## 2.03 Environmental tobacco smoke

The number and proportion of Aboriginal and Torres Strait Islander children aged 0–14 years who live in households with regular smokers and number and proportion of households with Indigenous children aged 0–17 years in which there were regular smokers

## **Data sources**

Data for this indicator come from the 2007-08 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) and 2008 National Aboriginal and Torres Strait Islander Social Survey (NATSISS).

# National Aboriginal and Torres Strait Islander Health Survey (NATSIHS)

The 2004–05 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) collected information from 10,439 Indigenous Australians of all ages. This sample was considerably larger than the supplementary Indigenous samples in the 1995 and 2001 National Health Surveys. The survey was conducted in remote and non-remote areas of Australia and collected a range of information from Indigenous Australians. This included information on health-related actions, health risk factors, health status, socioeconomic circumstances and women's health. The survey provides comparisons over time in the health of Indigenous Australians. It is planned to repeat the NATSIHS at 6-yearly intervals, with the next NATSIHS to be conducted in 2011–12. Selected non-Indigenous comparisons are available through the 2004–05 National Health Survey (NHS).

# National Aboriginal and Torres Strait Islander Social Survey (NATSISS)

The Australian Bureau of Statistics (ABS) conducted the 2002 National Aboriginal and Torres Strait Islander Social Survey (NATSISS) between August 2002 and April 2003. The 2008 NATSISS was conducted between August 2008 and April 2009. The survey provides information about the Aboriginal and Torres Strait Islander populations of Australia for a wide range of areas of social concern including health, education, culture and labour force participation. The 2008 NATSISS included for the first time children aged under 15. The NATSISS will be conducted every six years, with the next survey planned for 2013.

The 2008 NATSISS collected information by personal interview from 13,300 Indigenous Australians across all states and territories of Australia, including those living in remote areas. The sample covered persons aged 15 years and over who are usual residents in selected private dwellings. It collected information on a wide range of subjects including family and culture, health, education, employment, income, financial stress, housing, and law and justice.

## Data analyses

## Children living in households with smokers

- In 2007–08, there were around 122,000 Indigenous children aged 0–14 years living in households with a daily smoker. This represented 65% of all Indigenous children aged 0–14 years. In comparison, 32% of non-Indigenous children aged 0–14 years lived in households with a daily smoker (Table 2.03.1).
- In 2007–08, there were around 57,000 households with Indigenous children aged 0–14 years in which there were daily smokers. This represented 64% of all households with Indigenous children (Table 2.03.1).
- Approximately 22% of Indigenous children aged 0-14 years were living in households with a daily smoker who smoked at home indoors compared with 6.6% of non-Indigenous children of the same age (Table 2.03.1; Figure 2.03.1).

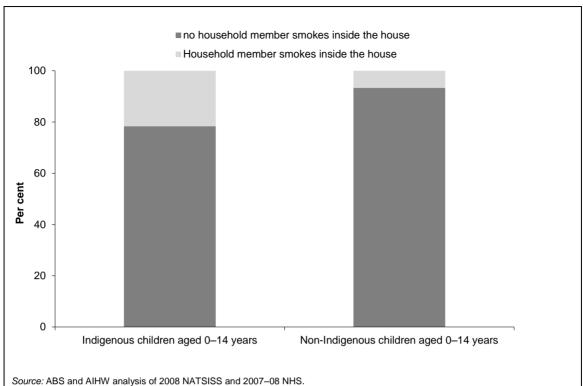
Table 2.03.1: Whether children aged 0–14 years are living in households with current daily smoker(s), by Indigenous status of children, 2007–08

	Indigenous aged 0–1		Non-Indi children a yea	ged 0-14	Households with Indigenous children aged 0–14 years		
	Number	Number Per cent		Per cent	Number	Per cent	
Current daily smoker in household							
No	65,410	34.9*	2,649,170	67.8*	32,837	36.2*	
Yes	122,182	65.1*	1,258,451	32.2*	56,996	63.8*	
Total	187,591	100.0	3,907,621	100.0	89,383	100.0	
Not stated	5,658				2,255		
Household member smokes inside the house							
No <sup>(a)</sup>	145,804	78.4*	3,649,133	93.4*	70,377	79.6*	
Yes	40,157	21.6*	258,488	6.6*	18,078	20.4*	
Total	185,961	100.0	3,907,621	100.0	88,455	100.0	
Not stated	7,288				3,183		

<sup>\*</sup> Represents results with statistically significant differences in the Indigenous/non-Indigenous comparisons.

