

2.25 Unsafe sexual practices

Proportion of Aboriginal and Torres Strait Islander peoples engaging in unsafe sexual practices

Data sources

Data are available from the National Perinatal Data Collection and the National Notifiable Diseases Surveillance System held at the Department of Health and Ageing.

National Notifiable Diseases Surveillance System (NNDSS)

A set of 56 diseases and conditions are notifiable nationally. Data on all these cases are forwarded to the NNDSS, managed by the Australian Government Department of Health and Ageing.

Identification of Indigenous notifications in all states and territories is incomplete, but three jurisdictions (Western Australia, South Australia and the Northern Territory) have been assessed as having adequate identification in the NNDSS (AIHW & ABS 2006). Data on Indigenous status for certain notifiable diseases are not available for the Australian Capital Territory, New South Wales or Tasmania.

National Perinatal Data Collection

Data for this measure come from the National Perinatal Data Collection of the AIHW National Perinatal Statistics Unit (NPSU).

Each state and territory has a perinatal collection based on birth notification forms completed by midwives and other staff, using information obtained from mothers and from hospital and other records. These data are provided annually in electronic format to the NPSU and are compiled into the National Perinatal Data Collection. Perinatal notification forms are completed in Australia for all births of 20 weeks or more gestation, or a birthweight of 400 grams or more.

Data are presented for all states and territories for the year 2005, the first year for which data from Tasmania have been included in analyses of Indigenous perinatal data.

Data on mothers for whom Indigenous status was not stated have been excluded from analysis. In 2005, there were 128 births where Indigenous status was not stated (0.05%).

Analyses

Notifications for chlamydia, syphilis, gonorrhoea and donovanosis

Notifications of sexually transmissible infections is one indicator of unsafe sexual practices. It does not measure all cases, just those involving sexually transmissible infections.

Notification data for chlamydia, syphilis, gonorrhoea and donovanosis are presented below.

Chlamydia

For the 3-year period 2004–2006, there were 29,245 notifications for chlamydia in Western Australia, South Australia and the Northern Territory, 26% of which were notifications of Aboriginal and Torres Strait Islander persons. Notification rates of chlamydia among Indigenous males and females were six times those of other Australian males and females.

Time series

- Over the period 1994–1996 to 2005–2006 in Western Australia, South Australia and the Northern Territory combined there were significant increases in notification rates for chlamydia among Indigenous Australians (from around 630 to 1616 notifications per 100,000) (Table 2.25.1). The fitted trend line shows an average yearly increase in the rate of around 99 per 100,000, which is equivalent to a 188% increase in the rate over the period.
- There were also significant increases in notification rates for chlamydia among other Australians during the same period (from around 50 to 218 notifications per 100,000; 379% increase) (Table 2.25.1; Figure 2.25.1).
- Notification rate ratios between Indigenous and other Australians for chlamydia showed significant declines over the 12-year period.

