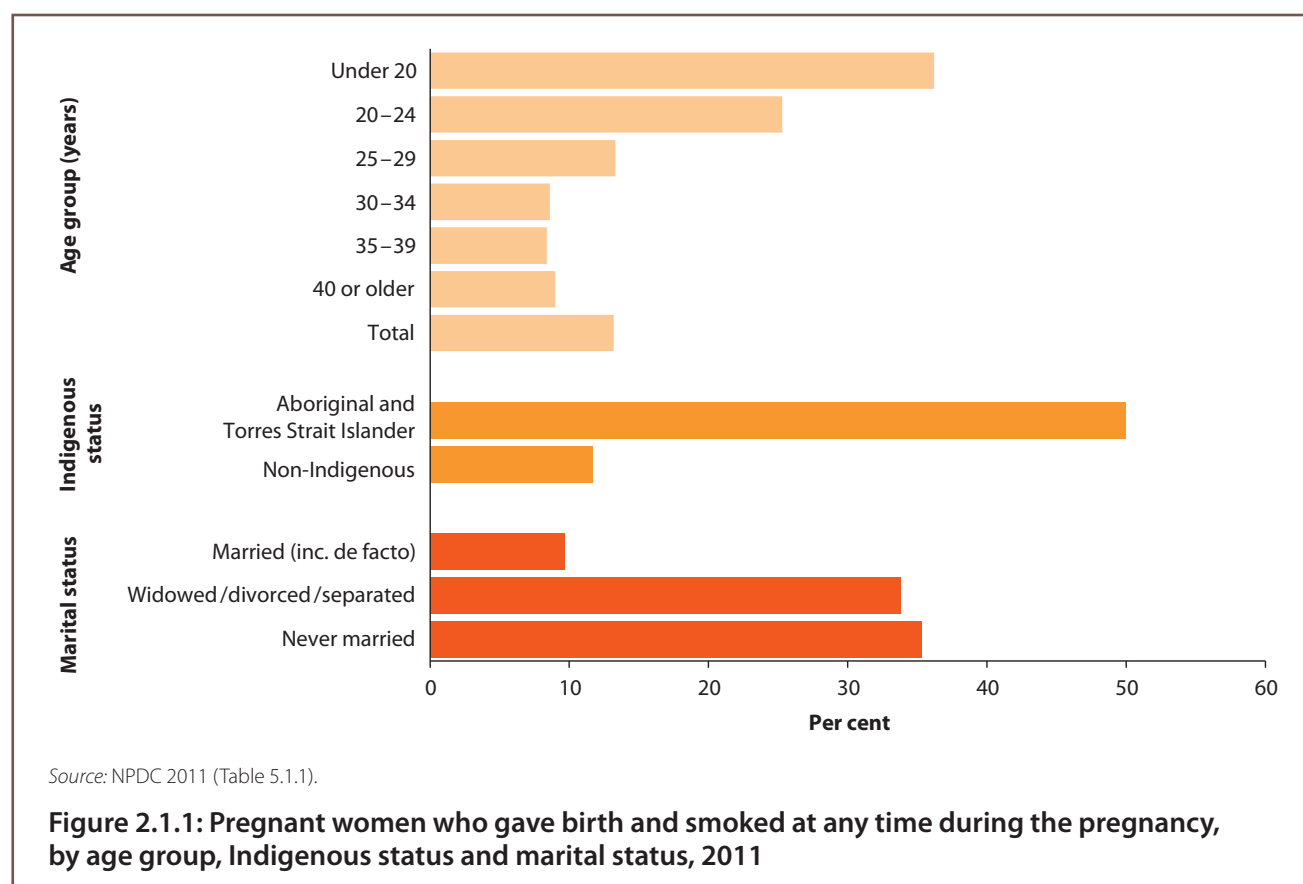
Box 3: Measuring smoking in pregnancy

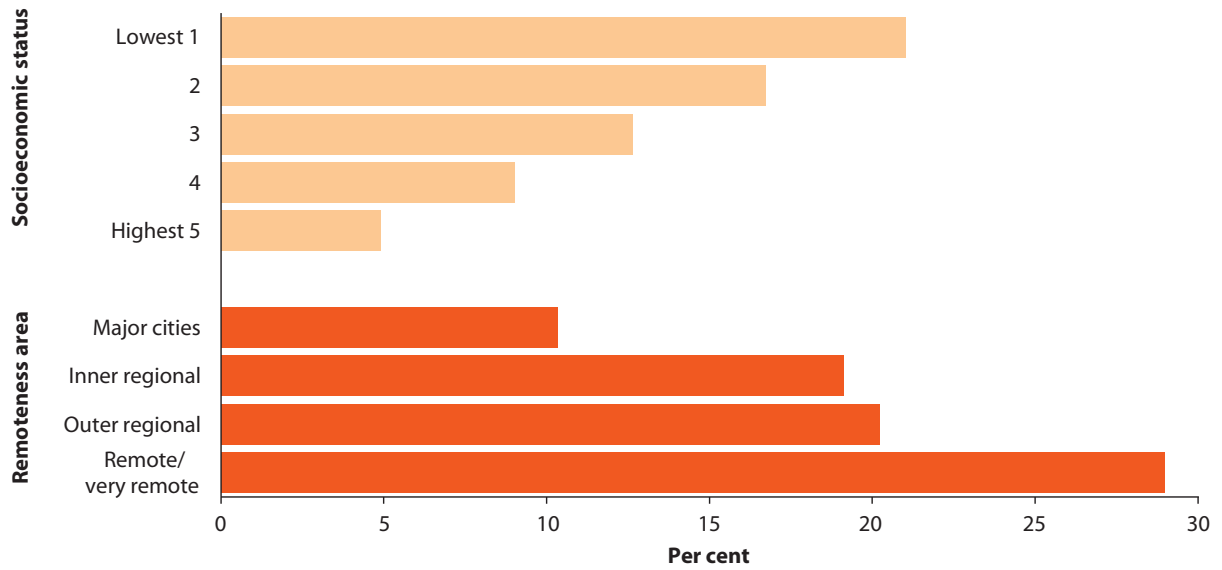
Data on smoking at any time during pregnancy have been collected in some states and territories since 2001. Before the availability of data on smoking in the first 20 weeks of pregnancy, data on smoking at any time in pregnancy was the key measure for monitoring smoking during pregnancy. Standard data items on smoking in the first 20 weeks of pregnancy and after 20 weeks of pregnancy were added to the Perinatal National Minimum Data Set in 2010, and national data are available for reporting from 2011 onwards. Smoking in the first 20 weeks of pregnancy is the most commonly reported measure; however, as limited trend data are currently available, smoking at any time in pregnancy is also often reported.

Baseline data

- In 2011, about 1 in 8 (13.2%) women who gave birth smoked at any time during their pregnancy (Table 5.1.1). After adjusting for differences in the age structure of the population, 16.2% of women smoked at any time during their pregnancy (Table 5.1.4).
- More than 1 in 3 (36%) teenagers who gave birth smoked at any stage during their pregnancy, and the proportion of women smoking at any time while pregnant decreased with increasing maternal age (Figure 2.1.1).
- Half (50%) of Aboriginal and Torres Strait Islander women who gave birth smoked at any time during their pregnancy—4.3 times the rate of non-Indigenous mothers (11.7%) (Figure 2.1.1). After adjusting for the differences in the age structure of these populations, Aboriginal and Torres Strait Islander women were 3.3 times as likely to smoke during pregnancy as non-Indigenous women (48% compared with 14.8%) (Table 5.1.5).
- Of women who gave birth in 2011, those born in Australia were more than 3 times as likely to smoke at any time during their pregnancy as those born overseas (16.6% compared with 5.2%) (Table 5.1.1).

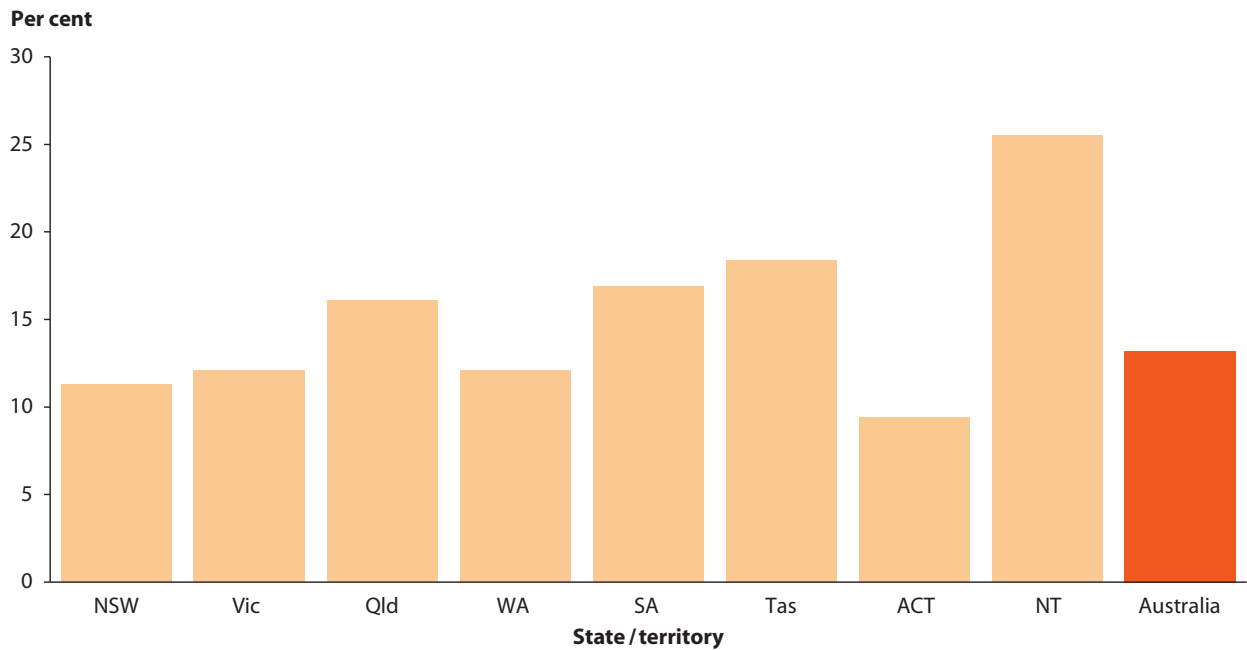
- Single mothers were about 3.5 times as likely to have smoked at any time during their pregnancy as those who were in a relationship (Figure 2.1.1).
- Smoking at any time during pregnancy was most common among mothers living in the lowest SES area (21%), and decreased with increasing SES (to 4.9% for those living in areas with the highest SES) (Figure 2.1.2).
- Almost 3 in 10 (29%) mothers living in *Remote and very remote* areas smoked at any time during their pregnancy—nearly 3 times the rate of mothers living in *Major cities* (10.3%) (Figure 2.1.2).
- The proportion of women who gave birth in 2011 who smoked at any stage of their pregnancy varied by state and territory, ranging from 9.4% in the Australian Capital Territory to 25% in the Northern Territory (Figure 2.1.3). After adjusting for the differences in the age structure across states and territories, New South Wales had the lowest rate of mothers smoking at any time during their pregnancy in 2011 (14.4%), and the Northern Territory remained the highest (24%) (Table 5.1.4).





Source: NPDC 2011 (Table 5.1.2).

Figure 2.1.2: Pregnant women who gave birth and smoked at any time during the pregnancy, by socioeconomic status and remoteness area, 2011



Source: NPDC 2011 (Table 5.1.3).

Figure 2.1.3: Pregnant women who gave birth and smoked at any time during pregnancy, by state and territory, 2011

Specification and baseline data for Indicator 5.2: Fewer women smoking while pregnant

Of women who gave birth in 2011, 12.9% of women smoked during the first 20 weeks of their pregnancy.

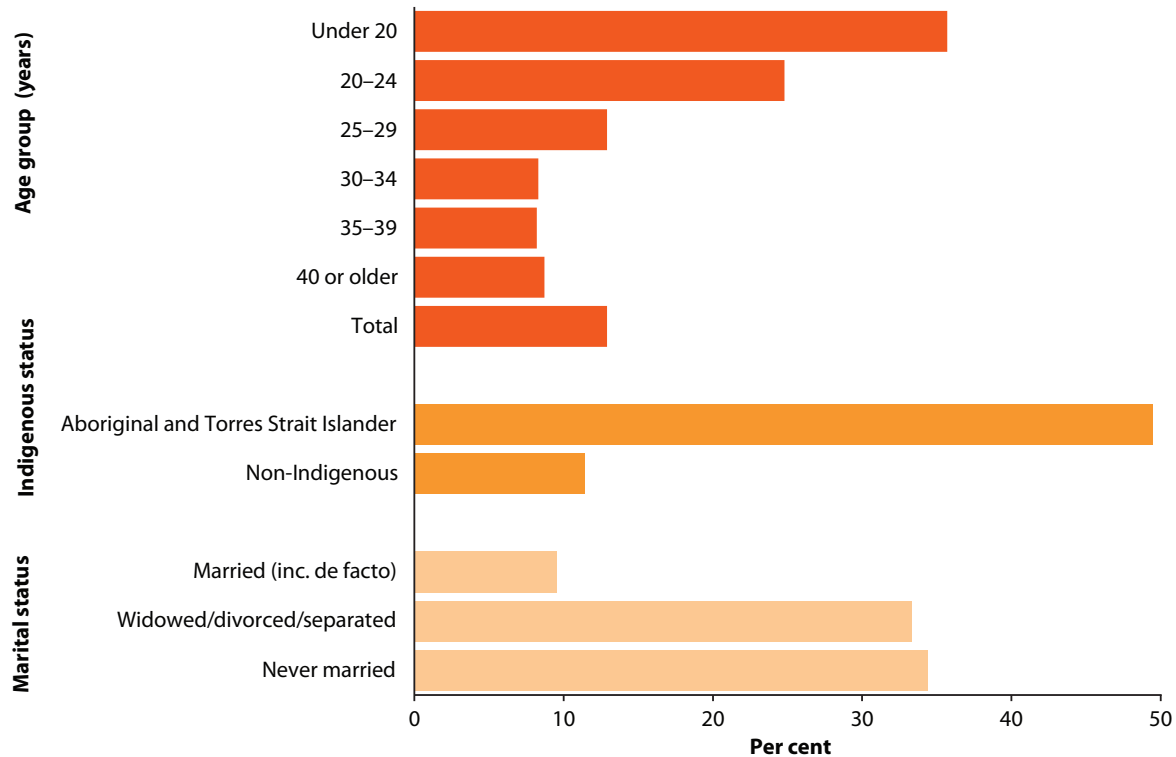
KEY FINDING

Women were most likely to smoke during the first 20 weeks of pregnancy if they were younger, from low socioeconomic status areas, Aboriginal or Torres Strait Islander, or single.

Description:	The number of women who gave birth and smoked during the first 20 weeks of their pregnancy, expressed as a percentage of all women who gave birth.
Numerator:	The number of women who gave birth and reported smoking during the first 20 weeks of their pregnancy.
Denominator:	The number of women who gave birth and whose smoking status during pregnancy was known.
Data source:	2011 National Perinatal Data Collection (NPDC).

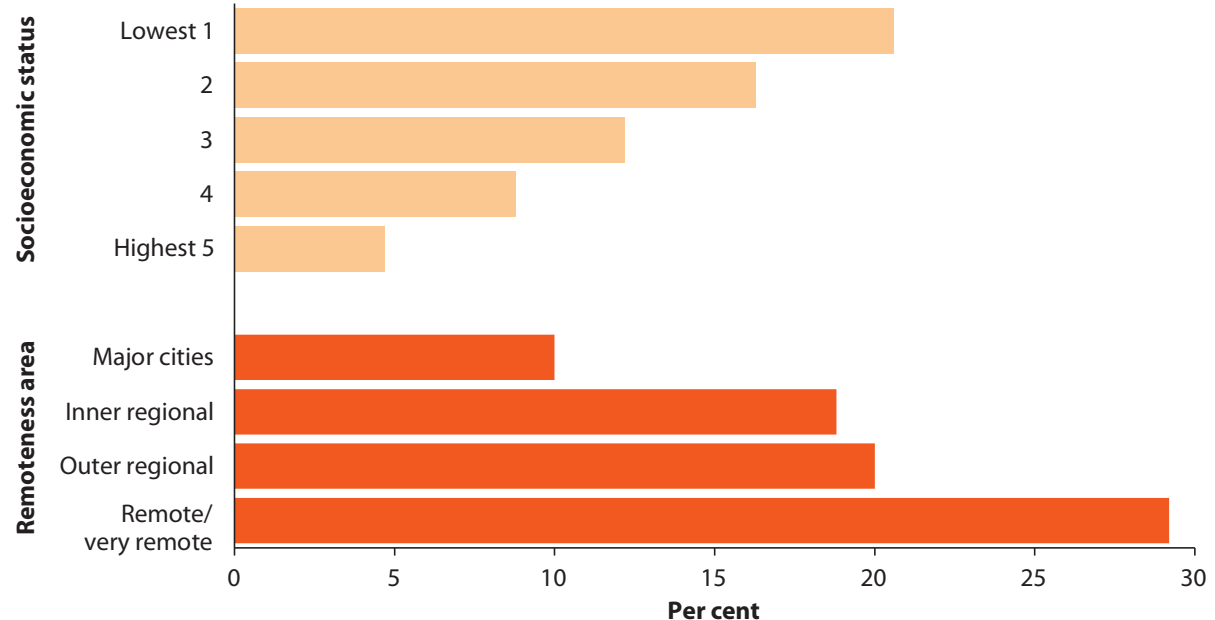
Baseline data

- In 2011, about 1 in 8 (12.9%) women who gave birth smoked during the first 20 weeks of their pregnancy (Table 5.2.1). After adjusting for differences in the age structure of the population, 15.9% of mothers smoked during the first 20 weeks of their pregnancy (Table 5.2.4).
- Smoking during the first 20 weeks of pregnancy was most common among teenage mothers (36%), and decreased with increasing maternal age to about 8–9% among those aged 30 or older (Figure 2.1.4).
- Almost half of Aboriginal and Torres Strait Islander mothers (49%) smoked during the first 20 weeks of their pregnancy—more than 4 times the rate of non-Indigenous mothers (11.4%) (Figure 2.1.4). These differences were still apparent even after adjusting for differences in age structure (Table 5.2.5).
- Australian-born mothers were 3.2 times as likely to smoke in the first 20 weeks of pregnancy as mothers born overseas (16.2% compared with 5.0%) (Table 5.2.1).
- Single mothers were more than 3.5 times as likely to have smoked during the first 20 weeks of their pregnancy as mothers who were in a relationship (Figure 2.1.4).
- Mothers in the lowest SES areas were more than 4 times as likely to have smoked during the first 20 weeks of their pregnancy as those in the highest SES areas (21% compared with 4.7%) (Figure 2.1.5).
- About 3 in 10 (29%) mothers in *Remote and very remote* areas who gave birth in 2011 smoked during the first 20 weeks of their pregnancy—almost 3 times the rate of mothers in *Major cities* (10%) (Figure 2.1.5).
- In 2011, the proportion of women who smoked tobacco during the first 20 weeks of their pregnancy was highest in the Northern Territory (25%) and lowest in the Australian Capital Territory (8.9%) (Figure 2.1.6). After adjusting for the differences in the age structure across the states and territories, the proportion ranged from 13.5% in New South Wales to 24% in the Northern Territory (Table 5.2.4).



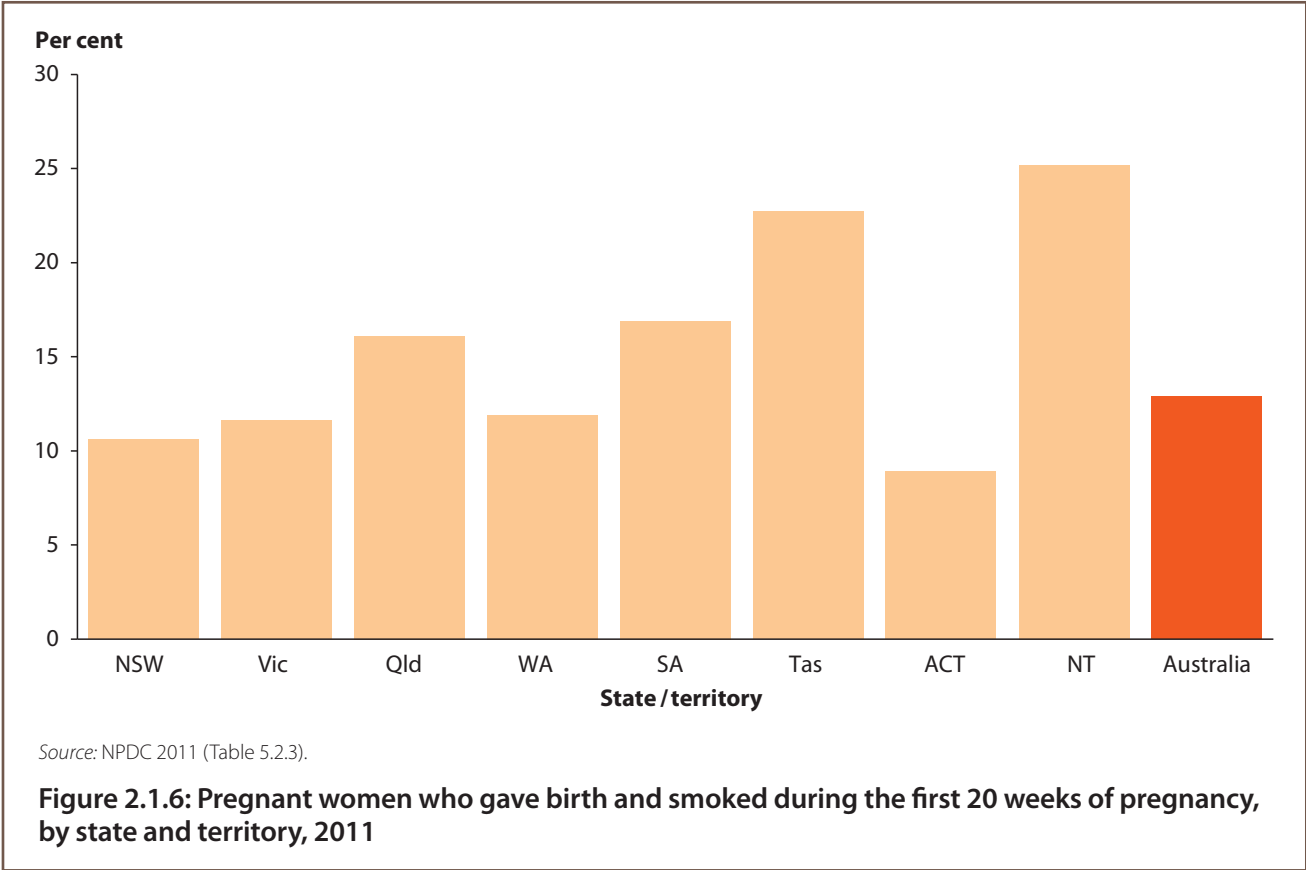
Source: NPDC 2011 (Table 5.2.1).

Figure 2.1.4: Pregnant women who gave birth and smoked during the first 20 weeks of pregnancy, by age group, Indigenous status and marital status, 2011



Source: NPDC 2011 (Table 5.2.2).

Figure 2.1.5: Pregnant women who gave birth and smoked during the first 20 weeks of pregnancy, by socioeconomic status and remoteness area, 2011



Specification and baseline data for Indicator 6: Fewer children exposed to second-hand smoke at home

In 2010, 6.1% of households with dependent children had a smoker who smoked daily inside the home.

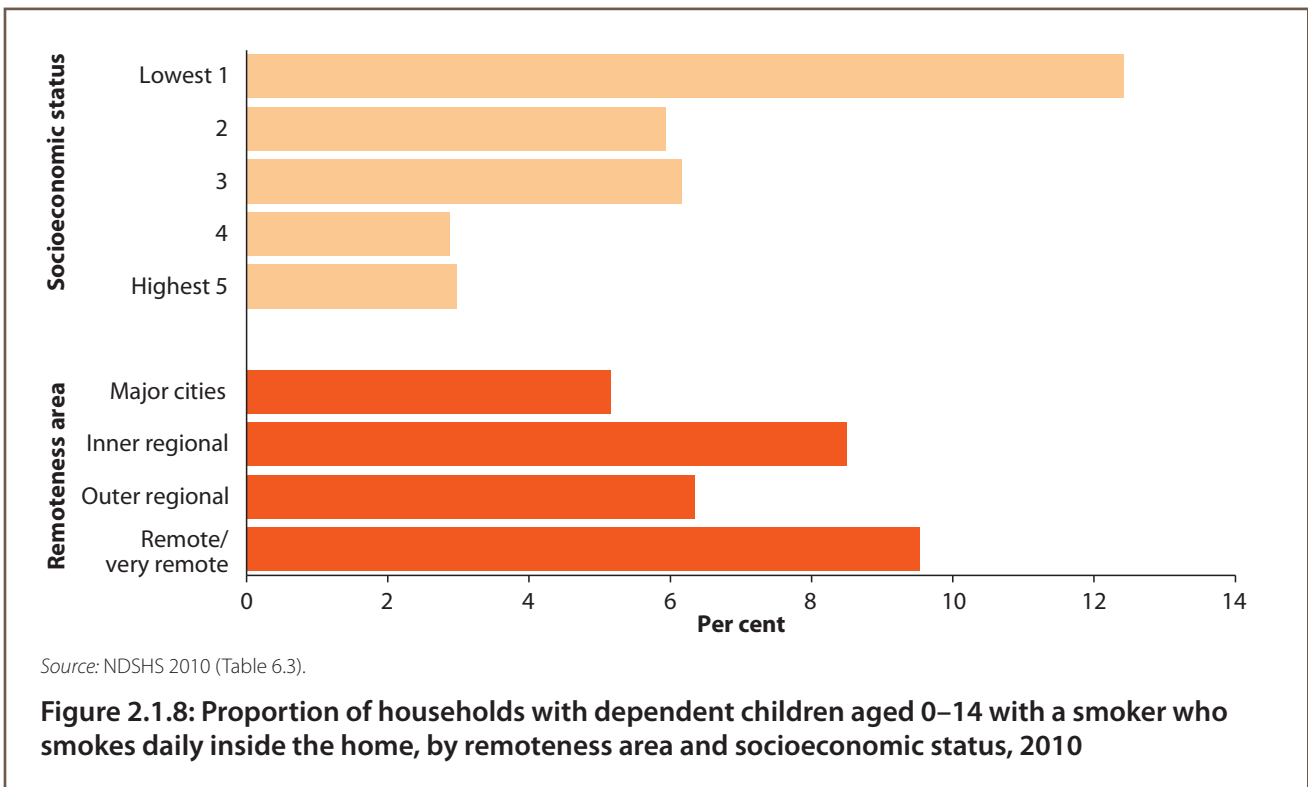
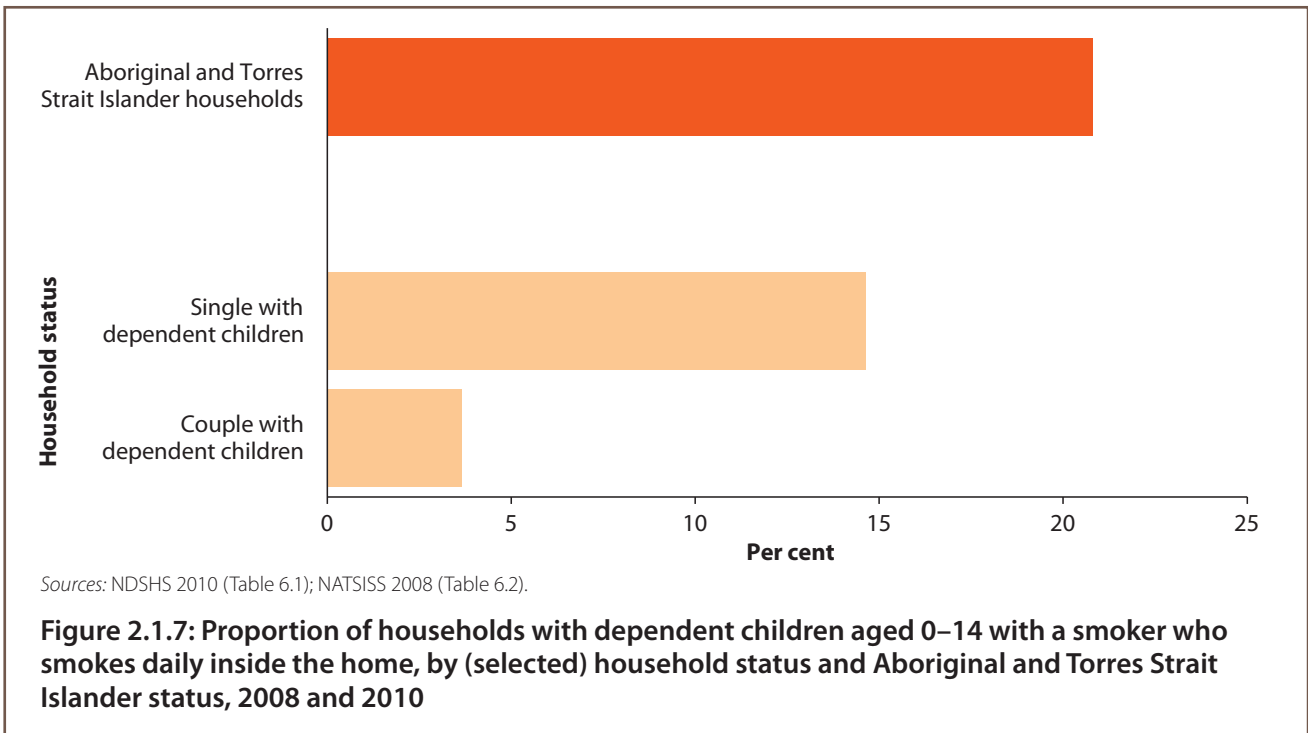
KEY FINDING

Children were most likely to be exposed to second-hand smoke if they were from low socioeconomic status areas, were Aboriginal or Torres Strait Islander, or lived in a single parent household.

Description:	The proportion of households with dependent children (aged 0–14) who live in a household with a smoker who smokes daily inside the home.
Numerator:	General population: the number of households with dependent children aged 0–14 with a household member who smokes daily inside a home. Indigenous population: the number of households with dependent children aged 0–14 with a smoker who smokes daily inside the home.
Denominator:	Households with dependent children aged 0–14.
Data source:	2010 National Drug Strategy Household Survey (NDSHS) (primary); 2008 National Aboriginal and Torres Strait Islander Social Survey (NATSISS) (Aboriginal and Torres Strait Islander population).

Baseline data

- In 2010, it was estimated that 6.1% of households with children aged 0–14 had someone who smoked at least one cigarette, cigar or pipe daily inside the home (Table 6.1).
- According to the 2008 National Aboriginal and Torres Strait Islander Social Survey, 1 in 5 (21%) Aboriginal and Torres Strait Islander children aged 0–14 lived with a daily smokers who smoked inside the home (Figure 2.1.7).
- There was little difference in exposure to tobacco smoke among households who mainly spoke English at home and households who spoke a language other than English (6.1% and 5.4%, respectively) (Table 6.1).
- Single parent households with dependent children were 4 times as likely to contain a daily smoker who smoked inside the home as couple households with dependent children (14.6% compared with 3.7%) (Figure 2.1.7).
- Dependent children living in areas with the lowest SES were 4.2 times as likely to be exposed to tobacco smoke inside the home as children living in areas with the highest SES (12.4% compared with 3.0%) (Figure 2.1.8).
- About 1 in 10 (9.5%) households with dependent children in *Remote and very remote* areas had a daily smoker who smoked inside the home—almost double the proportion of households with dependent children in *Major cities* (5.2%) (Figure 2.1.8).



Specification and baseline data for Indicator 7: Fewer adults exposed to second-hand smoke at home

In 2010, 4.0% of non-smoking adults lived with a smoker who smoked daily inside the home.

KEY FINDING

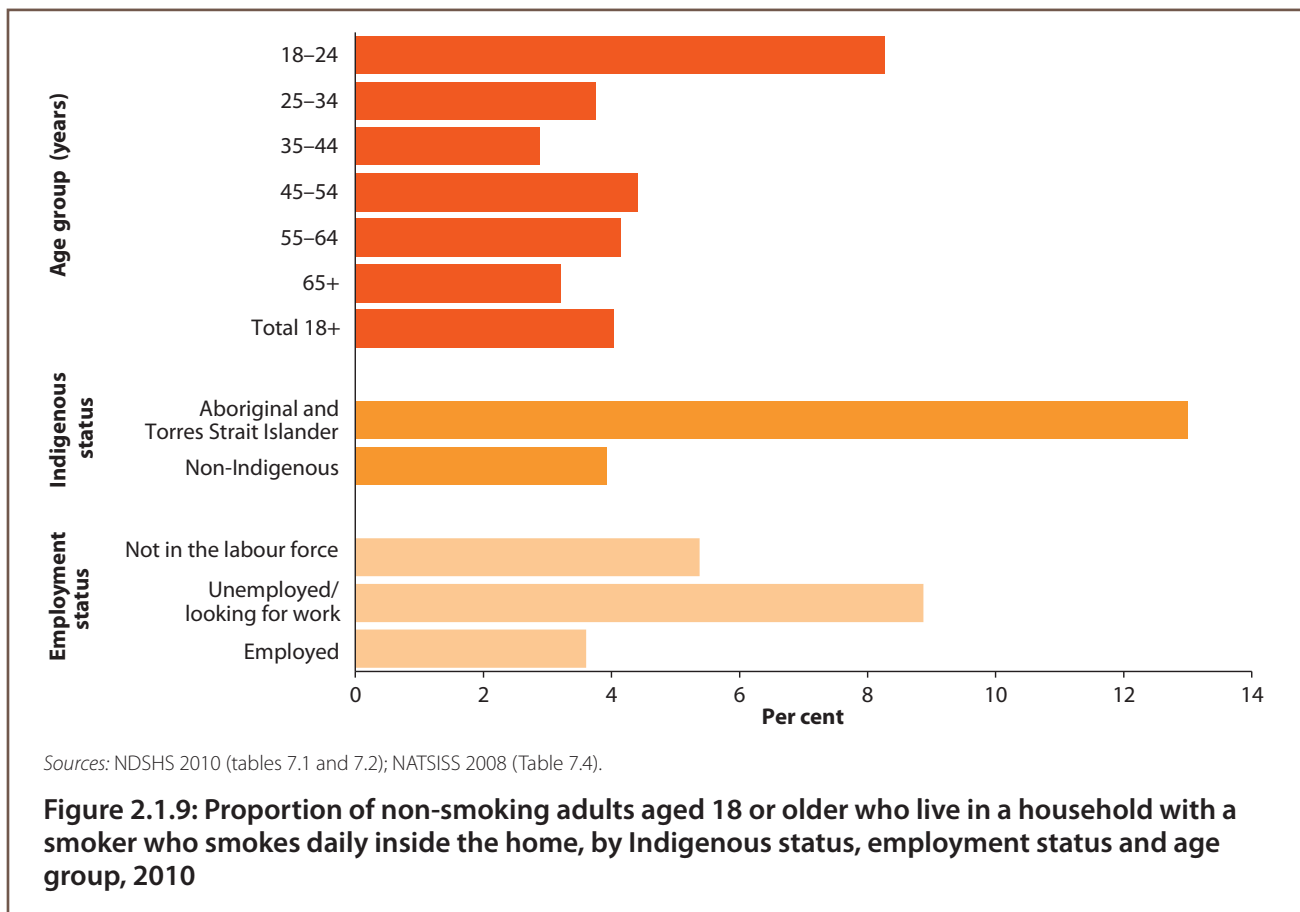
Young adults, people living in the lowest socioeconomic status areas, people living in *Remote and very remote* areas, and Aboriginal and Torres Strait Islander people were more likely to be exposed to second-hand tobacco smoke at home than other groups.

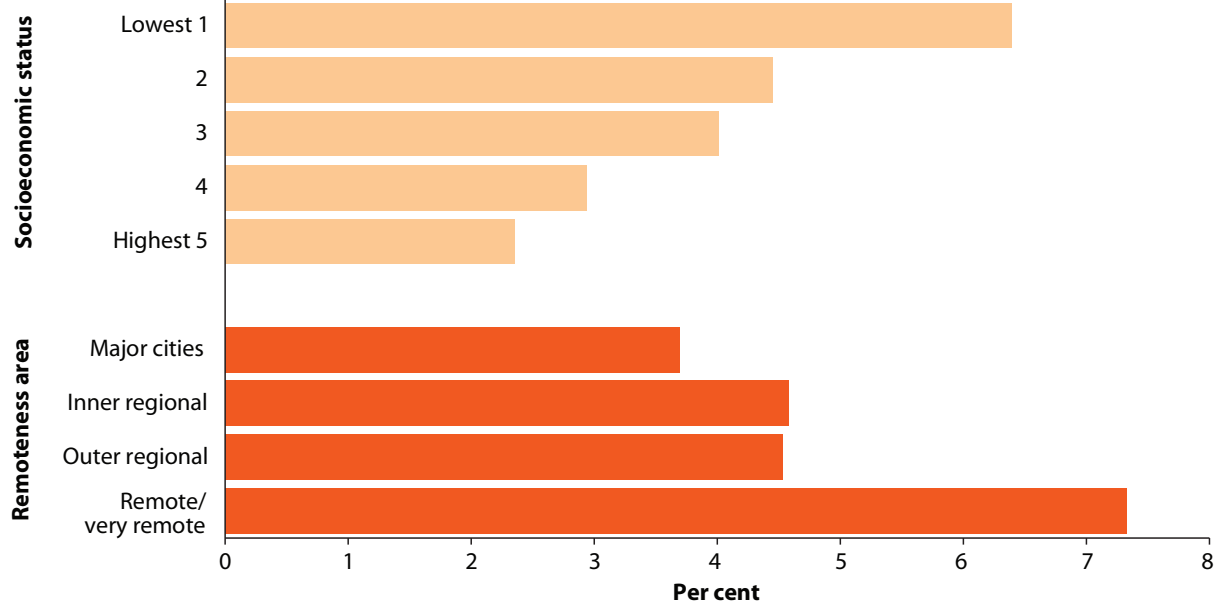
Description:	The proportion of non-smokers aged 18 or older who report living in a household with a smoker who smokes daily inside the home.
Numerator:	General population: the number of non-smokers aged 18 or older who report living in a household with a household member who smokes daily inside the home. Indigenous population: the number of non-smokers aged 18 or older who reported living in a household with smoker who smokes daily inside the home.
Denominator:	The total number of non-smokers aged 18 or older.
Data source:	2010 National Drug Strategy Household Survey (NDSHS); 2008 National Aboriginal and Torres Strait Islander Social Survey (NATSISS) (Aboriginal and Torres Strait Islander population).

Baseline data

- In 2010, an estimated 4.0% of non-smoking adults lived with a household member who smoked at least 1 cigarette, cigar or pipe daily inside the home (Table 7.1).
- Non-smoking adults aged 18–24 were far more likely than any other age group to be exposed to tobacco smoke inside the home (8.3%). People aged 35–44 were the least likely age group to live with a daily smoker (2.9%) (Figure 2.1.9).
- About 1 in 8 (13.0%) non-smoking Aboriginal and Torres Strait Islander adults lived with a household member who smoked tobacco daily inside the home (NATSISS 2008)—more than 3 times the rate of the non-Indigenous population (NDSHS 2010) (Figure 2.1.9).
- Exposure to tobacco smoke inside the home was slightly more common among households who spoke a language other than English (5.3% compared with 3.9% for households who mainly spoke English). There was little difference in exposure to tobacco smoke among people born in Australian and people born overseas (3.9% and 4.2%, respectively) (Table 7.2).
- Unemployed non-smokers were 2.5 times as likely as employed non-smokers to live with a smoker who smoked daily inside the home (8.9% compared with 3.6%) (Figure 2.1.9).
- The highest level of qualification appeared to have some influence on whether non-smoking adults were exposed to daily tobacco smoke inside the home. People with post-school qualifications such as bachelor degrees or diplomas or certificates were less likely to live with a daily smoker than people who had completed year 12 or below (Table 7.2).

