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Assisted Conception Australia and New Zealand 1992 and 1993

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Collaborating IVF and GIFT units

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Abbreviations

NSW	-	New South Wales
Vic	-	Victoria
Qld	-	Queensland
WA	-	Western Australia
SA	-	South Australia
Tas	-	Tasmania
ACT	-	Australian Capital Territory
NT	-	Northern Territory
AIHW	-	Australian Institute of Health and Welfare
GIFT	-	gamete intrafallopian transfer
GnRHa	-	gonadotrophin-releasing hormone analogues
hCG	-	human chorionic gonadotrophin
ICSI	-	intracytoplasmic sperm injection
IVF	-	in-vitro fertilisation
na	-	not available
PROST	-	pronuclear stage tranfer
PZD	-	partial zona dissection
SUZI	-	subzonal insemination
TEST	-	tubal embryo stage transfer
ZIFT	-	zygote intrafallopian transfer

Highlights

- In 1992 and 1993, infertile couples were treated by in-vitro fertilisation (IVF) and gamete intrafallopian transfer (GIFT) in 23 IVF units in Australia and 5 in New Zealand. In Australia, this treatment resulted in 2,237 births after assisted conception in 1992 and 2,361 births in 1993. In New Zealand, there were 107 births after treatment in 1992 and 123 births in 1993.

- The total number of treatment cycles increased from 16,809 in 1991 to 17,874 in 1992 and 18,765 in 1993. After transfer of fresh embryos to the uterus, the live-birth pregnancy rate was 8.5 per 100 oocyte retrieval cycles in 1992 and 9.5 per 100 in 1993; after transfer of fresh embryos to the fallopian tubes, the live-birth pregnancy rates were 9.2 per 100 in 1992 and 12.4 per 100 in 1993; and after GIFT, the live-birth pregnancy rates were 20.4 per 100 in 1992 and 20.8 per 100 oocyte retrieval cycles in 1993. After embryo freezing, the live-birth pregnancy rates were 9.8 and 9.6 per 100 embryo transfer cycles in 1992 and 1993, respectively.

- Relatively more couples with infertility due to male factors were treated by IVF in 1992 and 1993 than in previous years. The use of various techniques of microinsemination (mainly subzonal insemination and intracytoplasmic sperm injection) increased markedly from 393 cycles in 1991 to 812 cycles in 1992 and 1,243 cycles in 1993. Eleven IVF units were using these techniques in 1992 and 1993.

- After oocyte donation and IVF, the live-birth pregnancy rates were 12.7 per 100 embryo transfer cycles in 1992 and 14.0 per 100 cycles in 1993.

- The proportion of IVF treatment cycles in which more than 3 embryos were transferred declined from 5.3% in 1991 to 4.3% in 1992 and 2.6% in 1993. GIFT treatment cycles in which more than 3 oocytes were transferred declined from 11.0% in 1991 to 6.5% in 1992 and 4.7% in 1993.

- In IVF pregnancies, multiple pregnancy occurred in 17.6% in 1992 (15.9% twins and 1.7% triplets) and in 17.3% in 1993 (15.7% twins, 1.5% triplets, and 1 quadruplet pregnancy). In GIFT pregnancies, there were 27.1% multiple pregnancies in 1992 (23.5% twins and 3.5% triplets) and 24.2% multiple pregnancies in 1993 (21.5% twins, 2.4% triplets, and 1 quadruplet and 1 quintuplet pregnancies).

- The perinatal death rates in 1992-1993 were 31.6 per 1,000 births for IVF and 29.0 per 1,000 births for GIFT. Multiple births accounted for 47.8% of 90 perinatal deaths after IVF and 81.4% of 59 perinatal deaths after GIFT in these years.

- Among 244 IVF pregnancies after microinsemination in the period from 1990 to 1993, live births occurred in 74.6%, spontaneous abortion in 21.3%, and ectopic pregnancy in 2.5%. Except for fewer ectopic pregnancies after microinsemination, these outcomes were similar to those for all IVF pregnancies. Among 218 births after microinsemination, the perinatal death rate was 9.2 per 1,000 births and major congenital malformations were reported in 7 fetuses and infants (3.2%).

1 Introduction

This report contains a summary of the results of treatment of infertility by assisted conception in all units in Australia and New Zealand in 1992 and 1993. It includes data on in-vitro fertilisation (IVF), gamete intrafallopian transfer (GIFT), and the newer techniques of microinsemination that are used to treat male infertility, but excludes other treatment of infertility by artificial insemination or by ovulation induction without IVF or GIFT.

In 1992, there were 22 IVF or GIFT units in Australia and 5 in New Zealand. A third unit in Western Australia (Perth Andrology) began IVF treatment in 1992. An additional IVF unit in Victoria (Mildura Reproductive Medicine Unit) began treatment in 1993. Some IVF units have set up satellite clinics that are linked to major IVF centres in capital cities. The following IVF units have provided information on their satellite clinics (and the period when they commenced activities): Sydney IVF- Orange (1993), Coffs Harbour (1994), and Wollongong (1994); Monash IVF - Geelong (March 1990), Ballarat (June 1991), Shepparton (December 1991), Sale (April 1992), Morwell (October 1992), Bendigo (November 1992), and Wangaratta (May 1995); Queensland Fertility Group - Mackay (April 1987), Currumbin (September 1989, but discontinued in 1990), and Townsville (March 1992); Queensland IVF Services - Townsville (March 1992); Queen Elizabeth Hospital, Adelaide - Darwin.

The IVF units reported summary data on treatment cycles and also notified each pregnancy on a standard form (Appendix 2). The data included the number of cycles commenced in 1992 and 1993 and the number progressing to the stages of oocyte retrieval, embryo transfer, clinical pregnancy and live birth. Each IVF unit reported separate results for IVF with uterine transfer of fresh embryos, IVF with tubal transfer of fresh embryos, IVF with transfer of frozen/thawed embryos, donor oocytes, various techniques of microinsemination and GIFT. The tables on treatment cycles are mutually exclusive and so differ slightly from the presentation of IVF results in reports for the years prior to 1991. Each IVF unit was also requested to provide tabulated data on the age distribution, causes of infertility, drugs used to stimulate ovulation, and the number of embryos or oocytes transferred for women treated by IVF and uterine transfer, IVF and tubal transfer, and GIFT. Tabulated summaries of results and computer printouts of notified pregnancies were returned to each unit to check their accuracy and completeness.

Each IVF unit is designated by an alphabetical letter which may differ from that given for the unit in previous reports. As the relative size of IVF units (based on the total number of treatment cycles) may vary from year to year, IVF units may be designated by different letters for 1992 and 1993 in this report.

As noted in the report for 1991, cumulative pregnancy rates can be derived by taking account of all pregnancies that result from the same ovarian stimulation cycle. The numerator then includes pregnancies after transfer of fresh embryos in the initial stimulation cycle and any additional pregnancies occurring after transfer of embryos that were frozen after the same stimulation cycle. The denominator is based on the number of stimulation cycles that subsequently resulted in transfer of fresh or frozen embryos. To obtain cumulative pregnancy rates, it is necessary to have information on successive cycles of treatment and their outcome for each treated woman. This can be done using identified records in each IVF unit. Strict criteria on the number of treatment cycles within a specified period after the initial stimulation cycle would be needed to obtain accurate national data. Pilot studies in several IVF units are required to show the practical feasibility of reporting cumulative pregnancy rates.

All analyses of treatment cycles and pregnancy outcome in the report are based on the year of treatment and conception and so include births up to September 1994.

2 Treatment cycles and pregnancy rates

As in previous reports, clinical pregnancies and pregnancies resulting in one or more live births are expressed as rates per 100 treatment cycles that reach the stage of oocyte retrieval. In treatment cycles in which embryos were transferred after embryo freezing or oocyte donation, pregnancy rates are expressed per 100 embryo transfer cycles.

The total number of treatment cycles increased from 16,809 in 1991 to 17,874 in 1992 and 18,765 in 1993. This represented an increase of 6.3% between 1991 and 1992 and 5.0% increase between 1992 and 1993.

In 1992, 7,564 treatment cycles were commenced for IVF with a view to subsequent transfer of fresh embryos to the uterus (Table 1). Oocyte retrieval was attempted in 6,638 cycles and embryos were transferred in 5,549 cycles. There were 816 clinical pregnancies (12.3 per 100 oocyte retrieval cycles) and 565 pregnancies with live births (8.5 per 100 oocyte retrieval cycles). An additional 910 treatment cycles were commenced for tubal transfer of embryos after IVF (Table 2). These resulted in 109 clinical pregnancies (12.6 per 100 oocyte retrieval cycles) and 79 pregnancies with live births (9.2 per 100 oocyte retrieval cycles). There were marked variations in pregnancy rates among the individual IVF units. This may be partly attributable to differences in selection criteria, methods of treatment, and the characteristics of infertile couples, or to random fluctuations due to the relatively small number of treatment cycles in some IVF units.

There were 4,342 GIFT cycles commenced in 1992 (Table 3), similar to the 4,372 cycles in 1991. These resulted in 1,042 clinical pregnancies (27.2 per 100 oocyte retrieval cycles) and 780 pregnancies with live births (20.4 per 100 oocyte retrieval cycles).

Embryo freezing was used in 25 IVF units in 1992 (Table 4). The number of embryo transfer cycles increased from 3,207 in 1991 to 3,813 in 1992. There were 513 clinical pregnancies (13.5 per 100 embryo transfer cycles) and 373 pregnancies with live births (9.8 per 100 embryo transfer cycles).

IVF treatment cycles that followed use of donor oocytes increased from 293 in 1991 to 331 in 1992 (Table 5), resulting in 55 clinical pregnancies (16.6 per 100 embryo transfer cycles) and 42 pregnancies with live births (12.7 per 100 embryo transfer cycles).

Combined IVF and GIFT were used in 37 oocyte retrieval cycles in one IVF unit. There were 6 clinical pregnancies but none resulted in live births.

Most IVF units provided data on the age of treated women, causes of infertility, drugs used for ovarian stimulation, and the number of embryos or oocytes transferred for those women who reached the stage of oocyte retrieval in a treatment cycle. Separate data were given for three groups - IVF with transfer of embryos to the uterus, IVF with transfer to the fallopian tubes, and GIFT (Tables 6 and 7). Women treated by IVF with uterine transfer in 1992 tended to be slightly older than those in the other two groups and had a higher proportion aged 35-39 years, similar to the pattern in 1991. Women with tubal causes of infertility were usually treated by IVF with uterine transfer. Infertility due to male factors was relatively more common among women treated by IVF and tubal transfer; unexplained infertility was the main causal group among women treated by GIFT. Gonadotrophin-releasing hormone analogues (GnRHa) combined with gonadotrophins were used to stimulate ovulation in the majority of treatment cycles for all three groups of women. More than three oocytes were transferred in 6.5% of GIFT cycles and more than three embryos were transferred in 4.6% of uterine IVF cycles and in 2.3% of tubal IVF cycles (Table 7). These proportions were lower than in 1991 when they were 5.6%, 3.5% and 11.0%, respectively, in the three groups of treated women.

In 1993, 7,709 treatment cycles were commenced for IVF and subsequent transfer of fresh embryos to the uterus (Table 8). There were 876 clinical pregnancies (13.3 per 100 oocyte retrieval cycles) and 626 pregnancies with live births (9.5 per 100 oocyte retrieval cycles). In 588 treatment cycles commenced for tubal transfer of embryos, there were 93 clinical pregnancies (17.2 per 100 oocyte retrieval cycles) and 67 pregnancies with live births (12.4 per 100 oocyte retrieval cycles). Variations in pregnancy rates between IVF units were similar to those in 1992 and other years.

Among 4,215 GIFT cycles in 1993 (Table 10), there were 1,015 clinical pregnancies (27.7 per 100 oocyte retrieval cycles) and 761 pregnancies with live births (20.8 per 100 oocyte retrieval cycles).

Treatment cycles following embryo freezing showed a further increase from 3,813 in 1992 to 4,607 in 1993 (Table 11). There were 622 clinical pregnancies (13.5 per 100 embryo transfer cycles) and 440 pregnancies with live births (9.6 per 100 embryo transfer cycles).

In 342 embryo transfer cycles after oocyte donation (Table 12), there were 67 clinical pregnancies (19.6 per 100 embryo transfer cycles) and 48 pregnancies with live births (14.0 per 100 embryo transfer cycles).

The age distribution of women treated in 1993, their causes of infertility, the drugs used to stimulate ovulation, and the number of embryos or oocytes transferred (Tables 13 and 14) were generally similar to those for 1992 (Tables 6 and 7). However, relatively more women with infertility due to male factors were treated in 1993, reflecting more widespread use of microinsemination techniques for male infertility. In the two main treatment groups of IVF with uterine transfer of embryos and GIFT, there was a further reduction in the proportion of treatment cycles in which more than three embryos or oocytes were transferred to 2.4% (from 4.6% in 1992) and 4.7% (from 6.5% in 1992), respectively.

2.1 Microinsemination

The use of various techniques of microinsemination to treat male infertility has increased markedly in recent years. There were 337 oocyte retrieval cycles for these techniques in 1990, 393 in 1991, 812 in 1992, and 1,243 cycles in 1993.

In 1992, 10 units used subzonal insemination (SUZI) and 1 unit used partial zona dissection (PZD) or a combination of SUZI and PZD. Of 742 oocyte retrieval cycles for SUZI, 463 cycles progressed to embryo transfer and these resulted in 76 clinical pregnancies (10.2 per 100 oocyte retrieval cycles) and 53 pregnancies with live births (7.1 per 100 oocyte retrieval cycles). There were 70 oocyte retrieval cycles in which other techniques were used, of which 53 progressed to embryo transfer resulting in 4 clinical pregnancies and 2 pregnancies with live births.

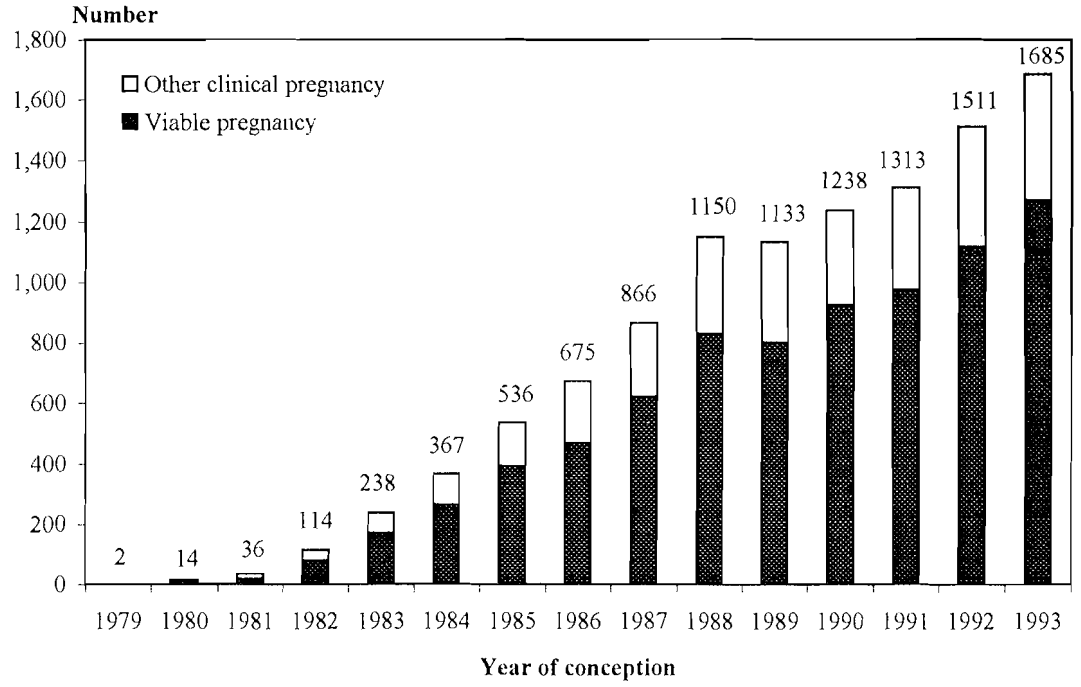
In 1993, 8 units used SUZI, 1 unit used this technique alone or in combination with intracytoplasmic sperm injection (ICSI), and another unit used only the combined techniques. One unit also used PZD, either alone or combined with SUZI. There were 623 oocyte retrieval cycles for SUZI, of which 423 progressed to embryo transfer and 40 to clinical pregnancy (6.4 per 100 oocyte retrieval cycles, 9.5 per 100 embryo transfer cycles). In 4 units that used ICSI, there were 454 oocyte retrieval cycles which progressed to embryo transfer in 382 cycles and 71 clinical pregnancies (15.6 per 100 oocyte retrieval cycles, 18.6 per 100 embryo transfer cycles). Combined or other techniques of microinsemination were used in 166 oocyte retrieval cycles which progressed to 132 embryo transfer cycles and 19 clinical pregnancies (11.4 per 100 oocyte retrieval cycles, 14.4 per 100 embryo transfer cycles).

3 IVF pregnancies

This section contains data on all pregnancies other than those resulting from GIFT; it therefore includes pregnancies occurring after transfer of fresh embryos to the uterus or fallopian tubes, transfer of frozen embryos, use of donor oocytes, and use of various methods of microinsemination.

There were 1,511 clinical pregnancies after IVF in 1992 and 1,685 in 1993 (Table 15, Figure 1), more than in any previous year. Of these clinical pregnancies, live births were the outcome in 72.9% of pregnancies in 1992 and in 74.4% in 1993.

Figure 1: Outcome of IVF pregnancies by year of conception, 1979-1993



3.1 Maternal and paternal characteristics

3.1.1 Place of residence

Compared to previous years, there were relatively more IVF pregnancies in Victoria and New Zealand in 1992 and 1993 and relatively fewer pregnancies in Queensland, Western Australia and Tasmania (Table 16, Figure 2).

3.1.2 Parental age

The proportion of older mothers aged 35 years and over was higher in 1992 and 1993 than in previous years (Table 17); the proportion of fathers aged 40 years and over was also higher (Table 18). In 1992, the proportion of women aged 35 years and over among IVF pregnancies was 32.3% compared with 11.3% for all mothers giving birth in Australia that year.

Figure 2: Place of parental residence, IVF pregnancies, 1979-1993

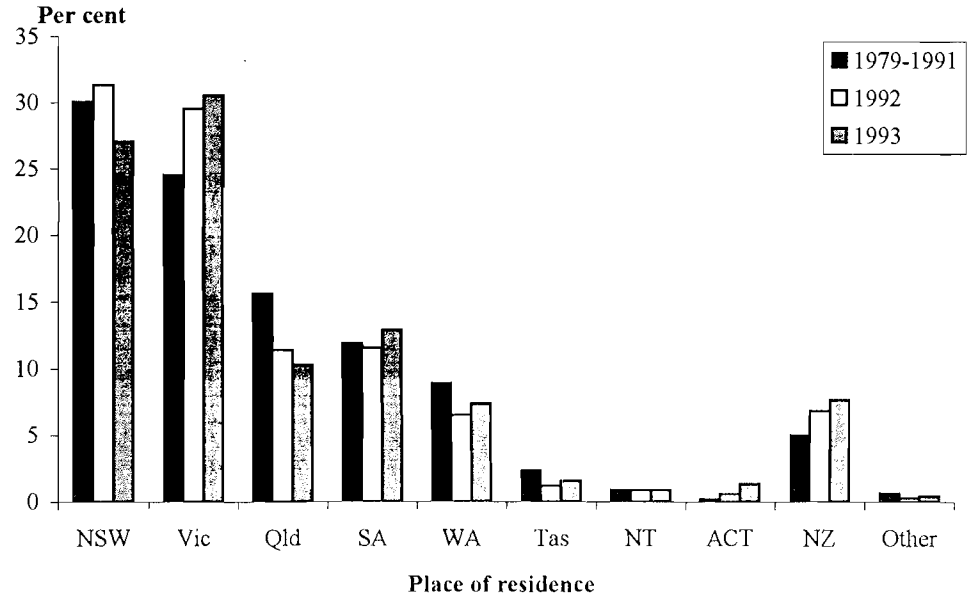
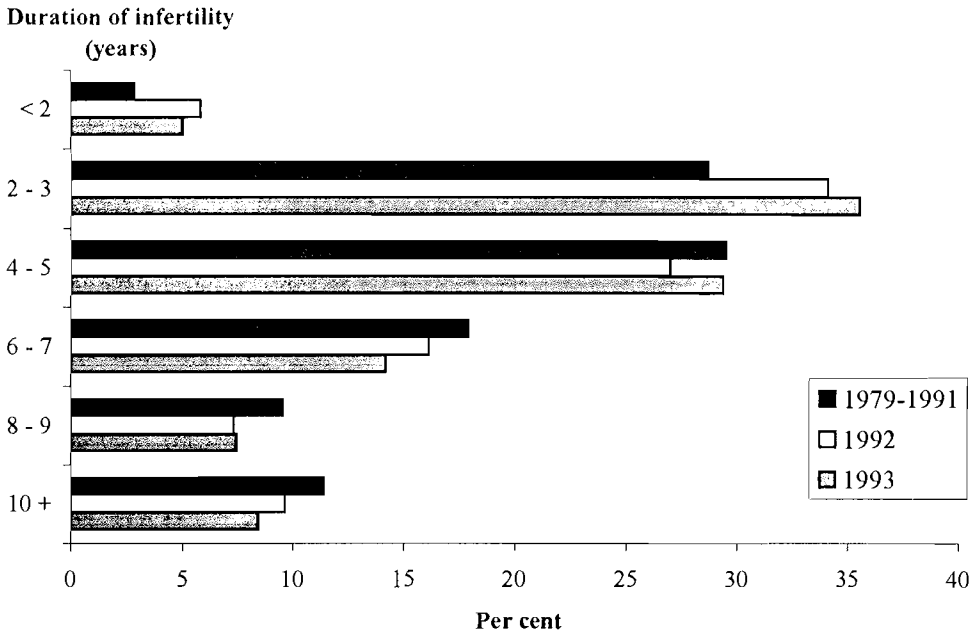


Figure 3: Duration of infertility, IVF pregnancies, 1979-1993



3.1.3 Previous pregnancies

Women who conceived in 1992 and 1993 were slightly more likely to have been pregnant previously than those who conceived in earlier years (Table 19).