Source: ABS and AIHW analysis of 2008 NATSISS and 2007-08 NHS.

<sup>(</sup>a) Includes households in which there were no current daily smokers.



Source. ABS and Airivi analysis of 2006 NATSISS and 2007–06 Nrs.

Figure 2.03.1: Percentage of Indigenous and non-Indigenous children aged 0-14 years, by whether a household member smokes inside the house, 2008

### Children living in households with smokers by state/territory

- In 2008, the proportion of Indigenous children aged 0–14 years who lived in households with daily smokers ranged from 53% in the Australian Capital Territory to 77% in the Northern Territory (Table 2.03.2).
- The proportion of Indigenous children aged 0–14 years who lived in households with a daily smoker who smoked at home indoors ranged from 13% in the Australian Capital Territory to 29% in Tasmania (Table 2.03.2).
- The proportion of households with Indigenous children aged 0–17 years in which there were daily smokers who smoked at home indoors ranged from 15% in the Australian Capital Territory to 29% in Tasmania (Table 2.03.3).
- In Queensland, Indigenous children were 2.5 times as likely as non-Indigenous children to live in households with a daily smoker who smoked at home indoors. In New South Wales and the Australian Capital Territory, Indigenous children were three times as likely, in Victoria, South Australia and Tasmania, four times as likely and in Western Australia five times as likely as non-Indigenous children to live in households with a daily smoker who smoked at home indoors (Table 2.03.2).

Table 2.03.2: Children aged 0-14 years living in households with smokers, by Indigenous status and state/territory, 2008

			NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Proportion of children living with	Indigenous	%	61.5	65.0	63.9	66.7	65.9	67.4	52.9	76.6	65.1
current daily smoker(s) <sup>(a)</sup>	Non-Indigenous	%	31.9	29.6	35.3	34.2	29.9	37.7	28.4	35.5	32.2
	Rate ratio		1.9*	2.2*	1.8*	1.9*	2.2*	1.8*	1.9*	2.2*	2.0*
Proportion of children living with	Indigenous	%	22.5	21.4	21.6	17.6	15.3	28.5	13.4	25.4	21.6
regular smokers who smokes at home indoors <sup>(a)</sup>	Non-Indigenous	%	8.3	5.1	8.6	3.4	3.7	8.0	3.9	0.0	6.6
	Rate ratio		2.7*	4.2*	2.5*	5.1*	4.1*	3.6*	3.4*		3.3*
Total number of children aged 0-14 years <sup>(b)</sup>	Indigenous	No.	57,941	12,430	56,785	25,405	10,281	6,736	1,567	22,104	193,249
years <sup>(3)</sup>	Non-Indigenous	No.	1,292,502	970,599	792,573	394,744	277,107	88,120	62,751	29,226	3,907,621

<sup>\*</sup> Represents results with statistically significant differences in the Indigenous/non-Indigenous comparisons.

Source: ABS and AIHW analysis of 2008 NATSISS and 2007-08 NHS.

<sup>(</sup>a) Proportions exclude not stated responses.

<sup>(</sup>b) Includes households in which the smoking status of members was not stated.

Table 2.03.3: Households with Indigenous children aged 0-17 years: current daily smoker status, by state/territory, 2008

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
	Per cent								
Proportion living with current daily smoker(s) <sup>(a)</sup>	61.3	62.2	64.0	64.4	65.2	65.2	58.7	70.8	63.7
Proportion living with a current daily smoker who smokes at home indoors <sup>(a)</sup>	23.9	20.9	22.4	18.1	16.0	28.9	15.1	22.7	22.1
Total number of households with Indigenous children aged 0-17 years <sup>(b)</sup>	32,049	7,521	28,515	12,212	5,525	4,303	862	8,703	99,689

<sup>(</sup>a) Excludes households in which the smoking status of members was not stated.

Source: ABS and AIHW analysis of 2008 NATSISS.

### Children living in households with smokers by remoteness

- A higher proportion of Indigenous children aged 0–14 years in *Very remote* areas lived in households with a daily smoker (77%) and in households with a daily smoker who smoked at home indoors (24%) than Indigenous children in *Major cities* and *Inner regional* areas. *Outer regional* and remote areas had a similar proportion to Indigenous Children in *Very remote* areas (Table 2.03.4). The same pattern was evident for Indigenous households with Indigenous children aged 0–17 years (Table 2.03.5).
- Indigenous children in *Major cities* were four times as likely to live in households with a daily smoker who smoked at home indoors as non-Indigenous children in *Major cities*. In *Outer regional* areas, Indigenous children were three times as likely, in *Inner regional* areas, two times as likely and in *Remote* areas, eight times as likely as non-Indigenous children to live in households with a daily smoker who smoked at home indoors (Table 2.03.4).