- Households consisting of parents with non-dependent children were most likely to contain a non-smoking adult who lived with a smoker who smoked daily inside the home (5.9%) (Table 7.2).
- Non-smoking adults living in areas with the lowest SES were 2.7 times as likely to be exposed to tobacco smoke inside the home as non-smoking adults living in areas with the highest SES (6.4% compared with 2.4%) (Figure 2.1.10).
- Non-smoking adults living in *Remote and very remote* areas were twice as likely as people in *Major cities* to live with a smoker who smoked daily inside the home (7.3% compared with 3.7%) (Figure 2.1.10).





Source: NDSHS 2010 (Table 7.3).

Figure 2.1.10: Proportion of non-smoking adults aged 18 or older who live in a household with a smoker who smokes daily inside the home, by socioeconomic status and remoteness area, 2010

2.2 Uptake

Specification and baseline data for Indicator 9: Young people delaying the onset of tobacco smoking

In 2010, people aged 14–24 smoked their first full cigarette when they were aged, on average, 15.4.

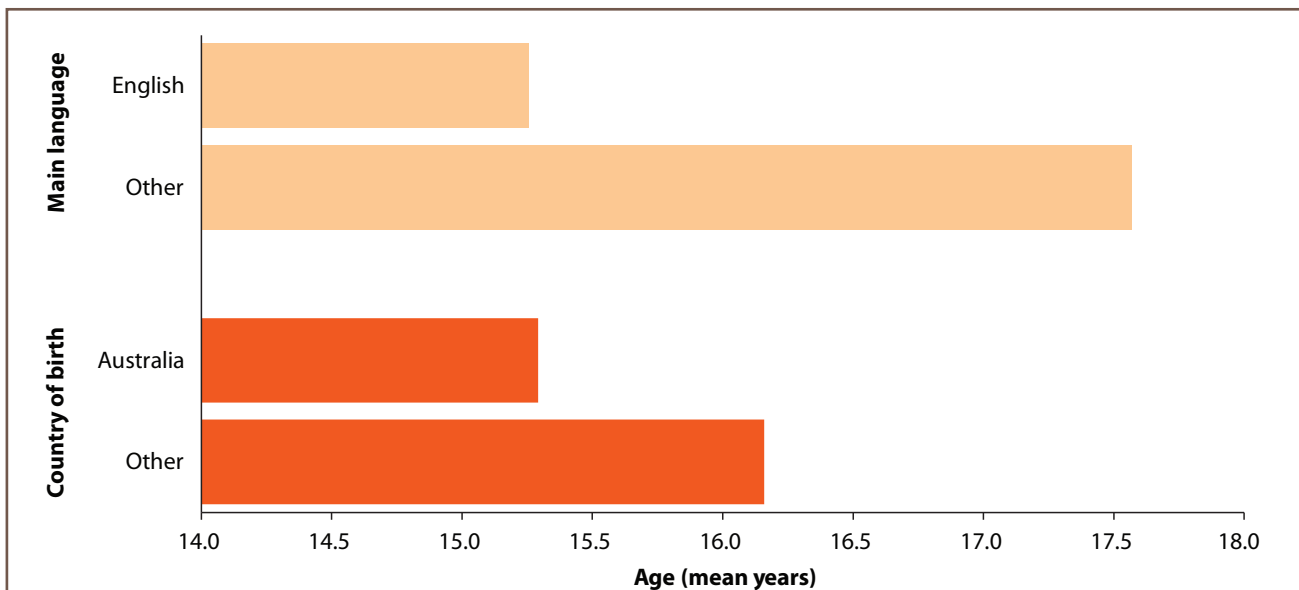
KEY FINDING

People aged 14–24 were most likely to be older when they smoked their first cigarette if their main language was not English, they were born in a country other than Australia, or they were from the highest socioeconomic status.

Description:	The age at which an individual smoked their first full cigarette.
Numerator:	The sum of age (in years) of people aged 14–24 who have smoked a full cigarette.
Denominator:	The total number of people aged 14–24 who have smoked a full cigarette.
Data source:	2010 National Drug Strategy Household Survey (NDSHS).

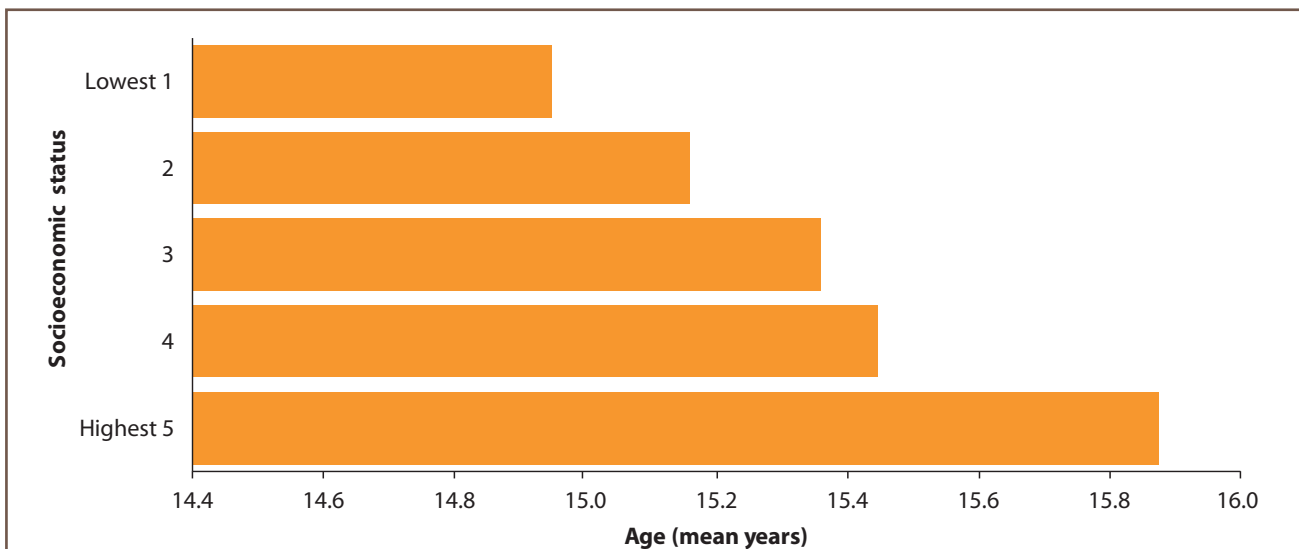
Baseline data

- In 2010, young people aged 14–24 smoked their first full cigarette when they were aged, on average, 15.4 (age of initiation) (Table 9.1).
- Young females smoked their first full cigarette at a slightly younger average age than young males (15.1 compared with 15.6) (Table 9.1).
- There was no difference in age of initiation for Aboriginal and Torres Strait Islander and non-Indigenous young people (both 15.4) (Table 9.2).
- Young people who mainly spoke a language other than English at home smoked their first full cigarette when they were, on average, more than 2 years older than young people who mainly spoke English at home (17.6 compared with 15.3) (Figure 2.2.1).
- Young people born in a country other than Australia also had an older age of initiation than those born in Australia (16.2 compared with 15.3) (Figure 2.2.1).
- There was only a small difference in age of initiation for young people identifying as heterosexual and those identifying as homosexual/bisexual (15.4 and 15.1, respectively) (Table 9.2).
- Young people living in areas with the lowest SES smoked their first full cigarette a year younger than those living in areas with the highest SES (14.9 compared with 15.9), and the age of initiation increased as the level of advantage increased (Figure 2.2.2).
- The age of initiation varied only slightly with remoteness area, ranging from 15.0 in *Inner regional* and *Outer regional* areas to 15.5 in *Major cities* (Table 9.3).



Source: NDSHS 2010 (Table 9.2).

Figure 2.2.1: Average age of first full cigarette, people aged 14–24, by main language and country of birth, 2010



Source: NDSHS 2010 (tables 9.2 and 9.3).

Figure 2.2.2: Average age of first full cigarette, people aged 14–24, by socioeconomic status, 2010

Specification and baseline data for Indicator 10: Fewer people trying cigarettes

In 2011, 23% of secondary school students aged 12–17 had smoked at least a few puffs of a cigarette in their lifetime.

In 2010, 63% of adults aged 18 or older had smoked a full cigarette in their lifetime.

KEY FINDINGS

Secondary school students were most likely to have smoked at least a few puffs of a cigarette in their lifetime if they had a larger amount of available spending money, lived in *Outer regional* areas, were Aboriginal or Torres Strait Islander, or were in later teen years.

Adults were most likely to have smoked a full cigarette in their lifetime if they lived in *Remote and very remote* areas, identified as homosexual or bisexual, had dependent children, had a trade or non-trade certificate, or were a prison entrant.

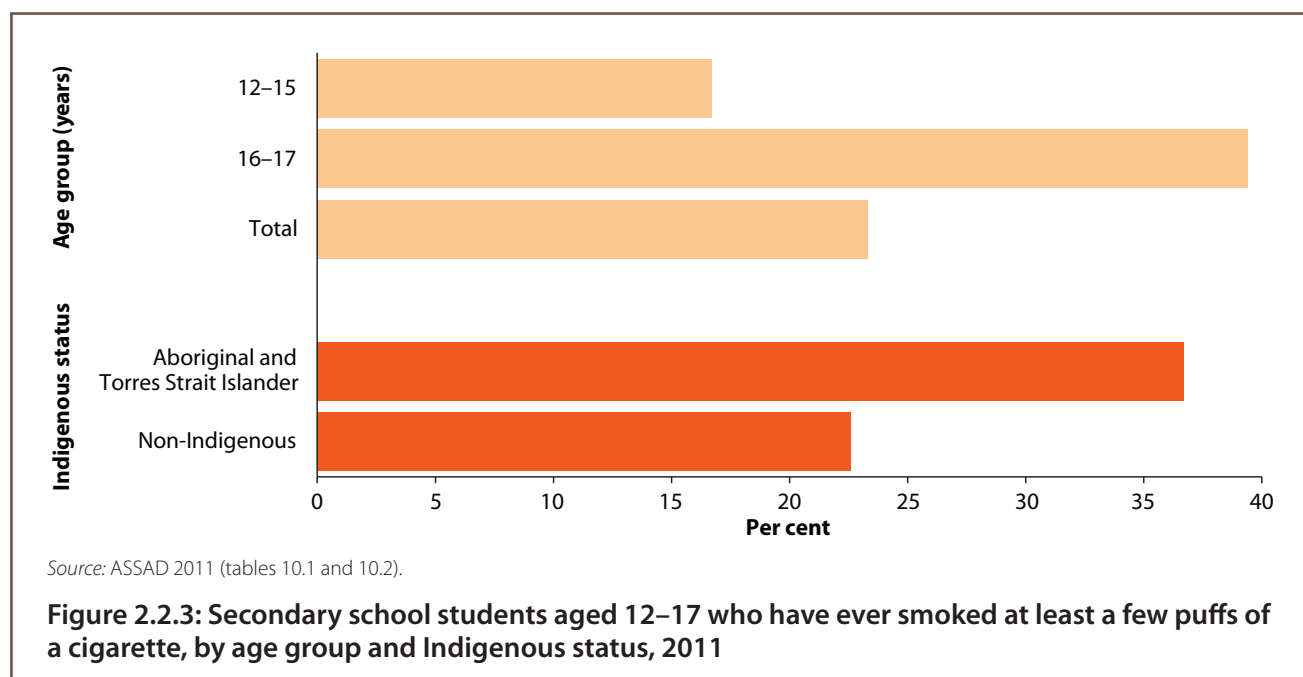
Description:	Secondary school students: The proportion of secondary school students aged 12–17 who have smoked at least a few puffs of a cigarette in their lifetime. Adults: The proportion of adults aged 18 or older who have smoked at least a full cigarette in their lifetime.
Numerator:	Secondary school students: The number of secondary school students aged 12–17 who have smoked at least a few puffs of a cigarette. Adults: The number of adults aged 18 or older who have smoked at least a full cigarette.
Denominator:	Secondary school students: The total number of secondary school students aged 12–17. Adults: The total number of adults aged 18 or older.
Data source:	2011 Australian Secondary Students' Alcohol and Drug (ASSAD) Survey (secondary school students); 2010 National Drug Strategy Household Survey (NDSHS) (adults); 2010 National Prisoner Health Data Collection (NPHDC) (prison entrants).

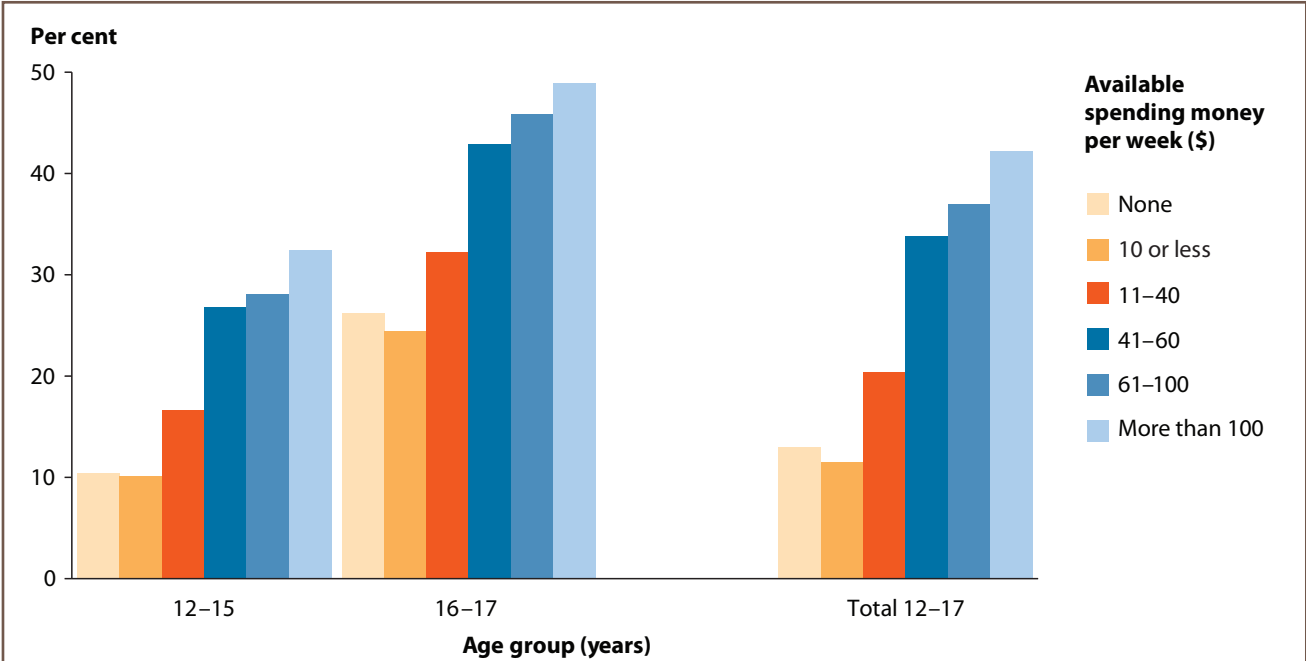
Secondary school students

Baseline data

- In 2011, an estimated 23% of secondary school students aged 12–17 had smoked at least a few puffs of a cigarette in their lifetime (Table 10.1).
- Secondary school students aged 16–17 were 2.4 times as likely to have ever smoked at least a few puffs of a cigarette as those aged 12–15 (39% compared with 16.7%) (Figure 2.2.3), with males slightly more likely to have smoked at least a few puffs than females across all age groups (Table 10.1).
- More than one-third (37%) of Aboriginal and Torres Strait Islander secondary school students aged 12–17 had smoked at least a few puffs of a cigarette in their lifetime—1.6 times the rate of non-Indigenous secondary school students (23%) (Figure 2.2.3).

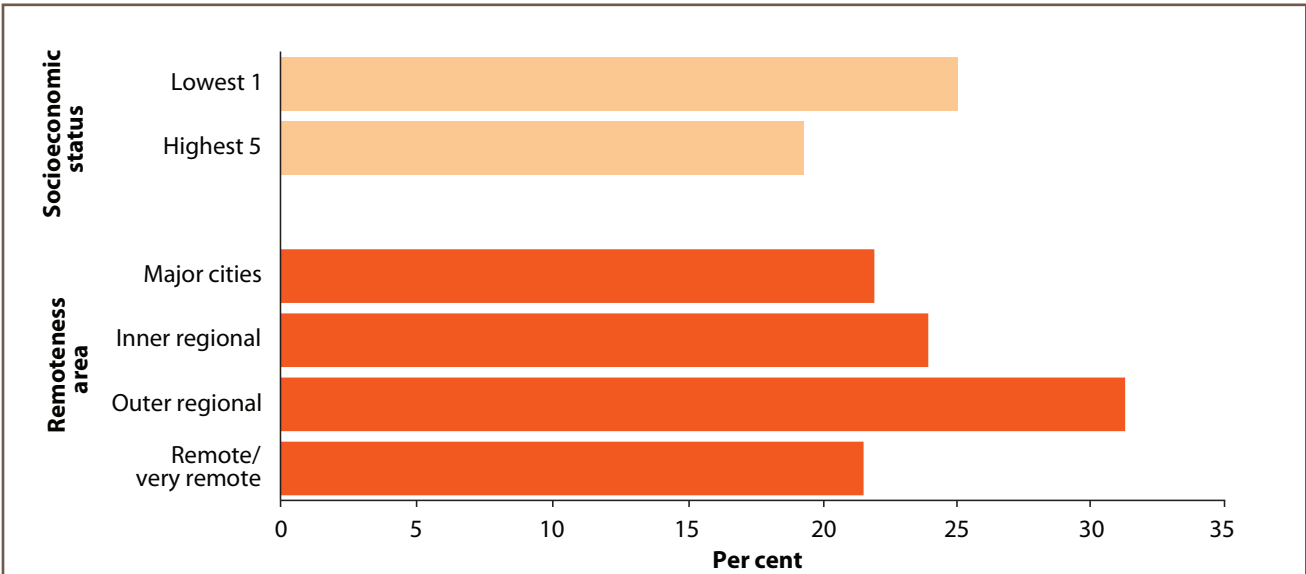
- There was only a small difference in the proportion of secondary school students who had ever smoked at least a few puffs of a cigarette among those who mainly spoke English at home and those who spoke a language other than English (24% compared with 19.8%) (Table 10.2).
- The proportion of secondary school students aged 12–17 who had ever smoked a few puffs of a cigarette was highly associated with the amount of weekly spending money they had; however, average spending money is highly correlated with age. For both secondary school students aged 12–15 and 16–17, those who had \$41 or more to spend each week were much more likely to have smoked at least a few puffs of a cigarette than those who had \$40 or less. For both age groups, those with \$10 or less were the least likely to have smoked at least a few puffs of a cigarette. Those with more than \$100 of available spending money per week were 3.2 times as likely (12–15 year olds) and twice as likely (16–17 year olds) to have smoked a few puffs as secondary school students with less than \$10 (Figure 2.2.4).
- One-quarter of secondary school students aged 12–17 living in areas with the lowest and second lowest SES had smoked at least a few puffs of a cigarette in their lifetime (25% and 26%, respectively) (Figure 2.2.5; Table 10.3).
- Secondary school students living in the lowest SES areas were 1.3 times as likely to have smoked a few puffs as those living in the highest SES areas (25% compared with 19.4%) (Figure 2.2.5).
- Almost one-third (31%) of secondary school students aged 12–17 living in *Outer regional* areas had ever smoked at least a few puffs of a cigarettes. They were far more likely to have tried a few puffs than those living in any other remoteness areas (Figure 2.2.5).





Source: ASSAD 2011 (Table 10.4).

Figure 2.2.4: Secondary school students aged 12–17 who have ever smoked at least a few puffs of a cigarette, by age group and available spending money per week (\$), 2011



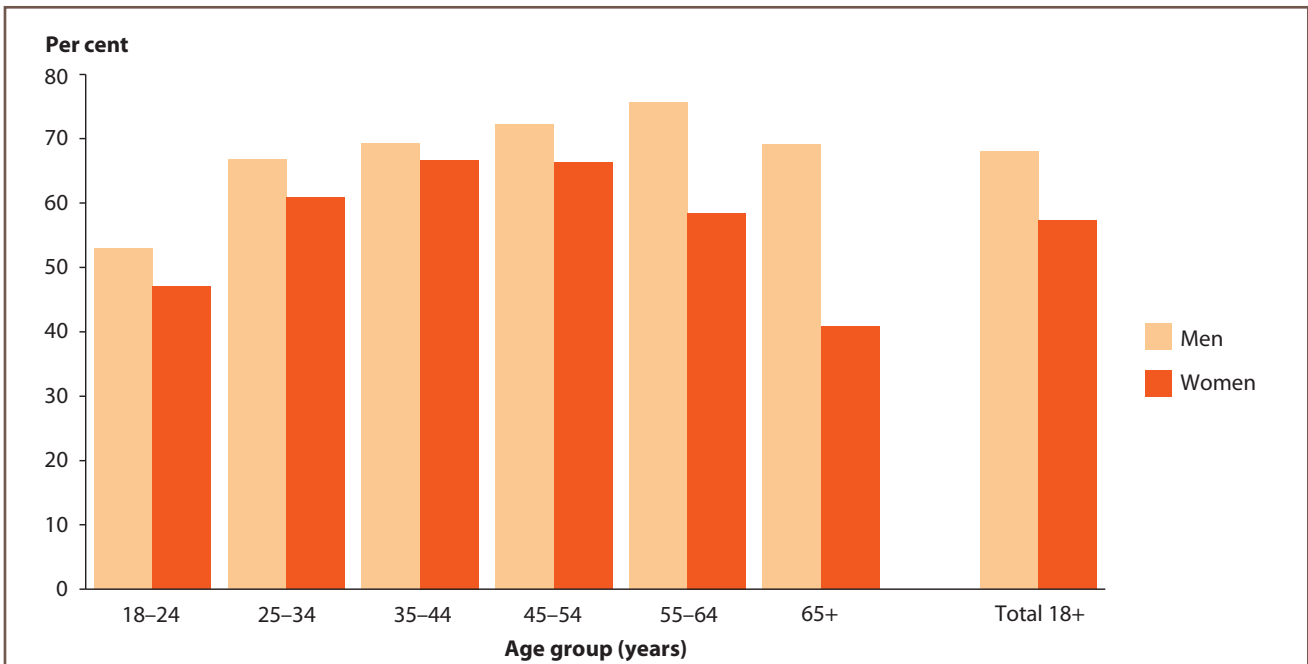
Source: ASSAD 2011 (Table 10.3).

Figure 2.2.5: Secondary school students aged 12–17 who have ever smoked at least a few puffs of a cigarette, by (selected) socioeconomic status and remoteness area, 2011

Adults

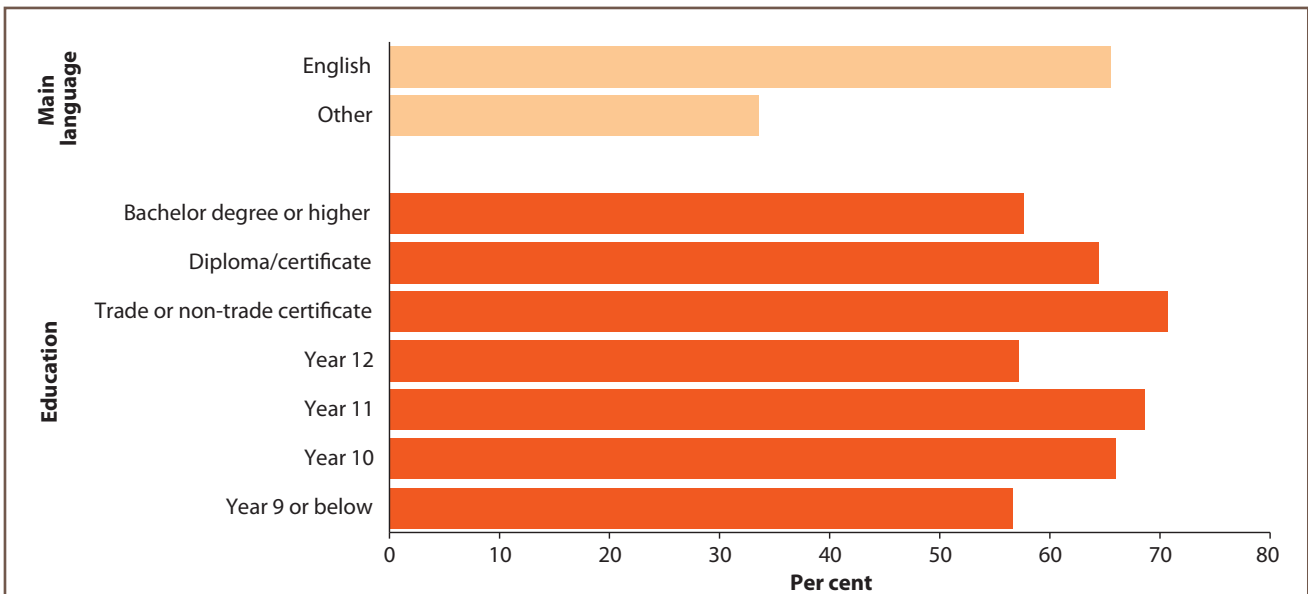
Baseline data

- In 2010, more than 6 in 10 (63%) adults aged 18 or older had smoked a full cigarette in their lifetime (Table 10.5).
- Adults aged 35–64 were most likely to have ever smoked a full cigarette, and men were more likely to have smoked a full cigarette than women across all age groups (Figure 2.2.6).
- It is useful to monitor the proportion of people in younger age groups who have smoked a full cigarette to reflect changing uptake patterns over time. In 2010, half (50%) of people aged 18–24 and almost two-thirds (64%) of people aged 25–34 had ever smoked a full cigarette. Men were more likely to have smoked a full cigarette than women for both age groups (Figure 2.2.6).
- Almost 7 in 10 (69%) Aboriginal and Torres Strait Islander adults aged 18 or older had ever smoked a full cigarette—slightly higher than the proportion of non-Indigenous adults (63%) (Table 10.6).
- Adults who mainly spoke English at home were twice as likely to have smoked a full cigarette as those who mainly spoke a language other than English at home (66% compared with 34%) (Figure 2.2.7).
- Adults born in Australia were more likely to have ever smoked a full cigarette than adults born overseas (66% compared with 55%) (Table 10.6).
- A similar proportion of adults whose highest level of educational attainment was a bachelor degree or higher, year 12 or year 9 or below had ever smoked a full cigarette (ranging from 57% to 58%). These groups were the least likely to have smoked a full cigarette. Adults whose highest educational attainment was a trade or non-trade certificate were the most likely to have ever smoked a full cigarette (71%) (Figure 2.2.7).
- Of adults identifying as homosexual or bisexual, 7 in 10 (71%) had smoked a full cigarette in their lifetime. They were slightly more likely to have smoked a full cigarette than people identifying as heterosexual (63%) (Table 10.6).
- Adults living in *Remote and very remote* areas were more likely to have ever smoked a full cigarette than adults in *Major cities* (70% compared with 60%) (Figure 2.2.8).
- The proportion of adults who had smoked a full cigarette in their lifetime differed little with SES, from 62% of people living in areas with the highest SES and 64% of people living in the lowest (Figure 2.2.8).
- Of prison entrants aged 18 or older, 9 in 10 (89%) had ever smoked a full cigarette. They were 1.4 times as likely to have smoked a full cigarette as the general population (63%) (tables 10.5 and 10.8).



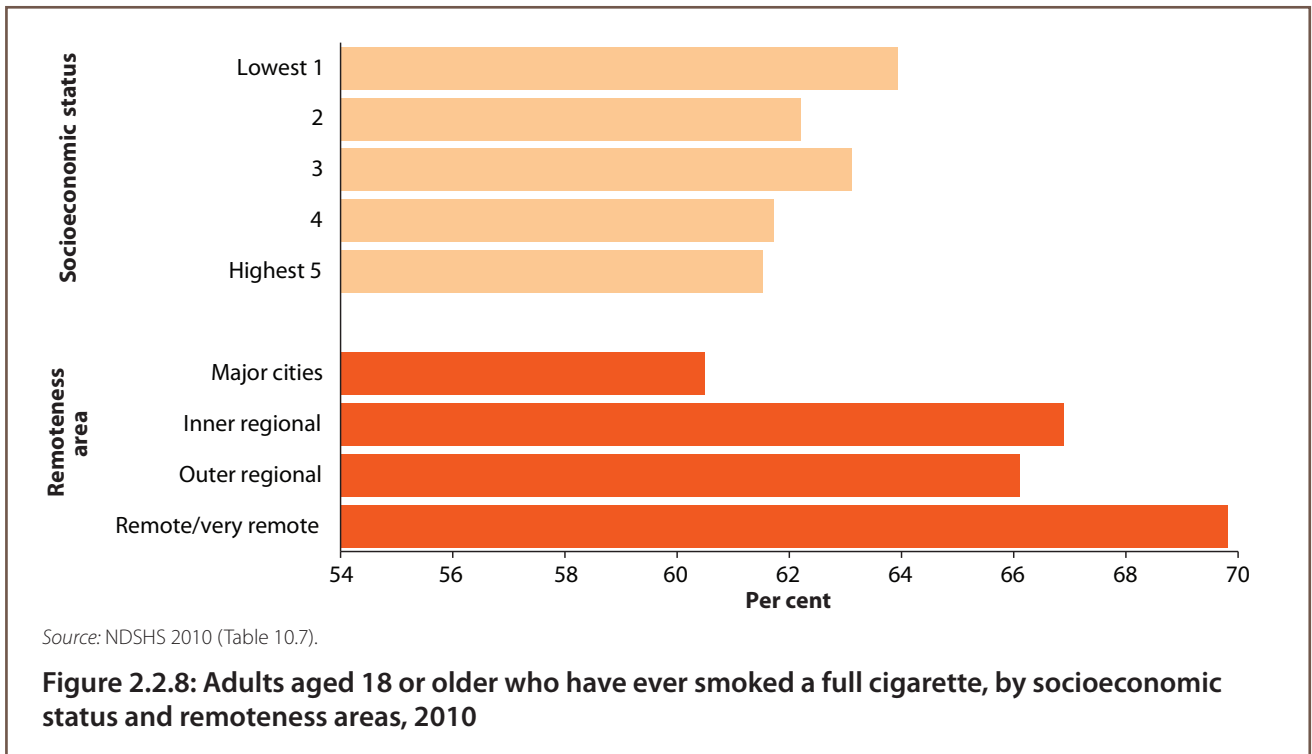
Source: NDSHS 2010 (Table 10.5).

Figure 2.2.6: Adults aged 18 or older who have ever smoked a full cigarette, by age group and sex, 2010



Source: NDSHS 2010 (Table 10.6).

Figure 2.2.7: Adults aged 18 or older who have ever smoked a full cigarette, by main language and education, 2010



2.3 Transition

Specification and baseline data for Indicator 2: Fewer young people making the transition to established patterns of smoking

In 2011, 3.5% of secondary school students aged 12–17 had smoked more than 100 cigarettes in their lifetime.

In 2010, 29% of young adults aged 18–24 had smoked more than 100 cigarettes in their lifetime.

KEY FINDINGS

Secondary school students were most likely to have smoked more than 100 cigarettes in their lifetime if they had more available spending money, were Aboriginal or Torres Strait Islander, or were in later teen years.

Young adults were most likely to have smoked more than 100 cigarettes in their lifetime if they lived in *Remote and very remote* areas, were Aboriginal or Torres Strait Islander, or were not in the labour force; they were most likely to have never smoked 100 cigarettes if their main language was not English.

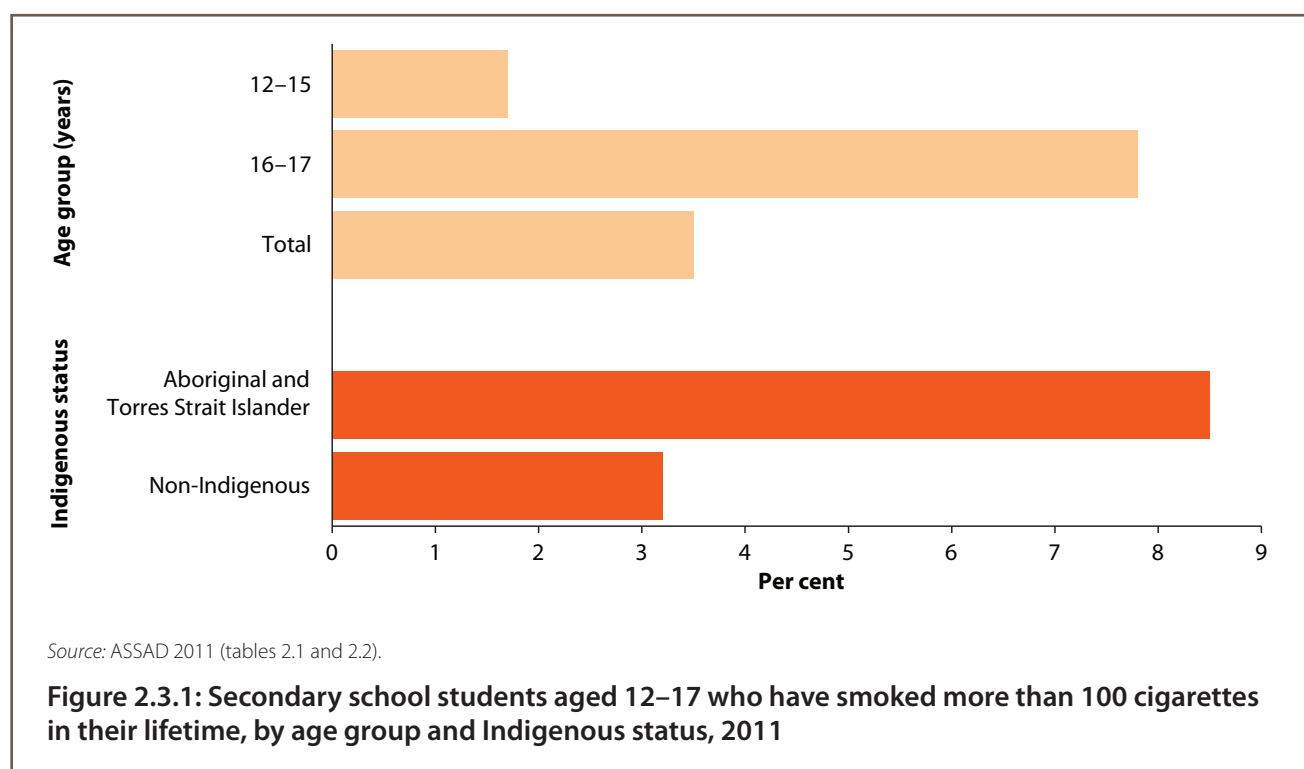
Description:	Secondary school students: Proportion of 12–17 year olds who have smoked more than 100 cigarettes in their lifetime. Young adults: Proportion of 18–24 year olds who have smoked more than 100 cigarettes in their lifetime.
Numerator:	Secondary school students: Number of secondary school students aged 12–17 who have smoked more than 100 cigarettes in their lifetime. Young adults: Number of young adults aged 18–24 who have smoked more than 100 cigarettes in their lifetime.
Denominator:	Secondary school students: Total number of secondary school students aged 12–17. Young adults: Total number of young adults aged 18–24.
Data source:	2011 Australian Secondary Students' Alcohol and Drug (ASSAD) Survey (secondary school students); 2010 National Drug Strategy Household Survey (NDSHS) (young adults).

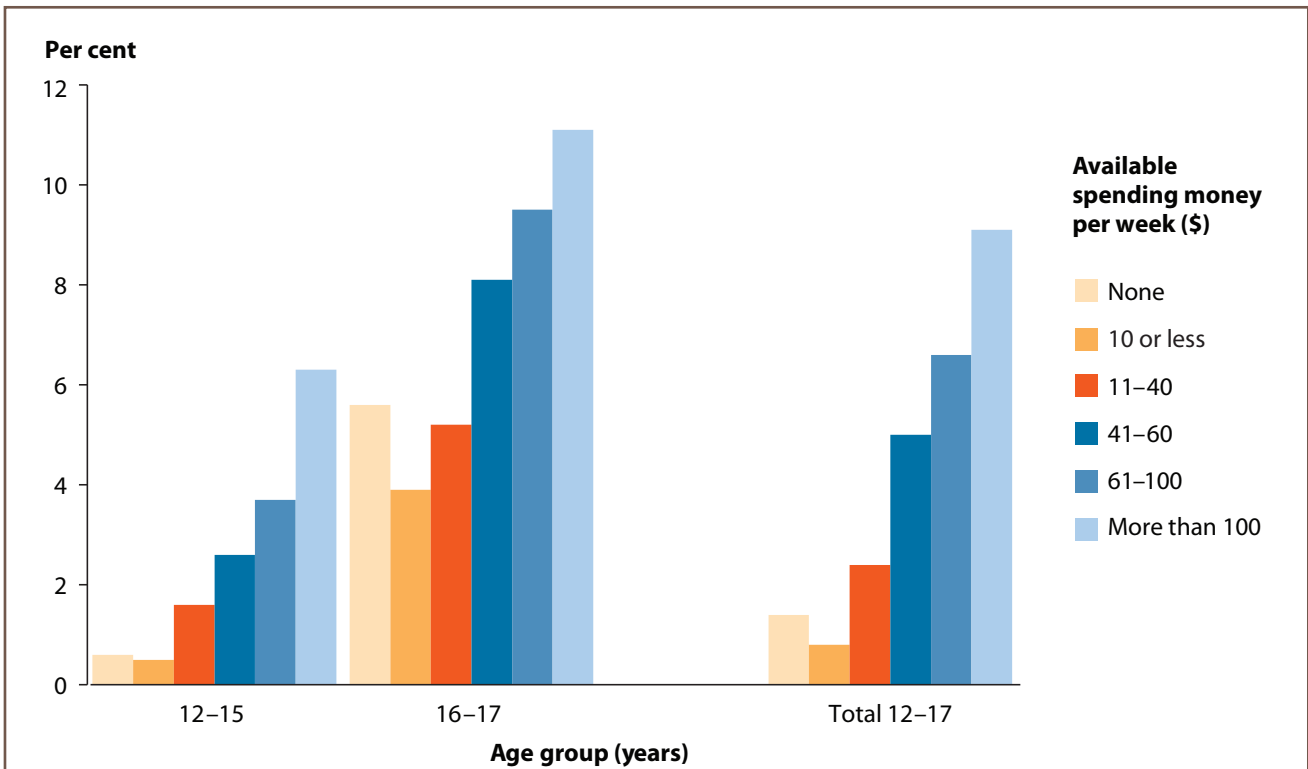
Secondary school students

Baseline data

- In 2011, an estimated 3.5% of secondary school students aged 12–17 had smoked more than 100 cigarettes in their lifetime (Table 2.1).
- Secondary school students aged 16–17 were 4.6 times as likely to have smoked 100 cigarettes in their lifetime as those aged 12–15 (7.8% compared with 1.7%) (Figure 2.3.1), with males slightly more likely to have smoked 100 cigarettes than females across all age groups (Table 2.1).

