

# **BIRTHS**

**AUSTRALIA** 

EMBARGO: 11:30AM (CANBERRA TIME) THURS 12 NOV 1998

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 For more information about these and related statistics, contact any ABS office. Refer to the back cover of this publication for contact details.

# NOTES This publication brings together statistics and indicators for births registered in ABOUT THIS PUBLICATION Australia. DATA IN THIS PUBLICATION This publication uses birth registrations data except where otherwise stated. SYMBOLS AND OTHER ABS Australian Bureau of Statistics USAGES AIHW Australian Institute of Health and Welfare preliminary р not applicable . . nil, rounded to zero or less than three (see Explanatory Notes, paragraph 3).

W. McLennanAustralian Statistician

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# MAIN FEATURES ......

# CONTRIBUTION OF BIRTHS TO POPULATION GROWTH

- There were about 500,000 conceptions in Australia during 1997 resulting in 251,800 registered births, and in the order of 2,000 still births, 150,000 miscarriages and 95,000 abortions (see page 10).
- Births is the main component in population growth. Each year there are approximately twice as many births as deaths, thereby keeping the natural increase of the country positive. In 1997, natural increase of 125,000 was greater than net overseas migration of 84,000 (see page 17).

## NUMBER OF BIRTHS CONTINUES TO DECLINE

- There were 251,800 births registered in Australia during 1997 compared to 226,300 in 1977. The three most populous States accounted for over three-quarters of births registered; 87,200 (35%) were in New South Wales, 60,700 (24%) were in Victoria and 47,000 (19%) were in Queensland (see page 22).
- While birth registrations continue to fall, data collected in the midwives' collection casts doubt on whether this is related to a continuing decline in fertility or to declining registration of births (see page 15).

## FERTILITY IS BELOW REPLACEMENT LEVEL

- The 1997 total fertility rate stood at 1.8 babies per woman. It was below the level of 2.1 babies a woman would need to have over her reproductive lifespan to replace herself and her partner. 1977 was the last year that the total fertility rate was at replacement level (see page 20).
- In each State and Territory the capital city had lower fertility than the balance of the State or Territory, with Adelaide having the lowest fertility rate of all cities (see page 34).
- In general, overseas-born women had a similar total fertility rate to Australia-born women, however, there was considerable variation between birthplace groups.

  Compared to Australia-born women with a total fertility rate of 1.8 babies per woman, Lebanon-born women had the highest total fertility rate of 3.5 babies per woman while Hong Kong-born women had the lowest total fertility rate of 1.0 babies per woman (see page 56).

# MOST BIRTHS STILL OCCUR WITHIN REGISTERED MARRIAGE

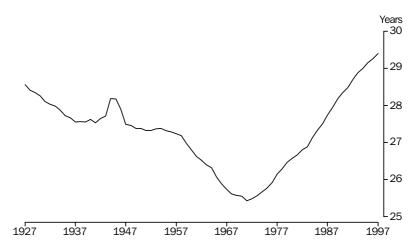
- In 1997, 72% of women giving birth were in a registered marriage, declining from the peak of 96% in 1950 (see page 43).
- The proportion of paternity-not-acknowledged births has been slowly declining, from 4.9% of all births in 1987 to 4.3% of all births in 1997 (see page 52).

6

# AGE OF PARENTS

■ The median age of parents has been steadily increasing over the past two decades. In 1977 the median age of mothers was 26.1 years while the median age of known fathers was 29.1 years. By 1997 the median age of mothers had increased to 29.4 years and fathers to 32.0 years (see page 25).

# MEDIAN AGE OF MOTHER



# INDIGENOUS

- The total fertility rate of Indigenous mothers was much higher than all mothers. For example, in Queensland the fertility rate for Indigenous women was 2.3 babies per woman compared to 1.8 for all women (see page 65).
- Indigenous mothers were generally younger than non-Indigenous mothers and were much less likely to be married (see page 65).

|--|

JUNINANI											
	1987	1992	1993	1994	1995	1996	1997				
BIRTHS											
Total births (no.) 243 959 264 151 260 229 258 051 256 190 253 83-											
Males (no.)	125 265	135 601	133 572	132 625	131 432	130 572	129 179				
Females (no.)	118 694	128 550	126 657	125 426	124 758	123 262	122 663				
Proportion male (%)	51.3	51.3	51.3	51.4	51.3	51.4	51.3				
Nuptial births (%)	82.0	76.0	75.1	74.4	73.4	72.6	71.9				
Ex-nuptial births (%)	18.0	24.0	24.9	25.6	26.6	27.4	28.1				
Paternity-not-acknowledged (%)	4.9	4.6	4.6	4.6	4.4	4.3	4.1				
Crude birth rate	15.0	15.1	14.7	14.5	14.2	13.9	13.6				
Age-specific fertility rate											
15–19	20.6	22.0	20.9	20.7	20.4	20.1	19.5				
20–24	85.0	74.9	71.3	69.7	67.1	65.2	62.3				
25–29	139.6	132.3	129.8	125.8	121.7	117.1	113.8				
30–34	90.6	104.6	105.4	105.0	106.0	105.7	106.7				
35–39	28.9	38.3	38.9	41.1	42.3	43.7	44.9				
40–44	4.8	6.1	6.3	6.7	7.2	7.5	7.5				
45–49	0.3	0.3	0.2	0.3	0.3	0.3	0.3				
Total fertility rate	1.848	1.893	1.864	1.846	1.825	1.797	1.775				
Net reproduction rate	0.884	0.908	0.895	0.885	0.877	0.862	0.853				
	COI	NFINEMENT	S								
Total confinements (no.)	241 271	260 669	256 703	254 547	252 708	250 363	248 246				
Nuptial (no.)	197 853	198 002	192 518	189 160	185 378	181 549	178 279				
First nuptial (no.)	80 241	80 821	77 718	77 166	75 606	73 873	73 356				
Ex-nuptial (no.)	43 418	62 667	64 185	65 387	67 330	68 814	69 967				
Paternity-acknowledged (no.)	31 689	50 774	52 448	53 742	56 071	57 911	59 793				
Median age of mother											
Nuptial (years)	28.3	29.5	29.7	29.9	30.1	30.2	30.4				
First nuptial (years)	26.8	28.0	28.3	28.5	28.6	28.7	29.0				
Ex-nuptial (years)	23.6	24.3	24.5	24.6	24.9	25.1	25.4				
Paternity-acknowledged (years)	24.1	24.6	24.8	24.9	25.2	25.3	25.6				
All confinements (years)	27.7	28.7	28.9	29.0	29.1	29.2	29.4				
Median age of father											
Nuptial (years)	30.8	31.8	32.1	32.3	32.5	32.7	32.8				
Paternity-acknowledged (years)	26.8	27.4	27.5	27.6	27.8	27.9	28.1				
Total where father's age is known (years)	30.4	31.2	31.4	31.6	31.7	31.9	32.0				
Median duration of marriage											
Nuptial (years)	4.6	4.6	4.6	4.6	4.6	4.6	4.6				
First nuptial (years)	2.4	2.4	2.5	2.5	2.5	2.5	2.6				
Previous births of current relationship											
0 (no.)	80 241	80 821	77 718	77 166	75 606	73 873	73 356				
1 (no.)	68 730	69 467	68 389	67 123	66 175	65 293	64 341				
2 (no.)	33 472	32 644	31 801	31 118	30 252	29 167	28 047				
3 (no.)	10 793	10 522	10 145	9 598	9 200	9 037	8 621				
4 (no.)	2 873	2 843	2 731	2 500	2 504	2 590	2 366				
5 and over (no.)	1 742	1 702	1 733	1 655	1 641	1 589	1 548				

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8 ABS • BIRTHS • 3301.0 • 1997

STATE AND	TERRITORY	SUMMARY

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
BIRTHS									
Total births (no.)	87 156	60 732	46 965	18 362	24 776	6 007	3 588	4 208	251 842
Males (no.)	44 647	31 248	24 024	9 383	12 810	3 098	1 812		129 179
Females (no.)	42 509	29 484	22 941	8 979	11 966	2 909	1 776	2 076	122 663
Proportion male (%)	51.2	51.5	51.2	51.1	51.7	51.6	50.5	50.7	51.3
Indigenous births (no.)	2 813		3 038	591	1 474		1 259		
Nuptial births (%)	73.3	77.7	66.7	70.4	69.2	64.4	42.4	75.0	71.9
Ex-nuptial births (%)	26.7	22.3	33.3	29.6	30.8	35.6	57.6	25.0	28.1
Paternity-not-acknowledged (%)	3.8	2.8	5.3	3.5	4.6	4.4	17.9	3.2	4.1
Crude birth rate	13.9	13.2	13.8	12.4	13.8	12.7	19.2	13.6	13.6
Age-specific fertility rate									
15–19	19.5	12.4	25.6	16.1	21.2	27.5	76.5	13.4	19.5
20–24	65.9	49.6	72.5	53.9	64.5	80.4	99.2	42.4	62.3
25–29	116.4	108.0	116.0	112.3	116.3	122.1	116.9	103.2	113.8
30–34	108.7	111.7	99.3	105.8	106.0	93.6	88.2	109.7	106.7
35–39	47.4	47.9	40.0	44.5	42.5	30.9	43.9	44.1	44.9
40–44	8.1	8.0	6.5	7.5	6.6	5.2	9.4	6.9	7.5
45–49	0.3	0.3	0.2	0.4	0.4	0.1	0.0	0.3	0.3
Total fertility rate	1.832	1.688	1.801	1.703	1.789	1.799	2.171	1.601	1.775
Net reproduction rate	0.882	0.809	0.868	0.822	0.853	0.859	1.043	0.783	0.853
	• • • • • •	CONFIN	NEMENTS	• • • • •	• • • • • •	• • • • • •	• • • • •	• • • • • •	• • • • •
Total confinements (no.)	85 967	59 804	46 279	18 095	24 407	5 935	3 552	4 161	248 246
Nuptial (no.)	62 974	46 438	30 829	12 725	16 839	3 814	1 503		178 279
First nuptial (no.)	26 275	19 264	12 313	5 174	6 737	1 733	559	1 285	73 356
Ex-nuptial (no.)	22 993	13 366	15 450	5 370	7 568	2 121	2 049	1 046	69 967
Paternity-acknowledged (no.)	19 750	11 698	13 005	4 728	6 428	1 859	1 410	912	59 793
Median age of mother									
Nuptial (years)	30.3	30.7	29.9	30.8	30.3	29.7	29.8	30.6	30.4
First nuptial (years)	28.9	29.3	28.6	29.4	29.0	28.3	28.6	29.2	29.0
Ex-nuptial (years)	25.6	26.2	24.6	25.8	25.3	24.2	24.2	25.9	25.4
Paternity-acknowledged (years)	25.8	26.3	24.8	26.0	25.5	24.4	25.0	26.1	25.6
All confinements (years)	29.4	30.0	28.6	29.7	29.2	28.2	27.0	29.8	29.4
Median age of father									
Nuptial (years)	32.9	33.0	32.3	33.0	32.8	32.2	32.5	32.7	32.8
First nuptial (years)	31.4	31.4	30.7	31.7	31.3	30.4	30.8	31.2	31.3
Paternity-acknowledged (years)	28.3	28.7	27.3	28.5	28.1	27.2	27.4	28.3	28.1
Total where father's age is known (years)	32.2	32.4	31.2	32.2	31.8	31.0	30.6	32.0	32.0
Median duration of marriage									
Nuptial (years)	4.5	4.8	4.5	4.9	4.5	4.5	4.0	4.5	4.6
First nuptial (years)	2.5	2.7	2.5	2.8	2.5	2.3	2.2	2.3	2.6
Previous births of current relationship									
0 (no.)	26 275	19 264	12 313	5 174	6 737	1 733	559	1 285	73 356
1 (no.)	22 534	16 686	10 993	4 793	6 264	1 310	563	1 184	64 341
2 (no.)	9 717	7 421	5 062	1 953	2 662	500	252	473	28 047
3 (no.)	3 059	2 148	1 672	538	809	193	82	116	8 621
4 (no.)	863	523	475	161	232	44	30	37	2 366
5 and over (no.)	526	396	314	106	135	34	17	20	1 548

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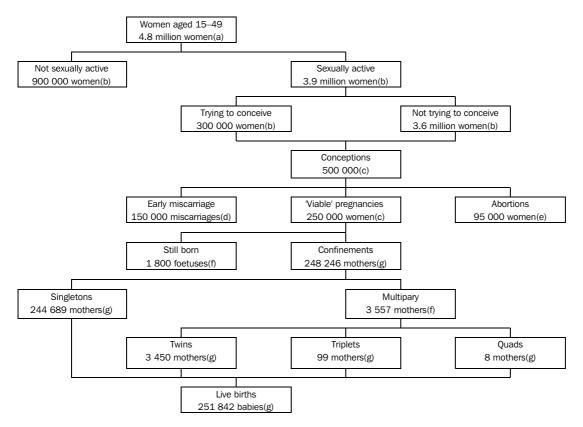
# CHAPTER 1 BIRTHS IN CONTEXT .....

## INTRODUCTION

In 1997 there were 251,800 births registered in Australia, the lowest number since 1989. There were 248,200 women giving birth (confinements). The difference between these two numbers can be attributed to multiple births. While 28% of births were to unmarried mothers, half of these were to unpartnered women, and half to women in de facto relationships.

The number of births each year is dependent on a range of other factors.

## 1.1 FACTORS DETERMINING THE NUMBER OF BIRTHS



- (a) Source: ABS, Australian Demographic Statistics, June 1998, (ABS Cat. no. 3101.0).
- (b) Source: Derived from ABS, unpublished data, National Health Survey 1995.
- (c) Derived by adding components, estimates are rounded.
- (d) Source: Derived from S. Blackburn & D. Loper, Maternal, fetal and neonatal physiology A clinical perspective, W.B. Saunders Company, Philadelphia, 1992.
- (e) Source: ABS, Australian Social Trends, 1998 (ABS Cat. no. 4102.0).
- (f) Source: P. Day, P. Lancaster & J. Huang, Australia's mothers and babies, 1995, AIHW National Perinatal Statistics Unit: Perinatal Statistics Series no. 6, Sydney, 1997.
- (g) Source: ABS, Births Registrations, 1997.

## PREGNANCY CONTEXT

This analysis is taken from a range of different sources, including the National Health Survey 1995, the midwives' collection, Medicare statistics, medical research, and birth registrations. Differences in method, reference periods and populations mean that they do not perfectly correspond with each other. Because of these differences, the numbers presented in this framework are rounded apart from those published elsewhere in this publication.

# 4.8 million women aged 15-49

The age range of 15–49 is generally regarded as the child-bearing age. In 1997 there were 5 births registered to women aged 50 or more and 95 to women under 15 years.

# 900,000 women not sexually active

Estimates of the sexual activity and intentions of women is based on proportions from the National Health Survey 1995, and applied to the 1997 population in five-year age groups.

Around 9% of women aged 25–44 were not sexually active, compared to 34% of 18–19 year olds. The National Health Survey did not ask this question of 15–17 year olds.

## 3,900,000 women sexually active

This analysis estimates that in 1997 around 3.9 million women of child-bearing age (81%) were sexually active. The 1996 Census showed that 58% of women in this age group lived with a married or de facto partner. This proportion was higher in older age groups.

# 300,000 women trying to conceive

The National Health Survey showed that in 1995, 6% of women were either pregnant or trying to get pregnant. In this exercise, it has been assumed that this relates to the number of women who try to get pregnant each year. Because some pregnant women, identified in the survey, had not intended to get pregnant, and some women had a baby within one year of starting to try to get pregnant, this figure does not represent the true number of women who attempted to conceive.

# 3.6 million women not trying to conceive

The vast majority of women aged 15–49 not trying to conceive used some form of contraceptive. The oral contraceptive pill was the most used method, with 27% of women of reproductive age using it; it was most popular in younger ages. Condoms, hysterectomies and vasectomies were also quite popular methods. For more information, see Family Planning, *Australian Social Trends*, 1998 (ABS Cat. no. 4102.0).

# 500,000 conceptions

There were around 300,000 women trying to have a baby. Many of these women conceived more than once during the year but miscarried some of these conceptions. Some of these conceptions also occurred to women who were not trying to conceive.

## 150,000 early miscarriages

Medical research has shown that about 15–20% of foetuses were miscarried within the first month. In many, if not most of these, the woman would not even know she was pregnant. By 20 weeks gestation, another 10–17% of foetuses were miscarried. So, all up, about 30% of pregnancies were miscarried.

## 250,000 'viable' pregnancies

For the purposes of this analysis, a pregnancy is regarded as viable after 20 weeks gestation. To some extent this is an arbitrary cut-off, however it has been chosen because notification forms are completed for any miscarriages after 20 weeks gestation, or a birth weight of 400 g, which occur in a hospital. Therefore numbers are available, rather than medical studies. Before 20 weeks gestation, there are very few live births.

## 95,000 abortions

In 1995–96, there were 95,200 induced abortions recorded in claims on Medicare and public patient hospital administration records. This is likely to be an underestimate of the total number of abortions performed in Australia.

While some induced abortions occur after 20 weeks, they are a relatively small number, and so for simplicity, all induced abortions have been assumed to occur before 20 weeks gestation.

#### 1,800 still births

Of the 250,000 viable pregnancies, 0.7% ended in foetal death. There was a strong correlation between gestational age at delivery and the chance of being still born. While only 20% of deliveries at 20 weeks produced a live baby, by 23 weeks, half of all deliveries produced a live birth, and by 30 weeks, over 90% of deliveries were live births.

This analysis only looks at outcomes to birth, it does not include any analysis of subsequent mortality after birth.

## 248,246 confinements

In total, there were 248,246 confinements which resulted in at least one live birth being registered in 1997; 72% of these were to women who were married. The median age of mothers was 29.4 years. The peak age was 29 years, with 12% of all 29 year old women having a baby in 1997.

# 244,689 singletons

In 1997 there were 244,689 singleton births registered. This was 97% of all births.

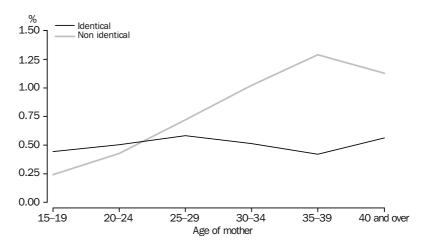
# 3,557 multipary

There were 3,557 confinements in 1997 which resulted in multiple births. Cases where foetal death reduces a multiple pregnancy to a single birth, are still regarded as multiple births. About 1.4% of all confinements resulted in multiple births, compared with less than 1% 20 years ago. The proportion of confinements resulting in multiple birth increases with age, from about 0.7% of 15 year old mothers, to about 2% of mothers in their late thirties.

## 3.450 sets of twins

Twins are the most common form of multiple birth, representing 1.4% of all confinements, and 97% of all multiple confinements. Analysis of the sex mix within twins indicated that about 40% of twins were identical, and 60% non-identical.

## 1.2 TWINS AS A PROPORTION OF ALL CONFINEMENTS



99 sets of triplets

In 1997 there were 99 triplets registered. Associated with the increase in fertility treatments, the incidence of triplets and higher order confinements has increased from around 11 per 100,000 confinements in 1977 to 80 in 1997.

8 sets of quadruplets

There were 8 sets of quadruplets registered in 1997.

251,842 live births

There were 251,842 babies registered in 1997.

# INTERNATIONAL FERTILITY

Total fertility rates vary between countries around the world. There are many factors that can influence a country's fertility rate, though basically, developing countries usually have high fertility rates while developed countries usually have low fertility rates.

# Comparison with other countries

Australia's average 1990–95 total fertility rate of 1.9 was equal eighth lowest in the world and significantly lower than the world average of 3.3. Compared to the other developed counties, Australia's total fertility rate was among the middle ranked nations. The lowest fertility rates in developed countries were in Europe, Italy in particular with an average fertility rate of 1.2 between 1990–95, followed by Germany and Spain (1.3). Hong Kong also had a total fertility rate of 1.3.

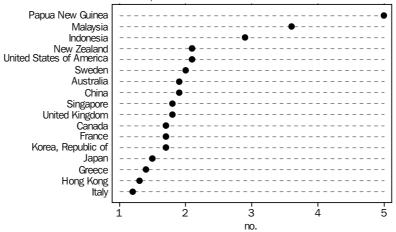
The Middle Eastern and African countries showed the highest fertility rates with Yemen (7.6) and Niger (7.4) the highest of all.

# Comparison with selected countries

Of the main English-speaking countries, Canada (1.6) and the United Kingdom (1.7) had the lowest fertility rates during 1996. Australia's fertility rate (1.8) was around the middle while the United States of America (2.0) and New Zealand (2.1) had the highest.

In 1996, most of the selected Asian countries had fertility rates much higher than that of Australia, except China (1.8) and Hong Kong (1.3) which were lower. Malaysia's fertility rate was 3.4, Viet Nam's was 3.1 and Indonesia's was 2.7.

# **1.3** TOTAL FERTILITY RATES, Selected Countries — 1996



Source: United Nations Department for Economic and Social Information and Policy Analysis, World Population 1996, United Nations, 1996.

Of the selected countries, only in the United States of America, New Zealand and Sweden have fertility rates increased since 1980-85. Prior to then the fertility rate for most developed countries were stable or slowly declining. Like Australia, the total fertility rates of most of these countries started declining in the 1960s, after the end of the baby boom.

The trend of Australian fertility is fairly similar to that of Canada and New Zealand. Canada's fertility fell more sharply than Australia's, reaching below replacement level some five years earlier. New Zealand has been consistent with Australia until 1980-85 with New Zealand starting to increase and Australia remaining relatively stable.

In the 1950s through to the late 1960s, fertility in some Asian countries was much higher than Australia's before declining sharply between the late 1960s and the late 1970s. Since then they have continued to decline with China and Korea now similar to Australia and Hong Kong going below.