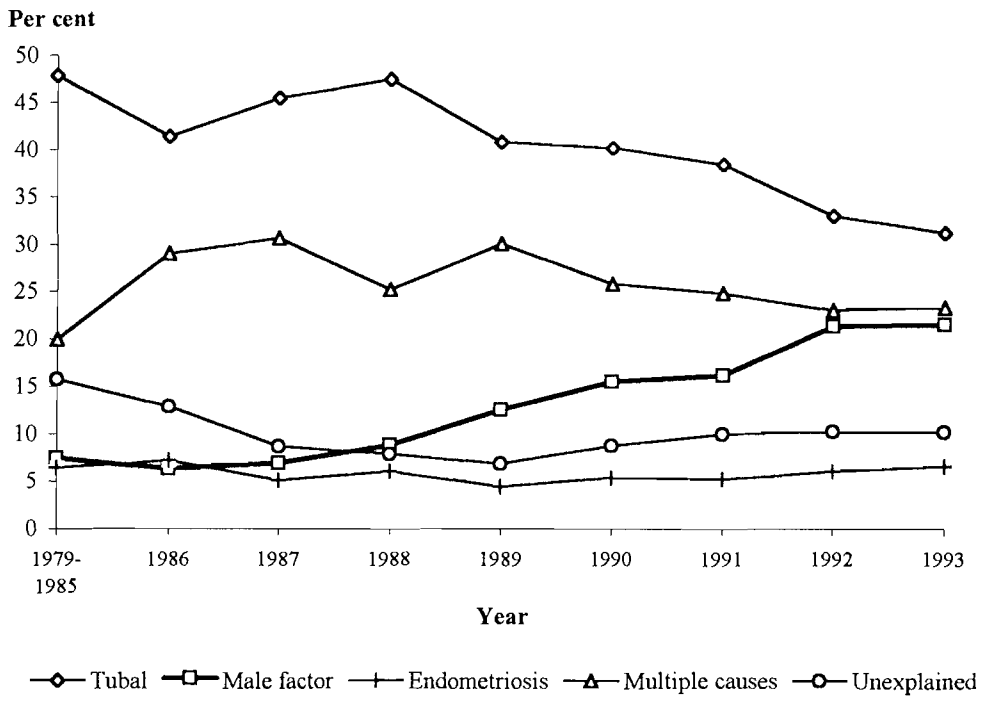
3.1.4 Duration of infertility

There were relatively more women with shorter periods of infertility in 1992 and 1993 than in previous years (Table 20, Figure 3). About 4 in every 10 women had been infertile for a period of less than four years. Women who had been infertile for 8 years or more were slightly less likely to achieve a live birth than those who had been infertile for shorter periods (Table 21).

3.1.5 Causes of infertility

Women conceiving after IVF in 1992 and 1993 were more likely to have infertility due to male factors than in previous years and were less likely to have tubal causes (Table 22, Figure 4). The proportion of pregnancies resulting in live births was slightly higher for male infertility and unexplained infertility than for other causes (Table 23). As in previous years, ectopic pregnancy was more likely among women treated for tubal causes of infertility than for other causes.

Figure 4: Causes of infertility, IVF pregnancies, 1979-1993



3.2 Management of IVF pregnancies

3.2.1 Ovarian stimulation

Continuing the trend of recent years, gonadotrophin-releasing hormone analogues (GnRHa) combined with gonadotrophins are now firmly established as the drugs of choice for stimulating ovulation. In 1993, these drugs were used to stimulate ovulation in 85.1% of treatment cycles that resulted in IVF pregnancies (Table 24, Figure 5). Clomiphene was used in only 13.1% of treatment cycles in that year.

Figure 5: Drug used to stimulate ovulation, IVF pregnancies, 1979-1993

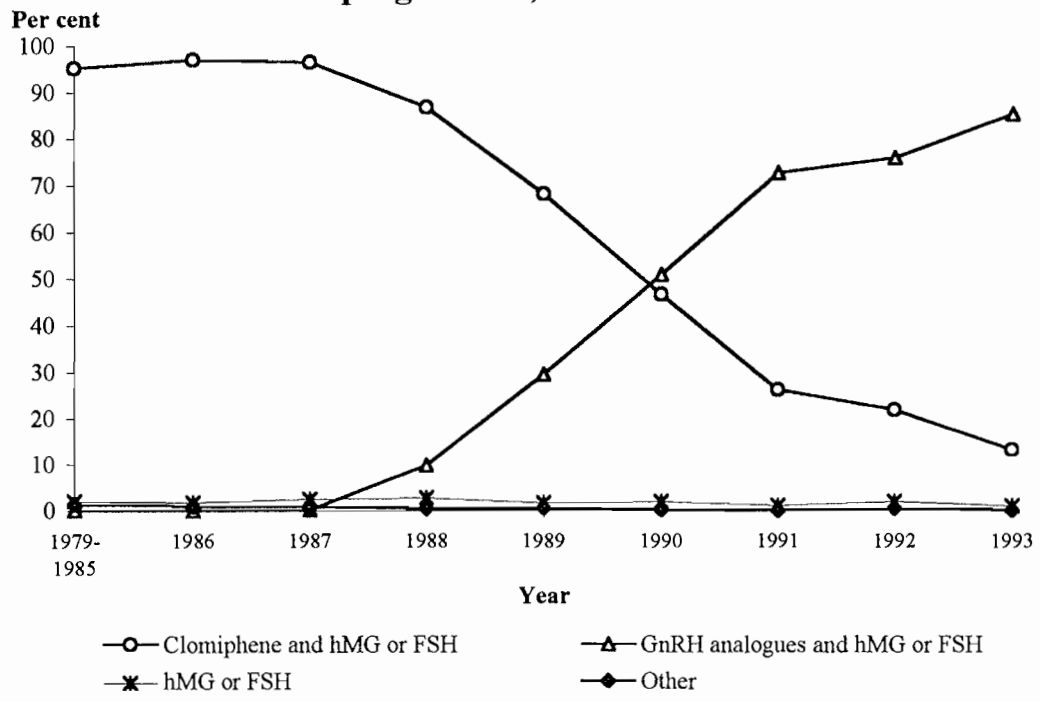
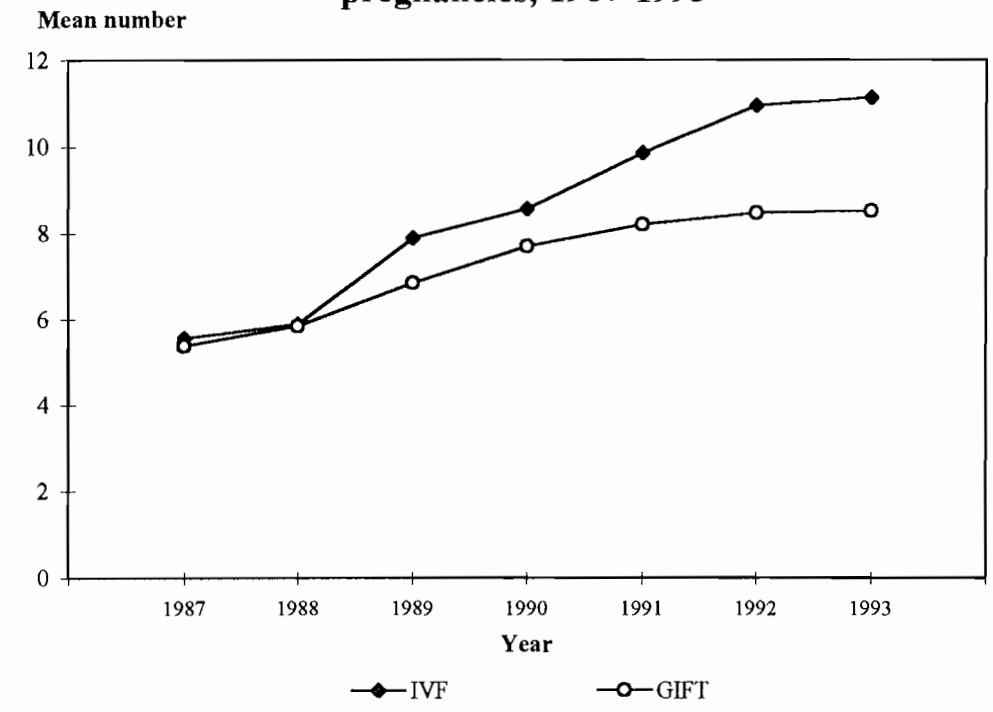


Figure 6: Mean number of oocytes collected by laparoscopy or ultrasound guidance, IVF and GIFT pregnancies, 1987-1993



3.2.2 Treatment cycle in which pregnancy occurred

About two-thirds of IVF pregnancies occurred in the first or second treatment cycle in 1992 and 1993, similar to the proportion in previous years (Table 25).

3.2.3 Number of oocytes collected

The average number of oocytes collected by laparoscopy or ultrasound guidance has increased since the mid-1980s. In 1992 and 1993, more than 8 oocytes were collected in two-thirds of all treatment cycles and the mean number of oocytes collected was 11 per cycle (Table 26, Figure 6).

3.2.4 Number of embryos transferred

There has been a continuing decline in the proportion of IVF pregnancies that resulted from transfer of 4 or more embryos. In 1992, only 3.5% of pregnancies followed transfer of 4 or more embryos and the proportion of 1.8% was even lower in 1993 (Table 27, Figure 7). Since 1988, the mean number of embryos transferred in IVF pregnancies has declined to 2.4 in 1993 (Figure 8).

The outcome of IVF pregnancies that resulted from transfer of 4 embryos was less likely to be a live birth and more likely to be a spontaneous abortion than in pregnancies resulting from transfer of a smaller number of embryos (Table 28).

3.2.5 Donor or frozen gametes and embryos

The number of IVF pregnancies that occurred after embryo freezing increased from 395 in 1991 to 530 in 1992 and 598 in 1993 (Table 29). There was also a slight increase in the number of IVF pregnancies that followed use of donor oocytes; there were 51 of these pregnancies in 1992 and 68 in 1993. The outcome of these pregnancies was similar to that of all IVF pregnancies (Table 30).

3.2.6 Microinsemination

IVF pregnancies after microinsemination increased markedly from 34 in 1990-1991 to 137 in 1993 (Table 31). The outcome of these pregnancies was similar to that of all IVF pregnancies except that ectopic pregnancy was less likely after microinsemination.

3.2.7 Drugs used in luteal phase of pregnancy

As in previous years, about three-quarters of women who became pregnant in 1992 and 1993 were treated with drugs during the luteal phase (Table 32). Human chorionic gonadotrophin and progestagens were the drugs that were most commonly used.

Figure 7: Percentage distribution of number of embryos transferred, IVF pregnancies, 1979-1993

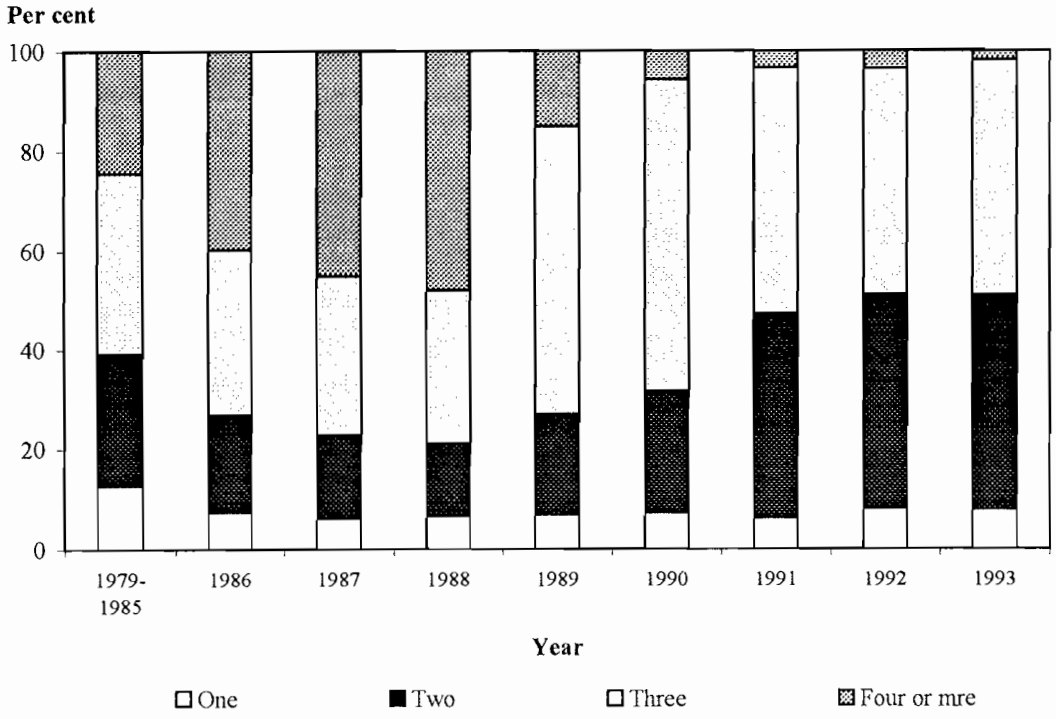
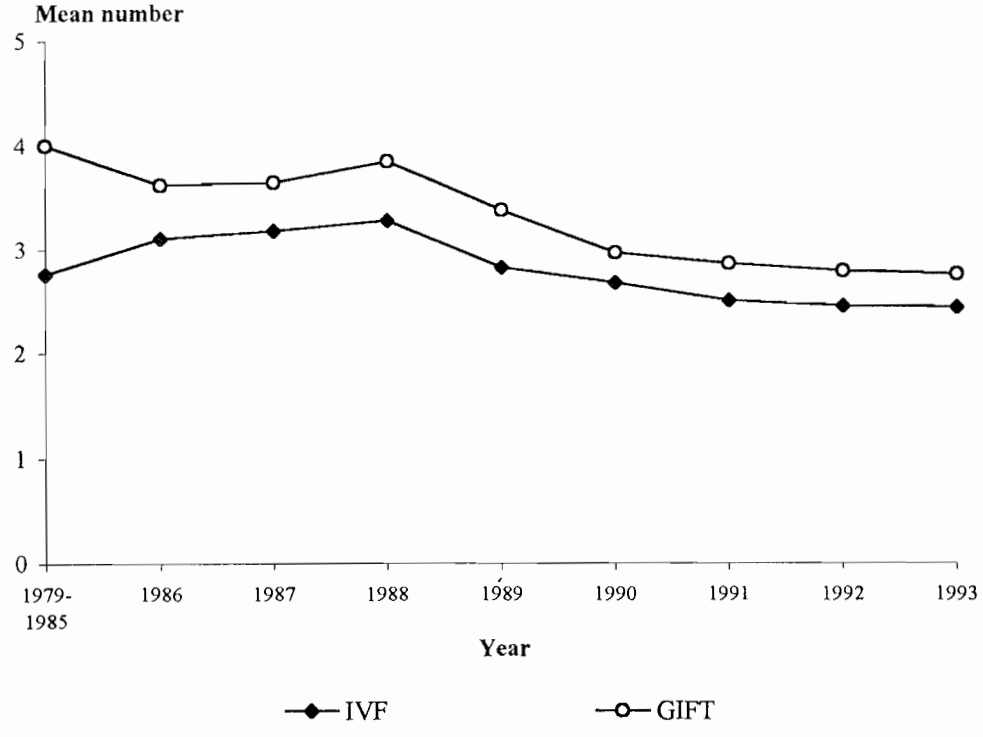


Figure 8: Mean number of embryos/oocytes transferred, IVF and GIFT pregnancies, 1979-1993



3.3. Outcome of pregnancy

3.3.1 Maternal death

A woman aged 36 years who conceived by IVF in 1992 died from a cerebral haemorrhage at 16 weeks' gestation. This was the second maternal death to be reported in an IVF pregnancy.

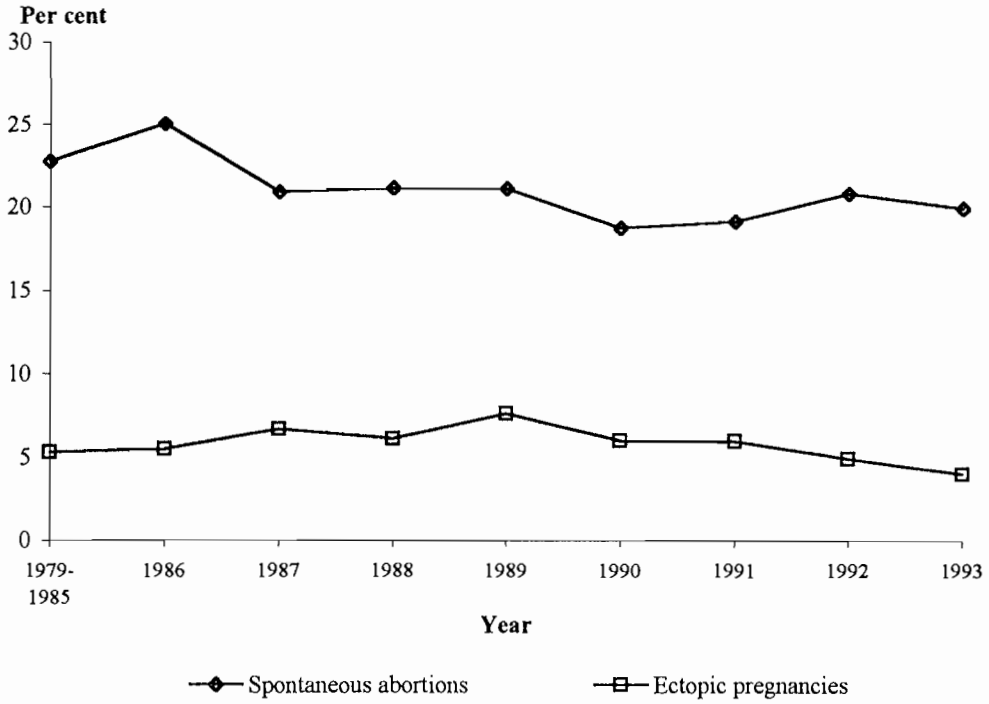
3.3.2 Maternal age and outcome of pregnancy

As in previous years, the proportion of women who achieved a live birth after conceiving in 1992-1993 declined with advancing maternal age. More than three-quarters of women aged less than 35 years gave birth to liveborn infants compared with 70.9% among women aged 35 to 39 years and 58.1% among women aged 40 years and over (Table 33). Spontaneous abortion and stillbirth were more likely among the older women.

3.3.3 Spontaneous abortion

Spontaneous abortion occurred in 22.0% and 20.9% of IVF pregnancies in 1992 and 1993, respectively, similar to the rates in recent years (Figure 9). Spontaneous abortion increased from 15.5% for women aged less than 25 years to 46.2% for women aged 45 years and over, but there were only 13 women in the oldest age group (Table 35, Figure 10). Among 236 pregnancies conceived after microinsemination in 1990 to 1993, there were 52 (22.0%) spontaneous abortions.

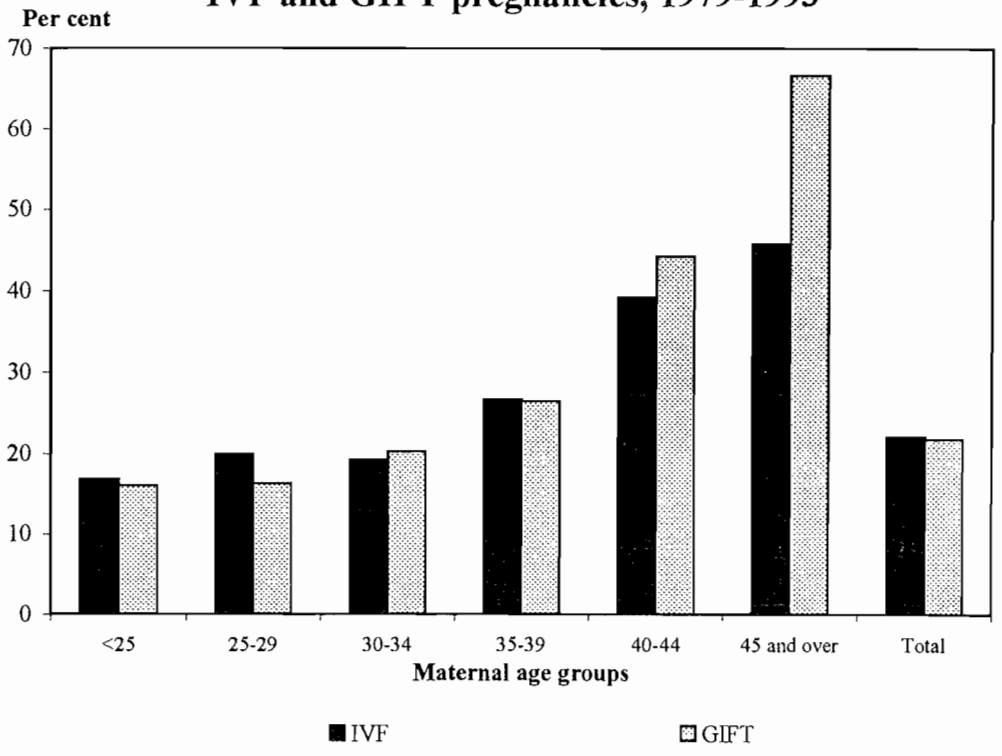
Figure 9: Incidence of ectopic pregnancy and spontaneous abortion, IVF pregnancies, 1979-1993



3.3.4 Ectopic pregnancy

The proportion of ectopic pregnancies declined from 5.9% in 1991 to 4.9% in 1992 and 4.0% in 1993 (Table 36, Figure 9), partly attributable to the lower ectopic pregnancy rate among women whose infertility was due to male factors.