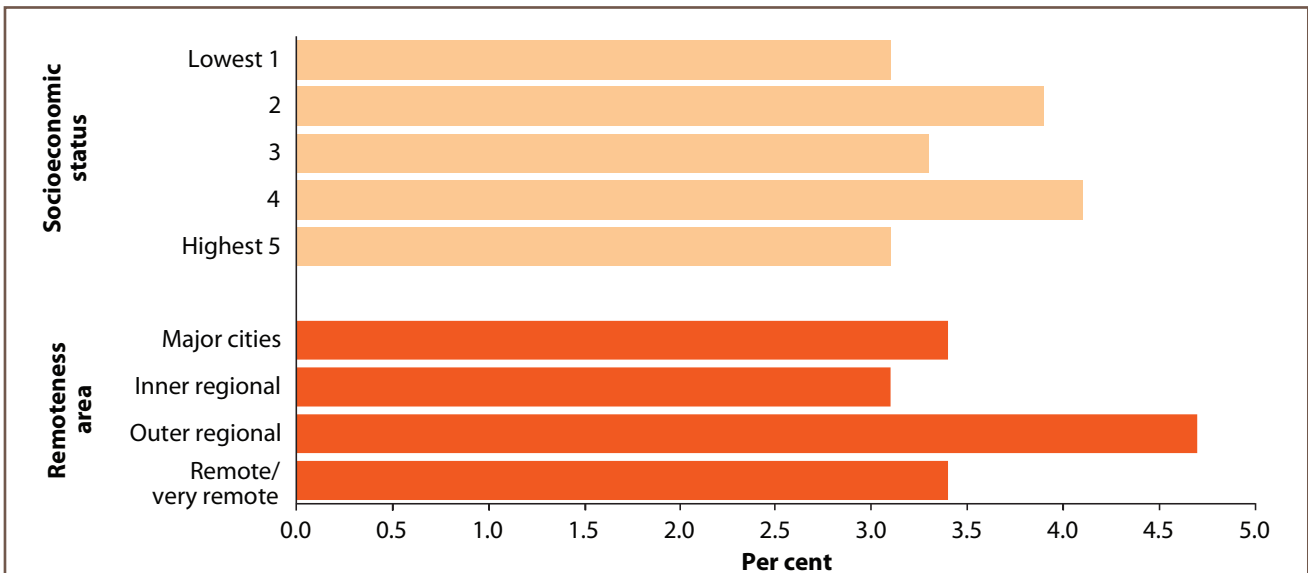
- Almost 1 in 9 (8.5%) Aboriginal and Torres Strait Islander secondary school students aged 12–17 had smoked 100 cigarettes in their lifetime, 2.7 times the rate for their non-Indigenous counterparts (3.2%) (Figure 2.3.1).
- There was little difference in the proportion of secondary school students who had smoked 100 cigarettes in their lifetime among those who mainly spoke English at home and those who spoke a language other than English (3.6% and 2.9%, respectively) (Table 2.2).
- The proportion of secondary school students aged 12–17 who had smoked more than 100 cigarettes in their lifetime was highly associated with the amount of weekly spending money they had; however, average spending money is highly correlated with age. For both those aged 12–15 and 16–17, those who had \$41 or more to spend each week were much more likely to have smoked 100 cigarettes than those who had \$40 or less. For both age groups, those with \$10 or less were the least likely to have smoked 100 cigarettes in their lifetime. Those with more than \$100 available spending money per week were 12 times as likely (12–15 year olds) and almost 3 times as likely (16–17 year olds) to have smoked 100 cigarettes than those with less than \$10 (Figure 2.3.2).
- There was no difference in the proportion of secondary school students aged 12–17 who had smoked 100 cigarettes in their lifetime among those who lived in the lowest and highest SES areas (both 3.1%). But those living in areas with the second highest and second lowest SES were the most likely to have smoked 100 cigarettes (4.1%) (Figure 2.3.3).
- Secondary school students aged 12–17 living in *Outer regional* areas (4.7%) were 1.4 times as likely to have smoked 100 cigarettes in their lifetime as those living in *Remote and very remote* areas (3.4%) and *Major cities* (3.4%) (Figure 2.3.3).





Source: ASSAD 2011 (Table 2.4).

Figure 2.3.2: Secondary school students aged 12–17 who have smoked more than 100 cigarettes in their lifetime, by age group and available spending money per week (\$), 2011



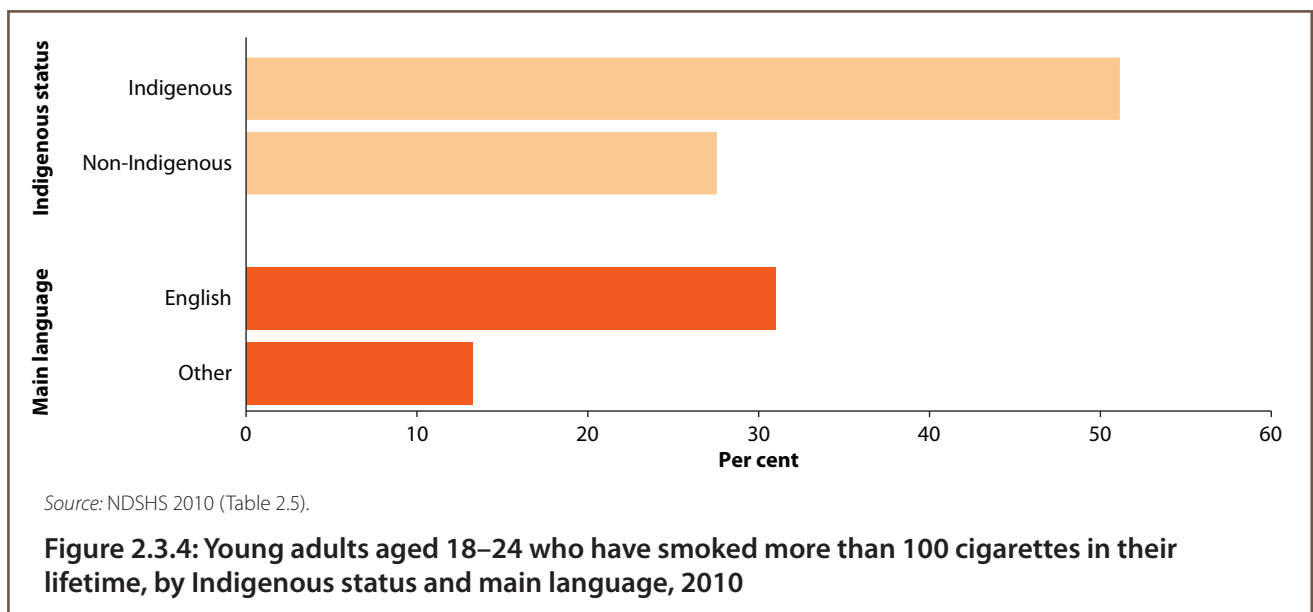
Source: ASSAD 2011 (Table 2.3).

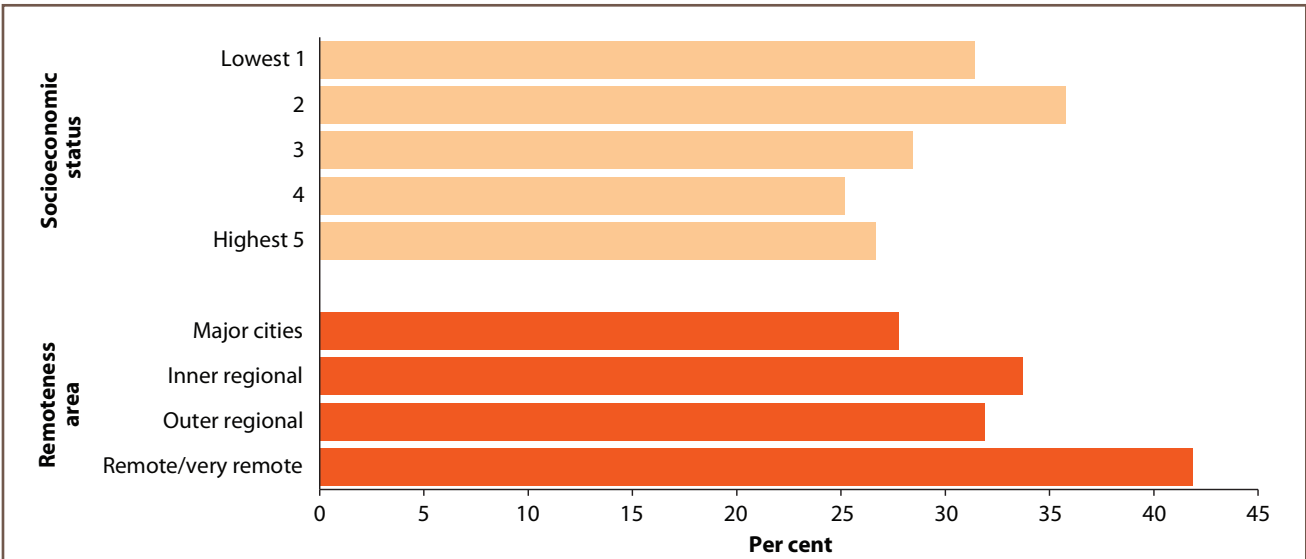
Figure 2.3.3: Secondary school students aged 12–17 who have smoked more than 100 cigarettes in their lifetime, by socioeconomic status and remoteness area, 2011

Young adults

Baseline data

- In 2010, about 3 in 10 (29%) young adults aged 18–24 had smoked more than 100 cigarettes in their lifetime, and men were slightly more likely than women to have smoked more than 100 cigarettes (31% compared with 28%) (Table 2.5).
- More than half (51%) of Aboriginal and Torres Strait Islanders aged 18–24 had smoked 100 cigarettes in their lifetime, 1.9 times the rate of their non-Indigenous counterparts (28%) (Figure 2.3.4).
- Young adults aged 18–24 who mainly spoke English at home were 2.3 times as likely to have smoked 100 cigarettes in their lifetime as those who mainly spoke a language other than English at home (31% compared with 13.3%) (Figure 2.3.4). Young adults born in Australia were 1.4 times as likely to have smoked 100 cigarettes as those born overseas (30% compared with 22%) (Table 2.5).
- Young adults aged 18–24 living in areas with the second lowest SES were most likely to have smoked 100 cigarettes in their lifetime (36%), and were 1.4 times as likely to have smoked 100 cigarettes as young adults living in areas with the second highest SES (25%) (Figure 2.3.5).
- Young adults aged 18–24 who lived in *Remote and very remote* areas were 1.5 times as likely to have smoked 100 cigarettes in their lifetime as those in *Major cities* (42% compared with 28%) (Figure 2.3.5).





Source: NDSHS 2010 (Table 2.6).

Figure 2.3.5: Young adults aged 18–24 who have smoked more than 100 cigarettes in their lifetime, by socioeconomic status and remoteness areas, 2010

2.4 Established smoking

Specification and baseline data for Indicator 1: Fewer young people smoking regularly

In 2011, 6.7% of secondary school students aged 12–17 smoked tobacco at least weekly.

KEY FINDING

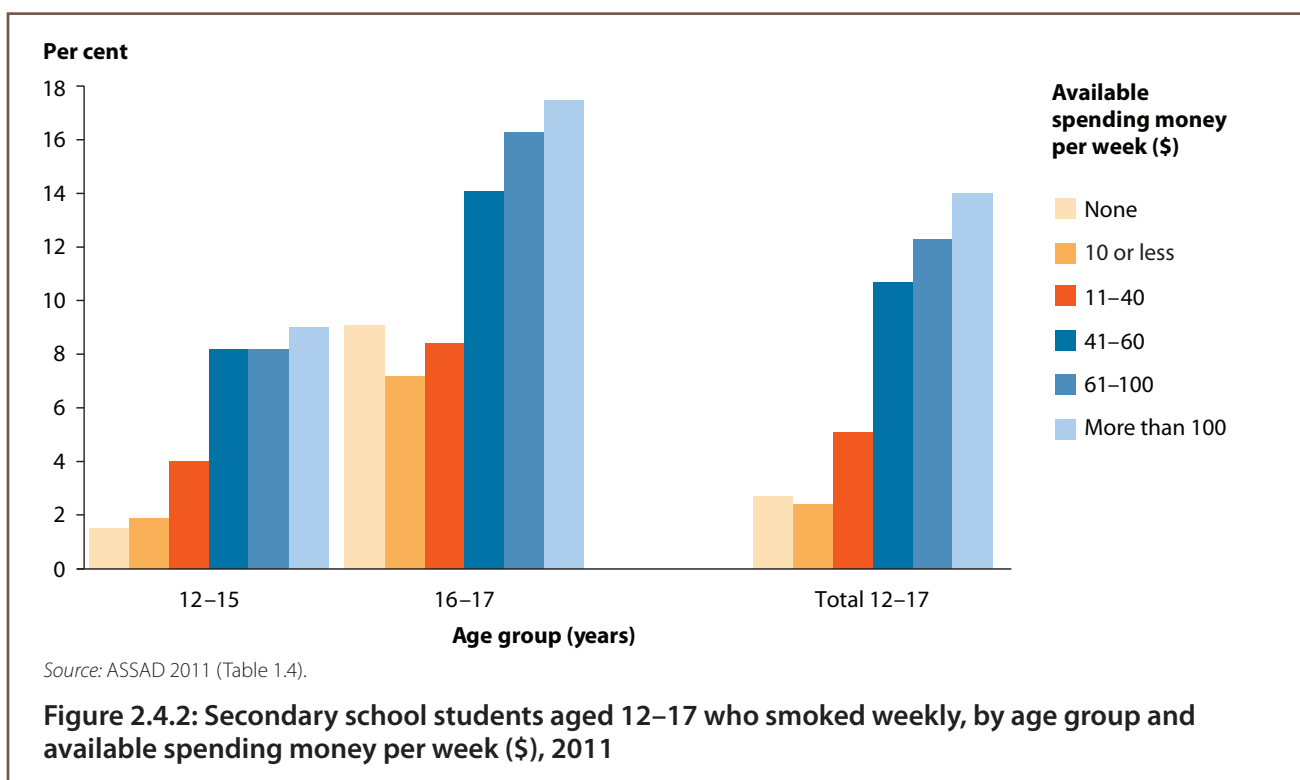
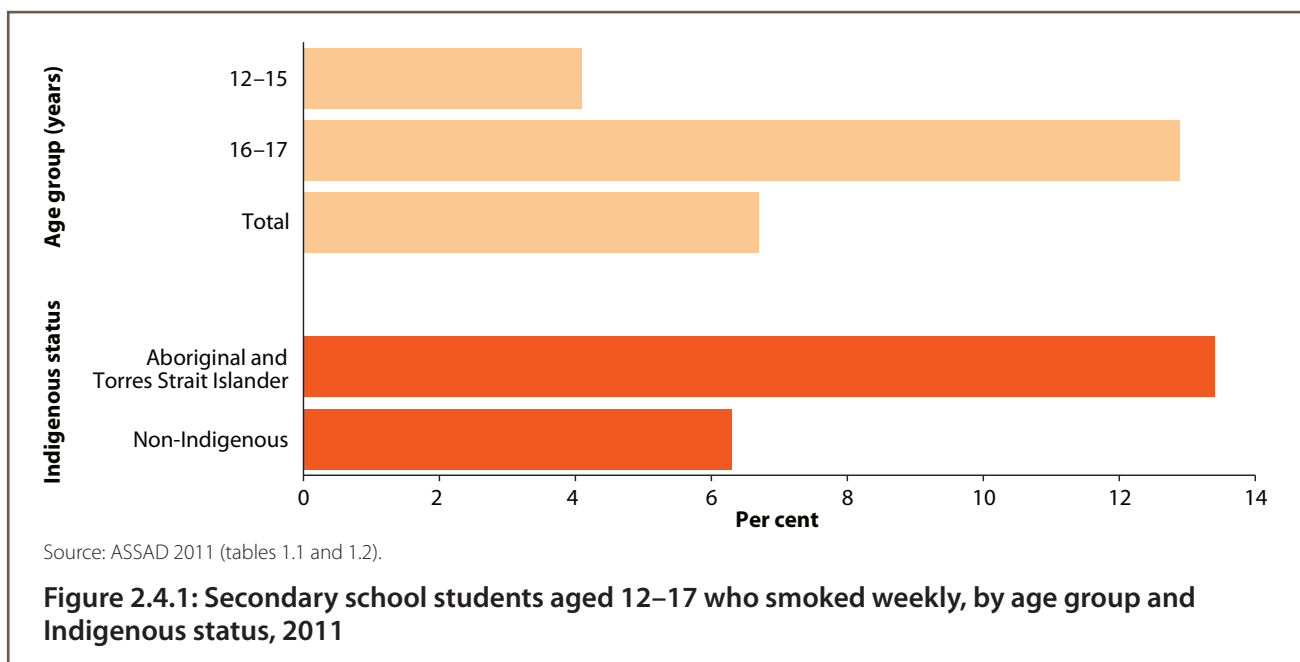
A large amount of available spending money, living in *Outer regional* areas, being Aboriginal or Torres Strait Islander, or being in later teen years were most highly associated with smoking at least weekly.

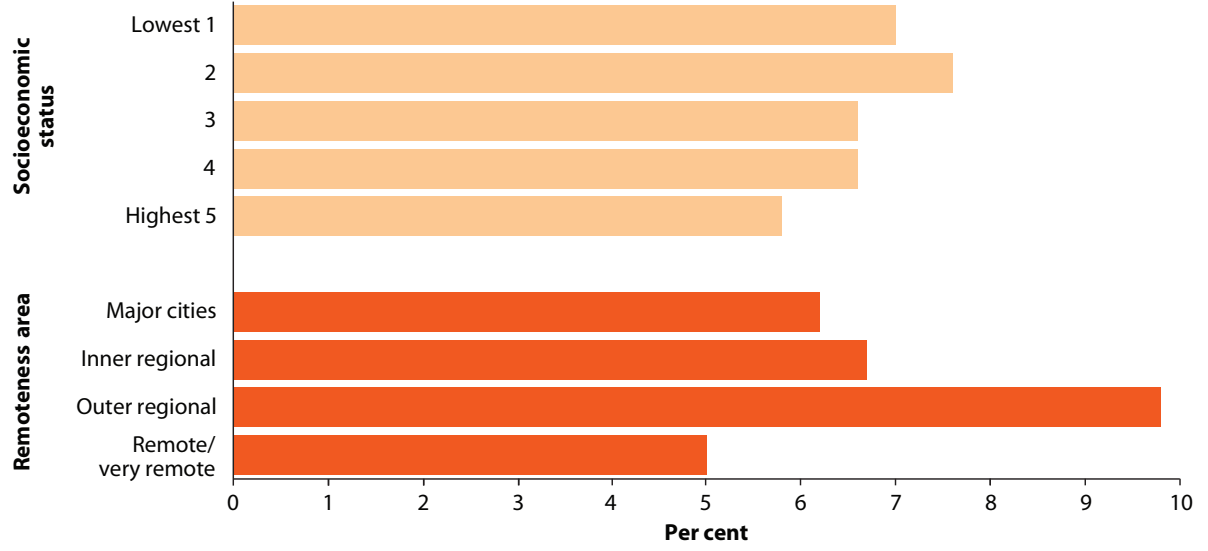
Description:	The proportion of young people aged 12–17 who smoked at least one day per week.
Numerator:	The number of secondary school students aged 12–17 who smoke tobacco at least one day in the previous week.
Denominator:	The total number of secondary school students aged 12–17.
Data source:	2011 Australian Secondary Schools Alcohol and Drug (ASSAD) survey.

Baseline data

- In 2011, an estimated 6.7% of young people aged 12–17 smoked tobacco at least weekly (weekly smokers) (Table 1.1).
- Secondary school students aged 16–17 were 3.1 times as likely to smoke at least weekly as those aged 12–15 (12.9% compared with 4.1%) (Figure 2.4.1), with males more likely to smoke weekly than females across all age groups (Table 1.1).
- Almost 1 in 7 (13.4%) Aboriginal and Torres Strait Islander secondary school students aged 12–17 were weekly smokers, 2.1 times the rate of their non-Indigenous counterparts (6.3%) (Figure 2.4.1).
- Young adults who mainly spoke English at home were 1.3 times as likely to smoke weekly as those who spoke a language other than English (7.0% compared with 5.3%) (Table 1.2).
- The proportion of secondary school students aged 12–17 who had smoked at least weekly was highly associated with the amount of weekly spending money they had; however, average spending money is highly correlated with age. For both secondary school students aged 12–15 and 16–17, those who had \$41 or more to spend each week were much more likely to have smoked at least once a week than those who had \$40 or less. For students aged 12–15, those who had more than \$100 of available spending money per week were 6 times as likely to smoke at least weekly as those with no money, while secondary school students aged 16–17 with more than \$100 to spend weekly were 2.4 times as likely to be weekly smokers as those with \$10 or less (Figure 2.4.2).
- Secondary school students aged 12–17 who lived in areas with the lowest and second lowest SES were more likely to smoke than those living in more advantaged areas (7.0% and 7.6%, respectively). Students living in the highest SES areas were the least likely to smoke weekly (5.8%) (Figure 2.4.3).

- About 1 in 10 (9.8%) secondary school students aged 12–17 who lived in *Outer regional* areas smoked weekly, and they were twice as likely to smoke weekly as students living in *Remote and very remote* areas (5.0%) (Figure 2.4.3).
- It might be useful to take into account the proportion of secondary school students who smoked daily; however, the proportion is too low to provide reliable and stable estimates and reflect significant change over time. In 2011, only 1.8% of secondary school students aged 12–17 were daily smokers (1.0% for those aged 12–15 and 3.6% for those aged 16–17).





Source: ASSAD 2011 (Table 1.3).

Figure 2.4.3: Secondary school students aged 12–17 who smoked weekly, by socioeconomic status and remoteness area, 2011

Specification and baseline data for Indicator 13: Fewer young people smoking

In 2011, 8.9% of secondary school students aged 12–17 smoked tobacco at least monthly.

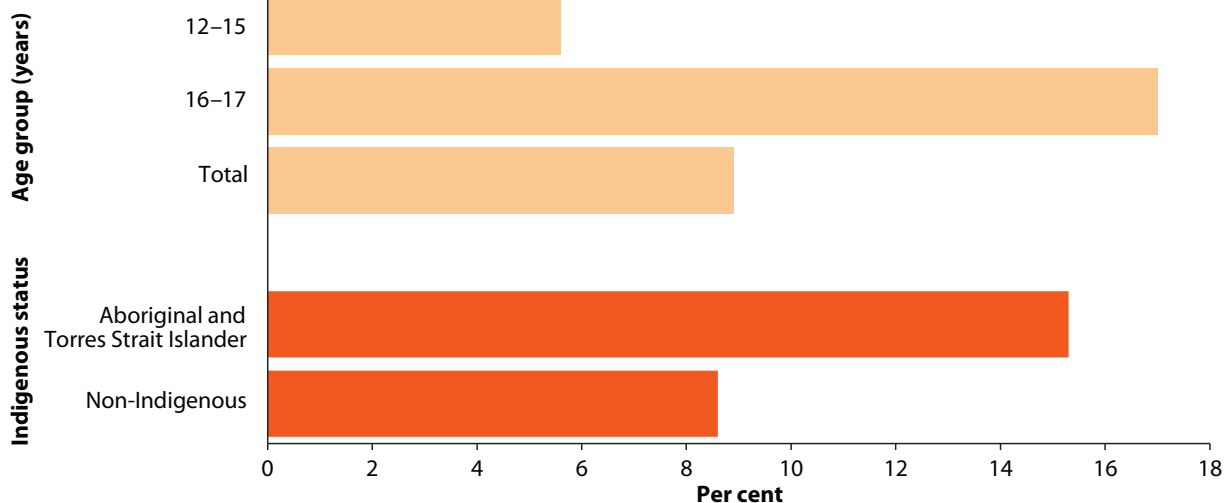
KEY FINDING

Secondary school students aged 12–17 were most likely to smoke at least monthly if they had a larger amount of available spending money, lived in *Outer regional* areas, were Aboriginal or Torres Strait Islander, or were in later teen years.

Description:	The proportion of secondary school students aged 12–17 who smoked at least once in the previous 4 weeks.
Numerator:	The number of secondary school students aged 12–17 who reported smoking tobacco at least once in the previous 4 weeks.
Denominator:	The total number of students aged 12–17.
Data source:	2011 Australian Secondary Students' Alcohol and Drug (ASSAD) Survey.

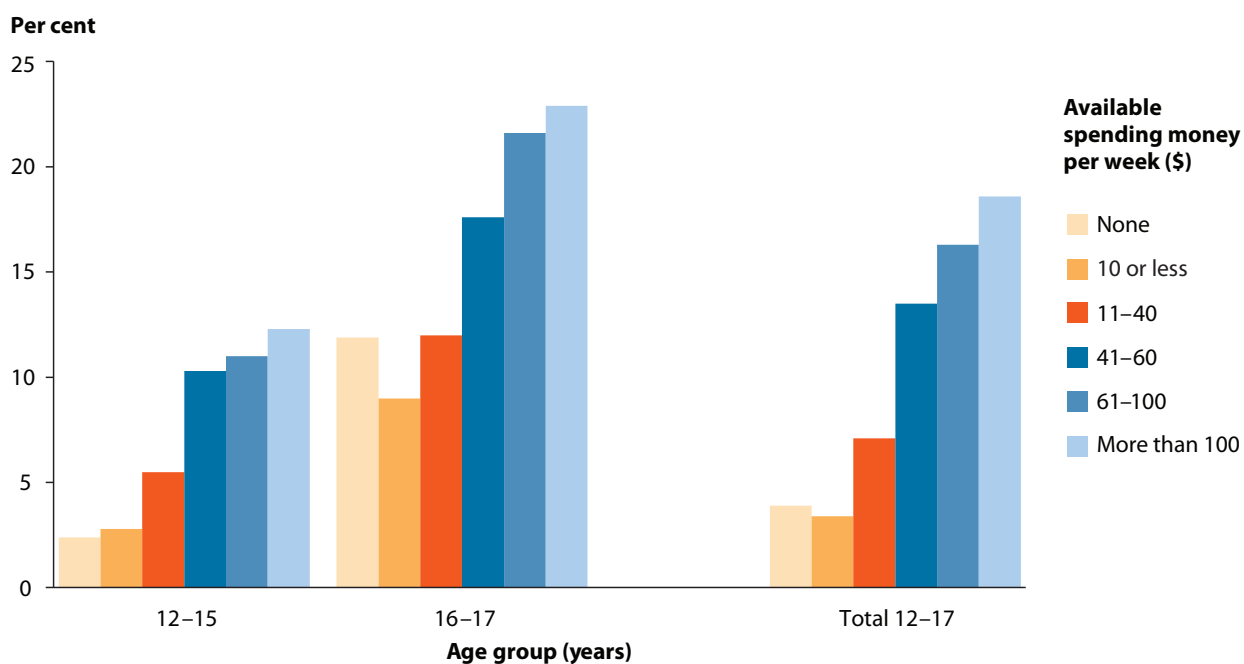
Baseline data

- In 2011, 8.9% of secondary school students aged 12–17 smoked tobacco at least monthly (monthly smokers) (Table 13.1).
- Secondary school students aged 16–17 were 3 times as likely to smoke monthly as those aged 12–15 (17.0% compared with 5.6%) (Figure 2.4.4), with males more likely to smoke monthly than females across all age groups (Table 13.1).
- Aboriginal and Torres Strait Islander secondary school students aged 12–17 were 1.8 times as likely to smoke at least monthly as non-Indigenous students (15.3% compared with 8.6%) (Figure 2.4.4).
- Secondary school students who mainly spoke English at home were 1.3 times as likely to smoke monthly as those who spoke a language other than English (9.3% compared with 7.3%) (Table 13.2).
- The proportion of secondary school students aged 12–17 who smoked at least monthly was highly associated with the amount of weekly spending money they had; however, average spending money is highly correlated with age. For both secondary school students aged 12–15 and 16–17, those who had \$41 or more to spend each week were much more likely to have smoked at least once a month than those who had \$40 or less. For students aged 12–15, those who had more than \$100 of available spending money per week were 5 times as likely to smoke at least monthly as those with no spending money, while students aged 16–17 with more than \$100 to spend weekly were 2.5 times as likely to be monthly smokers as those with \$10 or less (Figure 2.4.5).
- Secondary school students aged 12–17 living in areas with the second lowest and second highest SES were more likely to be monthly smokers than those living in other SES areas (10.2% and 9.6%, respectively). Those living in areas with the highest SES were the least likely to smoke monthly (7.8%) (Figure 2.4.6).
- Secondary school students aged 12–17 living in *Outer regional* areas were 1.6 times as likely to smoke at least monthly as people aged 12–17 living in *Major cities* and *Inner regional* areas (13.2% compared with 8.5% for both *Major cities* and *Inner regional* areas) and twice as likely to smoke monthly as those living in *Remote and very remote* areas (6.7%) (Figure 2.4.6).



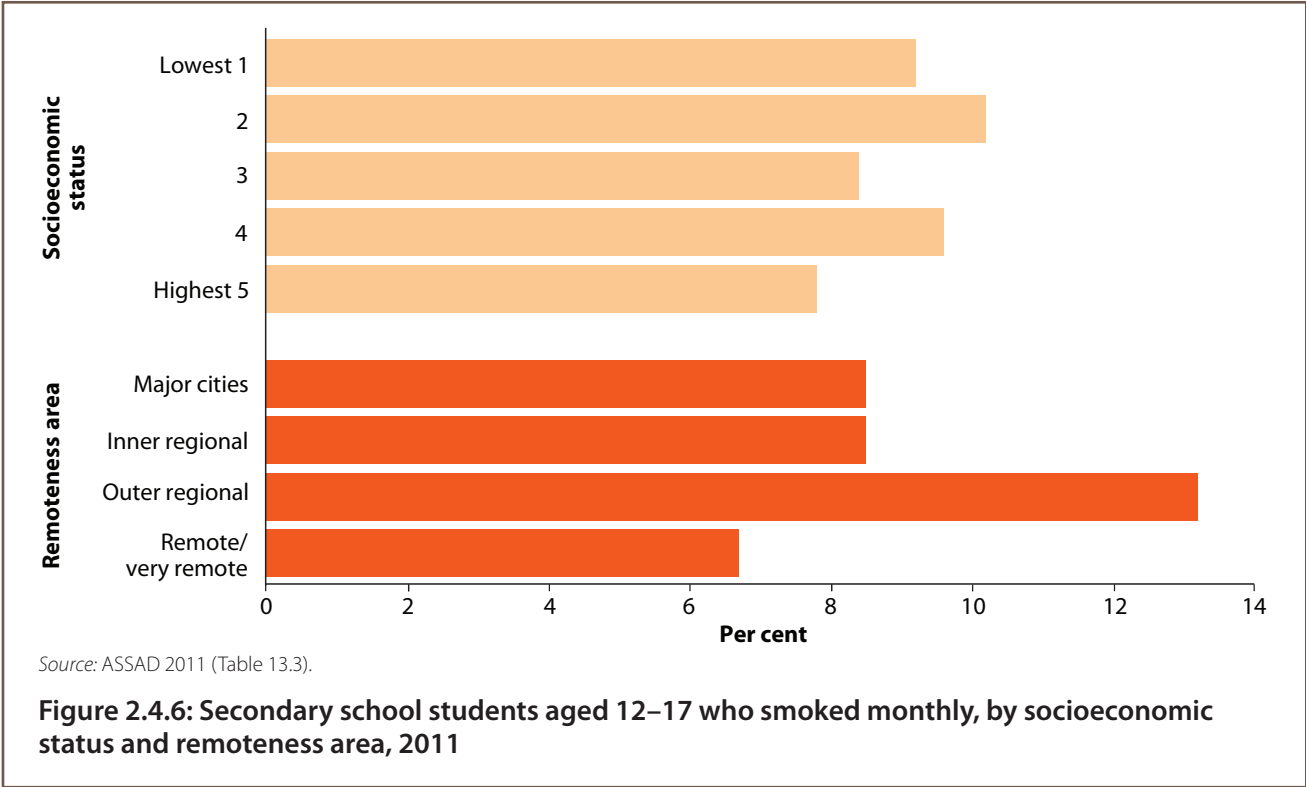
Source: ASSAD 2011 (tables 13.1 and 13.2).

Figure 2.4.4: Secondary school students aged 12-17 who smoked monthly, by age group and Indigenous status, 2011



Source: ASSAD 2011 (Table 13.4).

Figure 2.4.5: Secondary school students aged 12-17 who smoked monthly, by age group and available spending money per week (\$), 2011



Specification and baseline data for Indicator 3: Fewer adults smoking regularly

In 2007–08, 18.9% of adults smoked tobacco daily.

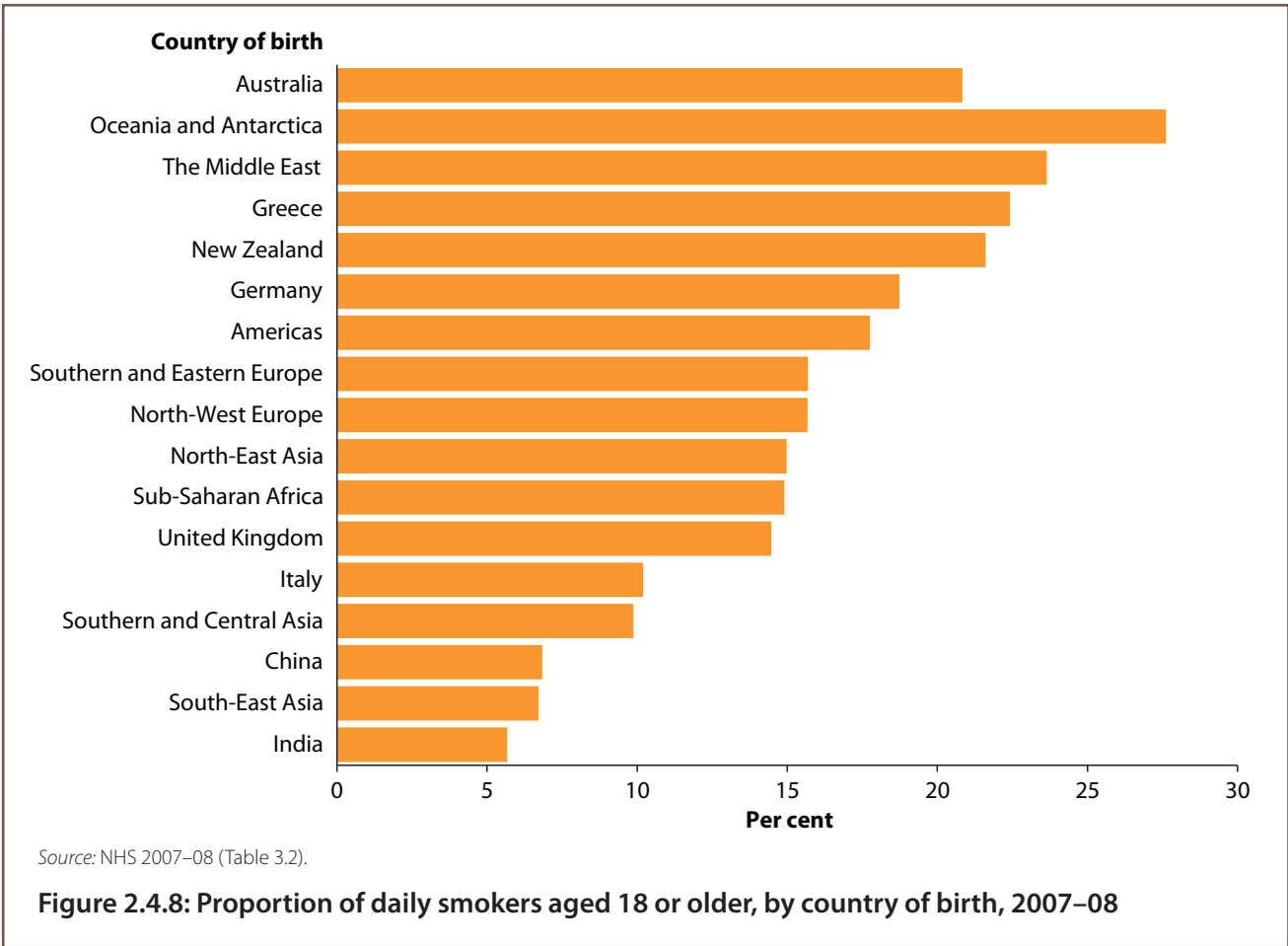
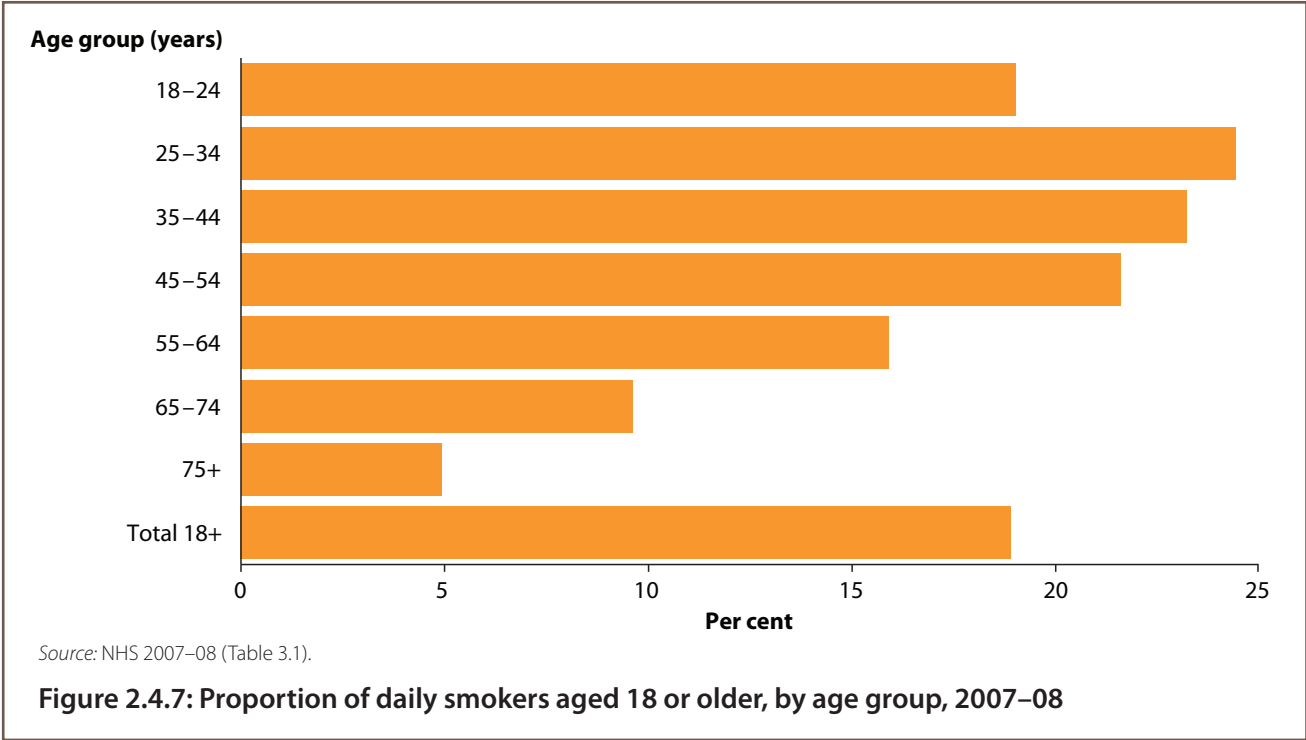
KEY FINDING

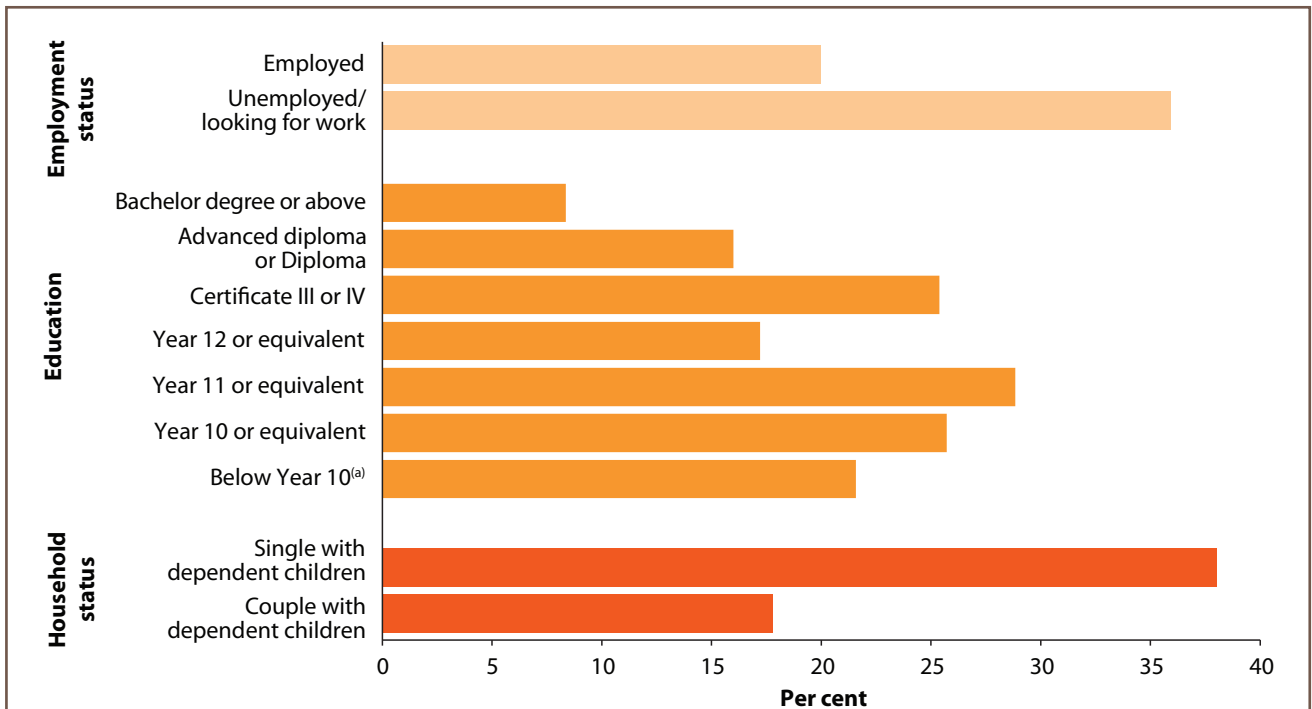
Adults were more likely to smoke daily than other groups if they were aged 25–34, were unemployed, had lower educational attainment, lived in a single-parent household or lived in *Remote* areas.