<sup>(</sup>b) Includes households in which the smoking status of members was not stated.

Table 2.03.4: Children aged 0-14 years living in households with smokers, by Indigenous status and remoteness, 2008 and 2007-08

		<b>Major Cities</b>		Ir	Inner Regional Outer Regional		Remote			Very Remote			Australia					
	Indig.	Non-Indig.	Rate ratio <sup>(a)</sup>	Indig.	Non- Indig.	Rate ratio <sup>(a)</sup>	Indig.	Non- Indig.	Rate ratio <sup>(a)</sup>	Indig.	Non- Indig.	Rate ratio <sup>(a)</sup>	Indig.	Non- Indig.	Rate ratio <sup>(a)</sup>	Indig.	Non-Indig.	R rat
	%	%		%	%		%	%		%	%		%	%		%	%	
Proportion of children living with current daily smoker(s) <sup>(b)</sup>	58.6	28.9	2.0*	60.5	35.5	1.7*	69.1	45.0	1.5*	72.9	34.7	2.1*	77.3			65.1	32.2	2
Proportion of children living with a current daily smoker who smokes at home indoors <sup>(b)</sup>	19.3	5.0	3.9*	20.3	10.5	1.9*	23.7	9.2	2.6*	24.3	3.0	8.2*	24.2			21.6	6.6	
Total number of children aged 0-14																		
years <sup>(c)</sup>	61,654	2,569,254		44,765	847,123		41,527	428,001		18,073	63,242		27,230			193,249	3,907,621	

 $<sup>{}^{\</sup>star} \ \text{Represents results with statistically significant differences in the Indigenous/non-Indigenous comparisons}.$ 

Source: ABS and AIHW analysis of 2008 NATSISS and 2007-08 NHS.

<sup>(</sup>a) Rate ratio Indigenous: non-Indigenous.

<sup>(</sup>b) Excludes households in which the smoking status of members was not stated.

<sup>(</sup>c) Includes households in which the smoking status of members was not stated.

Table 2.03.5: Households with Indigenous children aged 0-17 years: smoking status by remoteness, 2008

	Major Cities	Inner Regional	Outer Regional	Remote	Very Remote	Australia					
	Per cent										
Proportion with current daily smoker(s) <sup>(a)</sup>	60.8	58.7	65.4	71.4	76.5	63.7					
Proportion with a current daily smoker who smokes at home indoors <sup>(a)</sup>	19.9	22.4	24.3	23.6	23.5	22.1					
Total number of households with Indigenous children aged 0-17 years <sup>(b)</sup>	34,704	24,958	21,321	8,190	10,515	99,689					

<sup>(</sup>a) Excludes households in which the smoking status of members was not stated.

Source: ABS and AIHW analysis of 2008 NATSISS.

#### Time series

- A higher proportion of Indigenous children aged 0–14 years lived in households with daily smokers in 2004–05 than in 2007–08 (68% compared with 65%) in non-remote areas.
- Indigenous children aged 0–14 years were twice as likely as non-Indigenous children of the same age to live in households with daily smokers in 2004–05 and 2007–08 (Table 2.03.6).

Table 2.03.6: Proportion of children aged 0-14 years who live in households with regular smokers, by remoteness and Indigenous status, 2004-05 and 2008

		Non-remote		Australia					
	Indig.	Non-Indig.	Ratio.	Indig.	Non-Indig.	Ratio			
2004–05	65.3	36.6	1.8*	67.8	36.6	1.9*			
2008	62.1	32.2	1.9*	65.1	32.2	2.0*			

 $<sup>^{*} \ \</sup>text{Represents results with statistically significant differences in the Indigenous/non-Indigenous comparisons}. \\$ 

Source: ABS and AIHW analysis of 2004-05 NATSIHS, 2008 NATSISS, 2004-05 NHS, and 2007-08 NHS

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<sup>(</sup>b) Includes households in which the smoking status of members was not stated.