Figure 10: Spontaneous abortions by maternal age groups, IVF and GIFT pregnancies, 1979-1993



3.3.5 Selective reduction of fetuses

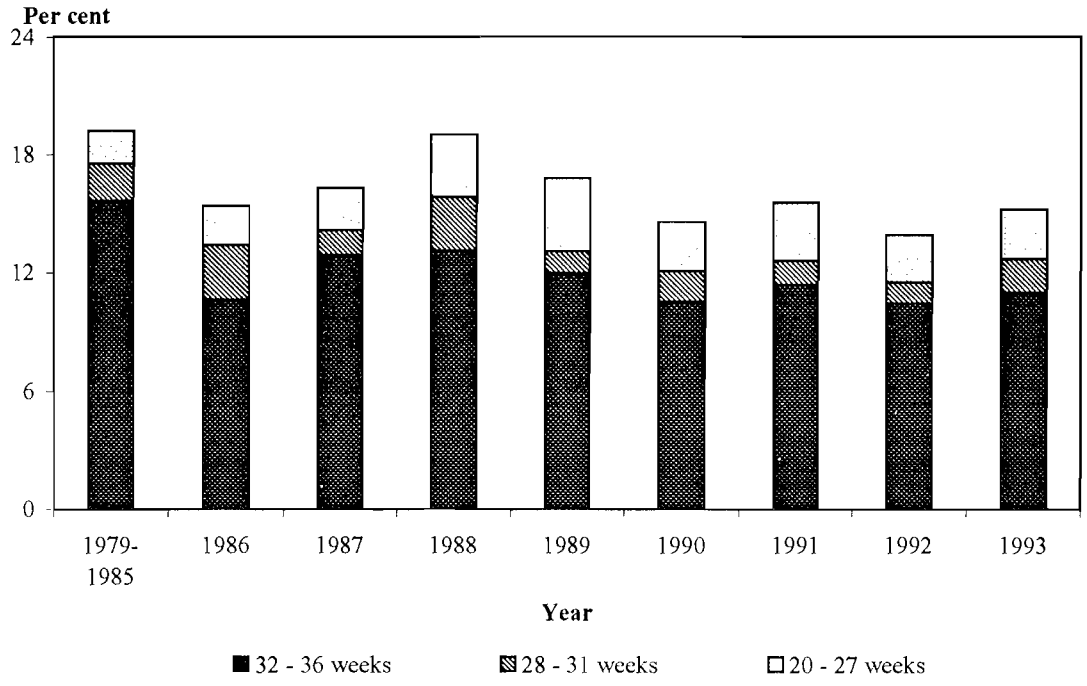
Selective reduction of fetuses may be performed in early pregnancy to abort a severely malformed fetus in a multiple pregnancy or to avoid multiple births. There were 5 IVF and 7 GIFT pregnancies notified after selective reduction of pregnancies conceived in 1992 and 1993. Fetal reduction had previously been performed in 2 pregnancies in 1988, 1 in 1989, 1 in 1990, and 9 in 1991. In 1992-1993, 3 fetuses were reduced to 2 in 8 pregnancies, 3 fetuses were reduced to 1 in one pregnancy, and 2 fetuses were reduced to 1 in 3 pregnancies. The indication for fetal reduction was a fetal chromosomal abnormality in 3 pregnancies - trisomy 21 in one reduced from 3 to 2 fetuses and in another reduced from 2 to 1 fetuses, and trisomy 18 in a pregnancy reduced from 2 fetuses to a single fetus. In two triplet GIFT pregnancies that were reduced to twin pregnancies, spontaneous abortions of the remaining fetuses occurred at 16 weeks in one pregnancy and at 18 weeks in the other. Spontaneous abortion of the remaining fetus also occurred after selective reduction of the twin pregnancy for trisomy 21.

3.3.6 Viable pregnancies of at least 20 weeks' gestation

Reflecting the overall increase in the number of IVF pregnancies in 1992 and 1993, there was also an increase in the total number of births. In Australia, there were 1,222 births after IVF in 1992 and 1,372 births after IVF in 1993. In New Zealand, there were 98 births after IVF in 1992 and 118 births after IVF in 1993.

The proportion of preterm births of less than 37 weeks' gestation was 21.8% in 1992-1993 (Table 37), similar to that in recent years. The proportion of preterm birth in singleton IVF pregnancies was 14.3% in 1992-1993 (Figure 11), more than double the rate of preterm birth of 6.9% in all Australian pregnancies in 1992. In 1992-1993, 54.0% of twin IVF pregnancies and 89.5% of triplet IVF pregnancies were preterm.

Figure 11: Incidence of preterm birth in singleton IVF pregnancies, 1979-1993



In 1992-1993, preterm births occurred in 8.8% of 182 singleton IVF births after use of donor sperm, in 15.5% of 84 singleton IVF births after use of donor oocytes, and in 13.0% of 763 singleton IVF births resulting from transfer of frozen embryos (Table 39).

After microinsemination, the proportion of preterm pregnancies in 1990-1993 was 20.1% for all pregnancies and 16.6% for singleton pregnancies (Table 38), similar to that for all IVF pregnancies.

The high rate of preterm birth in singleton IVF pregnancies occurred in all maternal age groups (Table 40) and for all causes of infertility (Table 41).

3.3.7 Multiple pregnancies

Multiple pregnancy occurred in 17.6% of IVF pregnancies in 1992 and 17.3% in 1993 (Table 42), slightly more than the rate of 16.0% in 1991 but less than in other years. Twin pregnancies accounted for 15.9% of IVF pregnancies in 1992 and 15.7% in 1993 (Figure 12), and there were 1.7% and 1.5% triplet pregnancies in 1992 and 1993, respectively (Figure 13), with one quadruplet pregnancy in 1993. In pregnancies that resulted from transfer of frozen embryos, multiple pregnancy occurred in 12.1% in 1992-1993. Except for relatively fewer twins after transfer of 4 or more embryos, multiple pregnancy increased as the number of embryos transferred increased (Table 43). Among 184 pregnancies conceived after microinsemination in 1990 to 1993, twins occurred in 33 (17.9%) and triplets in 1 (0.5%).

Figure 12: Incidence of twin pregnancy, IVF and GIFT, 1979-1993

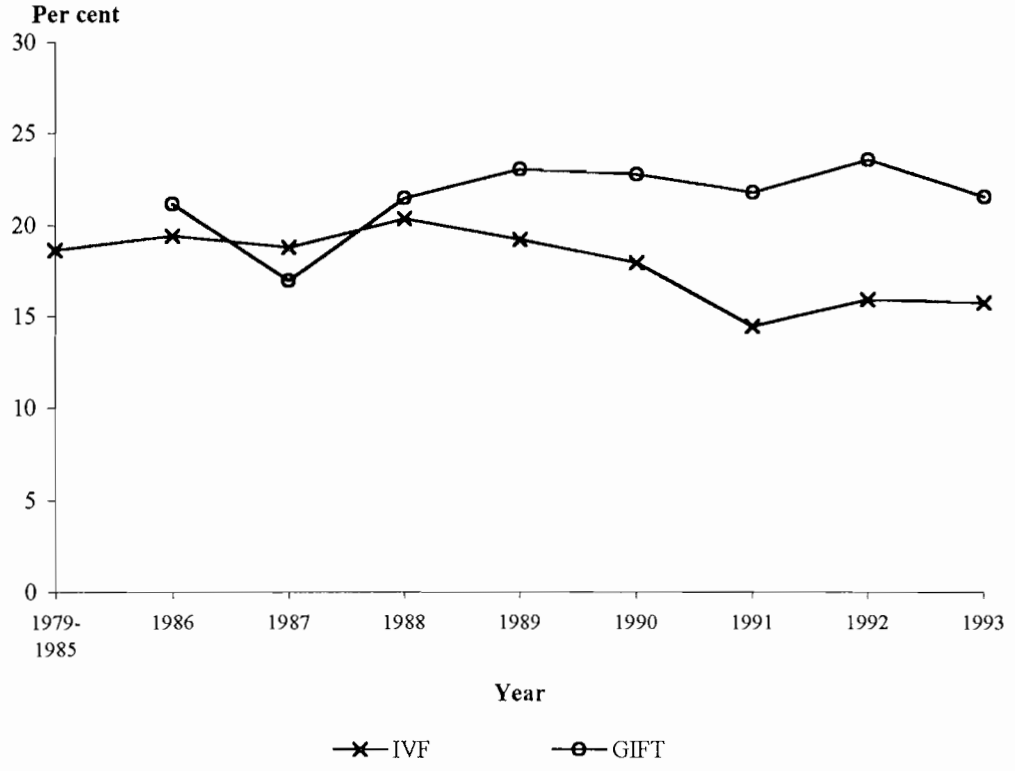
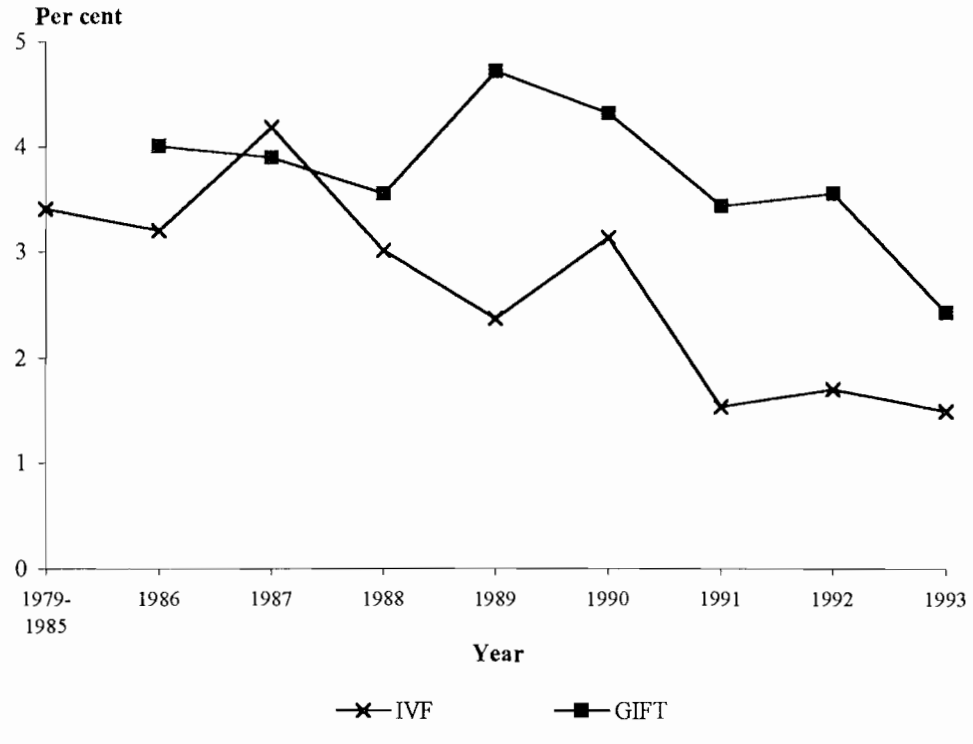


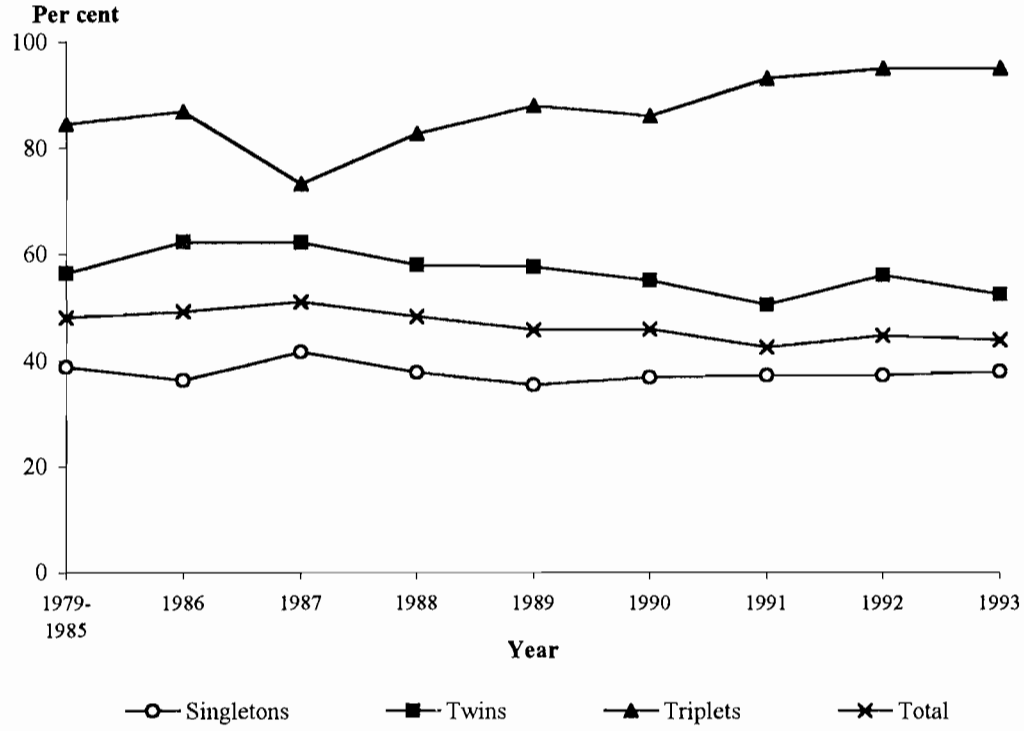
Figure 13: Incidence of triplet pregnancy, IVF and GIFT, 1979-1993



3.3.8 Method of delivery

As in previous years, caesarean rates were higher for multiple than for singleton IVF pregnancies (Figure 14). In 1992-1993, the caesarean rate was 37.3% for singleton pregnancies, 53.5% for twin pregnancies and 94.7% for triplet pregnancies (Table 44). The caesarean rate increased with advancing maternal age from 21.4% at 20-24 years to 22.8% at 25-29 years, 41.3% at 30-34 years, 37.3% at 35-39 years, and 62.5% at 40 years and over. For all Australian singleton births in 1992, the caesarean rates were 17.8% at 20-24 years, 20.3% at 25-29 years, 23.3% at 30-34 years, 28.3% at 35-39 years, and 34.2% for women aged 40-44 years.

Figure 14: Caesarean birth rates, singleton and multiple IVF pregnancies, 1979-1993



3.3.9 Sex of infants

The sex ratio of infants born after IVF was 111.8 in 1992 and 111.4 in 1993, slightly higher than the sex ratio of 106.8 for the preceding years (Table 45). The sex ratio of infants born in all years after use of donor sperm was 96.0 among 937 births; after use of donor oocytes, it was 112.9 among 247 births; and after use of frozen embryos, it was 112.3 among 1,841 births. Among the 218 births after microinsemination, the sex ratio was 111.7.

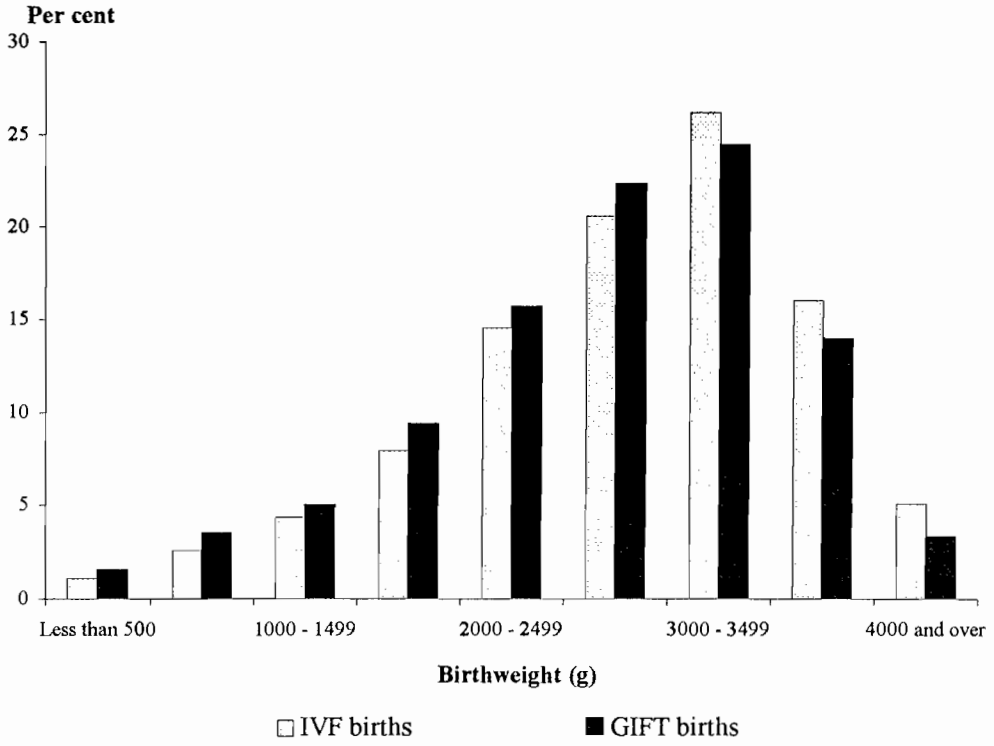
3.3.10 Birthweight

The mean birthweight and the incidence of low birthweight (less than 2500g) for infants born after IVF in 1992 and 1993 differed considerably from the birthweights for all Australian births in 1992. The mean birthweight of IVF births in 1992-1993 was 2,909g (Table 46), 459g less than the mean birthweight of 3,368g for all Australian births in 1992. The high incidence of multiple births after IVF accounted for much of this difference (Table 47). For singleton births, the mean birthweight was 3,220g after IVF and 3,384g for all Australian births; for twins, the mean birthweights were 2,287g and 2,396g, respectively; and for triplets, the mean birthweights were 1,761g and 1,615g, respectively. Among singleton IVF births in 1992-1993, low birthweight occurred in 12.1%, compared with 5.0% for all singleton births in Australia in 1992. Except for infants born to the small group of IVF mothers aged less than 25 years (1 low birthweight infant among 37 births - 2.7%), infants born to mothers in other

age groups all had high rates of low birthweight (11.9% at 25-29 years, 12.7% at 30-34, 11.7% at 35-39, and 13.4% at 40 years and over). The mean birthweight of singleton births after microinsemination was 3,170g (Table 48), slightly less than for all singleton IVF births.

There were relatively fewer low birthweight infants born after IVF than after GIFT (Figure 15) and the incidence of low birthweight in singleton IVF births was lower in recent years than in the 1980s (Figure 16).

Figure 15: Birthweight of IVF and GIFT births, 1979-1993



Low birthweight occurred in 12.1% of all singleton IVF births (Table 47), in 15.9% after microinsemination (Table 48), in 10.9% after donor sperm, in 16.4% after donor oocytes, and in 8.7% after embryo freezing (Table 49). Low birthweight was more likely in each of these groups than in all Australian singleton births, which had 5.0% low birthweight in 1992.

3.3.11 Perinatal mortality

Perinatal deaths include fetal deaths (stillbirths) of at least 20 weeks' gestation and neonatal deaths of liveborn infants occurring within 28 days of birth. The IVF perinatal death rates for 1992-1993 (Table 50, Figure 17) were generally lower than for previous years but were still well above those of all Australian births. For singleton IVF births, the rate was 23.8 per 1,000 births in 1992-1993 and 32.8 per 1,000 births in 1979-1991, and for all IVF births, the rate was 31.6 per 1,000 births in 1992-1993 and 42.0 per 1,000 births in 1979-1991. For all Australian births of at least 20 weeks' gestation or 400g birthweight, the perinatal death rate was 12.0 per 1,000 births in 1992. Among 218 births after microinsemination in 1990 to 1993, there were 2 stillbirths and no neonatal deaths, a perinatal death rate of 9.2 per 1,000 births.