Description:	A regular adult smoker is defined as an adult who smokes 1 or more cigarettes, roll-your-own cigarettes, cigars or pipes at least once a day. Chewing tobacco and the smoking of non-tobacco products were excluded.
Numerator:	The number of people aged 18 or older who smoke tobacco at least once a day.
Denominator:	The total number of people aged 18 or older.
Data source:	2007–08 National Health Survey (NHS) (primary); 2010 National Prisoner Health Data Collection (NPHDC) (prison entrants).

Baseline data

- In 2007–08, 18.9% of adults smoked cigarettes, roll-your-own cigarettes, cigars or pipes at least once a day (Table 3.1). After adjusting for differences in the age structure of the population, the age-standardised rate of daily smokers was 19.1% (Table 3.5).
- The proportion of people smoking daily was highest among those aged 25–34 (24%) and declined with age, with only 4.9% of people aged 75 or older smoking daily (Figure 2.4.7).
- Adults who spoke English at home were 1.5 times as likely to smoke daily as those who mainly spoke languages other than English at home (19.7% compared with 12.2%) (Table 3.2).
- In adults, the prevalence of daily smoking was highest among those born in Australia, Oceania, the Middle East, Greece and New Zealand, with more than 20% of adults from these regions smoking daily (Figure 2.4.8).
- Among adults of working age (18–64), those who were unemployed had higher rates of daily smoking (36%) than those who were employed (20%) (Figure 2.4.9).
- Adults whose highest educational attainment was a certificate III or IV or Year 11 or below were the most likely to smoke daily compared with all other levels of educational attainment (Figure 2.4.9).
- Single parents with dependent children were 2.1 times as likely to smoke daily as couples with dependent children (38% compared with 17.8%) (Figure 2.4.9; Table 3.2).
- Adults living in *Outer regional* or *Remote* areas were 1.5 times as likely to smoke daily as people from *Major cities* (Figure 2.4.10).
- Daily smoking was highest in the Northern Territory and Tasmania (both 23%), and lowest in the Australian Capital Territory (16.3%) (Figure 2.4.10). However, the age structure of the population varies between states and territories and needs to be taken into account when comparing rates across states and territories (see Table 3.6 for the age-standardised rates).
- About 3 in 4 (74%) prison entrants were regular smokers (smoked every day or most days), according to the 2010 NPHDC (Table 3.7).

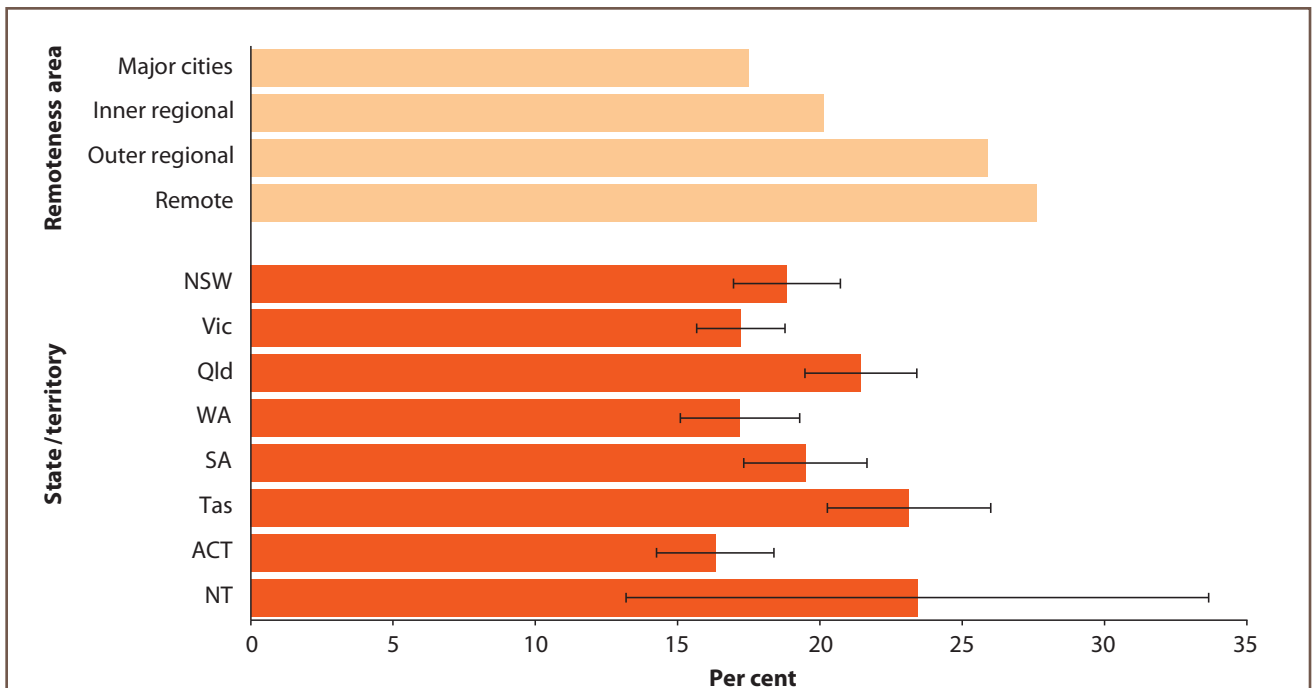




(a) Includes people whose highest level of attainment was a Certificate 1 or 2, and those who never attended school.

Source: NHS 2007–08 (Table 3.2).

Figure 2.4.9: Proportion of daily smokers aged 18 or older, by (selected) employment status, education and (selected) household status, 2007–08



Source: NHS 2007–08 (tables 3.3 and 3.4).

Figure 2.4.10: Proportion of daily smokers aged 18 or older, by remoteness area and state and territory, 2007–08

Specification and baseline data for Indicator 14: Current adult smokers smoking occasionally (weekly or less than weekly)

In 2007–08, 9.0% of current smokers smoked weekly or less than weekly.

KEY FINDING

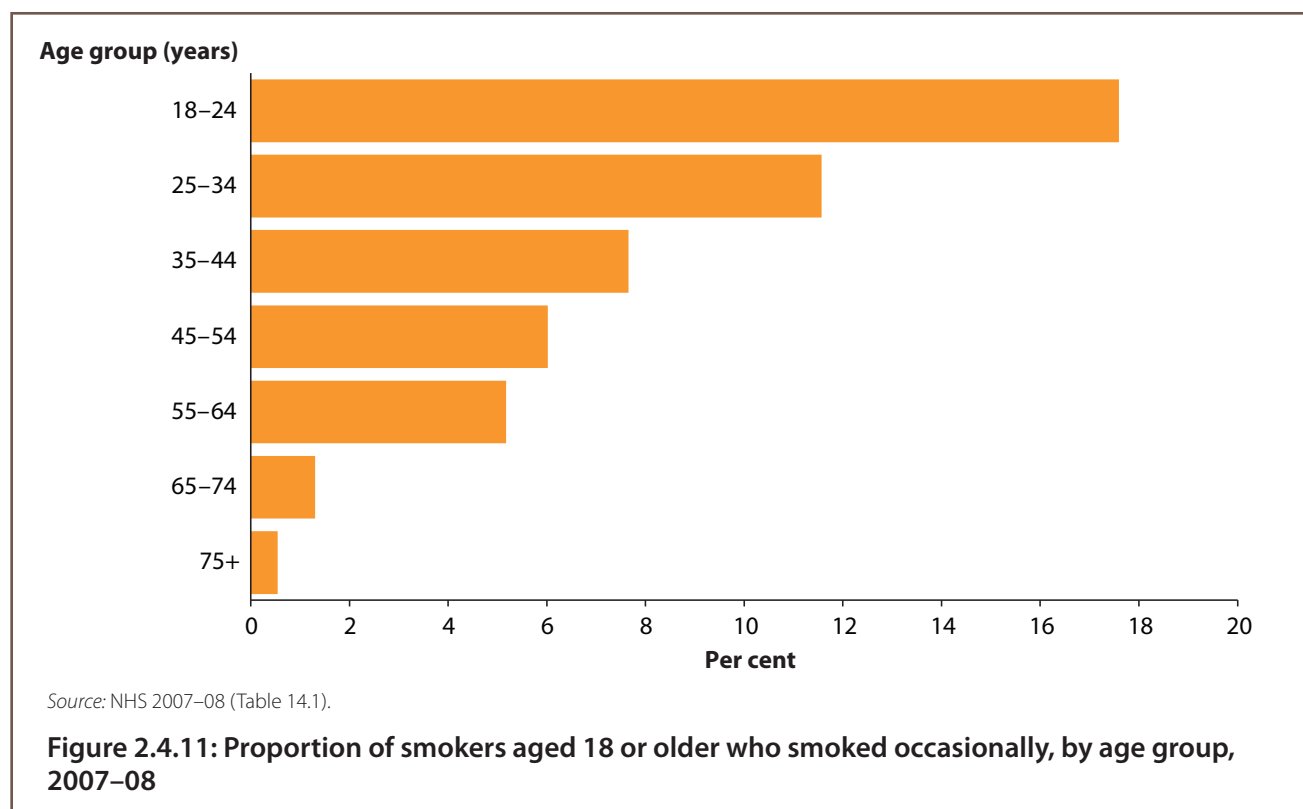
Current smokers were more likely to smoke weekly or less than weekly than other smokers if they lived in socioeconomically advantaged areas, *Major cities*, or two parent households, or if they were younger or more educated.

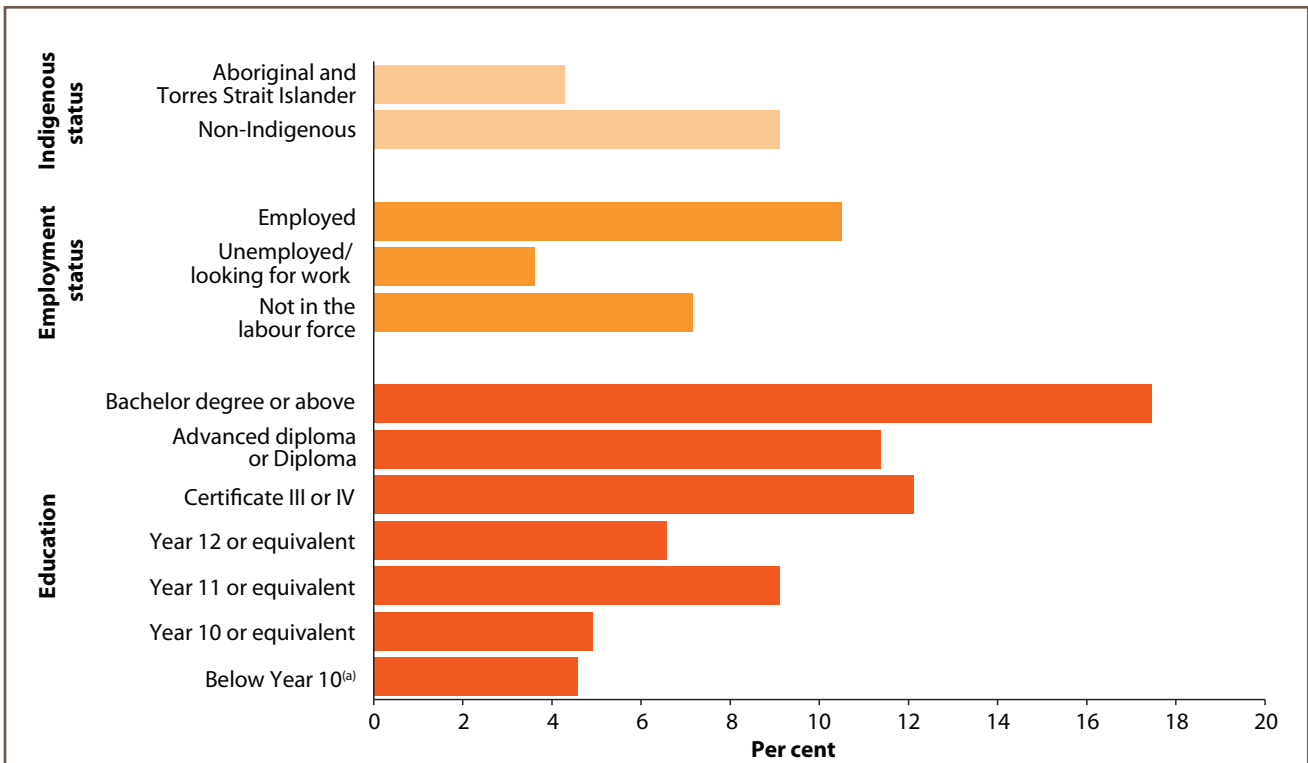
Description:	An adult smoker who smokes 1 or more cigarettes, roll-your-own cigarettes, cigars or pipe weekly or less than weekly, but not daily.
Numerator:	The number of people aged 18 or older who smoke tobacco weekly or less than weekly, but not daily.
Denominator:	The total number of current smokers aged 18 or older.
Data source:	2007–08 National Health Survey (NHS) (primary); 2008 National Aboriginal and Torres Strait Islander Social Survey (NATSISS) (Aboriginal and Torres Strait Islander); 2010 National Prisoner Health Data Collection (NPHDC) (prison entrants).

Baseline data

- In 2007–08, 9.0% of adults who currently smoked cigarettes, roll-your-own cigarettes, cigars or pipes did so weekly or less than weekly, but not daily (occasionally) (Table 14.1).
- Smokers aged 18–24 were the most likely to smoke occasionally (17.6%), with the proportion smoking occasionally declining with age (Figure 2.4.11).
- Aboriginal and Torres Strait Islander adults were considerably more likely to be a daily smoker than non-Indigenous adults (48% compared with 18.9%) (tables 3.1 and 8i.1), and, of current smokers, were less likely to smoke occasionally. According to the 2008 NATSISS, 4.3% of Aboriginal and Torres Strait Islander adults who were current smokers smoked only occasionally, compared with 9.1% of non-Indigenous adults (Figure 2.4.12).
- There was little difference between the proportion of occasional smokers who mainly spoke English at home (8.9%) and those who spoke languages other than English (10.1%) (Table 14.2).
- Smokers who were employed were 2.9 times as likely to smoke occasionally as those who were unemployed (10.5% compared with 3.6%) (Figure 2.4.12).
- Smokers with a post-school qualification (certificate III or IV, diploma, advanced diploma or bachelor degree or higher) were more likely to smoke occasionally than those with a secondary qualification of year 12 or below (Figure 2.4.12).
- Adult smokers from households composed of a couple with children were the most likely to smoke occasionally (11.5%), and households with couples without children were the least likely (7.2%) (Table 14.2).
- Smokers living in areas with the lowest SES were less likely to smoke occasionally than those living in areas with the highest SES (6.4% compared with 13.6%) (Figure 2.4.13).

- A similar proportion of occasional smokers lived in *Major cities* and *Remote* areas (10.2% and 10.6%, respectively), but a lower proportion lived in regional areas (7.3% for smokers in *Inner regional* areas, and 5.7% for *Outer regional* areas) (Figure 2.4.13).
- Smokers in the Australian Capital Territory smoked less often than smokers in Tasmania—the Australian Capital Territory had the highest proportion of occasional smokers (15.3%), while Tasmania had the lowest (6.1%) (Table 14.4).
- According to the 2010 NPHDC, more than 1 in 10 (10.8%) prison entrants who were smokers smoked only occasionally (excludes people smoking most days; see NPHDC data quality statement for further information) (Table 14.6).

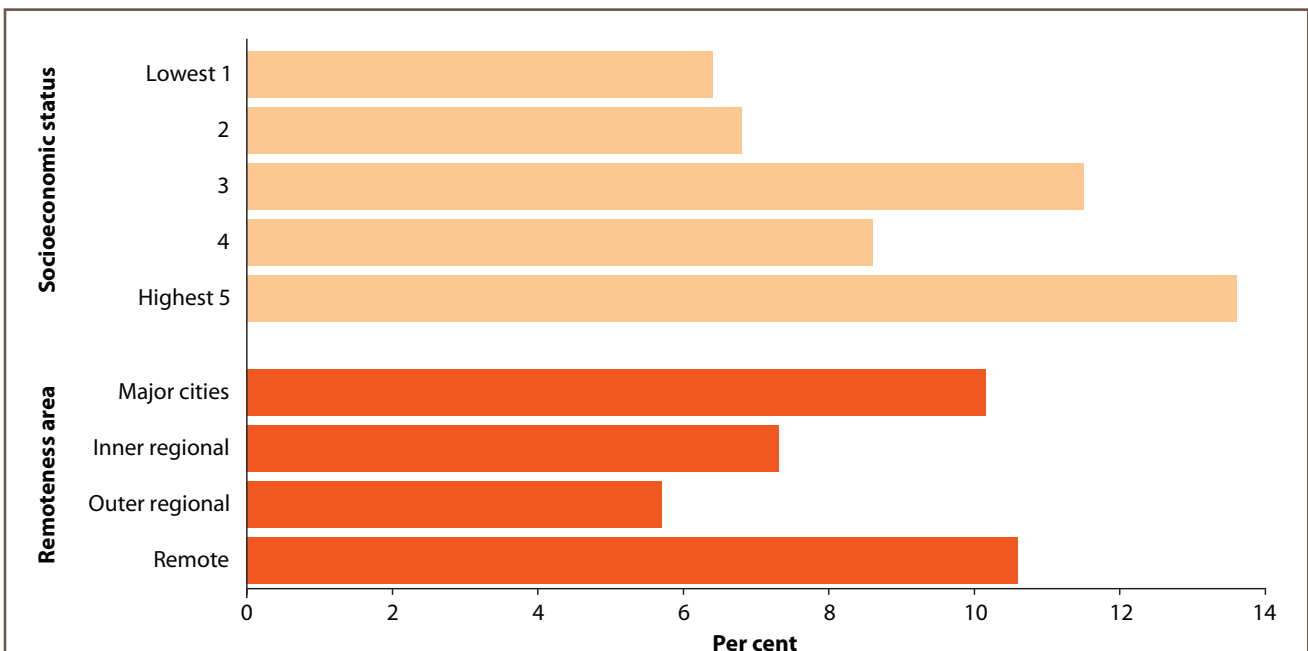




(a) Includes people whose highest level of attainment was a Certificate 1 or 2, and those who never attended school.

Source: NHS 2007–08 (Table 14.2); 2008 NATSISS (Table 14.5).

Figure 2.4.12: Proportion of smokers aged 18 or older who smoked occasionally, by Indigenous status, employment status and education, 2007–08 and 2008



Source: NHS 2007–08 (Table 14.3).

Figure 2.4.13: Proportion of smokers aged 18 or older who smoked occasionally, by socioeconomic status and remoteness area, 2007–08

Specification and baseline data for Indicator 8i: Fewer adults smoking regularly among Aboriginal and Torres Strait Islander people

In 2008, almost half (48%) of Aboriginal and Torres Strait Islander people aged 18 or older smoked tobacco daily.

KEY FINDING

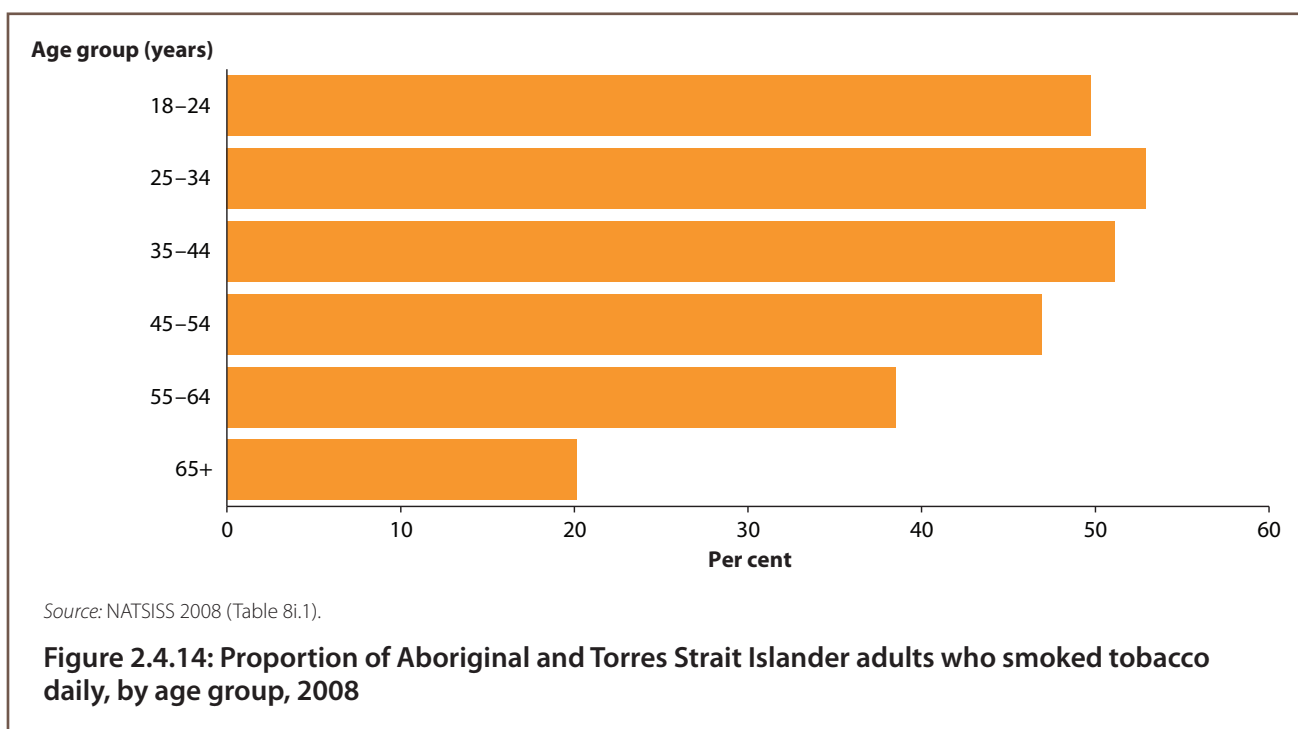
Similar to the general population, Aboriginal and Torres Strait Islander people were more likely to smoke daily if they had achieved lower education levels, were unemployed, or lived in low socioeconomic status areas.

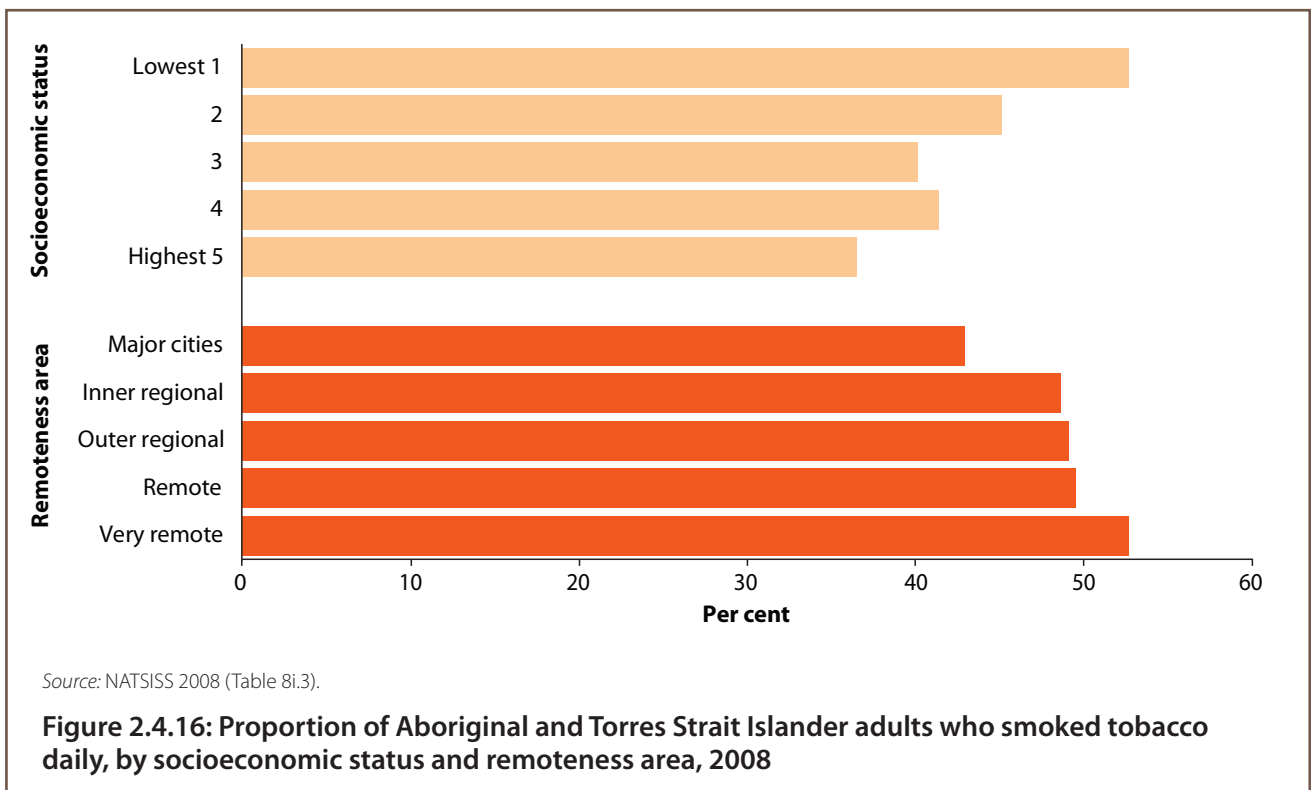
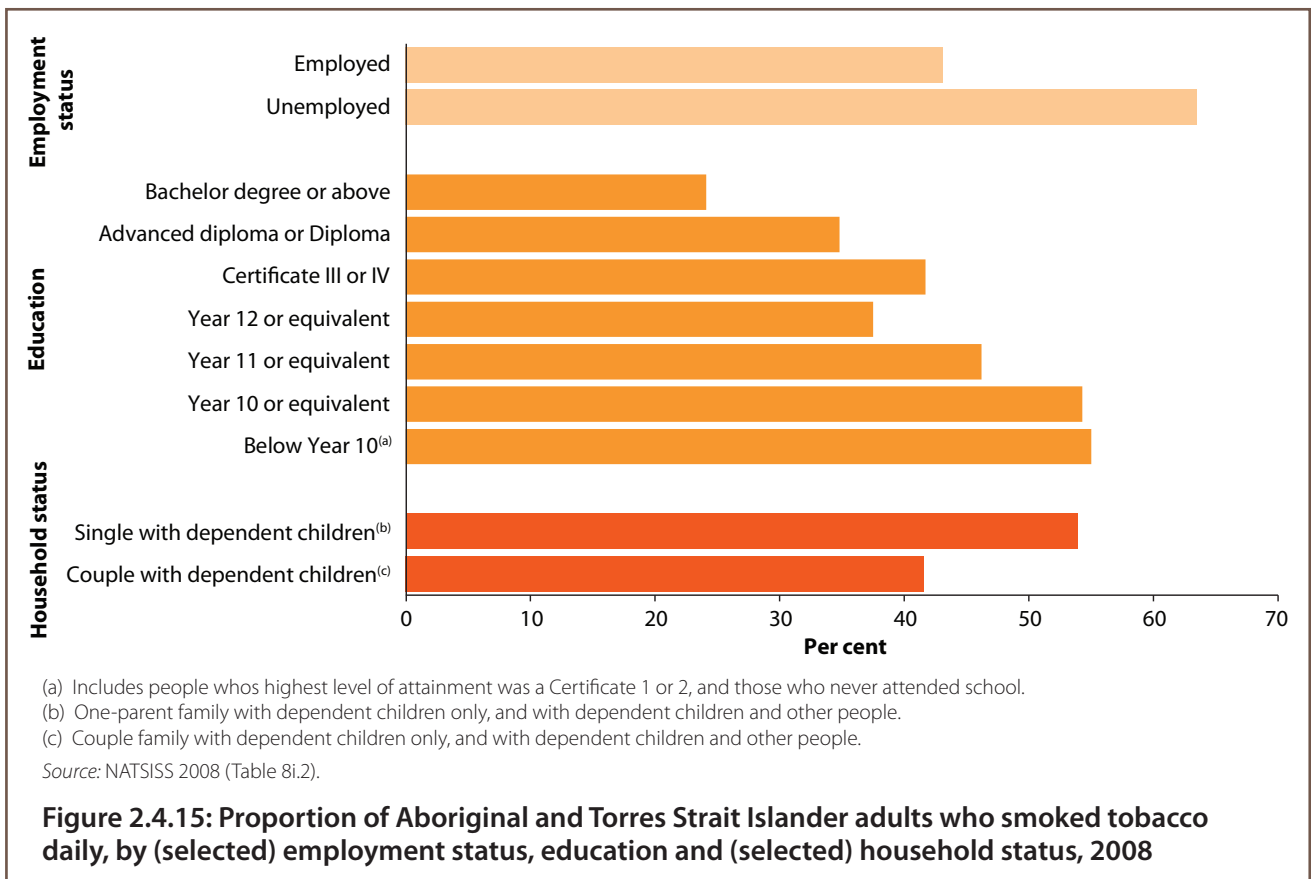
Description:	The proportion of Aboriginal and Torres Strait Islander people aged 18 or older who smoke daily.
Numerator:	The number of Aboriginal and Torres Strait Islander people aged 18 or older who smoke daily.
Denominator:	The total number of Aboriginal and Torres Strait Islander people aged 18 or older.
Data source:	2008 National Aboriginal and Torres Strait Islander Social Survey (NATSISS) (primary); 2010 National Prisoner Health Data Collection (NPHDC) (prison entrants).

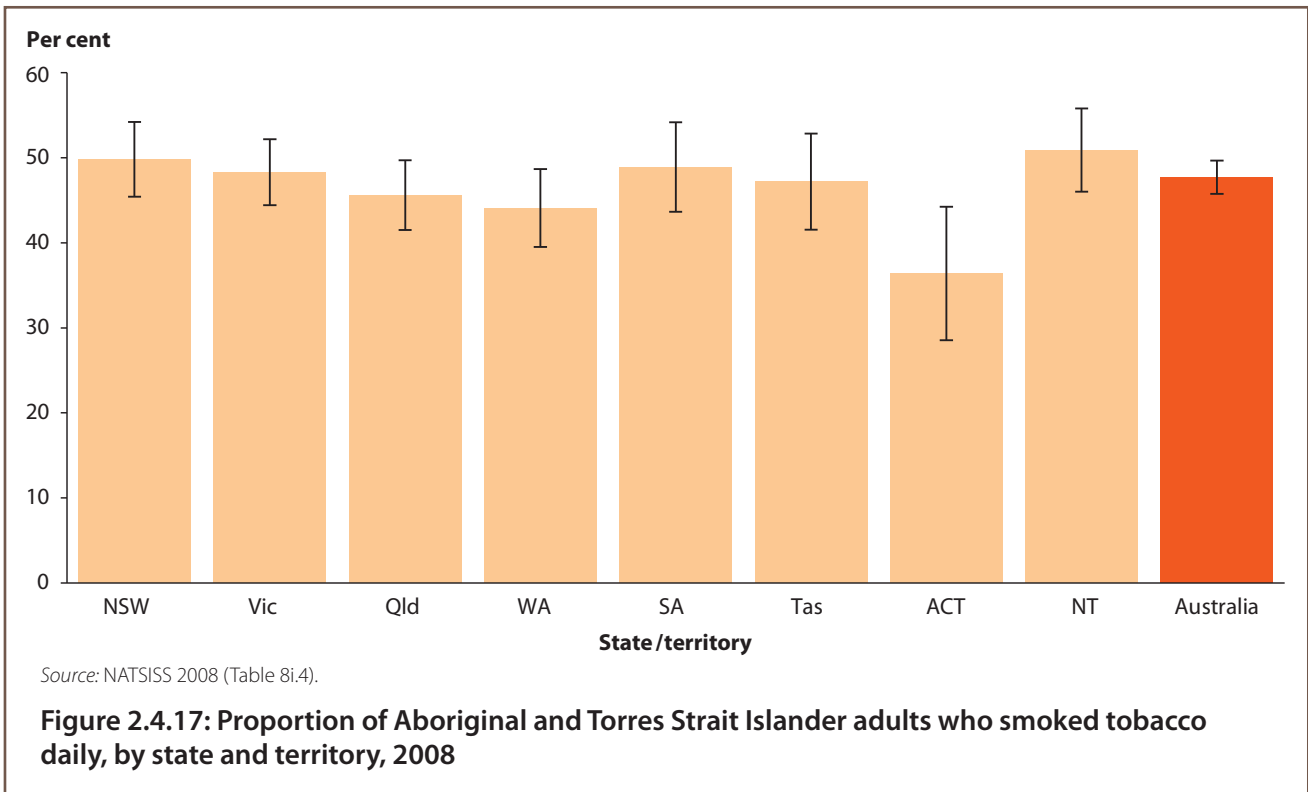
Baseline data

- Almost half (48%) of Aboriginal and Torres Strait Islander adults smoked daily in 2008, with men slightly more likely than women to smoke daily (50% compared with 46%) (Table 8i.1).
- After adjusting for differences in the age structure of the population, Aboriginal and Torres Strait Islander Australians were almost twice as likely as non-Indigenous Australians to smoke daily (45% compared with 18.9%) (Table 8i.6)
- Among Aboriginal and Torres Strait Islander people, rates of daily smoking were higher in younger age groups (reaching 53% for those aged 25–34) and lower among those aged 55 or older. Rates of smoking in the general population followed a similar pattern by age, although at considerably lower levels (Figure 2.4.14).
- Daily smoking was less common among Aboriginal and Torres Strait Islander adults who were employed (43%) as among those who were unemployed (64%) (Figure 2.4.15).
- In 2008, Aboriginal and Torres Strait Islander adults who had completed a bachelor degree or higher were less likely to be daily smokers (24%) than those who had completed Year 10 (54%) or below (55% for Year 9 or below) (Figure 2.4.15).
- Aboriginal and Torres Strait Islander single parents with dependent children were more likely to smoke daily than couple parents with dependent children (54% compared with 42%) (Figure 2.4.15).
- Aboriginal and Torres Strait Islander adults living in the lowest SES areas were 1.4 times as likely to smoke daily as those living in the highest SES areas (53% compared with 37%) (Figure 2.4.16).
- Aboriginal and Torres Strait Islander adults living in *Remote and very remote* areas were more likely to smoke daily than those living in *Major cities* (53% compared with 43%) (Figure 2.4.16).

- Aboriginal and Torres Strait Islander adults in the Australian Capital Territory were the least likely to smoke daily (36%). Across the other states and territory, the daily smoking rate ranged from 44% in Western Australia to 51% in the Northern Territory (Figure 2.4.17). After adjusting for the differences of the age structure of the states and territories, Aboriginal and Torres Strait Islander adults in New South Wales were the most likely to smoke daily (48%), and those in the Australian Capital Territory the least likely (30%) (Table 8i.6).
- Similar to the general population, lower rates of daily smoking were reported by people who had characteristics associated with socioeconomic advantage (that is, higher education levels, employment, and lived in the highest SES areas).
- In 2010, 74% of Aboriginal and Torres Strait Islander prison entrants smoked every day or most days), according to the 2010 (NPHDC) (Table 8i.8).







Specification and baseline data for Indicator 8ii: Fewer adults smoking regularly among people of low socioeconomic status

In 2007–08, 28% of people living in the lowest socioeconomic status (SES) area, and 21% living in the second lowest SES area smoked tobacco daily.

