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Assisted conception Australia and New Zealand 2000 and 2001

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AIHW National Perinatal Statistics Unit
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Preface

This is the seventh annual report in the Assisted Conception Series published by the AIHW National Perinatal Statistics Unit (NPSU) and the final in this series. This report presents summary data for the year of treatment 2001 and notifications of pregnancy outcomes for year 2000. In 2002, the Fertility Society of Australia (FSA) in collaboration with the NPSU introduced a new system for data collection from IVF and GIFT units. The first report in the new series of assisted conception publications will present treatment and pregnancy outcome data for 2002 and be released in the next year. This final report is more concise and differs in content from earlier reports in the series.

This report has two parts:

- summary of key findings relating to all assisted conception treatments in year 2001 and pregnancy outcomes of assisted conception treatments in year 2000
- tabulations on trends and other characteristics of the data. Some tables have been retained for historical consistency and may not be discussed or referenced in part 1.

The report may be viewed online as a PDF file at the NPSU website:

http://www.npsu.unsw.edu.au

Contents

List of tables

Assisted conception pregnancy rates

Outcome of pregnancies, causes of infertility, treatment year 2000

Outcome of pregnancies, maternal ages, treatment year 2000

Outcome of pregnancies, number of embryos or oocytes transferred, treatment year 2000

Outcome of pregnancies, other characteristics, treatment year 2000

Outcome of births, treatment year 2000

Assisted conception confinements and births, at least 20 weeks gestation or 400 games birthweight, Australia, 2000

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The Assisted Conception Data Collection is a truly collaborative effort between the IVF and GIFT Units in Australia and New Zealand and the NPSU. Without the support of individual IVF and GIFT units and their staff, the collection would not have been sustained over the last 22 years. It is important to recognise and thank all the individuals in the IVF and GIFT Units for their support of the primary data collection, data queries and follow-ups. Without these committed individuals, especially clinic coordinators and scientists, who have carefully checked records to obtain further details of clinical outcomes, or have provided data on the numbers of women treated, cycles of treatment and laboratory procedures, we would not be able to complete this report.

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Regional centres or satellite units:

Sydney IVF Coffs Harbour, Coffs Harbour NSW

Sydney IVF Illawarra, Wollongong NSW

Sydney IVF Lismore, Lismore NSW

Sydney IVF Orange, Orange NSW

Sydney IVF Tamworth, Tamworth NSW

Sydney IVF Liverpool, Liverpool NSW (Professor Robert P S Jansen)

Sydney IVF Newcastle, Merewether NSW (Dr Robert Woolcott)

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South Australia

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Northern Territory

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Victoria

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Melbourne IVF, East Melbourne Vic (Dr John McBain)

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Monash IVF, Epworth Hospital, Richmond Vic (Professor Gab Kovacs)

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Monash IVF Ballarat, Ballarat Vic (Dr Tim Sturrock)

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Joondalup IVF, Joondalup WA (Dr Anne Jequier)

Abbreviations

NSW	New South Wales
Vic	Victoria
Qld	Queensland
WA	Western Australia
SA	South Australia
Tas	Tasmania
ACT	Australian Capital Territory
NT	Northern Territory
NZ	New Zealand

AIHW	Australian Institute of Health and Welfare
FSA	Fertility Society of Australia
NPSU	National Perinatal Statistics Unit
WHO	World Health Organization

ART	assisted reproductive technique
FSH	follicle stimulating hormone
GIFT	gamete intrafallopian transfer
GnRH	gonadotrophin-releasing hormone
hCG	human chorionic gonadotrophin
ICSI	intracytoplasmic sperm injection
IVF	in-vitro fertilisation
MESA	microepididymal sperm aspiration
n.a.	not available
PESA	percutaneous epididymal sperm aspiration
SUZI	subzonal insemination
TASA	testicular sperm aspiration
TESE	testicular sperm extraction
VPR	Viable pregnancy rate

Highlights

- During 2001, 28,797 treatment cycles were performed in Australia and New Zealand. There were 11,338 IVF transfer cycles, 13,836 ICSI transfer cycles and 341 GIFT transfer cycles.
- When all techniques of assisted conception are included together, the viable pregnancy rate increased from 13.0 per 100 embryos / gametes transfer cycles in 1992 to 20.6 in 2001.
- Pregnancy rates of different methods of treatments vary within and between individual IVF or GIFT units. The average clinical pregnancy rate (per 100 oocyte retrieval cycles) of IVF treatment using fresh embryos achieved by the most successful 25%of all units increased from 24.9% in 1998 to 34.4% in 2001.
- In 2001, more than four in five assisted conception treatment cycles transferred one or two embryos / oocytes.
- In 2000, the majority (72.3%) of pregnant women after assisted conception treatment were aged 30 to 39 years. The average age of all women who gave birth after assisted conception treatment was 33.6 years, 4.6 years older than average age (29.0) of Australian mothers in 2000.
- There were 945 (22.1%) multiple pregnancies in 2000. Twin pregnancies occurred in 21.1% of all pregnancies. Triplet and other higher order pregnancies occurred in 1.0%. GIFT treatment had the highest incidence (28.1%) of multiple pregnancies.
- Delivery by caesarean section was higher among assisted conception pregnancies. There were 1,991 (46.7%) reported caesarean deliveries in 2000. The caesarean rate was 68.5% in twin pregnancies and 95.2% in triplet pregnancies.
- In 2000, there were 5,466 pregnancies following assisted conception treatments in Australia and New Zealand.
- In 2000, there were 4,285 confinements of women of =20 weeks gestation following assisted conception in Australia and New Zealand. Ogi0.0479 Tj 30.96-

1 Introduction

This report, *Assisted c*

The ascertainment by IVF and GIFT units of the outcomes of assisted-conception-related pregnancies is limited because the ongoing care for the pregnancy is often carried out by non-IVF practitioners. Usually, the IVF or GIFT unit will attempt to follow up the outcome of a pregnancy with either the client or her clinician. In a proportion of cases this information is not available.

Information about artificial insemination in this report is limited to IVF and GIFT units and does not include data from procedures performed outside of IVF and GIFT units. Therefore, the use of artificial insemination in Australia and New Zealand cannot be estimated from these data. There is no information available on infants born from artificial insemination pregnancies.

Demographic data are limited to age. There is no risk factor or behavioural information.

Scope

The report provides data for assisted conception treatment or assisted reproductive technology (ART) treatment. These data include specific treatment methods of IVF (in-vitro fertilisation), ICSI (intracytoplasmic sperm injection) and GIFT (gamete intrafallopian transfer); and special techniques used in assisted conception treatment including assisted hatching, blastocyst culture and frozen embryos. Data on artificial insemination as a fertility treatment when performed at an IVF or GIFT unit are also included in this report.

Terms used in this report

- IVF, IVF method or IVF treatment—data for all IVF techniques, including when used in combination with GIFT technique; the only exception is ICSI technique
- ICSI, ICSI method or ICSI treatment—data for ICSI technique, including when used in combination with other IVF techniques
- GIFT method or GIFT treatment—data for GIFT technique
- Treatment—assisted conception treatment
- Pregnancy—assisted conception pregnancy unless otherwise stated
- Outcome—outcome of assisted conception pregnancies
- Viable pregnancy rate—viable pregnancies per 100 transfer cycles unless otherwise stated
- Live-birth pregnancy—a pregnancy that results in at least one liveborn infant in a singleton or multiple pregnancy.