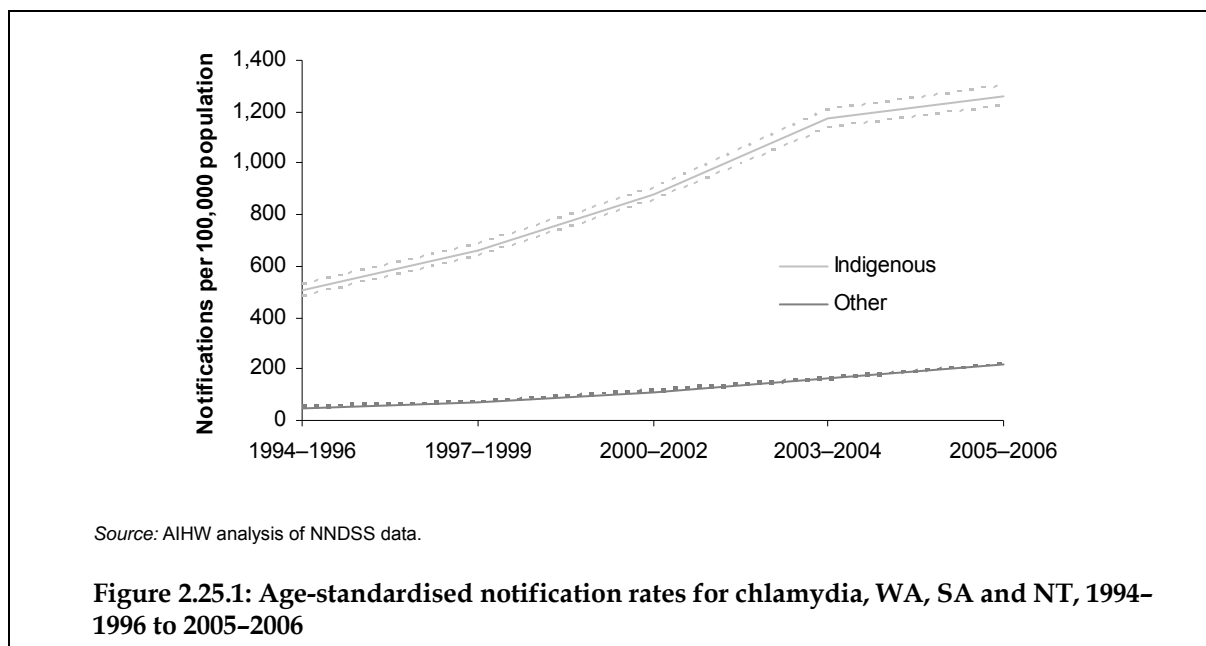


Table 2.25.1: Crude and age-standardised notification rates, rate ratios and rate differences for chlamydia, WA, SA and NT, 1994–1996 to 2005–2006

	1994–1996	1997–1999	2000–2002	2003–2004	2005–2006	Annual change ^(a)	% change over period ^(b)
Indigenous crude rate (no. per 100,000)							
Males	414.8	579.5	767.5	1,064.3	1,190.1	76.3*	220.7
Females	846.2	1047.6	1,413.7	1,838.9	1,974.0	114.7*	162.6
Persons	630.3	813.4	1,091.7	1,469.9	1,616.3	98.7*	187.8
Indigenous age-standardised rate (no. per 100,000)							
Males	357.4	497.5	647.5	888.1	961.5	60.1*	201.9
Females	657.2	829.7	1,113.1	1,435.2	1,515.2	87.6*	160.0
Persons	507.3	661.9	878.7	1,171.0	1,260.1	75.8*	179.4
Other Australian age-standardised rate (no. per 100,000)^(c)							
Males	35.5	58.0	91.1	131.4	176.7	13.2*	446.3
Females	64.3	86.4	132.0	191.4	260.9	18.4*	343.5
Persons	49.9	71.8	111.5	160.8	218.1	15.8*	379.0
Rate ratio^(d)							
Males	10.1	8.6	7.1	6.8	5.4	–0.4*	–49.8
Females	10.2	9.6	8.4	7.5	5.8	–0.4*	–47.5
Persons	10.2	9.2	7.9	7.3	5.8	–0.4*	–47.3
Rate difference^(e)							
Males	321.8	439.4	556.4	756.6	784.8	46.9*	175.0
Females	592.8	743.3	981.1	1,243.7	1,254.3	69.2*	140.1
Persons	457.4	590.1	767.2	1,010.2	1,041.9	60.1*	157.6

* Represents results with statistically significant increases or declines at the $p < 0.05$ level over the period 1994–1996 to 2005–2006.

(f) Average annual change in rates, rate ratios and rate differences determined using linear regression analysis.

(g) Per cent change between 1994–1996 and 2005–2006 based on the annual rate of change over the period.

(h) Includes notifications for non-Indigenous people and those for whom Indigenous status was not stated.

(i) Notification rate for Indigenous Australians divided by the notification rate for other Australians.

(j) Notification rate for Indigenous Australians minus the notification rate for other Australians.

Note: Rates have been directly age-standardised using the Australian 2001 standard population.