KEY FINDING

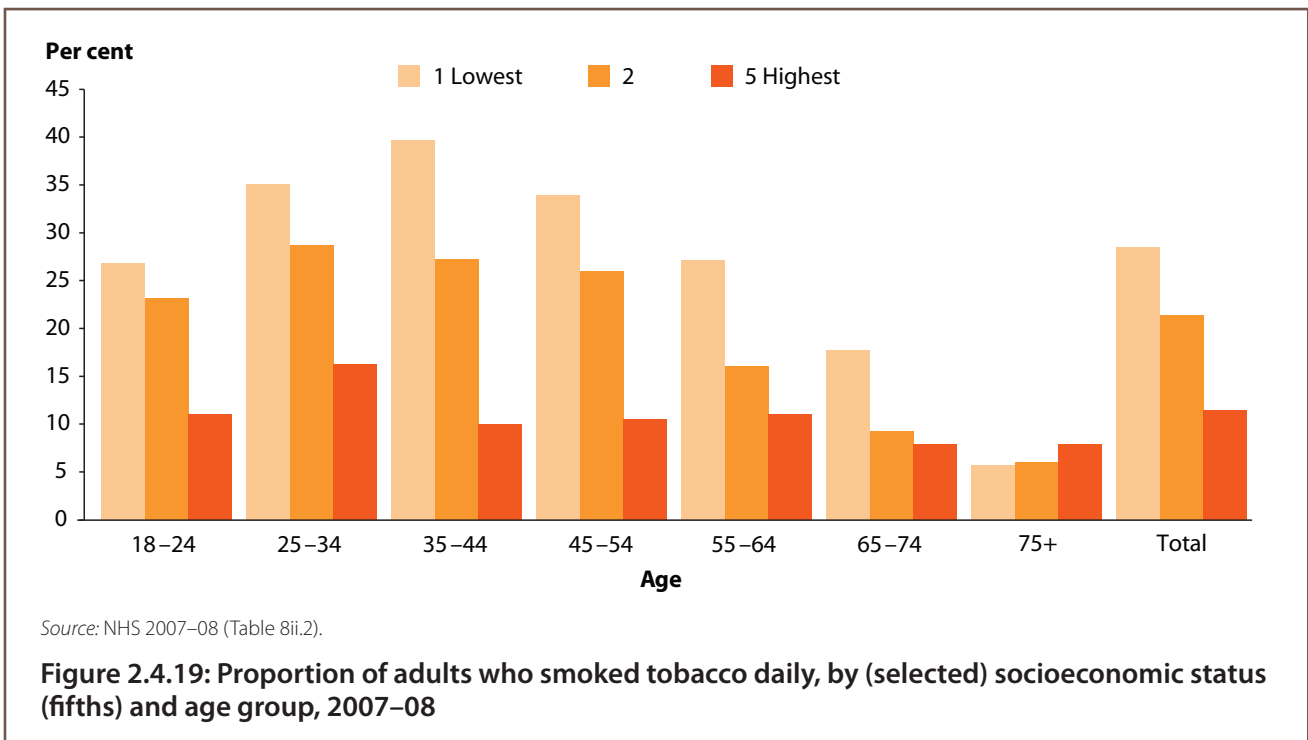
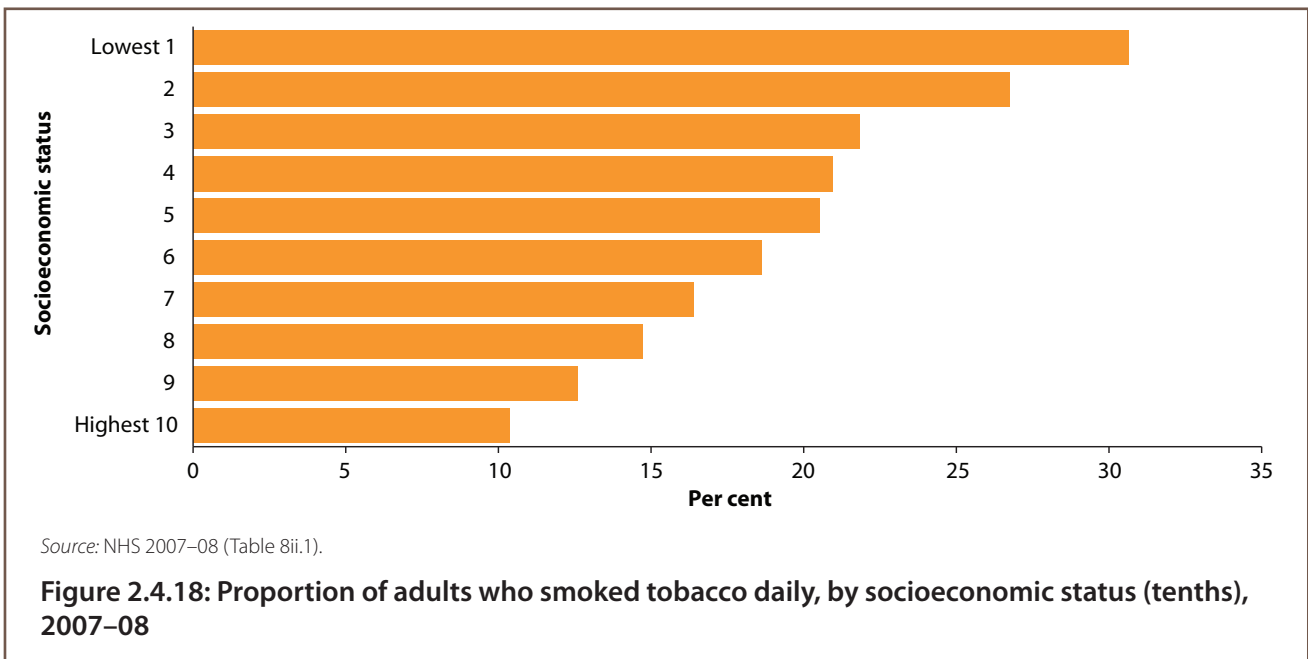
Tobacco smoking is strongly associated with low SES; people with the lowest SES decile were almost 3 times as likely to smoke as people with the highest SES decile. People living in the lowest SES area who are unemployed or are single parents with dependent children had the highest daily smoking rates in Australia, with almost half smoking daily.

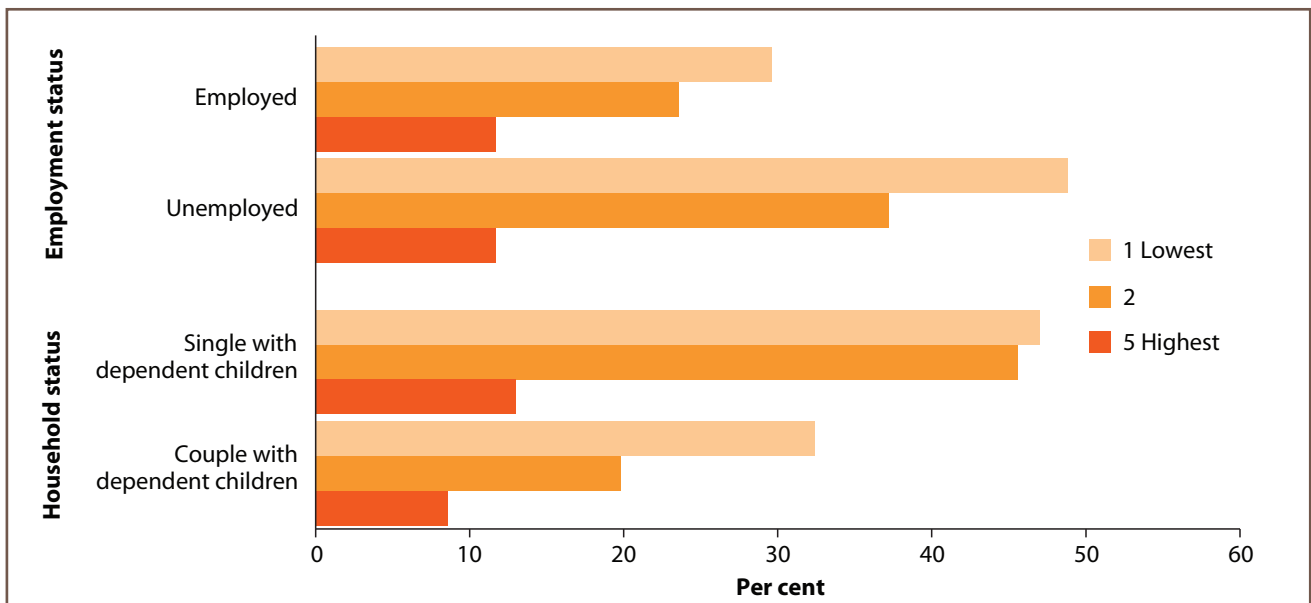
Description:	The proportion of people aged 18 or older living in the 2 lowest SES quintiles who smoke daily.
Numerator:	The number of people aged 18 or older living in the 2 lowest SES areas who smoke tobacco daily (using the 2006 Socio-Economic Indexes for Areas (SEIFA) Index of Relative Socio-economic Advantage and Disadvantage).
Denominator:	The total number of people aged 18 or older living in the lowest 2 SES areas.
Data source:	2007–08 National Health Survey (NHS) (primary).

Baseline data

- Adults were more likely to smoke daily in lower SES areas. People living in the lowest SES fifth were almost 2.5 times as likely to smoke daily as people in the highest SES fifth (Table 8ii.2). The difference is even wider when comparing tenth—adults living in the lowest SES tenth were 3 times as likely to smoke daily as adults living in the highest SES tenth (31% compared with 10.4%) (Figure 2.4.18).
- More than 1 in 5 adults living in areas with the lowest and second lowest SES fifth areas smoked daily (28% and 21%, respectively) (Table 8ii.2).
- Across all age groups, people from the lowest and second lowest SES fifths were more likely to smoke daily than people from the highest SES fifth, except for people aged 75 or older (Figure 2.4.19).
- Unemployed people who lived in the lowest SES areas had the highest daily smoking rate in Australia, closely followed by single parents with dependent children living in the lowest SES area (49% and 47%, respectively) (Figure 2.4.20).
- Regardless of education level, people from the lowest SES area generally had the highest daily smoking rate (Table 8ii.2). However, people who had completed a bachelor degree or above were far less likely to smoke daily than other education levels, regardless of which SES area they lived in.

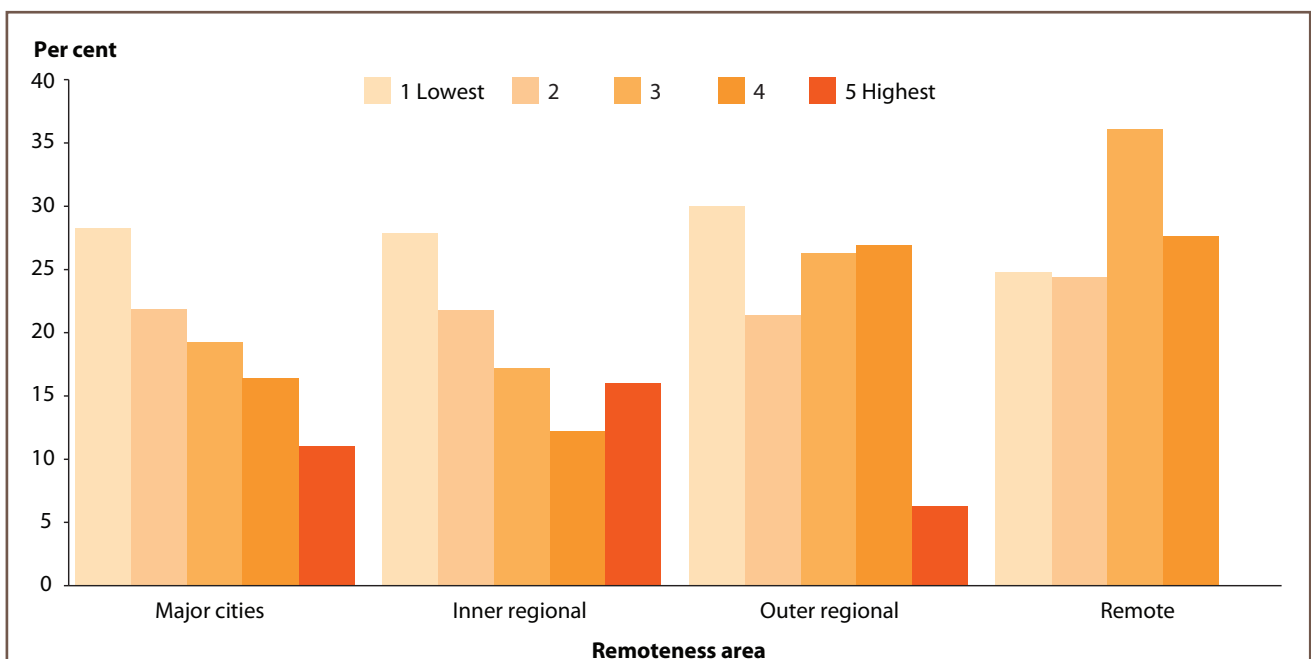
- The proportion of people smoking daily generally rises with increasing levels of socioeconomic disadvantage, but the daily smoking pattern is different for those living in areas that are not *Major cities*. People in *Inner regional* areas and living in the highest SES area had a higher daily smoking rate than those living in the second highest SES area (16% compared with 12%). People living in the 2 lowest SES areas in *Remote* areas (about 25% each) had a lower daily smoking rate than those living in the third (36%) and fourth (28%) SES areas (Figure 2.4.21).
- People living in the lowest SES area had the highest daily smoking rate in *Major cities* (28%), *Inner regional* (28%) and *Outer regional* areas (30%) (Figure 2.4.21).





Source: NHS 2007-08 (Table 8ii.2).

Figure 2.4.20: Proportion of adults who smoked tobacco daily, by (selected) socioeconomic status (fifths), by (selected) employment status and (selected) household status, 2007-08



Note: data for highest SES fifth for Remote areas are not available for publication.

Source: NHS 2007-08 (Table 8ii.3).

Figure 2.4.21: Proportion of adults who smoked tobacco daily, by socioeconomic status and remoteness area, 2007-08

2.5 Cessation

Specification and baseline data for Indicator 4: More adult smokers attempting to quit

In 2010, 45% of adults smokers had made an attempt to quit smoking in the previous 12 months.

KEY FINDING

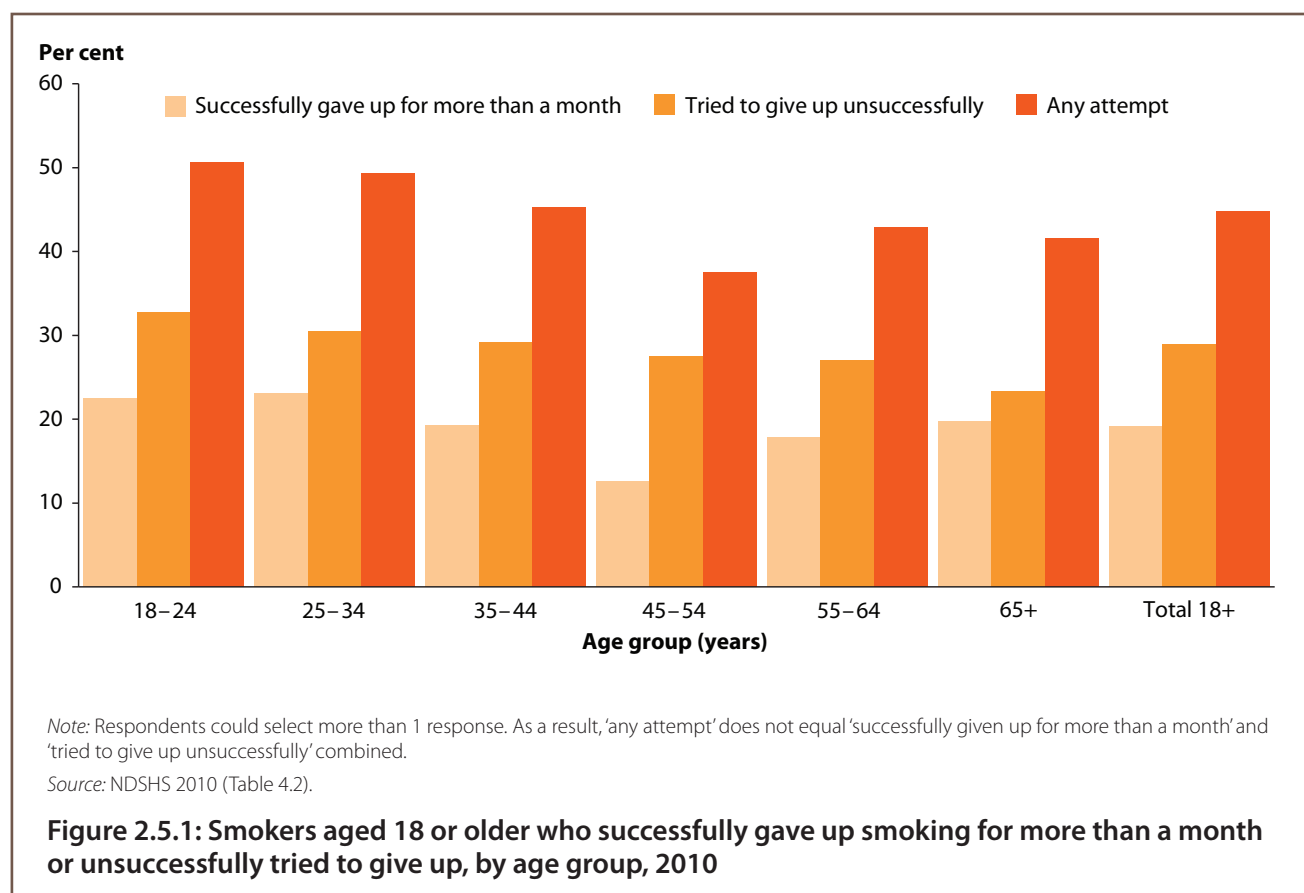
The proportion of smokers trying to quit did not vary much by the social determinants of health, but those who had a higher educational attainment, or lived in *Major cities* or in higher socioeconomic status areas were more likely to successfully quit for at least 1 month.

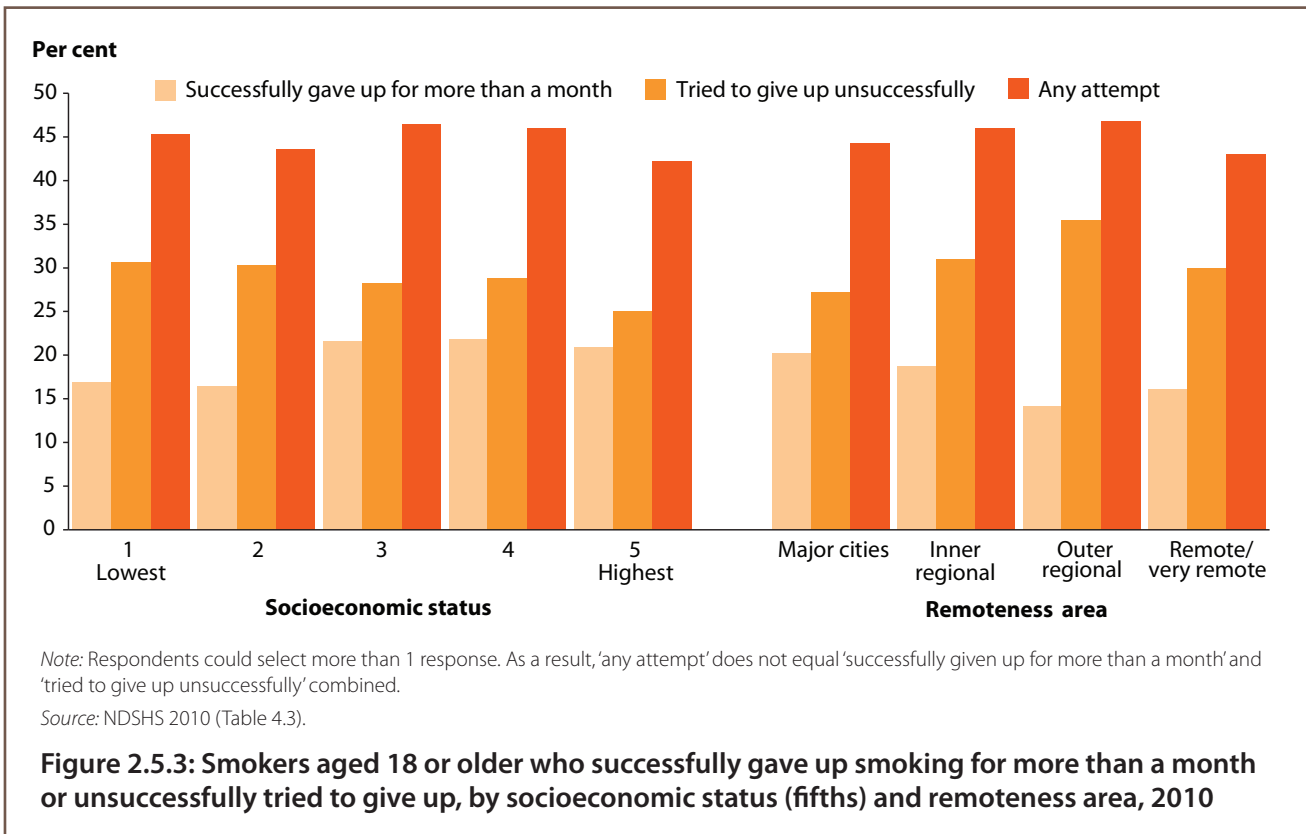
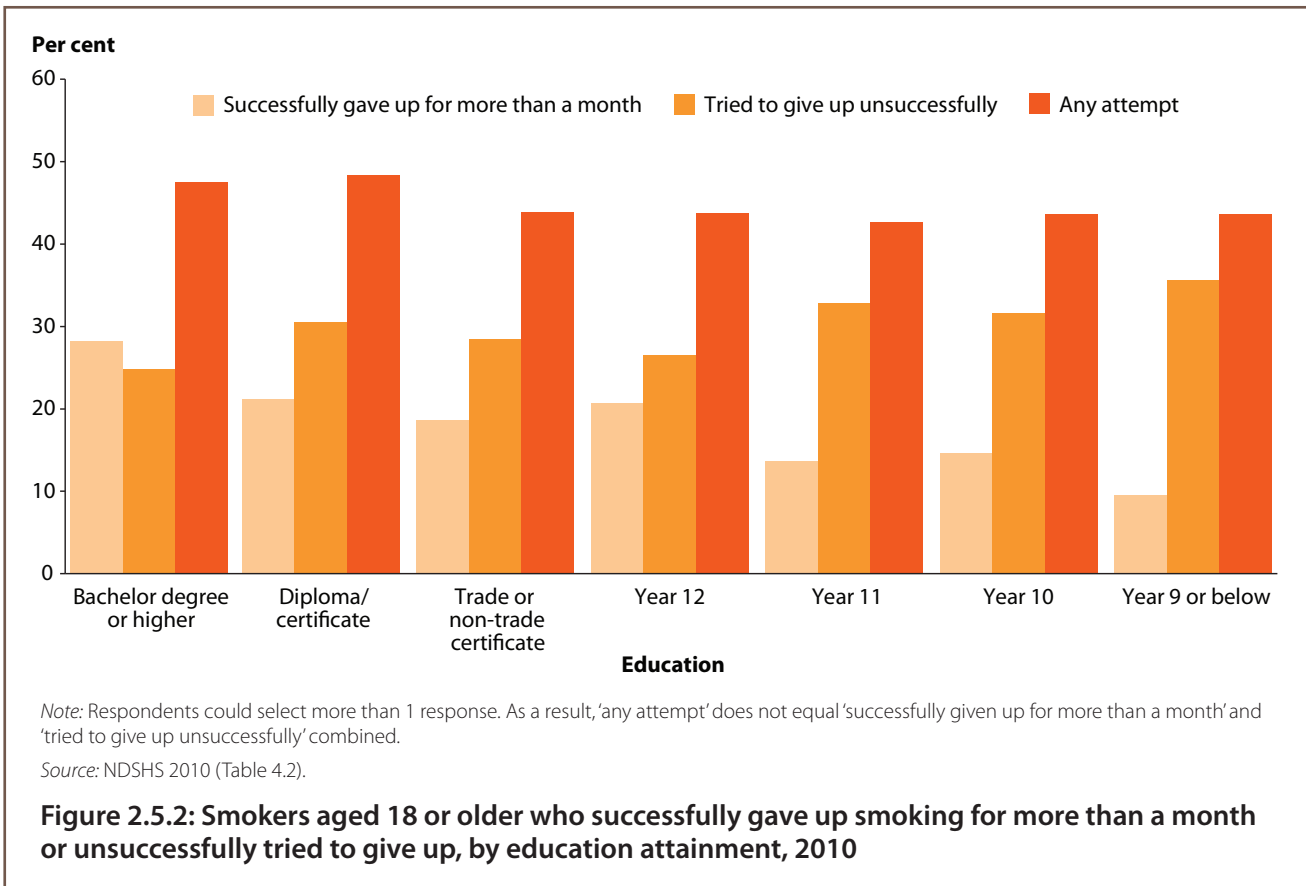
Description:	The proportion of people aged 18 or older who have smoked in the previous 12 months who report successfully giving up smoking for more than a month or unsuccessfully tried to give up in the previous 12 months.
Numerator:	The number of people aged 18 or older who have smoked in the previous 12 months who successfully gave up smoking for more than a month or unsuccessfully tried to give up in the previous 12 months.
Denominator:	The total number of smokers aged 18 or older.
Data source:	2010 National Drug Strategy Household Survey (NDSHS).

Baseline data

- In 2010, almost half (45%) of adult smokers made an attempt to quit smoking (Table 4.1).
- About 1 in 5 (19.1%) current smokers successfully gave up smoking for more than a month, and about 3 in 10 (29%) unsuccessfully tried to give up (Table 4.2).
- People aged 45–54 were the least likely to have successfully (12.6%) quit smoking for more than a month and people aged 25–34 were the most likely age group to have successfully quit for more than a month (12.6% compared with 23.1%) (Figure 2.5.1).
- A smoker's Indigenous status, main language spoken at home, country of birth and employment status appeared to have little influence on quit attempts (Table 4.2).
- Successful quit attempts for at least 1 month were associated with level of education. Adult smokers with a bachelor degree or higher were 3 times as likely to have successfully given up smoking for more than a month as a smoker whose highest level of education was Year 9 or below (28% compared with 9.5%) (Figure 2.5.2).
- Parents with non-dependent children were the least likely household structure to attempt to quit (38%) (Table 4.2).

- Any quit attempt did not vary greatly by socioeconomic status (SES), but smokers living in the highest SES areas had the lowest proportion (42%) of quit attempts compared with any other SES area. Smokers in the lowest 2 SES areas were less likely to have successfully given up for more than a month and more likely to have unsuccessfully tried to give up (Figure 2.5.3).
- Any quit attempt did not vary considerably by remoteness area, but people in *Major cities* were more likely than people in *Remote and very remote* areas to have successfully quit for at least 1 month (20% compared with 16.1%) (Figure 2.5.3).





Specification and baseline data for Indicator 11: Adult ever-smokers are quitting at a younger age

In 2010, adult ex-smokers quit smoking at an average age of 35.3.

KEY FINDING

Ex-smokers living in the lowest socioeconomic status areas quit smoking at an older average age than those in the highest socioeconomic status areas.

Description: The average age adult ex-smokers (smoked at least 100 cigarettes in their lifetime and have not smoked in the previous 12 months) smoked their last cigarette.

Numerator: The sum of age (in years) of adult ex-smokers no longer smoking.

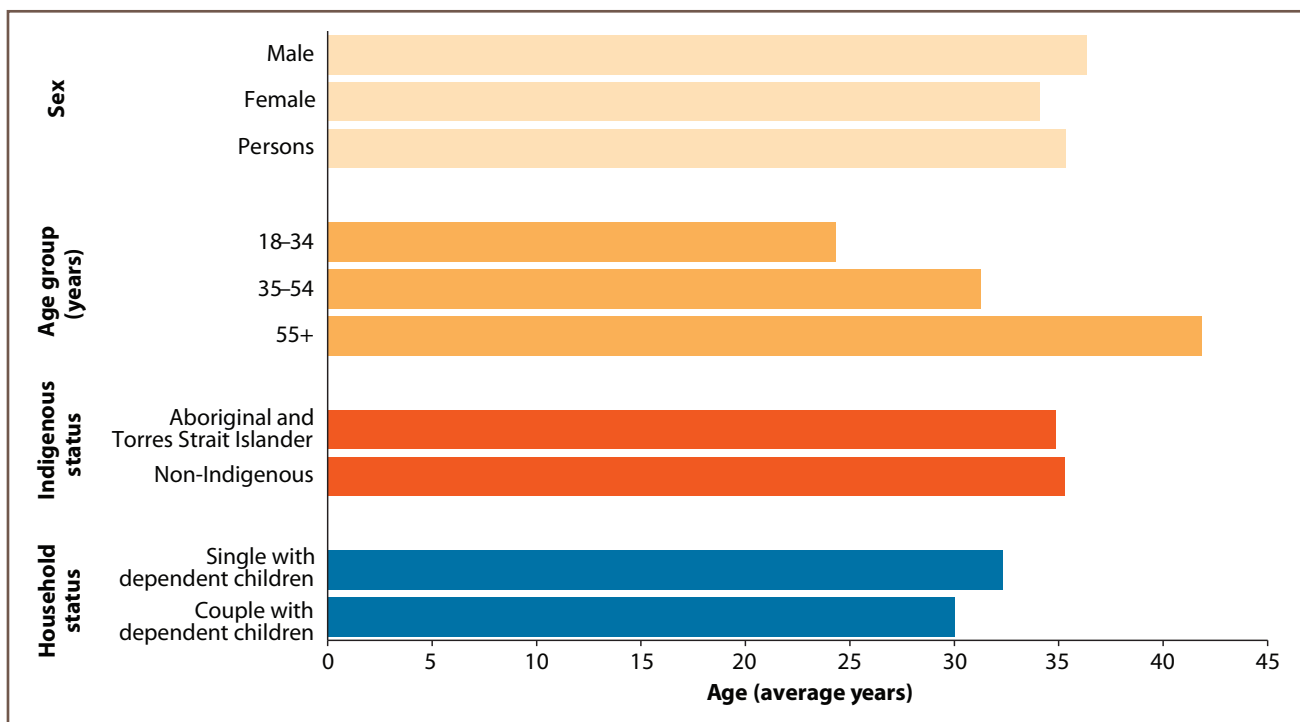
Denominator: The total number of ex-smokers aged 18 or older.

Data source: 2010 National Drug Strategy Household Survey (NDSHS).

Baseline data

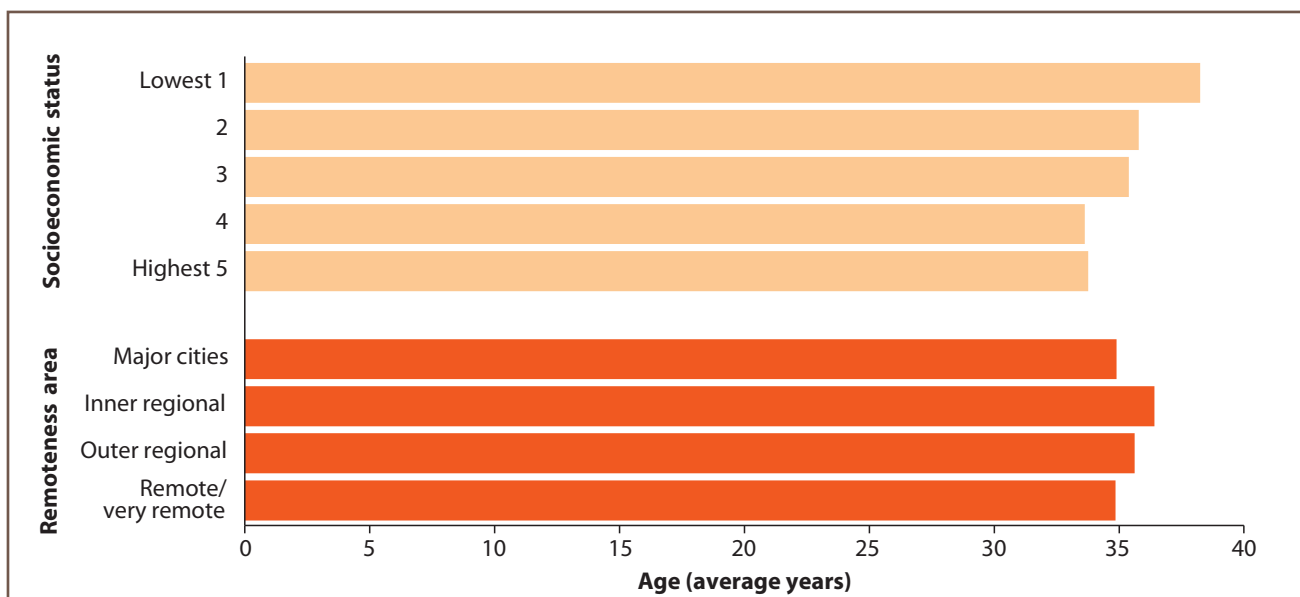
- In 2010, adult ex-smokers (has not smoked in the previous 12 months) quit smoking at an average age of 35.3. Men were slightly older than women when they quit (36.4 compared with 34.1) (Figure 2.5.4).
- Ex-smokers in the 18–34 age group quit smoking at an average age of 24.3. Those in the 35–54 age group quit at 31.3 on average, while those aged 55 or older quit at 41.8 on average (Figure 2.5.4).
- The average quitting age cannot be compared across education attainments and sexual orientation due to generational differences—that is, older people are more likely to have only completed high school qualifications and younger people are more likely to identify as being homosexual or bisexual.
- Aboriginal and Torres Strait Islander ex-smokers quit at an average age of 34.9, compared with 35.3 for non-Indigenous ex-smokers (Figure 2.5.4).
- There was little difference in the average age of quitting by country of birth and main language spoken at home. Ex-smokers born in Australia or overseas, and people who spoke mainly English at home or another language generally quit smoking on average between the ages of 35 and 37 (Table 11.1).
- Single parents with dependent children quit when they were slightly older than couple parents with dependent children (32.3 compared with 30.0) (Figure 2.5.4).
- Ex-smokers living in the lowest SES areas quit smoking at an older average age than those in the highest SES areas (38.2 compared with 33.8) (Figure 2.5.5).
- There was little difference by remoteness area in the average age when ex-smokers quit—from 34.9 in *Major cities* and *Remote and very remote* areas to 36.4 in *Inner regional* areas (Figure 2.5.5).

It is also useful to measure the proportion of ever-smokers (smoked at least 100 cigarettes in their lifetime) who quit (have not smoked for at least 12 months) before the age of 45. In 2010, 44% of ever-smokers aged 45–74 who quit smoking did so before the age of 45 (Table 11.3). Changes will not be easily detected over short time periods, so it is appropriate to report this measure infrequently (at least every 10 years).



Source: NDSHS 2010 (Table 11.1).

Figure 2.5.4: Average age at which ex-smokers aged 18 or older quit smoking, by sex, age group, Indigenous status and (selected) household status, 2010



Source: NDSHS 2010 (Table 11.2).

Figure 2.5.5: Average age at which ex-smokers aged 18 or older quit smoking, by socioeconomic status and remoteness area, 2010

Specification and baseline data for Indicator 12: More adult ever-smokers no longer smoking

In 2010, 47% of adult ever-smokers did not smoke in the previous 12 months.

KEY FINDING

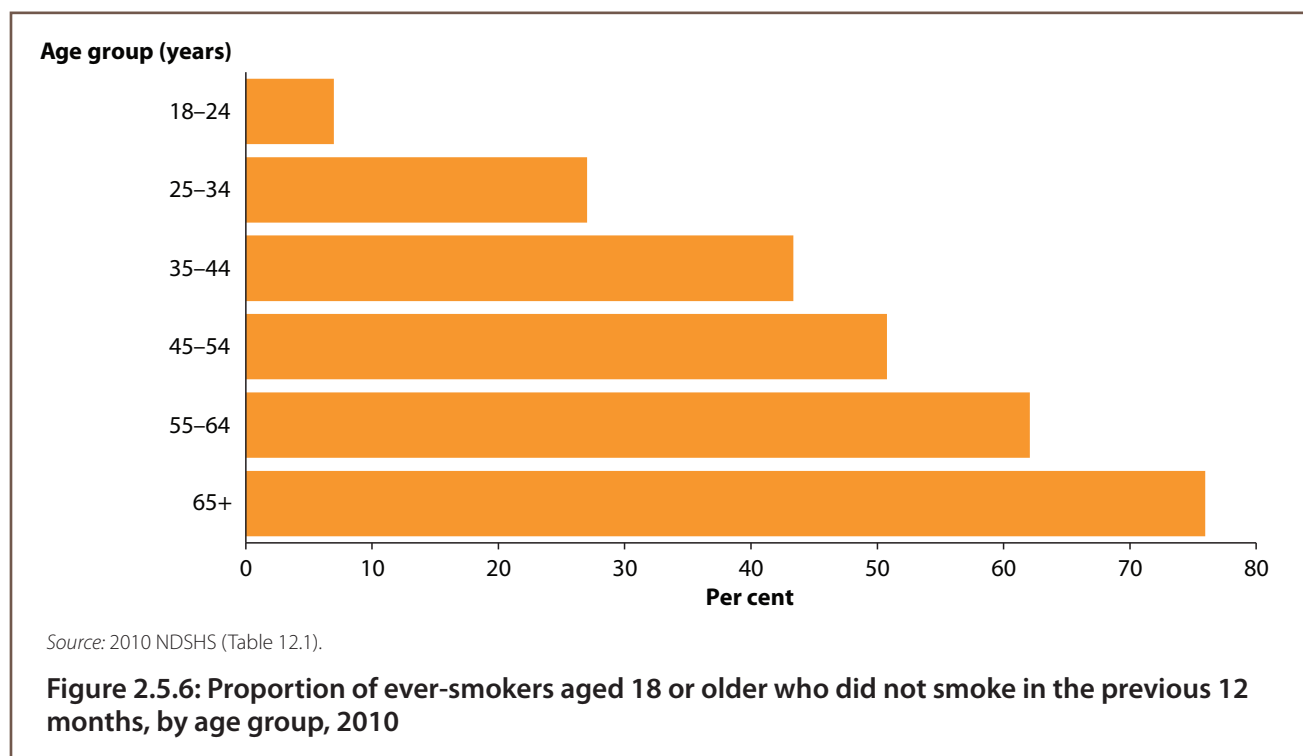
Smokers were less likely to quit smoking than their counterparts if they were Aboriginal or Torres Strait Islander, were unemployed, had a low level of education attainment, or were single parents with dependent children.

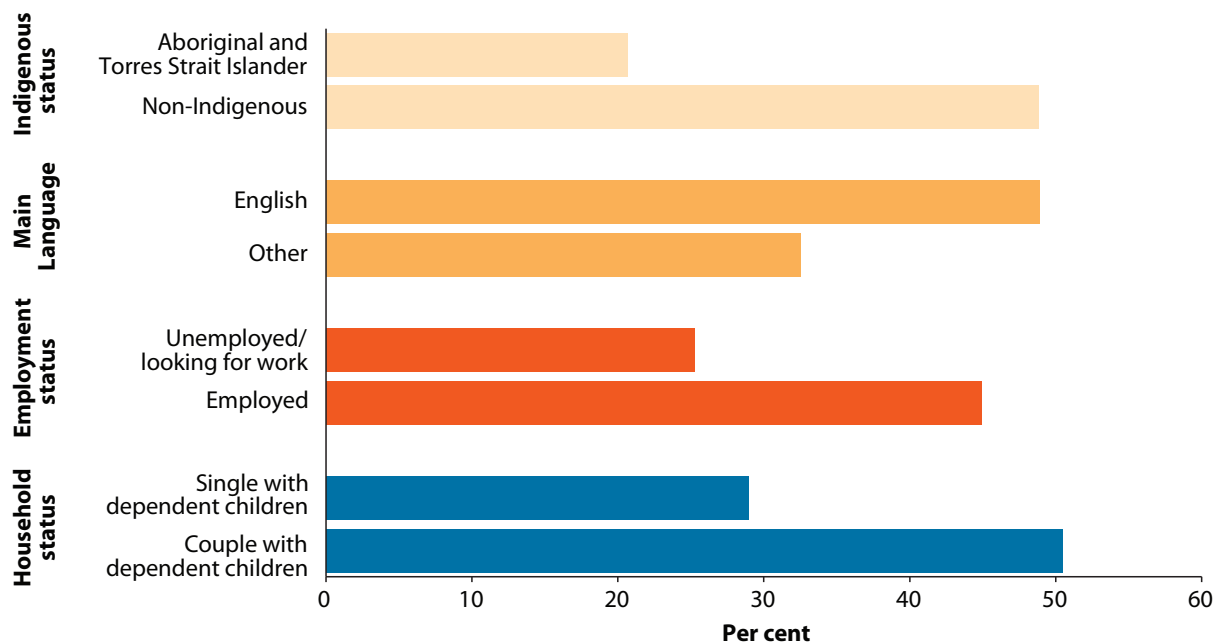
Description:	The proportion of adult ever-smokers (smoked at least 100 cigarettes in their lifetime) who did not smoke in the previous 12 months.
Numerator:	The number of adult ever-smokers aged 18 or older who did not smoke in the previous 12 months.
Denominator:	People aged 18 or older who have smoked at least 100 cigarettes in their lifetime.
Data source:	2010 National Drug Strategy Household Survey (NDSHS).