Denominator for treatment cycles and pregnancy outcomes

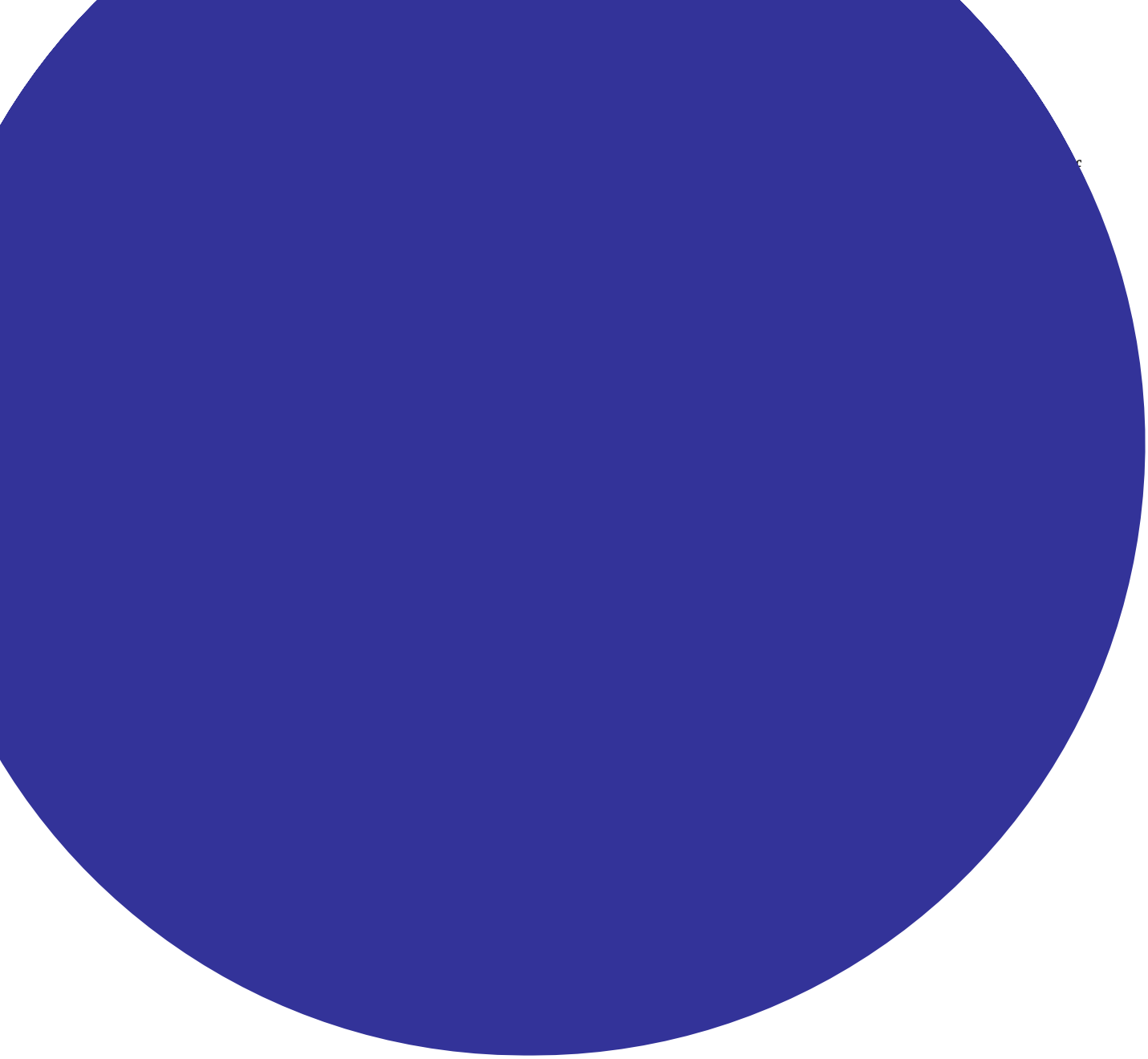
All analyses of treatment cycles and pregnancy outcomes are based on the year of treatment. For example, when analysing treatment cycles, the phrase ‘in 2001’ means all treatment cycles carried out in 2001. When analysing pregnancy outcomes, ‘in 2000’ means outcome of pregnancies resulting from the treatments in 2000.

2 Assisted conception treatment

2.1 Treatment cycles and pregnancy rates

In 2001, there were 28,797 treatment cycles commenced where either oocytes were retrieved and / or embryos / gametes were transferred. Of these treatment cycles, 18,092 had oocytes retrieved and 10,705 had frozen embryos transferred (Figure 1).

In the 10-year period 1992–2001, the total number of treatment cycles (oocyte retrievals and embryo transfers) for all types of assisted conception has increased by 76.8% from 16,288 in 1992 to 28,797 in 2001. The largest increase of 158.3% was in transfers of frozen embryos, compared to 49.0Assisted concept77 Tc 0. Tc 0 T6 Tc -0. Tw (Assisted088.3



From 1991 to 2000 the GIFT method produced a total of 6,717 pregnancies. There were 6,584 GIFT infants born in this period. In 2000, 235 pregnancies resulted from GIFT treatment and 225 infants were born (Tables 20 and 55).

Assisted hatching

Assisted hatching is one of several interventions applied during IVF treatment in an attempt to boost pregnancy rates (Meniru 2001). It involves the breaching of the zona pellucida (egg shell) prior to embryo transfer. It is used in limited situations and is usually indicated for older women and those with previous treatment failures.

Data for assisted hatching have been collected since 1994. There were 1,136 cycles using embryos by assisted hatching in 2001 (Table 4). The viable pregnancy rate (per 100 transfer cycles) for this technique ranged from a low of 6.4% in 1996 to a high of 16.2% in 2000. In 2001, it was 12.3% (Table 3).

Between 1995 and 2000, 324 assisted hatching pregnancies were reported. As a result of these pregnancies, 282 infants were born. In 2000, there were 159 assisted hatching pregnancies, resulting in 115 births (Table 53). These births resulted in 140 infants, which included 24 sets of multiples.

Blastocyst culture

Blastocyst formation usually occurs by the fifth day following ovulation or oocyte retrieval (Meniru 2001). The Blastocyst culture results in embryos being at a more

Between 1991 and 2000, there were 10,162 frozen embryo pregnancies delivering 8,895 infants. In 2000 there were 1,729 frozen embryos pregnancies and 1,345 births (Table 53). This resulted in 1,556 infants, including 203 sets of multiples.

Frozen embryos in storage

The total number of embryos in storage continued to rise in 2001. The trend of the number of embryos frozen exceeding the number thawed continued. In 2001, 46,835 embryos were frozen and 31,194 stored frozen embryos were thawed. Of these thawed embryos, 18,777 were used in transfer cycles. As of 31 December, 2001, 38 IVF units had reported 81,627 frozen embryos in storage (Table 19).

Artificial insemination

Artificial insemination is a fertility treatment available from IVF and GIFT units and other medical facilities. Artificial insemination does not involve using assisted conception methods, such as IVF, ICSI or GIFT. Information about artificial insemination in this report is limited to IVF and GIFT units only and does not include data from procedures performed outside an IVF or GIFT unit. Therefore, the use of artificial insemination in Australia and New Zealand cannot be estimated from these data. There is no information available on infants born from artificial insemination pregnancies.

Treatment cycle data from artificial insemination at an IVF unit were first collected in 1998. In 1999 the number of pregnancies by artificial insemination using either partner's sperm or donor's sperm was also collected.

In 2001 a total of 11,393 cycles of artificial insemination were performed in IVF and GIFT units (Table 6). Insemination with partner's sperm accounted for two-thirds (66.5%) of all artificial inseminations. In 2001, the viable pregnancy rate (per 100 treatment cycles) was 7.2% with partner's sperm and 7.7% with donor sperm.

2.3 Variations in pregnancy rates among IVF and GIFT units

Pregnancy rates of different methods of treatments vary within and between individual IVF or GIFT units. Since 1998, pregnancy rates achieved following IVF, ICSI or GIFT treatments have been reported by quartiles. Q1 (quartile 1) includes the IVF or GIFT units with the highest pregnancy rates for that particular method or technique, and Q4 includes those units with the lowest pregnancy rates. There are five different methods of conception reported and each method is mutually exclusive from the others. Tables 7 and 8 present unadjusted pregnancy rate calculations.