Figure 16: Incidence of low birthweight in singleton IVF births, 1979-1993

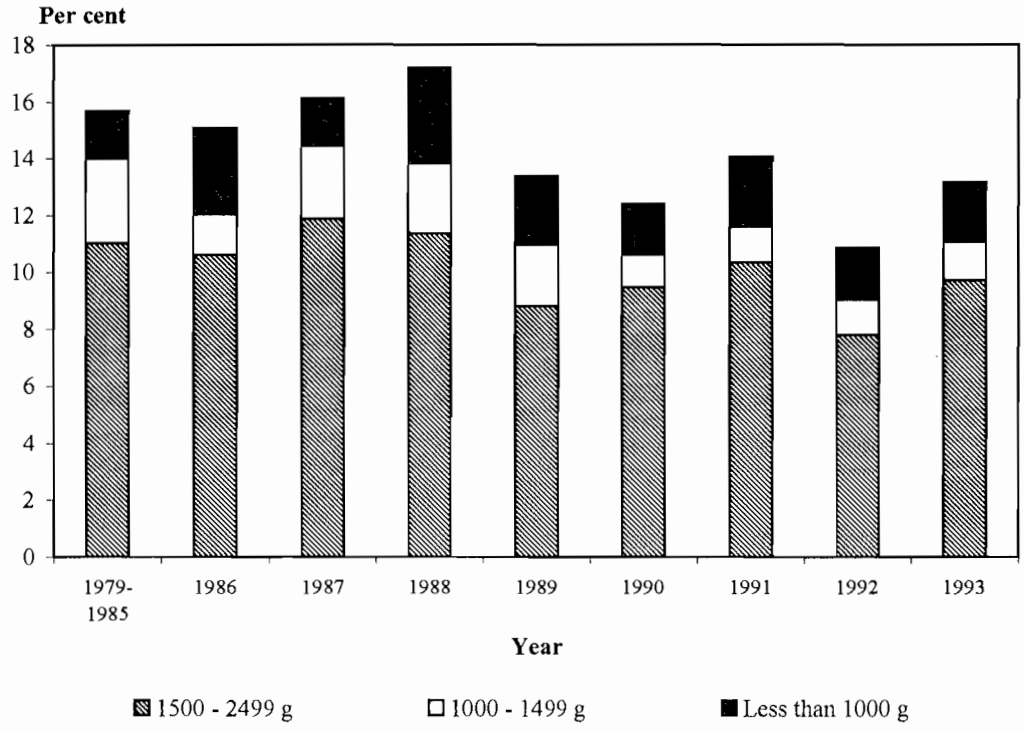
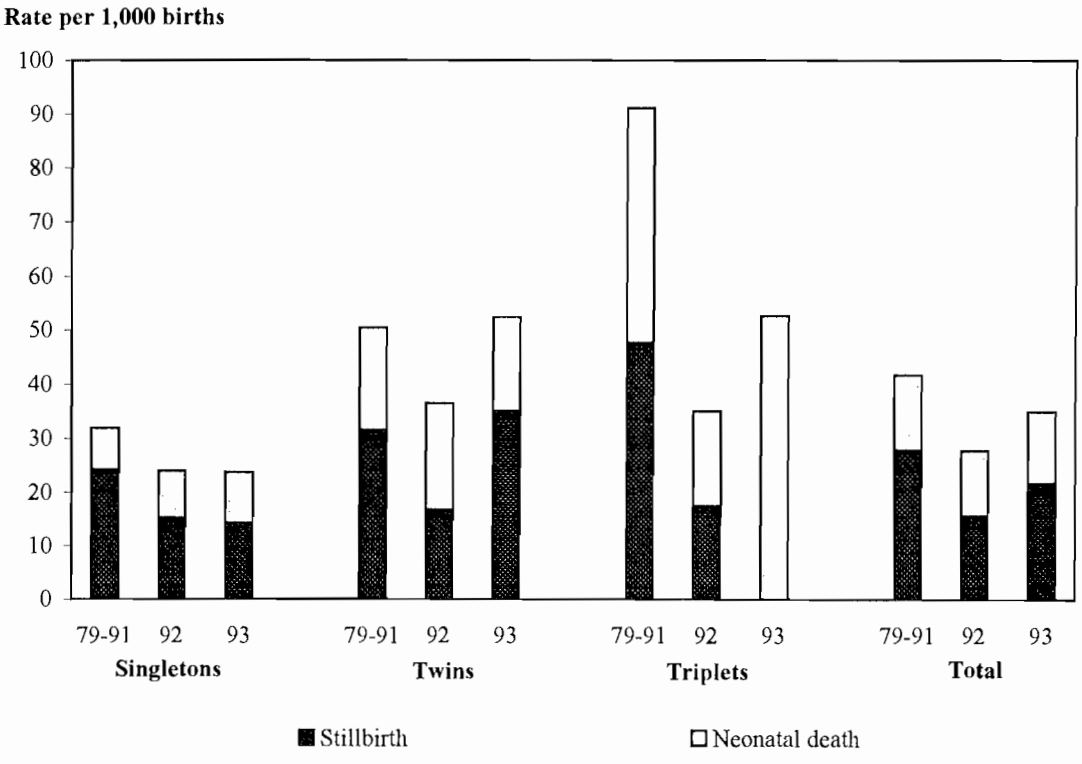


Figure 17: Perinatal mortality in singleton and multiple IVF births, 1979-1993



3.3.12 Congenital malformations

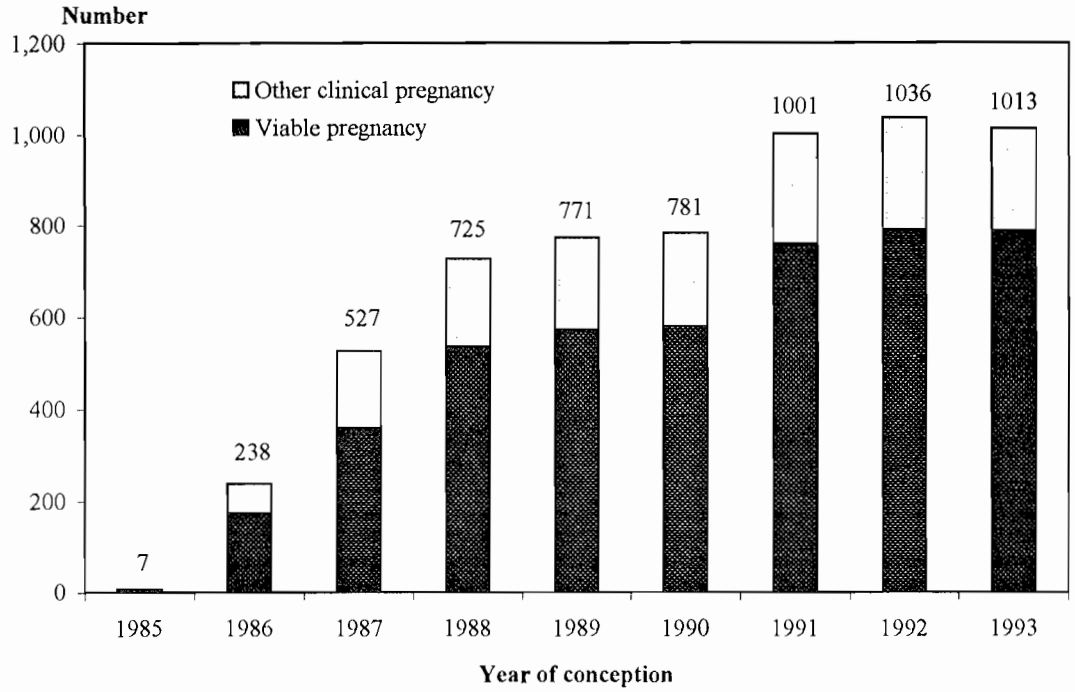
Among 9,807 live births, stillbirths and induced abortions of at least 16 weeks' gestation, there were 247 (2.5%) infants and fetuses with major congenital malformations (Table 51). The malformation rate was higher in singleton births (2.9%) than in multiple births (1.8%).

Among pregnancies conceived in 1990 to 1993 after treatment of male infertility by microinsemination, there were 2 pregnancies terminated for fetal abnormality and 218 births. Major congenital malformations were notified in 7 fetuses and infants, a malformation rate of 3.2%. The diagnoses included 1 infant with transposition of the great arteries and tricuspid atresia; 1 with hypospadias; 1 with hypospadias and ventricular septal defect; 1 with hydronephrosis due to pelvicalyceal obstruction; 1 with pre-axial polydactyly, single umbilical artery, 6 lumbar vertebrae and ventricular septal defect; 1 aborted fetus with acrania (reported previously in the report for 1990); and 1 aborted fetus with anencephalus. Another infant was treated surgically for removal of a neuroblastoma and is not included with the malformed infants.

4 GIFT pregnancies

The number of GIFT pregnancies showed little change between 1991 and 1993, after a substantial increase between 1990 and 1991 (Table 52, Figure 18). There were 1,001 GIFT pregnancies in 1991, 1,036 in 1992, and 1,013 in 1993. In 1993, 77.1% of GIFT pregnancies resulted in live births.

Figure 18: Outcome of GIFT pregnancies by year of conception, 1985-1993



4.1 Maternal and paternal characteristics

4.1.1 Place of residence

In 1992 and 1993, there were relatively more GIFT pregnancies than in 1985-1991 in Queensland and Victoria than in the other States and Territories and New Zealand (Table 53).

4.1.2 Parental age

Maternal and paternal ages for GIFT pregnancies in 1992 and 1993 were similar to those in previous years (Tables 54 and 55). Women who became pregnant after GIFT and IVF were generally older than the mothers of all babies born in Australia. In 1992, 26.1% of GIFT pregnancies were among women aged 35-39 years, compared with 27.2% for IVF pregnancies and 9.7% for all Australian births. In that year, the proportion of mothers aged 40 years and over was 4.6% for GIFT, 5.1% for IVF, and 1.6% for all births in Australia.

4.1.3 Previous pregnancies

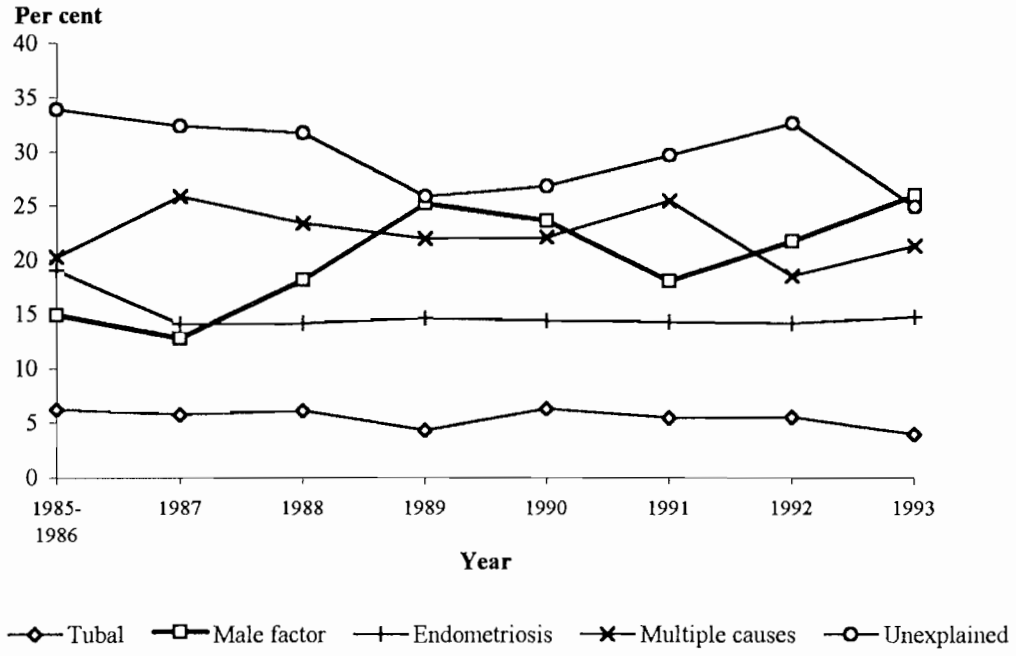
Women who conceived by GIFT in 1992 and 1993 were slightly more likely to have been pregnant previously than those who had conceived by GIFT in 1991 and earlier years (Table 56).

4.1.4 Duration and causes of infertility

There were relatively shorter periods of infertility preceding GIFT pregnancies in 1992 and 1993 than in previous years (Table 57). Infertility of 8 years or more was associated with a higher rate of spontaneous abortion and a reduced likelihood of achieving a live birth (Table 58).

The causes of infertility that preceded GIFT pregnancies in 1992 and 1993 were similar to those in previous years (Table 59, Figure 19). GIFT is not often used to treat infertility due to tubal factors, but there was a high rate of ectopic pregnancy (10.3%) in this group in 1992-1993 (Table 60).

Figure 19: Causes of infertility, GIFT pregnancies, 1985-1993



4.2 Management of GIFT pregnancies

4.2.1 Ovarian stimulation

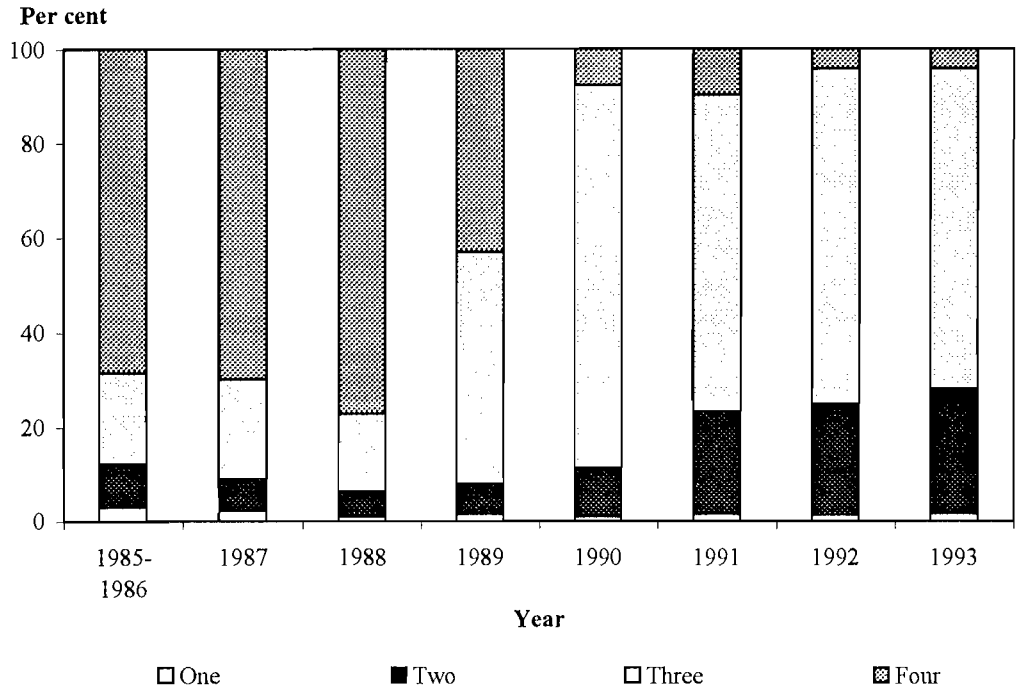
The trend of increasing use of GnRH analogues and declining use of clomiphene to induce ovulation (Table 61) was very similar to that for IVF pregnancies (Figure 5). Conception occurred in the first or second treatment cycle in about 70% of GIFT pregnancies in 1992 and 1993, similar to the proportion in previous years (Table 62).

4.2.2 Number of oocytes collected and transferred

The mean number of oocytes collected in treatment cycles that resulted in GIFT pregnancies increased to 8.5 in 1992 and 1993 (Table 63), but this was less than the mean of 11 for IVF pregnancies (Figure 6).

In 1992 and 1993, most GIFT pregnancies followed transfer of three or less oocytes (Table 64). There were relatively fewer pregnancies resulting from transfer of 4 or more oocytes than in previous years, and an increasing trend in pregnancies after transfer of 2 oocytes (Figure 20). Live births were slightly less likely among pregnancies after transfer of 4 or more oocytes (Table 65).

Figure 20: Percentage distribution of number of oocytes transferred, GIFT pregnancies, 1985-1993



4.2.3 Drugs used in luteal phase of pregnancy

Most women who became pregnant after GIFT in 1992 and 1993 were treated with either human chorionic gonadotrophin or progestagens during the luteal phase (Table 66).

4.3 Outcome of pregnancy

4.3.1 Maternal deaths

A woman aged 28 years who conceived by GIFT in 1992 died from an intracranial tumour at 24 weeks' gestation. Another women aged 27 years who conceived in 1993 died in a car accident at 23 weeks' gestation. One previous maternal death had been reported in a GIFT pregnancy.

4.3.2 Spontaneous abortion and ectopic pregnancy

The proportion of GIFT pregnancies that resulted in live births was more than 70% in all maternal age groups except for women aged 40 years and over (Table 67).

Spontaneous abortions occurred in 19.3% of intrauterine GIFT pregnancies in 1993, the lowest rate in any year since GIFT was first used in 1985 (Table 68). Increasing maternal age was associated with a higher rate of spontaneous abortion, occurring in 42.4% of pregnancies of women aged 40-44 years and in 66.7% of the small number of pregnancies of women aged 45 years and over (Table 69).

Ectopic pregnancy was also less likely in GIFT pregnancies in 1992 and 1993 than in previous years, occurring in 2.6% in 1992 and 3.1% in 1993 (Table 70).

4.3.3 Viable pregnancies of at least 20 weeks' gestation

The number of births in Australia after GIFT decreased slightly from 1,074 in 1991 to 1,015 in 1992 and 989 in 1993. GIFT is infrequently used to treat infertility in New Zealand, where there were only 9 births in 1992 and 5 in 1993.

Preterm birth occurred in 25.2% of GIFT pregnancies in 1992-1993 (Table 71), slightly less than the incidence of 27.4% in 1985-1991. In singleton GIFT pregnancies, preterm birth occurred in 11.5% in 1992-1993, considerably less than the rate of 14.5% in 1985-1991.

4.3.4 Multiple pregnancies

Twins occurred in 23.5% of GIFT pregnancies in 1992 and in 21.5% in 1993 (Table 72), similar to the rate in recent years (Figure 12). The triplet rate decreased from 3.5% in 1992 to 2.4% in 1993, the lowest rate for any year since GIFT was first used in 1985 (Figure 13). In 1993, there was 1 quadruplet pregnancy and 1 quintuplet pregnancy after GIFT.

In 1992-1993, higher multiple pregnancy rates were usually associated with transfer of an increasing number of oocytes (Table 73). However, the proportion of multiple pregnancies after transfer of 4 oocytes (20.0%) was less than after transfer after 3 oocytes (27.8%).

4.3.5 Method of delivery

Caesarean birth rates for GIFT pregnancies were higher for multiple than for singleton births (Table 74) and showed similar trends to those for IVF pregnancies (Figure 14).

4.3.6 Sex of infants

The sex ratio of 115.1 for births after GIFT in 1992 and 106.8 in 1993 was similar to that for previous years (Table 75).

4.3.7 Birthweight

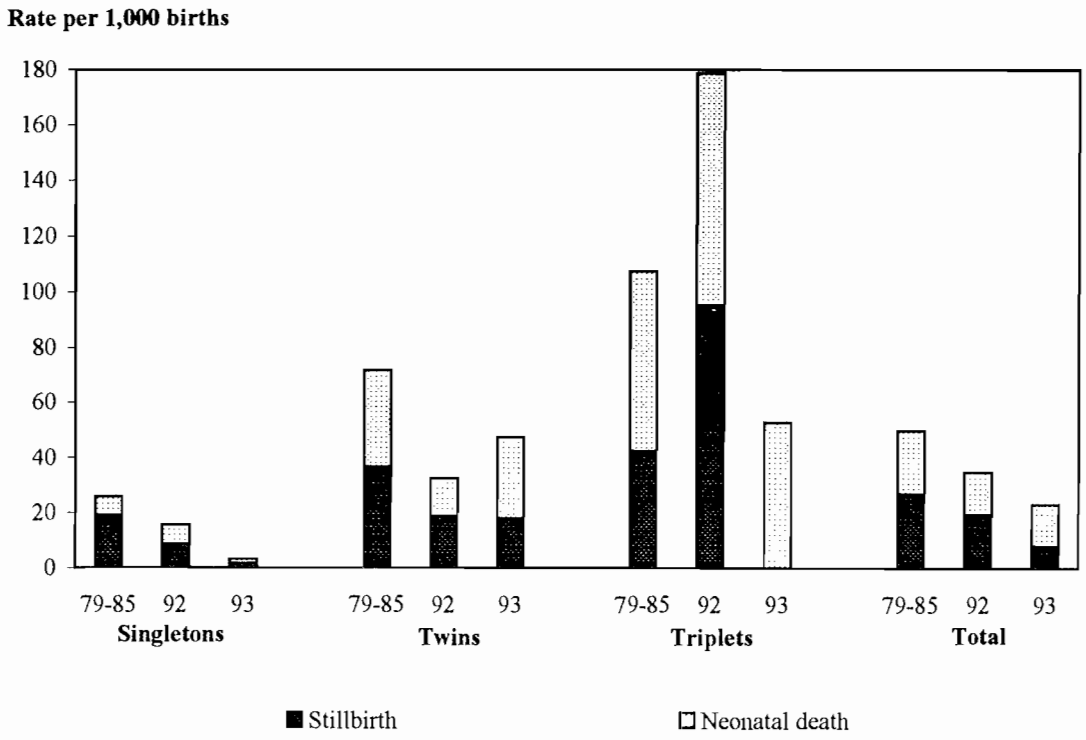
The mean birthweight of 2,748g for births after GIFT in 1992-1993 (Table 76) was less than that of 2,909g after IVF. The mean birthweight of singleton GIFT births was 3,185g; of twins, 2,277g; and of triplets, 1,595g (Table 77).