Baseline data

- Almost half (47%) of adult ever-smokers (smoked at least 100 cigarettes in their lifetime) no longer smoked in 2010 (Table 12.1).
- The proportion of ever-smokers no longer smoking increases with age. Only 7% of ever smokers aged 18–24 had not smoked for 12 months or longer, compared with:
 - 27% for those aged 25–34
 - 43% for those aged 35–44
 - 51% for those aged 45–54
 - 62% for those aged 55–64
 - 76% for those aged 65 or older (Figure 2.5.6).
- Non-Indigenous ever-smokers were 2.4 times as likely as Aboriginal and Torres Strait Islander smokers to have stopped smoking for at least 12 months (49% compared with 21%) (Figure 2.5.7).
- About half (49%) of ever-smokers who mainly spoke English at home no longer smoked (for 12 months or longer), while one-third (33%) of people who mainly spoke a language other than English no longer smoked (Figure 2.5.7).
- Employed ever-smokers were far more likely than unemployed ever-smokers to have quit smoking for at least 12 months (45% compared with 25%) (Figure 2.5.7).
- Ever-smokers with a diploma or a bachelor degree or higher were more likely to have quit smoking for at least 12 months than people who had only completed Year 12 (58% for bachelor degree, 53% for diploma or higher, and 39% Year 12) (Table 12.2).
- Couples with dependent children were 1.7 times as likely as single parents with dependent children to have quit smoking for 12 months or longer (50% compared with 29%) (Figure 2.5.7).

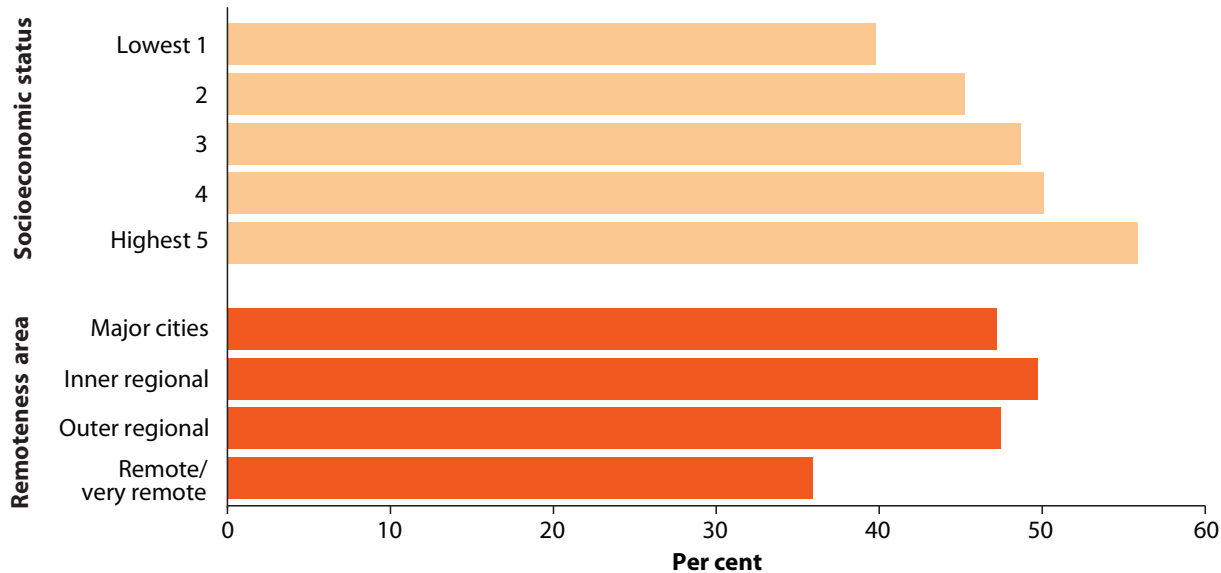
- Ever-smokers who identified as being heterosexual were twice as likely as homosexual or bisexual ever-smokers to report no longer smoking (49% compared with 23%) (Table 12.2). However, these rates are not age-standardised, and the age profile of these two groups are different (for example, in the 2010 NDSHS, the average age of a heterosexual person was 49 and the average age of a homosexual/bisexual person was 42), so differences in rates should be interpreted with caution.
- The proportion of ever-smokers living in the highest SES area who had quit smoking for 12 months or longer was 30% as high as that of people living in the lowest SES area (56% compared with 40%) (Figure 2.5.8).
- Ever-smokers living in *Remote and very remote* areas were less likely to have quit smoking than those in *Major cities* (36% compared with 47%) (Figure 2.5.8).





Source: NDSHS 2010 (Table 12.2).

Figure 2.5.7: Proportion of ever-smokers aged 18 or older who did not smoke in the previous 12 months, by Indigenous status, main language, (selected) employment status and (selected) household status, 2010



Source: NDSHS 2010 (Table 12.3).

Figure 2.5.8: Proportion of ever-smokers aged 18 or older who did not smoke in the previous 12 months, by socioeconomic status and remoteness area, 2010

3 Smoking patterns across key factors and groups

This chapter presents a summary of the tobacco smoking patterns across the 4 categories presented in the conceptual framework:

- cohorts
- life stages
- social determinants of health
- risk groups.

It also presents key patterns across the smoking phases for specific sub-population groups with a high prevalence of smoking.

Factors influencing smoking behaviours interact in complex ways. The categories included in the conceptual framework are not mutually exclusive, and often overlap with others. For example, people with low socioeconomic status (SES) might have low income, be unemployed or underemployed, not have higher educational qualifications, and be employed in unskilled or semi-skilled occupations. In addition, people within disadvantaged groups might experience different levels of disadvantage, and might belong to one or multiple groups.

Smoking patterns across cohorts, life stages, social determinants of health and at-risk groups

Cohorts

Secondary school students

Living in *Outer regional* areas, living in areas with the second lowest SES fifth, being Aboriginal or Torres Strait Islander, having a main language of English and being male were associated with higher rates of uptake and transition behaviours among secondary school students. More information on this group can be found in the section *Sub-population groups with a high prevalence of smoking: patterns across the smoking phases*.

Regular smoking among students aged 12–17 is defined as smoking at least 1 cigarette a week. Students (aged 12–17) living in *Remote and very remote* areas were the least likely to smoke weekly or monthly or to have tried a few puffs of a cigarette, while those living in *Outer regional* areas were most likely to smoke weekly, smoke monthly, have smoked at least a few puffs of a cigarette, and have smoked 100 cigarettes in their lifetime.

The patterns of smoking prevalence in teenagers (aged 12–17) across the SES areas were different to the patterns seen for adults. While smoking rates and related behaviours generally increased with decreasing SES for adults, results for teenagers varied. For example, while weekly and monthly smoking was generally highest for those living in the lowest 2 areas, the proportion of teenagers who had smoked 100 cigarettes in their lifetime was equal for those with the lowest and highest SES, while teenagers living in areas with the second highest SES were the most likely to have smoked 100 cigarettes. However, overall, living in areas with the second lowest SES fifth was associated with the highest rates of uptake and transition behaviours among secondary school students as they were the most likely to try or currently smoke.

Young adults

Those aged 18–24 smoked less often than those in other adult age groups, and were less likely to smoke daily, and most likely to smoke occasionally.

Women aged less than 20 (36%) and 20–24 (25%) were more likely to smoke during the first 20 weeks of pregnancy than those in any other age group (12.9% for all ages combined).

Non-smokers aged 18–24 were about twice as likely as any other age group to live with a smoker who smoked daily inside the home.

Adults

Across smoking phases, adults aged 18 or older were more likely to smoke or to be exposed to second-hand tobacco smoke if they were Aboriginal or Torres Strait Islander, were unemployed or looking for work, were single with dependent children, lived in areas with the lowest SES, or lived in *Remote* areas.

Men were slightly more likely to be exposed to tobacco smoke, take up smoking and have established patterns of smoking than women. Further, women were slightly more likely to try quitting, and generally quit at a younger average age than males (34.1 compared with 36.4).

Life stages

Being a single parent with dependent children was associated with higher smoking prevalence across multiple smoking phases. More information on this group can be found in the section *Sub-population groups with a high prevalence of smoking: patterns across the smoking phases*.

Compared with couples with dependent children, adults in single parent households with dependent children were 2.1 times as likely to smoke daily, and 1.5 times as likely to be exposed to tobacco smoke inside the home, and, for ever-smokers, were less likely to have succeeded at quitting (for 12 months or longer). Children living in single parent households were 4 times as likely to be exposed to tobacco smoke inside the home as children living in couple parent households (14.6% compared with 3.7%).

Single parents with dependent children were also more likely than any other groups, across all determinants/disaggregations, to have smoked a full cigarette (75%).

Single people (with or without dependent children) were more likely to smoke daily than those in a couple (with or without dependent children).

Social determinants of health

Main language

For both young people and adults, speaking English as the main language at home was associated with higher smoking prevalence across many smoking phases when compared with those who mainly spoke a language other than English at home.

Secondary school students aged 12–17 who mainly spoke English at home were more likely than those who spoke a language other than English at home to smoke weekly, smoke monthly, have had a few puffs of a cigarette, and have smoked 100 cigarettes in their lifetime.

Young people aged 14–24 who mainly spoke English at home were generally younger when they first experimented with cigarettes than those who mainly spoke a language other than English at home.

The difference in adults was more pronounced than in secondary school students. Adults who mainly spoke English at home were more likely to have ever smoked a full cigarette and to have smoked daily. However, English speaking ever-smokers were more likely to quit for 12 months or longer, and non-smoking adults were less likely to live in a household with a smoker who smoked daily inside the home than those who mainly spoke a language other than English.

Country of birth

People born in a country other than Australia were less likely than people born in Australia to smoke during pregnancy, have smoked at least 100 cigarettes in their lifetime, and smoke daily.

Daily smoking among those not born in Australia was lower than among those born in Australia, but rates varied considerably by country of birth. People born in Italy, China, India, South-East Asia and Southern and Central Asia were less likely to smoke than people born in Australia, while those born in New Zealand, Greece, Oceania and the Middle East were more likely to smoke daily than those born in Australia.

Employment

Being unemployed was associated with higher smoking prevalence across multiple smoking phases. Compared with those who were employed or not in the labour force, people who were unemployed or looking for work were:

- more likely to live with a smoker who smoked daily inside the home (2.5 times as likely as employed non-smoking adults)
- more likely to smoke more often—they had the highest rate of daily smokers and the lowest proportion of occasional smokers
- more likely to try quitting, but had the lowest proportion of ever-smokers successfully quitting.

A similar pattern was also seen among the Aboriginal and Torres Strait Islander population—those who were unemployed or looking for work were 1.5 times as likely to smoke daily as those who were employed, and they had the highest rate of daily smoking out of all groups across different determinants (64%) other than prison entrants (74%).

Education

Having a higher level of educational attainment, particularly a bachelor degree or higher, was associated with lower smoking prevalence across multiple smoking phases. Compared with all other levels of educational attainment, people who had a bachelor degree or higher were:

- least likely to be exposed to tobacco smoke in the home
- least likely to smoke daily and most likely to smoke occasionally—this difference was also apparent among the Aboriginal and Torres Strait Islander population with bachelor degrees or higher
- most likely to succeed at quitting smoking for 12 months or longer.

Compared with any other group, those with the lowest level of educational attainment (Year 9 or below) started experimenting with cigarettes at the youngest age (13.5), and quit at the oldest average age (42.7), indicating that people among this group smoke for the longest duration.

At-risk groups

Several at-risk groups were identified when the conceptual framework was developed. Some of these were identified as groups with high smoking prevalence, and are discussed in the section *Sub-population groups with a high prevalence of smoking: patterns across the smoking phases*.

Prison entrants

For those indicators where prison entrants could be looked at, results showed that they were far more likely than the general population to smoke daily, slightly more likely to smoke occasionally, and the most likely to have smoked a full cigarette (89%).

Sub-population groups with a high prevalence of smoking: patterns across the smoking phases

Smoking rates differ across population groups in Australia, with smoking prevalence high among the most disadvantaged and people who face multiple levels of disadvantage such as low income, limited education, unemployment and sole parenthood (CCV 2013). People within disadvantaged groups might experience different levels of disadvantage, and belong to multiple groups. They might experience even higher rates of smoking as levels of disadvantage increase.

This section focuses on certain sub-population groups with higher smoking prevalence, particularly across multiple aspects of the smoking phases, these include:

- Aboriginal and Torres Strait Islander people
- people living in areas with the lowest socioeconomic status (SES)
- people living in remote areas
- single parent households.

Table 3 presents indicator results for groups susceptible to higher smoking prevalence, and highlights the difference in rate ratio to that in the general population. Different data sources and collections years have been used. These range from 2007–08 to 2011. Data presented in Table 3 have not been age-standardised, and reported differences are due to various factors, including differences in the age structure.

Aboriginal and Torres Strait Islander people

Factors influencing smoking behaviours among Aboriginal and Torres Strait Islander people are complex and interrelated. As with other populations, some groups experience multiple levels of disadvantage—low SES, living in remote areas, unemployment, low education attainment, single parent households with dependent children, and even higher rates of daily smoking.

Exposure

A high proportion (1 in 5) of Aboriginal and Torres Strait Islander children aged 0–14 were exposed to tobacco smoke inside the home.

Aboriginal and Torres Strait Islander adults were also more likely to be exposed to tobacco smoke than non-Indigenous adults. For example, non-smoking Aboriginal and Torres Strait Islander adults were more than 3 times as likely as non-Indigenous adults to report living with a household member who smoked daily inside the home (2008 NATSISS).

Aboriginal and Torres Strait Islander mothers were also more likely to smoke during pregnancy, and they were more than 4 times as likely as non-Indigenous mothers to smoke during the first 20 weeks of their pregnancy.

Uptake

The differences between the Aboriginal and Torres Strait Islander and the non-Indigenous population were less apparent for the uptake phase than the other smoking phases. For example:

- Young Aboriginal and Torres Strait Islanders and non-Indigenous Australians aged 14–24 both first smoked a full cigarette at an average age of 15.4.
- Aboriginal and Torres Strait Islander secondary school students aged 12–17 were more likely to have tried smoking at least a few puffs of a cigarette than their non-Indigenous counterparts (37% compared with 23%).
- Only a slightly higher proportion of Aboriginal and Torres Strait Islander adults have smoked a full cigarette than non-Indigenous adults (69% compared with 63%).

Transition

Aboriginal and Torres Strait Islander secondary school students and young adults are more likely to become a smoker than their non-Indigenous counterparts. Nearly 1 in 10 (8.5%) Aboriginal and Torres Strait Islander secondary school students aged 12–17 had smoked at least 100 cigarettes in their lifetime compared with 3.2% of non-Indigenous students. This increased to 51% for young Aboriginal and Torres Strait Islander Australians aged 18–24, compared with 28% of young non-Indigenous Australians.

Established smoker

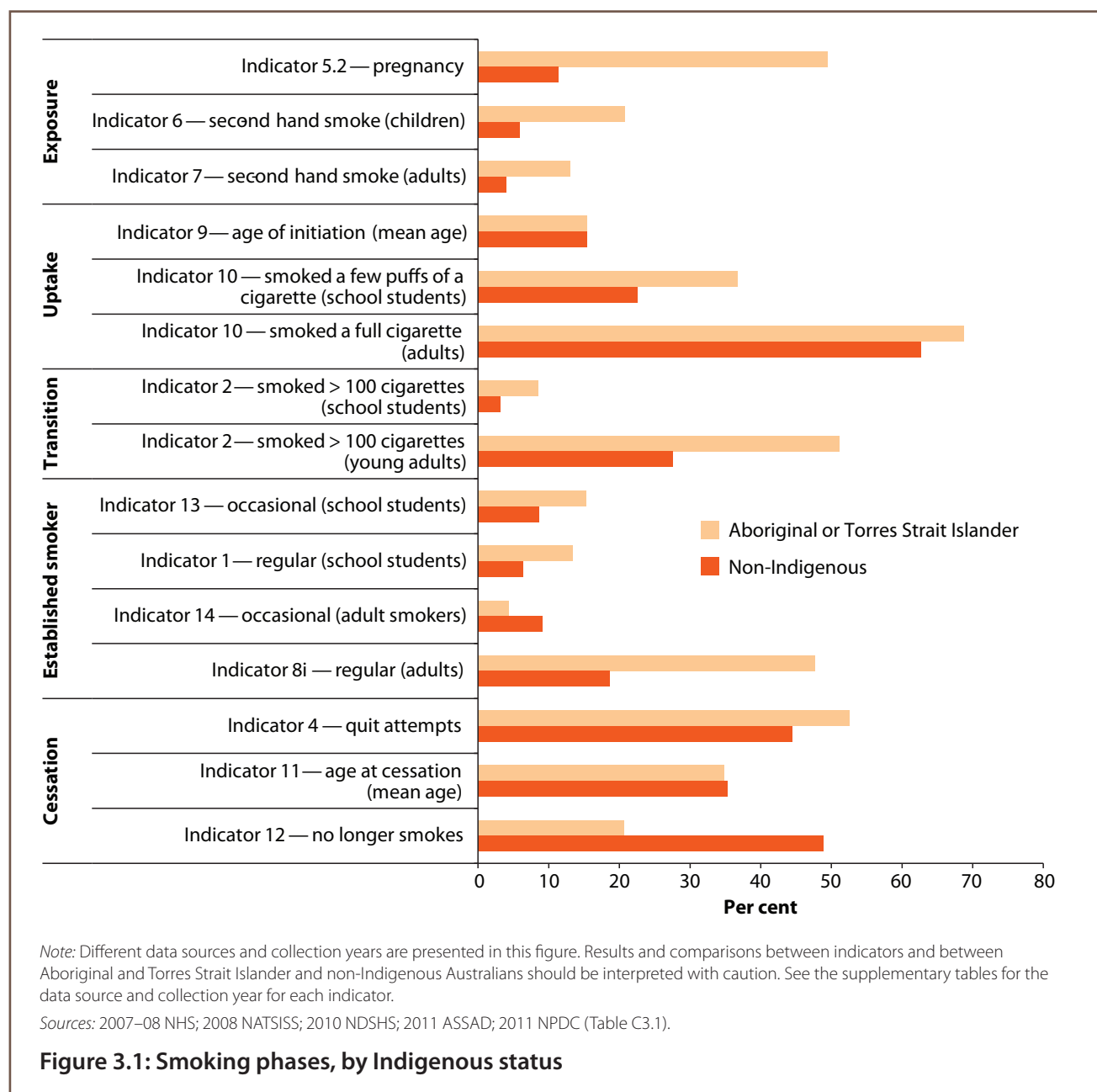
Aboriginal and Torres Strait Islander secondary school students and adults were more likely to have established patterns of regular smoking than their non-Indigenous counterparts. For example:

- About 1 in 7 Aboriginal and Torres Strait Islander secondary school students (aged 12–17) smoked tobacco monthly, and 1 in 8 smoked tobacco weekly, compared with 1 in 12 and 1 in 16 for non-Indigenous students, respectively.
- Aboriginal and Torres Strait Islander adults were considerably more likely to be a daily smoker than non-Indigenous adults (48% compared with 18.6%), and of current smokers, were less likely to smoke occasionally (4.3% compared with 9.1%).

Cessation

Aboriginal and Torres Strait Islander adults were more likely to try to quit smoking than non-Indigenous adults, but were less likely to succeed. About 2 in 5 Aboriginal and Torres Strait Islander smokers tried to give up smoking but were unsuccessful, and 1 in 5 ever-smokers had quit smoking for a year or longer, compared with about 3 in 10 and almost half for non-Indigenous adults, respectively.

There was little difference in the average age at which Aboriginal and Torres Strait Islander and non-Indigenous smokers quit smoking, but this result might be affected by the age structure of the Aboriginal and Torres Strait Islander population, which is younger than that of the non-Indigenous population.



People living in areas with the lowest socioeconomic status

The Socio-Economic Indexes for Areas (SEIFA) is a measure that ranks areas in Australia according to relative socioeconomic disadvantage and advantage. The indexes are based on several measures, such as income and education.

Exposure

People with low socioeconomic status were much more likely to be exposed to tobacco smoke. For example:

- Mothers living in the lowest SES area were more than 4 times as likely to have smoked tobacco during the first 20 weeks of their pregnancy as those from the highest SES areas (21% compared with 4.7%).
- Both children and non-smoking adults living in the lowest SES area were more likely to live with an adult who smoked daily inside the home than those who lived in the highest SES areas.

Uptake

Socioeconomic status seems to have some impact on the uptake of smoking. Results showed that:

- Secondary school students living in the lowest SES area were about 20% as likely to try smoking a few puffs of a cigarette as those living in the highest SES area.
- People from the lowest SES area smoked their first full cigarette at a younger average age—those aged 14–24 living in the lowest SES area were about a year younger than people in the highest SES area.

Transition

There was no difference in the proportion of secondary school students smoking at least 100 cigarettes in their lifetime in the highest and lowest SES. However, this finding is likely to be affected by higher school retention in higher SES areas. By the ages of 18–24, a slightly higher proportion of young adults living in the lowest SES area had smoked more than 100 cigarettes in their lifetime than those in the highest SES area (31% compared with 27%).

Established smoker

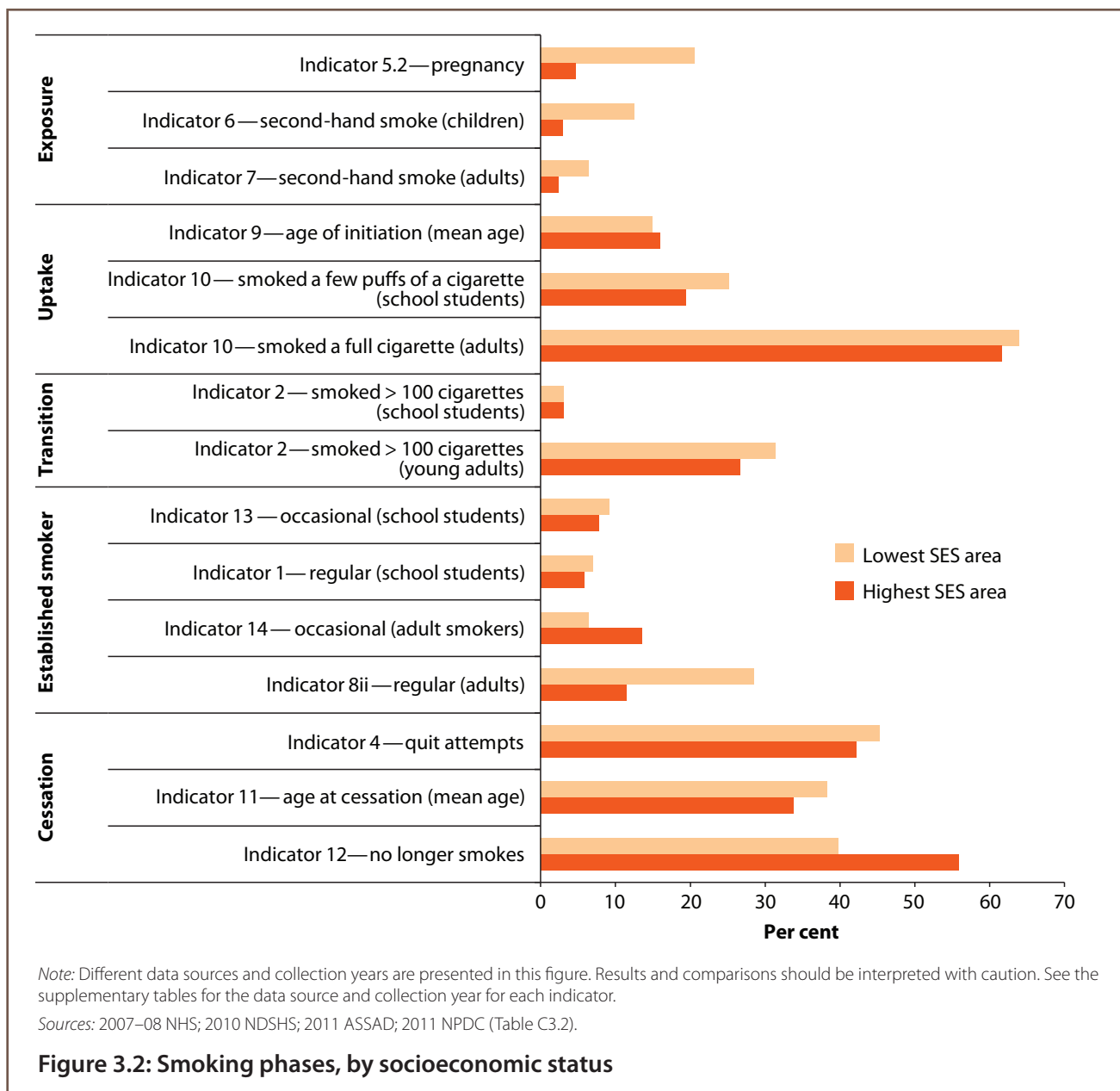
The difference in smoking rates among adults living in the lowest and highest SES areas is more apparent than it is among secondary school students. Results showed that:

- Secondary school students living in the lowest SES areas were only slightly more likely to smoke monthly and weekly than those living in the highest SES areas (9.2% compared with 7.8% for monthly, and 7.0% compared with 5.8% for weekly) (Regular smoking among young people is defined as smoking at least weekly, not daily as for adults.)
- Adults living in the lowest SES area were 2.5 times as likely to smoke daily as people living in the highest SES area.
- Among current smokers, a greater proportion of smokers in the highest SES only smoked occasionally than in the lowest SES (13.6% compared with 6.4%).

Cessation

The discrepancies in smoking rates by socioeconomic status were also seen at the cessation phase. People living in the highest SES area quit smoking about 4 years earlier than those in the lowest SES area.

While similar rates of people living in the highest and lowest SES tried to quit, those in the highest SES area were more likely to succeed, with the majority of ever-smokers quitting for 12 months or longer (56% compared with 40%).



People living in remote areas

Outcomes for people living in different remoteness areas are affected by the population structure of each area. While the majority of Aboriginal and Torres Strait Islander people live in *Major cities*, compared with the general population, a relatively high proportion of Aboriginal and Torres Strait Islander people live in *Remote and very remote* areas (ABS 2007). Therefore, the outcomes of people living in these areas will reflect the higher proportion of Aboriginal and Torres Strait Islander people living in these areas.

Exposure

People living in *Remote and very remote* areas were more likely to smoke daily, and to expose other people within their household to tobacco smoke.

- Smoking during the first 20 weeks of pregnancy was far more common among pregnant women in *Remote and very remote* areas—almost 3 times the rate of people in *Major cities*.
- Households with dependent children in *Remote and very remote* areas were 1.8 times as likely to contain a daily smoker who smoked inside the home as those in *Major cities*.
- Non-smoking adults in *Remote and very remote* areas were also more likely to live with a smoker who smoked daily inside the home than those in *Major cities* (7.3% compared with 3.7%).

Uptake

There was little difference in the rates of people taking up smoking in *Remote and very remote* areas and *Major cities*. For example:

- A similar proportion of secondary school students in *Major cities* and *Remote and very remote* areas experimented with cigarettes, with 22% smoking a few puffs of a cigarette.
- Most people aged 14–24 also smoked their first cigarette when aged 15–16, and there was little difference by remoteness area.

Transition

There was no difference in the proportion of secondary school students aged 12–17 smoking more than 100 cigarettes by remoteness, but the difference was apparent for young adults—42% living in *Remote and very remote* areas had smoked 100 cigarettes compared with 28% of young people in *Major cities*.

Established smoker

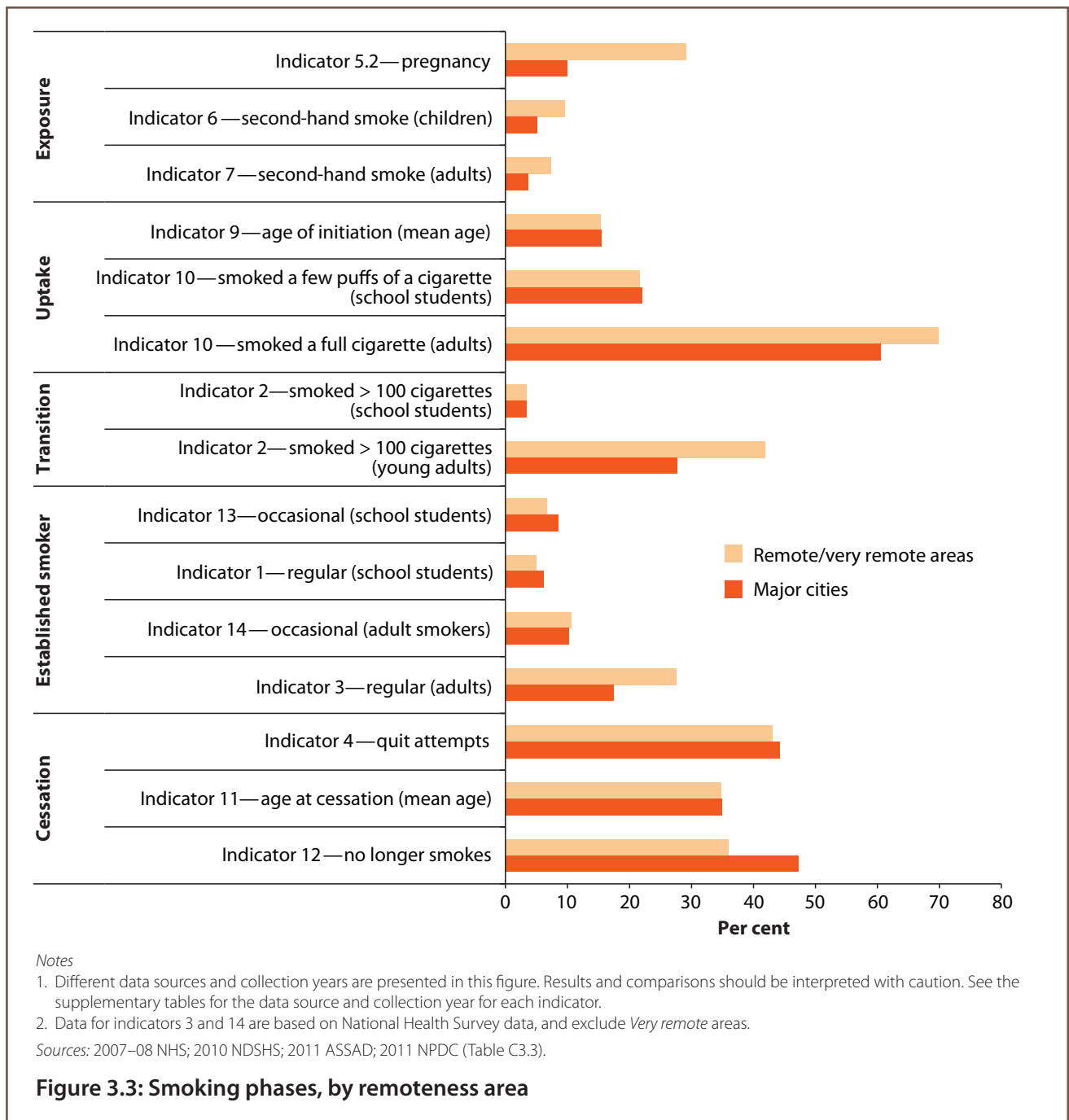
Adults living in *Remote* areas were 1.6 times as likely to smoke daily as those in *Major cities*. But the same pattern was not seen among secondary school students—those in *Major cities* were slightly more likely to smoke weekly or monthly than those in *Remote and very remote* areas. Secondary school students living in *Outer regional* areas had the highest proportions of smoking weekly (9.8% compared with 5.0% for *Remote and very remote*) and monthly (13.2% compared with 6.7% for *Remote and very remote*).

Cessation

A similar proportion of smokers in *Major cities* and *Remote and very remote* areas tried to quit smoking, and the average quit age was the same for both areas. However, people in *Major cities* had a greater proportion of ever-smokers no longer smoking for at least 12 months than in *Remote and very remote* areas (47% compared with 36%).

Secondary school students living in outer regional areas

Compared with secondary school students living in *Remote and very remote* areas, students living in *Outer regional* areas were: 1.4 times as likely to have smoked a few puffs of a cigarette; 1.4 times as likely to have smoked 100 cigarettes; twice as likely to be monthly smokers; and twice as likely to be weekly smokers. The pattern for secondary school students was somewhat different to the adult population.



Single parent households

Exposure

A person’s relationship status appears to have some impact on whether dependent children are exposed to tobacco smoke inside the home. Households containing single parents with dependent children were 4 times as likely to smoke tobacco daily inside the home as couples with dependent children.

Single mothers were also more than 3.5 times as likely to have smoked during the first 20 weeks of their pregnancy as mothers who were in a relationship.

Uptake and established smoker

Single parents with dependent children were 1.1 times as likely to have smoked a full cigarette, and 2.1 times as likely to be daily smokers as couples with dependent children.

Cessation

A similar proportion of single and couple parents with dependent children had tried quitting, but a far greater proportion of ever-smokers in couples had quit smoking for at least 12 months than single parents with dependent children (50% compared with 29%). Couples with dependent children generally quit smoking at a younger average age than single parents with dependent children (30 compared with 32.3).

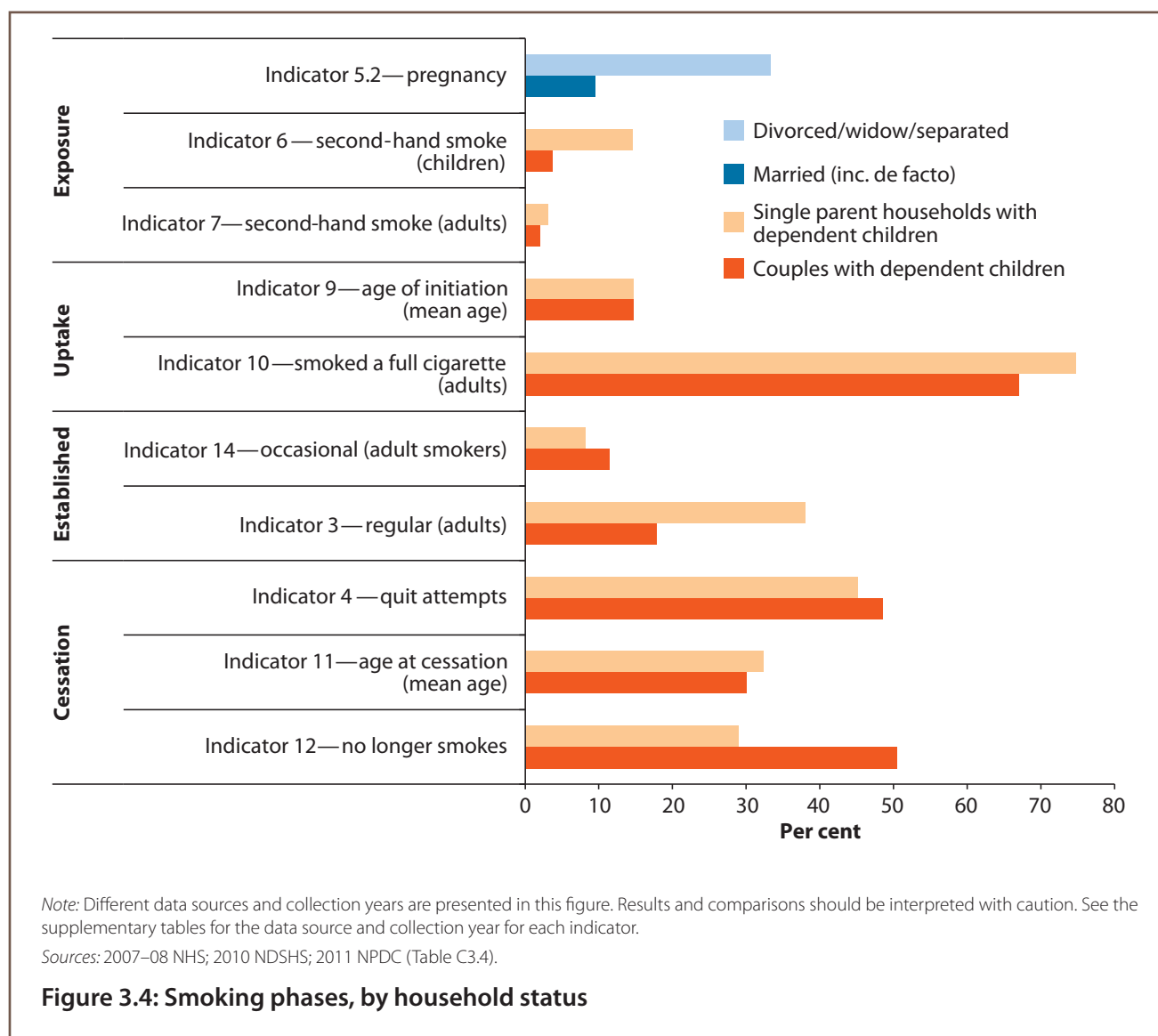


Table 3: Groups with a higher smoking prevalence, rate comparison with the general population, data sources from 2007–08, 2008, 2010, 2011

Smoking phase	% except for indicators 9 and 11	General population	Aboriginal and Torres Strait Islander Australians	Lowest SES area ^(a)	Remote and very remote ^(b)	Single parent households with dependent children	Unemployed
Exposure	Indicator 5—pregnancy	12.9	49.5	20.6	29.2	33.3 (Divorced/separated)	
	Indicator 6—children exposed	6.1	20.8	12.4	9.5	14.6	n.a.
	Indicator 7—adults exposed	4.0	13.0	6.4	7.3	3.0	8.9
	Indicator 9—(mean age) age of initiation	15.4	15.4	14.9	15.3	14.8	14.9
Uptake	Indicator 10—full cigarette (secondary school students)	23.3	36.7	25.1	21.6	n.a.	n.a.
	Indicator 10—full cigarette (adults)	62.5	68.7	63.9	69.8	74.7	58.8
	Indicator 2—100 cigarettes (secondary school students)	3.5	8.5	3.1	3.4	n.a.	n.a.
Transition	Indicator 2—100 cigarettes (young adults)	29.4	51.1	31.4	41.8		40.1
	Indicator 13—monthly (secondary school students)	8.9	15.3	9.2	6.7	n.a.	n.a.
Established smoker	Indicator 1—weekly (secondary school students)	6.7	13.4	7.0	5.0	n.a.	n.a.
	Indicator 14—adult occasional	9.0	4.3	6.4	10.6	8.2	3.6
	Indicator 3—regular, 8i Indigenous, 8ii SES	18.9	47.7	28.5	27.6	38.0	35.9
	Indicator 4—12 month attempt	44.8	52.5	45.3	43.0	45.2	50.0
Cessation	Indicator 11—quitting (mean age)	35.3	34.9	38.2	34.9	32.3	31.6
	Indicator 12—successfully quit	47.4	20.6	39.8	35.9	29.0	25.3

Rate less than half that of the general population ■ Rate half to three-quarters of the general population ■

Rate 1.5 to 1.9 times the general population ■ Rate at least twice the general population ■

(a) Indicators 2 (students), 5, 10 (students) and 13 are based on the 2011 Index of Relative Socio-economic Advantage and Disadvantage (IRSAD); Indicators 1, 2 (adults), 3, 4, 6, 7, 9, 10 (adults), 11, 12 and 14 are based on the 2006 IRSAD.