Source: AIHW analysis of NNDSS data.

Syphilis

For the period 2004–2006, there were 1,464 notifications for syphilis in Western Australia, South Australia and the Northern Territory combined, 73% of which were notifications of Aboriginal and Torres Strait Islander persons. Notification rates for syphilis among Indigenous males and females were 53 and 115 times the rates for other Australian males and females.

Time series

- Over the period 1994–1996 to 2005–2006 in Western Australia, South Australia and the Northern Territory combined, there were significant decreases in notification rates for syphilis among Indigenous Australians (from around 333 to 207 notifications per 100,000). The fitted trend line shows an average yearly decline in the rate of around 9 per 100,000 which is equivalent to a 33% reduction in the rate over the period (Table 2.25.2).
- There were significant increases in notification rates for syphilis among other Australians during the same period (from 2 to 4 per 100,000; 62% increase) (Table 2.25.2; Figure 2.25.2).
- There were significant declines in notification rate ratios between Indigenous and other Australians for syphilis over the 12-year period.

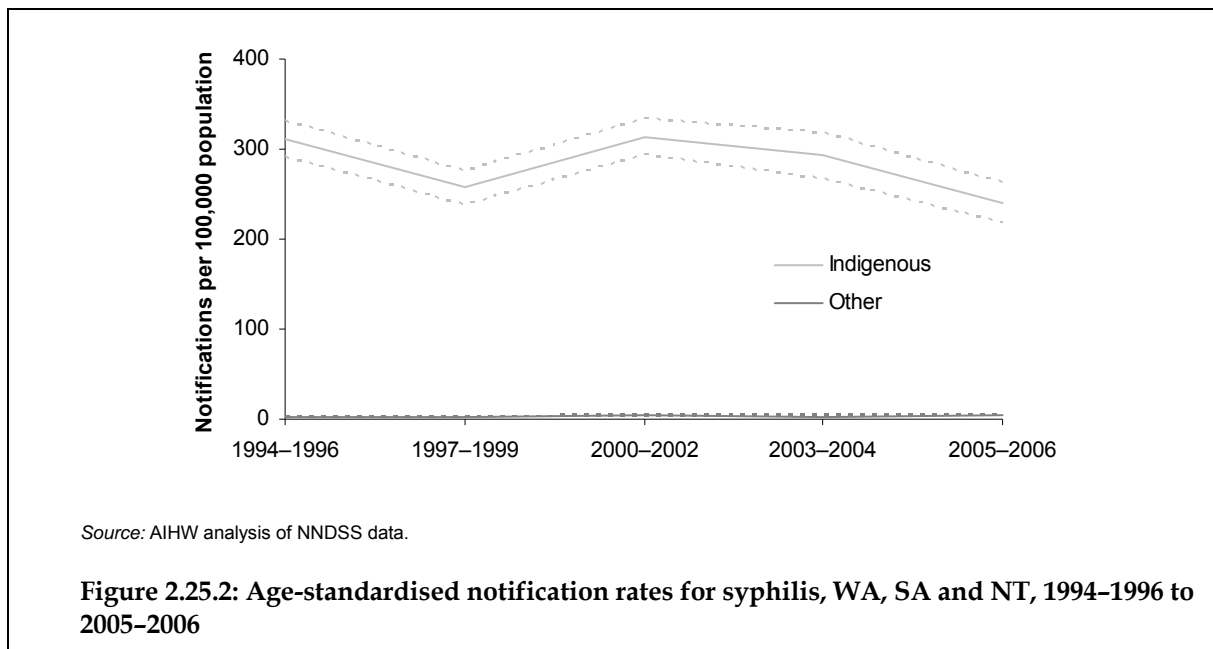


Table 2.25.2: Crude and age-standardised notification rates, rate ratios and rate differences for syphilis, WA, SA and NT, 1994–1996 to 2005–2006