Low birthweight (less than 2500g) occurred in 33.8% of all GIFT births in 1992-1993 and in 11.1% of singleton GIFT births (Table 77). There were relatively more infants of low birthweight after GIFT than after IVF (Figure 15).

4.3.8 Perinatal mortality

The perinatal death rate after GIFT in 1992-1993 was 29.0 per 1,000 births for all births and 9.4 per 1,000 births for singleton births (Table 78,Figure 21), both considerably less than the rates of 49.0 and 25.7 per 1,000 births, respectively, for GIFT births in 1985-1991.

Figure 21: Perinatal mortality in singleton and multiple GIFT births, 1985-1993



4.3.9 Congenital malformations

Major congenital malformations occurred in 2.7% of 5,957 GIFT births and induced abortions in the period from 1985 to 1993 (Table 79). The malformation rate of 2.9% in singleton births was slightly higher than that of 2.3% in multiple births.

Table 1. *Numbers and pregnancy rates for selected stages of treatment in each IVF unit, IVF pregnancies after transfer of fresh embryos, 1992*

Stage of treatment	IVF unit									
	A	B	C	D	E*	F	G	H	I	J
Treatment cycles commenced	1,479	756	943	573	247	199	310	226	336	266
Cycles with oocyte retrieval	1,315	635	863	493	247	190	243	211	255	247
· by ultrasound guidance	1,315	633	645	491	247	190	242	211	181	247
· by laparoscopy	-	2	218	2	-	-	1	-	74	-
Cycles with embryo transfer	1,080	523	774	451	179	138	196	185	215	190
Clinical pregnancies	142	64	114	84	19	14	37	18	37	22
Live-birth pregnancies	106	33	64	58	8	10	28	10	27	20
Clinical pregnancies per 100 oocyte retrieval cycles	10.8	10.1	13.2	17.0	7.7	7.4	15.2	8.5	14.5	8.9
Live-birth pregnancies per 100 oocyte retrieval cycles	8.1	5.2	7.4	11.8	3.2	5.3	11.5	4.7	10.6	8.1

Stage of treatment	IVF unit									
	K	L	M	N	O	P	Q	R	S	T
Treatment cycles commenced	226	138	225	198	134	188	171	220	114	61
Cycles with oocyte retrieval	210	132	187	173	129	153	137	186	106	52
· by ultrasound guidance	210	132	183	173	129	149	127	186	74	52
· by laparoscopy	-	-	4	-	-	4	10	-	32	-
Cycles with embryo transfer	178	117	155	145	125	124	117	154	76	45
Clinical pregnancies	26	14	26	21	19	21	17	23	8	10
Live-birth pregnancies	21	6	22	18	14	15	12	16	8	9
Clinical pregnancies per 100 oocyte retrieval cycles	12.4	10.6	13.9	12.1	14.7	13.7	12.4	12.4	7.5	19.2
Live-birth pregnancies per 100 oocyte retrieval cycles	10.0	4.5	11.8	10.4	10.9	9.8	8.8	8.6	7.5	17.3

Stage of treatment	IVF unit							
	U	V	W	X	Y	Z	AA	Total
Treatment cycles commenced	177	-	94	130	91	37	25	7,564
Cycles with oocyte retrieval	133	-	85	115	83	37	21	6,638
· by ultrasound guidance	129	-	85	115	83	37	21	6,287
· by laparoscopy	4	-	-	-	-	-	-	351
Cycles with embryo transfer	106	-	64	102	64	30	16	5,549
Clinical pregnancies	23	-	14	22	13	1	7	816
Live-birth pregnancies	19	-	7	17	9	1	7	565
Clinical pregnancies per 100 oocyte retrieval cycles	17.3	-	16.5	19.1	15.7	2.7	33.3	12.3
Live-birth pregnancies per 100 oocyte retrieval cycles	14.3	-	8.2	14.8	10.8	2.7	33.3	8.5

* *Number of cycles commenced was not available, so total is slightly underestimated.*

Table 2. ***Numbers and pregnancy rates for selected stages of treatment in each IVF unit, IVF pregnancies after PROST, ZIFT, TEST and other methods, 1992***

Stage of treatment	IVF unit									
	A	**B**	**C**	**D**	**E***	**F**	**G**	**H**	**I**	**J**
Treatment cycles commenced	-	137	79	1	114	188	1	4	22	-
Cycles with oocyte retrieval	-	120	78	1	114	179	1	3	21	-
Cycles with embryo transfer	-	80	60	1	57	112	1	2	21	-
Clinical pregnancies	-	4	12	1	10	21	-	1	2	-
Live-birth pregnancies	-	3	9	1	7	13	-	-	2	-
Clinical pregnancies per 100 oocyte retrieval cycles	-	3.3	15.4	100.0	8.8	11.7	-	33.3	9.5	-
Live-birth pregnancies per 100 oocyte retrieval cycles	-	2.5	11.5	100.0	6.1	7.3	-	-	9.5	-

Stage of treatment	IVF unit									
	K	**L**	**M**	**N**	**O**	**P**	**Q**	**R**	**S**	**T**
Treatment cycles commenced	88	162	5	-	79	9	-	-	5	8
Cycles with oocyte retrieval	81	155	4	-	76	9	-	-	5	8
Cycles with embryo transfer	66	139	3	-	72	7	-	-	5	7
Clinical pregnancies	12	23	-	-	16	1	-	-	1	1
Live-birth pregnancies	11	17	-	-	10	-	-	-	1	1
Clinical pregnancies per 100 oocyte retrieval cycles	14.8	14.8	-	-	21.1	11.1	-	-	20.0	12.5
Live-birth pregnancies per 100 oocyte retrieval cycles	13.6	11.0	-	-	13.2	-	-	-	20.0	12.5

Stage of treatment	IVF unit							
	U	**V**	**W**	**X**	**Y**	**Z**	**AA**	**Total**
Treatment cycles commenced	1	-	-	-	-	-	7	910
Cycles with oocyte retrieval	1	-	-	-	-	-	7	863
Cycles with embryo transfer	1	-	-	-	-	-	7	641
Clinical pregnancies	-	-	-	-	-	-	4	109
Live-birth pregnancies	-	-	-	-	-	-	4	79
Clinical pregnancies per 100 oocyte retrieval cycles	-	-	-	-	-	-	57.1	12.6
Live-birth pregnancies per 100 oocyte retrieval cycles	-	-	-	-	-	-	57.1	9.2

** Number of cycles commenced was not available, so total is slightly underestimated.*

Table 3. Numbers and pregnancy rates for selected stages of treatment in each IVF unit, GIFT pregnancies, 1992

Stage of treatment	IVF unit									
	A	B	C	D	E*	F	G	H	I	J
Treatment cycles commenced	65	997	1,003	165	321	201	105	310	260	30
Cycles with oocyte retrieval	65	843	911	146	321	189	79	294	206	30
· by ultrasound guidance	65	842	3	114	321	12	78	294	-	30
· by laparoscopy	-	1	908	32	-	177	1	-	206	-
Cycles with gamete transfer	65	820	903	146	313	189	79	280	205	30
Clinical pregnancies	12	245	289	52	61	59	17	86	47	1
Live-birth pregnancies	10	189	209	42	39	42	14	62	36	1
Clinical pregnancies per 100 oocyte retrieval cycles	18.5	29.1	31.7	35.6	19.0	31.2	21.5	29.3	22.8	3.3
Live-birth pregnancies per 100 oocyte retrieval cycles	15.4	22.4	22.9	28.8	12.1	22.2	17.7	21.1	17.5	3.3

Stage of treatment	IVF unit									
	K	L	M	N	O	P	Q	R	S	T
Treatment cycles commenced	4	63	98	133	20	116	61	11	33	115
Cycles with oocyte retrieval	4	62	78	115	16	89	54	11	28	101
· by ultrasound guidance	4	-	33	115	16	-	50	11	na	101
· by laparoscopy	-	62	45	-	-	89	4	-	na	-
Cycles with gamete transfer	4	62	76	115	16	85	54	11	28	94
Clinical pregnancies	1	11	13	31	4	14	12	5	6	21
Live-birth pregnancies	1	9	10	23	4	8	10	3	6	19
Clinical pregnancies per 100 oocyte retrieval cycles	25.0	17.7	16.7	27.0	25.0	15.7	22.2	45.5	21.4	20.8
Live-birth pregnancies per 100 oocyte retrieval cycles	25.0	14.5	12.8	20.0	25.0	9.0	18.5	27.3	21.4	18.8

Stage of treatment	IVF unit							
	U	V	W	X	Y	Z	AA	Total
Treatment cycles commenced	8	199	17	-	-	4	3	4,342
Cycles with oocyte retrieval	8	157	17	-	-	4	3	3,831
· by ultrasound guidance	3	153	17	-	-	4	3	2,269
· by laparoscopy	5	4	-	-	-	-	-	1,534
Cycles with gamete transfer	7	151	17	-	-	4	3	3,757
Clinical pregnancies	4	45	5	-	-	-	1	1,042
Live-birth pregnancies	3	35	4	-	-	-	1	780
Clinical pregnancies per 100 oocyte retrieval cycles	50.0	28.7	29.4	-	-	-	33.3	27.2
Live-birth pregnancies per 100 oocyte retrieval cycles	37.5	22.3	23.5	-	-	-	33.3	20.4

* *Number of cycles commenced was not available, so total is slightly underestimated.*

Table 4. ***Numbers and pregnancy rates for individual IVF units, IVF pregnancies after use of frozen embryos, 1992***

Stage of treatment	IVF unit									
	A	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**
Cycles with embryo transfer	1,238	301	109	275	226	135	203	137	152	247
Clinical pregnancies	186	20	12	52	42	13	35	14	12	29
Live-birth pregnancies	135	12	10	39	24	6	26	8	10	22
Clinical pregnancies per 100 embryos transfers	15.0	6.6	11.0	18.9	18.6	9.6	17.2	10.2	7.9	11.7
Live-birth pregnancies per 100 embryos transfers	10.9	4.0	9.2	14.2	10.6	4.4	12.8	5.8	6.6	8.9

Stage of treatment	IVF unit									
	K	**L**	**M**	**N**	**O**	**P**	**Q**	**R**	**S**	**T**
Cycles with embryo transfer	188	29	143	72	53	45	73	35	35	19
Clinical pregnancies	24	1	23	7	11	9	10	2	3	-
Live-birth pregnancies	20	1	21	5	8	8	6	2	3	-
Clinical pregnancies per 100 embryos transfers	12.8	3.4	16.1	9.7	20.8	20.0	13.7	5.7	8.6	-
Live-birth pregnancies per 100 embryos transfers	10.6	3.4	14.7	6.9	15.1	17.8	8.2	5.7	8.6	-

Stage of treatment	IVF unit							
	U	**V**	**W**	**X**	**Y**	**Z**	**AA**	**Total**
Cycles with embryo transfer	24	-	48	16	-	4	6	3,813
Clinical pregnancies	6	-	1	-	-	-	1	513
Live-birth pregnancies	5	-	1	-	-	-	1	373
Clinical pregnancies per 100 embryos transfers	25.0	-	2.1	-	-	-	16.7	13.5
Live-birth pregnancies per 100 embryos transfers	20.8	-	2.1	-	-	-	16.7	9.8

Table 5. ***Numbers and pregnancy rates for individual IVF units, IVF pregnancies after use of donor oocytes, 1992***

Stage of treatment	IVF unit									
	A	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**
Cycles with embryo transfer	52	72	27	53	50	4	5	-	11	-
Clinical pregnancies	11	8	1	10	9	-	3	-	1	-
Live-birth pregnancies	8	6	1	10	7	-	3	-	1	-
Clinical pregnancies per 100 embryos transfers	21.2	11.1	3.7	18.9	18.0	0.0	60.0	-	9.1	-
Live-birth pregnancies per 100 embryos transfers	15.4	8.3	3.7	18.9	14.0	0.0	60.0	-	9.1	-

Stage of treatment	IVF unit									
	K	**L**	**M**	**N**	**O**	**P**	**Q**	**R**	**S**	**T**
Cycles with embryo transfer	-	5	-	1	23	-	3	14	-	7
Clinical pregnancies	-	-	-	-	6	-	1	5	-	-
Live-birth pregnancies	-	-	-	-	2	-	1	3	-	-
Clinical pregnancies per 100 embryos transfers	-	-	-	-	26.1	-	33.3	35.7	-	-
Live-birth pregnancies per 100 embryos transfers	-	-	-	-	8.7	-	33.3	21.4	-	-

Stage of treatment	IVF unit							
	U	**V**	**W**	**X**	**Y**	**Z**	**AA**	**Total**
Cycles with embryo transfer	-	-	3	-	-	-	1	331
Clinical pregnancies	-	-	-	-	-	-	-	55
Live-birth pregnancies	-	-	-	-	-	-	-	42
Clinical pregnancies per 100 embryos transfers	-	-	-	-	-	-	-	16.6
Live-birth pregnancies per 100 embryos transfers	-	-	-	-	-	-	-	12.7

Table 6. *Oocyte retrieval cycles for IVF and GIFT, by age, cause of infertility, and drugs used to stimulate ovulation, selected IVF units, 1992*

Characteristic	Oocyte retrieval cycles attempted					
	IVF : uterine transfer		IVF : tubal transfer		GIFT	
	Number	Per cent	Number	Per cent	Number	Per cent
Maternal age (at start of treatment)						
<20	1	-	-	-	-	-
20-24	78	1.6	21	3.7	62	1.9
25-29	832	17.1	148	25.9	712	21.9
30-34	1,927	39.5	214	37.4	1,277	39.3
35-39	1,589	32.6	135	23.6	899	27.7
40+	451	9.2	54	9.4	300	9.2
All ages	**4,878**	**100.0**	**572**	**100.0**	**3,250**	**100.0**
Cause(s) of infertility						
Tubal only	2,398	51.7	18	3.1	192	6.1
Other female only	472	10.2	102	17.8	709	22.4
Male factors only	554	12.0	225	39.3	595	18.8
Multiple causes	839	18.1	139	24.3	379	12.0
Unexplained	372	8.0	88	15.4	1,295	40.9
All causes	**4,635**	**100.0**	**572**	**100.0**	**3,170**	**100.0**
Ovarian stimulation						
GnRH analogues + other	4,178	87.0	530	92.3	2,712	83.7
No GnRH analogues						
· clomiphene + any other	469	9.8	33	5.7	442	13.6
· other drugs	47	1.0	7	1.2	47	1.5
· natural cycles	108	2.2	4	0.7	40	1.2
Total	**4,802**	**100.0**	**574**	**100.0**	**3,241**	**100.0**

Table 7. *Embryo transfer cycles for IVF and GIFT, by number of embryos or oocytes transferred, selected IVF units, 1992*

Number of embryos / oocytes	Embryo transfer cycles					
	IVF : uterine transfer		IVF : tubal transfer		GIFT	
	Number	Per cent	Number	Per cent	Number	Per cent
One	542	12.7	72	13.6	159	4.5
Two	1,283	30.1	143	26.9	1,042	29.8
Three	2,239	52.6	304	57.3	2,072	59.2
Four	193	4.5	12	2.3	217	6.2
Five	3	0.1	-	-	3	0.1
Six or more	-	-	-	-	6	0.2
Total	**4,260**	**100.0**	**531**	**100.0**	**3,499**	**100.0**

Table 8. ***Numbers and pregnancy rates for selected stages of treatment in each IVF unit, IVF pregnancies after transfer of fresh embryos, 1993***

Stage of treatment	IVF unit									
	A	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**
Treatment cycles commenced	1,365	1,004	721	595	193	304	207	199	207	309
Cycles with oocyte retrieval	1,192	829	658	508	177	228	190	190	185	257
· by ultrasound guidance	1,192	827	552	507	177	228	188	190	185	211
· by laparoscopy	-	2	106	1	-	-	2	-	-	46
Cycles with embryo transfer	929	637	582	456	133	189	145	165	135	232
Clinical pregnancies	105	95	76	116	19	42	19	22	15	49
Live-birth pregnancies	79	62	43	88	9	36	15	14	14	43
Clinical pregnancies per 100 oocyte retrieval cycles	8.8	11.5	11.6	22.8	10.7	18.4	10.0	11.6	8.1	19.1
Live-birth pregnancies per 100 oocyte retrieval cycles	6.6	7.5	6.5	17.3	5.1	15.8	7.9	7.4	7.6	16.7

Stage of treatment	IVF unit									
	K	**L**	**M**	**N**	**O**	**P**	**Q**	**R**	**S**	**T**
Treatment cycles commenced	162	241	247	233	123	228	187	227	80	162
Cycles with oocyte retrieval	154	191	204	213	112	185	155	195	67	110
· by ultrasound guidance	152	191	204	213	112	185	145	195	67	85
· by laparoscopy	2	-	-	-	-		10	-	-	25
Cycles with embryo transfer	133	157	123	203	94	159	117	170	62	89
Clinical pregnancies	18	18	15	58	9	18	21	44	7	13
Live-birth pregnancies	13	16	8	32	6	16	17	34	6	10
Clinical pregnancies per 100 oocyte retrieval cycles	11.7	9.4	7.4	27.2	8.0	9.7	13.5	22.6	10.4	11.8
Live-birth pregnancies per 100 oocyte retrieval cycles	8.4	8.4	3.9	15.0	5.4	8.6	11.0	17.4	9.0	9.1

Stage of treatment	IVF unit								
	U	**V**	**W**	**X**	**Y**	**Z**	**AA**	**BB**	**Total**
Treatment cycles commenced	110	192	102	141	-	33	65	72	7,709
Cycles with oocyte retrieval	103	149	92	113	-	28	55	63	6,603
· by ultrasound guidance	103	148	92	113	-	28	55	63	6,408
· by laparoscopy	-	1	-	-	-	-	-	-	195
Cycles with embryo transfer	90	129	66	94	-	19	44	53	5,405
Clinical pregnancies	21	29	8	16	-	8	5	10	876
Live-birth pregnancies	15	22	3	9	-	6	2	8	626
Clinical pregnancies per 100 oocyte retrieval cycles	20.4	19.5	8.7	14.2	-	28.6	9.1	15.9	13.3
Live-birth pregnancies per 100 oocyte retrieval cycles	14.6	14.8	3.3	8.0	-	21.4	3.6	12.7	9.5

Table 9. *Numbers and pregnancy rates for selected stages of treatment in each IVF unit, IVF pregnancies after PROST, ZIFT, TEST and other methods, 1993*

Stage of treatment	IVF unit									
	A	B	C	D	E	F	G	H	I	J
Treatment cycles commenced	-	2	70	-	75	-	98	4	1	6
Cycles with oocyte retrieval	-	2	70	-	70	-	83	3	1	6
Cycles with embryo transfer	-	2	60	-	39	-	72	2	1	6
Clinical pregnancies	-	-	14	-	9	-	14	1	-	2
Live-birth pregnancies	-	-	9	-	7	-	12	1	-	2
Clinical pregnancies per 100 oocyte retrieval cycles	-	-	20.0	-	12.9	-	16.9	33.3	-	33.3
Live-birth pregnancies per 100 oocyte retrieval cycles	-	-	12.9	-	10.0	-	14.5	33.3	-	33.3

Stage of treatment	IVF unit									
	K	L	M	N	O	P	Q	R	S	T
Treatment cycles commenced	170	5	5	15	86	-	-	2	19	16
Cycles with oocyte retrieval	163	4	3	15	81	-	-	2	16	8
Cycles with embryo transfer	138	4	2	14	54	-	-	2	13	8
Clinical pregnancies	35	2	1	1	10	-	-	-	-	-
Live-birth pregnancies	21	1	1	1	8	-	-	-	-	-
Clinical pregnancies per 100 oocyte retrieval cycles	21.5	50.0	33.3	6.7	12.3	-	-	-	-	-
Live-birth pregnancies per 100 oocyte retrieval cycles	12.9	25.0	33.3	6.7	9.9	-	-	-	-	-

Stage of treatment	IVF unit								
	U	V	W	X	Y	Z	AA	BB	Total
Treatment cycles commenced	-	2	-	-	-	12	-	-	588
Cycles with oocyte retrieval	-	2	-	-	-	12	-	-	541
Cycles with embryo transfer	-	2	-	-	-	12	-	-	431
Clinical pregnancies	-	-	-	-	-	4	-	-	93
Live-birth pregnancies	-	-	-	-	-	4	-	-	67
Clinical pregnancies per 100 oocyte retrieval cycles	-	-	-	-	-	33.3	-	-	17.2
Live-birth pregnancies per 100 oocyte retrieval cycles	-	-	-	-	-	33.3	-	-	12.4

Table 10. ***Numbers and pregnancy rates for selected stages of treatment in each IVF unit, GIFT pregnancies, 1993***

Stage of treatment	IVF unit									
	A	B	C	D	E	F	G	H	I	J
Treatment cycles commenced	47	985	1,006	118	286	102	258	328	85	210
Cycles with oocyte retrieval	47	786	914	110	275	79	232	296	85	165
· by ultrasound guidance	47	786	3	92	275	78	8	296	85	-
· by laparoscopy	-	-	911	18	-	1	224	-	-	165
Cycles with embryo transfer	47	811	909	110	260	79	231	291	85	165
Clinical pregnancies	7	233	318	30	52	17	66	70	16	48
Live-birth pregnancies	5	179	241	26	29	14	53	44	12	40
Clinical pregnancies per 100 oocyte retrieval cycles	14.9	29.6	34.8	27.3	18.9	21.5	28.4	23.6	18.8	29.1
Live-birth pregnancies per 100 oocyte retrieval cycles	10.6	22.8	26.4	23.6	10.5	17.7	22.8	14.9	14.1	24.2