# 1.4 TOTAL FERTILITY RATES, Selected Countries

	1950–55	1955–60	1960–65	1965–70	1970–75	1975–80	1980–85	1985–90	1990–95
• • • • • • • • • • • • • • • •									
Australia	3.2	3.4	3.3	2.9	2.5	2.1	1.9	1.9	1.9
Canada	3.7	3.9	3.6	2.5	2.0	1.8	1.7	1.7	1.7
China	6.2	5.4	5.9	6.0	4.8	2.9	2.5	2.4	1.9
France	2.7	2.7	2.9	2.6	2.3	1.9	1.9	1.8	1.7
Greece	2.3	2.3	2.2	2.4	2.3	2.3	2.0	1.5	1.4
Hong Kong	4.4	4.7	5.3	4.0	2.9	2.3	1.8	1.4	1.3
Indonesia	5.5	5.7	5.4	5.6	5.1	4.7	4.1	3.5	2.9
Italy	2.3	2.4	2.6	2.5	2.3	1.9	1.6	1.3	1.2
Japan	2.8	2.1	2.0	2.0	2.1	1.8	1.8	1.7	1.5
Korea, Republic of	5.2	6.1	5.4	4.5	4.1	2.8	2.4	1.7	1.7
Malaysia	6.8	6.9	6.7	5.9	5.2	4.2	4.2	4.0	3.6
New Zealand	3.5	3.9	3.8	3.2	2.8	2.2	2.0	2.0	2.1
Papua New Guinea	6.2	6.3	6.3	6.2	6.1	5.9	5.6	5.3	5.0
Singapore	6.4	6.0	4.9	3.5	2.6	1.9	1.7	1.7	1.8
Sweden	2.2	2.2	2.3	2.1	1.9	1.7	1.7	1.9	2.0
United Kingdom	2.2	2.5	2.8	2.5	2.0	1.7	1.8	1.8	1.8
United States of America	3.5	3.7	3.3	2.6	2.0	1.8	1.8	1.9	2.1
Viet Nam	6.1	6.1	6.1	5.9	5.9	5.6	4.7	4.2	3.4

Source: United Nations, World Population Prospects, United Nations, 1992.

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## RECONCILING THE DIFFERENT NUMBERS

The Australian Bureau of Statistics (ABS) has three series which represent the number of births in Australia and the National Perinatal Statistics Unit of the Australian Institute of Health and Welfare a fourth (midwives' collection). While in an ideal world these would all coincide, for a variety of reasons they do not, although they do give fairly similar numbers and attributes.

## Births registered

Most analysis in this publication is based on the number of births which were registered in a given period, usually 1997. Because there is a gap between when a baby is born and when the birth is registered, some of the births registered in 1997 occurred in earlier years. In a small number of cases it can be several decades between the birth and the registration of that birth.

#### Births (occurrence basis)

Using birth registration statistics, but compiling them on a year-of-occurrence basis gives an estimate of the number of births that occurred in a given year. As births that occur in a given year may be registered years later, this concept is never finalised and is always subject to revision.

## **1.5** REVISIONS TO BIRTHS (OCCURRENCE BASIS)

Year of occurrence	1996 estimate	1997 estimate	% increase
• • • • • • • • • • • •	• • • • • • • • • • •		• • • • • • •
1991	256 497	256 712	0.1
1992	261 886	262 372	0.2
1993	258 363	259 028	0.3
1994	258 066	258 788	0.3
1995	254 422	255 481	0.4
1996	249 136	251 583	1.0
1997		244 793	

There is some bias in the type of births which are registered late. For example, young mothers, births where paternity is not acknowledged, and births registered in particular States tend to be delayed more than other births.

# Births as a component of population estimates

The ABS produces estimates of the population in each State and Territory every three months. These are produced by taking the population at one point, adding births, subtracting deaths and adding net migration. To meet the conflicting demands for accuracy and timeliness, this is done three times; preliminary estimates are produced six months after the end of the reference period, revised estimates are produced fifteen months after a financial year and final estimates are produced after the following census. Therefore three estimates of the number of births are produced.

## Midwives' collection

The National Perinatal Statistics Unit of the Australian Institute of Health and Welfare publish *Australia's Mothers and Babies* annually. This publication contains data from the Perinatal Statistics Collection, or the midwives' collection. To avoid confusion with the

#### Midwives' collection continued

ABS Perinatal Deaths Collection, throughout this publication it has been referred to as the midwives' collection, or midwives' data.

The data are collected in hospitals, primarily by midwives, for each birth which takes place in a hospital.

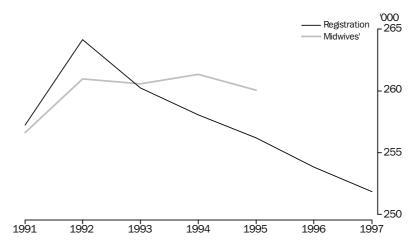
# 1.6 DIFFERENT BIRTH ESTIMATES

e	1995 estimate(a)	Date 1997 data becomes available	Known problems in measuring actual number of births occuring	Other variables available
• • • • • • • • • • • • • • • • • • • •			• • • • • • • • • • • • • • • •	• • • • •
Births registered	256 190	Nov 1998	Fluctuates above and below actual level	Yes
Births (occurrence basis)	254 422	Nov 1998	Underestimates by 1-2%	Yes
Births for population estimates			-	
Preliminary	253 900	Jun 1998	Fluctuates above and below actual level	No
Revised	254 900	Jun 1999	Small underestimate	No
Final	254 900(b)	Dec 2002	Very small underestimate	No
Midwives	258 221	Dec 1998	Excludes some home births	Yes

<sup>(</sup>a) 1995 is the lastest year for which data are available for all collections.

Birth registration statistics, and the occurrence statistics which are based on them show a decline in the birth rate during the 1990s. However, the perinatal statistics do not show such a decline.

# 1.7 DIFFERENT MEASURES OF BIRTHS



Note: Data are not available from midwives' collection since 1995.

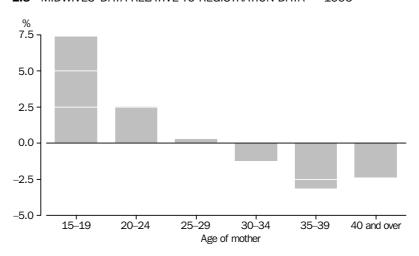
Not every birth that occurs in Australia is registered, or has a birth notification form filled out. However, the extent of this undercoverage is very difficult to measure. In 1992 the number of registered births was 1,400 more than for the midwives' collection, while in 1995, it was 3,900 less than the midwives' collection. The difference between the number of births collected in both collections is very strongly related to age. The midwives' collection had 7% more births to 15–19 year old women, but 2% less births to women aged over 40.

<sup>(</sup>b) The 1995 estimate was revised after the end of the intercensal period, it is therefore the same as the final estimate.

#### Midwives' collection continued

This could indicate that a high, and growing, proportion of young mothers do not register the birth of their child. A small proportion of older women have home births, and no midwives' birth notification form is submitted, but the birth is registered.

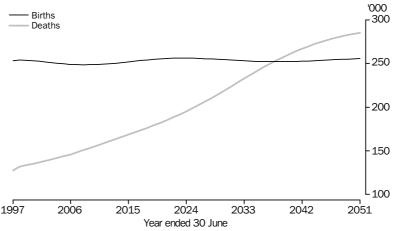
# 1.8 MIDWIVES' DATA RELATIVE TO REGISTRATION DATA — 1995



## BIRTHS AS A COMPONENT OF POPULATION GROWTH

Table 1.10 shows how births have changed the population over the last five years. Each year, about a quarter of a million births occur. This is roughly twice the number of deaths, giving a natural increase of around 120,000 to 140,000 each year. Since the mid-1970s, Australia has had below replacement fertility. That is, on current rates, on average, women can expect to have 1.8 babies each throughout their life time, which is less than the number required to replace her and her partner (currently 2.1). Despite this, natural increase is still positive. This reflects the relatively young age structure of the population. While women are not having very many babies each, there are enough women in child-bearing ages to keep the total number of births relatively high. Conversely, there are relatively few people in the older ages where death rates are high, and so Australia has a relatively small number of deaths. As the population ages, the gap between the number of births and deaths will decrease, and given a total fertility rate of 1.75 and net overseas migration of 70,000, natural increase is projected to fall below zero some time around the 2030s.

# 1.9 PROJECTED BIRTHS AND DEATHS



Source: ABS, Population Projections (ABS Cat. no. 3222.0) (series II).

# BIRTHS AS A COMPONENT OF POPULATION GROWTH continued

While net overseas migration makes a significant contribution to population growth, natural increase has been a larger contributor in every year since 1950 except 1987 and 1988.

# 1.10 POPULATION CHANGE, Components

## COMPONENTS OF POPULATION CHANGE.....

Period	Births	Deaths	Natural increase	Net overseas migration	Total(a)	Population at end of period
• • • • • • • •			• • • • • •	• • • • • • • •		• • • • • • • • •
1991	259 092	119 739	139 353	81 669	221 022	17 387 023
1992	262 104	122 944	139 160	51 358	190 518	17 581 284
1993	258 626	120 804	137 822	34 822	172 644	17 759 999
1994	258 426	126 982	131 444	55 506	186 950	17 951 481
1995	254 942	125 105	129 837	106 864	236 701	18 196 054
1996	251 000	128 565	122 435	98 827	221 262	18 422 695
1997	253 673	128 944	124 729	83 702	208 431	18 631 126
1991–92	259 186	120 836	138 350	68 580	206 930	17 494 664
1992–93	259 959	121 338	138 621	30 042	168 663	17 667 093
1993–94	258 314	123 496	134 818	46 549	181 367	17 854 738
1994–95	258 210	126 232	131 978	80 125	212 103	18 071 758
1995–96	250 438	126 400	124 038	104 137	228 175	18 310 714
1996–97	253 350	127 592	125 758	95 775	221 533	18 532 247
Mar qtr 1996	62 238	28 925	33 313	25 142	58 455	18 257 201
Jun qtr 1996	61 900	31 713	30 187	20 639	50 826	18 310 714
Sep qtr 1996 p	65 535	37 685	27 850	28 212	56 062	18 366 776
Dec qtr 1996 p	61 327	30 242	31 085	24 834	55 919	18 422 695
Mar qtr 1997 p	62 040	28 185	33 855	31 243	65 098	18 487 793
Jun qtr 1997 p	64 448	31 480	32 968	11 486	44 454	18 532 247
Sep qtr 1997 p	63 947	37 902	26 045	30 355	56 400	18 588 647
Dec qtr 1997 p	63 238	31 377	31 861	10 618	42 479	18 631 126
Mar qtr 1998 p	59 901	29 033	30 868	47 719	78 587	18 709 713

<sup>(</sup>a) Total growth will not necessarily equate with the difference between the population in consecutive periods. This discrepancy is known as intercensal discrepancy. See Glossary for more information.

Source: ABS, Australian Demographic Statistics, March 1996 (ABS Cat. no. 3101.0).

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# CHAPTER 2

FERTILITY .....

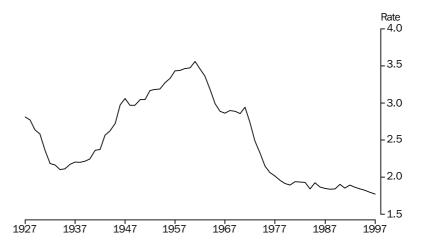
HISTORICAL PATTERNS

In 1997, the total fertility rate remained around 1.8, although slightly below the 1996 level. The total fertility rate dropped significantly after the peak of the baby boom peak in 1961 (3.6 babies per woman), largely as a result of the introduction of the contraceptive pill.

The reinterpretation of abortion law in New South Wales in late 1971 in a ruling by Justice Levine in the case of R v Wall et al. had a significant impact on women's ability to control their fertility, and contributed to a substantial fall in births to young women, a decrease in the total fertility rate and an increase in the median age of mothers. In his directions to the jury, Justice Levine explicitly admitted 'effects of economic or social stresses that may be pertaining at the time' as relevant to establishing danger to a woman's mental health sufficient to justify an abortion. He also asserted that a second doctor's opinion that legal grounds for carrying out an abortion existed was unnecessary, and that abortions need not take place in public hospitals, effectively allowing private practitioners and specialist clinics to provide abortion services. This ruling coincided with a turning point in fertility decline in Australia. The biggest falls in fertility occurred in the immediate following period, as births involving young mothers in particular fell steeply. More frequent abortion was probably a major reason for this, although improved contraception among the sexually active unmarried as defacto unions became more common also contributed (Gordon Carmichael, Things Ain't What They Used To Be! Demography, Mental Coborts, Morality and Values in Post-war Australia, Presidential Address, 9th National Conference of the Australian Population Association, University of Queensland, 30 September 1998).

Since the mid-1970s, the total fertility rate has remained around 1.8 to 1.9 babies per woman.

# 2.1 TOTAL FERTILITY RATES



## HISTORICAL PATTERNS continued

The decline in the fertility rate over the period 1977 to 1997 occurred among younger women aged 20–29 years. The fertility of women aged between 20 and 24 years declined by 49%, while that for women aged 25–29 years declined by 22%. Conversely, the fertility of women aged 30–34 years and 35–39 years increased during the period showing the continuing trend towards older mothers.

## 2.2 AGE-SPECIFIC BIRTH RATES AND TOTAL FERTILITY RATES

Selected years	15–19(a)	20–24	25–29	30–34	35–39	40–44	45-49(b)	Total fertility rate
• • • • • •	• • • • • • •	• • • • •			• • • • • • •	• • • • • •	• • • • • • •	
1977 1982 1987	32.1 27.4 20.6	122.0 104.0 85.0	145.7 145.0 139.6	74.1 80.6 90.6	23.9 25.6 28.9	5.0 4.5 4.8	0.3 0.3 0.3	2.016 1.936 1.848
1992 1993 1994 1995 1996 1997	22.0 20.9 20.7 20.4 20.1 19.5	74.9 71.3 69.7 67.1 65.2 62.3	132.3 129.8 125.8 121.7 117.1 113.8	104.6 105.4 105.0 106.0 105.7 106.7	38.3 38.9 41.1 42.3 43.7 44.9	6.1 6.3 6.7 7.2 7.5 7.5	0.3 0.2 0.3 0.3 0.3	1.893 1.864 1.846 1.825 1.797 1.775

- (a) Includes births to mothers aged less than 15.
- (b) Includes births to mothers aged 50 and over.

The decline in fertility of younger women can be attributed to social, economic and demographic factors. In the 1990s, more and more women are deciding not to have children or have fewer children. These decisions are made with the influence of advancing medical technology, social acceptance, the rising cost of raising a child, and career or educational aspirations.

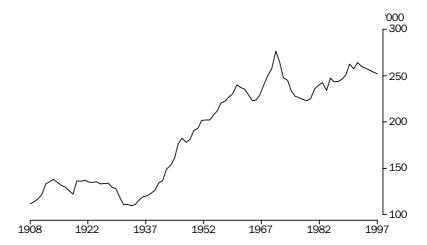
## Replacement fertility

Australia has had below replacement fertility since the mid-1970s, that is, the total current fertility rate of 1.8 babies is below the number of babies a woman would need to have over her reproductive life span to replace herself and her partner (2.1 babies).

# REGISTERED BIRTHS

For most of the first half of this century, the number of registered births in Australia remained under 140,000, troughing in the early 1930s during the Great Depression. The number of registered births in Australia grew to reach a peak in 1971 (276,400), fluctuated for the next two decades before reaching the next peak in 1992 (264,200). Since then births have been declining.

## 2.3 REGISTERED BIRTHS



There were 251,800 births registered in Australia during 1997. The three most populous States accounted for over three-quarters of births registered, 87,200 (35%) were in New South Wales, 60,700 (24%) were in Victoria and 47,000 (19%) were in Queensland. These proportions broadly reflected the distribution of the female population in the reproductive ages for these States.

Over the past two decades, the Northern Territory (1.6%), Queensland (1.5%) and Western Australia (0.9%) have experienced the highest average annual increases in the number of babies born in that State or Territory. These increases were a result of the increases in the populations. The population of the Northern Territory increased the most with an average annual rate of 3.0% per year, followed by Queensland (2.4%) and Western Australia (2.0%).

Conversely, Tasmania (-0.6%), South Australia (-0.2%) and the Australian Capital Territory (-0.2%) experienced average annual declines in the number of births registered. Tasmania's and South Australia's populations increased marginally, each by 0.7% on average over the past two decades, the Australian Capital Territory increased by 1.9%.

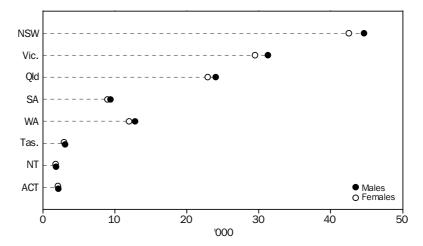
# 2.4 BIRTHS, Number Registered

	Other													
Selected years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Territories	Aust.				
MALES														
1977	40 096	30 667	18 034	9 856	10 732	3 475	1 365	2 258	_	116 551				
1982	43 096	30 702	20 957	9 916	11 401	3 616	1 456	2 110	_	123 254				
1987	44 035	31 605	20 293	9 896	12 044	3 483	1 819	2 090	_	125 265				
1992	47.710	22 604	22.600	0.057	10.070	2 505	1.012	0.056		125 601				
1993	47 710	33 691	23 600 24 055	9 957	12 879	3 595 3 523	1 913 1 884	2 256 2 234	_	135 601 133 572				
1993	45 906	32 793		10 232	12 925				20					
	45 187	32 904	24 148	9 951	12 867	3 497	1 818	2 232	21	132 625				
1995	44 884	32 108	23 863	9 977	12 942	3 390	1 960	2 291	17	131 432				
1996	44 448	31 587	24 533	9 710	12 813	3 346	1 861	2 241	33	130 572				
1997	44 647	31 248	24 024	9 383	12 810	3 098	1 812	2 132	25	129 179				
• • • • • • • • • • •	• • • • • • • •	• • • • • • •	• • • • • • •	• • • • • • •		• • • • • • •	• • • • • •	• • • • • •	• • • • • • • •	• • • • • • • •				
				FE	MALES									
1977	20.000	00 577	10010	0.244	0.050	2.005	4.000	0.4.47		400.740				
	38 206	28 577	16 942	9 314	9 956	3 285	1 236	2 147	_	109 740				
1982	40 812	29 174	19 642	9 283	10 860	3 423	1 458	1 997	_	116 649				
1987	42 058	29 902	19 072	9 339	11 288	3 307	1 710	2 018	_	118 694				
1992	44 875	32 075	22 640	9 354	12 194	3 392	1 829	2 191	_	128 550				
1993	43 448	31 256	22 723	9 846	12 156	3 312	1 719	2 180	17	126 657				
1994	42 790	31 070	22 430	9 458	12 271	3 347	1 808	2 229	23	125 426				
1995	42 965	30 483	22 621	9 359	12 197	3 180	1 806	2 124	23	124 758				
1996	42 147	29 556	23 236	9 346	11 980	3 111	1 701	2 155	30	123 262				
1997	42 509	29 484	22 941	8 979	11 966	2 909	1 776	2 076	23	122 663				
				PE	RSONS									
1977	78 302	59 244	34 976	19 170	20 688	6 760	2 601	4 405	_	226 291				
1982	83 908	59 876	40 599	19 199	22 261	7 039	2 914	4 107	_	239 903				
1987	86 093	61 507	39 365	19 235	23 332	6 790	3 529	4 108	_	243 959				
1992	92 585	65 766	46 240	19 311	25 073	6 987	3 742	4 447	_	264 151				
1993	92 363 89 354	64 049	46 778	20 078	25 073	6 835	3 603	4 447	37	260 229				
1994	87 977	63 974	46 778	19 409	25 138	6 844	3 626	4 414	44	258 051				
1995														
	87 849	62 591	46 484	19 336	25 139	6 570	3 766	4 415	40	256 190				
1996	86 595	61 143	47 769	19 056	24 793	6 457	3 562	4 396	63	253 834				
1997	87 156	60 732	46 965	18 362	24 776	6 007	3 588	4 208	48	251 842				

Just over half (51.3%) of all the births registered during 1997 were male babies. Every State and Territory recorded slightly more male babies than female.

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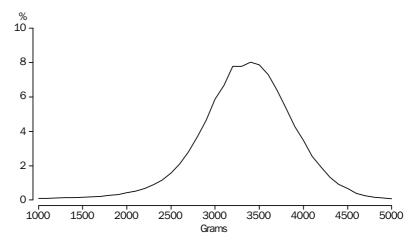
# 2.5 BIRTHS REGISTERED, State and Territory



# BIRTH WEIGHT

Birth weight is recorded by the registries in New South Wales, Western Australia and the Australian Capital Territory. The pattern of birth weight was very similar, with an average birth weight for all three States and Territory within 22 g. The average birth weight was 3,361 g. The median was 3,391 g, while the tenth percentile was 2,752 g, and the ninetieth percentile was 4,287 g.

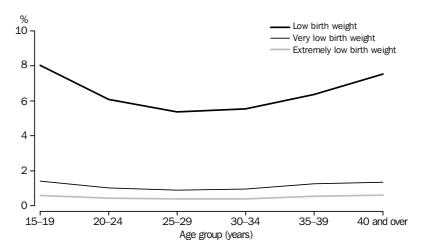
# 2.6 BIRTH WEIGHT DISTRIBUTION(a)



(a) Based on birth registration data from New South Wales, Western Australia and the Australian Capital Territory.

About 6% of all births with a stated birth weight were of a low birth weight (less than 2,500 g), 1% were of very low birth weight (less than 1,500 g) and 0.4% were of extremely low birth weight (less than 1,000 g). While 6% of non-Indigenous babies were of low birth weight, 10% of Indigenous babies were.

# 2.7 LOW BIRTH WEIGHT BABIES(a), Age of Mother



(a) Based on birth registraion data from New South Wales, Western Australia and the Australian Captial Territory.

Teenage mothers are at higher risk of having a low birth weight baby (8%), although this is more likely to reflect a socioeconomic difference, such as a higher propensity to smoke during pregnancy, than a biological difference directly associated with age. Older mothers are also more likely to have low birth weight babies, with 8% of babies born to women aged 40 and over having a low birth weight.

Only 5% of singleton babies had a low birth weight compared with just under half of all twins, and 96% of triplets.

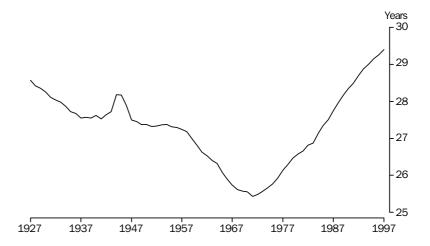
While birth registration data only collects previous issue of the current relationship, this does show the relationship between previous issue and birth weight. Second births are the least likely to be of low birth weight, with only 5%. First births (6%) and higher order births are more likely; 7% of sixth and subsequent births are of low birth weight. This is partly because large families are more common among low socioeconomic groups, such as Indigenous women. But it probably also reflects that having large numbers of children takes its toll on women's bodies making it more difficult to produce a subsequent healthy baby.