In 2001, there were 9–10 units included in each quartile for IVF and ICSI treatment and 5–6 units for GIFT treatment.

The success rate (per 100 oocyte retrieval cycles) of IVF treatment for clinical pregnancies using fresh embryos achieved by Q1 units was 34.4% in 2001 (Table 7) compared with 24.9% in 1998. The success rate of ICSI treatment for clinical pregnancies using fresh embryos achieved by Q1 units was 34.4% in 2001 compared with 27IVF and ICSI Tcn0t01SI tr34.49%026.9%1-in cy1998.cey

The success rate (per 100 embryo transfer cycles) of IVF treatment for clinical pregnancies using thawed embryos achieved by Q1 units was 28.4% in 2001 (Table 8) compared to 23.2% in 1998. The success rate of ICSI treatment for clinical pregnancies using thawed embryos achieved by Q1 units was 26.0% in 2001 compared with 23.4% in 1998.

Quartile reporting of viable pregnancy rates after IVF, ICSI and GIFT is provided in Table 9.

2.4 Other aspects of assisted conception treatment

Information about to couples or women seeking assisted conception treatment is

program. In 2000, of all pregnant women after assisted conception treatment, more than one woman in nine (11.2%) was 40 years or older and one in three (34.5%) was 35 to 39 years (Table 22).

In 2000 about 72.3% of all women being

47.2% in the proportion transferring three or more fresh embryos / oocytes (Table 13). This pattern is also seen with the transfer of frozen embryos / oocytes (Table 18).

In 2001, 84.6% of fresh transfer cycles had one or two embryos / oocytes transferred, and 91.5% of frozen transfer cycles had one or two embryos transferred, compared with 63.8% and 80.6% respectively in 1997 (Tables 13 and 18).

The outcomes of assisted conception pregnancies in 2000 by number of embryos / oocytes transferred are detailed in Table 43. The percentage of live births following transfer of one or two embryos / oocytes was 79.5% and 79.2% respectively. The proportion of live births was lower (=75.0%) in women who had three or more embryos / oocytes transferred (Table 43).

pregnancies were

proportion of triplet pregnancies per transfer of embryo / oocyte increased with increasing number of embryos / oocytes transferred. For two embryos / oocytes transferred, the proportion of triplets was 0.5%, for three 3.5% and for four 4.1%.

The incidence of twin pregnancies after assisted conception has increased slightly from 17.7% in 1991 to 21.0% in 2000, with the lowest incidence of 17.1% in 1994 (Figure 5). In 2000, the incidence of IVF twin pregnancies was 20.8% of all IVF pregnancies, compared with 21.0% for ICSI twin pregnancies and 24.6% for GIFT twin pregnancies (Table 32).

The incidence of triplet and higher order pregnancy after assisted conception has decreased by 58.3% from 2.4% in 1991 to 1.0% in 2000 (Figure 5). Between 1991.62 1994 Tj -385 00 l011 Tc 1.

The incidence of caesarean deliveries was higher with increasing plurality, ranging from 40.2% for singleton pregnancies, 68.5% for twin pregnancies and 95.2% for triplet pregnancies (Table 51).

3.2 Outcome of births

This section includes all births of at least 20 weeks gestation.

In 2000, there were 4,285 confinements of women of at least 20 weeks gestation in Australia and New Zealand. Of those 4,285 confinements, 3,901 were in Australia and 378 in New Zealand, an increase of 10.9% and 14.2% respectively from 1999. The 4,285 confinements notified by IVF and GIFT units in Australia and New Zealand resulted in a total of 5,275 live births and fetal deaths (Table 54). There were 99 live births for every 100 assisted conception births in Australia and New Zealand in 2000 compared with 99.3 per 100 total births in Australia in 2000 (AIHW National Perinatal Statistics Unit 2003). Between 1991 and 2000 the fetal death rate (fetal deaths per 100 relevant births) varied from 2.7% in 1994 to 1.0% in 2000 (Figure 6). There were 4,801 infants born in Australia in 2000, accounting for 1.9% of all births (AIHW National Perinatal Statistics Unit 2003), 472 births in New Zealand and two births where place of birth was not stated.

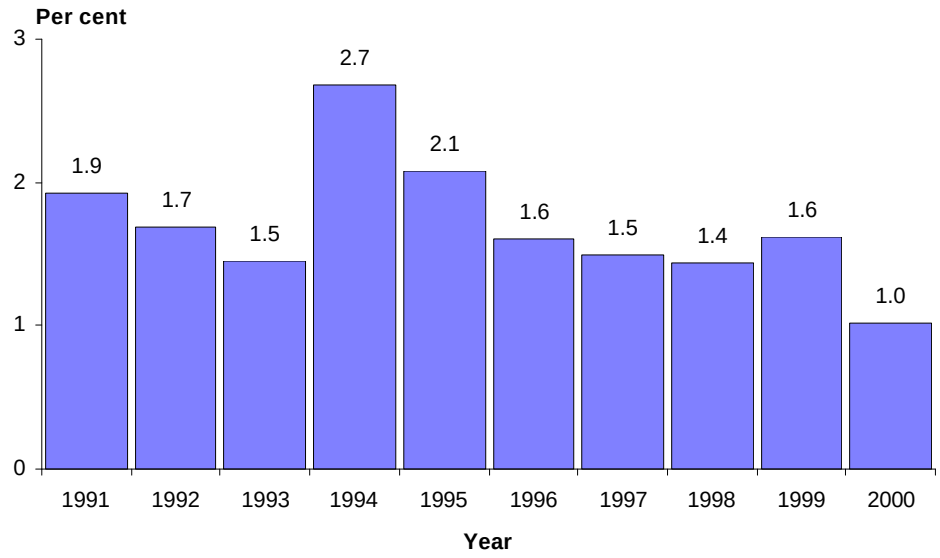


Figure 6: Trend of fetal death rate after assisted conception, 1991–2000

Of all assisted conception births in 2000, there were 3,341 (63.3%) singletons, 1,805 (34.2%) twins, and 129 (2.4%) triplets (Table 55). There was no quadrup

Infant’s gestational age

Preterm birth before 37 weeks gestation accounts for a high proportion of perinatal deaths. Prematurity is associated with many neonatal problems that cause significant

The mean birthweight for infants born after assisted conception was 2,916 g (Table 57), 448 g (13.3%) less than the mean birthweight of 3,364 g for all Australian births in 2000 (AIHW National Perinatal Statistics Unit 2003). The mean birthweight for live births was 2,935 g for assisted conception births (Table 60), compared with 3,377 g for all live births in Australia in 2000 (AIHW National Perinatal Statistics Unit 2003). There were 1,383 (26.4%) assisted conception infants with low birthweight (less than 2,500 g) in 2000 compared with 6.8% for of all births in Australia (AIHW National Perinatal Statistics Unit 2003).

The high incidence of multiple births after assisted conception accounted for much of this difference. In 2000, 947 (22.1%) multiple pregnancies resulted in 1,934 (36.7%) assisted conception infants. The mean birthweights for singleton, twin and triplet assisted conception births were 3,273 g, 2,354 g and 1,531 g respectively (Table 62).