	1994–1996	1997–1999	2000–2002	2003–2004	2005–2006	Annual change ^(a)	% change over period ^(b)
Indigenous crude rate (no. per 100,000)							
Males	337.2	257.7	308.7	254.2	190.3	–10.8*	–38.5
Females	328.2	241.0	294.6	254.4	209.0	–8.3	–30.2
Persons	333.2	249.6	301.6	255.0	206.6	–9.1*	–32.7
Indigenous age-standardised rate (no. per 100,000)							
Males	328.7	286.4	340.5	311.9	243.7	–5.0	–18.1
Females	296.9	231.5	289.1	275.9	229.3	–3.2	–12.9
Persons	311.6	256.9	313.5	292.4	240.5	–3.7	–14.2
Other Australian age-standardised rate (no. per 100,000)^(c)							
Males	2.7	3.7	4.7	4.3	5.3	0.2*	99.0
Females	2.0	1.5	2.2	1.7	2.3	0.0	15.6
Persons	2.3	2.7	3.5	3.0	3.8	0.1*	62.2
Rate ratio^(d)							
Males	122.9	76.4	72.6	72.2	46.0	–6.0*	–58.4
Females	149.8	151.2	131.9	166.4	100.1	–2.9	–23.3
Persons	132.6	96.5	89.6	98.0	63.3	–5.1*	–46.6
Rate difference^(e)							
Males	326.0	282.6	335.8	307.6	238.4	–5.2	–19.1
Females	295.0	230.0	286.9	274.2	227.0	–3.2	–13.1
Persons	309.2	254.2	310.0	289.5	236.7	–3.8	–14.8

* Represents results with statistically significant increases or declines at the $p < 0.05$ level over the period 1994–1996 to 2005–2006.

(f) Average annual change in rates, rate ratios and rate differences determined using linear regression analysis.

(g) Per cent change between 1994–1996 and 2005–2006 based on the annual rate of change over the period.

(h) Includes notifications for non-Indigenous people and those for whom Indigenous status was not stated.

(i) Notification rate for Indigenous Australians divided by the notification rate for other Australians.

(j) Notification rate for Indigenous Australians minus the notification rate for other Australians.

Note: Rates have been directly age-standardised using the Australian 2001 standard population.

Source: AIHW analysis of NNDSS data.

Gonorrhoea

For the period 2004–2006, there were 11,105 notifications for gonorrhoea in Western Australia, South Australia and the Northern Territory combined, 79% of which were notifications of Aboriginal and Torres Strait Islander persons. Notification rates of gonorrhoea among Indigenous males and females were 47 and 134 times the rates of other Australian males and females respectively.

Time series

- Over the period 1994–1996 to 2005–2006 in Western Australia, South Australia and the Northern Territory combined, there were significant increases in notification rates for gonorrhoea among Indigenous Australians (from around 1,127 to 1,917 notifications per 100,000; 74% increase) (Table 2.25.3).
- There were also significant increases in notification rates for gonorrhoea among other Australians over the same period (from around 13 to 22 per 100,000; 68% increase) (Table 2.25.3; Figure 2.25.3).
- Notification rate ratios between Indigenous and other Australians for gonorrhoea showed no significant changes over the 12-year period.