# AGE OF PARENTS

# Median age of mothers this century

Prior to the 1930s the median age of mothers had been declining, it then plateaued during the 1930s and then during the Second World War rose after which it fell substantially. The lowest median age of mothers was reached during 1971 (25.4 years). The reinterpretation of abortion law in New South Wales in 1971 led to a substantial fall in births to young women and an increase in the median age of mothers (see page 19). Since then the median age has been increasing each year to reach the highest level so far this century (29.4 years in 1997). The total fertility rate is now at its lowest (1.8 babies per woman). As the age-specific fertility rates indicate, the younger women who are deciding not to have children or to delay having children, cause the increasing median age of mothers and the declining total fertility rate.

#### 2.8 MEDIAN AGE OF MOTHER



# Median age of parents

The median age of parents has been steadily increasing over the past two decades. In 1977 the median age of mothers was 26.1 years while the median age of known fathers was 29.1 years. Paternity-not-acknowledged births tend to occur to young mothers, and presumably, to young fathers. Therefore the median age of all fathers is likely to be slightly below 29.1 years. By 1997 the median age of mothers had increased to 29.4 years and fathers to 32.0 years.

Women who registered a birth outside of marriage in 1997 had a median age around five years younger (25.4 years) than women who registered a nuptial birth (30.4 years). Meanwhile, the median age of mothers registering the first child of the current marriage was 29.0 years. In 1997, of the women whose births were outside of a registered marriage, the median age of those where paternity was not acknowledged (23.9 years) was younger than those where paternity was acknowledged (25.6 years).

Between 1977 and 1997 the median age of all mothers increased by 3.3 years. The median age of all married mothers increased by 3.9 years while that of married mothers having their first child increased by 4.4 years. These increases are not surprising given that women are delaying marriage. In 1997, the median age for women to marry was 27.5 years, up by 5.0 years since 1977. The median age of all unmarried mothers increased by 3.9 years, from 21.5 years in 1977 to 25.4 years in 1997.

The median age of all fathers in 1997 was 32.0 years, this reflects a steady increase over the past two decades. Between 1977 and 1997, the median age of married fathers increased by 3.7 years from 29.1 years to 32.8 years. The median age of unmarried fathers who acknowledged the birth of their child increased from 25.8 years in 1979 (the first year for which reliable paternity-acknowledged data are available) to 28.1 years in 1997.

## 2.9 MEDIAN AGE OF PARENTS

## MARRIED MOTHERS ..

Selected years	Married fathers	First child of marriage	All children of current marriage	Unmarried mothers	All mothers
1977	29.1	24.6	26.5	21.5	26.1
1982	29.9	25.5	27.3	22.2	26.8
1987	30.8	26.8	28.3	23.6	27.7
1992	31.8	28.0	29.5	24.3	28.7
1993	32.0	28.3	29.7	24.5	28.9
1994	32.3	28.5	29.9	24.6	29.0
1995	32.5	28.6	30.1	24.9	29.1
1996	32.7	28.7	30.2	25.1	29.2
1997	32.8	29.0	30.4	25.4	29.4

Victoria had the oldest mothers in the country, followed by the Australian Capital Territory and South Australia. Victoria recorded the highest median age of mothers, 30.0 years compared to the national level of 29.4 years. Similarily, the median age of Victorian women reported nuptial (30.7 years) and ex-nuptial (26.2 years) confinements higher than the national average. As ex-nuptial births have a lower median age than nuptial births, the Northern Territory has the lowest median age of mothers having ex-nuptial births.

Tasmania, Queensland and the Northern Territory all had relatively similar median ages of mothers for both nuptial and ex-nuptial births. The Northern Territory had a higher proportion of ex-nuptial births than any other State or Territory (57.7%), largely as a result of its large Indigenous population. Therefore the Northern Territory had the youngest mothers overall.

Victoria also had the oldest fathers in the country (median age of 32.4 years), though only marginally older than most other States and Territories, while the Northern Territory also had the youngest fathers (30.6 years).

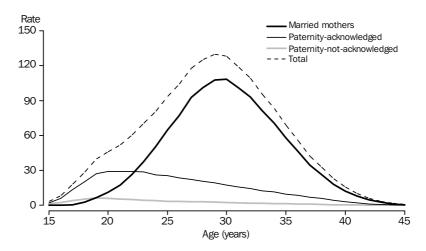
# **2.10** MEDIAN AGE OF PARENTS, State and Territory

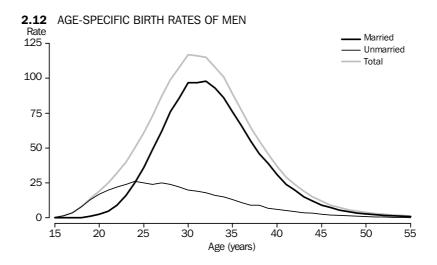
	MOTHE	RS		FATHE	FATHERS			
State and Territory	Nuptial	Ex-nuptial	Total	Nuptial	Ex-nuptial paternity- acknowldeged	Total		
• • • • • • • • • • • • • • •	• • • • • •	• • • • • •		• • • • • • • •	• • • • • • • • •	• • • • • •		
New South Wales	30.3	25.6	29.4	32.9	28.3	32.2		
Victoria	30.7	26.2	30.0	33.0	28.7	32.4		
Queensland	29.9	24.6	28.6	32.3	27.3	31.2		
South Australia	30.8	25.8	29.7	33.1	28.5	32.2		
Western Australia	30.3	25.3	29.2	32.8	28.1	31.8		
Tasmania	29.7	24.2	28.2	32.2	27.2	31.0		
Northern Territory	29.8	24.2	27.0	32.5	27.4	30.6		
<b>Australian Capital Territory</b>	30.6	25.9	29.8	32.7	28.3	32.0		
Australia	30.4	25.4	29.4	32.8	28.1	32.0		

# Age of parents

The peak ages for married mothers to have babies was 28 to 31 years while the peak ages for married fathers was 30 to 33 years. For unmarried mothers, the peak ages were 19 to 29 for paternity-acknowledged births, and 18 to 23 years for births where paternity was not acknowledged. In comparison, the peak ages for married fathers was between 30 and 33 years while that of unmarried fathers was much younger (23 to 27 years).

# 2.11 AGE-SPECIFIC BIRTH RATES OF WOMEN





# 2.13 BIRTHS, Age of Parents

	MOTHER	S			FATHERS	S	
Age of parent (years)	Married	Unmarried— paternity- acknowledged	Unmarried— paternity-not- acknowledged	Total	Married	Unmarried— paternity- acknowledged	Total
• • • • • • • • • • • • •	• • • • • • •	• • • • • • • •		• • • • • • • •	• • • • • • • • • • • •	• • • • • • • • •	• • • • • • • •
15 and under	_	244	197	442	_	58	58
16	4	736	319	1 059	_	193	194
17	49	1 684	499	2 232	3	488	491
18	331	2 541	665	3 537	22	1 006	1 028
19	816	3 438	785	5 039	145	1 685	1 830
20	1 462	3 738	751	5 951	345	2 254	2 599
21	2 277	3 807	686	6 770	651	2 748	3 399
22	3 572	3 945	658	8 175	1 289	3 111	4 400
23	5 132	3 917	609	9 658	2 254	3 447	5 701
24	7 185	3 729	584	11 498	3 616	3 730	7 346
25	9 659	3 802	496	13 957	5 390	3 804	9 194
26	11 788	3 595	502	15 885	7 439	3 699	11 138
27	13 283	3 177	430	16 890	8 915	3 598	12 513
28	14 410	2 941	442	17 793	10 750	3 338	14 088
29	14 932	2 687	367	17 986	11 901	3 045	14 946
30	14 851	2 401	323	17 575	13 178	2 771	15 949
31	14 044	2 182	313	16 539	13 448	2 567	16 015
32	13 192	2 061	239	15 492	13 745	2 473	16 218
33	12 003	1 853	235	14 091	13 572	2 324	15 896
34	10 574	1 713	221	12 508	12 849	2 165	15 014
35	8 722	1 432	208	10 362	11 420	1 872	13 292
36	7 041	1 292	174	8 507	10 056	1 673	11 729
37	5 167	1 011	138	6 316	8 199	1 349	9 548
38	3 836	845	123	4 804	6 715	1 232	7 947
39	2 610	606	88	3 304	5 622	978	6 600
40	1 728	415	65	2 208	4 369	861	5 230
41	1 104	273	40	1 417	3 289	727	4 016
42	639	168	33	840	2 685	585	3 270
43	375	93	20	488	2 069	506	2 575
44	159	60	9	228	1 581	435	2 016
45	72	25	3	100	1 212	328	1 540
46	30	8	4	42	957	261	1 218
47	15	3	_	18	730	219	949
48	6	_	_	7	547	193	740
49	_	_	_	_	441	155	596
50	_	_	_	_	391	118	509
51	_	_	_	_	259	84	343
52	_	_	_	_	193	77	270
53	_	_	_	_	151	52	203
54	_	_	_	_	127	46	173
55–59	_	_	_	_	365	103	468
60 and over	_	_	_	_	169	48	217
Not stated	29	28	60	117	44	46	90
Paternity-not- acknowledged	_	_	_	_	_	_	10 286
Total	181 104	60 452	10 286	251 842	181 104	60 452	251 842

•••••

# 2.14 AGE-SPECIFIC BIRTH RATES, Nuptiality

RIRTHS PER 1 000 WOMEN	RIRTHS PER 1 000 MEN

	Billio		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Dillino i	EN I 000 MEN	
		Unmarried—	Unmarried—			Unmarried—	
		paternity-	paternity-not-			paternity-	
Age of parent (years)	Married	acknowledged	acknowledged	Total	Married	acknowledged	Total
• • • • • • • • • • • • •	• • • • • • •	• • • • • • • • • •	• • • • • • • • •	• • • • • • • •		• • • • • • • • • •	• • • • • •
15 and under		1.9	1.5	2.5		0.4	0.4
16	_	5.8	2.5	3.5 8.3	_	1.4	
17					_		1.5
18	0.4 2.7	13.5 20.4	4.0 5.3	17.9 28.3	_	3.7 7.6	3.7
19					0.2		7.8
19	6.5	27.2	6.2	39.8	1.1	12.7	13.8
20	11.3	28.9	5.8	46.0	2.6	16.8	19.4
21	17.4	29.1	5.2	51.7	4.8	20.2	25.0
22	26.4	29.1	4.9	60.4	9.2	22.3	31.5
23	37.5	28.6	4.4	70.5	15.9	24.3	40.2
24	50.4	26.2	4.1	80.7	24.8	25.6	50.4
25	64.7	25.5	3.3	93.5	35.7	25.2	60.9
26	77.3	23.6	3.3	104.1	48.5	24.1	72.6
27	92.8	22.2	3.0	118.0	62.1	25.1	87.2
28	101.4	20.7	3.1	125.2	75.7	23.5	99.2
29	107.7	19.4	2.6	129.8	85.9	22.0	107.9
29	107.7	19.4	2.0	129.6	65.9	22.0	107.9
30	108.4	17.5	2.4	128.3	96.7	20.3	117.0
31	100.9	15.7	2.2	118.9	97.3	18.6	115.9
32	93.2	14.6	1.7	109.5	97.7	17.6	115.3
33	81.4	12.6	1.6	95.6	92.5	15.8	108.3
34	70.6	11.4	1.5	83.5	86.2	14.5	100.7
35	58.1	9.5	1.4	69.0	76.4	12.5	88.9
36	46.3	8.5	1.1	55.9	66.1	11.0	77.1
37	34.6	6.8	0.9	42.3	55.4	9.1	64.6
38	26.4	5.8	0.8	33.1	46.4	8.5	54.9
39	18.1	4.2	0.6	22.9	39.2	6.8	46.0
40	12.2	2.9	0.5	15.7	31.0	6.1	37.1
41	7.9	2.0	0.3	10.1	23.5	5.2	28.7
42	4.6	1.2	0.2	6.1	19.7	4.3	24.0
43	2.7	0.7	0.1	3.5	15.1	3.7	18.8
44	1.2	0.4	0.1	1.7	11.7	3.2	14.9
45	0.6	0.2	_	0.8	9.3	2.5	11.9
46	0.2	0.1	_	0.3	7.3	2.0	9.2
47	0.1	_	_	0.1	5.6	1.7	7.3
48	_	_	_	0.1	4.3	1.5	5.8
49	_	_	_	_	3.4	1.2	4.6
10					0.1	1.2	1.0
50	_	_	_	_	2.9	0.9	3.8
51	_	_	_	_	2.3	0.7	3.1
52	_	_	_	_	1.8	0.7	2.5
53	_	_	_	_	1.4	0.5	1.9
54	_	_	_	_	1.3	0.5	1.8
55–59	_	_	_	_	0.8	0.2	1.1
					0.3	V.Z	1.1
60 and over	_	_	_	_	0.1	_	0.2
Total fertility/ paternity rates	1.264	0.434	0.073	1.775	1.268	0.427	1.695

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## STATE AND TERRITORY COMPARISONS

Age of mother

The Northern Territory recorded the highest proportion of young mothers aged 19 years and under (14.0%), much higher than the national proportion of 4.9%. South Australia (2.4%) showed the highest proportion of older mothers aged 40 years and over, compared with a national level of 2.1%.

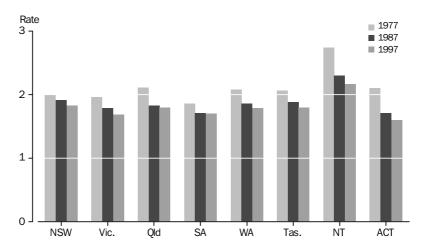
# 2.15 BIRTHS, Age of Mother

Age group (years)	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Other Territories	Aust.
40 anddan	4.074	4.044	0.000	775	1.040	457	500	400		40.000
19 and under	4 071	1 911	3 082	775	1 348	457	502	163	_	12 309
20–24	14 698	8 365	9 322	2 705	4 291	1 235	832	594	10	42 052
25-29	28 312	20 038	15 473	6 026	8 144	2 013	1 104	1 385	16	82 511
30-34	26 253	20 158	12 842	5 799	7 408	1 612	741	1 380	12	76 205
35–39	11 865	8 802	5 407	2 607	3 103	592	338	571	8	33 293
40 and over	1 938	1 415	833	439	479	95	64	90	_	5 355
Not stated	19	43	6	11	3	3	7	25	_	117
Total	87 156	60 732	46 965	18 362	24 776	6 007	3 588	4 208	48	251 842

# Fertility rates

The total fertility rate in 1997 varied substantially between the States and Territories, from 1.6 births per women in the Australian Capital Territory to 2.2 for the Northern Territory. Over the past two decades, the total fertility rate has declined for all States and Territories.

# 2.16 STATE AND TERRITORY FERTILITY RATES, Selected Years



Between 1996 and 1997 the total fertility rate for New South Wales increased marginally (by 0.2%) while the rate for every other State and Territory declined. Tasmania (by 4.8%) and the Australian Capital Territory (by 4.1%) showed the largest declines.

## 2.17 TOTAL FERTILITY RATES

Selected years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
• • • • • • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • • •		• • • • • • •	• • • • • • •	• • • • •
1977	2.004	1.969	2.114	1.865	2.085	2.067	2.748	2.111	2.016
1982	1.966	1.847	2.068	1.766	1.960	2.006	2.321	1.885	1.936
1987	1.919	1.791	1.833	1.717	1.864	1.885	2.306	1.709	1.848
1992	1.974	1.818	1.929	1.703	1.876	1.946	2.383	1.721	1.893
1993	1.910	1.780	1.910	1.787	1.879	1.921	2.283	1.688	1.864
1994	1.878	1.789	1.866	1.744	1.876	1.947	2.300	1.709	1.846
1995	1.868	1.754	1.828	1.760	1.858	1.892	2.357	1.685	1.825
1996	1.827	1.707	1.851	1.756	1.815	1.890	2.201	1.670	1.797
1997	1.832	1.688	1.801	1.703	1.789	1.799	2.171	1.601	1.775

# Age contributions to the total fertility rates

Northern Territorian fertility had a much younger age structure than any other State or Territory. Women aged under 25 years made up 40% of the total fertility rate (down from 43% in 1996). The age-specific birth rate for 15–19 year old women in the Northern Territory (76.5 births per 1,000 women) was more than six times higher than the lowest State (Victoria with 12.4).

## 2.18 CONTRIBUTION OF AGE GROUPS TO THE TOTAL FERTILITY RATE

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Age group (years)	%	%	%	%	%	%	%	%	%
• • • • • • • • • • • • •	• • • • •		• • • • •	• • • • • •	• • • • •	• • • • •	• • • • •	• • • • •	
19 and under 20–24 25–29 30–34 35–39 40 and over <b>Total</b>	5.3 18.0 31.8 29.7 12.9 2.3 <b>100.0</b>	3.7 14.7 32.0 33.1 14.2 2.5 <b>100.0</b>	7.1 20.1 32.2 27.6 11.1 1.9 <b>100.0</b>	4.7 15.8 33.0 31.1 13.1 2.3 <b>100.0</b>	5.9 18.0 32.5 29.7 11.9 2.0 <b>100.0</b>	7.6 22.3 33.9 26.0 8.6 1.5 <b>100.0</b>	17.6 22.9 26.9 20.3 10.1 2.2 <b>100.0</b>	4.2 13.3 32.3 34.3 13.8 2.3 <b>100.0</b>	5.5 17.5 32.1 30.1 12.6 2.2 <b>100.0</b>

# Net reproduction rate

On current rates, a baby girl born today can expect to have 0.852 daughters in her life time. This takes into account the current fertility rates, the sex ratio of babies, and the chance of her dying before finishing her reproductive life. The sex ratio is very stable: about 48.5% of babies are girls, and mortality rates are falling, hence the proportion of girls surviving to reproductive ages is increasing, so the decline in the net reproduction rate is entirely due to the fall in fertility over the last two decades.

The net reproduction rate in 1997 was 0.852, a figure which has declined by 11% from its level of 0.956 in 1977 and 4% from its level of 0.884 in 1987.

**2.19** FEMALE NET REPRODUCTION RATE(a)

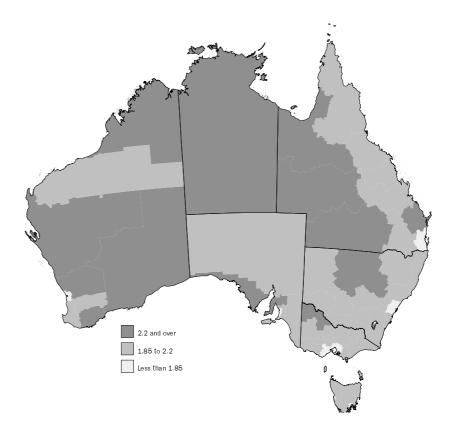
Selected years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
• • • • • • • • •		• • • • • •	• • • • • •	• • • • •			• • • • •		• • • • •
1977 1982	0.956 0.938	0.931	1.000	0.884	0.981	0.981	1.204 1.127	1.008	0.956 0.924
1987	0.922	0.856	0.872	0.821	0.889	0.903	1.087	0.823	0.884
1992 1993	0.943 0.917	0.876 0.857	0.929 0.914	0.813 0.864	0.898 0.897	0.931 0.919	1.126 1.054	0.837 0.827	0.908 0.895
1994 1995	0.902 0.901	0.859 0.843	0.886 0.875	0.839 0.841	0.903 0.890	0.939 0.908	1.116 1.099	0.844 0.801	0.885 0.877
1996 1997	0.879 0.882	0.816 0.809	0.887 0.868	0.852 0.822	0.866 0.853	0.899 0.859	1.029 1.043	0.809 0.783	0.862 0.853

<sup>(</sup>a) Net reproduction rates are based on Annual Life Tables calculated by the ABS.

# **REGIONAL COMPARISONS**

The total fertility rate of capital cities is much lower than that of the rural regions. Factors influencing the lower fertility rate of city women include their easier access to medical technology and information, and their careers. Likewise, the median age of mothers is slighly higher in the cities than in the rural regions.

# 2.20 REGIONAL TOTAL FERTILITY RATES



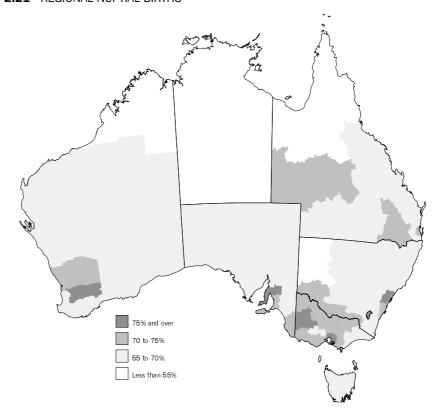
## REGIONAL COMPARISONS continued

Of all the capital cities, Adelaide and Canberra had the lowest fertility rates while Melbourne had the highest median age of mother. Of the rural regions, Kimberly in northern Western Australia had the highest fertility rate, the highest proportion of ex-nuptial births, including the highest proportion of paternity-not-acknowledged births, and the lowest median age of mother.

The highest proportion of ex-nuptial births were found in the Northern Territory and the northern regions of Western Australia and Queensland where there was a high Indigenous population.

Of all the capital cities, Darwin had the highest proportion of ex-nuptial births (43%) while Melbourne had the lowest (20%).

# 2.21 REGIONAL NUPTIAL BIRTHS



# 2.22 REGIONAL PATTERNS OF FERTILITY

EX-NUPTIAL BIRTHS......