Perinatal mortality

Perinatal deaths include fetal deaths (stillbirths) of at least 20 weeks gestation or 400 g

Tabulation data

Assisted conception pregnancy rates

Table 1: Assisted conception pregnancies, 1992-2001

	Year of treatment									
Stage of treatment	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**
Cycles with oocyte retrieval	12,144	12,050	13,247	13,556	14,337	15,071	15,728	16,461	16,982	18,092
Cycles with embryo/gamete transfer	14,607	15,359	16,966	18,337	20,052	21,330	22,829	24,534	24,915	26,556
Clinical pregnancies	2,560	2,742	3,139	3,253	3,603	3,985	4,350	4,844	5,285	6,513
Viable pregnancies	1,894	2,052	2,341	2,609	2,887	3,243	3,529	3,892	4,469	5,458
Clinical pregnancies per 100 embryo transfer cycles	17.5	17.9	18.5	17.7	18.0	18.7	19.1	19.7	21.2	24.5
Viable pregnancies per 100 embryo/gamete transfer cycles	13.0	13.4	13.8	14.2	14.4	15.2	15.5	15.9	17.9	20.6

Table 2: Assisted conception pregnancies, all methods, 2001

Stage of treatment	**IVF fresh embryos**	**IVF frozen embryos**	**ICSI fresh embryos**	**ICSI frozen embryos**	**GIFT**	**[(a)]All methods**
Treatment cycles commenced	9,308	-	10,802	-	398	-
Cycles with oocyte retrieval	8,027	-	9,709	-	356	18,092
Cycles with embryo / gametes transfer	6,883	4,455	8,627	5,209	341	26,556
Clinical pregnancies	2,074	883	2,528	929	99	6,513
Viable pregnancies	1,673	690	2,066	764	70	5,458
Clinical pregnancies per 100 oocyte retrieval cycles	25.8	-	26.0	-	27.8	-
Viable pregnancies per 100 oocyte retrieval cycles	20.8	-	21.3	-	19.7	-
Clinical pregnancies per 100 embryo transfer cycles	30.1	19.8	29.3	17.8	29.0	24.5
Viable pregnancies per 100 embryo transfer cycles	24.3	15.5	23.9	14.7	20.5	20.6

(a) All methods include donor oocytes/donor embryos transfer cycles.

Table 3: Viable pregnancy rates, assisted conception, 1992–2001

Treatment method or technique	Year of treatment									
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
	Viable pregnancies per 100 transfer cycles									
IVF method	9.4	10.2	11.4	12.4	12.8	14.3	14.7	15.7	18.2	20.8
ICSI method	-	-	16.4	17.5	17.4	19.1	20.3	20.3	22.6	25.9
GIFT method	20.8	20.9	21.7	21.2	22.4	20.7	21.3	18.6	21.9	20.5
Assisted hatching	-	-	9.6	7.0	6.4	6.5	11.5	10.8	16.2	12.3
Blastocyst culture	-	-	-	-	-	-	17.5	27.7	30.4	31.4
Frozen embryos	9.8	9.6	11.3	11.2	11.1	11.8	12.1	12.0	14.2	15.0
Artificial insemination	-	-	-	-	-	-	-	9.6	9.3	7.4

Table 4:

Table 7: Assisted conception pregnancies after transfer of fresh embryos or oocytes, pregnancy rates for grouped IVF units, 2001

Table 8: Assisted conception pregnancies after transfer of thawed embryos, pregnancy rates for grouped IVF units, 2001

Stage of treatment	Q1	Q2	Q3	Q4	Total
IVF treatment cycles					
IVF units (n)	10	10	10	10	40
Cycles with embryo transfer	1,354	1,741	1,242	508	4,845
Clinical pregnancies	385	324	200	60	969
Viable pregnancies	298	265	153	38	754
Clinical pregnancies per 100 embryo transfer cycles	28.4	18.6	16.1	11.8	20.0
Viable pregnancies per 100 embryo transfer cycles	22.0	15.2	12.3	7.5	15.6
ICSI treatment cycles					
IVF units (n)	10	10	10	10	40
Cycles with embryo transfer	1,242	1,701	2,121	406	5,470
Clinical pregnancies	323	312	305	38	978
Viable pregnancies	285	258	239	16	798
Clinical pregnancies per 100 embryo transfer cycles	26.0	18.3	14.4	9.4	17.9
Viable pregnancies per 100 embryo transfer cycles	22.9	15.2	11.3	3.9	14.6

Note: This table represents the success rates in each type of treatments of each IVF unit ranked from the most successful to the least successful in quartiles. Q1 (quartile 1) includes the most successful quarter of all IVF units, and Q4 (quartile 4) includes the least successful quarter of all IVF units.

Table 9: Viable pregnancy rates after IVF, ICSI and GIFT, grouped IVF units, 2001

		Viable pregnancy rates				
Method of conception	**Units (n)**	**Q1**	**Q2**	**Q3**	**Q4**	**Total**
IVF fresh	40	25.5 – 45.0	21.1 – 25.0	13.8 – 21.0	0.0 – 13.8	21.0
IVF frozen	40	17.8 – 30.0	13.8 – 17.6	10.3 – 13.4	0.0 – 10.3	15.6
ICSI fresh	39	25.9 – 40.7	21.1 – 25.3	12.5 – 17.9	0.0 – 12.2	21.3
ICSI frozen	40	19.6 – 50.0	13.6 – 18.9	8.5 – 13.4	0.0 – 6.7	14.6
GIFT	21	31.0 – 100.0	10.0 – 25.0	0.0 – 0.0	0.0 – 0.0	21.5

Note: Viable pregnancy rates are expressed per 100 oocyte retrieval cycles for IVF fresh, ICSI fresh and GIFT cycles and per 100 embryo transfers for IVF frozen and ICSI frozen embryo transfers

Variations in assisted conception, treatment year 2001

Table 10: Oocyte retrieval cycles for IVF, ICSI and GIFT, maternal age, cause of infertility and drugs used to stimulate ovulation, 2001

	Oocyte retrieval cycles attempted					
Characteristic	**IVF**		**ICSI**		**GIFT**	
	Number	**Per cent**	**Number**	**Per cent**	**Number**	**Per cent**
Maternal age (at start of treatment)						
<20	1	0.0	6	0.1	1	0.2
20–24	99	1.2	181	1.9	4	1.0
25–29	937	11.7	1,254	12.8	26	6.2
30–34	2,615	32.6	3,196	32.7	114	27.2
35–39	2,816	35.1	3,298	33.7	155	37.0
40–44	1,419	17.7	1,683	17.2	109	26.0
45+	136	1.7	159	1.6	10	2.4
Not stated	1		-		1	
All ages	**8,024**	**100.0**	**9,777**	**100.0**	**420**	**100.0**
Cause(s) of infertility						
Tubal only	1,808	22.5	436	4.5	18	4.5
Other female only	1,912	23.8	619	6.3	90	22.7
Male factors only	500	6.2	4,846	49.6	63	15.9
Multiple causes	1,451	18.1	2,733	28.0	108	27.3
Unexplained	2,351	29.3	1,143	11.7	117	29.5
Not stated	2		-		24	
All causes	**8,024**	**100.0**	**9,777**	**100.0**	**420**	**100.0**
Ovarian stimulation						
GnRH analogues + other	7,630	95.7	9,201	94.8	351	89.3
No GnRH analogues						
— clomiphene + any other	179	2.2	350	3.6	11	2.8
— other drugs	70	0.9	72	0.7	29	7.4
— natural cycles	91	1.1	82	0.8	2	0.5
Not stated	54		72		27	
Total	**8,024**	**100.0**	**9,777**	**100.0**	**420**	**100.0**

Table 12: Proportions of causes of infertility at time of oocyte retrieval, 1992–2001

Cause of infertility	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Tubal only	31.1	27.0	26.5	20.4	17.7	16.2	15.5	14.9	13.4	12.4
Other female only	15.3	17.3	16.9	17.1	9.6	10.9	12.0	13.2	13.3	14.4
Male factors only	16.4	22.7	22.6	25.1	33.9	33.0	30.5	32.1	30.7	29.7
Multiple causes	16.2	12.8	14.8	16.2	19.4	19.5	23.5	20.3	21.0	23.6
Unexplained	21.0	20.2	19.2	21.2	19.3	20.4	18.4	19.4	21.6	19.8