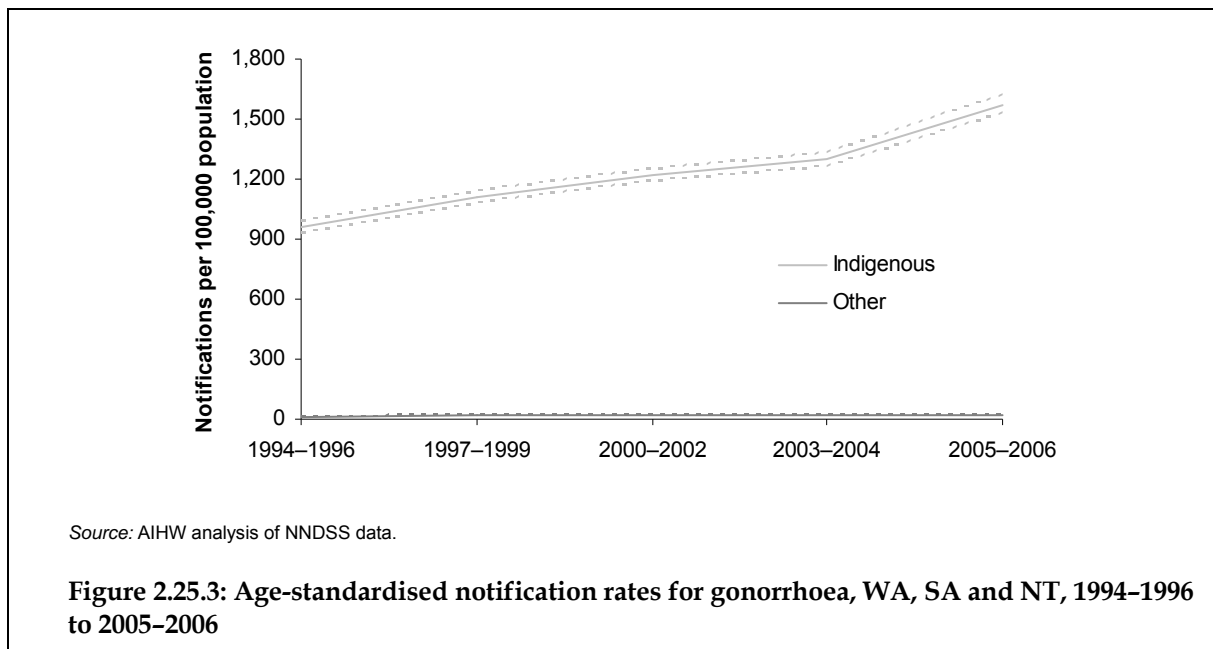


Table 2.25.3: Crude and age-standardised notification rates, rate ratios and rate differences for gonorrhoea, WA, SA and NT, 1994–1996 to 2005–2006

	1994–1996	1997–1999	2000–2002	2003–2004	2005–2006	Annual change ^(a)	% change over period ^(b)
Indigenous crude rate (no. per 100,000)							
Males	1,308.1	1,257.5	1,381.8	1,500.8	1,833.9	46.6*	42.8
Females	938.5	1,371.9	1,531.7	1,678.3	1,916.3	85.5*	109.3
Persons	1,126.9	1,315.4	1,456.9	1,608.3	1,916.5	69.4*	73.9
Indigenous age-standardised rate (no. per 100,000)							
Males	1,168.0	1,114.6	1,207.4	1,255.8	1,575.0	34.0*	34.9
Females	761.2	1,113.7	1,234.1	1,314.8	1,518.0	64.9*	102.3
Persons	962.5	1,110.1	1,216.9	1,296.1	1,574.1	52.1*	64.9
Other Australian age-standardised rate (no. per 100,000)^(c)							
Males	18.5	26.0	30.3	32.3	32.0	1.3*	84.1
Females	7.7	16.1	15.8	12.3	11.1	0.2	24.7
Persons	13.3	21.2	23.5	22.5	22.0	0.8*	68.3
Rate ratio^(d)							
Males	63.2	42.9	39.9	38.9	49.2	-1.4	-25.7
Females	98.5	69.3	78.1	107.0	136.9	4.0	48.3
Persons	72.6	52.5	51.8	57.7	71.5	-0.1	-1.2
Rate difference^(e)							
Males	1,149.6	1,088.6	1,177.1	1,223.6	1,543.0	32.7*	34.1
Females	753.5	1,097.6	1,218.3	1,302.5	1,506.9	64.7*	103.1
Persons	949.2	1,089.0	1,193.4	1,273.6	1,552.0	51.3*	64.9

* Represents results with statistically significant increases or declines at the $p < 0.05$ level over the period 1994–1996 to 2005–2006.

(f) Average annual change in rates, rate ratios and rate differences determined using linear regression analysis.

(g) Per cent change between 1994–1996 and 2005–2006 based on the annual rate of change over the period.