	Births	Total fertility	Median age of mother	Nuptial births	Paternity- acknowledged	Paternity-not- acknowledged
Statistical Division	no.	rate	years	%	%	%
• • • • • • • • • • • • • • • •	• • • • • • • • • • • • •	• • • • • • • • •	• • • • • • • • • • •	• • • • • • • • • • • • •	• • • • • • • • •	• • • • • • • • •
New South Wales	FF 00F	4 744	20.0	70.0	10.0	2.2
Sydney	55 825	1.741	30.0	78.0	18.6	3.3
Hunter	7 243	1.862	28.4	66.1	29.9	3.9
Illawarra	4 989	1.932	28.8	70.2	25.1	4.7
Richmond-Tweed	2 501	2.009	29.1	58.0	37.0	5.0
Mid-North Coast	3 183	2.200	28.1	58.5	36.3	5.2
Northern	2 474	2.123	27.8	63.8	31.7	4.5
North Western	1 817	2.317	27.8	58.1	35.7	6.2
Central West	2 485	2.195	28.0	66.9	29.3	3.8
South Eastern	2 365	2.103	29.0	65.9	30.5	3.6
Murrumbidgee	2 279	2.197	28.2	68.1	27.8	4.1
Murray	1 561	2.180	29.2	70.9	24.6	4.5
Far West	330	2.033	27.7	50.3	43.0	6.7
Total	87 156	1.832	29.4	73.3	22.9	3.8
Victoria						
Melbourne	44 053	1.606	30.4	80.0	17.4	2.6
Barwon	2 971	1.804	29.4	72.8	24.1	3.1
Weston Districts	1 347	2.088	29.3	72.4	24.8	2.8
Central Highlands	1 768	1.886	29.2	69.0	26.8	4.2
Wimmera	670	2.168	29.4	80.7	17.8	1.5
Mallee	1 296	2.339	28.5	72.8	24.2	3.1
Loddon-Campaspe	1 975	1.925	29.4	70.7	26.0	3.3
Goulburn	2 499	2.162	28.8	71.6	25.3	3.2
Ovens-Murray	1 203	2.060	29.0	71.1	25.6	3.3
East Gippsland	922	1.960	28.7	67.1	29.6	3.3
Gippsland	2 000	2.013	28.6	71.6	25.1	3.4
Total	60 732	1.688	30.0	77.7	19.5	2.8
Queensland						
Brisbane	20 888	1.671	29.2	70.5	24.9	4.6
Moreton	7 593	1.669	29.0	66.3	29.1	4.6
Wide Bay-Burnett	3 064	2.203	27.6	61.4	32.2	6.4
Darling Downs	2 936	2.100	27.9	72.2	23.6	4.2
South West	463	2.425	28.5	66.5	27.9	5.6
Fitzroy	2 785	2.072	27.8	64.7	30.5	4.8
Central West	228	2.373	28.8	70.6	25.4	3.9
Mackay	1 807	1.920	28.0	66.6	29.7	3.7
Northern	2 936	1.943	27.9	61.9	32.3	5.9
Far North	3 399	1.968	28.2	53.5	36.5	10.0
North West	748	2.555	27.3	51.1	36.2	12.7
Total	46 965	1.801	28.6	66.7	28.0	5.3
South Australia						
Adelaide	12 997	1.594	30.0	71.5	25.0	3.5
Outer Adelaide	1 278	1.851	30.3	74.3	23.3	2.3
Yorke and Lower North	532	2.279	29.6	77.8	19.7	2.4
Murray Lands	885	2.093	28.2	64.4	32.0	3.6
South East	879	2.031	29.0	73.3	23.2	3.5
Eyre	490	2.332	28.6	64.1	32.0	3.9
Northern	1 273	2.167	28.4	56.6	38.1	5.3
Total	18 362	1.703	29.8	70.4	26.1	3.5
. • • • • • • • • • • • • • • • • • • •	10 002	2.700	20.0	10.4	20.1	0.0

......

# 2.22 REGIONAL PATTERNS OF FERTILITY continued

# EX-NUPTIAL BIRTHS.....

	Births	Total fertility	Median age of mother	Nuptial births	Paternity- acknowledged	Paternity-not- acknowledged
Ctatistical Division				birtis %	acknowledged %	acknowledged %
Statistical Division	no.	rate	years	%	%	%
	• • • • • • • • • • • •	• • • • • • • •			• • • • • • • • •	
Western Australia						
Perth	17 252	1.671	29.6	72.6	23.4	4.0
South West	2 311	2.045	28.6	64.3	31.0	4.7
Lower Great Southern	739	2.318	28.3	66.7	28.7	4.6
Upper Great Southern	283	2.174	28.9	77.0	19.4	3.5
Midlands	786	2.343	28.9	71.2	24.4	4.3
South Eastern	1 099	2.228	28.0	61.0	34.3	4.7
Central	974	2.258	27.9	58.1	35.5	6.4
Pilbara	744	2.046	28.3	58.6	34.5	6.9
Kimberley	575	2.523	26.2	28.2	51.7	20.2
Total	24 776	1.787	29.2	69.2	26.2	4.6
Tasmania						
Greater Hobart	2 342	1.639	28.8	64.3	30.7	5.0
Southern	409	1.914	27.9	62.6	35.2	2.2
Northern	1 735	1.850	28.2	65.9	29.9	4.1
Mersey-Lyell	1 518	2.037	27.7	63.3	32.4	4.3
Total	6 007	1.799	28.3	64.4	31.2	4.4
Northern Territory						
Darwin	1 511	1.950	28.1	56.8	34.5	8.7
Northern Territory - Bal	2 074	2.343	26.2	32.0	43.3	24.6
Total	3 588	2.171	27.1	42.4	39.7	17.9
Australian Capital Territory						
Canberra	4 195	1.597	29.9	75.0	21.7	3.2
Total	4 208	1.601	29.9	75.0 75.0	21.8	3.2
Australia	251 842	1.775	29.4	71.9	24.0	4.1

..... ABS • BIRTHS • 3301.0 • 1997 35

#### COMPLETED FERTILITY

Table 2.23 shows the average number of babies that a cohort of women had over their reproductive lives. This is calculated in a similar way to the total fertility rate, except that instead of adding the age-specific birth rates prevailing in a given year, the age-specific birth rates experienced by a cohort of women born in a given year are included.

2.23 COMPLETED FERTILITY(a), Year of Birth of Woman

	Average	Proportion based on	Median
	issue	projected births(b)	age
Year of birth	no.	%	years
• • • • • • • • •	• • • • • • • • •		• • • • • • •
1905	2.296	_	27.8
1910	2.333	_	28.8
1915	2.430	_	28.9
1920	2.649	_	28.2
1925	2.803	_	27.6
1930	3.034	_	27.0
1935	3.044	_	26.0
1940	2.758	_	25.4
1945	2.304	_	25.4
1950	2.168	_	26.4
1955	2.177	0.4	27.2
1960	2.168	4.9	27.9
1965	2.060	23.9	28.7
1970	1.933	58.8	29.4
1975	1.844	85.6	29.7
1980	1.783	98.3	30.0

<sup>(</sup>a) Based on age-specific fertility rates derived from birth registrations. Cohorts which have not yet completed their fertility are assumed to experience the fertility patterns used in the population projections; that is, fertility rate dropping to 1.75 over 10 years, with an increasing age of motherhood.

An alternative way of generating a similar estimate is to use the 1996 Census question 'For each female, how many babies has she ever had?' and use the age question to determine the year of birth.

Cohorts of women born since 1955 have not completed their fertility, and so an assumption has to be made about future fertility patterns of these women. Using analysis of mothers with infants from the Census it is possible to generate assumptions about future age and birth-order specific birth rates. While it is quite likely that these assumptions will not prevail in future years, this does give an indication of what would happen to family size if current patterns were to continue.

Probably the most significant factors in the fall in average issue, from the peak of women born around 1930 to the more recent cohorts, has been the rise in childlessness. The number of women who remain childless throughout their lives has increased from 9% for women born in 1930 to what could become around 27% if current patterns continue. There has also been a significant fall in the proportion of women having large families: 9% of women born in 1930 had six or more children, compared to 2% of women born in 1950.

<sup>(</sup>b) Proportion of the estimated average derived from projected fertility.

## **2.24** NUMBER OF CHILDREN EVER BORN, Year of Birth of Woman

	0	1	2	3	4	5	6	Average	Women in cohort	Proportion of projected births(a)	
Year of birth	%	%	%	%	%	%	%	no.	no.	%	
1905	19.5	18.5	24.3	16.6	10.3	4.4	6.3	2.182	6 666	_	
1910	16.6	16.7	26.0	17.6	10.6	5.5	7.0	2.331	18 617	_	
1915	14.0	14.8	27.1	20.0	11.6	5.8	6.8	2.448	31 684	_	
1920	11.9	13.3	26.8	20.9	12.6	6.7	7.8	2.602	47 135	_	
1925	10.8	11.1	26.3	22.0	14.3	7.3	8.2	2.725	56 629	_	
1930	9.5	9.1	24.9	23.5	15.7	8.2	9.0	2.876	63 560	_	
1935	8.7	7.8	25.7	25.8	16.9	7.7	7.4	2.871	62 221	_	
1940	8.9	7.7	30.2	27.6	14.9	6.1	4.6	2.683	76 935	_	
1945	9.9	9.2	36.8	26.8	11.4	3.6	2.3	2.406	94 706	_	
1950	11.0	10.4	39.1	25.3	9.8	2.8	1.6	2.275	121 031	_	
1955	13.0	11.5	37.9	24.6	9.1	2.4	1.4	2.183	125 457	0.6	
1960	14.9	12.0	37.6	23.2	8.6	2.0	1.6	2.111	140 667	6.6	
1965	20.2	13.3	35.2	20.5	7.5	1.6	1.8	1.940	128 169	28.4	
1970	25.7	12.2	32.5	19.1	7.2	1.4	1.9	1.817	130 443	64.5	
1975	27.8	10.6	32.0	19.0	7.2	1.4	1.9	1.790	120 759	89.1	
1980	26.6	11.9	32.0	19.1	7.2	1.4	1.9	1.801	105 789	98.8	

<sup>(</sup>a) Some birth cohorts had not completed their fertility by the 1996 Census. These groups were assumed to have the fertility patterns shown in the 1996 Census. This column shows the proportion of the births which are estimated using this method.

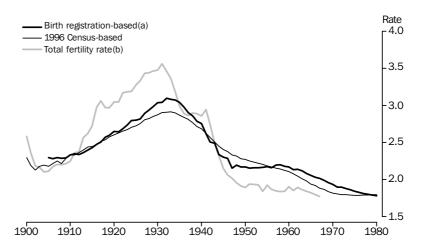
Source: ABS, unpublished data, 1996 Census of Population and Housing.

Completed fertility follow a similar pattern to the total fertility rate. The highest average completed fertility was for women born in 1932 (registration basis) or 1933 (1996 Census basis). This high fertility is reflected in the total fertility rate at the peak of the baby boom around 1961 (3.562).

The experience of a cohort of women can be thought of as an average of the prevailing attitudes and patterns that occurred throughout their lives. So while women born in 1930 lived through the peak of the baby boom, they also lived through the build-up of the baby boom, and the aftermath of the baby boom. Because of this, their average completed fertility does not reach the heights of the peak of the baby boom.

The two measures of completed fertility give similar results. The differences are due to a number of factors. The 1996 Census model includes births which occurred in other countries to women who later migrated to Australia. Women who died, or emigrated from Australia before the 1996 Census are not included in this model. If these women had a different pattern of fertility to those who survived and stayed in Australia, then this may create a bias in this model.

## 2.25 AVERAGE COMPLETED FERTILITY AND TOTAL FERTILITY RATE



- (a) Not available.
- (b) The total fertility rate has been lagged by 30 years to enable comparison of the different series. Hence the completed fertility of women can be compared to the total fertility rate prevailing while they were at or near their peak fertility.

# CHAPTER 3 PREVIOUS BIRTHS .....

DATA SOURCES

There are two births collections analysed within this chapter; birth registration data and data from the midwives' collection. The birth registration analysis relates to previous births of the current relationship while the analysis from the midwives' collection relates to all previous births. The impact of this difference is for birth registration data to overstate the number of first births, and understate subsequent births. In 1995, 49% of births were the first birth of that relationship, but only 40% were the first birth of the mother. This indicates that around 9% of all mothers had babies to different fathers.

The number of previous births a mother has had provides an indication of the size of families being created. Around 41% of married women who registered a birth during 1997 were first-time mothers, a proportion which has only increased by two percentage points in the past 20 years. Similarly, the proportion of married women who have had one previous birth fluctuated between 34% and 36% throughout the past two decades, (36% in 1997). The proportion of women who have had two or more previous births also remained relatively unchanged at 23% in 1997, compared to 26% in 1977.

## **3.1** NUPTIAL CONFINEMENTS, Previous Births of Mother

## PREVIOUS BIRTHS OF THE CURRENT RELATIONSHIP.....

Selected years	0	1	2	3	4	5 and over	Not stated	Total
• • • • • •	• • • • • •	• • • • • •	• • • • • •	• • • • • • •		• • • • • •	• • • • •	• • • • • • •
1977	78 588	70 859	34 596	11 032	3 438	2 612	10	201 135
1982	83 300	69 963	34 670	11 631	3 193	2 016	3	204 775
1987	80 241	68 730	33 472	10 793	2 873	1 742	3	197 853
1992	80 821	69 467	32 644	10 522	2 843	1 702	3	198 002
1993	77 718	68 389	31 801	10 145	2 731	1 733	_	192 518
1994	77 166	67 123	31 118	9 598	2 500	1 655	_	189 160
1995	75 606	66 175	30 252	9 200	2 504	1 641	_	185 378
1996	73 873	65 293	29 167	9 037	2 590	1 589	_	181 549
1997	73 356	64 341	28 047	8 621	2 366	1 548	_	178 279

Age of mother

In 1997 there were 238,100 confinements registered where paternity was acknowledged. Nearly half (48%) of these were by the first birth of the mother's current relationship, 33% of mothers already had a child with their current partner, and 13% already had two children. The majority (53%) of first-time mothers were aged between 24 and 31 years, one-tenth were 20 years or under and one-tenth were over 35 years.

## **3.2** CONFINEMENTS(a), Age and Previous Births of Mother

## PREVIOUS BIRTHS OF THE CURRENT RELATIONSHIP.....

						5 and	Total	Total	Average
Age (years)	0	1	2	3	4	over	confinements	issue	issue
15 and under	239	4	_	_	_	_	243	249	1.0
16	714	23	_	_	_	_	737	763	1.0
17	1 625	93	5	_	_	_	1 723	1 836	1.1
18	2 513	318	19	_	_	_	2 850	3 228	1.1
19	3 521	628	78	4	3	_	4 232	5 054	1.2
20	3 926	1 058	161	16	_	_	5 162	6 633	1.3
21	4 212	1 499	296	33	4	_	6 044	8 290	1.4
22	4 781	2 083	474	94	10	3	7 443	10 875	1.5
23	5 472	2 530	770	149	24	5	8 950	13 689	1.5
24	6 420	3 107	962	248	45	13	10 795	16 936	1.6
25	7 623	4 030	1 288	297	66	13	13 317	21 291	1.6
26	8 369	4 792	1 512	399	100	15	15 187	24 874	1.6
27	8 495	5 371	1 732	496	119	34	16 247	27 441	1.7
28	8 297	5 915	2 096	593	134	52	17 087	30 043	1.8
29	7 877	6 254	2 363	646	151	70	17 361	31 520	1.8
30	7 373	6 115	2 594	658	161	69	16 970	31 558	1.9
31	6 281	5 967	2 623	807	179	114	15 971	31 201	2.0
32	5 590	5 606	2 670	772	223	124	14 985	30 096	2.0
33	4 685	5 079	2 658	846	227	111	13 606	28 327	2.1
34	3 940	4 454	2 442	824	250	149	12 059	25 939	2.2
35	3 206	3 522	2 100	760	229	138	9 955	21 859	2.2
36	2 639	2 868	1 665	638	199	160	8 169	18 155	2.2
37	1 991	2 087	1 150	505	184	147	6 064	13 682	2.3
38	1 534	1 569	890	358	135	105	4 591	10 286	2.2
39	1 044	1 058	576	263	104	124	3 169	7 352	2.3
40	754	635	362	157	94	100	2 102	4 980	2.4
41	499	431	223	92	44	71	1 360	3 151	2.3
42	306	224	115	63	29	57	794	1 912	2.4
43	173	127	68	32	20	42	462	1 180	2.6
44	98	45	26	14	10	24	217	555	2.6
45	38	24	9	7	5	13	96	267	2.8
46	18	8	3	3	_	5	37	101	2.7
47	7	3	3	3	3	_	16	41	2.6
48	4	3	_	_	_	3	7	14	2.0
49	_	_	_	_	_	_	_	7	
50 and over	3	3	_	_	_	_	5	7	1.4
Not stated	29	9	13	5	_	_	57	111	1.9
ot otatou	20	3	10	3			<b>5</b> 1	111	1.0
Total	114 296	77 540	31 945	9 783	2 749	1 759	238 072	433 503	1.8

(a) Excludes paternity-not-acknowledged.

About 31% of births to 35–39 year old women were the first birth of their current relationship. Among 40–44 year old women this increased to 35% and among women 45 and over to 40%. This may indicate that a high proportion of births to women in this age group are to divorced and repartnered women who want to have a child with their new partner.

## 3.3 AGE-SPECIFIC BIRTH RATES, Previous Births of this Relationship

AGE	OF	MOTHER
-----	----	--------

Previous births	15–19	20-24	25–29	30–34	35–39	40–44	45 and over	Total
• • • • • • • • • • •	• • • • • •	• • • • •		• • • • • •	• • • • • •	• • • • • •	• • • • •	• • • • • • • • • •
Paternity-not-								
acknowledged	3.9	4.9	3.1	1.9	1.0	0.2	0.0	75.3
0	13.7	36.8	56.0	39.0	14.1	2.6	0.1	811.4
1	1.8	15.6	37.1	38.9	15.3	2.2	0.1	554.2
2	0.2	4.1	12.9	18.8	8.9	1.2	0.0	230.2
3	0.0	0.8	3.5	5.7	3.5	0.5	0.0	71.0
4	0.0	0.2	1.1	2.4	2.2	0.7	0.0	32.9
Total	19.6	62.3	113.7	106.7	44.9	7.5	0.3	1 774.8

#### MIDWIVES' COLLECTION

Midwives' data from 1995 indicates that 73% of women would have a first birth. Because this is measuring first ever births, and not first births in the current relationship it is valid to interpret this as meaning that on current rates, 73% of women give birth to a child at some time in their lives, and 27% do not. Further, given that 73% of women will have a first birth, and 60% will have a second birth, on current rates 12% of women will have one baby and no more.

On the rates prevailing in 1995, 27% of women will have no children, 12% will have one, 31% will have two, 19% will have three and 11% will have four or more. Just as the total fertility rate does not measure what happens to cohorts of women, this measure does not either. However analysis of midwives' data from 1991 to 1995, and 1996 Census (see page 37) indicates that there is very little short-term fluctuations in these levels.

The 1995 midwives' data indicates a total fertility rate of 1.811, compared with 1.824 from birth registrations. This discrepancy is discussed on pages 15–17.

## 3.4 MIDWIVES' COLLECTION, Age and Birth Order-Specific Birth Rates — 1995

AGE GROUP (YEARS).....

15–19	20–24	25–29	30–34	35–39	40 and over	Total
• • • • •	• • • • •	• • • • • •	• • • • • •	• • • • • •	• • • • •	• • • • • • •
17.6	38.6	49.1	30.9	8.3	1.3	729.2
3.4	23.0	40.3	39.4	12.9	2.0	604.9
0.5	7.5	17.5	23.3	9.5	1.4	298.7
0.0	2.0	5.8	8.6	4.8	1.0	111.6
0.0	0.5	2.8	4.7	3.8	1.2	65.4
21.5	71.7	115.5	107.0	39.4	7.0	1 810.7
	17.6 3.4 0.5 0.0	17.6 38.6 3.4 23.0 0.5 7.5 0.0 2.0 0.0 0.5	17.6 38.6 49.1 3.4 23.0 40.3 0.5 7.5 17.5 0.0 2.0 5.8 0.0 0.5 2.8	17.6 38.6 49.1 30.9 3.4 23.0 40.3 39.4 0.5 7.5 17.5 23.3 0.0 2.0 5.8 8.6 0.0 0.5 2.8 4.7	15-19 20-24 25-29 30-34 35-39 17.6 38.6 49.1 30.9 8.3 3.4 23.0 40.3 39.4 12.9 0.5 7.5 17.5 23.3 9.5 0.0 2.0 5.8 8.6 4.8 0.0 0.5 2.8 4.7 3.8	17.6 38.6 49.1 30.9 8.3 1.3 3.4 23.0 40.3 39.4 12.9 2.0 0.5 7.5 17.5 23.3 9.5 1.4 0.0 2.0 5.8 8.6 4.8 1.0 0.0 0.5 2.8 4.7 3.8 1.2

Source: P. Day, P. Lancaster & J. Huang, *Australia's mothers and babies*, 1995, AIHW National Perinatal Statistics Unit: Perinatal Statistics Series no. 6, Sydney, 1997.

## **3.5** MIDWIVES' COLLECTION, Previous Births and Age of Mother — 1995

AGE OF	MOTHER

Previous Births	15–19	20–24	25–29	30–34	35–39	40 and over	Not stated	Total
None	11 118	26 068	35 612	22 089	6 160	902	7	101 956
One	2 113	15 561	29 269	28 156	9 552	1 359	9	86 019
Two	290	5 059	12 699	16 680	7 051	999	6	42 784
Three	29	1 374	4 182	6 162	3 574	713	_	16 034
Four or more	9	361	2 027	3 359	2 816	864	1	9 437
Not stated	3	13	34	46	24	6	22	148
Total	13 562	48 436	83 823	76 492	29 177	4 843	45	256 378

Source: P. Day, P. Lancaster & J. Huang, *Australia's mothers and babies*, 1995, AIHW National Perinatal Statistics Unit: Perinatal Statistics Series no. 6, Sydney, 1997.

Nationally, 40% of births were first births. This proportion, and the distribution of subsequent births did not vary significantly between States and Territories. The Northern Territory, with a considerably higher total fertility rate had higher proportions of higher order births. While the Australian Capital Territory with the lowest total fertility rate had the highest proportion of first and second births. Tasmania, despite having a similar total fertility rate to the national average had a very different distribution of birth orders to the other States, with considerably fewer first births, and considerably more fourth and fifth births. One possible explanation for this is that a higher proportion of Tasmanian women had no babies, but those that did, had more than in other States.

**3.6** MIDWIVES' COLLECTION, Previous Births — 1995

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.				
Previous births	%	%	%	%	%	%	%	%	%				
• • • • • • • •	• • • • •	• • • • •	• • • • •	• • • • •	• • • • •	• • • • •	• • • • •	• • • • •					
None	40.0	40.1	39.1	39.8	40.6	35.0	39.7	42.1	39.8				
One	33.6	34.4	33.0	34.9	32.3	31.1	29.1	35.1	33.6				
Two	16.6	16.6	17.0	16.2	16.9	17.9	17.5	15.1	16.7				
Three	6.2	5.8	6.7	6.2	6.3	8.7	7.3	4.6	6.3				
Four or more	3.5	3.1	4.3	2.8	3.9	7.4	6.3	3.1	3.7				
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0				

Source: P. Day, P. Lancaster & J. Huang, Australia's mothers and babies, 1995, AIHW National Perinatal Statistics Unit: Perinatal Statistics Series no. 6, Sydney, 1997.