Table 15: Embryo transfer cycles after cryopreservation, maternal age, cause of infertility and number of embryos transferred, 2001

Characteristic	Frozen embryo transfer cycles					
	IVF		ICSI		Donor oocytes	
	Number	Per cent	Number	Per cent	Number	Per cent
Maternal age (at start of treatment)						
<20	-	-	1	0.0	1	0.2
20–24	46	1.0	124	2.4	16	2.5
25–29	560	12.6	808	15.5	42	6.5
30–34	1,718	38.6	2,078	39.9	88	13.6
35–39	1,604	36.0	1,639	31.5	144	22.3
40–44	482	10.8	545	10.5	196	30.3
45+	42	0.9	16	0.3	159	24.6
Not stated	1		1		2	
All ages	**4,453**	**100.0**	**5,212**	**100.0**	**648**	**100.0**
Cause(s) of infertility						
Tubal only	830	20.7	157	3.3	20	3.3
Other female only	927	23.1	297	6.2	286	47.5
Male factors only	283	7.1	2,306	48.0	50	8.3
Multiple causes	991	24.7	1,503	31.3	177	29.4
Unexplained	983	24.5	543	11.3	69	11.5
Not stated	439		406		46	
All causes	**4,453**	**100.0**	**5,212**	**100.0**	**648**	**100.0**
Number of embryos transferred						
One	1,150	25.9	1,384	26.5	160	24.7
Two	2,896	65.2	3,418	65.5	413	63.7
Three	375	8.4	410	7.9	70	10.8
Four	20	0.5	10	0.2	5	0.8
Five	-	-	-	-	-	-
Six or more	1	0.0	-	-	-	-
Not stated	11		10		-	
All transfer cycles	**4,453**	**100.0**	**5,212**	**100.0**	**648**	**100.0**

Table 16: Distribution of women's ages, at time of transferring frozen embryos, 1997–2001

Age group (years)	Year of treatment				
	1997	1998	1999	2000	2001
	Per cent				
<20	0.1	0.1	0.0	0.0	0.0
20–24	1.8	2.7	1.6	1.6	1.8
25–29	17.5	18.4	16.4	14.8	14.2
30–34	38.0	37.3	37.2	38.1	39.3
35–39	31.8	32.6	33.8	33.7	33.6
40–44	10.3	8.2	10.4	10.8	10.6
45 and over	0.6	0.8	0.6	1.0	0.6
All ages	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Table 17: Proportions of causes of infertility at time of transferring frozen embryos, 1997–2001

	Year of treatment				
Cause of infertility	**1997**	**1998**	**1999**	**2000**	**2001**
	100.0		**Per cent**		
Tubal only	17.4	15.0	15.1	14.4	11.2
Other female only	10.2	11.2	11.9	12.4	13.9
Male factors only	33.0	28.3	29.8	31.9	29.4
Multiple causes	20.4	28.9	22.7	21.4	28.3
Unexplained	19.0	16.7	20.5	19.9	17.3
All causes	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Outcome of pregnancies, methods of assisted conception, treatment year 2000

Table 20: Outcome of pregnancies, 2000

Pregnancy outcome	IVF	ICSI	GIFT	All	IVF	ICSI	GIFT	All
	Number				Per cent			
Stillbirth	20	12	1	33	0.8	0.5	0.4	0.6
Live birth [(a)]	2,017	2,066	170	4,253	78.3	78.8	72.6	78.3
Ectopic pregnancy	66	59	9	134	2.6	2.3	3.8	2.5
Spontaneous abortion	368	382	47	797	14.3	14.6	20.1	14.7
Termination of pregnancy	104	103	7	214	4.0	3.9	3.0	3.9
Not stated	16	18	1	35				
All outcomes	**2,591**	**2,640**	**235**	**5,466**	**100.0**	**100.0**	**100.0**	**100.0**

(a) Multiple pregnancies with both stillbirths and live births are included only in the live-birth category.

Table 21: Place of parental residences, 2000

Place of residence	IVF	ICSI	GIFT	All	IVF	ICSI	GIFT	All
	Number				Per cent			
New South Wales	975	912	28	1,915	37.6	34.7	12.0	35.1
Victoria	564	616	28	1,208	21.8	23.4	12.0	22.1
Queensland	328	393	173	894	12.7	14.9	73.9	16.4
Western Australia	268	182	3	453	10.3	6.9	1.3	8.3
South Australia	142	187	1	330	5.5	7.1	0.4	6.0
Tasmania	28	93	-	121	1.1	3.5	-	2.2
Australian Capital Territory	23	12	-	35	0.9	0.5	-	0.6
Northern Territory	26	21	1	48	1.0	0.8	0.4	0.9
New Zealand	236	215	-	451	9.1	8.2	-	8.3
Not stated/other countries	1	9	1	11				
All regions	**2,591**	**2,640**	**235**	**5,466**	**100.0**	**100.0**	**100.0**	**100.0**

Table 22: Maternal age groups, 2000

Age group (years)	IVF	ICSI	GIFT	All	IVF	ICSI	GIFT	All
	Number				Per cent			
20–24	27	45	-	72	1.0	1.7	-	1.3
25–29	343	453	29	825	13.3	17.2	12.4	15.2
30–34	969	1,001	88	2,058	37.5	38.1	37.8	37.8
35–39	915	868	94	1,877	35.4	33.0	40.3	34.5
40–44	287	232	22	541	11.1	8.8	9.4	9.9
45 and over	42	28	-	70	1.6	1.1	-	1.3
Not stated	8	13	2	23				
All ages	**2,591**	**2,640**	**235**	**5,466**	**100.0**	**100.0**	**100.0**	**100.0**

Table 23: Paternal age groups, 2000

Age group (years)	IVF	ICSI	GIFT	All	IVF	ICSI	GIFT	All
	Number				Per cent			
Less than 20	-	1	-	1	-	0.0	-	0.0
20–24	13	15	-	28	0.5	0.6	-	0.5
25–29	241	210	17	468	9.5	8.1	7.6	8.7
30–34	745	719	63	1,527	29.2	27.6	28.1	28.4
35–39	901	817	90	1,808	35.3	31.3	40.2	33.6
40–44	436	469	38	943	17.1	18.0	17.0	17.5
45 and over	213	377	16	606	8.4	14.5	7.1	11.3
Not stated/single female	42	32	11	85				
All ages	**2,591**	**2,640**	**235**	**5,466**	**100.0**	**100.0**	**100.0**	**100.0**

Table 24: Previous pregnancies of women, 2000

Number of previous pregnancies	IVF	ICSI	GIFT	All	IVF	ICSI	GIFT	All
	Number				Per cent			
None	1,214	1,485	108	2,807	46.9	56.3	46.0	51.4
One	688	692	79	1,459	26.6	26.2	33.6	26.7
Two	355	282	28	665	13.7	10.7	11.9	12.2
Three	186	102	7	295	7.2	3.9	3.0	5.4
Four or more	148	79	13	240	5.7	3.0	5.5	4.4
All pregnancies	**2,591**	**2,640**	**235**	**5,466**	**100.0**	**100.0**	**100.0**	**100.0**

Table 25:

Table 31: Reported obstetric complications, 2000

Pregnancy complications	IVF	ICSI	GIFT	All	
			Number		
None	1,982	2,071	183	4,236	
Threatened abortion	36	30	8	74	
Antepartum haemorrhage	26	22	2	50	
Pregnancy-induced hypertension	105	104	6	215	
Placenta praevia	44	30	2	76	1.
Other complications	398	383	34	815	15.4
All pregnancies	**2,591**	**2,640**			

Table 32:

2,5 at least

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Outcome of pregnancies, causes of infertility, treatment year 2000

Table 34: Outcome of pregnancies by causes of infertility, 2000

Outcome of pregnancy	Causes of infertility						
	Tubal	Male	Endometriosis	Other specified	Multiple	Unexplained	All causes[(b)]
				Number			
Stillbirth	6	5	2	4	8	8	33
Live birth[(a)]	468	1,319	303	493	1,050	619	4,253
Ectopic pregnancy	22	34	9	19	36	14	134
Spontaneous abortion	91	236	56	97	197	120	797
Termination of pregnancy	25	61	12	27	55	34	214
Not stated	4	12	2	4	9	4	35
All outcomes	**616**	**1,667**	**384**	**644**	**1,355**	**799**	**5,466**
				Per cent			
Stillbirth	1.0	0.3	0.5	0.6	0.6	1.0	0.6
Live birth[(a)]	76.5	79.7	79.3	77.0	78.0	77.9	78.3
Ectopic pregnancy	3.6	2.1	2.4	3.0	2.7	1.8	2.5
Spontaneous abortion	14.9	14.3	14.7	15.2	14.6	15.1	14.7
Termination of pregnancy	4.1	3.7	3.1	4.2	4.1	4.3	3.9
All outcomes	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

(a) Multiple pregnancies with both stillbirths and live births are included only in the live-birth category.
(b) Includes 1 pregnancy with 'not stated' causes of infertility.

Table 35:

Table 36:

Outcome of pregnancies, maternal ages, treatment year 2000

Table 37: Outcome of pregnancies by maternal ages, 2000

Outcome of pregnancy	Maternal age (years)						
	Less than 25	25–29	30–34	35–39	40–44	45 and over	All ages[(b)]
				Number			
Stillbirth	1	5	11	13	3	-	33
Live birth[(a)]	63	660	1,691	1,446	327	46	4,253
Ectopic pregnancy	-	16	50	54	13	1	134
Spontaneous abortion	5	115	237	278	142	20	797
Termination of pregnancy	2	21	58	76	53	2	214
Not stated	1	8	11	10	3	1	35
All outcomes	**72**	**825**	**2,058**	**1,877**	**541**	**70**	**5,466**
				Per cent			
Stillbirth	1.4	0.6	0.5	0.7	0.6	-	0.6
Live birth[(a)]	88.7	80.8	82.6	77.5	60.8	66.7	78.3
Ectopic pregnancy	-	2.0	2.4	2.9	2.4	1.4	2.5
Spontaneous abortion	7.0	14.1	11.6	14.9	26.4	29.0	14.7
Termination of pregnancy	2.8	2.6	2.8	4.1	9.9	2.9	3.9
All outcomes	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

(a) Multiple pregnancies with both stillbirths and live births are included only in the live-birth category.
(b) Includes 23 pregnancies with 'not stated' maternal age.

Table 38: Causes of infertility by maternal ages, 2000

Causes of infertility	Less than 25	25–29	30–34	35–39	40–44	45 and over	All ages[(b)]
Tubal	4	73	221	235	73	6	616
Male factor	35	304	633	554	124	11	1667
Endometriosis	4	57					

Table 39: Number of embryos or oocytes transferred by maternal ages, 2000

Number of embryos / oocytes transferred	Maternal age (years)						
	Less than 25	25–29	30–34	35–39	40–44	45 and over	All ages[(a)]
				Number			
One	2	55	197	157	57	7	477
Two	63	690	1,608	1,272	279	44	3,967
Three	7	73	229	405	169	17	910
Four	-	1	12	32	29	1	75
Five or more	-	5	10	8	6	1	30
Not stated	-	1	2	3	1	-	7
All pregnancies	**72**	**825**	**2,058**	**1,877**	**541**	**70**	**5,466**
				Per cent			
One	2.8	6.7	9.6	8.4	10.6	10.0	8.7
Two	87.5	83.7	78.2	67.9	51.7	62.9	72.7
Three	9.7	8.9	11.1	21.6	31.3	24.3	16.7
Four	-	0.1	0.6	1.7	5.4	1.4	1.4
Five or more	-	0.6	0.5	0.4	1.1	1.4	0.5
All pregnancies	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Mean number	2.1	2.1	2.1	2.2	2.4	2.3	2.2

(a) Includes 23 pregnancies with 'not stated' maternal age.

Table 40: Duration of pregnancies by maternal ages, at least 20 weeks gestation, 2000

Duration of pregnancy (weeks)	Maternal age (years)						
	Less than 25	25–29	30–34	35–39	40–44	45 and over	All ages[(a)]
				Number			
20–27	3	22	31	47	10	1	114
28–31	3	21	55	37	6	2	125
32–36	11	146	350	257	49	15	832
37 or more	47	477	1,251	1,112	266	28	3,196
Not stated	2	23	53	46	17	-	142
All pregnancies	**66**	**689**	**1,740**	**1,499**	**348**	**46**	**4,409**
20–36	17	189	436	341	65	18	1,071
				Per cent			
20–27	4.7	3.3	1.8	3.2	3.0	2.2	2.7
28–31	4.7	3.2	3.3	2.5	1.8	4.3	2.9
32–36	17.2	21.9	20.7	17.7	14.8	32.6	19.5
37 or more	73.4	71.6	74.2	76.5	80.4	60.9	74.9
All pregnancies	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
20–36	26.6	27.5	25.1	22.8	18.8	40.9	24.3

(a) Includes 21 pregnancies with 'not stated' maternal age.

Table 41: Methods of delivery by maternal ages, at least 20 weeks gestation, 2000

	Maternal age (years)						
Method of delivery	**Less than 25**	**25–29**	**30–34**	**35–39**	**40–44**	**45 and over**	**All ages[(a)]**
				Number			
Vaginal	40	364	945	775	133	9	2,276
Caesarean section	24	300	747	681	193	37	1,991
Not stated / not applicable	2	25	48	43	22	-	142
All methods	**66**	**689**	**1,740**	**1,499**	**348**	**46**	**4,409**
				Per cent			
Vaginal	62.5	54.8	55.9	53.2	40.8	19.6	53.3
Caesarean section	37.5	45.2	44.1	46.8	59.2	80.4	46.7
All methods	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

(a) Includes 21 pregnancies with 'not stated' maternal age.

Table 42: Plurality of pregnancies by maternal ages, at least 20 weeks gestation, 2000

Plurality	**Less than 25**	**25–29**	**30–34**	**35–39**	**40–44**	**45 and over**	**All ages[(a)]**
Singleton	50	493	1,307	1,157	286	31	3,340
Twin	12	170	371	292	41	13	902
Triplet	2	4	21	11	2	2	43
Not stated / not applicable	2	22	41	39	19	-	124
All pregnancies	**66**	**689**	**1,740**	**1,499**	**348**	**46**	**4,409**
				Per cent			
Singleton	78.1	73.9	76.9	79.2	86.9	67.4	77.9
Twin	18.8	25.5	21.8	20.0	12.5	28.3	21.1
Triplet	3.1	0.6	1.2	0.8	0.6	4.3	1.01.0T

Outcome of pregnancies, number of embryos or oocytes transferred, treatment year 2000

Table 43: Outcome of pregnancies by number of embryos or oocytes transferred, 2000

Outcome of pregnancy	1	2	3	4	5+	All pregnancies[(b)]
Stillbirth	2	23	8	-	-	33
Live birth[(a)]	377	3,124	678	49	21	4,253
Ectopic pregnancy	11	96	23	3	-	134
Spontaneous abortion	66	549	156	18	7	797
Termination of pregnancy	18	152	39	5	-	214
Not stated	3	23	6	-	2	35
All outcomes	**477**	**3,967**	**910**	**75**	**30**	**5,466**
				Per cent		
Stillbirth	0.4	0.6	0.9	-	-	0.6
Live birth[(a)]	79.5	79.2	75.0	65.3	75.0	78.3
Ectopic pregnancy	2.3	2 TD (0.6)pregnancy				