Stage of treatment	IVF unit									
	K	L	M	N	O	P	Q	R	S	T
Treatment cycles commenced	138	65	68	7	7	129	16	6	111	39
Cycles with oocyte retrieval	132	53	58	7	7	112	13	6	99	20
· by ultrasound guidance	-	46	4	7	7	112	13	6	99	12
· by laparoscopy	132	7	54	-	-	-	-	-	-	8
Cycles with embryo transfer	132	53	47	7	7	111	13	6	90	20
Clinical pregnancies	37	7	10	1	-	36	1	2	21	4
Live-birth pregnancies	28	3	6	1	-	27	1	2	18	4
Clinical pregnancies per 100 oocyte retrieval cycles	28.0	13.2	17.2	14.3	-	32.1	7.7	33.3	21.2	20.0
Live-birth pregnancies per 100 oocyte retrieval cycles	21.2	5.7	10.3	14.3	-	24.1	7.7	33.3	18.2	20.0

Stage of treatment	IVF unit								
	U	V	W	X	Y	Z	AA	BB	Total
Treatment cycles commenced	35	4	-	-	159	1	5	-	4,215
Cycles with oocyte retrieval	35	4	-	-	122	1	5	-	3,663
· by ultrasound guidance	-	3	-	-	120	1	5	-	2,105
· by laparoscopy	-	1	-	-	2	-	-	-	1,523
Cycles with embryo transfer	35	4	-	-	118	1	5	-	3,637
Clinical pregnancies	5	1	-	-	32	1	-	-	1,015
Live-birth pregnancies	3	1	-	-	23	1	-	-	761
Clinical pregnancies per 100 oocyte retrieval cycles	14.3	25.0	-	-	26.2	100.0	-	-	27.7
Live-birth pregnancies per 100 oocyte retrieval cycles	8.6	25.0	-	-	18.9	100.0	-	-	20.8

Table 11. ***Numbers and pregnancy rates for individual IVF units, IVF pregnancies after use of frozen embryos, 1993***

Stage of treatment	IVF unit									
	A	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**
Cycles with embryo transfer	1,289	333	112	316	396	309	140	186	304	104
Clinical pregnancies	230	35	11	50	42	57	16	23	22	14
Live-birth pregnancies	169	26	10	32	29	41	10	18	16	11
Clinical pregnancies per 100 embryos transfers	17.8	10.5	9.8	15.8	10.6	18.4	11.4	12.4	7.2	13.5
Live-birth pregnancies per 100 embryos transfers	13.1	7.8	8.9	10.1	7.3	13.3	7.1	9.7	5.3	10.6

Stage of treatment	IVF unit									
	K	**L**	**M**	**N**	**O**	**P**	**Q**	**R**	**S**	**T**
Cycles with embryo transfer	42	170	132	82	154	105	86	56	40	32
Clinical pregnancies	3	20	13	14	16	7	15	10	-	4
Live-birth pregnancies	2	17	8	7	11	6	11	3	-	2
Clinical pregnancies per 100 embryos transfers	7.1	11.8	9.8	17.1	10.4	6.7	17.4	17.9	0.0	12.5
Live-birth pregnancies per 100 embryos transfers	4.8	10.0	6.1	8.5	7.1	5.7	12.8	5.4	0.0	6.3

Stage of treatment	IVF unit								
	U	**V**	**W**	**X**	**Y**	**Z**	**AA**	**BB**	**Total**
Cycles with embryo transfer	58	36	46	18	-	35	19	7	4,607
Clinical pregnancies	5	6	4	1	-	3	1	-	622
Live-birth pregnancies	4	5	-	-	-	2	-	-	440
Clinical pregnancies per 100 embryos transfers	8.6	16.7	8.7	5.6	-	8.6	5.3	0.0	13.5
Live-birth pregnancies per 100 embryos transfers	6.9	13.9	0.0	0.0	-	5.7	0.0	0.0	9.6

Table 12. ***Numbers and pregnancy rates for individual IVF units, IVF pregnancies after use of donor oocytes, 1993***

Stage of treatment	IVF unit									
	A	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**
Cycles with embryo transfer	54	77	25	58	58	8	-	-	2	10
Clinical pregnancies	8	19	3	12	7	4	-	-	-	2
Live-birth pregnancies	7	14	2	7	5	4	-	-	-	2
Clinical pregnancies per 100 embryos transfers	14.8	24.7	12.0	20.7	12.1	50.0	-	-	-	20.0
Live-birth pregnancies per 100 embryos transfers	13.0	18.2	8.0	12.1	8.6	50.0	-	-	-	20.0

Stage of treatment	IVF unit									
	K	**L**	**M**	**N**	**O**	**P**	**Q**	**R**	**S**	**T**
Cycles with embryo transfer	4	-	2	13	2	2	2	10	2	1
Clinical pregnancies	1	-	-	2	2	-	-	4	1	-
Live-birth pregnancies	1	-	-	1	1	-	-	1	1	-
Clinical pregnancies per 100 embryos transfers	25.0	-	-	15.4	100.0	-	-	40.0	50.0	-
Live-birth pregnancies per 100 embryos transfers	25.0	-	-	7.7	50.0	-	-	10.0	50.0	-

Stage of treatment	IVF unit								
	U	**V**	**W**	**X**	**Y**	**Z**	**AA**	**BB**	**Total**
Cycles with embryo transfer	4	-	3	-	-	5	-	-	342
Clinical pregnancies	-	-	1	-	-	1	-	-	67
Live-birth pregnancies	-	-	1	-	-	1	-	-	48
Clinical pregnancies per 100 embryos transfers	-	-	33.3	-	-	20.0	-	-	19.6
Live-birth pregnancies per 100 embryos transfers	-	-	33.3	-	-	20.0	-	-	14.0

Table 13. *Oocyte retrieval cycles for IVF and GIFT, by age, cause of infertility, and drugs used to stimulate ovulation, selected IVF units, 1993*

Characteristic	Oocyte retrieval cycles attempted					
	IVF : uterine transfer		IVF : tubal transfer		GIFT	
	Number	Per cent	Number	Per cent	Number	Per cent
Maternal age (at start of treatment)						
<20	-	-	-	-	2	0.1
20-24	119	2.0	17	3.9	67	2.1
25-29	1,037	17.3	86	19.6	609	19.0
30-34	2,232	37.3	181	41.3	1,294	40.3
35-39	1,912	32.0	112	25.6	899	28.0
40+	680	11.4	42	9.6	339	10.6
All ages	**5,980**	**100.0**	**438**	**100.0**	**3,210**	**100.0**
Cause(s) of infertility						
Tubal only	2,379	41.2	15	3.4	134	4.3
Other female only	680	11.8	77	17.6	860	27.3
Male factors only	1,295	22.4	238	54.3	595	18.9
Multiple causes	746	12.9	58	13.2	394	12.5
Unexplained	671	11.6	50	11.4	1,166	37.0
All causes	**5,771**	**100.0**	**438**	**100.0**	**3,149**	**100.0**
Ovarian stimulation						
GnRH analogues + other	5,394	85.9	330	91.9	2,800	86.8
No GnRH analogues						
· clomiphene + any other	637	10.1	25	7.0	364	11.3
· other drugs	39	0.6	3	0.8	24	0.7
· natural cycles	212	3.4	1	0.3	38	1.2
Total	**6,282**	**100.0**	**359**	**100.0**	**3,226**	**100.0**

Table 14. *Embryo transfer cycles for IVF and GIFT, by number of embryos or oocytes transferred, selected IVF units, 1993*

Number of embryos / oocytes	Embryo transfer cycles					
	IVF : uterine transfer		IVF : tubal transfer		GIFT	
	Number	Per cent	Number	Per cent	Number	Per cent
One	791	15.0	66	16.3	158	4.6
Two	1,893	35.8	98	24.1	1,064	31.2
Three	2,474	46.8	221	54.4	2,031	59.5
Four	126	2.4	21	5.2	152	4.5
Five	3	0.1	-	-	2	0.1
Six or more	-	-	-	-	7	0.2
Total	**5,287**	**100.0**	**406**	**100.0**	**3,414**	**100.0**

Table 15: ***Numbers and outcomes of completed IVF pregnancies in conception cohorts, 1979-1993***

Outcome of pregnancy	Year of conception							
	1979-1991		1992		1993		1979-1993	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
Spontaneous abortion	1,612	21.0	314	20.8	335	19.9	2,261	20.8
Termination of pregnancy	36	0.5	7	0.5	15	0.9	58	0.5
Ectopic pregnancy	472	6.1	74	4.9	67	4.0	613	5.6
Stillbirth	124	1.6	14	0.9	15	0.9	153	1.4
Live birth *	5,438	70.8	1,102	72.9	1,253	74.4	7,793	71.6
Total pregnancies	**7,682**	**100.0**	**1,511**	**100.0**	**1,685**	**100.0**	**10,878**	**100.0**

* *Multiple pregnancies with both stillbirths and live births are included only in the live birth category*

Table 16: ***Place of parental residence, IVF pregnancies, 1979-1993***

Place of usual residence	Number			Per cent		
	1979-1991	1992	1993	1979-1991	1992	1993
New South Wales	2,292	473	455	30.0	31.3	27.0
Victoria	1,870	446	514	24.5	29.5	30.5
Queensland	1,192	172	173	15.6	11.4	10.3
South Australia	911	175	217	11.9	11.6	12.9
Western Australia	677	98	124	8.9	6.5	7.4
Tasmania	177	18	27	2.3	1.2	1.6
Australian Capital Territory	68	13	15	0.9	0.9	0.9
Northern Territory	14	9	23	0.2	0.6	1.4
New Zealand	380	103	129	5.0	6.8	7.7
Other countries	48	4	7	0.6	0.3	0.4
Not stated	53	-	1	-	-	-
Total	**7,682**	**1,511**	**1,685**	**100.0**	**100.0**	**100.0**

Table 17: *Maternal ages, IVF pregnancies, 1979-1993*

Age group (years)	Number			Per cent		
	1979-1991	1992	1993	1979-1991	1992	1993
Less than 20	2	-	1	0.0	-	0.1
20 - 24	181	24	34	2.4	1.6	2.0
25 - 29	1,994	333	356	26.0	22.0	21.2
30 - 34	3,344	666	715	43.6	44.1	42.5
35 - 39	1,907	411	475	24.8	27.2	28.2
40 - 45	236	68	98	3.1	4.5	5.8
45 and over	12	9	4	0.2	0.6	0.2
Not stated	6	-	2	-	-	-
Total	**7,682**	**1,511**	**1,685**	**100.0**	**100.0**	**100.0**

Table 18: *Paternal ages, IVF pregnancies, 1979-1993*

Age group (years)	Number			Per cent		
	1979-1991	1992	1993	1979-1991	1992	1993
Less than 20	1	-	-	0.0	-	-
20 - 24	76	12	20	1.1	0.8	1.2
25 - 29	1,113	205	202	16.1	13.9	12.4
30 - 34	2,671	550	603	38.7	37.4	36.9
35 - 39	1,991	420	500	28.8	28.5	30.6
40 - 45	758	192	217	11.0	13.0	13.3
45 and over	294	93	91	4.3	6.3	5.6
Not stated	778	39	52	-	-	-
Total	**7,682**	**1,511**	**1,685**	**100.0**	**100.0**	**100.0**

Table 19: *Previous pregnancies for pregnant women, IVF pregnancies, 1979-1993*

Number of previous pregnancies	Number				Per cent			
	1979-1990	1991	1992	1993	1979-1990	1991	1992	1993
None	3,048	621	629	728	49.3	47.7	43.0	45.8
One	1,668	356	447	461	27.0	27.3	30.6	29.0
Two	792	184	204	207	12.8	14.1	13.9	13.0
Three	405	80	107	107	6.6	6.1	7.3	6.7
Four or more	269	61	76	87	4.4	4.7	5.2	5.5
Not stated	187	11	48	95	-	-	-	-
Total	**6,369**	**1,313**	**1,511**	**1,685**	**100.0**	**100.0**	**100.0**	**100.0**

Table 20: ***Duration of infertility, IVF pregnancies, 1979-1993***

Duration of infertility (years)	Number			Per cent		
	1979-1991	1992	1993	1979-1991	1992	1993
Less than 2	205	84	81	2.8	5.8	5.0
2 - 3	2,067	494	576	28.7	34.1	35.5
4 - 5	2,125	391	477	29.5	27.0	29.4
6 - 7	1,292	234	230	17.9	16.1	14.2
8 - 9	689	106	121	9.6	7.3	7.5
10 or more	820	140	137	11.4	9.7	8.4
Not stated	484	62	63	-	-	-
Total	**7,682**	**1,511**	**1,685**	**100.0**	**100.0**	**100.0**

Table 21: ***Outcome of pregnancy by duration of infertility, IVF pregnancies, 1992-1993***

Outcome of pregnancy	Duration of infertility (years)					
	Less than 4		4 - 7		8 or more	
	Number	Per cent	Number	Per cent	Number	Per cent
Spontaneous abortion	246	19.9	269	20.2	107	21.2
Termination of pregnancy	9	0.7	7	0.5	6	1.2
Ectopic pregnancy	52	4.2	54	4.1	28	5.6
Stillbirth	9	0.7	13	1.0	5	1.0
Live birth *	919	74.4	989	74.2	358	71.0
Total	**1,235**	**100.0**	**1,332**	**100.0**	**504**	**100.0**

* *Multiple pregnancies with both stillbirths and live births are included only in the live birth category*
Note: The duration of infertility was not stated for 125 pregnancies in 1992-1993

Table 22: ***Causes of infertility, selected IVF cohorts, 1979-1993***

Causes of infertility	Number			Per cent		
	1979-1991	1992	1993	1979-1991	1992	1993
Tubal	3,302	498	524	43.1	33.0	31.1
Male factor	846	322	362	11.0	21.3	21.5
Endometriosis	429	91	111	5.6	6.0	6.6
Other stated causes	328	98	123	4.3	6.5	7.3
Multiple causes	1,992	347	392	26.0	23.0	23.3
Unexplained infertility	773	154	171	10.1	10.2	10.2
Not stated	12	1	2	-	-	-
Total	**7,682**	**1,511**	**1,685**	**100.0**	**100.0**	**100.0**

Table 23: *Outcome of IVF pregnancies by causes of infertility, 1992-1993*

Outcome of pregnancy	Causes of infertility					
	Tubal	Male	Endometriosis	Multiple	Unexplained	Total *
			Number			
Spontaneous abortion	225	121	39	156	47	649
Termination of pregnancy	7	2	1	7	3	22
Ectopic pregnancy	68	15	9	35	9	141
Stillbirth	6	7	1	9	3	29
Live birth	716	539	152	532	263	2,355
Total	**1,022**	**684**	**202**	**739**	**325**	**3,196**
			Per cent			
Spontaneous abortion	22.0	17.7	19.3	21.1	14.5	20.3
Termination of pregnancy	0.7	0.3	0.5	0.9	0.9	0.7
Ectopic pregnancy	6.7	2.2	4.5	4.7	2.8	4.4
Stillbirth	0.6	1.0	0.5	1.2	0.9	0.9
Live birth	70.1	78.8	75.2	72.0	80.9	73.7
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

* *Total includes 224 pregnancies with 'other' or 'not stated' causes of infertility*

Table 24: *Drugs used to stimulate ovulation, IVF pregnancies, 1979-1993*

Drugs	Number			Per cent		
	1979-1991	1992	1993	1979-1991	1992	1993
Natural cycles	30	3	11	0.4	0.2	0.7
Clomiphene and hMG or FSH	5,128	302	205	71.7	21.7	13.1
hMG or FSH	142	26	16	2.0	1.9	1.0
GnRH analogues and hMG or FSH	1,813	1,053	1,329	25.3	75.8	85.1
Other	44	6	-	0.6	0.4	-
Not stated	525	121	124	-	-	-
Total	**7,682**	**1,511**	**1,685**	**100.0**	**100.0**	**100.0**

Table 25: *IVF treatment cycle in which conception occurred, 1979-1993*

Treatment cycle	Number			Per cent		
	1979-1991	1992	1993	1979-1991	1992	1993
1	3,142	605	692	43.3	42.8	43.9
2	1,788	345	371	24.6	24.4	23.5
3	994	199	234	13.7	14.1	14.8
4	569	101	113	7.8	7.1	7.2
5 or more	765	165	167	10.5	11.7	10.6
Not stated	424	96	108	-	-	-
Total	**7,682**	**1,511**	**1,685**	**100.0**	**100.0**	**100.0**

Table 26: *Number of oocytes collected by laparoscopy or ultrasound guidance, IVF pregnancies, 1979-1993*

Number of oocytes collected	1979-1991		1992		1993	
	Number	Per cent	Number	Per cent	Number	Per cent
1	149	2.1	10	0.7	22	1.4
2	460	6.5	21	1.6	37	2.4
3	707	10.0	43	3.2	45	2.9
4	890	12.5	68	5.0	87	5.6
5	903	12.7	108	8.0	90	5.8
6	820	11.6	105	7.8	110	7.1
7	626	8.8	104	7.7	106	6.9
8 or more	2,537	35.8	894	66.1	1,049	67.9
Not stated	590	-	158	-	139	-
Total	**7,682**	**100.0**	**1,511**	**100.0**	**1,685**	**100.0**
Mean number of oocytes	7.7*		11.0		11.1	

* *Data include 1987-1991*

Table 27: ***Number of embryos transferred, IVF pregnancies, 1979-1993***

Number of embryos transferred	Number			Per cent		
	1979-1991	1992	1993	1979-1991	1992	1993
1	583	120	131	7.7	8.0	7.8
2	1,832	653	723	24.2	43.3	43.2
3	3,371	683	788	44.6	45.3	47.1
4	1,618	53	28	21.4	3.5	1.7
5 or more	158	-	2	2.1	-	0.1
Not stated	120	2	13	-	-	-
Total	**7,682**	**1,511**	**1,685**	**100.0**	**100.0**	**100.0**
Mean number of embryos	2.9	2.4	2.4			

Table 28: ***Outcome of IVF pregnancies by number of embryos transferred, 1992-1993***

Outcome of pregnancy	Number of embryos transferred					
	1	2	3	4	5+	Total **
			Number			
Spontaneous abortion	60	269	296	21	-	649
Termination of pregnancy	1	9	12	-	-	22
Ectopic pregnancy	7	39	87	7	-	141
Stillbirth	1	10	17	1	-	29
Live birth *	182	1,049	1,059	52	2	2,355
Total	**251**	**1,376**	**1,471**	**81**	**2**	**3,196**
			Per cent			
Spontaneous abortion	23.9	19.5	20.1	25.9	-	20.3
Termination of pregnancy	0.4	0.7	0.8	-	-	0.7
Ectopic pregnancy	2.8	2.8	5.9	8.6	-	4.4
Stillbirth	0.4	0.7	1.2	1.2	-	0.9
Live birth *	72.5	76.2	72.0	64.2	100.0	73.7
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

** Multiple pregnancies with both stillbirths and live births are included only in the live birth category*

*** Total includes 15 pregnancies in which the number of embryos transferred was not stated*

Table 29: ***Number of IVF pregnancies following donor oocytes, sperm or embryos, and frozen embryos or oocytes, 1979-1993***

Type of pregnancy	1979-1990	1991	1992	1993	Total
Donor oocytes	130	46	51	68	295
Donor sperm	551	139	150	138	978
Donor embryos	8	1	2	9	20
Frozen embryos	552	395	530	598	2,075
Frozen oocytes	4	-	-	-	4

Table 30: ***Outcome of pregnancy after use of donor gametes, donor or frozen embryos, IVF pregnancies, 1992-1993***

Outcome of pregnancy	Donor sperm		Donor oocytes		Donor embryos		Frozen embryos	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
Spontaneous abortion	55	19.1	26	21.8	3	27.3	218	19.3
Termination of pregnancy	-	-	1	0.8	-	-	7	0.6
Ectopic pregnancy	9	3.1	3	2.5	2	18.2	36	3.2
Stillbirth	3	1.0	1	0.8	-	-	9	0.8
Live birth *	221	76.7	88	73.9	6	54.5	858	76.1
Total	**288**	**100.0**	**119**	**100.0**	**11**	**100.0**	**1,128**	**100.0**

** Multiple pregnancies with both stillbirths and live births are included only in the live birth category*

Table 31: ***Number and outcome of pregnancies after microinsemination, 1990-1993***

Outcome of pregnancy	Year of conception							
	1990-1991		1992		1993		1990-1993	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
Spontaneous abortion	7	20.6	20	27.4	25	18.2	52	21.3
Termination of pregnancy	1	2.9	1	1.4	-	-	2	0.8
Ectopic pregnancy	3	8.8	1	1.4	2	1.5	6	2.5
Stillbirth	-	-	1	1.4	1	0.7	2	0.8
Live birth *	23	67.6	50	68.5	109	79.6	182	74.6
Total pregnancies	**34**	**100.0**	**73**	**100.0**	**137**	**100.0**	**244**	**100.0**

** Multiple pregnancies with both stillbirths and live births are included only in the live birth category*

Table 32: ***Drugs used in luteal phase after embryos transfer, IVF pregnancies, 1979-1993***