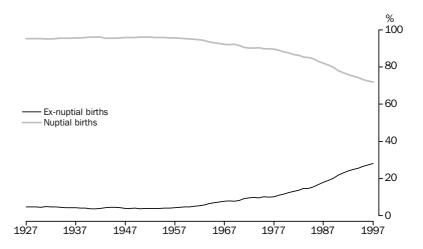
# CHAPTER 4

## MARRIED AND UNMARRIED MOTHERS ......

## WHETHER MOTHERS ARE MARRIED

There were 251,800 babies registered in Australia during 1997. Nearly three-quarters (72%) of the mothers were in a registered marriage and 28% were unmarried. The proportion of unmarried mothers has been increasing since the early 1950s.

## 4.1 MARITAL STATUS OF MOTHERS

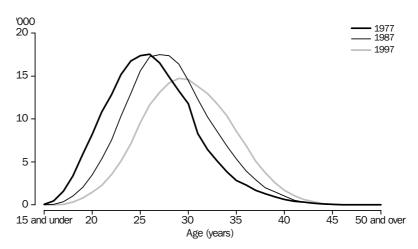


## MARRIED MOTHERS

Age of mother

Of all the married mothers who registered a birth during 1997, the peak ages were between 28 years and 31 years, much older than they were two decades ago. In 1977 the peak ages were 24 years to 27 years, while in 1987 the peak ages were 26 years to 28 years. Graph 4.2 shows this changing age pattern.

## 4.2 AGE OF MARRIED MOTHERS



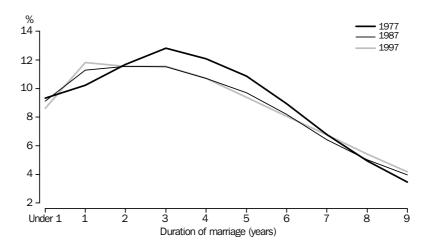
**4.3** NUPTIAL CONFINEMENTS, Age of Mother

Age of mother						
(years)	1977	1982	1987	1992	1996	1997
	• • • • • • •	• • • • • • •	• • • • • • •			• • • • • • •
15 and under	48	29	7	_	_	_
16	458	194	80	23	17	4
17	1 602	804	392	168	68	49
18	3 355	1 989	1 037	602	300	326
19	5 901	3 939	2 043	1 412	840	809
20	8 220	6 295	3 510	2 637	1 537	1 450
21	10 830	8 831	5 369	4 104	2 532	2 264
22	12 815	11 381	7 544	5 783	3 841	3 534
23	15 156	13 527	10 334	7 882	5 605	5 078
24	16 760	15 816	12 957	9 690	8 022	7 106
25	17 379	17 176	15 585	11 765	10 121	9 550
26	17 552	17 385	17 239	13 771	11 864	11 630
27	16 510	17 042	17 482	15 492	13 485	13 116
28	14 913	16 092	17 390	16 971	14 390	14 188
29	13 274	15 047	16 411	17 304	14 764	14 711
30	11 800	12 995	14 468	16 529	14 626	14 609
31	8 291	10 897	12 311	15 399	14 329	13 819
32	6 473	8 775	10 233	13 247	13 319	12 954
33	5 107	6 955	8 571	11 103	11 775	11 776
34	3 842	5 639	6 849	9 103	10 074	10 374
35	2 839	4 479	5 354	7 221	8 466	8 544
36	2 290	3 013	3 953	5 473	6 433	6 897
37	1 704	2 155	2 912	4 047	4 884	5 067
38	1 305	1 499	2 008	2 918	3 615	3 760
39	955	1 051	1 496	1 988	2 563	2 570
40	626	719	1 045	1 405	1 647	1 698
41	431	449	556	839	1 032	1 088
42	321	266	323	498	666	627
43	186	172	188	276	351	369
44	95	80	82	159	190	157
45	45	40	50	85	70	71
46	32	27	29	32	34	29
47	7	11	10	17	13	13
48	4	_	5	7	5	6
49	_	_	_	4	3	_
50 and over	_	_	3	4	8	4
Not stated	5	5	25	44	58	29
Total	201 135	204 775	197 853	198 002	181 549	178 279

Timing of births within marriage

Most confinements within a marriage occur within the first four years of that marriage. This has not changed over the past two decades, however, in 1977 the fourth and fifth years of marriage were the most popular time for couples to have a baby whilst in 1997 the second year of marriage was the most common.

## 4.4 CONFINEMENTS, Duration of Marriage



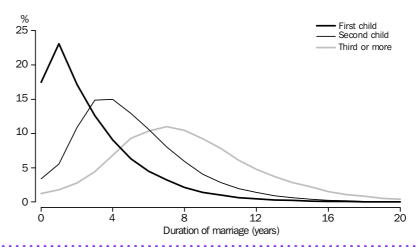
## 4.5 NUPTIAL CONFINEMENTS, Duration of Marriage

## DURATION OF CURRENT MARRIAGE (YEARS).....

Selected years	Under 1	1	2	3	4	5	6	7	8	9	10–14	15 and over	Not stated	Total
1977	18 757	20 583	23 507	25 774	24 269	21 842	17 947	13 664	9 940	6 976	13 960	3 560	356	201 135
1982	21 004	22 831	22 983	22 129	20 697	18 699	16 621	14 870	12 023	9 271	19 611	3 730	306	204 775
1987	18 024	22 314	22 832	22 784	21 159	19 178	16 223	12 723	9 918	7 852	20 454	4 355	37	197 853
1992	18 781	22 934	23 101	22 557	21 039	18 000	15 657	13 092	10 661	8 410	18 861	4 848	60	198 002
1993	17 946	22 126	21 949	22 410	20 630	18 166	14 793	12 819	10 350	7 983	18 647	4 612	87	192 518
1994	16 658	22 211	21 932	21 763	20 252	17 935	15 207	12 424	9 928	7 994	18 278	4 578	_	189 160
1995	16 112	21 772	21 765	21 226	19 459	17 623	15 109	12 463	9 775	7 658	18 118	4 298	_	185 378
1996	15 844	21 411	20 741	20 775	19 363	17 333	14 924	12 188	9 794	7 475	17 457	4 244	_	181 549
1997	15 350	21 052	20 587	20 575	19 069	16 733	14 383	12 050	9 672	7 440	17 311	4 057	_	178 279

The majority of couples registering their first child during 1997, had that child within the first three years of their marriage. The fourth and fifth years of marriage were the most popular time for couples having their second child, for those having a third child, the seventh and eighth years of marriage were the most popular.

## 4.6 PREVIOUS CHILDREN OF THE CURRENT MARRIAGE



## 4.7 NUPTIAL CONFINEMENTS, Duration of Current Marriage and Previous Births of Relationship

## PREVIOUS BIRTHS OF THE CURRENT RELATIONSHIP.....

Duration of current marriage (years)	0	1	2	3	4	5 and over	Total confinements	Total births(a)	Average births(a)
• • • • • • • • •	• • • • • •	• • • • • •			• • • • •			• • • • • • • •	• • • • • • • • •
Under 1	12 805	2 061	368	91	17	8	15 350	18 751	1.2
1	16 919	3 431	579	97	21	5	21 052	26 299	1.2
2	12 573	6 969	852	163	23	7	20 587	30 184	1.5
3	9 257	9 579	1 501	190	35	13	20 575	34 228	1.7
4	6 646	9 699	2 374	299	39	12	19 069	34 932	1.8
5	4 646	8 357	3 144	513	58	15	16 733	33 519	2.0
6	3 301	6 867	3 393	682	113	27	14 383	30 912	2.1
7	2 379	5 192	3 449	852	144	34	12 050	27 675	2.3
8	1 553	3 858	3 016	974	208	63	9 672	23 824	2.5
9	1 023	2 629	2 470	998	233	87	7 440	19 537	2.6
10-14	1 925	5 032	5 885	2 923	974	572	17 311	50 313	2.9
15 and over	329	667	1 016	839	501	705	4 057	15 693	3.9
Total	73 356	64 341	28 047	8 621	2 366	1 548	178 279	345 867	1.9

<sup>(</sup>a) Excludes previous births not stated.

## First confinements

For those married couples having their first baby in 1997, the median duration of marriage was two and a half years, this is only slightly longer than the median duration of marriage in 1977 (two years and four months). Overall, the pattern of when most couples have their first baby has not really changed over the past two decades.

## 4.8 NUPTIAL FIRST CONFINEMENTS(a), Duration of Current Marriage

## DURATION OF CURRENT MARRIAGE (YEARS).....

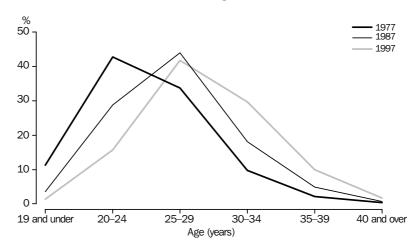
	Under 1	1	2	3	4	5–9	10 and over	Not stated	Total	Median duration
Selected years	no.	no.	no.	no.	no.	no.	no.	no.	no.	years
	• • • • • •		• • • • • •		• • • • • •	• • • • • •	• • • • • • •	• • • • • •		
1977	17 625	17 095	13 871	11 000	7 774	10 442	687	96	78 588	2.3
1982	19 372	18 592	13 322	9 267	7 261	13 752	1 293	81	83 300	2.3
1987	16 053	18 420	13 587	10 029	7 252	12 757	2 126	17	80 241	2.4
1992	16 175	18 406	13 459	9 959	7 261	13 314	2 205	42	80 821	2.4
1993	15 234	17 613	12 946	9 897	7 043	12 867	2 090	_	77 718	2.5
1994	13 740	17 794	13 402	9 753	7 127	13 108	2 242	_	77 166	2.5
1995	13 342	17 405	13 113	9 556	6 740	13 301	2 149	_	75 606	2.5
1996	13 138	17 004	12 681	9 242	6 866	12 811	2 131	_	73 873	2.5
1997	12 805	16 919	12 573	9 257	6 646	12 902	2 254	_	73 356	2.5

<sup>(</sup>a) Excludes confinements to relationships with ex-nuptial births.

Age of mother

Over the past 20 years the proportion of teenage married mothers having their first baby has been declining, from 11% in 1977 to 1% in 1997. The trend was the same for married mothers in their early twenties, with the proportion having their first baby declining from 43% in 1977 to 16% in 1997. The declines in these age groups have been offset by the increases in all of the older age groups.

## 4.9 NUPTIAL FIRST CONFINEMENTS, Age of Mother



In 1977, the peak age group for married first-time mothers was 20–24 years, in 1987 it was 25–29 years and this still stands for 1997.

## **4.10** NUPTIAL FIRST CONFINEMENTS(a), Age of Mother

AGE OF MOTHER (YEARS)....

	19 and under	20–24	25–29	30–34	35–39	40 and over	Total	Median age
Selected years	no.	no.	no.	no.	no.	no.	no.	years
• • • • • • • • • •	• • • • • • • • •	• • • • • • • • •	• • • • • • •		• • • • • • •	• • • • • • • • •	• • • • • • • • • •	• • • • • • • •
1977	8 901	33 574	26 524	7 609	1 673	305	78 588	24.6
1982	5 535	31 975	31 964	11 067	2 416	341	83 300	25.5
1987	2 836	23 087	35 285	14 510	3 935	579	80 241	26.8
1992	1 765	17 927	34 377	20 057	5 749	919	80 821	28.0
1993	1 343	16 207	32 850	20 574	5 772	956	77 718	28.3
1994	1 133	15 351	32 143	21 266	6 248	1 003	77 166	28.5
1995	1 039	13 934	31 689	21 296	6 539	1 090	75 606	28.6
1996	989	12 815	30 890	21 090	6 896	1 171	73 873	28.7
1997	970	11 483	30 663	21 720	7 296	1 211	73 356	29.0

<sup>(</sup>a) Excludes confinements to relationships with ex-nuptial births.

Timing of first baby of marriage

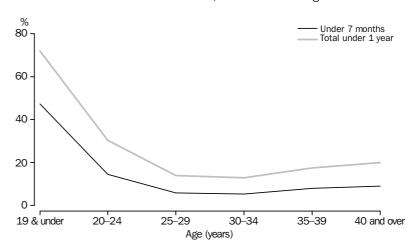
In 1997, 17% of married women having their first birth with their current partner did so within a year of marriage, and 9% within the first seven months. While this does not necessarily mean that the pregnancy was a factor in the decision to marry, it is likely that in a proportion of such marriages this was the case.

Timing of first baby of marriage continued

However, this varies considerably with age of the mother. Among teenage wives having their first baby, 72% had been married less than a year, and 52% had been married less than seven months.

Women aged 30–34 years were the least likely to have a baby within the first year of marriage, with only 13% of first nuptial babies being born in the first year, and 6% in the first seven months. In older age groups, these proportions increased: 20% of women aged 40 or over having their first nuptial birth had married in the past 12 months. These women may have felt their biological clock ticking, and so felt they could not have as long a gap between marriage and child-bearing as younger women could.

## 4.11 NUPTIAL FIRST CONFINEMENTS, Duration of Marriage



Mothers in their mid-twenties to mid-thirties tended to wait just a little bit longer in their marriage before having their first child as the biological pressure was less of an issue for women in these age groups than older women.

## 4.12 NUPTIAL FIRST CONFINEMENTS(a), Age of Mother and Duration of Marriage

Duration of current marriage	19 and under	20-24	25–29	30–34	35–39	40 and over	Not stated	Total
	• • • • • • • • • •				• • • • • •	• • • • • • • •	• • • • • • • •	• • • • • • • • •
Under 7 months	459	1 678	1 815	1 177	581	109	_	5 821
7 months	42	265	367	227	128	23	_	1 052
8 months	39	238	332	228	99	24	_	960
9 months	53	399	580	376	151	26	_	1 585
10 months	60	450	609	403	173	33	_	1 729
11 months	44	449	599	397	142	27	_	1 658
Total under 1 year	697	3 479	4 302	2 808	1 274	242	_	12 805
1 year	245	4 060	6 860	4 050	1 485	215	4	16 919
2 years	25	2 272	6 040	3 194	910	131	_	12 573
3 years	_	1 111	4 903	2 478	636	127	_	9 257
4 years	_	376	3 594	2 077	515	83	_	6 646
5–9 years	_	185	4 883	6 080	1 524	225	5	12 902
10–14 years	_	_	80	1 011	741	93	_	1 925
15 years and over	_	_	_	22	211	95	_	329
Total	970	11 483	30 663	21 720	7 296	1 212	12	73 356

(a) Excludes confinements to couples who had had a baby before they were married.

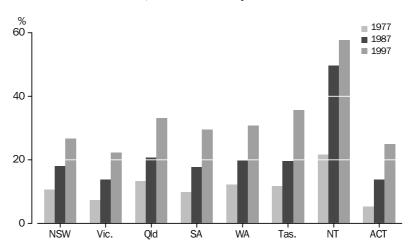
## **UNMARRIED MOTHERS**

## Ex-nuptial births

There was an increasing number of births to women who were not in a registered marriage. In 1977, there were 23,300 (10% of all births) ex-nuptial births, by 1997 there were 70,700 (28% of all births).

More than half (58%) of the births registered in the Northern Territory were ex-nuptial, compared to proportions for the other States of between 22% for Victoria and 36% for Tasmania. New South Wales, Victoria and the Australian Capital Territory recorded proportions below the national average while the remaining States recorded proportions above.

## 4.13 EX-NUPTIAL BIRTHS, State and Territory



## 4.14 EX-NUPTIAL BIRTHS, Total and Paternity-Acknowledged

									Other	
Selected years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Territories	Aust.
				EX-NUP	TIAL BIRTI	HS				
1977	8 268	4 328	4 670	1 890	2 539	794	560	236	_	23 314
1982	11 807	6 139	6 766	2 522	3 322	1 075	914	413	_	32 958
1987	15 503	8 480	8 129	3 423	4 623	1 324	1 755	569	_	43 806
1992	21 412	12 591	12 897	4 834	6 673	1 984	2 068	909	_	63 368
1993	21 351	12 629	13 644	5 096	6 991	2 155	1 992	1 010	_	64 874
1994	21 548	13 114	13 851	5 148	7 220	2 119	2 043	1 042	7	66 092
1995	21 910	13 629	14 255	5 295	7 475	2 189	2 153	1 135	9	68 050
1996	22 000	13 210	15 578	5 728	7 665	2 215	2 058	1 108	6	69 568
1997	23 238	13 541	15 620	5 434	7 642	2 141	2 066	1 051	5	70 738
		P	ATERNITY-	ACKNOWLE	EDGED EX-	NUPTIAL I	BIRTHS			
1982	7 751	3 628	4 029	1 628	1 817	643	684	255	_	20 435
1987	11 727	6 316	5 454	2 542	3 283	994	1 236	420	_	31 972
1992	17 494	10 372	10 353	3 980	5 348	1 660	1 365	777	_	51 349
1993	17 504	10 512	11 036	4 227	5 713	1 854	1 279	886	_	53 016
1994	17 777	11 034	11 228	4 328	5 951	1 808	1 347	855	5	54 333
1995	18 359	11 527	11 769	4 516	6 304	1 896	1 384	925	8	56 688
1996	18 545	11 367	13 032	4 960	6 473	1 941	1 292	934	5	58 549
1997	19 958	11 853	13 145	4 787	6 490	1876	1 423	916	4	60 452

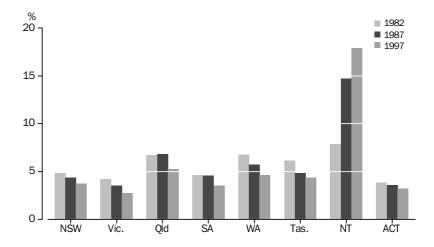
#### Ex-nuptial births continued

These proportions of ex-nuptial births for each State and Territory have increased considerably since 1977 when the proportion for the Northern Territory was 22% while those for the States and the other Territory ranged between 5% for the Australian Capital Territory and 13% for Queensland. These substantial increases in the proportion of ex-nuptial births are associated with the increase, over the same period, in the incidence of de facto relationships.

## Paternity-acknowledgment

With ex-nuptial births comes the chance that the father does not acknowledge the birth. However, the growth in ex-nuptial births is associated with a growth in paternity-acknowledged births. Paternity-not-acknowledged births have remained relatively stable, falling from 5% of all births in 1977 to 4% in 1997. Fifteen years ago, the Northern Territory experienced a similar proportion of paternity-not-acknowledged births (of all births) as the other States and Territories. By 1997 this had changed, all the other States and Territories marginally declined while the Northern Territory increased substantially from 8% of all births in 1982 to 18% in 1997.

#### 4.15 PATERNITY-NOT-ACKNOWLEDGED BIRTHS OF ALL BIRTHS



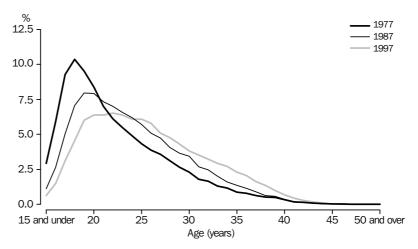
## Age of mother

The median age of unmarried mothers was 25.4 years in 1997, compared to 21.5 years in 1977. This increase has largely been driven by an increase in ex-nuptial births by women in their twenties and thirties, often associated with de facto relationships. The proportion of ex-nuptial births to teenage mothers has fallen, although the actual number has increased from 9,000 to 11,000. This increase is not an increase in fertility of teenagers, but rather a decrease in their propensity to marry when they became pregnant.

**4.16** EX-NUPTIAL CONFINEMENTS, Age of Mother

Age of mother (years)	1977	1982	1987	1992	1996	1997
• • • • • • • • • • • • •						
15 and under	679	538	489	400	465	438
16	1 373	1 242	1 150	1 087	1 065	1 051
17	2 145	2 335	2 188	2 299	2 347	2 173
18	2 395	3 041	3 068	3 515	3 215	3 186
19	2 204	3 092	3 453	4 571	4 110	4 201
20	1 938	2 977	3 448	5 045	4 537	4 461
21	1 623	2 574	3 181	4 910	4 546	4 462
22	1 417	2 411	3 039	4 350	4 621	4 560
23	1 271	2 064	2 859	4 138	4 591	4 474
24	1 134	1 836	2 694	3 783	4 589	4 267
25	1 001	1 549	2 481	3 325	4 212	4 260
26	896	1 404	2 205	3 122	3 548	4 054
27	830	1 223	2 063	2 973	3 414	3 556
28	724	1 039	1 760	2 714	3 098	3 334
29	617	1 014	1 590	2 590	2 788	3 010
30	534	801	1 498	2 314	2 565	2 677
31	417	744	1 167	2 078	2 373	2 459
32	383	598	1 075	1 793	2 277	2 265
33	301	483	872	1 629	2 047	2 057
34	272	414	691	1 287	1 828	1 902
35	203	336	588	1 141	1 527	1 615
36	182	249	497	976	1 282	1 441
37	146	219	387	761	1 094	1 134
38	124	148	278	552	824	951
39	113	117	253	456	618	686
40	74	86	156	316	448	469
41	42	53	90	200	321	312
42	31	33	62	105	171	200
43	20	17	33	72	106	111
44	14	12	11	23	47	69
45	9	7	10	17	18	28
46	8	3	7	3	8	12
47	_	_	4	4	_	3
48	_	_	_	_	3	3
49	_	_	_	_	_	_
50 and over	_	_	_	_	3	_
Not stated	10	15	70	116	107	87
Total	23 134	32 679	43 418	62 667	68 814	69 967

## 4.17 EX-NUPTIAL CONFINEMENTS, Age of Mother

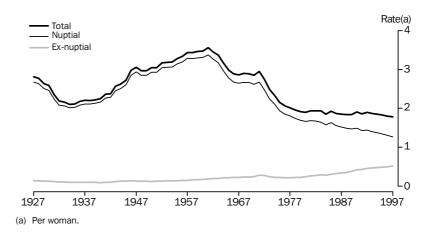


#### UNMARRIED MOTHERS: DE FACTO OR SINGLE?

The total fertility rate decreased from 3.6 babies per woman in 1961 (the year fertility peaked) to 1.8 babies per woman in 1997.