(b) Indicators 2 (students), 5, 10 (students) and 13 are based on Australian Statistical Geography Standard 2011; indicators 1, 2 (adults), 3, 4, 6, 7, 9, 10 (adults), 11, 12 and 14 are based on the Australian Standard Geographical Classification remoteness area categories 2006.

Note: Different data sources, timing of data collection, and collections years are used in this table. Rates supplied in this report range from 2007–08 to 2011. Data presented have not been age-standardised, and the differences reported are due to various causes, including differences in the age structure. Any comparisons between groups should be treated with caution.

Appendix 1 List of data collections

Year	Data collection (Name)	Organisation
2011	Australian Secondary Students' Alcohol and Drug (ASSAD) Survey	Cancer Council Victoria
2010	National Drug Strategy Household Survey (NDSHS)	AIHW
2007–08	National Health Survey (NHS)	ABS
2008	National Aboriginal and Torres Strait Islander Social Survey (NATSISS)	ABS
2011	National Perinatal Data Collection (NPDC)	AIHW
2010	National Prisoner Health Data Collection (NPHDC)	AIHW

Appendix 2 Indicator specifications

Indicator 1	Fewer young people smoking regularly
Definition and specifications	Among young people, a regular smoker is defined as smoking at least 1 day per week.
Measure (computation)	The measure is presented as a proportion, and is constructed as: The number of secondary school students aged 12–17 who smoked tobacco at least 1 day in the previous week divided by the total number of secondary school students aged 12–17.
Other similar indicators	National indicators of young people’s health and wellbeing. Proportion of young people aged 14–24 who are daily smokers. (Data sources: ASSAD for 12–17 year olds and NDSHS for 18–24 year olds).
Recommended data source	ASSAD.
Disaggregation / cross tabulations available from recommended data source	State and territory. Sex. Age (12–15, 16–17). Indigenous status. Main language. Socioeconomic status—Index of Relative Socio-Economic Advantage and Disadvantage 2011. Remoteness—Australian Statistical Geography Standard 2011.
Analysis required (that is, publicly available / AIHW will need to request data or perform analysis)	Baseline data are publicly available, but cross tabulations require additional analysis. No publicly accessible national data. National data requests are directed to the Centre for Behavioural Research, Cancer Council Victoria. Costs and timeframes for data requests depend on scope of request.
Reporting frequency	
Baseline (2014 report)	ASSAD 2011 (available now).
Mid-point (2015 report)	ASSAD 2014 (results usually released within 12–18 months).
Final (2018 report)	ASSAD 2017 (results usually released within 12–18 months).
Comments	No publicly available national data. Might also be useful to monitor 18–24 year olds.

Indicator 2		Fewer young people making the transition to established patterns of smoking	
Definition and specifications	Secondary school students: Reduction in the proportion of 12–17 year olds smoking more than 100 cigarettes in their lifetime. Young adults: Reduction in the proportion of 18–24 year olds smoking more than 100 cigarettes in their lifetime.		
Measure (computation)	The measure is presented as a proportion and is constructed as: Secondary school students: The number of secondary school students aged 12–17 who have smoked more than 100 cigarettes in their lifetime divided by the total number of secondary school students aged 12–17. Young adults: The number of young adults aged 18–24 who have smoked more than 100 cigarettes in their lifetime divided by the total population aged 18–24.		
Other similar indicators	None.		
Recommended data source	ASSAD; NDSHS (for 18–24 year olds).		
Disaggregation / cross tabulations available from recommended data source	State and territory. Sex. Age (12–15, 16–17, 18–24). Indigenous status. Main language. Socioeconomic status—Index of Relative Socio-Economic Advantage and Disadvantage 2011. Remoteness—Australian Statistical Geography Standard 2011.		
Analysis required (that is, publicly available / AIHW will need to request data or perform analysis)	Data are not publicly available. Data request would need to be submitted, which involves additional costs.		
Reporting frequency	ASSAD 2011 (available now).		
Baseline (2014 report)	NDSHS 2010 (available now).		
Mid-point (2015 report)	ASSAD 2014 (results usually released within 12–18 months) NDSHS 2013 (available now).		
Final (2018 report)	ASSAD 2017 (results usually released within 12–18 months). NDSHS 2016 (results usually released within 12 months).		
Comments	No publicly available national data. Not sure whether ASSAD results will be available in time for mid-point report. Could consider using the NDSHS as a backup if these results are not available in time.		

Indicator 3 Fewer adults smoking regularly	
Definition and specifications	To align with the COAG indicator, regular smoking is defined as daily smoking rather than current smoking. A current daily smoker is defined as a person who smokes 1 or more cigarettes, roll-your-own cigarettes, cigars or pipes at least once a day. Chewing tobacco and the smoking of non-tobacco products were excluded. An adult is defined as 18 years or older.
Measure (computation)	The measure is presented as a proportion and is constructed as: The number of people aged 18 or older who smoke tobacco every day divided by the total population aged 18 or older.
Other similar indicators	This indicator is consistent with the COAG indicator and the National Health Performance Authority indicator. <ul style="list-style-type: none"> • By 2018, reduce the national smoking rate to 10 per cent of the population and halve the Aboriginal and Torres Strait Islander smoking rate over the 2009 baseline, 2014 (Data source: NHS and NATSISS). • PI 04—Rates of current daily smokers, National Healthcare Agreement (2014) Health, Standard 30 April 2014 (Data source: Australian Health Survey). • Percentage of adults who are daily smokers, 2011–12 National Health Performance Authority: Healthy communities: 2011. National Health Performance Authority, Standard 07 November 2013 (Data source: AHS).
Recommended data source	NHS (primary); NPHDC (supplementary).
Disaggregation / cross tabulations available from recommended data source	State and territory. Sex. Age (18–24, 25–34, 35–44, 45–54, 55–64, 65+). Employment. Education. Income. Household status. Main language. Country of birth. Socioeconomic status—Index of Relative Socio-Economic Advantage and Disadvantage 2006. Remoteness—Australian Standard Geographical Classification remoteness area categories 2006.
Analysis required (that is, publicly available / AIHW will need to request data or perform analysis)	Baseline data are publicly available, but cross tabulations require additional analysis. AIHW can undertake these analyses using table builder for 2011–12 and the ABS expanded confidentialised unit record files for 2007–08 data.
Reporting frequency	
Baseline (2014 report)	NHS 2007–08 (available now).
Mid-point (2015 report)	AHS 2011–12 (available now).
Final (2018 report)	AHS 2016–17 (results usually released within 6–18 months).
Comments	Potentially 3 data sources could be used to inform this indicator, all of which are reliable enough and meet the required definition. While the NHS has been recommended as the primary data source, it might be useful to also report the proportions from the NDSHS and the Household, Income and Labour Dynamics in Australia survey as supporting information. Indigenous status and SES are not listed as disaggregations for this indicator, as these 2 groups are looked at in indicators 8i and 8ii.

Indicator 4		More smokers attempting to quit	
Definition and specifications	The proportion of people aged 18 or older who have smoked in the previous 12 months who successfully gave smoking for more than a month or unsuccessfully tried to give up in the previous 12 months.		
Measure (computation)	The measure is presented as a proportion and is constructed as: The number of people aged 18 or older who have smoked in the previous 12 months who successfully gave up smoking for more than a month or unsuccessfully tried to give up in the previous 12 months divided by the total number of smokers aged 18 or older.		
Other similar indicators	None.		
Recommended data source	NDSHS (primary); NATSISS (Aboriginal and Torres Strait Islander population); NPHDC (prisoners).		
Disaggregation / cross tabulations available from recommended data source	State and territory. Sex. Age (18–24, 25–34, 35–44, 45–54, 55–64, 65+). Indigenous status. Employment. Education. Income. Main language. Country of birth. Number of previous quit attempts. Socioeconomic status—Index of Relative Socio-Economic Advantage and Disadvantage 2006. Remoteness—Australian Standard Geographical Classification remoteness area categories 2006.		
Analysis required (that is, publicly available / AIHW will need to request data or perform analysis)	Baseline data are publicly available for people aged 14 or older but not for those aged 18 or older. AIHW can do these analyses using the NDSHS confidentialised unit record files.		
Reporting frequency	<p>Baseline (2014 report)</p> <p>NDSHS 2010 (available now). NATSISS 2008–09 (available now).</p> <p>Mid-point (2015 report)</p> <p>NDSHS 2013 (available now). NATSISS (no new data available).</p> <p>Final (2018 report)</p> <p>NDSHS 2016 (results usually released within 12 months). NATSISS 2014–15 (results usually released within 12 months).</p>		
Comments	<p>No new data available for the Aboriginal and Torres Strait Islander population for the mid-point report. Could supplement with NDSHS data depending on reliability of the data.</p> <p>In addition to the proposed measure, the proportion who have successfully given up smoking for more than a month and the proportion who tried to give up but were unsuccessful will be reported separately as top line data only (that is, it will not be cross-tabulated with other variables).</p> <p>The definition for the prisoner population will be slightly different, as the question asks whether they plan to quit smoking.</p>		

Indicator 5 Fewer women smoking while pregnant	
Definition and specifications	Two definitions of smoking while pregnant have been included, expressed as a percentage of all women who gave birth. These are, the number of women who gave birth and smoked: <ul style="list-style-type: none"> • at any time during the pregnancy (5.1) • during the first 20 weeks of their pregnancy (5.2).
Measure (computation)	The measure is presented as a proportion, and is constructed as: 5.1—The number of women who gave birth and smoked at any time during pregnancy divided by the number of women who gave birth and whose smoking status during pregnancy was known. 5.2—The number of women who gave birth and smoked during the first 20 weeks of pregnancy divided by the number of women who gave birth and whose smoking status during pregnancy was known.
Other similar indicators	National Core Maternity Indicators: Tobacco smoking in pregnancy for all women giving birth (Data source: NPDC). National Aboriginal and Torres Strait Islander Reform Agreement: Tobacco smoking during pregnancy (Data source: NPDC). National Health Performance Authority: Healthy communities: Percentage of women who gave birth and smoked during pregnancy (Data source: NPDC).
Recommended data source	NPDC.
Disaggregation / cross tabulations available from recommended data source	State and territory. Age (less than 20, 20–29, 30–39, 40+). Indigenous status. Country of birth. Number of cigarettes smoked. Birth weight. Socioeconomic status—Index of Relative Socio-Economic Advantage and Disadvantage 2011 (usual residence of mother). Remoteness— Australian Statistical Geographic Standard remoteness area categories 2011 (usual residence of mother).
Analysis required (that is, publicly available / AIHW will need to request data or perform analysis)	Baseline data publicly available, but cross-tabulations require additional analysis. AIHW hold the unit record data; custom tables requested.
Reporting frequency	
Baseline (2014 report)	NPDC 2011 (available now).
Mid-point (2015 report)	NPDC 2012 or 2013 (results usually released after 2 years).
Final (2018 report)	NPDC 2015 or 2016 (results usually released after 2 years).
Comments	Unsure which year of data will be reported, as there is a 2 year time lag so the 2013 data might not be available in time for the mid-point report. Further disaggregation will enable the identification of particular demographics or determinants (for example, teenage mothers) associated with higher rates of smoking during pregnancy.

Indicator 6		Fewer children exposed to second-hand smoke at home	
Definition and specifications	The proportion of households with dependent children (aged 0–14) who live with a smoker who smokes daily inside the home.		
Measure (computation)	The measure is presented as a proportion and is constructed as: The number of households with dependent children aged 0–14 with a household member who smokes daily inside a home (as reported by a member of that household) divided by all households with dependent children aged 0–14.		
Other similar indicators	This indicator is consistent with the National Health Performance Framework indicator—Children exposed to tobacco smoke in the home. The proportion of households with dependent children (0–14) where adults report smoking inside.		
Recommended data source	NDSHS (primary); NATSISS (supplementary).		
Disaggregation / cross tabulations available from recommended data source	State and territory. Sex (for the respondent, not the child). Indigenous status (for the respondent, not the child). Household status. Main language (for the respondent, not the child). Socioeconomic status—Index of Relative Socio-Economic Advantage and Disadvantage 2006. Remoteness—Australian Standard Geographical Classification remoteness area categories 2006.		
Analysis required (that is, publicly available / AIHW will need to request data or perform analysis)	Top line data publicly available, but cross-tabulations will require additional analysis on NDSHS data set.		
Reporting frequency			
Baseline (2014 report)	NDSHS 2010 (available now). NATSISS 2008–09 (available now).		
Mid-point (2015 report)	NDSHS 2013 (available now). NATSISS (no new data available).		
Final (2018 report)	NDSHS 2016 (results usually released within 12 months). NATSISS 2014–15 (results usually released within 12 months).		
Comments	No new data available for the Aboriginal and Torres Strait Islander population for the mid-point report. Could supplement with NDSHS data depending on reliability of the data.		

Indicator 7		Fewer adults exposed to second-hand smoke at home	
Definition and specifications	The proportion of non-smokers aged 18 or older who living in a household with a smoker who smokes daily inside the home.		
Measure (computation)	The measure is presented as a proportion, and is constructed as: The number of non-smokers aged 18 or older who report living in a household with a smoker who smokes daily inside the home divided by the total population aged 18 or older.		
Other similar indicators	None.		
Recommended data source	NDSHS (primary); NATSISS (supplementary).		
Disaggregation / cross tabulations available from recommended data source	State and territory. Sex. Age (18–24, 25–34, 35–44, 45–54, 55–64, 65+). Indigenous status. Employment. Household status. Marital status. Main language. Country of birth. Socioeconomic status—Index of Relative Socio-Economic Advantage and Disadvantage 2006. Remoteness—Australian Standard Geographical Classification remoteness area categories 2006.		
Analysis required (that is, publicly available / AIHW will need to request data or perform analysis)	Top line data publicly available, but cross-tabulations will require additional analysis. AIHW will perform analysis on NDSHS data set.		
Reporting frequency			
Baseline (2014 report)	NDSHS 2010 (available now). NATSISS 2008–09 (available now).		
Mid-point (2015 report)	NDSHS 2013 (available now). NATSISS (no new data available).		
Final (2018 report)	NDSHS 2016 (results usually released within 12 months). NATSISS 2014–15 (results usually released within 12 months).		
Comments	No new data available for the Aboriginal and Torres Strait Islander population for the mid-point report. Could potentially supplement with NDSHS data depending on reliability of the data.		

Indicator 8i		Fewer adults smoking regularly among Aboriginal and Torres Strait Islander people	
Definition and specifications	The proportion of Aboriginal and Torres Strait Islander people aged 18 or older who smoke daily.		
Measure (computation)	The measure is presented as a proportion and is constructed as: The number of Aboriginal and Torres Strait Islander people aged 18 or older who smoke tobacco daily divided by the total population of Aboriginal and Torres Strait Islanders aged 18 or older.		
Other similar indicators	This indicator is consistent with the COAG indicators: <ul style="list-style-type: none"> • National Aboriginal and Torres Strait Islander Reform Agreement 2014: PI 03—Rates of current daily smokers, 2014 • National Healthcare Agreement: PB e—Better health: by 2018, reduce the national smoking rate to 10 per cent of the population and halve the Aboriginal and Torres Strait Islander smoking rate over the 2009 baseline, 2014. 		
Recommended data source	Australian Aboriginal and Torres Strait Islander Health Survey (AATSIHS) and NATSISS (primary); NPHDC (supplementary).		
Disaggregation / cross tabulations available from recommended data source	State and territory. Sex. Age (18–24, 25–34, 35–44, 45–54, 55–64, 65+). Indigenous status. Employment. Socioeconomic status—Index of Relative Socio-Economic Advantage and Disadvantage 2006. Remoteness—Australian Standard Geographical Classification remoteness area categories 2006.		
Analysis required (that is, publicly available / AIHW will need to request data or perform analysis)	Top line data from the AATSIHS and NATSISS are publicly available, but cross tabulations will require additional analysis.		
Reporting frequency			
Baseline (2014 report)	NATSISS 2008–09 (available now).		
Mid-point (2015 report)	AATSIHS 2011–13 (available now).		
Final (2018 report)	AATSIHS 2016–17 (results usually released within 12–18 months).		
Comments	The NATSISS will need to be used for the baseline report, as the previous AATSIHS (National Aboriginal and Torres Strait Islander Health Survey; NATSIHS) was done before 2007.		

Indicator 8ii Fewer adults smoking regularly among people of low socioeconomic status	
Definition and specifications	The proportion of people living in the 2 lowest socioeconomic status fifths aged 18 or older who smoke daily.
Measure (computation)	The measure is presented as a proportion and is constructed as: The number of people aged 18 or older living in the 2 lowest SES area fifths (using the 2006 SEIFA and Index of Relative Socio-economic Advantage and Disadvantage fifths) who smoke tobacco daily divided by the total population aged 18 or older living in the 2 lowest SES area.
Other similar indicators	None.
Recommended data source	NHS; NATSISS (supplementary).
Disaggregation / cross tabulations available from recommended data source	State and territory. Sex. Indigenous status. Employment. Education. Income. Household status. Main language. Country of birth. Remoteness—Australian Standard Geographical Classification remoteness area categories 2006.
Analysis required (that is, publicly available / AIHW will need to request data or perform analysis)	Baseline data are publicly available, but cross tabulations require additional analysis. AIHW can conduct these analyses using table builder for 2011–12 and the ABS expanded confidentialised unit record files for 2007–08 data.
Reporting frequency	
Baseline (2014 report)	NHS 2007–08 (available now).
Mid-point (2015 report)	AHS 2011–12 (available now).
Final (2018 report)	AHS 2016–17 (results usually released within 6–18 months).
Comments	

Indicator 9		Young people delaying the onset of tobacco smoking
Definition and specifications	Delaying the onset of tobacco smoking is reflected by an older age of initiation. This is defined as the age an individual smoked their first full cigarette.	
Measure (computation)	The measure is presented as a mean (in years), and is constructed as: The sum of age (in years) of people aged 14–24 who have smoked a full cigarette divided by the total number of people aged 14–24 who have smoked a full cigarette.	
Other similar indicators	None.	
Recommended data source	NDSHS.	
Disaggregation / cross tabulations available from recommended data source	State and territory. Sex. Age (average age of initiation for people aged 14–19). Country of birth. Main language. Education. Employment status. Sexual orientation (dependent on data quality). Socioeconomic status—Index of Relative Socio-Economic Advantage and Disadvantage 2006. Remoteness—Australian Standard Geographical Classification remoteness area categories 2006.	
Analysis required (that is, publicly available / AIHW will need to request data or perform analysis)	Baseline data are publicly available for people aged 14–19, but cross tabulations require additional analysis. AIHW can conduct these analyses using the NDSHS confidentialised unit record files.	
Reporting frequency		
Baseline (2014 report)	NDSHS 2010 (available now).	
Mid-point (2015 report)	NDSHS 2013 (available now).	
Final (2018 report)	NDSHS 2016 (results usually released within 12 months).	
Comments	NATSISS does not collect data on age of initiation of tobacco smoking. NATSIHS/AATSIHS collect the age at which an individual started smoking daily.	

Indicator 10		Fewer people trying cigarettes	
Definition and specifications	Adults: The proportion of adults aged 18 or older who have smoked at least a full cigarette in their lifetime. Young people: The proportion of secondary school students aged 12–17 who have smoked at least a few puffs of a cigarette in their lifetime.		
Measure (computation)	The measure is presented as a proportion, and is constructed as: Adults: Number of adults aged 18 or older who have smoked at least a full cigarette divided by the total population aged 18 or older. Young people: Number of secondary school students aged 12–17 who have smoked at least a few puffs of a cigarette divided by the total number of secondary school students aged 12–17.		
Other similar indicators	None.		
Recommended data source	NDSHS; ASSAD (supplementary); NPHDC (supplementary).		
Disaggregation / cross tabulations available from recommended data source	State and territory. Sex. Age (12–17, 18–24, 25–34, 35–44, 45–54, 55–64, 65+). Country of birth. Main language. Education. Sexual orientation (dependent on data quality). Socioeconomic status—Index of Relative Socio-Economic Advantage and Disadvantage 2006. Remoteness—Australian Standard Geographical Classification remoteness area categories 2006.		
Analysis required (that is, publicly available / AIHW will need to request data or perform analysis)	No data publicly available. AIHW can conduct these analyses using the NDSHS confidentialised unit record files for the adult population. Supplementary ASSAD data—no publicly accessible national data. National data requests are directed to the Centre for Behavioural Research, Cancer Council Victoria. Costs and timeframes for data requests depend on scope of request.		
Reporting frequency			
Baseline (2014 report)	NDSHS 2010 (available now). ASSAD 2011 (available now).		
Mid-point (2015 report)	NDSHS 2013 (available now). ASSAD 2014 (results usually released within 12–18 months).		
Final (2018 report)	NDSHS 2016 (results usually released within 12 months). ASSAD 2017 (results usually released within 12–18 months).		
Comments	NATSISS or NATSIHS do not collect data on smoking a full cigarette only. The definition for young people is different to the definition for adults, as the ASSAD survey does not capture data on whether they have smoked a full cigarette.		

Indicator 11		Adult ever-smokers are quitting at a younger age	
Definition and specifications	The average age ex-smokers (smoked at least 100 cigarettes in their lifetime and have not smoked in the previous 12 months) smoked their last cigarette.		
Measure (computation)	The measure is presented as a mean, and is constructed as: The sum of age (in years) of adult ex-smokers aged 18 or older no longer smoking divided by total number of ex-smokers aged 18 or older.		
Other similar indicators	None.		
Recommended data source	NDSHS.		
Disaggregation / cross tabulations available from recommended data source	State and territory. Sex. Age (18–34, 35–44, 45–64). Country of birth. Main language. Income. Education. Employment status. Sexual orientation (dependent on data quality). Socioeconomic status—Index of Relative Socio-Economic Advantage and Disadvantage 2006. Remoteness—Australian Standard Geographical Classification remoteness area categories 2006.		
Analysis required (that is, publicly available / AIHW will need to request data or perform analysis)	Baseline data are not publicly available. AIHW can conduct these baseline and detailed analyses using the NDSHS confidentialised unit record files.		
Reporting frequency			
Baseline (2014 report)	NDSHS 2010 (available now).		
Mid-point (2015 report)	NDSHS 2013 (available now).		
Final (2018 report)	NDSHS 2016 (results usually released within 12 months).		
Comments	NATSISS does not collect data on age at cessation. NATSIHS/AATSIHS only collect information on the age an individual last ceased daily smoking.		

Indicator 12		More adult ever-smokers no longer smoking	
Definition and specifications	The proportion of adult ever-smokers (smoked at least 100 cigarettes in their lifetime) aged 18 or older who did not smoke in the previous 12 months.		
Measure (computation)	The measure is presented as a proportion and is constructed as: The number of ever-smokers aged 18 or older who did not smoke in the previous 12 months divided by the total number of ever-smokers aged 18 or older.		
Other similar indicators	None.		
Recommended data source	NDSHS.		
Disaggregation / cross tabulations available from recommended data source	State and territory. Sex. Age (18–24, 25–34, 35–44, 45–54). Country of birth. Main language. Income. Education. Employment status. Sexual orientation (dependent on data quality). Socioeconomic status—Index of Relative Socio-Economic Advantage and Disadvantage 2006. Remoteness—Australian Standard Geographical Classification remoteness area categories 2006.		
Analysis required (that is, publicly available / AIHW will need to request data or perform analysis)	Baseline data are not publicly available. AIHW can conduct the baseline and detailed analyses using the NDSHS confidentialised unit record files.		
Reporting frequency			
Baseline (2014 report)	NDSHS 2010 (available now).		
Mid-point (2015 report)	NDSHS 2013 (available now).		
Final (2018 report)	NDSHS 2016 (results usually released within 12 months).		
Comments	NATSISS does not collect data on successful (12 months) cessation. NHS/NATSIHS only collect information on when an individual last stopped smoking daily.		

Indicator 13		Fewer young people smoking	
Definition and specifications	The proportion of secondary school students aged 12–17 who smoked tobacco at least once in the previous 4 weeks.		
Measure (computation)	The measure is presented as a proportion and is constructed as: The number of secondary school students aged 12–17 who smoked tobacco at least 1 day in the previous 4 weeks divided by the total number of secondary school students aged 12–17.		
Other similar indicators	None.		
Recommended data source	ASSAD.		
Disaggregation / cross tabulations available from recommended data source	State and territory. Sex. Age (12–15, 16–17). Indigenous status. Main language. Socioeconomic status—Index of Relative Socio-Economic Advantage and Disadvantage 2006. Remoteness—Australian Standard Geographical Classification remoteness area categories 2006.		
Analysis required (that is, publicly available / AIHW will need to request data or perform analysis)	Baseline data are publicly available, but cross tabulations require additional analysis. No publicly accessible national data. National data requests are directed to the Centre for Behavioural Research, Cancer Council Victoria. Costs and timeframes for data requests depend on scope of request.		
Reporting frequency			
Baseline (2014 report)	ASSAD 2011 (available now).		
Mid-point (2015 report)	ASSAD 2014 (results usually released within 12–18 months).		
Final (2018 report)	ASSAD 2017 (results usually released within 12–18 months).		
Comments	No publicly available national data. Not sure whether results will be available in time for mid-point report. Could consider using the NDSHS as a supplement if these results are not available in time.		

Indicator 14		Current adult smokers smoking occasionally (weekly or less than weekly)	
Definition and specifications	An adult smoker aged 18 or older who smokes 1 or more cigarettes, roll-your-own cigarettes, cigars or pipe, weekly or less than weekly, but not daily.		
Measure (computation)	The measure is presented as a proportion and is constructed as: The number of people aged 18 or older who smoke tobacco weekly or less than weekly, but not daily, divided by the total number of current smokers aged 18 or older.		
Other similar indicators	None.		
Recommended data source	NHS; NPHDC (supplementary); NATSISS (supplementary).		
Disaggregation / cross tabulations available from recommended data source	State and territory. Sex. Age (18–24, 25–34, 35–44, 45–54, 55–64, 65+). Employment. Education. Income. Household status. Main language. Country of birth. Indigenous status. Socioeconomic status—Index of Relative Socio-Economic Advantage and Disadvantage 2006. Remoteness—Australian Standard Geographical Classification remoteness area categories 2006.		
Analysis required (that is, publicly available / AIHW will need to request data or perform analysis)	Baseline data are publicly available, but cross tabulations require additional analysis. AIHW can undertake these analyses using table builder for 2011–12 and the ABS expanded confidentialised unit record files for 2007–08 data.		
Reporting frequency	<p>Baseline (2014 report)</p> <p>NHS 2007–08 (available now). NATSISS 2008–09 (available now).</p> <p>Mid-point (2015 report)</p> <p>AHS 2011–12 (available now). AATSIHS 2011–13 (available now).</p> <p>Final (2018 report)</p> <p>AHS 2016–17 (results usually released within 6–18 months). AATSIHS 2016–17 (results usually released within 12–18 months).</p>		
Comments	<p>Potentially 3 data sources could be used to inform this indicator, all of which are reliable enough and meet the required definition. While the AHS has been recommended as the primary data source, it might be useful to also report the proportions from the NDSHS and the Household, Income and Labour Dynamics in Australia survey as supporting information.</p> <p>For the Aboriginal and Torres Strait Islander population, the NATSISS will need to be used for the baseline report, as the previous AATSIHS was done before 2007.</p>		

Appendix 3 Data quality statements

The data quality statements provide information on various aspects of the quality of the data being reported for each indicator, to enable users to understand any data limitations and make informed judgements about use of the data. A data quality statement is provided for each data collection, and any issues related to a specific indicator are highlighted in the relevance and accuracy section. Data quality information has been supplied or agreed by relevant data custodians. The dimensions used in this data quality statement template align with those used in data quality statements supplied when reporting national agreement performance indicators to the Council of Australian Governments (COAG), and are based on quality frameworks developed by Statistics Canada and the Australian Bureau of Statistics (ABS).

2010 National Drug Strategy Household Survey

Relational attributes

Indicators linked to this quality statement

- Indicator 2 (supplementary)
- Indicator 4 (primary)
- Indicator 6 (primary)
- Indicator 7 (primary)
- Indicator 9 (primary)
- Indicator 10 (primary)
- Indicator 11 (primary)
- Indicator 12 (primary).

Data quality

Institutional environment

The Australian Institute of Health and Welfare (AIHW) is a major national agency set up by the Australian Government under the *Australian Institute of Health and Welfare Act 1987* to provide reliable, regular and relevant information and statistics on Australia's health and welfare. It is an independent corporate Commonwealth entity established in 1987, governed by a management board, and accountable to the Australian Parliament through the Health portfolio.

The AIHW aims to improve the health and wellbeing of Australians through better health and welfare information and statistics. It 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 AIHW 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 AIHW 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 data sets based on data from each jurisdiction, to analyse these data sets and disseminate information and statistics.

The *Australian Institute of Health and Welfare Act 1987*, in conjunction with compliance to the *Privacy Act 1988 (Cth)*, ensures that the data collections managed by the AIHW are kept securely and under the strictest conditions with respect to privacy and confidentiality.

Timeliness

The NDSHS is conducted about every 3 years over 3–4 months. The 2010 data were collected between late April and mid September 2010.

A preliminary data set was received by the AIHW in late October 2010, and initial data checks were completed in late-November 2010.

Initial results were planned to be released in May 2011.

Results from the 2010 NDSHS were released on 27 July 2011.

Accessibility

Published results from the 2010 NDSHS are available on the AIHW website.

Users can request data not available online or in reports via the Communications, Media and Marketing Unit on (02) 6244 1032 or to info@aihw.gov.au. A charge applies to requests that take longer than 30 minutes to compile. A confidentialised unit record file is 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 help interpret 2010 NDSHS results is in Chapter 14 of the 2010 NDSHS report.

In addition, the 2010 technical report, code book and other supporting documentation are available through the Australian Data Archive website.

Relevance

Indicator 2: The 2010 NDSHS collected self-reported information on whether a person had smoked at least 100 cigarettes—including manufactured (packet) cigarettes or roll-your-own cigarettes—or the equivalent amount of tobacco in their life. This indicator is based on question D6 of the 2010 NDSHS questionnaire. This question was asked to all respondents, but, for the purpose of this indicator, is only reported for people aged 18–24.

The desired outcome over time for this indicator is a decrease in proportion.

Indicator 4: This indicator is based on the response to question D17 of the 2010 NDSHS questionnaire. Those who reported having smoked any form of tobacco in the previous 12 months were asked whether they had tried to change their smoking behaviour in the previous 12 months—either tried to quit, changed to a brand with lower tar or nicotine content, or reduced the amount they smoked in a day.

This indicator only focused on the people who attempted to quit and includes 2 measures—successfully quit for a month or longer, and unsuccessfully tried to quit. It also includes an overall measure of ‘any quit attempt’, which includes all those who either successfully quit for a month or longer or unsuccessfully tried to quit. The NDSHS was not specifically designed to obtain reliable national estimates for Aboriginal and Torres Strait Islander people, and results might not be representative of the Aboriginal and Torres Strait Islander population, so estimates should be interpreted with caution.

Indicator 6: This indicator is based on question D1 of the 2010 NDSHS questionnaire. This question is asked to all respondents who answer for their entire household. The respondent is asked whether anyone in the previous 12 months—either themselves or another member of the household—smoked at least 1 cigarette, cigar or pipe of tobacco per day in the home. The respondent may choose from 3 options: yes, inside the home; no, only smoke outside the home; no one at home regularly smokes. As this question was answered by the respondent speaking for his/her entire household, a different weight was used to estimate the proportion of households represented by the sample responses.

The denominator for this question was based on 3 questions from the 2010 NDSHS: ZZ18b, ZZ19 and ZZ20 to determine whether a household contained dependent children, and whether that household contains single parents or couples. Disaggregations for this indicator were limited, as most disaggregations relate to the respondent and not the child or the household. The National Aboriginal and Torres Strait Islander Social Survey (NATSISS) is used as supplementary data for the Aboriginal and Torres Strait Islander population (see NATSISS data quality statement for more information).

Exposure to tobacco smoke in the home for 15–17 year olds is not covered by indicators 6 or 7, and is a data gap.

The desired outcome over time for this indicator is a decrease in proportion.

Indicator 7: This indicator is based on question D1 of the 2010 NDSHS questionnaire. This question is asked to all respondents who answer this question for their entire household. The respondent is asked whether anyone in the previous 12 months—either themselves or another member of the household—smoked at least 1 cigarette, cigar or pipe of tobacco per day in the home. The respondent may choose from 3 options: yes, inside the home; no, only smoke outside the home; no one at home regularly smokes. This indicator relates to the smoking status of the respondent. A person is considered to be a non-smoker if at the time of the survey they reported not smoking (includes ex-smokers and never-smokers).

The desired outcome over time for this indicator is a decrease in proportion.

The National Aboriginal and Torres Strait Islander Social Survey (NATSISS) is used as supplementary data for the Aboriginal and Torres Strait Islander population (see NATSISS data quality statement for more information).

Indicator 9: This indicator is derived from question D4 of the 2010 NDSHS. All people who had ever smoked a full cigarette were asked what age they were when they smoked their first full cigarette. This indicator is presented as a mean (average) age. This indicator was restricted to the age range of 14–24 to reduce respondent recall bias.

The desired outcome over time for this indicator is an increase in the average age.

Indicator 10: This indicator is derived from question D3 of the 2010 NDSHS. All adults aged 18 or older were asked to report whether they had ever smoked a full cigarette. The Australian Secondary Students' Alcohol and Drug (ASSAD) survey is used as supplementary data for young people aged 12–17, and is based on a different definition (See ASSAD data quality statement for more information).

The desired outcome over time for this indicator is a decrease in proportion.

Indicator 11: This indicator is derived from several questions, but predominantly question D11 in the 2010 NDSHS questionnaire. The denominator is based on the number of ex-smokers aged 18 or older. A person is only considered to be an ex-smoker if they have smoked at least 100 cigarettes in their lifetime, and have reported not smoking for at least 12 months. All ex-smokers are asked what their age was when they last smoked. This indicator is presented as a mean (average) age. Many of the disaggregations are influenced by age, and it is difficult to make comparisons between sub-population groups.

The desired outcome over time for this indicator is a decrease in average age over time.

An additional measure of quit proportion before the age of 45 is also included for this indicator. This measure is also predominantly based on question D11 in the 2010 NDSHS questionnaire. The numerator for this indicator is the number of ever-smokers aged 45–74 who reported not smoking for at least 12 months and quit smoking before the age of 45. The denominator is the number of ever-smokers aged 45–74. A person is considered to be an ever-smoker if they have smoked at least 100 cigarettes in their lifetime.

Current smokers in this age range can never be included in the numerator for this measure. Changes will not be easily detected over short time periods, so reporting for this measure would be more appropriate on a less-frequent basis (a minimum of 10 years between reporting).

Indicator 12: This indicator is derived from several questions in the 2010 NDSHS questionnaire (D2, D3, D6, D7, D10). The denominator for this indicator are all people aged 18 or older who have smoked at least 100 cigarettes in their lifetime. The numerator for this indicator are all people aged 18 or older who have smoked at least 100 cigarettes in their lifetime, but reported not smoking in the previous 12 months.

The desired outcome over time for this indicator is an increase in proportion.

Scope and coverage

The NDSHS collects self-reported information on tobacco, alcohol and illicit drug use, and attitudes from people aged 12 or older.

Excluded from sampling were non-private dwellings (such as hotels, motels, boarding houses) and institutional settings (hospitals, nursing homes, other clinical settings such as drug and alcohol rehabilitation centres, prisons, military establishments and university halls of residence). People who were homeless were also excluded, as well as the territories of Jervis Bay, Christmas Island and Cocos Island.

The exclusion of people from non-private dwellings and institutional settings, and the difficulty in reaching marginalised people are likely to have affected estimates.

The 2010 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 people, as there was no target sample size for Aboriginal and Torres Strait Islander Australians. In 2010, the sample size for Aboriginal and Torres Strait Islander Australians was smaller than anticipated based on population estimates, and so estimates based on this population group should be interpreted with caution.

Accuracy

Sample design

The sample was stratified by region (15 strata in total—capital city and rest of state for each state and territory, except for the Australian Capital Territory, which operated as one stratum). To produce reliable estimates for the smaller states and territories, sample sizes were boosted in Tasmania, the Australian Capital Territory and the Northern Territory. An additional 1,200 booster sample was also allocated to Queensland.

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 12 or older. Weighting was applied to adjust for imbalances arising from the sampling and differential response rates, and to ensure that the results relate to the Australian population.

Sampling error

The measure used to indicate reliability of individual estimates reported in 2010 was the relative standard error (RSE). Only estimates with RSEs of less than 25% are considered sufficiently reliable for most purposes. Results subject to RSEs of between 25% and 50% should be considered with caution and those with relative standard errors greater than 50% should be considered as unreliable for most practical purposes. Estimates with RSEs greater than 50% have not been presented in the baseline report.

Indicator 2: This indicator has acceptable levels of sampling error.

Indicator 4: This indicator has acceptable levels of sampling error.

Indicator 6: This indicator has acceptable levels of sampling error except for *Remote and very remote* areas which have an RSE between 25% and 50% and should be used with caution.

Indicator 7: This indicator has acceptable levels of sampling error.

Indicator 9: This indicator has acceptable levels of sampling error.

Indicator 10: This indicator has acceptable levels of sampling error.

Indicator 11: This indicator has acceptable levels of sampling error.

Indicator 12: This indicator has acceptable levels of sampling error.

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.

Reported findings are based on self-reported data, and not empirically verified by blood tests or other screening measures.

Response rates and contact rates

Contact was made with 52,690 in-scope households, of which 26,648 questionnaires were categorised as being complete and useable, representing a response rate for the 2010 survey of 50.6%—slightly lower than the drop and collect component of the 2007 survey (51.6%).

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.

A low response rate does not necessarily mean that the results are biased. As long as the non-respondents are not systematically different in terms of how they would have answered the questions, there is no bias. Given the nature of the topics in this survey, some non-response bias is expected. If non-response bias in the NDSHS is to be eliminated as much as possible, additional work would be needed to investigate the demographic profile of the non respondents and the answers they might have given had they chosen to respond.

Aboriginal and Torres Strait Islander data

The survey was not specifically designed to obtain reliable national estimates for Aboriginal and Torres Strait Islander people, as there was no target sample size. In 2010, the sample size for Aboriginal and Torres Strait Islander Australians was smaller than anticipated based on population estimates. As a result, estimates based on this population group should be interpreted with caution. Where possible, Aboriginal and Torres Strait Islander estimates have been supplemented with results from the NATSISS.

Aboriginal and Torres Strait Islander estimates from the NDSHS have only been used for Indicators 9, 10 and 12.

For more information on the limitations of the survey results see Chapter 14 of the 2010 NDSHS report <<http://www.aihw.gov.au/publication-detail/?id=32212254712>>.

Comparisons of data from previous waves of the NDSHS, National Health Survey (NHS) and ASSAD show variations in estimates. Differences in scope, collection method, and design might account for this variation, and comparisons between collections should be made with caution.