(h) Includes notifications for non-Indigenous people and those for whom Indigenous status was not stated.

(i) Notification rate for Indigenous Australians divided by the notification rate for other Australians.

(j) Notification rate for Indigenous Australians minus the notification rate for other Australians.

Note: Rates have been directly age-standardised using the Australian 2001 standard population.

Source: AIHW analysis of NNDSS data.

Donovanosis

For the period 2004–2006, there were 27 notifications for donovanosis in Australia, 93% (25) of which were notifications of Aboriginal and Torres Strait Islander persons. All of these recorded notifications took place in Queensland, Western Australia and the Northern Territory. Rates have not been calculated for these jurisdictions because of the small numbers of notifications.

Teenage pregnancies

Teenage pregnancy is one indicator of unsafe sexual practices. It does not measure all cases, just those involving pregnancies in the under 20 year age group. Note that not all unsafe sexual practices result in teenage pregnancy and not all teenage pregnancies are unplanned. So this measure overestimates unplanned pregnancies and underestimates all cases of unsafe sexual practices.

Information on births to teenage mothers is available from the National Perinatal Data Collection.

- In 2005, there were 2,138 mothers aged less than 20 years who identified as Aboriginal or Torres Strait Islander. This represented 22% of all Indigenous mothers at a rate of 48 per 1,000 women. In comparison, only 4% of all non-Indigenous mothers were aged less than 20 years at a rate of 9 per 1,000 women (Table 2.25.4; Table 2.25.5).
- The majority of teenage mothers were aged 17–19 years for both Indigenous and non-Indigenous mothers. However, 9% of Indigenous teenage mothers were aged less than 16 years compared to only 3% of non-Indigenous mothers (Table 2.25.4).
- The rate of Indigenous women who gave birth at 12 and 13 years, 14 years and 15 years was 13, 17 and 18 times respectively the rate of non-Indigenous women who gave birth at these ages (Table 2.25.4).
- The rate of Indigenous women aged less than 20 years who gave birth varied across jurisdictions. The Northern Territory and Western Australia had the highest rates (72 and 66 per 1,000 women respectively) and Tasmania had the lowest (25) (Table 2.25.5).
- Indigenous women aged less than 20 years gave birth at seven times the rate of non-Indigenous women in Western Australia, six times the rate in Victoria, five times the rate in New South Wales, four times the rate in the Northern Territory, the Australian Capital Territory Queensland and South Australia, and twice the rate in Tasmania (Table 2.25.5).

Table 2.25.4: Women aged less than 20 years who gave birth, by Indigenous status, 2005

Age (years)	Indigenous	Non-Indigenous		
	Number			
12 and 13	10	17		
14	35	48		
15	144	191		
16	271	754		
17	413	1,703		
18	569	2,707		
19	696	4,236		
Total < 20 years	2,138	9,656		
	Per cent			
12 and 13	0.5	0.2		
14	1.6	0.5		
15	6.7	2.0		
16	12.7	7.8		
17	19.3	17.6		
18	26.6	28.0		
19	32.6	43.9		
Total < 20 years	100.0	100.0		
	Number per 1,000 women			
	Indigenous	Non-Indigenous	Rate ratio	
12 and 13	0.8	0.1	12.9	
14	6.0	0.4	16.6	
15	26.0	1.5	17.9	
16	49.2	5.8	8.5	
17	77.5	13.2	5.9	
18	112.2	21.0	5.3	
19	138.7	31.9	4.3	
Total < 20 years	48.4	9.2	5.2	

Source: AIHW analysis of NPSU National Perinatal Data Collection.