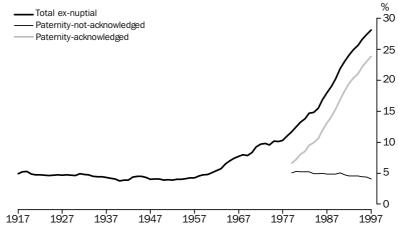
Over this period there has been a decreasing rate of nuptial births and an increasing rate of ex-nuptial births (where the birth occurred outside a registered marriage). The ex-nuptial rate has increased steadily particularly in the last 10 years from just over 0.3 babies per woman in 1987 to 0.5 babies per woman in 1997.

## 4.18 TOTAL FERTILITY RATES, By Nuptiality



The number and proportion of ex-nuptial births has risen substantially over the last 30 years, increasing from 17,700 or 8% of births in 1967 to 70,700 or 28% of births in 1997. Although data on paternal acknowledgment (that is, whether the father signed the birth certificate) has only been collected for all States and Territories since 1979, it is clear from graph 4.19 that the rise in the number of ex-nuptial births has largely been where the father acknowledged the birth (that is, paternity was acknowledged). Paternity-not-acknowledged births has fallen slightly from 5% of all births in 1979 to 4% in 1997.

## 4.19 EX-NUPTIAL BIRTHS



Note: Data on whether paternity was acknowledged was not collected before 1979.

## Registration of births and midwives collections

While the birth registration collection provides an insight into the number of ex-nuptial confinements and paternity, it does not provide any further breakdown of the mother's relationship status (that is, it does not distinguish between women in de facto relationships and single women). The midwives' collection provides the mother's relationship status. However, the midwives' data do not provide a breakdown between mothers who were married or in a de facto relationship. By using the birth registration data together with the midwives' data, ex-nuptial confinements can be distributed between mothers who were partnered and mothers who were unpartnered. This analysis provides a breakdown of mothers into those who are married, in a de facto relationship or single. The relationship status 'not stated' from the midwives' data has been excluded from this analysis. Midwives' data have only been available nationally since 1991.

There were two assumptions in using this method. Firstly, that nuptial confinements do not occur to unpartnered women, and secondly that both collections relate to the same population. The first assumption is probably fairly reasonable. However the midwives' data are compiled on the year the birth occurred, while registration data are based on the year the birth was registered. There is some evidence that not all births are registered, and some home births are not reported by midwives (see pages 15–17).

# **4.20** SOCIAL MARITAL STATUS, By Registered Marital Status—1995

SOCIAL MARITAL STATUS (MIDWIVES' COLLECTION)......

	Partnered	Unpartnered	Total
Registered marital status (birth registrations)	%	%	%
• • • • • • • • • • • • • • • • • • • •	• • • • • • • •	• • • • • • • • •	• • • • • •
Married (nuptial confinement) Unmarried (ex-nuptial confinement) Total	73.4 13.9 <b>87.3</b>	0.0 12.7 <b>12.7</b>	73.4 26.6 <b>100.0</b>
Total	67.3	12.1	100.0

Source: ABS, *Births, Australia*, 1996 (ABS Cat. no. 3301.0); P. Day, P. Lancaster & J. Huang, *Australia's mothers and babies*, 1995, AlHW National Perinatal Statistics Unit: Perinatal Statistics Series no. 6, Sydney, 1997.

The midwives' data show that 87% of all confinements in 1995 were to partnered women, while 73% of registered confinements were to married women. Therefore 14% were to women in de facto relationships. A further 13% were to single women.

Between 1991 and 1995, there was a slight growth in the proportion of mothers who were unpartnered, or single. However, the largest growth was among women in de facto relationships increasing from 11% of confinements in 1991 to 14% in 1995.

## 4.21 RELATIONSHIP STATUS OF MOTHERS

	Married		De facto.		Unpartner	ed	Total	
Year	no.	%	no.	%	no.	%	no.	%
• • • • •	• • • • • •	• • • • • •	• • • • • • •	• • • • •		• • • • • •		• • • • •
1991 1992 1993 1994 1995	195 258 198 002 192 518 189 160 185 378	76.9 76.0 75.0 74.3 73.4	27 614 30 374 31 901 33 370 35 193	10.9 11.7 12.4 13.1 13.9	32 293 31 284 32 017	12.2 12.4 12.6 12.6 12.7	253 861 260 669 256 703 254 547 252 708	100.0 100.0 100.0 100.0

Source: ABS, Births, Australia, 1991 to 1995 (Cat. no. 3301.0); P. Day, P. Lancaster & J. Huang, Australia's mothers and babies, AlHW National Perinatal Statistics Unit: Perinatal Statistics Series no. 6, Sydney, (various issues).

## Teenage mothers

Data on age of mother and relationship status from the midwives' collection are only published for mothers aged under 20 years. The data aggregate one of the components of unpartnered women (widowed, separated or divorced women) with women who did not state their social marital status. Because a very small proportion of teenage women are widowed, separated or divorced, for this analysis they have been excluded from all calculations.

## **4.22** SOCIAL AND REGISTERED MARITAL STATUS, 15–19 Year Old Mothers—1995

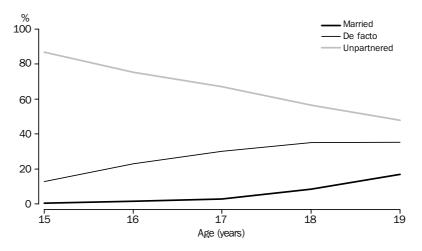
# SOCIAL MARITAL STATUS (MIDWIVES' COLLECTION).....

	Partnered	Unpartnered	Total
Registered marital status (birth registrations)	%	%	%
• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • •	• • • • • • • • •	
Married (nuptial confinements) Unmarried (ex-nuptial confinements) Total	10.4 34.6 <b>45.0</b>	0.0 55.0 <b>55.0</b>	10.4 89.6 <b>100.0</b>

Source: ABS, Births, Australia, 1996 (ABS Cat. no. 3301.0); P. Day, P. Lancaster & J. Huang, Australia's mothers and babies, 1995, AlHW National Perinatal Statistics Unit: Perinatal Statistics Series no. 6, Sydney, 1997.

In 1995, 85% of mothers aged 19 and under were unpartnered, and most of the rest were in a de facto relationship. Less than 0.5% were married. However, there were only 440 confinements registered to mothers of this age. Among 19 year old mothers, less than half (45%) were unpartnered.

## 4.23 RELATIONSHIP STATUS, 15-19 Year Old Mothers—1995



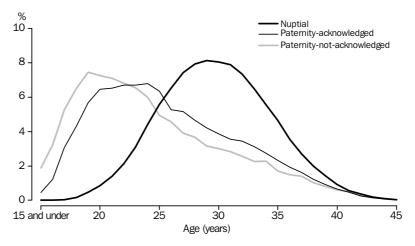
Age of mothers

There is no published data on relationship of mothers by age for mothers 20 years and over. Because of this, the only available information of age structure and relationship of mothers aged 20 and over is from birth registrations.

Graph 4.24 shows that mothers outside of marriage, particularly where paternity was not acknowledged, had a younger age structure than women who were married.

There were only 11,000 confinements with paternity-not-acknowledged, and 32,000 confinements of unpartnered women, so paternity-not-acknowledged cannot be used as a proxy for unpartnered, but most paternity-not-acknowledged confinements were probably to women who were unpartnered.

## 4.24 NUPTIALITY, Mother's Age



## CHAPTER 5

## COUNTRY OF BIRTH .....

#### FERTILITY OF OVERSEAS BORN WOMEN

Overseas-born women had a fertility rate of 1.787, very similar to the 1.761 for Australia-born women. However, this masks considerable variation between birthplace groups. For example, Lebanon-born women in Australia had a total fertility rate of 3.5, while Hong Kong-born women in Australia had a total fertility rate of only 1.0.

No other major birthplace group in Australia had a total fertility rate as high as the Lebanon-born. However, there were relatively high rates among the Egypt-born (2.8); the China-born (2.5); the Cambodia-born (2.4) and the Turkey-born (2.4).

Like Hong Kong, many of the birthplace groups with very low fertility were from Northeast and Southeast Asia: Singapore-born (1.0); and Japan-born (1.2). One factor keeping the fertility low for some of these groups was the high proportion of students among the population. Overseas students on temporary visas could be expected to have very low fertility, and therefore to bring the total fertility rate for the whole birthplace group down considerably. The Singapore-born had a total fertility rate 42% lower than the total Australian population, however the age-specific birth rates for Singapore women aged 30 and over were relatively similar to that of the total population, while rates for 20–24 year olds were only 11% of the national average. Similar patterns were seen among Malaysia-, Korea- and Japan-born women.

Hong Kong-born women not only had the lowest total fertility rate of any birthplace group in Australia, but they also had the highest median age at 33.4 years.

#### PATERNITY OF OVESEAS-BORN MEN

Reproductive ages for men were much wider than for women. There were no births registered to mothers aged over 55 years in 1997, while there were 16 fathers in their seventies. Because of this and that women tend to partner men who were slightly older than themselves, the median age of fathers was slightly higher than that of mothers.

## OVERSEAS-BORN PARENTS

Generally, the attributes of mothers born in a specific country closely reflect the attributes of fathers born in that country. For example, New Zealand-born parents had the lowest proportion of births within registered marriage, with only 60% of mothers, and 64% of fathers being married. Conversely, people born in many southern and eastern Asian nations had very high rates of nuptial births.

Not surprisingly, there is a strong correlation between the proportion of mothers and fathers who partner people born in the same country. For example, low proportions of Canada-, Papua New Guinea- and the Netherlands-born had partners from the same birthplace, while there were high proportions for parents born in Viet Nam and Korea.

However, for some birthplaces, there was a considerable difference. For example, 84% of babies with Philippines-born fathers also had Philippines-born mothers. However, only 42% of babies with Philippines-born mothers also had Philippines-born fathers. This reflects the high level of Filipino brides among migrants. There were similar differences for parents born in Thailand and Japan.

# **5.1** BIRTHPLACE OF MOTHER, Summary

		FATHER	R BORN IN(	a)		Unmarried mothers—	Unmarried mothers—		Median
	Total confinements	Australia	Same country as mother	Other country	Married mothers	paternity- acknowledged	paternity-not- acknowledged	Total fertility	age of mothers
Birthplace of mother	no.	%	%	%	%	%	%	rate	years
Oceania	197 866	84.4	1.6	14.0	68.5	27.0	4.4	1.769	28.9
Australia	188 739	86.1	0.0	13.9	68.7	26.9	4.4	1.761	28.9
Fiji	971	20.7	63.8	15.5	84.9	12.8	2.4	1.951	29.0
New Zealand	6 178	56.0	27.9	16.1	60.0	34.3	5.7	1.853	29.5
Papua New Guinea	709	73.9	8.4	17.7	70.9	24.8	4.2	1.745	29.0
Europe and the Former USSR	19 983	57.0	25.3	17.7	81.2	16.8	2.0	1.578	31.7
Cyprus	218	30.0	51.2	18.9	97.7	1.8	0.5	1.586	30.7
Former Yugoslav Republics	1 925	23.9	55.2	20.9	90.7	8.1	1.2	1.752	30.1
France	292	55.9	13.9	30.2	77.7	20.9	1.4	1.592	31.6
Germany	700	60.5	13.1	26.4	75.9	21.4	2.7	1.442	31.8
Greece	505	57.1	30.7	12.2	95.0	3.8	1.2	1.372	32.0
Ireland	624	47.3	29.6	23.1	85.3	13.3	1.4	1.399	33.1
Italy	832	61.2	22.5	16.2	92.1	7.1	0.8	1.480	33.0
Malta	238	63.1	17.8	19.1	88.7	10.5	0.8	1.874	32.6
Netherlands	432	71.8	10.1	18.1	82.4	16.2	1.4	1.655	31.8
Poland United Kingdom	374	26.6	58.5	14.9	82.1	16.6	1.3	1.257	30.9
unitea kingaam	11 885	65.9	19.0	15.1	77.8	19.9	2.3	1.603	31.9
Middle East and North Africa	5 489	10.9	76.0	13.1	95.4	4.2	0.5	2.996	28.6
Egypt	425	16.0	75.5	8.5	96.9	2.8	0.2	2.804	31.4
Iran	232	7.0	83.8	9.2	94.0	4.7	1.3	1.418	31.7
Lebanon	2 625	12.0	79.1	8.9	95.2	4.5	0.3	3.500	27.9
Turkey	847	9.9	84.1	6.1	95.6	3.8	0.6	2.397	27.9
Southeast Asia	11 217	19.7	62.2	18.1	81.1	13.3	5.5	1.777	30.5
Cambodia	738	3.6	74.7	21.7	76.0	17.1	6.9	2.411	28.3
Indonesia	919	20.8	58.0	21.2	89.0	8.6	2.4	1.727	29.6
Malaysia	1 200	33.6	35.1	31.3	90.9	8.0	1.1	1.393	32.6
Philippines	2 627	38.7	41.6	19.7	83.0	14.5	2.5	1.960	31.6
Singapore	367	41.7	22.1	36.2	89.4	9.3	1.4	1.027	32.2
Thailand	418	44.1	18.7	37.2	74.2	22.0	3.8	1.298	31.3
Viet Nam	4 505	2.5	90.1	7.5	76.8	13.6	9.5	2.130	29.7
Northeast Asia	5 489	10.0	71.9	18.1	90.8	8.1	1.1	1.639	32.6
China	3 490	5.3	78.9	15.8	88.4	10.1	1.5	2.472	32.9
Hong Kong	791	11.6	63.5	24.9	96.1	3.4	0.5	1.013	33.4
Japan	474	42.5	31.9	25.6	93.9	6.1	0.0	1.193	32.1
Republic of Korea	502	6.4	84.4	9.2	95.2	4.4	0.4	1.294	29.6
Southern Asia	3 073	12.0	79.0	8.9	96.5	3.0	0.5	2.078	30.7
India	1 440	16.0	71.6	12.4	96.1	3.4	0.5	1.902	30.6
Sri Lanka	917	11.6	81.8	6.6	96.6	2.6	0.8	1.850	32.1
Northern America	1 447	64.6	14.5	20.9	87.8	10.7	1.5	1.686	32.2
Canada	500	71.1	8.1	20.9	86.4	10.7	0.8	1.492	32.2
United States of America	940	61.1	18.1	20.8	88.7	9.5	1.8	1.492	32.3
Office Otates of Afficilea	340	01.1	10.1	20.1	00.1	9.9	1.0	1.014	52.5
Southern America	1 355	34.0	36.9	29.0	79.0	18.1	2.9	1.660	30.0
Chile	427	32.0	43.4	24.5	78.7	17.8	3.5	1.644	29.6
Africa (excluding North Africa)	1 952	38.2	36.7	25.1	84.2	13.6	2.2	1.696	30.7
Mauritius	259	38.4	39.6	22.0	86.5	12.4	1.2	1.665	31.9
South Africa	815	45.5	31.9	22.5	83.4	14.1	2.5	1.472	30.5
Total	248 246	74.2	11.1	14.7	71.8	24.1	4.1	1.775	29.4

<sup>(</sup>a) Paternity-acknowledged births only.

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## **5.2** BIRTHPLACE OF FATHER(a), Summary

		MOTHE	R BORN IN.			Unmarried fathers—		Median
	Total confinements	Australia	Same country as father	Other country	Married fathers	paternity- acknowledged	Total paternity(b)	age of fathers
Birthplace of father	no.	%	%	%	%	%	rate	years
Oceania	185 474	86.3	1.7	12.0	71.7	28.3	1.677	31.3
Australia	176 366	88.1		11.9	71.9	28.1	1.666	31.3
Fiji	921	23.7	65.7	10.5	84.0	16.0	2.179	32.4
New Zealand	6 134	59.4		14.0	64.3	35.7	1.723	32.2
Papua New Guinea	647	76.2	8.8	15.0	76.0	24.0	2.051	31.4
Europe and the Former USSR	23 814	61.6	20.8	17.5	82.5	17.5	1.543	34.0
Cyprus	353	49.6	31.4	18.7	91.2	8.8	2.045	32.8
Former Yugoslav Republics	2 472	39.0	42.5	18.5	90.2	9.8	1.804	32.7
France	310	60.0	12.9	26.8	76.1	23.9	1.602	32.7
Germany	852	64.1	10.4	25.4	77.7	22.3	1.463	35.1
Greece	938	72.0		11.7	92.5	7.5	1.529	35.1
Ireland	690	51.4	26.4	22.0	83.0	17.0	1.433	33.9
Italy	1 403	71.3	13.3	15.5	87.1	12.9	1.470	35.5
Malta	335	70.1		17.3	87.5	12.5	1.524	36.1
Netherlands	555	69.4		22.9	84.1	15.9	1.539	35.8
Poland	381	26.5	56.7	16.8	87.7	12.3	1.227	35.8
United Kingdom	13 581	68.1	16.2	15.6	79.6	20.4	1.541	33.8
Middle East and North Africa	6 824	25.4	60.9	13.7	94.0	6.0	2.968	33.1
Egypt	576	27.1	55.6	17.2	95.0	5.0	2.286	36.3
Iran	329	16.1	58.4	25.2	93.0	7.0	1.446	35.5
Lebanon	3 319	29.9	62.4	7.7	94.2	5.8	3.790	32.2
Turkey	1 016	22.2	69.7	8.1	92.5	7.5	2.445	31.2
Southeast Asia	8 775	10.8	75.0	14.1	84.8	15.2	1.735	33.7
Cambodia	660	1.8	77.7	20.3	80.8	19.2	2.297	31.9
Indonesia	775	18.3	67.1	14.3	90.3	9.7	1.682	33.6
Malaysia	1 025	30.1	40.5	28.9	92.2	7.8	1.418	34.9
Philippines	1 271	12.0	83.7	4.2	83.9	16.1	1.843	32.8
Singapore	316	40.5	25.3	34.2	87.7	12.3	1.118	35.0
Thailand	139	19.4	54.0	26.6	70.5	29.5	1.125	33.1
Viet Nam	4 167	2.6	88.0	9.3	83.6	16.4	1.970	33.9
Northeast Asia	4 792	4.0	81.2	14.6	91.9	8.1	1.660	34.9
China	3 057	1.9	88.3	9.5	89.7	10.3	2.050	35.1
Hong Kong	870	8.2		34.4	95.9	4.1	1.275	35.9
Japan	227	17.6	66.5	15.9	94.3	5.7	1.114	33.7
Republic of Korea	461	3.3	91.3	5.2	97.0	3.0	1.367	32.7
Southern Asia	3 321	15.7	72.7	11.4	95.8	4.2	1.753	34.7
India	1 517	20.2		12.1	95.1	4.2	1.582	34.1
Sri Lanka	980	14.3		9.6	96.7	3.3	1.697	35.8
<b>.</b>								
Northern America	1 401	64.5		20.7	85.2	14.8	1.642	34.3
Canada	446	70.9		20.2	84.5	15.5	1.517	34.7
United States of America	952	61.6	17.5	20.8	85.5	14.5	1.751	34.1
Southern America	1 328	37.3	36.6	26.1	76.1	23.9	1.633	32.1
Chile	426	36.9		21.1	77.0	23.0	1.690	31.2
Africa (avaluding North Africa)	0.110	41.0	22.0	25.0	0.5.1	110	1 740	24.2
Africa (excluding North Africa)	2 112	41.6		25.2	85.1	14.9	1.748	34.3
Mauritius South Africa	283 791	45.2 45.0		19.1 22.8	84.5 87.0	15.5 13.0	1.678 1.477	35.0 33.7
Journ Amou	191	45.0	32.1	22.0	67.0	13.0	1.411	33.1
Total	248 246	76.0	10.7	12.4	71.8	24.1	1.695	32.3

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<sup>(</sup>a) Paternity-acknowledged births and confinements only.

<sup>(</sup>b) Total paternity rate is calculated in the same way as the total fertility rate, although summed over five-year age groups 15–19 to 85 and over. Because paternity was not acknowledged in 5% of births, the actual paternity rate is, on average, 5% higher than the figures given in this table.

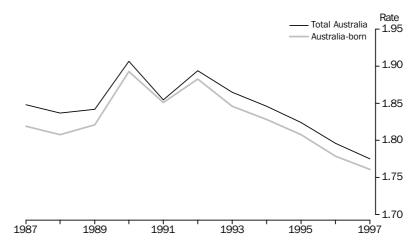
#### TOTAL FERTILITY RATES BY MOTHER'S REGION OF BIRTH

While the national total fertility rate in 1997 was 1.8 births per woman, there were substantial variations in the total fertility rates of women who were born overseas. In particular, the total fertility rate rose as high as 3.0 births per woman for persons born in the Middle East and North Africa, and as low as 1.6 births per woman for persons born in Europe and the Former USSR. The following paragraphs discuss the trends in fertility for each birthplace group, and for selected countries within these groups.

Australia

Fertility for women born in Australia has remained relatively constant over the past decade, fluctuating between about 1.8 and 1.9 births per woman. However, since 1992 it has declined each successive year.

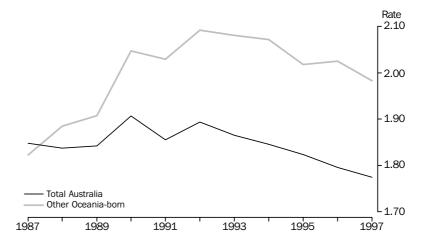
## 5.3 TOTAL FERTILITY RATE, Women Born in Australia



Other Oceania

After a slight increase in the late 1980s and early 1990s, fertility levels for women born in Other Oceania also declined. With about two-thirds of the births from this region, New Zealand-born women had a similar pattern of fertility in Australia.

## 5.4 TOTAL FERTILITY RATE, Women Born in Other Oceania

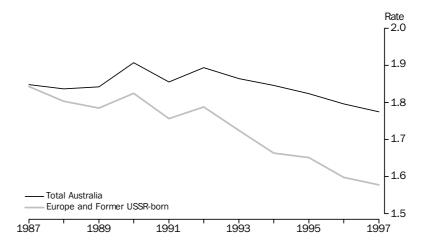


## Europe and the Former USSR

The greatest decline in fertility over the past decade has been for women born in Europe and the Former USSR, dropping 14% in a decade to 1.6 births per woman in 1997, making it the birthplace group with the lowest fertility.

Within this birthplace group, some groups had very low fertility, the Poland-born women in Australia had a fertility rate of only 1.3 in 1997.

## 5.5 TOTAL FERTILITY RATE, Women Born in Europe and the Former USSR



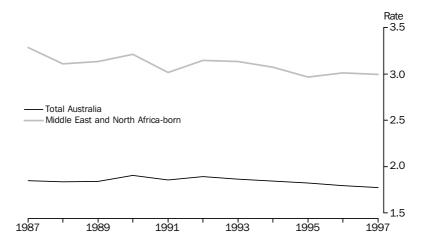
#### Middle East and North Africa

Women born in the Middle East and North Africa had the highest levels of fertility in Australia. The fertility rate for women born in this region has decreased slightly since 1987, falling from 3.3 births per woman to 3.0 births per woman.