Spontaneou 1 0 0 1 126.4 TD 0.037 Tc Tc (-) Ti 41.6279 0 TD (-)496 Tc (0.6) Ti -398.7644510.70Tw TD 0.0162 Tc 0.0273 Tw (Spontaneous abortion) Ti 14

Table 45: Gestational ages by number of embryos or oocytes transferred, at least 20 weeks gestation, 2000

	Number of embryos or oocytes transferred					
Gestational age (weeks)	**1**	**2**	**3**	**4**	**5+**	**All pregnancies[(a)]**
				Number		
20–27	5	80	24	4	1	114
28–31	5	90	28	1	-	125
32–36	48	618	137	22	7	832
37 or more	317	2,351	493	22	10	3,196
20–36	58	788	189	27	8	1,071
Not stated	15	98	20	2	6	142
All pregnancies	**390**	**3,237**	**702**	**51**	**24**	**4,409**
				Per cent		
20–27	1.3	2.5	3.5	8.2	5.6	2.7
28–31	1.3	2.9	4.1	2.0	-	2.9
32–36	12.8	19.7	20.1	44.9	38.9	19.5
37 or more	84.5	74.9	72.3	44.9	55.6	74.9
20–36	15.5	25.1	27.7	55.1	44.4	25.1
All pregnancies	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

(a) Includes 5 pregnancies with 'not stated' number of embryos or oocytes transferred.

Table 46: Plurality of pregnancies by number of embryos or oocytes transferred, at least 20 weeks gestation, 2000

	Number of embryos or oocytes transferred					
Plurality	**1**	**2**	**3**	**4**	**5+**	**All pregnancies[(a)]**
				Number		
Singleton	370	2,428	490	33	16	3,340
Twin	8	703	171	14	5	902
Triplet	-	17	24	2	-	43
Not stated / not applicable	12	89	17	2	3	124
All pregnancies	**390**	**3,237**	**702**	**51**	**24**	**4,409**
				Per cent		
Singleton	97.9	77.1	71.5	67.3	76.2	77.9
Twin	2.1	22.3	25.0	28.6	23.8	21.1
Triplet	-	0.5	3.5	4.1	-	1.0
All pregnancies	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

(a) Includes 5 pregnancies with 'not stated' number of embryos or oocytes transferred.

Outcome of pregnancies, other characteristics, treatment year 2000

Table 47: Women hospitalised for ovarian hyperstimulation syndrome (OHSS) by number of oocytes collected, 2000

	Number of oocytes collected

Table 50: Heterotopic pregnancies, 1979–2000

Outcome of pregnancy	1979–97	1998	1999	2000
		Number		
Heterotopic- abortion	104	8	4	4
Heterotopic- birth	64	2	3	2
All heterotopic pregnancies	**168**	**10**	**7**	**6**
Clinical pregnancies	31,173	4,460	4,952	5,466
		Per cent		
Heterotopic- abortion	0.3	0.2	0.1	0.1
Heterotopic- birth	0.2	0.0	0.1	0.0
All heterotopic pregnancies	**0.5**	**0.2**	**0.1**	**0.1**

Table 51: Methods of delivery for singleton and multiple pregnancies, at least 20 weeks gestation, 2000

	Method of delivery				
Plurality	Vaginal		Caesarean section		All methods[(a)]
	Number	Per cent	Number	Per cent	Number
Singleton	1,991	59.8	1,337	40.2	3,340
Twin	283	31.5	614	68.5	902
Triplet	2	4.8	40	95.2	43
All pregnancies	**2,276**	**53.3**	**1,991**	**46.7**	**4,285**

(a) Includes 18 pregnancies in which the method of delivery was not stated.

Table 52: Place of parental residences for singleton and multiple pregnancies, at least 20 weeks gestation, 2000

Plurality	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia	New Zealand
Singleton	1,141	797	499	269	212	77	21	33	3,049	288
Twin	337	176	144	75	50	20	7	4	813	86
Triplet	10	6	11	7	3	1	1	-	39	4

All48 re h .989786 q 486.84 9.24 8.897.88 re29.1426 q 486(65488 re29.1426 q 486(1 488 re29.1426 q 486 310.32 9.24 6re h W331i

Outcome of births, treatment year 2000

Data in this section are all births resulting from assisted conception treatment, at least 20 weeks gestation or 400 g birthweight.

Table 54: Outcome of births, singleton and multiple births, 2000

Outcome	Singleton	Twin	Triplet	All births
Live births[(a)]	3,322	1,774	125	5,221
Stillbirths	19	31	4	54
All births	**3,341**	**1,805**	**129**	**5,275**
Neonatal deaths	20	31	4	55
Perinatal deaths	39	62	8	109
Stillbirths per 1,000 births	5.7	17.2	31.0	10.2
Neonatal deaths per 1,000 births	6.0	17.2	31.0	10.4
Perinatal deaths per 1,000 births	11.7	34.3	62.0	20.7

(a) Live births include births for which birth status was not stated.

Table 55: Sex of infants by singleton and multiple births, methods of assisted conception, 2000

Plurality	IVF	ICSI	GIFT	All	IVF	ICSI	GIFT	All
	Number				Per cent			
Male								
Singleton	867	796	67	1,730	64.7	64.1	56.3	64.1
Twins	443	421	45	909	33.1	33.9	37.8	33.7
Triplets	29	24	7	60	2.2	1.9	5.9	2.2
All males	**1,339**	**1,241**	**119**	**2,699**	**100.0**	**100.0**	**100.0**	**100.0**
	Number				Per cent			
Female								
Singleton	724	827	56	1,607	62.4	63.4	52.8	62.5
Twins	406	450	39	895	35.0	34.5	36.8	34.8
Triplets	31	27	11	69	2.7	2.1	10.4	2.7
All female	**1,161**	**1,304**	**106**	**2,571**	**100.0**	**100.0**	**100.0**	**100.0**
	Number				Per cent			
Singleton	1,593	1,625	123	3,341	63.7	63.8	54.7	63.3
Twins	849	872	84	1,805	33.9	34.2	37.3	34.2
Triplets	60	51	18	129	2.4	2.0	8.0	2.4
All births	**2,502**	**2,548**	**225**	**5,275**	**100.0**	**100.0**	**100.0**	**100.0**
	Sex ratio (M:F)							
Singleton	119.8	96.3	119.6	107.7				
Twins	109.1	93.6	115.4	101.6				
Triplets	93.5	88.9	63.6	87.0				
All births	**115.3**	**95.2**	**112.3**	**105.0**				

Note: Infant's sex was not stated for 5 births in 2000.