#### Data quality concerns

#### National Aboriginal and Torres Strait Islander Health Survey (NATSIHS)

The NATSIHS uses the standard Indigenous status question. The NATSIHS sample was specifically designed to select a representative sample of Aboriginal and Torres Strait Islander Australians. It therefore overcomes the problem inherent in most national surveys with small and unrepresentative Indigenous samples. As with other surveys, the NATSIHS is subject to sampling and non-sampling errors. Calculations of standard errors and significance testing help to identify the accuracy of the estimates and differences.

Information recorded in this survey is essentially 'as reported' by respondents. The ABS makes every effort to collect accurate information from respondents, particularly through careful questionnaire design, pre-testing of questionnaires, use of trained interviewers and assistance from Indigenous facilitators. Imperfect recall or individual interpretation of survey questions may nevertheless affect some responses.

Non-Indigenous comparisons are available through the National Health Survey (NHS). The NHS was conducted in Major cities, Inner and Outer regional areas and Remote and Very remote areas, but Very remote areas were excluded from the sample. Time series comparisons are available through the 1995 and 2001 NHS.

In Remote and very remote communities there were some modifications to the NATSIHS content in order to accommodate language and cultural appropriateness in traditional communities and help respondents understand the concepts. Some questions were excluded and some reworded. Also, paper forms were used in communities in remote areas and computer-assisted interview (CAI) instruments were used in non-remote areas. The CAI process included built-in edit checks and sequencing.

Further information on NATSIHS data quality issues can be found in the NATSIHS 2004–05 publication (ABS 2006).

#### National Aboriginal and Torres Strait Islander Health Survey (NATSIHS)

The NATSISS is conducted in all states and territories and includes remote and non-remote areas. The 2008 sample was 13,300 persons in 6900 households, with a response rate of 82% of households. Up to three randomly selected Indigenous people were chosen from selected households to participate in the survey. Trained ABS interviewers conducted the survey using face-to-face interviews. In non-remote areas interviewers used a notebook computer to record responses, while in remote areas a paper questionnaire was used. Interviewers obtained the consent of a parent or guardian before interviewing those aged 15 to 17 years. Indigenous persons usually resident in non-private dwellings such as hotels, motels, hostels, hospitals, short-stay caravan parks, prisons and other correctional facilities were excluded

The NATSISS uses the standard Indigenous status question. The NATSISS sample was specifically designed to select a representative sample of Aboriginal and Torres Strait Islander Australians.

As with other surveys, the NATSISS is subject to sampling and non-sampling errors Care has been taken to ensure that the results of this survey are as accurate as possible. All interviews were conducted by trained ABS officers. However, some factor may affect the reliability of the data.

Information recorded in this survey is 'as reported' by respondents, and therefore may differ from information available from other sources or collected using different methodologies.

Data on health related indicators 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 Indigenous and non-Indigenous population.

Time series comparisons for the 2008 survey are available through the 1994 National Aboriginal and Torres Strait Islander Survey and the 2002 NATSISS. However not all data elements align across the three (1994, 2001 and 2008) NATSISS surveys, hence care is required when reviewing results across the three surveys. There are no strictly comparable non-Indigenous results available for the 2008 NATSISS because the latest General Social Survey (which has been used in the past to compare with Indigenous results from the NATSISS) was run in 2006, with the next being run in 2010. Data from other ABS surveys run in 2008 may, however, be used to obtain rough non-Indigenous comparisons for some data items. Where possible, the ABS has provided recommendations for non-Indigenous data comparisons these have been adopted in this report.

The 2008 NATSISS has a relatively large level of under-coverage when compared to other ABS surveys. There was also an increase in under-coverage compared to previous ABS Indigenous surveys. For example, the estimated under-coverage in the 2004-05 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) was 42%. The overall under-coverage rate for the 2008 NATSISS is approximately 53% of the in-scope population at the national level. This rate varies across the states and territories (ABS 2010).

Further information on NATSISS data quality issues can be found in the 2008 NATSISS User's guide (ABS 2010).

# List of symbols used in tables

- n.a. not available
- rounded to zero (including null cells)
- 0 zero
- .. not applicable
- n.e.c. not elsewhere classified
- n.f.d. not further defined
- n.p. not available for publication but included in totals where applicable, unless otherwise indicated

## References

ABS (Australian Bureau of Statistics) 2006. National Aboriginal and Torres Strait Islander Health Survey 2004–05. Canberra: ABS.

ABS 2010. National Aboriginal and Torres Strait Islander Social Survey: Users' Guide. ABS Cat. no. 4720.0. Canberra: ABS.

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