Lebanese-born women had the highest total fertility rate every year over the past decade, with a fertility rate about twice the national average. The 1987 total fertility rate for women born in Lebanon was 4.0 births per woman. By 1997, this had declined to 3.5 births per woman. Interestingly, the total fertility rate of Lebanese-born women in Australia was higher than that of women in Lebanon (3.1 births per woman in 1990–95).

The high levels of fertility for women born in the Middle East and North Africa may be associated with the persistence of the cohesive extended family providing a greater degree of support to mothers from these backgrounds, and therefore encouraging higher levels of fertility (F. Yusuf and I. Rockett, 'Immigrant Fertility Patterns and Differentials in Australia, 1971–1976', *Population Studies*, vol.35: pp. 413–424).

#### 5.6 TOTAL FERTILITY RATE, Women Born in the Middle East and North Africa



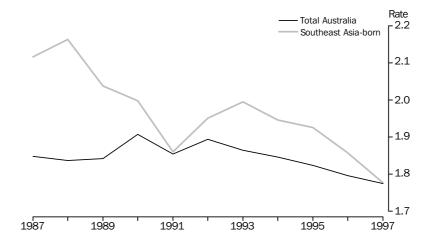
#### Southeast Asia

Fertility of women from Southeast Asia dropped considerably between 1987 and 1997, reaching levels similar to those of the rest of the population.

Philippines-born women experienced a considerable fall in fertility, dropping from 2.9 births per woman in 1987 to 2.0 births per woman in 1997. Cambodia and Vietnam-born women experienced very little change in fertility, while fertility of women from other Southeast Asian countries declined markedly.

Cambodia, Malaysia and Philippines-born women living in Australia can expect to have less than half as many children, on average, as women living in Cambodia, Malaysia and the Philippines.

#### 5.7 TOTAL FERTILITY RATE, Women Born in Southeast Asia



## Northeast Asia

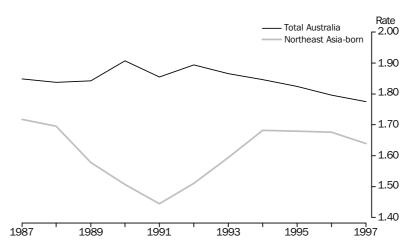
Fertility for women born in Northeast Asia has fluctuated over the past decade. While the total fertility rate only fell 5% in the last 10 years, there was a considerable trough in the early 1990s. Northeast Asia-born women had the lowest fertility of any birthplace group between 1987 and 1993.

#### Northeast Asia continued

The fertility for China-born women in 1997 (2.5) was considerably higher than 10 years previously (1.6 births per woman), Most of this increase occurred between 1990 and 1994.

Fertility for women born in other Northeast Asian countries has experienced substantial decline, dropping by 41%, 27% and 35%, respectively, for women born in Hong Kong, Japan and Korea. In 1997, Hong Kong-born women had fertility at only 1.0 births per woman.

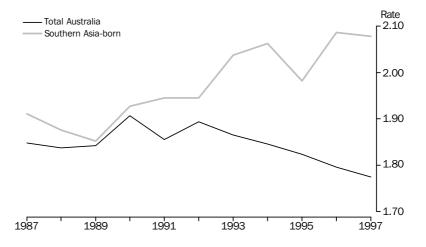
## 5.8 TOTAL FERTILITY RATE, Women Born in Northeast Asia



## Southern Asia

Women from the Southern Asian countries defied the trend towards declining fertility. Total fertility rates for women born in this region increased by 9% over the past decade, from 1.9 births per woman in 1987 to 2.1 births per woman in 1997. While Sri Lanka-born women experienced a similar increase in fertility, most of this increase for the region has not come from an increase in fertility in the individual countries, but rather from a change in the make up of this group. The number of India and Sri Lanka-born women (who had lower fertility) grew more slowly than the number of women from other parts of Southern Asia, especially Pakistan and Afghanistan, therefore the total fertility for the region increased.

## 5.9 TOTAL FERTILITY RATE, Women Born in Southern Asia

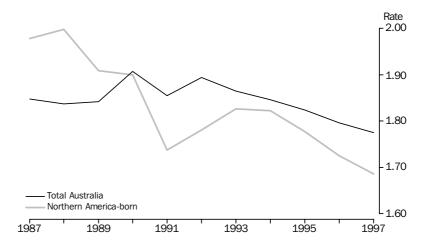


#### Northern America

The total fertility rate for women born in North America dropped by almost 15% over the past decade, from 2.0 births per woman in 1987 to 1.7 births per woman in 1997.

While fertility rates for women born in the United States of America have been above the Australian average for nine out of the last ten years, fertility rates for women born in Canada have been below the Australian average for nine out of the last ten years.

## 5.10 TOTAL FERTILITY RATE, Women Born in Northern America



## South and Central America and the Caribbean

While the fertility rate of South and Central America and the Caribbean appears more volatile than that of other regions, this is largely a function of the scale of the graph. Women from this region had very little change in their fertility rates over the last decade, although there was considerable variation within the region. South American born women, representing 79% of births from this region, had a pattern similar to the total region, while Central American women had a somewhat higher fertility, and Caribbean-born women lower.

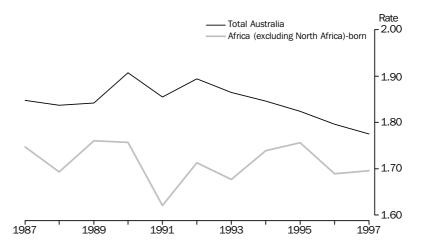
**5.11** TOTAL FERTILITY RATE, Women born in South and Central America and the Caribbean



## Africa (excluding North Africa)

The total fertility rate for women born in South Africa, and in other African countries (excluding North Africa) has been below the national average throughout the past decade. In 1997, women born in South Africa could expect to have 1.5 births each, a drop of almost 13% from their 1987 total fertility rate of 1.7 births per woman.

## **5.12** TOTAL FERTILITY RATE, Women Born in Africa (Excluding North Africa)



# CHAPTER 6

## INDIGENOUS BIRTHS ......

#### COVERAGE OF BIRTH REGISTRATION

In 1997 there were 10,000 births registered in Australia with one or both parents identified as being of Indigenous origin. However, this is an under-estimate of the true number of such births.

There are several forms in which people are asked whether they are of Indigenous origin. Due to a number of factors, these results are not always consistent. For example, there was a net effect of about 51,800 people who identified as Indigenous in the 1996 Census, but had not identified as such in the 1991 Census. This variation in whether a person identifies, or is identified, as Indigenous on a specific form is known as their propensity to identify as Indigenous. Propensity to identify as Indigenous can be thought of as the proportion of the total, unknown, number of Indigenous people who identify as such on a specific form.

Propensity to identify is determined by a range of factors, including the perception of how the information will be used; education programs about identifying as Indigenous; and emotional reaction to identifying as Indigenous.

There are four estimates of the number of Indigenous births each year. Each is based on a different collection, with a different propensity to identify as Indigenous:

- 1991 Census-based projections: The number of Indigenous children in the 1991 Census was used to estimate the number of babies in previous years, and the fertility rate. Assuming this fertility rate continued, and making other assumptions about mortality and interstate migration, the number of births in subsequent years can be projected.
- 1996 Census-based projections: Using a very similar method to the 1991 Census-based projections, the number of births each year is estimated, using the propensity to identify found in the 1996 Census. An alternative assumption of an increasing propensity to identify based on the change between 1991 and 1996 was also produced, but has not been used in this analysis.
- Birth registrations: This publication is based on the registration of births by each State's Registrar of Births, Deaths and Marriages.
- Midwives' collection: The data, also known as the Perinatal Statistics Collection, are from information gathered primarily by midwives about babies born in hospitals and their mothers.

Propensity to identify can be seen as a social issue, primarily reflecting the social attitude Indigenous people have about making what amounts to public statements about their heritage. Alternatively it can be seen as a problem with data quality, indicating an undercount of the 'true' picture of 'reality'. Both these perspectives have some validity. In this chapter, the focus is the low propensity to identify in the birth registration statistics as a data quality concern.

In this chapter the number of births registered in each State and Territory has been published. A breakdown of the characteristics of these births is given when the number registered is regarded as being of reasonable quality.

Reasonable quality is measured by comparing the number of births registered with a benchmark; the number projected from the 1996 Census-based projections. Any State or Territory which is within 20% of the benchmark, and has been within 10% in the last three years is regarded as being of reasonable quality. Based on this, Queensland, South Australia, Western Australia, and the Northern Territory are all publishable. It is worth remembering that the choice of the benchmark, and the cut-off is relatively arbitrary.

#### **6.1** INDIGENOUS BIRTHS, Summary

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.(a)
• • • • • • •	• • • • • • • • • •	• • • • • • • •	• • • • • • • • •	• • • • • • •	• • • • • • • • •		• • • • • • • •	• • • • • • •	• • • • • •
			E	BIRTHS REG	ISTERED				
1987	16	86	_	356	9	_	962	_	1 435
1988	30	295	6	508	21	_	1 138	_	2 002
1989	42	419	4	467	25	_	1 277	_	2 238
1990	47	499	7	588	30	3	1 289	35	2 498
1991	50	508	9	593	33	190	1 257	58	2 698
1992	42	503	4	561	1 215	218	1 354	14	3 911
1993	1 278	493	31	519	1 535	264	1 359	43	5 523
1994	2 011	520	25	531	1 578	247	1 338	59	6 310
1995	2 345	542	29	554	1 492	267	1 354	52	6 640
1996	2 444	474	2 534	557	1 538	244	1 343	66	9 204
1997	2 813	457	3 038	591	1 474	310	1 259	53	9 999
	• • • • • • • • • •		• • • • • • • • •	• • • • • • •				• • • • • • • •	
			BIRTHS (199	1 Census-b	ased project	ions(b))			
1992	2 333	575	2 334	513	1 521	278	1 349	52	8 962
1993	2 376	589	2 389	524	1 553	285	1 362	54	9 139
1994	2 414	601	2 441	535	1 582	293	1 375	55	9 303
1995	2 446	612	2 485	543	1 607	302	1 387	57	9 445
1996	2 473	622	2 520	551	1 629	310	1 401	59	9 571
1997	2 499	631	2 553	559	1 653	319	1 416	61	9 698
• • • • • • •	• • • • • • • • • •	• • • • • • • •	• • • • • • • • •	• • • • • • •	• • • • • • • • •		• • • • • • • •	• • • • • • •	• • • • • •
			BIRTHS (199	6 Census-b	ased project	ions(c))			
1992	3 200	619	2 986	583	1 460	388	1 359	79	10 681
1993	3 259	634	3 056	595	1 491	398	1 372	82	10 892
1994	3 311	647	3 123	608	1 519	409	1 385	84	11 088
1995	3 355	659	3 179	617	1 543	421	1 397	87	11 258
1996	3 392	669	3 224	626	1 564	432	1 411	90	11 409
1997	3 428	679	3 266	635	1 587	445	1 426	93	11 559
• • • • • • •			• • • • • • • • •	• • • • • • •	• • • • • • • • •	• • • • • • • • •	• • • • • • • •	• • • • • • • •	
	BIRTHS F	REGISTERED	AS A PERCE	NTAGE OF E	BIRTHS (1991	1-Census bas	sed projectio	ns)	
1992	2	87	_	109	80	78	100	27	44
1993	54	84	1	99	99	93	100	80	60
1994	83	87	1	99	100	84	97	107	68
1995	96	89	1	102	93	88	98	91	70
1996	99	76	101	101	94	79	96	112	96
1997	113	72	119	106	89	97	89	87	103
• • • • • • •	• • • • • • • • • •	• • • • • • • •	• • • • • • • • •	• • • • • • •	• • • • • • • • •	• • • • • • • • •	• • • • • • • •	• • • • • • •	• • • • • •
	BIRTHS F	REGISTERED	AS A PERCE	NTAGE OF E	BIRTHS (1996	6 Census-bas	sed projectio	ns)	
1992	1	81	_	96	83	56	100	18	37
1993	39	78	1	87	103	66	99	52	51
1994	61	80	1	87	104	60	97	70	57
1995	70	82	1	90	97	63	97	60	59
1996	72	71	79	89	98	56	95	73	81
1997	82	67	93	93	93	70	88	57	87

<sup>(</sup>a) Includes 'Other Territories'.

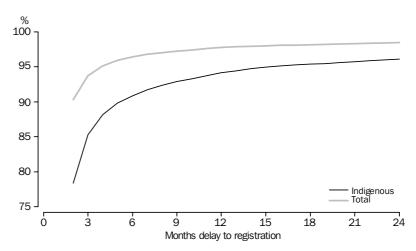
<sup>(</sup>b) Source: ABS, Experiemental Projections of the Aboriginal and Torres Strait Islander Population, 1991–2001 (ABS Cat. no. 3231.0). Medium series,

<sup>(</sup>c) Derived from ABS, Experimental Projections of the Aboriginal and Torres Strait Islander Population (ABS Cat. no. 3231.0), using low series, 1996–2006 edition and the medium series of the 1991–2001 edition.

#### **DELAY IN REGISTRATION**

All data in this chapter are based on period of registration; i.e. those births that were registered in 1997, regardless of when they occurred. One reason this has been done is because of the delay in registration for some births. The allowable time to register a birth varies between States and Territories, usually either 28 or 60 days after the birth. However, of all the births registered in 1997, 10% had been registered more than two months after birth, and 2% more than 12 months after the birth. However, 22% of Indigenous births registered in 1997 were registered more than two months after the birth, and 6% more than 12 months after. This proportion varies from year to year, which explains some of the variation in the registration patterns shown in graphs 6.2 to 6.10.

#### **6.2** ESTIMATED PROPORTION OF BIRTHS REGISTERED WITHIN SPECIFIED PERIOD(a)



(a) Based on delay between occurrence and registration of all births registered in 1997.

#### ESTIMATING THE NUMBER OF BIRTHS

There are four different ways of estimating Indigenous births; the projections based on the 1991 and 1996 Censuses described earlier; the birth registrations and the midwives' collection.

The midwives' data collect attributes of the mother but not the father. So births to Indigenous fathers and non-Indigenous mothers cannot be identified as Indigenous births. To enable comparison of the four series, confinements of Indigenous women have been chosen, rather than all Indigenous births. To estimate the number of confinements of Indigenous women for the two projection series, the ratio of confinements of Indigenous women to Indigenous births based on registrations in that State or Territory was used.

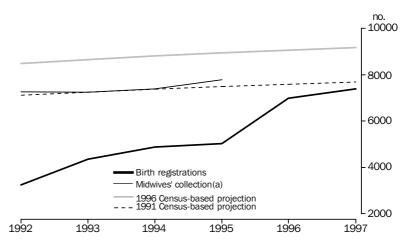
Australia

The number of confinements registered as Indigenous in Australia in 1997 was about 87% of the number that was projected, based on the results of the 1996 Census. During the 1990s, there has been a significant increase in the number registered. This increase has been much stronger in some States than others; most noticeably in Queensland where registered confinements of Indigenous women increased from virtually none in 1995 to 2,300 in 1997.

#### Australia continued

Because less than 90% of the projected number of births have been registered, the data would be inconsistent with the projected population, and so birth rates cannot be meaningfully calculated. The number of confinements of Indigenous women measured by the midwives' collection has been much higher than the number registered, and up until 1995 (the latest data available) was broadly consistent with the 1991 Census level of propensity to identify.

#### 6.3 CONFINEMENTS OF INDIGENOUS WOMEN: Australia

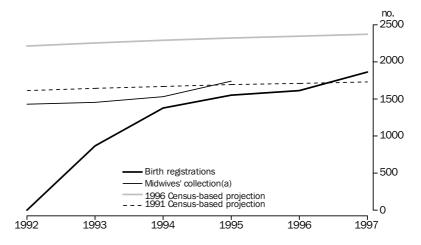


(a) Data from midwives' collection not yet available for 1996 or 1997.

## New South Wales

In New South Wales, the number of confinements measured by the midwives' data in the early to mid-1990s, and by birth registrations in the mid-1990s has been relatively consistent with the 1991 Census-based propensity to identify. Registration numbers grew from the early 1990s as the New South Wales Registrar of Births, Deaths and Marriages included a question about Indigenous origin in 1993.

## 6.4 CONFINEMENTS OF INDIGENOUS WOMEN: New South Wales

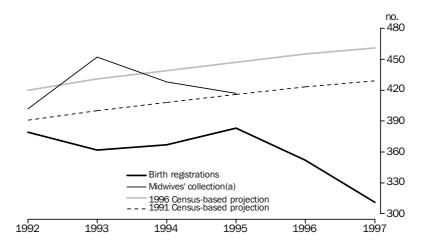


(a) Data from midwives' collection not yet available for 1996 or 1997.

#### Victoria

In Victoria, registrations of confinements of Indigenous women are significantly lower than any of the other three measures, and have fallen during the 1990s. The number of confinements registered is below the number measured by the midwives' data.

## 6.5 CONFINEMENTS OF INDIGENOUS WOMEN: Victoria

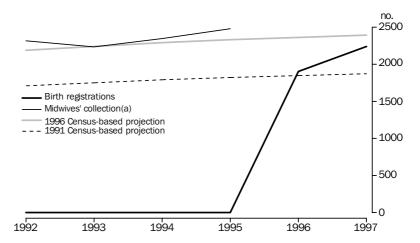


(a) Data from midwives' collection not yet available for 1996 or 1997.

## Queensland

In 1996 the Queensland Registrar introduced a new birth registration form which included a question on Indigenous status. There were still some of the old forms used in early 1996, explaining the slightly lower level in 1996 than in 1997. By 1997 the number of births registered was 93% of the number projected based on the 1996 Census. The midwives' data were also reasonably comparable to the 1996 level.

## 6.6 CONFINEMENTS OF INDIGENOUS WOMEN: Queensland

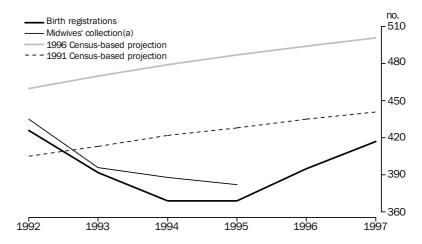


(a) Data from midwives' collection not yet available for 1996 or 1997.

## South Australia

In South Australia, the number of confinements of Indigenous women registered and the number reported by the midwives' data have followed quite similar patterns, although with birth registrations at a slightly higher level.

#### 6.7 CONFINEMENTS OF INDIGENOUS WOMEN: South Australia

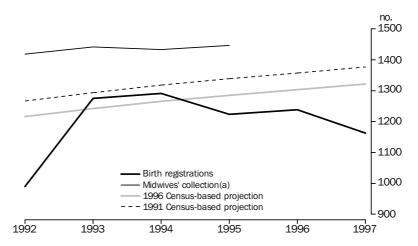


(a) Data from midwives' collection not yet available for 1996 or 1997.

#### Western Australia

In Western Australia, the number of confinements counted in the midwives' collection was considerably above the number registered or projected under either Census. Western Australia and Queensland appear to be the only States where propensity to identify in hospital collections was greater than the propensity to identify in either the Census or birth registrations.

## 6.8 CONFINEMENTS OF INDIGENOUS WOMEN: Western Australia

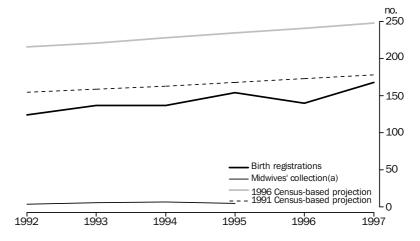


(a) Data from midwives' collection not yet available for 1996 or 1997.

## Tasmania

In Tasmania, there were virtually no Indigenous confinements recorded by midwives. The number registered was slightly below the number projected based on the 1991 Census. Between 1991 and 1996 Tasmania had a very large increase in propensity to identify. There was no similar increase for birth registrations, which increased at about the rate expected given purely biological increase in the population (the assumption behind both projection series).

#### 6.9 CONFINEMENTS OF INDIGENOUS WOMEN: Tasmania

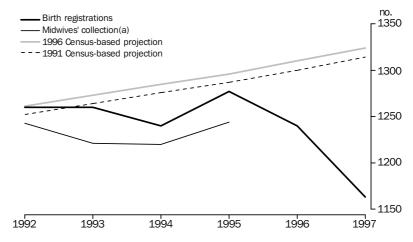


(a) Data from midwives' collection not yet available for 1996 or 1997.

## Northern Territory

In two censuses, persons in the Northern Territory displayed similar levels of propensity to identify. Until 1995, birth registrations were very similar to the projected level, with midwives' data at a slightly lower level. However in 1996 and 1997 the number of Indigenous confinements in the Northern Territory had fallen.

## 6.10 CONFINEMENTS OF INDIGENOUS WOMEN: Northern Territory

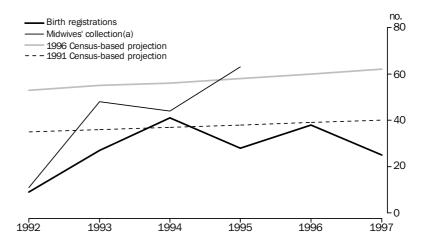


(a) Data from midwives' collection not yet available for 1996 or 1997.

## Australian Capital Territory

In the Australian Capital Territory, the relatively small number of Indigenous confinements each year has led to a considerable volatility from year to year. As the midwives' data are based on confinements which occurred in the Australian Capital Territory, but not necessarily to residents of the Territory, the fact that they were higher than the registration statistics could simply reflect that some Aboriginal women in surrounding regions go to the larger hospitals in the Australian Capital Territory, rather than have their babies in the smaller regional hospitals.

## 6.11 CONFINEMENTS OF INDIGENOUS WOMEN: Australian Capital Territory

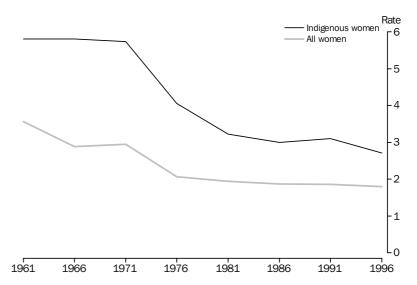


(a) Data from midwives' collection not yet available for 1996 or 1997.