Drugs	Number			Per cent		
	1979-1991	1992	1993	1979-1991	1992	1993
Proluton	241	2	4	3.2	0.1	0.2
Human chorionic gonadotrophin (hCG)	3,551	718	830	47.3	47.6	49.9
Human chorionic gonadotrophin / Proluton	389	38	57	5.2	2.5	3.4
Progestagen	683	322	390	9.1	21.4	23.5
Other drugs	66	15	2	0.9	1.0	0.1
None	2,576	412	379	34.3	27.3	22.8
Not stated	176	4	23	-	-	-
Total	**7,682**	**1,511**	**1,685**	**100.0**	**100.0**	**100.0**

Table 33: ***Outcome of pregnancy in maternal age groups, IVF pregnancies, 1992-1993***

Outcome of pregnancy	Maternal age (years)					
	Less than 25	25 - 29	30 - 34	35 - 39	40 and over	Total *
			Number			
Spontaneous abortion	9	125	245	204	64	649
Termination of pregnancy	1	6	7	7	1	22
Ectopic pregnancy	1	28	68	37	7	141
Stillbirth	-	3	13	10	3	29
Live birth	48	527	1,048	628	104	2,355
Total	**59**	**689**	**1,381**	**886**	**179**	**3,196**
			Per cent			
Spontaneous abortion	15.3	18.1	17.7	23.0	35.8	20.3
Termination of pregnancy	1.7	0.9	0.5	0.8	0.6	0.7
Ectopic pregnancy	1.7	4.1	4.9	4.2	3.9	4.4
Stillbirth	-	0.4	0.9	1.1	1.7	0.9
Live birth	81.4	76.5	75.9	70.9	58.1	73.7
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

* *Total includes 2 pregnancies in which maternal age was not stated*

Table 34: ***Spontaneous abortions, IVF pregnancies, 1979-1993***

Outcome of pregnancy	1979-1990	1991	1992	1993	1979-1993
Spontaneous abortion	1,361	251	314	335	2,261
Stillbirth	108	16	14	15	153
Live birth	4,480	958	1,102	1,253	7,793
Total abortion and births	5,949	1,225	1,430	1,603	10,207
Spontaneous abortion rate (%)	22.9	20.5	22.0	20.9	22.2

Table 35: ***Incidence of spontaneous abortions in maternal age groups, IVF pregnancies, 1992-1993***

Maternal age (years)	Number of IVF pregnancies *	Spontaneous abortions	
		Number	Per cent
Less than 25	58	9	15.5
25 - 29	657	125	19.0
30 - 34	1,308	245	18.7
35 - 39	843	204	24.2
40 - 44	158	58	36.7
45 and over	13	6	46.2
Not stated	2	2	-
Total	**3,039**	**649**	**21.4**

* *Spontaneous abortions and pregnancies of at least 20 weeks' gestation*

Table 36: ***Ectopic pregnancies after IVF, 1979-1993***

Outcome of pregnancy	1979-1990	1991	1992	1993	Total
Ectopic pregnancies	394	78	74	67	613
Clinical pregnancies	6,369	1,313	1,511	1,685	10,878
% ectopic pregnancies	6.2	5.9	4.9	4.0	5.6
Total abortion and births	5,975	1,235	1,437	1,618	10,265
Ectopic pregnancy ratio *	1:15.2	1:15.9	1:19.4	1:24.1	1:16.7

* *Ratio of ectopic pregnancies: total abortions and births*

Table 37: ***Duration of singleton and multiple IVF pregnancies of at least 20 weeks' gestation, 1992-1993***

Gestation age (weeks)	Singleton		Twin		Triplet		Total *	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
20 - 23	18	0.9	8	2.1	1	2.6	28	1.2
24 - 27	24	1.2	13	3.4	2	5.3	39	1.6
28 - 31	28	1.4	22	5.8	8	21.1	58	2.4
32 - 36	211	10.7	161	42.6	23	60.5	395	16.6
37 - 41	1,647	83.9	174	46.0	4	10.5	1,825	76.7
42 or more	35	1.8	-	-	-	-	35	1.5
20 - 36	281	14.3	204	54.0	34	89.5	520	21.8
Not stated	4	-	-	-	-	-	4	-
Total	**1,967**	**100.0**	**378**	**100.0**	**38**	**100.0**	**2,384**	**100.0**

* *Total includes 1 quadruplet pregnancy*

Table 38: ***Duration of singleton and multiple pregnancies of at least 20 weeks' gestation after microinsemination, 1990-1993***

Gestation age (weeks)	Singleton		Twin		Triplet		Total	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
20 - 23	1	0.7	-	-	-	-	1	0.5
24 - 27	-	-	1	3.1	1	100.0	2	1.1
28 - 31	4	2.6	1	3.1	-	-	5	2.7
32 - 36	20	13.2	9	28.1	-	-	29	15.8
37 - 41	124	82.1	21	65.6	-	-	145	78.8
42 or more	2	1.3	-	-	-	-	2	1.1
20 - 36	25	16.6	11	34.4	1	100.0	37	20.1
Total	**151**	**100.0**	**32**	**100.0**	**1**	**100.0**	**184**	**100.0**

Table 39: *Duration of pregnancy of singleton IVF births after use of donor sperm, donor oocytes or frozen embryos, 1992-1993*

Gestation age (weeks)	Donor sperm		Donor oocytes		Frozen embryos	
	Number	Per cent	Number	Per cent	Number	Per cent
20 - 27	1	0.6	-	-	17	2.2
28 - 31	-	-	-	-	6	0.8
32 - 36	15	8.3	13	15.5	76	10.0
37 - 41	162	89.5	71	84.5	646	85.0
42 or more	3	1.7	-	-	15	2.0
Not stated	1	-	-	-	3	-
Total	**182**	**100.0**	**84**	**100.0**	**763**	**100.0**

Table 40: *Maternal age and duration of singleton IVF pregnancies of at least 20 weeks' gestation, 1992-1993*

Gestational age (weeks)	Maternal age (years)					
	Less than 25	25 - 29	30 - 34	35 - 39	40 and over	Total
			Number			
20 - 27	1	16	16	14	1	48
28 - 31	1	6	10	8	3	28
32 - 36	2	32	108	60	9	211
37 or more	34	371	722	470	85	1,682
Not stated	-	-	3	1	-	4
Total	**38**	**425**	**859**	**553**	**98**	**1,973**
20 - 36	4	54	134	82	13	287
			Per cent			
20 - 27	2.6	3.8	1.9	2.5	1.0	2.4
28 - 31	2.6	1.4	1.2	1.4	3.1	1.4
32 - 36	5.3	7.5	12.6	10.9	9.2	10.7
37 or more	89.5	87.3	84.3	85.1	86.7	85.4
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
20 - 36	10.5	12.7	15.7	14.9	13.3	14.6

Table 41: *Causes of infertility and duration of singleton IVF pregnancies of at least 20 weeks' gestation, 1992-1993*

Gestational age (weeks)	Causes of infertility					
	Tubal	Male	Endometriosis	Multiple	Unexplained	Total *
			Number			
20 - 27	16	8	4	13	4	48
28 - 31	7	10	-	2	6	28
32 - 36	51	46	17	46	30	211
37 - or more	518	390	107	378	181	1,682
Not stated	2	-	-	2	-	4
Total	**594**	**454**	**128**	**441**	**221**	**1,973**
20 - 36	74	64	21	61	40	287
			Per cent			
20 - 27	2.7	1.8	3.1	3.0	1.8	2.4
28 - 31	1.2	2.2	-	0.5	2.7	1.4
32 - 36	8.6	10.1	13.3	10.5	13.6	10.7
37 - or more	87.5	85.9	83.6	86.1	81.9	85.4
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
20 - 36	12.5	14.1	16.4	13.9	18.1	14.6

* *Total includes 135 pregnancies with 'other' or 'not stated' causes of infertility*

Table 42: *Plurality of IVF pregnancies of at least 20 weeks' gestation, 1979-1993*

Plurality	Number			Per cent		
	1979-1991	1992	1993	1979-1991	1992	1993
Singletons	4,385	921	1,052	78.8	82.4	82.7
Twins	1,013	178	200	18.2	15.9	15.7
Triplets	161	19	19	2.9	1.7	1.5
Quadruplets	8	-	1	0.1	-	0.1
Quintuplets	1	-	-	0.0	-	-
Total	**5,568**	**1,118**	**1,272**	**100.0**	**100.0**	**100.0**

Table 43: ***Plurality of IVF pregnancies of at least 20 weeks' gestation and number of embryos transferred, 1992-1993***

Number of embryos transferred	Plurality							
	Singleton		Twin		Triplet		Total *	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
1	181	98.9	2	1.1	-	-	183	100.0
2	905	85.3	153	14.4	3	0.3	1,061	100.0
3	829	76.8	217	20.1	33	3.1	1,080	100.0
4	45	84.9	6	11.3	2	3.8	53	100.0
5 or more	2	100.0	-	-	-	-	2	100.0
Not stated	11	-	-	-	-	-	11	-
Total	**1,973**	**82.6**	**378**	**15.8**	**38**	**1.6**	**2,390**	**100.0**

* *Total includes 1 quadruplet pregnancy*

Table 44: ***Method of delivery for singleton and multiple IVF pregnancies of at least 20 weeks' gestation, 1992-1993***

Plurality	Method of delivery				
	Vaginal		Caesarean section		Total *
	Number	Per cent	Number	Per cent	Number
Singleton	1,228	62.5	736	37.5	1,973
Twin	175	46.5	201	53.5	378
Triplet	2	5.3	36	94.7	38
Quadruplet	1	100.0	-	-	1
Total	**1,406**	**59.1**	**973**	**40.9**	**2,390**

* *Total includes 11 pregnancies in which the method of delivery was not stated*

Table 45: ***Sex of infants in singleton and multiple IVF births of at least 20 weeks' gestation, selected fertilisation cohorts, 1979-1993***

Plurality	Male			Female			Sex ratio (M:F)		
	1979-1991	1992	1993	1979-1991	1992	1993	1979-1991	1992	1993
Singletons	2,239	484	555	2,115	434	491	105.9	111.5	113.0
Twins	1,056	182	206	959	173	190	110.1	105.2	108.4
Triplets	240	36	28	237	21	29	101.3	171.4	96.6
Quadruplets	18	-	3	14	-	1	128.6	-	300.0
Quintuplets	1	-	-	4	-	-	25.0	-	-
Total	**3,554**	**702**	**792**	**3,329**	**628**	**711**	**106.8**	**111.8**	**111.4**

Note: Infant's sex was not stated for 63 births

Table 46: ***Birthweight of IVF live births and stillbirths, 1992-1993***

Birthweight (g)	Live births		Stillbirths		Total births	
	Number	Per cent	Number	Per cent	Number	Per cent
Less than 500	12	0.4	18	45.0	30	1.1
500 - 999	53	1.9	10	25.0	63	2.2
1000 - 1499	100	3.6	4	10.0	104	3.7
1500 - 1999	193	6.9	4	10.0	197	7.0
2000 - 2499	372	13.4	2	5.0	374	13.3
2500 - 2999	546	19.6	-	-	546	19.4
3000 - 3499	792	28.5	2	5.0	794	28.2
3500 - 3999	518	18.6	-	-	518	18.4
4000 and over	193	6.9	-	-	193	6.8
Not stated	13	-	14	-	27	-
Total	**2,792**	**100.0**	**54**	**100.0**	**2,846**	**100.0**
Mean birthweight (g)	2,938		905		2,909	

Table 47: ***Birthweight of infants in singleton and multiple IVF births of at least 20 weeks' gestation, 1992-1993***

Birthweight (g)	Singleton		Twin		Triplet		Total *	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
Less than 500	11	0.6	13	1.7	2	1.8	30	1.1
500 - 999	28	1.4	29	3.9	6	5.3	63	2.2
1000 - 1499	25	1.3	51	6.8	28	24.6	104	3.7
1500 - 1999	46	2.4	112	15.0	39	34.2	197	7.0
2000 - 2499	126	6.5	218	29.1	30	26.3	374	13.3
2500 - 2999	299	15.3	238	31.8	9	7.9	546	19.4
3000 - 3499	714	36.6	80	10.7	-	-	794	28.2
3500 - 3999	511	26.2	7	0.9	-	-	518	18.4
4000 and over	192	9.8	1	0.1	-	-	193	6.8
Less than 2500	236	12.1	423	56.5	105	92.1	768	27.2
Not stated	20	-	7	-	-	-	27	-
Total	**1,972**	**100.0**	**756**	**100.0**	**114**	**100.0**	**2,846**	**100.0**
Mean birthweight (g)	3,220		2,287		1,761		2,909	

** Total includes 4 quadruplet births*

Table 48: ***Birthweight of infants in singleton and multiple births of at least 20 weeks' gestation after microinsemination, 1990-1993***

Birthweight (g)	Singleton		Twin		Triplet		Total	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
500 - 999	1	0.7	1	1.6	1	33.3	3	1.4
1000 - 1499	1	0.7	2	3.1	2	66.7	5	2.3
1500 - 1999	7	4.6	7	10.9	-	-	14	6.4
2000 - 2499	15	9.9	22	34.4	-	-	37	17.0
2500 - 2999	22	14.6	21	32.8	-	-	43	19.7
3000 - 3499	55	36.4	9	14.1	-	-	64	29.4
3500 - 3999	40	26.5	2	3.1	-	-	42	19.3
4000 and over	10	6.6	0	0.0	-	-	10	4.6
Less than 2500	24	15.9	32	50.0	3	100.0	59	27.1
Total	**151**	**100.0**	**64**	**100.0**	**3**	**100.0**	**218**	**100.0**
Mean birthweight (g)	3,170		2,502		997		2,944	

Table 49: ***Birthweight of infants in singleton IVF pregnancies after use of donor sperm, donor oocytes or frozen embryos, 1979-1993***

Birthweight (g)	Donor sperm		Donor oocytes		Frozen embryos	
	Number	Per cent	Number	Per cent	Number	Per cent
Less than 500	4	0.7	1	0.5	6	0.4
500 - 999	5	0.9	3	1.6	18	1.3
1000 - 1499	6	1.0	5	2.6	9	0.7
1500 - 1999	11	1.9	5	2.6	29	2.1
2000 - 2499	38	6.5	17	9.0	58	4.2
2500 or more	521	89.1	158	83.6	1,254	91.3
Not stated	7	-	3	-	24	-
Less than 2500	64	10.9	31	16.4	120	8.7
Total	**592**	**100.0**	**192**	**100.0**	**1,398**	**100.0**

Table 50: ***Outcome of infants in singleton and multiple IVF births of at least 20 weeks' gestation, 1992-1993***

Outcome	Singleton	Twin	Triplet	Quadruplet	Total
Live births	1,943	736	113	-	2,792
Stillbirths	29	20	1	4	54
Total births	**1,972**	**756**	**114**	**4**	**2,846**
Neonatal deaths	18	14	4	-	36
Perinatal deaths	47	34	5	4	90
Stillbirth rate per 1,000 total births	14.7	26.5	8.8	1000.0	19.0
Neonatal death rate per 1,000 live births	9.3	19.0	35.4	-	12.9
Perinatal mortality rate per 1,000 total births	23.8	45.0	43.9	1000.0	31.6

Table 51: ***Major congenital malformations in singleton and multiple IVF births of at least 20 weeks' gestation, 1979-1993***

Outcome	Singleton	Multiple	Total *
Total births	6,388	3,419	9,807
Congenital malformations			
- number	185	62	247
- rate (per cent)	2.9	1.8	2.5

** Total includes 31 abortions for fetal abnormality at gestational ages of at least 16 weeks*

Table 52: ***Numbers and outcomes of completed GIFT pregnancies in conception cohorts, 1985-1993***

Outcome of pregnancy	Year of conception							
	1985-1991		1992		1993		1985-1993	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
Spontaneous abortion	869	21.5	214	20.7	188	18.6	1,271	20.8
Termination of pregnancy	21	0.5	5	0.5	9	0.9	35	0.6
Ectopic pregnancy	176	4.3	27	2.6	31	3.1	234	3.8
Stillbirth	51	1.3	9	0.9	4	0.4	64	1.0
Live birth *	2,933	72.4	781	75.4	781	77.1	4,495	73.7
Total pregnancies	**4,050**	**100.0**	**1,036**	**100.0**	**1,013**	**100.0**	**6,099**	**100.0**

** Multiple pregnancies with both stillbirths and live births are included only in the live birth category*

Table 53: ***Place of parental residence, GIFT pregnancies, 1985-1993***

Place of usual residence	Number			Per cent		
	1985-1991	1992	1993	1985-1991	1992	1993
New South Wales	1,389	287	285	34.4	27.7	28.2
Victoria	673	307	281	16.7	29.6	27.8
Queensland	978	308	359	24.2	29.7	35.5
South Australia	357	59	27	8.8	5.7	2.7
Western Australia	489	46	39	12.1	4.4	3.9
Tasmania	15	5	5	0.4	0.5	0.5
Australian Capital Territory	29	8	5	0.7	0.8	0.5
Northern Territory	6	2	3	0.1	0.2	0.3
New Zealand	86	10	5	2.1	1.0	0.5
Other countries	17	4	3	0.4	0.4	0.3
Not stated	11	-	1	-	-	-
Total	**4,050**	**1,036**	**1,013**	**100.0**	**100.0**	**100.0**

Table 54: *Maternal ages, GIFT pregnancies, 1985-1993*

Age group (years)	Number			Per cent		
	1985-1991	1992	1993	1985-1991	1992	1993
Less than 20	-	-	-	-	-	-
20 - 24	117	18	24	2.9	1.7	2.4
25 - 29	1,007	252	248	24.9	24.3	24.5
30 - 34	1,755	448	432	43.3	43.2	42.7
35 - 39	997	270	258	24.6	26.1	25.5
40 - 45	170	46	43	4.2	4.4	4.2
45 and over	3	2	7	0.1	0.2	0.7
Not stated	1	-	1	-	-	-
Total	**4,050**	**1,036**	**1,013**	**100.0**	**100.0**	**100.0**

Table 55: *Paternal ages, GIFT pregnancies, 1985-1993*

Age group (years)	Number			Per cent		
	1985-1991	1992	1993	1985-1991	1992	1993
Less than 20	2	-	-	0.1	-	-
20 - 24	22	5	6	0.6	0.5	0.6
25 - 29	530	144	148	14.1	14.1	14.9
30 - 34	1,438	392	398	38.2	38.5	40.0
35 - 39	1,125	288	258	29.9	28.3	25.9
40 - 45	453	123	113	12.0	12.1	11.4
45 and over	196	67	72	5.2	6.6	7.2
Not stated	284	17	18	-	-	-
Total	**4,050**	**1,036**	**1,013**	**100.0**	**100.0**	**100.0**

Table 56: *Previous pregnancies for pregnant women, GIFT pregnancies, 1985-1993*

Number of previous pregnancies	Number				Per cent			
	1985-1990	1991	1992	1993	1985-1990	1991	1992	1993
None	1,679	548	511	505	56.4	55.1	50.2	52.0
One	911	277	345	304	30.6	27.8	33.9	31.3
Two	256	112	100	111	8.6	11.3	9.8	11.4
Three	79	39	43	35	2.7	3.9	4.2	3.6
Four or more	54	19	19	17	1.8	1.9	1.9	1.7
Not stated	70	6	18	41	-	-	-	-
Total	**3,049**	**1,001**	**1,036**	**1,013**	**100.0**	**100.0**	**100.0**	**100.0**

Table 57: ***Duration of infertility, GIFT pregnancies, 1985-1993***

Duration of infertility (years)	Number			Per cent		
	1985-1991	1992	1993	1985-1991	1992	1993
Less than 2	190	103	99	5.0	10.2	10.0
2 -3	1,420	445	453	37.1	44.2	45.9
4 -5	1,042	235	244	27.2	23.3	24.7
6 - 7	573	112	100	15.0	11.1	10.1
8 -9	334	57	31	8.7	5.7	3.1
10 or more	270	55	60	7.1	5.5	6.1
Not stated	221	29	26	-	-	-
Total	**4,050**	**1,036**	**1,013**	**100.0**	**100.0**	**100.0**

Table 58: ***Outcome of pregnancy by duration of infertility, GIFT pregnancies, 1992-1993***

Outcome of pregnancy	Duration of infertility (years)					
	Less than 4		4 - 7		8 or more	
	Number	Per cent	Number	Per cent	Number	Per cent
Spontaneous abortion	216	19.6	129	18.7	50	24.6
Termination of pregnancy	5	0.5	7	1.0	2	1.0
Ectopic pregnancy	27	2.5	23	3.3	7	3.4
Stillbirth	8	0.7	4	0.6	1	0.5
Live birth *	844	76.7	528	76.4	143	70.4
Total	**1,100**	**100.0**	**691**	**100.0**	**203**	**100.0**

* *Multiple pregnancies with both stillbirths and live births are included only in the live birth category*
Note: The duration of infertility was not stated for 55 pregnancies in 1992-1993

Table 59: ***Causes of infertility, selected GIFT cohorts, 1985-1993***

Causes of infertility	Number			Per cent		
	1985-1991	1992	1993	1985-1991	1992	1993
Tubal	225	57	40	5.6	5.5	3.9
Male factor	792	225	263	19.6	21.7	26.0
Endometriosis	588	146	149	14.6	14.1	14.7
Other stated causes	302	79	93	7.5	7.6	9.2
Multiple causes	949	191	216	23.5	18.5	21.3
Unexplained infertility	1,185	337	252	29.3	32.6	24.9
Not stated	9	1	-	-	-	-
Total	**4,050**	**1,036**	**1,013**	**100.0**	**100.0**	**100.0**