Table 2.25.5: Women aged less than 20 years who gave birth, by Indigenous status and state/territory, 2005

	Number		Per cent		Rate (no. per 1,000 women aged 12 to < 20 years)		
	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous	Ratio
NSW	504	2,936	20.4	3.4	38.8	8.6	4.5
Vic	109	1,722	20.6	2.7	38.2	6.6	5.8
Qld	592	2,477	19.3	4.8	48.2	11.9	4.0
WA	418	1,068	26.0	4.3	66.0	10.1	6.5
SA	102	821	20.9	4.7	40.0	10.5	3.8
Tas	43	392	19.7	7.0	24.5	15.8	1.6
ACT	10	120	9.7	2.5	27.5	6.7	4.1
NT	360	120	26.1	5.3	71.9	16.9	4.3
Aust	2,138	9,656	21.7	3.7	48.4	9.2	5.2

Source: AIHW analysis of NPSU National Perinatal Data Collection.

Table 2.25.6 presents information on teenage mothers by selected maternal characteristics.

- In 2005, Very Remote areas had the highest proportion of Indigenous mothers who were teenagers (26%) and Major Cities had the lowest (20%). For non-Indigenous mothers, Outer Regional areas had the highest proportion of teenage mothers (6%) and Major Cities had the lowest (3%).
- For those jurisdictions where data on smoking during pregnancy were available, approximately 43% of Indigenous teenage mothers reported smoking during pregnancy in 2005, 34% reported they did not smoke during pregnancy and 23% did not state their smoking status. Excluding those who did not state whether they smoked during pregnancy, 56% of Indigenous teenage mothers smoked during pregnancy compared with 39% of non-Indigenous teenage mothers. When the effect of age was controlled, Aboriginal and Torres Strait Islander mothers across all age groups smoked during pregnancy at around three times the rate of non-Indigenous mothers in these jurisdictions (52% compared with 16%).
- Almost three-quarters (73%) of Indigenous teenage mothers in 2005 were first time mothers, 23% were having their second baby and 4% were having their third baby. For non-Indigenous teenage mothers, 85% were first time mothers, 14% were having their second baby and 1% were having their third baby.

Table 2.25.6: Women aged less than 20 years who gave birth, by Indigenous status and selected maternal characteristics, 2005

	Number		Per cent	
	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous
Remoteness				
Major Cities	466	5,314	19.7	3.0
Inner Regional	401	2,677	21.4	5.4
Outer Regional	547	1,414	20.1	5.7
Remote	241	185	22.4	4.6
Very Remote	481	55	26.2	4.0
Total	2,138	9,656	21.7	3.7
Smoked during pregnancy^(a)				
Smoked	920	2,614	43.0	27.1
Did not smoke	734	4,005	34.3	41.5
Not stated	484	3,037	22.6	31.5
Parity^(b)				
None	1,557	8,224	72.8	85.2
One	482	1,305	22.5	13.5
Two	93	117	4.3	1.2
Three or more	6	8	0.3	0.1
Total mothers < 20 years	2,138	9,656

(a) Excludes Victoria and six months of Queensland.

(b) Parity refers to number of previous pregnancies resulting in live births or stillbirths, excluding the current pregnancy.

Source: AIHW analysis of NPSU National Perinatal Data Collection.

Table 2.25.7 presents information on teenage mothers by selected birth outcomes.

- In 2005, approximately 13% of Indigenous teenage mothers had births that were pre-term and 13% gave birth to low birthweight babies. Around 10% of non-Indigenous teenage mothers had pre-term births and 8% gave birth to low birthweight babies. Babies of Indigenous mothers were twice as likely to be of low birthweight as babies born to non-Indigenous mothers (12% compared to 6%). This was true across all age groups.
- Around 2.5% of Indigenous teenage mothers gave birth to a baby with an Apgar score of less than 7 at 5 minutes, compared with 2% of non-Indigenous teenage mothers.
- The perinatal mortality rate in 2005 was similar for babies born to Indigenous and non-Indigenous teenage mothers (18 and 20 per 1,000).

Table 2.25.7: Women aged less than 20 years who gave birth, by Indigenous status and selected birth outcomes, 2005

	Number		Per cent	
	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous
Pre-term births	285	939	13.2	9.6
Low birthweight^(a)	284	769	13.4	8.0
Apgar score at 5 minutes^(a)				
0–6	53	179	2.5	1.9
7–10	2,065	9,403	97.2	98.0
	Number		Rate (no. per 1,000 births)	
	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous
Perinatal deaths	39	194	18.1	19.9

(a) For live births.