#### ATTRIBUTES OF INDIGENOUS BIRTHS

Due to the poor quality of historical birth registration data, the most reliable source of information on historical fertility of the Indigenous population is the Census (from the issue question and/or derived from the number of children in each enumerated family). In the 1960s, Indigenous fertility, at about 6.0 children per woman, was approximately twice the rate for all women. Over the last 35 years, fertility levels for both Indigenous and non-Indigenous women have declined substantially, with the largest decreases recorded during the 1970s. While the fertility decline for non-Indigenous women commenced in the 1960s, the fertility levels of Indigenous women remained relatively stable during the 1960s, followed by a sharp decline during the 1970s. In the fifteen years to 1996 the rate of decline of fertility for Indigenous women has slowed. As such, it is difficult to predict whether the fertility for Indigenous women will continue to decline or level out.

## **6.12** TOTAL FERTILITY RATES



Source: A. Gray, The explosion of Aboriginality: components of indigenous population growth 1991–96, CAEPR Discussion Paper no. 142/1997, Centre for Aboriginal Economic Policy Research, Australian National University, Canberra, 1997; ABS, Births, Australia, 1996 (ABS Cat. no. 3301.0); ABS, Australian Demographic Trends, 1997 (ABS Cat. no. 3102.0).

## Queensland

In 1997, there were 3,000 births registered in Queensland with one or both parents identifying as Indigenous. About one-quarter of these were to women living in Brisbane, compared with nearly half of births to all Queensland mothers.

Indigenous mothers were generally younger than non-Indigenous mothers, and were much less likely to be married. Only 17% of Indigenous mothers were married, compared with 67% of all mothers. In about three-quarters of births to unmarried Indigenous mothers, the father acknowledged the birth. While this does not necessarily indicate a de facto relationship (see page 53 for discussion of this issue), it may be associated with some form of tribal or traditional marriage.

On 1997 rates, Indigenous women in Queensland could expect to have, on average, about 2.3 babies each. This is about the level experienced by the total Queensland population in the mid-1970s.

6.13 INDIGENOUS BIRTHS — Queensland

	All Indigenous births	Births to Indigenous mothers	All births
	• • • • • • • • • • •	• • • • • • • • • • • • • •	
Total births (no.)	3 038	2 257	46 965
Nuptial births (%)	21.4	17.1	66.7
Ex-nuptial births (%)	78.6	82.9	33.3
Paternity-acknowledged (%)	62.9	61.7	28.0
Paternity-not-acknowledged (%)	15.7	21.1	5.3
Both parents Indigenous (%)	32.7		
Mother only(a) (%)	41.6		
Father only (%)	25.7		
Age of mother			
19 and under (no.)	598	455	3 082
20–24 (no.)	1 000	747	9 322
25–29 (no.)	815	622	15 473
30-34 (no.)	428	300	12 842
35-39 (no.)	162	111	5 407
40-44 (no.)	32	20	814
45 and over (no.)	_	_	17
Not stated (no.)	_	_	5
Age-specific birth rates			
15–19		84.9	25.6
20–24		147.6	72.5
25–29		125.9	116.0
30–34		72.5	99.3
35–39		31.3	40.0
40–44		7.0	6.5
45–49		0.0	0.1
Total fertility rate		2.346	1.801
Total confinements (no.)	3 003	2 232	46 279
Median age of mother (years)	24.6	24.5	28.6
Median age of father (years)	27.5	27.5	31.2
	• • • • • • • • • • •		

<sup>(</sup>a) Includes paternity not acknowledged.

## South Australia

Indigenous mothers in South Australia were younger and less likely to be married than non-Indigenous mothers in South Australia. Only 15% of Indigenous mothers were married. The proportion for all Indigenous births was 20%.

Of parents where only one member was Indigenous, about a third were married. Where both parents were Indigenous the proportion fell to only 9%. This excluded births to Indigenous women where paternity was not acknowledged, as the Indigenous status of the father could not be determined.

**6.14** INDIGENOUS BIRTHS — South Australia

	All Indigenous births	Births to Indigenous mothers	All births
	• • • • • • • • • •		
Total births (no.)	591	446	18 362
Nuptial births (%)	19.6	15.0	70.4
Ex-nuptial births (%)	80.4	85.0	29.6
Paternity-acknowledged (%)	67.0	67.3	26.1
Paternity-not-acknowledged (%)	13.4	17.7	3.5
Both parents Indigenous (%)	34.7		
Mother only(a) (%)	40.8		
Father only (%)	24.5		
Age of mother			
19 and under (no.)	114	92	775
20–24 (no.)	193	151	2 705
25–29 (no.)	153	112	6 026
30-34 (no.)	91	64	5 799
35–39 (no.)	33	20	2 607
40-44 (no.)	3	3	418
45 and over (no.)	_	_	21
Not stated (no.)	4	4	11
Age-specific birth rates			
15–19		82.7	16.1
20–24		142.5	53.9
25–29		106.6	112.3
30–34		65.6	105.8
35–39		26.3	44.5
40–44		5.0	7.5
45–49		0.0	0.4
Total fertility rate		2.144	1.703
Total confinements (no.)	582	437	18 095
Median age of mother (years)	24.5	24.2	29.7
Median age of father (years)	27.4	27.1	32.2

<sup>(</sup>a) Includes paternity not acknowledged.

### Western Australia

Western Australian Indigenous women aged 20–24 had the highest fertility of any age group in any State or Territory: 15% of women had a baby (149 births per 1000 women). However, to put this level in context, in the peak of the baby boom (1961) the national rate was 23%. Similarly, the total fertility rate at 2.3 was well below the 3.6 experienced by the Australian population in 1961.

**6.15** INDIGENOUS BIRTHS — Western Australia

	• • • • • • • • • • •	• • • • • • • • • • • • •	• • • • • • •
	All Indigenous births	Births to Indigenous mothers	All births
		-	• • • • • • •
Total births (no.)	1 474	1 186	24 776
Nuptial births (%)	13.6	9.6	69.2
Ex-nuptial births (%)	86.4	90.4	30.8
Paternity-acknowledged (%)	65.2	64.1	26.2
Paternity-not-acknowledged (%)	21.2	26.3	4.6
Both parents Indigenous (%)	42.1		
Mother only(a) (%)	38.3		
Father only (%)	19.5		
Age of mother			
19 and under (no.)	338	285	1 348
20–24 (no.)	488	390	4 291
25–29 (no.)	382	309	8 144
30–34 (no.)	189	143	7 408
35–39 (no.)	69	53	3 103
40–44 (no.)	8	5	458
45 and over (no.)	_	_	22
Not stated (no.)	_	_	_
Age-specific birth rates			
15–19		102.9	21.2
20–24		148.6	64.5
25–29		115.4	116.3
30–34		61.4	106.0
35–39		27.2	42.5
40–44		3.2	6.6
45–49		0.0	0.4
Total fertility rate		2.293	1.787
Total confinements (no.)	1 457	1 176	24 407
Median age of mother (years)	24.0	23.9	29.2
Median age of father (years)	26.9	26.7	31.8

<sup>(</sup>a) Includes paternity not acknowledged.

## Northern Territory

In the Northern Territory, the proportion of nuptial births was much lower than in other States, with only 4% of Indigenous mothers being married.

The 44% of Indigenous births to Indigenous mothers only, included births where paternity was not acknowledged. It is likely that quite a high proportion of these fathers were actually Indigenous.

In 1997, there were 181 births to non-Indigenous women in the Northern Territory, but paternity was not acknowledged. Some of these fathers were probably Indigenous.

The median age of Indigenous mothers was only 23 years, the lowest of any State or Territory.

# **6.16** INDIGENOUS BIRTHS — Northern Territory

	All Indigenous births	Births to Indigenous mothers	All births
			• • • • •
Total births (no.)	1 259	1 169	3 588
Nuptial births (%)	4.8	3.6	42.4
Ex-nuptial births (%)	95.2	96.4	57.6
Paternity acknowledged (%)	58.5	56.9	39.7
Paternity not acknowledged (%)	36.7	39.5	17.9
Both parents Indigenous (%)	48.8		
Mother only(a) (%)	44.1		
Father only (%)	7.1		
Age of mother			
19 and under (no.)	373	353	502
20–24 (no.)	398	372	832
25–29 (no.)	304	279	1 104
30–34 (no.)	125	109	741
35–39 (no.)	45	42	338
40–44 (no.) 45 and over (no.)	8	8	64
Not stated (no.)	6	6	6
Not stated (no.)	6	0	6
Age-specific birth rates			
15–19		131.8	76.5
20–24		133.3	99.2
25–29		112.3	116.9
30–34		53.1	88.2
35–39		25.0	43.8
40–44		5.7	9.4
45–49		0.0	0.0
Total fertility rate		2.306	2.170
Total confinements (no.)	1 253	1 163	3 552
Median age of mother (years)	22.9	22.8	27.0
Median age of father (years)	26.2	26.1	30.6

<sup>(</sup>a) Includes paternity not acknowledged.

# EXPLANATORY NOTES ......

### INTRODUCTION

- **1** Registration of births is the responsibility of individual State and Territory Registrars and is based on the data provided on an information form completed, generally by one of the parents. This information form is the basis of the data provided to the ABS, by individual Registrars, for compilation into the aggregate statistics in this publication. Most data items are collected in all States and Territories and therefore statistics at the national level are available for most characteristics. Some States, however collect additional information, and some of this is produced in this publication.
- **2** In the main, statistics in this publication refer to births registered by the State and Territory Registrars during the calendar year shown. There is usually an interval between the occurrence and registration of a birth and, as a result of delay in registration, some births occurring in one year are not registered until the following year or even later. This delay can be caused by either a delay by the parents in registering the birth, or a delay by the Registrar in registering the birth.

## YEAR OF OCCURRENCE OF BIRTHS REGISTERED IN 1997

	YEAR IN WHIC	CH BIRT	н осси	JRRED			
	1991 and earlier	1992	1993	1994	1995	1996	1997
	%	%	%	%	%	%	%
• • • • • • • • • • • • • •	• • • • • • • • • •		• • • • •	• • • • •	• • • • • •	• • • • •	• • • • •
New South Wales	0.9	0.4	0.4	0.5	0.7	11.5	85.7
Victoria	0.4	0.0	0.0	0.0	0.1	9.9	89.6
Queensland	0.5	0.4	0.4	0.5	1.0	9.6	87.7
South Australia	0.8	0.0	0.1	0.1	0.1	7.2	91.7
Western Australia	0.4	0.1	0.1	0.2	0.4	9.2	89.5
Tasmania	0.4	0.2	0.2	0.2	0.4	8.4	90.3
Northern Territory	0.1	0.0	0.0	0.0	0.0	10.5	89.4
<b>Australian Capital Territory</b>	0.0	0.0	0.0	0.0	0.0	8.1	91.9
Australia	0.6	0.2	0.2	0.3	0.5	10.0	88.1

**3** For births data, cell values less than three have been suppressed to assist in the preservation of confidentiality of information.

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### STATES AND TERRITORIES

**4** In the main, statistics for States and Territories have been compiled and presented in respect of the State or Territory of usual residence of the mother. However, in the following table data have been presented on a State or Territory of registration basis. Births which took place outside Australia are excluded from the statistics.

BIRTHS, State or Territory of Usual Residence of Mother and State or Territory of Registration

STATE OR TERRITORY OF REGISTRATION	

State or Territory of usual residence of mother	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
New South Wales	85 411	687	349	43	17	7	4	638	87 156
Victoria	202	60 418	33	50	8	7	4	10	60 732
Queensland	600	68	46 242	21	15	5	6	8	46 965
South Australia	19	34	15	18 239	10	3	42	_	18 362
Western Australia	28	19	15	14	24 663	4	31	_	24 776
Tasmania	3	22	6	_	_	5 975	_	_	6 007
Northern Territory	20	10	39	34	19	_	3 464	_	3 588
Australian Capital Territory	76	4	10	3	_	_	_	4 116	4 208
Other Territories	13	_	_	_	34	_	_	_	48
Australia	86 371	61 262	46 710	18 404	24 767	6 001	3 551	4 776	251 842

- **5** There were 223 births to women who usually lived overseas. These have been included in this publication and classified according to the State or Territory in which the birth was registered.
- **6** As a result of an amendment made in 1992 to section 17(a) of the *Acts Interpretation Act 1901–1973* (Cwlth) the Indian Ocean Territories of Christmas Island and Cocos (Keeling) Islands have been included as part of geographic Australia, hence another category of the State and Territory classification has been created. This category is known as 'Other Territories' and includes Christmas Island, the Cocos (Keeling) Islands and Jervis Bay Territory.
- **7** Prior to 1993 usual residence data for Christmas Island and Cocos (Keeling) Islands were included with offshore areas and migratory in Western Australia while usual residence data for Jervis Bay Territory were included with the Australian Capital Territory. In 1997 there were 12 births to mothers usually resident in Jervis Bay Territory, 19 to mothers usually resident in Christmas Island and 17 to mothers usually resident in the Cocos (Keeling) Islands.

### INDIGENOUS BIRTHS

**8** This publication includes a section on the number of Indigenous births for Queensland, South Australia, Western Australia, the Northern Territory and the Australian Capital Territory. The data are regarded as being of sufficient quality to publish. This is measured by comparing it to a benchmark (the number of Indigenous births projected from *Experimental Projections of the Aboriginal and Torres Strait Islander Population, 30 June 1996 to 30 June 2006* (ABS Cat. no. 3231.0)). Data for a State or Territory are considered publishable if they are within 20% of the projected number of births, and have been within 10% within the last three years.

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- **9** Due to the small number of Indigenous births, data for the Australian Capital Territory are highly variable and only the number of Indigenous births are considered of publishable quality.
- **10** The population used to calculate Indigenous fertility rates for 1997 are based on *Experimental Projections of the Aboriginal and Torres Strait Islander Population, 30 June 1996 to 30 June 2006* (ABS Cat. no. 3231.0). These projections are, in turn, based on the 1996 Census of Population and Housing.

### RELATED PUBLICATIONS

- 11 Other ABS publications which may be of interest to users include:

  Australian Demographic Statistics (ABS Cat. no. 3101.0) issued quarterly

  Australian Demographic Trends (ABS Cat. no. 3102.0) issued irregularly

  Causes of Death, Australia (ABS Cat. no. 3303.0) issued annually

  Deaths, Australia (ABS Cat. no. 3302.0) issued annually

  Experimental Projections of the Aboriginal and Torres Strait Islander

  Population, 30 June 1996 to 30 June 2006 (ABS Cat no. 3231.0) issued irregularly
- **12** A compendium of all demographic data for each State and Territory has been released in State or Territory specific publications, *Demography* (ABS Cat. nos 3311.1–8). These publications are released each year for each State or Territory and contain a variety of demographic data.
- **13** Current publications produced by the ABS are listed in the *Catalogue of Publications and Products* (ABS Cat. no. 1101.0). The ABS also issues, on Tuesdays and Fridays, a *Release Advice* (ABS Cat. no. 1105.0) which lists publications to be released in the next few days. Both are available from any ABS office.
- **14** For more information about related unpublished statistics or data concepts contact Katrina Phelan on Canberra 02 6252 6573.

### ADDITIONAL STATISTICS AVAILABLE

**15** The ABS can also make available information which is not published. The following table lists the characteristics processed by the ABS for births registered. Generally, a charge is made for providing unpublished information.

## CHARACTERISTICS OF BIRTH REGISTRATIONS

State or Territory

Characteristic of availability(a) Notes on quality(b)

Parents

Date of marriage Duration of marriage

Nuptiality

Previous issue of relationship Births where paternity is not acknowledged may bias data.

In Tas., refers to previous issue of this marriage.

State/country of marriage Not available in Vic.

Mother

Indigenous origin Good quality in Qld, SA, WA and NT. Variable quality elsewhere.

Age

State/country of birth

Postcode WA

Usual residence

Indigenous origin

Father Not available for births where paternity is not acknowledged.

Good quality in Qld, SA, WA and NT. Variable quality elsewhere.

Age

State/country of birth

Occupation Vic., WA, ACT Poor quality data.

Registration

Registration district State of registration

Date of registration Year and month only.

Confinement

Date of birth

Hospital of occurrence NSW

Outcome of multiple birth

Sex

Stillbirths Likely to be under-registered.

Birth

Indigenous origin Good quality in Qld, SA, WA and NT. Variable quality elsewhere.

Birth weight

 $\hbox{(a) State or Territory of registration, not of usual residence. Available nationally unless otherwise stated.}\\$ 

(b) Relates to known concerns about data quality.

# GLOSSARY .....

Age-specific birth rate

Age-specific birth rates are the number of live births registered during the calendar year, according to age of mother, per 1,000 of the female estimated resident population of the same age as estimated for 30 June. For calculating these rates, births to mothers under 15 are included in the 15–19 age group, and births to mothers aged 50 and over are included in the 45–49 age group. Pro rata adjustment is made in respect of births for which age of mother is not given.

Birth

The delivery of a baby, irrespective of the duration of the pregnancy, who after being born, breathes or shows any other evidence of life such as a heartbeat. For the sake of simplicity, reference to 'birth' in this publication is to 'live births'.

Birth order

See Previous births.

Completed fertility

The completed fertility rate represents the number of births a woman has had by the end of her reproductive life. Average completed fertility is calculated by summing the age-specific birth rates experienced by a cohort of women over their reproductive lives. Alternatively, completed fertility can be measured by asking a group of women who have finished their reproductive lives how many babies they have had.

Confinements

A pregnancy which results in at least one live birth.

Country of birth

The classification of countries in this publication is the Australian Standard Classification of Countries for Social Statistics. For more detailed information refer to the ABS publication *Australian Standard Classification of Countries for Social Statistics* (ABS Cat. no. 1269.0) Revision 1.03.

Crude birth rates

The crude birth rate is the number of live births registered during a calendar year, per 1,000 estimated resident population at 30 June of that year.

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## Estimated resident population

Estimated resident population (ERP) data are quarterly estimates of the Australian population obtained by adding to the estimated population at the beginning of each period the components of natural increase (on a usual residence basis) and net overseas migration. For the States and Territories, account is also taken of estimated interstate movements involving a change of usual residence. After each census, estimates for the preceding intercensal period are revised by incorporating an additional quarterly adjustment (intercensal discrepancy) to ensure that the total intercensal increase agrees with the difference between the ERP at the two respective census dates.

Estimates of the resident population are based on adjusted (for under-enumeration) census counts by place of usual residence, to which are added the number of Australian residents estimated to have been temporarily overseas at the time of the Census.

The concept of ERP links people to a place of usual residence within Australia. Usual residence is that place where each person has lived or intends to live for six months or more in a reference year.

Rates shown in this publication for the years since 1976 are calculated using estimates of resident population. A description of the conceptual basis of the ERP is contained in the publication *Information Paper: Population Estimates—Concepts, Sources and Methods, 1995* (ABS Cat. no. 3228.0). Revised population estimates are shown in *Australian Demographic Statistics* (ABS Cat. no. 3101.0) (issued quarterly).

## Indigenous

Persons who identify as being of Aboriginal or Torres Strait Islander origin.

## Indigenous birth

The birth of a child where either the mother or the father has identified as being of Aboriginal or Torres Strait Islander origin on the birth registration forms.

## Intercensal discrepancy

After each census, estimates of the preceding intercensal periods are provided by incorporating an additional quarterly adjustment to ensure that the total intercensal increase agrees with the difference between the estimated resident populations at the two respective census dates. For a detailed description see Information Paper: *Population Estimates* — *Concepts Sources and Methods*, 1995 (ABS Cat. no. 3228.0).

## Marital status

Two separate concepts are measured by the Australian Bureau of Statistics. These are registered marital status and social marital status. They are different personal characteristics and are independent variables with separate classifications. See also Registered marital status and Social marital status.

### Median value

The median value (age, duration) is that value which divides the relevant population into two equal parts, half falling below the value, and half exceeding it. Where the value for a particular record has not been stated, that record is excluded from the calculations.

### Multiple birth

A multiple birth is a confinement which results in two or more births, at least one of which is live born.

Net reproduction rate

The net reproduction rate represents the average number of daughters born to a hypothetical group of women who are subject to the fertility rates of a given year and to the mortality rates of that year. It indicates the extent to which the population would reproduce itself. The net reproduction rate is obtained by multiplying the female age-specific birth rates by the proportion of survivors at corresponding ages in a female life table and adding the products.

Nuptial first confinement

A nuptial first confinement is a married woman's first confinement of her current relationship. It therefore does not necessarily represent the woman's first ever confinement. Women who have one or more births then marry and have subsequent births to the same man will not have a nuptial first confinement.

Nuptiality

Nuptiality relates to the registered marital status of parents. Confinements and births are identified as being nuptial where the mother was married at the time of birth, or where the husband died during pregnancy. Other confinements are classified as ex-nuptial, whether or not both parents were living together at the time of birth.

Paternity-acknowledged births

A paternity-acknowledged birth refers to ex-nuptial births where paternity was acknowledged by the child's father, irrespective of whether or not the parents were living together at the time of the birth.

Previous births

Previous births refer to previous births of the current relationship. That is, children born alive (who may be still living or now dead) to both parents prior to the current birth.

Previous births of current relationship is available in all States and Territories except Tasmania, where previous births of current marriage is recorded. However, these data are presented together as previous births of current relationship in this publication.

Where paternity is not acknowledged, there is no information on whether there are previous births to this relationship.

Registered marital status

Registered marital status refers to formally registered marriages for which the partners hold a marriage certificate. In this publication the distinction is between married parents (nuptial births) and unmarried parents (ex-nuptial births)

Replacement fertility

Replacement level fertility is the number of babies a woman would need to have over her reproductive life span to replace herself and her partner. Given the current mortality of women up to age 49, replacement fertility is 2.1.

Social marital status

Social marital status is the consensual union status of a person with reference to another person in the household. In this publication data are only available from midwives' collection. The categories are married/de facto; single; and separated/divorced/widowed.

State or Territory of registration

State or Territory of registration refers to the State or Territory in which the birth was registered.

State or Territory of usual residence

State or Territory of usual residence refers to the State or Territory of usual residence of the population in estimated resident population and the State or Territory of usual residence of the mother at confinement.

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**Total fertility rate** The sum of age-specific birth rates (live births at each age of mother per female

population of that age). It represents the number of children a woman would bear during her lifetime if she experienced current age-specific fertility rates at

each age of her reproductive life.

**Year of occurrence** Data presented on year-of-occurrence basis relate to the date the birth occurred.

**Year of registration** Data presented on year-of-registration basis relate to the date the birth was

registered.

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