Coherence

2007–08 National Health Survey

Relational attributes

Indicators linked to this quality statement

- Indicator 3 (primary)
- Indicator 8ii (primary)
- Indicator 14 (primary).

Data quality

Institutional environment

The Australian Bureau of Statistics (ABS) operates within a framework of the *Census and Statistics Act 1905* and the *Australian Bureau of Statistics Act 1975*. These ensure the independence and impartiality from political influence of the ABS, and the confidentiality of respondents. For more information on the institutional environment of the ABS, including its legislative obligations, financing and governance arrangements, and mechanisms for scrutiny of ABS operations, see *ABS Institutional Environment*.

Timeliness

The NHS is completed every 5 years over 12 months. Results from the 2007–08 NHS were released in May 2009.

Accessibility

See *National Health Survey, summary of results* (cat. no. 4364.0) for an overview of results from the NHS, and *National Health Survey: state tables for state and territory specific tables*.

Specialised data tables and confidentialised unit record files are also available on request.

Interpretability

Information to help interpret the data is available from the NHS User Guide. Many health-related issues are closely associated with age, so the relative differences between groups should be interpreted with caution. Age standardised rates have been provided for Indicator 3—headline result and state and territory results only. State and territory data, and non-Indigenous data for Indicator 3 have been age-standardised to the 2001 total Australian population to account for differences in the age structures of the states and territories and the Aboriginal and Torres Strait Islander and non-Indigenous population. Age-standardised rates should be used to assess the relative differences between groups, not to infer the rates that actually exist in the population.

Relevance

Indicator 3: The NHS 2007-08 collected self-reported information on smoker status from people aged 18 or older. This refers to the smoking of tobacco—including manufactured (packet) cigarettes, roll your-own cigarettes, cigars and pipes, but excluding chewing tobacco and smoking of non-tobacco products. The ‘current daily smoker’ category includes respondents who reported at the time of interview that they regularly smoked 1 or more cigarettes, cigars or pipes per day.

The desired outcome over time for this indicator is a decrease in proportion.

Indicator 8ii: The 2006 Socio-Economic Indexes for Areas and Index of Relative Socio-Economic Advantage and Disadvantage was used for this indicator.

The desired outcome over time for this indicator is a decrease in proportion.

Indicator 14: The NHS 2007–08 collected self-reported information on smoker status from people aged 18 or older. This refers to the smoking of tobacco—including manufactured (packet) cigarettes, roll-your-own cigarettes, cigars and pipes, but excluding chewing tobacco and smoking of non-tobacco products. The ‘current smoker’ category includes respondents who reported at the time of interview that they smoked cigarettes, cigars or pipes.

The desired outcome over time for this indicator is an increase in proportion.

Accuracy

The NHS is conducted in all states and territories excluding *Very remote* areas. Non-private dwellings (such as hotels, motels, hospitals, nursing homes and short-stay caravan parks) were also not included in the survey. The exclusion of people who usually live in *Very remote* areas has a small impact on estimates, except for the Northern Territory, where it has a larger impact, as a relatively large proportion of the population live in *Very remote* areas. The 2007–08 NHS response rate was 91%. NHS data are weighted to account for non-response.

As it is drawn from a sample survey, the indicator is subject to sampling error. Sampling error occurs because only a small proportion of the population is used to produce estimates that represent the whole population. Sampling error can be reliably estimated, as it is calculated based on the statistical methods used to design surveys. Rates should be considered with reference to their relative standard errors (RSEs). Estimates with RSEs between 25% and 50% should be used with caution. Estimates with RSEs greater than 50% are generally considered too unreliable for general use and have not been presented in the baseline report.

Indicator 3: This indicator has acceptable levels of sampling error, except for the country of birth disaggregation—Italy, China, Greece, India, and Oceania and Antarctica have RSEs between 25% and 50%, and should be used with caution.

The country of birth disaggregation is influenced by sex. Some countries, for example China, are known to have a far greater proportion of men smoking than women and this should be taken into consideration.

Indicator 8ii: This indicator has acceptable levels of sample error, except for people aged 75 or older, *Remote* areas, single parents with dependent children (highest SES only), and unemployed people.

Indicator 14: This indicator has acceptable levels of sampling error except for age and sex breakdowns, country of birth, employment status, education level, household status and the Northern Territory.

Coherence

The methods used to construct the indicators are consistent and comparable with other collections. The NHS also collects other health-related information that can be analysed with smoker status. Other non-ABS collections, such as the NDSHS, report estimates of smoker status. Results from the 2007 NDSHS showed slightly lower estimates for current daily smoking than the NHS 2007–08. These differences might be due to non-response bias in the NDSHS, different questions, and the differences in collection method.

2008 National Aboriginal and Torres Strait Islander Social Survey

Relational attributes

Indicators linked to this quality statement

- Indicator 6 (supplementary)
- Indicator 7 (supplementary)
- Indicator 8i (primary)
- Indicator 14 (supplementary).

Data quality

Institutional environment

The ABS operates within a framework of the *Census and Statistics Act 1905* and the *Australian Bureau of Statistics Act 1975*. These ensure the independence and impartiality from political influence of the ABS, and the confidentiality of respondents. For more information on the institutional environment of the ABS, including its legislative obligations, financing and governance arrangements, and mechanisms for scrutiny of its operations, please see *ABS Institutional Environment*.

Timeliness

The NATSISS is conducted every 6 years. The 2008 survey was conducted from August 2008 to April 2009. Results were released in October 2009.

Interpretability

Information on how to interpret and use the data appropriately is available from Explanatory Notes in National Aboriginal and Torres Strait Islander Social Survey, 2008 (cat. no. 4714.0), 2007–08 NHS Users' Guide (cat. no. 4363.0.55.001), 2008 NATSISS Users' Guide (cat. no 4720.0).

Accessibility

See National Aboriginal and Torres Strait Islander Social Survey, 2008 (cat. no. 4714.0) for an overview of results from the NATSISS.

Specialised data tables and confidentialised unit record files are also available on request.

Relevance

Indicator 6 (supplementary): This question is asked to all respondents, who answer this question for their entire household. The respondent is firstly asked whether anyone in the household smokes at least 1 (cigarette) a day. A second question is then asked about whether anyone usually smokes inside the house. This measure is different to that reported for the general population (see NDSHS data quality statement for more information).

The proportion reported is that of daily smokers who smoke inside the house, but not necessarily daily. As this question was answered by the respondent for his/her entire household, a different weight was used to estimate the proportion of households represented by the sample responses.

The numerator for this indicator is different for the Indigenous population. The numerator is the number of households with a daily smoker who smokes inside the home where dependent children aged 0–14 lived. The denominator is all households containing dependent children aged 0–14.

The desired outcome over time for this indicator is a decrease in proportion.

Indicator 7 (supplementary): This question is asked to all respondents, who answer this question for their entire household. The respondent is firstly asked whether anyone in the household smokes at least 1 cigarette a day. A second question is then asked about whether anyone usually smokes inside the house. This measure is different to that reported for the general population (see NDSHS data quality statement for more information).

The proportion reported is the proportion of non-smokers living with a daily smoker who smokes inside the house, but not necessarily inside the house on a daily basis. As this question was answered by the respondent speaking for his/her entire household, a different weight was used to estimate the proportion of households represented by the sample responses.

The numerator for this indicator is different for the Indigenous population. The numerator is the number of non-smokers aged 18 or older living in a household with a daily smoker who smokes inside the home. The denominator is the total number of non-smokers aged 18 or older.

The desired outcome over time for this indicator is a decrease in proportion.

Exposure to tobacco smoke in the home for young people aged 15–17 is not covered by indicators 6 or 7, and is a data gap.

Indicator 8i: The 2008 NATSISS collected self-reported information on smoker status from people aged 18 or older. This refers to the smoking of tobacco—including manufactured (packet) cigarettes, roll-your-own cigarettes, cigars and pipes, but excluding chewing tobacco and smoking of non-tobacco products. The current daily smoker category includes respondents who reported at the time of interview that they regularly smoked 1 or more cigarettes, cigars or pipes per day.

The desired outcome over time for this indicator is a decrease in proportion.

Indicator 14: The 2008 NATSISS collected self-reported information on smoker status from people aged 18 or older. This refers to the smoking of tobacco—including manufactured (packet) cigarettes, roll-your-own cigarettes, cigars and pipes, but excluding chewing tobacco and smoking of non-tobacco products. The current smoker category includes respondents who reported at the time of interview that they smoked cigarettes, cigars or pipes.

The desired outcome over time for this indicator is an increase in proportion.

The NATSISS also collects other health-related information that can be analysed with these indicators. The NATSISS is conducted in all states and territories, and includes *Remote* and non-remote areas.

The NATSISS is conducted in all states and territories, and includes *Remote* and non-remote areas. The 2008 sample was 13,300 people/6,900 households, with a response rate of 82% of households.

Accuracy

The 2008 NATSISS had a relatively large level of undercoverage when compared with other ABS surveys. As a consequence, the analysis undertaken to ensure results from the survey were consistent with other data sources was more extensive than usual. Potential bias due to undercoverage was addressed by several adjustments to the initial weights, and an adjustment to geographical areas based on the density of the Aboriginal and Torres Strait Islander population. As undercoverage can result in variances across population characteristics, as well as across data items, caution should be exercised when interpreting the survey results. For more information see the 2008 NATSISS quality declaration.

Sampling error occurs because only a small proportion of the population is used to produce estimates that represent the whole population. Sampling error can be reliably estimated, as it is calculated based on the statistical methods used to design surveys. Rates should be considered with reference to their relative standard error (RSE). Estimates with RSEs between 25% and 50% should be used with caution. Estimates with RSEs greater than 50% are generally considered too unreliable for general use, and have not been presented in the baseline report.

Indicator 6: This indicator has acceptable levels of sampling error.

Indicator 7: This indicator has acceptable levels of sampling error.

Indicator 8i: This indicator has acceptable levels of sampling error.

Indicator 14: This indicator has acceptable levels of sampling error.

Coherence

The methods used to construct the indicators are consistent and comparable with other collections. Data for Indicator 8i are consistent with the COAG indicators:

- National Aboriginal and Torres Strait Islander Reform Agreement 2014: PI 03—Rates of current daily smokers in the Aboriginal and Torres Strait Islander Health Performance Framework (Indicator 2.18)
- National Healthcare Agreement 2014: PB e-Better health: by 2018, reduce the national smoking rate to 10% of the population and halve the Aboriginal and Torres Strait Islander smoking rate over the 2009 baseline.

The numerators for indicators 6 and 7 for the Indigenous population are slightly different to the numerators for the general and non-Indigenous population. As a result, caution should be exercised when comparing Indigenous and non-Indigenous data.

Only headline data for Indicator 8i have been age standardised to account for differences between the age structures of the Aboriginal and Torres Strait Islander and non-Indigenous populations. Direct age-standardisation to the 2001 total Australian population was used. Age-standardised results provide a measure of relative difference only between populations.

National Perinatal Data Collection

Relational attributes

Indicators linked to this quality statement

- Indicator 5 (primary).

Data quality

Institutional environment

Data in the National Perinatal Data Collection (NPDC) include data collected as part of the Perinatal National Minimum Data Set and supplied by state and territory health authorities to the AIHW. The National Perinatal Epidemiology and Statistics Unit (NPESU) is a collaborating centre of the AIHW.

The AIHW is a major national agency set up by the Australian Government under the *Australian Institute of Health and Welfare Act 1987* to provide reliable, regular and relevant information and statistics on Australia's health and welfare. It is an independent corporate Commonwealth entity established in 1987, governed by a management board, and accountable to the Australian Parliament through the Health portfolio.

The AIHW aims to improve the health and wellbeing of Australians through better health and welfare information and statistics. It 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 AIHW 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 AIHW 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 data sets based on data from each jurisdiction, to analyse these data sets and disseminate information and statistics. The *Australian Institute of Health and Welfare Act 1987*, in conjunction with compliance to the *Privacy Act 1988* (Cth), ensures that the data collections managed by the AIHW are kept securely and under the strictest conditions with respect to privacy and confidentiality.

Timeliness

NPDC data are collated annually for calendar years. Most jurisdictions need at least 12 months lead time to undertake data entry, validation and linking with hospital data as required after the end of the data collection period. Data were requested to be submitted on 30 April 2013, and 3 jurisdictions supplied required data by this date. Final and useable data were received from all jurisdictions by 30 September 2013. Data are published in *Australia's mothers and babies* in November/December each year, about 2 years after the end of the data collection period. The National Health Information Standards and Statistics Committee agreed that jurisdictions would move to financial year data collection from July 2013.

Accessibility

The NPESU provides various products that draw upon the NPDC. Published products available are:

- *Australia's mothers and babies* annual report
- *Aboriginal and Torres Strait Islander mothers and their babies* reports
- *National core maternity indicators* reports
- *Children's headline indicators* reports.

Ad hoc data are also available on request (charges apply to recover costs).

Data for selected indicators are also published biennially in reports such as *Australia's Health*, *Aboriginal and Torres Strait Islander Health Performance Framework*, *A picture of Australia's children*, and *Overcoming Aboriginal and Torres Strait Islander disadvantage*.

The latest publication on the NPDC is *Australia's mothers and babies 2011*. This is the 21st annual report on pregnancy and childbirth in Australia, providing national information on women who gave birth and the characteristics and outcomes of their babies.

Interpretability

Supporting information on the use and quality of the NPDC is published annually in *Australia's mothers and babies* (Chapter 1), and available in hard copy or on the AIHW website. Comprehensive information on the quality of Perinatal National Minimum Data Set elements are published in *Perinatal National Minimum Data Set compliance evaluation 2006 to 2009* (Donnolley & Li 2012). Readers are advised to read caveat information to ensure appropriate interpretation of data. Metadata information for the NPDC is published in the Metadata Online Registry *METeOR*, the National Health Data Dictionary and the Maternity Information Matrix.

Relevance

The NPDC comprises data items as specified in the Perinatal National Minimum Data Set plus additional items collected by the states and territories. The purpose of the NPDC is to collect information at birth for monitoring pregnancy, childbirth and the neonatal period for both the mother and baby.

The NPDC is a specification for data collected on all births in Australia in hospitals, birth centres and the community. It includes information for all live births and stillbirths of at least 400 grams birthweight, or at least 20 weeks gestation. It includes data items on the mother, such as demographic characteristics and factors about the pregnancy, labour and birth. It also includes data items on the baby, such as birth status, sex, gestational age at birth, birthweight and neonatal morbidity and fetal deaths.

Due to the time delay between collection of data by the state and territory perinatal data collections, and their inclusion into the NPDC, estimates are not published until at least 2 years after the collection year. Improving perinatal data is a priority for COAG.

Data on smoking at any time during pregnancy have been collected in some states and territories since 2001. Before 2009, national data on smoking at any time in pregnancy was the key measure. Standard data items on smoking in the first and second 20 weeks of pregnancy were added to the Perinatal National Minimum Data Set in 2010, and are reported from 2011 onwards. The baseline report presents smoking prevalence for both of these measures: women who smoked during the first 20 weeks of pregnancy and women who smoked at any time during pregnancy.

Accuracy

Inaccurate responses might occur in data provided to the NPESU, which does not have direct access to perinatal records to determine the accuracy of the data provided. However, the NPESU checks data when received from states and territories for completeness, validity and logical errors. Potential errors are queried with jurisdictions, and corrections and resubmissions are made in response to these edit queries. The NPESU does not adjust data to account for possible errors.

Errors might occur during the processing of data by the states and territories or at the NPESU. Processing errors before data supply might be found through the validation checks applied by the NPESU.

Before publication, data are referred back to jurisdictions for checking and review. The NPESU does not adjust the data to correct for missing values. Because of data editing and subsequent updates of state/territory databases, numbers reported might differ from those in reports published by the states and territories.

According to the National Health Data Dictionary, Indigenous status is a measure of whether a person identifies as being of Aboriginal and Torres Strait Islander origin (AIHW 2012). All states and territories have a data item to record Indigenous status of the mother on their perinatal form, although there are some differences among the jurisdictions. For 2011, data on the baby's Indigenous status were available from New South Wales, Victoria, Queensland, Tasmania, the Australian Capital Territory and the Northern Territory.

Coherence

NPDC data are reported and published annually by the AIHW. While definitions and data domains of some individual data elements have changed over time in response to data development, in many cases it is possible to map coding changes to make meaningful comparisons over time.

The other national data sources on perinatal data are the ABS and the AIHW National Hospital Morbidity Database. The ABS compiles statistics, and publishes reports on registrations of live births and perinatal deaths from data made available by the Registrars of Births, Deaths and Marriages in each state and territory.

The ABS collection includes all live births that were not previously registered and stillbirths of at least 400 grams, or at least 20 weeks gestation where birthweight is unknown.

The National Hospital Morbidity Database is compiled from data supplied by the state and territory health authorities. It is a collection of electronic confidentialised summary records for separations (that is, episodes of admitted patient care) in public and private hospitals in Australia.

As these collections differ from NPDC in scope, collection method, definitions and reference periods, comparisons between collections should be made with caution.

The Children's Headline Indicator 'smoking in pregnancy' data is cited in the National Antenatal Care Guidelines as data that can be used to monitor the extent to which the guidelines have influenced practice and policy. This provides some support for using data that aligns with what is reported in the Children Headline Indicators (that is, first 20 weeks).

Age-standardised rates have been provided for Indicator 5—headline result, state and territory estimates and Indigenous and non-Indigenous estimates only. Data were age standardised to the 2001 total Australian female population to account for differences in the age structures of the states and territories, and the Aboriginal and Torres Strait Islander and non-Indigenous population. Age-standardised rates should be used to assess the relative differences between groups, not to infer the rates that actually exist in the population.

Age-standardised results might not match previously published estimates, as the method used was different and was standardised to the Australian female population who gave birth in the respective year, rather than the Australian female population at 30 June 2001.

National Prisoner Health Data Collection

Relational attributes

Indicators linked to this quality statement

- Indicator 3 (supplementary)
- Indicator 8i (supplementary)
- Indicator 10 (supplementary)
- Indicator 14 (supplementary).

Data quality

Institutional environment

The AIHW is a major national agency set up by the Australian Government under the *Australian Institute of Health and Welfare Act 1987* to provide reliable, regular and relevant information and statistics on Australia's health and welfare. It is an independent corporate Commonwealth entity established in 1987, governed by a management board, and accountable to the Australian Parliament through the Health portfolio.

The AIHW aims to improve the health and wellbeing of Australians through better health and welfare information and statistics. It 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 AIHW 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 AIHW 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 data sets based on data from each jurisdiction, to analyse these data sets and disseminate information and statistics.

The *Australian Institute of Health and Welfare Act 1987*, in conjunction with compliance to the *Privacy Act 1988* (Cth), ensures that the data collections managed by the AIHW are kept securely and under the strictest conditions with respect to privacy and confidentiality.

Timeliness

The Census was done during 11–24 October 2010 in the Australian Capital Territory and the Northern Territory, and during 8–21 November 2010 in Queensland, South Australia, Tasmania and Western Australia. One prison in Queensland completed the Census during February 2011.

Accessibility

The AIHW website provides prisoner health data, which can be downloaded free of charge. Reports including *The health of Australia's prisoners*, and thematic bulletins, are published and are also available on the AIHW website. Users can request data not available online or in reports via the Child Welfare and Prisoner Health Unit, Australian Institute of Health and Welfare on (02) 6244 1000 or to prisoner.health@aihw.gov.au. A fee may be charged for substantial requests on a cost-recovery basis. General enquiries about AIHW publications can be made to the Communications, Media and Marketing Unit on (02) 6244 1032 or to info@aihw.gov.au.

Interpretability

Most of the data in the NPHDC are self-report rather than diagnostic health data. Reports such as *The health of Australia's prisoners* have a 'method' section outlining technical information.

Relevance

Indicator 3: The NPHDC collected self-reported information on smoker status from prison entrants. This refers to the smoking of tobacco—including manufactured (packet) cigarettes, roll your-own cigarettes, cigars, pipes and other tobacco products. The definition of a regular smoker for prison entrants is different to the general population (see NHS data quality statement for the general population definition), as it includes entrants who smoked 'most days' and daily. Data should be considered as supplementary only, and comparisons between the prison entrant population and other groups made with caution. This estimate is based on question 23d of the prison entrants form. The desired outcome over time for this indicator is a decrease in proportion.

Indicator 8i: The NPHDC collected self-reported information on smoker status from Aboriginal and Torres Strait Islander prison entrants. This refers to the smoking of tobacco—including manufactured (packet) cigarettes, roll your-own cigarettes, cigars, pipes and other tobacco products. The definition of a regular smoker for Indigenous prison entrants is different to the general Indigenous population (see NATSISS data quality statement for the general Indigenous population definition), as it includes entrants who smoked most days and daily. Data should be considered as supplementary only, and comparisons between the Indigenous prison entrant population and non-prisoner Indigenous population or other groups should be made with caution. This estimate is based on question 23d of the prison entrants form.

The desired outcome over time for this indicator is a decrease in proportion.

Indicator 10: The NPHDC collected self-reported information on whether prison entrants had ever smoked a full cigarette—including manufactured (packet) cigarettes, roll your-own cigarettes, cigars, pipes and other tobacco products. This data is based on question 23a of the prison entrants form. The NDSHS is the primary data source for the general adult population, and NPHDC data is considered supplementary only.

The desired outcome over time for this indicator is a decrease in proportion.

Indicator 14: The NPHDC collected self-reported information on smoker status from prison entrants. This refers to the smoking of tobacco—including manufactured (packet) cigarettes, roll your-own cigarettes, cigars, pipes and other tobacco products. Occasional smoking is defined as smoking not every day, but at least once a week or less than once a week at the time of the interview, and is based on question 23d of the prison entrants form. Occasional smokers as a proportion of current smokers was not publically available, and this supplementary data was derived from published data by dividing occasional smokers by the total proportion of current smokers (sum of regular and occasional smokers).

The definition of regular smoking in the NPHDC includes 'every day or most days', so prison entrants who smoke most days cannot be considered occasional. This definition is different to the general population (see NHS data quality statement for the general population definition). As a result, this estimate might be an underestimation.

The desired outcome over time for this indicator is an increase in proportion.

Accuracy

The prison entrants form is completed for all prisoners entering prison in the Census period. For the 2010 Census, the period was increased from 1 week to 2 weeks. The Census was conducted in 44 of the 45 public and private prisons in all states and territories excluding New South Wales and Victoria.

Of all those completing the prison entrants form, 14% were women, and 43% were Aboriginal or Torres Strait Islanders prisoners.

Coherence

The indicators that constitute the NPHDC were developed by the AIHW with the assistance and advice of the National Prisoner Health Information Committee, and are influenced by policy relevance in monitoring key aspects of prisoner health.

New data items have been added to the entrants, clinic and establishments collections of the 2012 NPHDC. A discharge component will also be added to the collection.

Comparison of data from previous years is difficult because the participating jurisdictions have changed. As a result, comparisons at the national level should be used with caution. Comparisons between years at the jurisdictional level might be more appropriate. Trend data for those states and territories that have participated in all 3 data collections would also be possible.

Scope and coverage

A prison entrant is classed as a person aged 18 or older, entering full-time prison custody, either on remand (awaiting a trial or sentencing) or on a sentence. Prisoners who have been transferred from one prison to another are not included as entrants.

A prison dischargee is a full-time prisoner aged 18 or older, who expects to be released from prison within the 4 weeks following the time of interview.

Prisoners aged 18 or older, held in full-time custody in correctional facilities in Australia are in scope for the clinic and medication components of the NPHDC.

Police cells, court cells, periodic detention, juvenile correctional facilities, and immigration detention centres are out of scope for all components of the NPHDC.

Statistical standards

Australian Standard Classification of Countries and Australian Standard Classification of Languages were used as the code frame for questions on country of birth and main language spoken at home.

Australian Secondary Students' Alcohol and Drug Survey 2011

Relational attributes

Indicators linked to this quality statement

- Indicator 1 (primary)
- Indicator 2 (primary)
- Indicator 10 (supplementary)
- Indicator 13 (primary).

Data quality

Institutional environment

Cancer Council Victoria (CCV) is a leading non-government organisation of more than 400 staff, with an international reputation for innovation in cancer research, prevention, support and advocacy. The organisation focuses on applying research to inform and shape the best possible prevention, early detection, treatment and support programs for the benefit of all Victorians, and more widely where applicable. Located in the St Kilda Road precinct in Melbourne, the organisation runs the internationally renowned Quit and SunSmart prevention programs. CCV is the largest non-government funder of cancer control research in Victoria, and provided more than \$23 million for this purpose in 2013. CCV provides a home for intramural researchers in epidemiology, behavioural and tobacco control research.

The Centre for Behavioural Research in Cancer (CBRC) is one of these intramural research units and was established in 1986. With about 25 staff members, CBRC researchers attract substantial research funding from the US National Cancer Institute, National Health and Medical Research Council, ARC, VicHealth, Victorian Department of Health, Victorian Cancer Agency, Department of Health, and other government and non-government bodies. The centre hosts a multidisciplinary group of researchers who undertake research to develop and evaluate mass media campaigns in tobacco control, skin cancer prevention, obesity prevention and alcohol harm prevention, as well as research to shape supportive care interventions for people affected by cancer, and cancer prevention policies, including tobacco plain packaging, warnings on unhealthy products and the impact of product marketing on healthy choices.

CCV has coordinated, analysed and managed ASSAD at the national level since 1984.

Timeliness

ASSAD is conducted every 3 years throughout the school year. The 2011 data were collected between June and December 2011.

Data processing commenced in October 2011 and continued until January 2012. Data cleaning took place between February and June 2012.

Results from the national 2011 ASSAD were released on 10 December 2012.

Accessibility

Published results from the 2011 ASSAD survey are available at: <[www.nationaldrugstrategy.gov.au/internet/drugstrategy/Publishing.nsf/content/BCBF6B2C638E1202CA257ACD0020E35C/\\$File/National%20Report_FINAL_ASSAD_7.12.pdf](http://www.nationaldrugstrategy.gov.au/internet/drugstrategy/Publishing.nsf/content/BCBF6B2C638E1202CA257ACD0020E35C/$File/National%20Report_FINAL_ASSAD_7.12.pdf)>.

Interpretability

Information to help interpret 2011 ASSAD results are in *Australian secondary school students' use of tobacco, alcohol, and over-the-counter and illicit substances in 2011*.

A copy of the survey instrument is included as Appendix 1 in the report, available at <www.nationaldrugstrategy.gov.au>.

Relevance

Indicator 1: The ASSAD survey collects self-reported information on smoking frequency from secondary school students aged 12–17. ASSAD collects data on percentages of secondary school students who have smoked in the previous month, in the previous week, and on more than 3 days in the previous week. Smoking at least weekly or at least monthly are the internationally accepted indicators for adolescent smoking. This is different than the adult definitions. For adults (Indicator 3), regular smoking is defined as smoking daily, while for secondary school students aged 12–17 it is defined as smoking at least 1 day in the previous week. This refers to the smoking of cigarettes only—the question did not specifically ask about smoking cigars or pipes, chewing tobacco, or smoking non-tobacco products. This indicator is based on question 25 of the 2011 ASSAD questionnaire.

The desired outcome over time for this indicator is a decrease in proportion.

Indicator 2: The ASSAD collected self-reported information on whether a school student had smoked more than 100 cigarettes in their life. This indicator is based on question 22 of the 2011 ASSAD questionnaire.

The desired outcome over time for this indicator is a decrease in proportion.

Indicator 10: The ASSAD collected self-reported information on whether a school student had ever smoked just a few puffs of a cigarette. This indicator is based on question 22 of the 2011 ASSAD questionnaire. The NDSHS is used as the primary data for the adult population (18 or older), and is based on a different definition (see NDSHS data quality statement for more information).

The desired outcome over time for this indicator is a decrease in proportion.

Indicator 13: The ASSAD collected self-reported information on smoker status from school students aged 12–17. A student is defined as a smoker if they reported smoking a cigarette at least once in the 4 weeks before the survey. This indicator is based on question 24 of the 2011 ASSAD survey. The desired outcome over time for this indicator is a decrease in proportion.

Perceptions of behaviour

It is known from past studies of alcohol and tobacco consumption that respondents tend to underestimate actual consumption levels (Stockwell et al. 2004).

Sample design

Within each state and territory, schools were sampled using a random sampling method designed to represent students from the 3 main education sectors: government, Catholic and independent. The basic design of the sampling procedure was a stratified two-stage probability sample, with schools selected at the first stage of sampling, and students selected within schools at the second stage of sampling. Within each state and territory, schools were stratified by the 3 education sectors, and randomly selected from each sector to ensure that the distribution of schools in the 3 education sectors was reflected in the sample. Two samples of schools were drawn to reflect the distinction between junior secondary (up to Year 10) and senior secondary (Year 11 and Year 12) campuses.

To correct for any over and under-sampling of students in any state, education sector, age and gender group, data were weighted to ensure that the results relate to the distribution of students across the states and education sectors throughout Australia.

Method

The ASSAD is a cross-sectional school-based survey of adolescents in Australian secondary schools. Principals of selected schools were contacted, and permission to conduct the survey at the school was sought. If a school refused, they were replaced by the school geographically nearest to them within the same education sector.

The policy of the education departments in each state and territory, and the policies of individual schools determined whether active parental consent is required before students participate in the study. Active parental consent requires that the student return a consent form showing that their parents have approved their participation in the study.

The study aimed to have 80 students from each participating school complete the survey. On an agreed day, external research staff attended the school to administer the pencil-and-paper questionnaire to the preselected classes of students, during school time. Students worked independently, and completed the survey anonymously.

Sampling error

The measure used to indicate reliability of individual estimates reported in 2011 was the relative standard error (RSE). Only estimates with RSEs of less than 25% are considered reliable enough for most purposes. Results subject to RSEs of between 25% and 50% should be considered with caution, and those with relative standard errors greater than 50% should be considered as unreliable for most practical purposes.

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.

Reported findings are based on self-reported data, and are not empirically verified by blood tests or other screening measures.

Response and contact rates

Overall, 26,194 students in years 7 to 12 took part in the survey. Of those, 163 were removed from the data set due to large amounts of missing data or wildly exaggerated responses. A total of 24,854 surveys were from students aged 12–17, and were included in the analysis. Some students did not answer all questions, because they were either unable or unwilling to provide a response. The survey responses for these students were kept in the sample, and the missing values were recorded as not answered. No attempt was made to deduce or impute these missing values.

A low response rate does not necessarily mean that the results are biased. As long as the non-respondents are not systematically different in terms of how they would have answered the questions, there is no bias.

Aboriginal and Torres Strait Islander data

The survey was not specifically designed to obtain reliable national estimates for Aboriginal and Torres Strait Islander people, as there was no target sample size.

Indicators

Indicator 1: This indicator has acceptable levels of sampling error.

Indicator 2: This indicator has acceptable levels of sampling error.

Indicator 10: This indicator has acceptable levels of sampling error.

Indicator 13: This indicator has acceptable levels of sampling error.

Coherence

Disaggregations of average spending money

Average spending money is highly correlated with age, and the estimates have not been adjusted for age. As a result, the association between available spending money and weekly smoking should be interpreted with caution.

Comparisons of data collected through the NDSHS show variations in estimates. Differences in collection method, questions used, and design might account for this variation. As a result, comparisons between collections should be made with caution.

Glossary

Australian Standard Geographical Classification (ASGC) remoteness areas: The ABS Australian Standard Geographical Classification remoteness areas 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 2006 Census.

Areas are classified as:

- *Major cities*
- *Inner regional*
- *Outer regional*
- *Remote*
- *Very remote.*

Data from the NDSHS and NPDC collections group *Remote and very remote* together, and data from the NHS excludes *Very remote* areas.

Australian Statistical Geographic Standard remoteness areas: The ABS Australian Statistical Geographic Standard (ASGS) remoteness areas 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 2011 Census.

Areas are classified as:

- *Major cities*
- *Inner regional*
- *Outer regional*
- *Remote*
- *Very remote.*

Data from the ASSAD collection groups *Remote* and *Very remote* areas together.

socioeconomic status and the Index of Relative Socio-Economic Advantage and Disadvantage: The Index of Relative Socio-Economic Advantage and Disadvantage is 1 of 4 Socio-Economic Indexes for Areas (SEIFA) compiled by the ABS after each Census of Population and Housing. The SEIFA aims to represent the socioeconomic status (SES) of Australian communities, and pinpoint areas of advantage and disadvantage. Both SEIFA fifths and tenths are used in this report.

- **Fifths** divide a distribution into 5 equal groups. The population living in the first fifth (20% of areas with the greatest overall level of disadvantage) is described as the 'lowest SES'. The 20% living in the top fifth is described as the 'highest SES'.
- **Tenths** divide a distribution into 10 equal groups. In the case of SEIFA, the population living in the first tenth (10% of areas with the greatest overall level of disadvantage) is described as the 'lowest SES'. The 10% at the other end of the scale—the top tenth—is described as the 'highest SES'.

daily smoker: A person who smokes 1 or more cigarettes, roll your-own cigarettes, cigars or pipes at least once a day (excluding chewing tobacco and smoking of non-tobacco products).

ever-smoker: A person who has smoked at least 100 cigarettes in their lifetime.

ex-smoker: A person who has smoked at least 100 cigarettes in their lifetime and has not smoked in the previous 12 months.

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

non-smoker: A person who is a never-smoker or an ex-smoker.

not in the labour force: A person who is neither employed nor unemployed in a particular reference period. Includes people who are unable to work and students studying full time who are not currently working.

occasional smoking—adults: The smoking of 1 or more cigarettes, roll your-own cigarettes, cigars or pipe, weekly or less than weekly (excluding chewing tobacco and smoking of non-tobacco products).

occasional smoking—young people: The smoking of tobacco (cigarettes only) at least 1 day per month.

prison entrant: People aged 18 or older entering prison. For this report, prison entrants refer to prisoners aged 18 or older who entered custody during the 2010 National Prisoner Health Census period.

regular smoking—adults: See *daily smoker*.

regular smoking—prison entrants: An adult who reported at the time of the interview that he or she regularly smoked 1 or more cigarettes, cigars or pipes every day or most days.

regular smoking—young people: The smoking of tobacco (cigarettes only) at least 1 day per week.

second-hand smoke (also called environmental smoke): The exposure to tobacco smoke, or the chemicals in tobacco smoke, without actually smoking.

References

- ABS (Australian Bureau of Statistics) 2007. Population distribution, Aboriginal and Torres Strait Islander Australians, 2006. ABS cat. no. 4705.0. Canberra: ABS.
- ABS 2011. The health and welfare of Australia's Aboriginal and Torres Strait Islander peoples, October 2010. ABS cat. no. 4704.0. Canberra: ABS
- AIHW (Australian Institute of Health and Welfare) 2011. 2010 National Drug Strategy Household Survey report. Cat. no. PHE 145. Canberra: AIHW.
- AIHW 2012. Australia's health 2012. Australia's health series no. 13. Cat. no. AUS 156. Canberra: AIHW.
- AIHW 2014. Australia's health 2014. Australia's health series no. 14. Cat. no. AUS 178. Canberra: AIHW.
- AIHW & AACR (Australasian Association of Cancer Registries) 2012. Cancer in Australia: an overview, 2012. Cancer series no. 74. Cat. no. CAN 70. Canberra: AIHW.
- Banks, E, Joshy G, Weber M, Lui B, Grenfell R, Egger S, Pagie E, Lopez A, Sitas F and Beral V 2015. Tobacco smoking and all-cause mortality in a large Australian cohort study: findings from a mature epidemic with current low smoking prevalence. *BMC Medicine* 13:38.
- CCV (Cancer Council Victoria) 2013. Smoking and disadvantage evidence brief. Canberra: Australian National Preventive Health Agency.
- COAG (Council of Australian Governments) 2008. National Healthcare Agreement. Canberra: COAG.
- COAG 2012. National Healthcare Agreement. Canberra: COAG.
- Collins D & Lapsley H 2008. The costs of tobacco, alcohol and illicit drug abuse to Australian society in 2004–05. National Drug Strategy Monograph Series no. 66. Canberra: Department of Health and Ageing.
- Dunn J, Greenbank S, McDowell M, Mahoney C, Mazerolle P, Occhipinti S et al. 2008. Community knowledge, attitudes and behaviours about environmental tobacco smoke in homes and cars. *Health Promotion Journal of Australia* 19:113.
- Donnolley N & Li Z 2012. Perinatal National Minimum Data Set compliance evaluation 2006 to 2009. Perinatal statistics series no. 26. Cat. no. PER 54. Sydney: AIHW National Perinatal Epidemiology and Statistics Unit.
- Hyland A, Borland R, Li Q, Yong HH, McNeill a, Fong GT et al. 2006. Individual-level predictors of cessation behaviours among participants in the International Tobacco Control (ITC) Four Country Survey. *Tobacco Control* 15 (Supplement 3): iii83-iii94. doi: 10.1136/tc.2005.013516
- IGCD (Intergovernmental Committee on Drugs) 2013. National Tobacco Strategy 2012–2018. Canberra: Commonwealth of Australia.
- IHME (Institute for Health Metrics and Evaluation) 2014. Seattle: IHME. Viewed 16 September 2014, <www.healthmetricsandevaluation.org/tools/data-visualizations>.
- Li Z, Zeki R, Hilder L & Sullivan EA 2013. Australia's mothers and babies 2011. Perinatal statistics series no. 28. Cat. no. PER 59. Canberra: AIHW National Perinatal Epidemiology and Statistics Unit.
- MCDS (Ministerial Council on Drug Strategy) 2011. National Drug Strategy 2010–2015: a framework for action on alcohol, tobacco and other drugs. Canberra: Commonwealth of Australia.
- National Statistician's Office 2014. Using Administrative Data: Good Practice Guidance for Statisticians. Viewed 2 June 2015 <<https://gss.civilservice.gov.uk/wp-content/uploads/2012/12/Interim-Admin-Data-guidance.pdf>>.

NCASU (National Centre on Addiction and Substance Use, Columbia University) 2010. Adolescent substance use: America's #1 public health problem. New York: Columbia University.

Öberg M, Jaakkola MS, Prüss-Üstün A, Schweizer C & Woodward A 2010. Second-hand smoke: assessing the burden of disease at national and local levels: WHO environmental burden of disease series, no. 18. Geneva: World Health Organization.

SGV (State Government of Victoria) 2014. Pregnancy and smoking. Viewed 15 May 2015, <www.betterhealth.vic.gov.au/bhcv2/bhcarticles.nsf/pages/Pregnancy_and_smoking>.

Stockwell T, Donath S, Cooper-Stanbury M, Chikritzhs T, Catalano P & Mateo C 2004. Under-reporting of alcohol consumption in household surveys: a comparison of quantity-frequency, graduated-frequency and recent recall. *Addiction* 99(8):1024–33.

USHHS (US Department of Health and Human Services) 2006. The health consequences of involuntary exposure to tobacco smoke: a report of the US surgeon general. Atlanta: Centers for Disease Control and Prevention, Office on Smoking and Health. Viewed 30 April 2015. Available from: <www.cdc.gov/tobacco/data_statistics/sgr/2006/>.

USHHS 2010. How tobacco smoke causes disease: the biology and behavioural basis for smoking-attributable disease: a report of the US surgeon general. Atlanta: Centers for Disease Control and Prevention, Centre for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health. Viewed 30 April 2015. Available from: <www.surgeongeneral.gov/library/tobaccosmoke/report/index.html>.

This report presents baseline data for several tobacco indicators using various data sources and collection years. The baseline showed that some groups are at much higher risk of smoking or being exposed to second-hand smoke, including Aboriginal and Torres Strait Islander people, those living in remote or socioeconomically disadvantaged areas, and single parents with dependent children.