Table 56: Gestational age of infants, methods of assisted conception, 2000

Gestational age (weeks)	IVF	ICSI	GIFT	All	IVF	ICSI	GIFT	All
20–27	85	69	9	163	3.4	2.7	4.0	3.1
28–31	108	114	7	229	4.3	4.5	3.1	4.4

Table 59: Gestational age of infants, live births and stillbirths, 2000

Table 62: Birthweight of infants, singleton and multiple births, 2000

Birthweight (g)	Singleton	Twin	Triplet	All births	Singleton	Twin	Triplet	All births
	Number				Per cent			
Less than 500	11	20	3	34	0.3	1.1	2.3	0.6
500–999	29	68	19	116	0.9	3.8	14.7	2.2
1000–1499	28	98	40	166	0.8	5.5	31.0	3.2
1500–1999	58	232	42	332	1.7	13.0	32.6	6.3
2000–2499	180	537	18	735	5.4	30.0	14.0	14.0
2500–2999	549	598	7	1,154	16.5	33.4	5.4	22.0
3000–3499	1,222	211	-	1,433	36.8	11.8	-	27.3
3500–3999	921	23	-	944	27.7	1.3	-	18.0
4000 and over	327	3	-	330	9.8	0.2	-	6.3
Less than 2500	306	955	122	1,383	9.2	53.4	94.6	26.4
Not stated	16	15	-	31				
All births	**3,341**	**1,805**	**129**	**5,275**	**100.0**	**100.0**	**100.0**	**100.0**
Mean birthweight (g)	3,273	2,354	1,531	2,916				

Table 63: Perinatal deaths by methods of assisted conception, 2000

Method	All births[(a)]

Table 65:

Assisted conception confinements and births, at least 20 weeks gestation or 400 games birthweight, Australia, 2000

Data extracted from assisted conception database for all births, at least 20 weeks gestation,

Table 70: Singleton and multiple confinements, states and territories, 2000

Plurality	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia	New Zealand
Singleton	1,061	750	415	265	211	71	29	37	2,839	257
Twin	317	160	117	68	63	13	4	3	745	84
Triplet or higher order	11	11	16	3	5	1	2	-	49	5
All confinements	**1,389**	**921**	**548**	**336**	**279**	**85**	**35**	**40**	**3,633**	**346**
Singleton	76.4	81.4	75.7	78.9	75.6	83.5	82.9	92.5	78.1	74.3
Twin	22.8	17.4	21.4	20.2	22.6	15.3	11.4	7.5	20.5	24.3
Triplet or higher order	0.8	1.2	2.9	0.9	1.8	1.2	5.7	-	1.3	1.4
All confinements	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**		

References

Definitions and glossary

Artificial insemination (AI): [illegible]n, [illegible] semen or [illegible] spermatozoa, into the vagina, [illegible] Fallopian tube, to aid ferti[illegible] male partner's sperm (AIH) o[illegible] (DI) can be used.

AIH: Artificial insemination ([illegible]s (sperm).

Assisted hatching: An in-vitr[illegible] micromanipulation in which a sm[illegible] opening is made in the zona p[illegible]he embryo to help the blastocyst e[illegible] prior to implantation.

Biochemical pregnancy: The [illegible] pregnancy is derived only from rai[illegible] levels of serum β human chor[illegible]otrophin (βhCG), but without any s[illegible] gestational sac on ultrasound [illegible]bsence of chorionic villi if curettage[illegible] done.

Blastocyst: Stage of developm[illegible]mbryos about 5-6 days after fertilisa[illegible]

Clinical pregnancy: Any type[illegible]cy except that diagnosed only by measuring levels of human ch[illegible]adotrophin. This definition includes[illegible] pregnancy, blighted ovum an[illegible]us abortion.

Clinical pregnancy rate: The [illegible]f treatment cycles that result in a cl[illegible] pregnancy, including ectopic [illegible], spontaneous and induced abortio[illegible] viable pregnancies of at least [illegible]station but excluding biochemical pregnancies. Pregnancy rates [illegible]expressed per 100 treatment cycles commenced, or per 100 cycles [illegible]e stage of attempted oocyte retrieva[illegible] embryo transfer.

Conception cohort: emt9posy [illegible] 7.76 -123.46 11.04 Tf -0.016 Tc -0.10 [illegible]nical pregnanc Blast9.46 [illegible] pis76 Tf -0.0154 0 -c.04I) -0.014i Tj [illegible] 0f.7onbryw (-)

Embryo transfer cycle: The transfer of one or more embryos to the uterus or fallopian tube.

Fertilisation: The penetration of the ovum by the spermatozoon and fusion of genetic materials resulting in the development of a zygote.

Fetal death (stillbirth): Death prior to the complete expulsion or extraction from its mother of a product of conception of 20 or more completed weeks of gestation or of 400 g or more birthweight; the death is indicated by the fact that after such separation the fetus does not breathe or show any other evidence of life, such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles.

Fetus: The product of conception starting from completion of embryonic development (at 8 completed weeks after fertilisation) until birth or abortion.

Fresh embryo: Fresh embryos result from fertilisation in laboratory of oocytes collected by aspiration from ovarian follicles. These embryos are subsequently transferred within several days to the uterus or fallopian tube.

Frozen embryo: Freezing (cryopreservation) of fresh embryos produces frozen embryos which are subsequently thawed prior to transfer to the uterus or fallopian tube.

Full-term birth: A birth that takes place at 37 or more completed week of gestational age. This includes both live births and stillbirths.

Gamete intrafallopian transfer (GIFT): An assisted conception procedure in which unfertilised eggs plus sperm (i.e. gametes) are transferred to the fallopian tube, so that fertilisation occurs in the normal place.

Hatching: It is the process that precedes implantation by which an embryo at the blastocyst stage separates from the zona pellucida.

Heterotopic pregnancy: Heterotopic pregnancies are those in which there is both a uterine and tubal (ectopic) pregnancy simultaneously. The uterine pregnancy may abort or continue to a birth.

In-vitro fertilisation (IVF): Fertilisation of the egg by a sperm in-vitro, i.e. in the
It is 4 pregnancy sik29 Tc 0 Tw (-) Tj 3.72 0 TD nrsta eTj 38.64 0 TD-29.76b5D /F6 11s(lised egg7 Tw (

Microepididymal sperm aspiration (MESA): Use of microsurgery to dissect the epididymis to find motile sperm cells suitable to be aspirated, isolated and prepared for ICSI.

Neonatal death: A death of a liveborn infant within 28 days of birth.

Newborns or infants born: The number of live births plus stillbirths.

Oocyte: An unfertilised egg (ovum).

Perinatal death: A perinatal death is a fetal death of at least 20 weeks gestation or at least 400 g birthweight or a neonatal death.

Postneonatal death: A death of a liveborn infant more than 28 days after birth but within the first year (expressed as a rate per 1,000 live births).

Pregnancy rate: See 'clinical pregnancy rate' and 'viable pregnancy rate'.

Pre-implantation genetic diagnosis (PGD): Screening of cells from pre-implantation embryos for the detection of genetic and / or chromosomal disorders before embryo transfer.

Preterm birth: A liveborn or stillborn infant of at least 20 but less than 37 weeks gestation.

Spontaneous abortion: Loss of an intrauterine pregnancy detected clinically or by ultrasound, and less than 20 weeks gestation (from the first day of the last menstrual period).

Stillbirth: A birth in which the fetus does not exhibit any sign of life when completely removed or expelled from the birth canal at or above 20 weeks gestation.

Subzonal insemination (SUZI): An IVF technique involving sperm microinjection, in which one or more sperm are injected through the zona pellucida into the perivitelline space of the oocyte.

Testicular sperm aspiration (TESA): Procedure in which spermatozoa are obtained directly from testicle(s), by either aspiration or surgical excision testicular tissue.

Testicular sperm extraction (TESE): Dissection into the testis itself to recover immature sperm cells from the (often small) fraction of testicular tubules there which still contain such cells, for use with ICSI.

Thawed embryo: See 'frozen embryo'.

Treatment cycle: Procedure for collecting eggs (oocytes), usually after ovarian stimulation, involving the passing of a needle into a mature follicle either directly at laparoscopy or (more usually) via the vagina guided by transvaginal ultrasound.

Viable pregnancy rate: The percentage of treatment cycles that result in a viable pregnancy of at least 20 weeks gestation, most commonly expressed per 100 attempted oocyte retrievals (egg collections). A multiple pregnancy is counted as one pregnancy. Pregnancies resulting in live births and / or stillbirths are included.

Zygote intrafallopian transfer (ZIFT): Procedure in which the zygote, in its pronuclear stage of development, is transferred into the fallopian tube.

Zygote: The diploid cell, resulting from the fertilisation of an oocyte by a spermatozoon, which subsequently develops into an embryo.