Source: AIHW analysis of NPSU National Perinatal Data Collection.

Data quality issues

Notification data

Notifications

Incidence of sexually transmissible infections is one indicator of unsafe sexual practices. It does not measure all cases, just those involving sexually transmissible infections.

Notification statistics do not measure the incidence or prevalence of these infections in the community. Under-reporting of these infections can occur at a number of stages:

- *a person infected may not feel ill*
- *a person may not seek medical care*
- *a false negative result may occur*
- *there may be a positive test result but for some reason a notification may not occur*
- *the case may not be reported to the National Notifiable Diseases Surveillance System (NNDSS).*

The level of under-reporting can vary by disease, jurisdiction and by time. The method of surveillance can vary between jurisdictions with different requirements for notification by medical practitioners, laboratories and hospitals. The case definitions for surveillance also vary among jurisdictions. These can also change over time.

Notification statistics can provide insights into the health of the population which has been diagnosed with a notifiable illness and changes over time.

Indigenous status question

In the NNDSS, New South Wales, Queensland and Tasmania use the standard ABS question of Indigenous status. Other states and territories can provide data for the categories 'Indigenous', 'non-Indigenous' and 'not stated' but do not identify Torres Strait Islanders separately (AIHW & ABS 2006).

Under-identification

The incompleteness of Indigenous identification means the number of notifications recorded as Indigenous is an underestimate of Aboriginal and Torres Strait Islander notifications rates. In 2003, Indigenous status was reported for only 43% of sexually transmittable infections notifications nationally (DoHA 2005).

The accuracy of Indigenous identification in notifiable disease registries varies between the states and territories. Jurisdictional comparisons must be undertaken with care and it is not possible to provide reliable measures of change over time for most of these measures (SIMC 2004).

The identification of Indigenous notifications is incomplete in all states and territories, but three jurisdictions (Western Australia, South Australia and the Northern Territory) have been assessed as having adequate identification in the NNDSS (AIHW & ABS 2006). Data on Indigenous status for certain notifiable diseases are not available for the Australian Capital Territory, New South Wales or Tasmania. For HIV/AIDS the recording of Indigenous status in the National Centre in HIV Epidemiology and Clinical Research data is considered reliable (SIMC 2004).

(continued)

Data quality issues (continued)

Numerator and denominator

Rate and ratio calculations rely on good population estimates. The changes in the completeness of identification of Indigenous people in notification records may take place at different rates from changes in the identification of Indigenous people in the population estimates. Denominators used here are sourced from Experimental estimates and projections: Aboriginal and Torres Strait Islander Australians, 1991 to 2009 (ABS 2004).

National Perinatal Data Collection

Teenage pregnancy is one indicator of unsafe sexual practices. It does not measure all cases, just those involving births in the under 20 year age group. Note that not all unsafe sexual practices result in teenage pregnancy and not all teenage pregnancies are unplanned. So this measure overestimates unplanned pregnancies and underestimates all cases of unsafe sexual practices.

Indigenous status question

A standard data item for Indigenous status is specified in the Perinatal National Minimum Data Set. However, at this stage not all states and territories use this standard wording for the Indigenous status question on their forms. This affects the quality and comparability of the data collected (ABS & AIHW 2005).

Under-identification

Birth notification forms are completed for all births of 20 weeks or more gestation, or a birthweight of 400 grams or more. The National Perinatal Data Collection includes all births in Australia in hospitals, birth centres and the community.

All jurisdictions are working towards improving the quality of the Indigenous status data. Data on Indigenous status are not reported for Tasmania before 2005, because the 'not stated' category for Indigenous status was included with the non-Indigenous category. The 'not stated' category for birthweight was found to be small nationally in the evaluation of the Perinatal National Minimum Data Set (Laws & Sullivan 2004). Therefore, the exclusion of 'not stated' for birthweight will not have a significant impact on these data.

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