Table 60: *Outcome of GIFT pregnancies by causes of infertility, 1992-1993*

Outcome of pregnancy	Causes of infertility					
	Tubal	Male	Endometriosis	Multiple	Unexplained	Total *
			Number			
Spontaneous abortion	20	81	69	92	105	402
Termination of pregnancy	-	3	2	2	5	14
Ectopic pregnancy	10	10	4	13	17	58
Stillbirth	1	3	2	2	3	13
Live birth	66	391	218	298	459	1,562
Total	**97**	**488**	**295**	**407**	**589**	**2,049**
			Per cent			
Spontaneous abortion	20.6	16.6	23.4	22.6	17.8	19.6
Termination of pregnancy	-	0.6	0.7	0.5	0.8	0.7
Ectopic pregnancy	10.3	2.0	1.4	3.2	2.9	2.8
Stillbirth	1.0	0.6	0.7	0.5	0.5	0.6
Live birth	68.0	80.1	73.9	73.2	77.9	76.2
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

* *Total includes 173 pregnancies with 'other' or 'not stated' causes of infertility*

Table 61: *Drugs used to stimulate ovulation, GIFT pregnancies, 1985-1993*

Drugs	Number			Per cent		
	1985-1991	1992	1993	1985-1991	1992	1993
Natural cycles	4	2	1	0.1	0.2	0.1
Clomiphene and hMG or FSH	2,435	163	117	60.5	15.9	11.7
hMG or FSH	117	14	12	2.9	1.4	1.2
GnRH analogues and hMG or FSH	1,456	843	869	36.2	82.5	87.0
Other	11	-	-	0.3	-	-
Not stated	27	14	14	-	-	-
Total	**4,050**	**1,036**	**1,013**	**100.0**	**100.0**	**100.0**

Table 62: ***GIFT treatment cycle in which conception occurred, 1985-1993***

Treatment cycle	Number			Per cent		
	1985-1991	1992	1993	1985-1991	1992	1993
1	1,860	448	476	46.4	43.8	47.7
2	1,032	256	229	25.7	25.0	22.9
3	509	155	138	12.7	15.2	13.8
4	273	67	71	6.8	6.6	7.1
5 or more	336	96	84	8.4	9.4	8.4
Not stated	40	14	15	-	-	-
Total	**4,050**	**1,036**	**1,013**	**100.0**	**100.0**	**100.0**

Table 63: ***Number of oocytes collected by laparoscopy or ultrasound guidance, GIFT pregnancies, 1985-1993***

Number of oocytes collected	1985-1991		1992		1993	
	Number	Per cent	Number	Per cent	Number	Per cent
1	44	1.1	11	1.1	13	1.3
2	153	3.8	32	3.1	39	3.9
3	423	10.6	90	8.8	80	8.0
4	521	13.0	89	8.7	71	7.1
5	519	13.0	92	9.0	98	9.8
6	506	12.6	83	8.2	71	7.1
7	413	10.3	84	8.3	109	10.9
8 or more	1,425	35.6	537	52.8	515	51.7
Not stated	46	-	18	-	17	-
Total	**4,050**	**100.0**	**1,036**	**100.0**	**1,013**	**100.0**
Mean number of oocytes	7.0*		8.5		8.5	

** Data include 1987-1991*

Table 64: ***Number of oocytes transferred, GIFT pregnancies, 1985-1993***

Number of oocytes transferred	Number			Per cent		
	1985-1991	1992	1993	1985-1991	1992	1993
1	59	14	16	1.5	1.4	1.6
2	445	244	267	11.1	23.6	26.5
3	1,940	732	682	48.5	70.9	67.7
4	1,407	41	40	35.2	4.0	4.0
5 or more	148	2	3	3.7	0.2	0.3
Not stated	51	3	5	-	-	-
Total	**4,050**	**1,036**	**1,013**	**100.0**	**100.0**	**100.0**
Mean number of oocytes	3.3	2.8	2.8			

Table 65: ***Outcome of GIFT pregnancies by number of oocytes transferred, 1992-1993***

Outcome of pregnancy	Number of oocytes transferred					
	1	2	3	4	5+	Total **
			Number			
Spontaneous abortion	6	107	266	18	3	402
Termination of pregnancy	-	3	11	-	-	14
Ectopic pregnancy	2	12	36	8	-	58
Stillbirth	-	3	10	-	-	13
Live birth *	22	386	1,091	55	2	1,562
Total	**30**	**511**	**1,414**	**81**	**5**	**2,049**
			Per cent			
Spontaneous abortion	20.0	20.9	18.8	22.2	60.0	19.6
Termination of pregnancy	-	0.6	0.8	-	-	0.7
Ectopic pregnancy	6.7	2.3	2.5	9.9	-	2.8
Stillbirth	-	0.6	0.7	-	-	0.6
Live birth *	73.3	75.5	77.2	67.9	40.0	76.2
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

* *Multiple pregnancies with both stillbirths and live births are included only in the live birth category*

** *Total includes 8 pregnancies in which the number of oocytes transferred was not stated*

Table 66: ***Drugs used in luteal phase after GIFT, 1985-1993***

Drugs	Number			Per cent		
	1985-1991	1992	1993	1985-1991	1992	1993
Proluton	37	-	3	0.9	-	0.3
Human chorionic gonadotrophin (hCG)	2,257	780	772	56.5	75.4	76.5
Human chorionic gonadotrophin / Proluton	278	5	4	7.0	0.5	0.4
Progestagen	434	140	128	10.9	13.5	12.7
Other frugs	6	-	-	0.2	-	-
None	984	109	102	24.6	10.5	10.1
Not stated	54	2	4	-	-	-
Total	**4,050**	**1,036**	**1,013**	**100.0**	**100.0**	**100.0**

Table 67: ***Outcome of pregnancy in maternal age groups, GIFT pregnancies, 1992-1993***

Outcome of pregnancy	Maternal age (years)					
	Less than 25	25 - 29	30 - 34	35 - 39	40 and over	Total *
			Number			
Spontaneous abortion	6	69	163	122	42	402
Termination of pregnancy	1	2	5	4	2	14
Ectopic pregnancy	3	16	21	16	2	58
Stillbirth	-	4	3	6	-	13
Live birth	32	409	688	380	52	1,562
Total	**42**	**500**	**880**	**528**	**98**	**2,049**
			Per cent			
Spontaneous abortion	14.3	13.8	18.5	23.1	42.9	19.6
Termination of pregnancy	2.4	0.4	0.6	0.8	2.0	0.7
Ectopic pregnancy	7.1	3.2	2.4	3.0	2.0	2.8
Stillbirth	-	0.8	0.3	1.1	-	0.6
Live birth	76.2	81.8	78.2	72.0	53.1	76.2
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

* *Total includes 1 pregnancies in which maternal age was not stated*

Table 68: ***Spontaneous abortions, GIFT pregnancies, 1985-1993***

Outcome of pregnancy	1985-1990	1991	1992	1993	1985-1993
Spontaneous abortion	665	204	214	188	1,271
Stillbirth	40	11	9	4	64
Live birth	2,187	746	781	781	4,495
Total abortion and births	2,892	961	1,004	973	5,830
Spontaneous abortion rate (%)	23.0	21.2	21.3	19.3	21.8

Table 69: ***Incidence of spontaneous abortions in maternal age groups, GIFT pregnancies, 1992-1993***

Maternal age (years)	Number of GIFT pregnancies*	Spontaneous abortions	
		Number	Per cent
Less than 25	38	6	15.8
25 - 29	482	69	14.3
30 - 34	854	163	19.1
35 - 39	508	122	24.0
40 - 44	85	36	42.4
45 and over	9	6	66.7
Not stated	1	-	-
Total	**1,977**	**402**	**20.3**

* *Spontaneous abortions and pregnancies of at least 20 weeks' gestation*

Table 70: ***Ectopic pregnancies after GIFT, 1985-1993***

Outcome of pregnancy	1985-1990	1991	1992	1993	Total
Ectopic pregnancies	141	35	27	31	234
Clinical pregnancies	3,049	1,001	1,036	1,013	6,099
% ectopic pregnancies	4.6	3.5	2.6	3.1	3.8
Total abortion and births	2,908	966	1,009	982	5,865
Ectopic pregnancy ratio *	1:20.6	1:27.6	1:37.4	1:31.7	1:25.1

* *Ratio of ectopic pregnancies: total abortions and births*

Table 71: ***Duration of singleton and multiple GIFT pregnancies of at least 20 weeks' gestation, 1992-1993***

Gestation age (weeks)	Singleton		Twin		Triplet		Total *	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
20 - 23	5	0.4	7	2.0	3	6.4	15	1.0
24 - 27	13	1.1	19	5.4	6	12.8	39	2.5
28 - 31	15	1.3	25	7.0	9	19.1	50	3.2
32 - 36	101	8.6	163	45.9	28	59.6	292	18.6
37 - 41	1,015	86.8	141	39.7	1	2.1	1,157	73.5
42 or more	21	1.8	-	-	-	-	21	1.3
20 - 36	134	11.5	214	60.3	46	97.9	396	25.2
Not stated	1	-	-	-	-	-	1	-
Total	**1,171**	**100.0**	**355**	**100.0**	**47**	**100.0**	**1,575**	**100.0**

* *Total includes 1 quadruplet and 1 quintuplet pregnancies*

Table 72: ***Plurality of GIFT pregnancies of at least 20 weeks' gestation, 1985-1993***

Plurality	Number			Per cent		
	1979-1991	1992	1993	1979-1991	1992	1993
Singletons	2,216	576	595	74.2	72.9	75.8
Twins	642	186	169	21.5	23.5	21.5
Triplets	118	28	19	3.9	3.5	2.4
Quadruplets	11	-	1	0.4	-	0.1
Quintuplets	1	-	1	0.0	-	0.1
Total	**2,988**	**790**	**785**	**100.0**	**100.0**	**100.0**

Table 73: ***Plurality of GIFT pregnancies of at least 20 weeks' gestation and number of oocytes transferred 1992-1993***

Number of oocytes transferred	Plurality							
	Singleton		Twin		Triplet		Total *	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
1	21	95.5	1	4.5	-	-	22	100.0
2	308	79.2	77	19.8	4	1.0	389	100.0
3	793	72.0	266	24.2	40	3.6	1,101	100.0
4	44	80.0	8	14.5	3	5.5	55	100.0
5 or more	1	50.0	1	50.0	-	-	2	100.0
Not stated	4	-	2	-	-	-	6	-
Total	**1,171**	**74.3**	**355**	**22.5**	**47**	**3.0**	**1,575**	**100.0**

* *Total includes 1 quadruplet and 1 quintuplet pregnancies*

Table 74: ***Method of delivery for singleton and multiple GIFT pregnancies of at least 20 weeks' gestation, 1992-1993***

Plurality	Method of delivery				
	Vaginal		Caesarean section		Total *
	Number	Per cent	Number	Per cent	Number
Singleton	784	67.2	383	32.8	1,171
Twin	143	40.3	212	59.7	355
Triplet	6	12.8	41	87.2	47
Quadruplet	-	-	1	100.0	1
Quintuplet	-	-	1	100.0	1
Total	**933**	**59.4**	**638**	**40.6**	**1,575**

* *Total includes 4 pregnancies of method of delivery not stated*

Table 75: ***Sex of infants in singleton and multiple GIFT births of at least 20 weeks' gestation, selected fertilisation cohorts, 1985-1993***

Plurality	Male			Female			Sex ratio (M:F)		
	1985-1991	1992	1993	1985-1991	1992	1993	1985-1991	1992	1993
Singletons	1,136	300	316	1,065	274	279	106.7	109.5	113.3
Twins	641	198	162	639	170	176	100.3	116.5	92.0
Triplets	197	51	34	157	33	23	125.5	154.5	147.8
Quadruplets	27	-	2	17	-	2	158.8	-	100.0
Quintuplets	2	-	2	3	-	3	66.7	-	66.7
Total	**2,003**	**549**	**516**	**1,881**	**477**	**483**	**106.5**	**115.1**	**106.8**

Note: Infant's sex was not stated for 25 births

Table 76: ***Birthweight of GIFT live births and stillbirths, 1992-1993***

Birthweight (g)	Live births		Stillbirths		Total births	
	Number	Per cent	Number	Per cent	Number	Per cent
Less than 500	6	0.3	15	62.5	21	1.0
500 - 999	69	3.5	5	20.8	74	3.7
1000 - 1499	94	4.7	2	8.3	96	4.8
1500 - 1999	158	7.9	1	4.2	159	7.9
2000 - 2499	332	16.6	1	4.2	333	16.5
2500 - 2999	447	22.4	-	-	447	22.1
3000 - 3499	523	26.2	-	-	523	25.9
3500 - 3999	285	14.3	-	-	285	14.1
4000 and over	82	4.1	-	-	82	4.1
Not stated	7	-	4	-	11	-
Total	**2,003**	**100.0**	**28**	**100.0**	**2,031**	**100.0**
Mean birthweight (g)	2,773		673		2,748	

Table 77: ***Birthweight of infants in singleton and multiple GIFT births of at least 20 weeks' gestation, 1992-1993***

Birthweight (g)	Singleton		Twin		Triplet		Total *	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
Less than 500	3	0.3	9	1.3	8	5.7	21	1.0
500 - 999	13	1.1	39	5.6	17	12.1	74	3.7
1000 - 1499	17	1.5	42	6.0	34	24.1	96	4.8
1500 - 1999	23	2.0	96	13.7	40	28.4	159	7.9
2000 - 2499	74	6.3	226	32.2	33	23.4	333	16.5
2500 - 2999	219	18.7	219	31.2	9	6.4	447	22.1
3000 - 3499	456	39.0	67	9.6	-	-	523	25.9
3500 - 3999	282	24.1	3	0.4	-	-	285	14.1
4000 and over	82	7.0	-	-	-	-	82	4.1
Less than 2500	130	11.1	412	58.8	132	93.6	683	33.8
Not stated	2	-	9	-	-	-	11	-
Total	**1,171**	**100.0**	**710**	**100.0**	**141**	**100.0**	**2,031**	**100.0**
Mean birthweight (g)	3,185		2,277		1,595		2,748	

Table 78: ***Outcome of infants in singleton and multiple GIFT births of at least 20 weeks' gestation, 1992-1993***

Outcome	Singleton	Twin	Triplet	Other multiple	Total
Live births	1,165	697	133	8	2,003
Stillbirths	6	13	8	1	28
Total births	**1,171**	**710**	**141**	**9**	**2,031**
Neonatal deaths	5	15	10	1	31
Perinatal deaths	11	28	18	2	59
Stillbirth rate per 1,000 total births	5.1	18.3	56.7	111.1	13.8
Neonatal death rate per 1,000 live births	4.3	21.5	75.2	125.0	15.5
Perinatal mortality rate per 1,000 total births	9.4	39.4	127.7	222.2	29.0

Table 79: ***Major congenital malformations in singleton and multiple GIFT births of at least 20 weeks' gestation, 1985-1993***

Outcome	Singleton	Multiple	Total *
Total births	3,409	2,548	5,957
Congenital malformations			
- number	99	59	158
- rate (per cent)	2.9	2.3	2.7

** Total includes 23 abortions for fetal abnormality at gestational ages of at least 16 weeks*

6 Bibliography

This bibliography lists references to scientific, epidemiological and social studies on in-vitro fertilisation and other methods of assisted conception in Australia and New Zealand which have been published or made available since the previous report for 1991.

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Appendix 1 Definitions

Clinical pregnancy: Any type of pregnancy except that diagnosed only by measuring levels of human chorionic gonadotrophin. This definition includes ectopic pregnancy, blighted ovum and spontaneous abortion.

Conception cohort: A designated group of pregnancies resulting from conception in a specified period of time (usually either a single year or several years combined).

Ectopic pregnancy: Pregnancy occurring outside the uterus.

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 400g 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.

Live birth: Infant with signs of life after pregnancy of at least 20 weeks' gestation.

Live-birth pregnancy: A pregnancy resulting in one or more live births.

Low birthweight: A liveborn or stillborn infant weighing less than 2500g at birth.

Neonatal death: A death of a liveborn infant within 28 days of birth (expressed as a rate per 1,000 live births).

Perinatal death: Includes both stillbirths and neonatal deaths (expressed as a rate per 1,000 total births).

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).

Preterm birth: A liveborn or stillborn infant of less than 37 weeks' gestation.

Spontaneous abortion: Pregnancy detected clinically or by ultrasound and less than 20 weeks' gestation (from the first day of the last menstrual period).

Stillbirth: See fetal death.

AIHW NATIONAL PERINATAL STATISTICS UNIT / FERTILITY SOCIETY OF AUSTRALIA

REGISTER OF PREGNANCIES AFTER IVF OR RELATED PROCEDURES

Please complete all data items by ticking relevant boxes

IVF Unit/Hospital: _____ Identification number: _____

Usual home address : **Marital status** : **Date of birth** **Age**
Suburb/Town _____ : [ ] Married/De facto : Mother __/__/__ ___ yrs
:
State _____ Postcode _____ : [ ] Single [ ] Other : Father __/__/__ ___ yrs

NUMBER OF PREVIOUS PREGNANCIES: : **TYPE OF CONCEPTION IN CURRENT PREGNANCY:**
Current marriage **Previous marriages** :
:
Livebirths _____ Mother: livebirths _____ : [ ] IVF [ ] PROST/ZIFT [ ] TEST
:
Abortions _____ other _____ : [ ] GIFT
:
Other _____ Father: livebirths _____ : [ ] Microinjection [ ] Epididymal sperm
:
other _____ : [ ] Other (specify) _____

Did this pregnancy result from use of:
[ ] Donor sperm [ ] Donor oocyte [ ] Frozen embryo

[ ] Donor embryos [ ] Frozen oocytes

What was the date of embryo freezing? ---/---/--- : If donor oocyte or embryo, what was
: the age of the donor?
What was the date of embryo transfer? __/__/__ : _____ yrs

CAUSE OF INFERTILITY PRIOR TO THIS PREGNANCY [ ] Unknown cause

Tubal [ ] Tubal obstruction [ ] Previous ectopic [ ] Salpingectomy

[ ] Sterilization [ ] Pelvic adhesions [ ] Pelvic inflammatory disease

[ ] Other tubal (specify)_____

Male factor [ ] Azoospermia [ ] Oligospermia

[ ] Increased abnormal sperm [ ] Male sperm antibodies

[ ] Decreased motility [ ] Other male (specify)_____

[ ] Endometriosis [ ] Ovulation defects [ ] Maternal sperm antibodies

[ ] 'Hostile' cervical mucus [ ] Other cause (specify)_____

DURATION OF INFERTILITY (before first IVF/GIFT pregnancy) _____ years

DRUGS USED TO INDUCE OVULATION IN <u>OOCYTE RETRIEVAL CYCLE</u> (specify each separately)

[ ] Clomiphene [ ] hMG [ ] hCG [ ] Endogenous LH surge

[ ] FSH [ ] Recomb DNA FSH [ ] Recomb DNA LH

[ ] GnRH-agonist (specify)_____ [ ] short protocol [ ] long protocol (previous luteal phase)

[ ] None [ ] Other (specify) _____

<u>DRUGS USED DURING CYCLE IN WHICH FROZEN EMBRYOS WERE TRANSFERRED</u>(specify each separately)
[ ] None [ ] Oestrogen/progesterone [ ] Other (specify) _____

SPECIFY IN WHICH OOCYTE RETRIEVAL CYCLE THE PREGNANCY OCCURRED _____

Number of oocytes collected _____

IF DONOR OOCYTES WERE USED, IN WHICH INDUCTION CYCLE DID PREGNANCY OCCUR _____

METHOD OF COLLECTING OOCYTES

[ ] Laparoscopy

[ ] Ultrasound-guided transvaginal

[ ] Other (specify) _____

Date of fertilization (or GIFT, etc) --/--/--: Number of embryos/ova transferred ____

Was the patient hospitalised for ovarian hyperstimulation syndrome? [ ] Yes [ ] No

DRUGS USED IN LUTEAL PHASE

[ ] hCG: specify dose and duration _____

[ ] Progesterone: specify dose and duration _____

[ ] Oestrogen/progesterone (frozen embryo transfer) _____

[ ] Other (specify)_____

[ ] None

OBSTETRIC COMPLICATIONS

[ ] None [ ] Pregnancy-induced hypertension

[ ] Threatened abortion

[ ] Placenta praevia

[ ] Antepartum haemorrhage

[ ] Embryo reduction

[ ] Other _____

NUMBER OF SACS SEEN IN EARLY PREGNANCY ON ULTRASOUND EXAMINATION _____ [ ] Ultrasound not done

PREGNANCY OUTCOME

[ ] Spontaneous abortion (date __/__/__)

[ ] Missed abortion (date of curette --/--/--)

[ ] Induced abortion (date __/__/__, specify malformations_____)

[ ] Other (e.g. combined pregnancy) _____

[ ] Pregnancy of 20 weeks or more Date of birth __/__/__

[ ] Multiple births (number _____)

[ ] Ectopic pregnancy

[ ] Ovarian pregnancy

[ ] Blighted ovum

METHOD OF DELIVERY [ ] Vaginal [ ] Caesarean section

LIVEBIRTHS AND STILLBIRTHS	1	2	3
Sex	M F	M F	M F
Birthweight	_____g	_____g	_____g
Condition at birth (delete one)	Live birth/ Stillbirth	Live birth/ Stillbirth	Live birth/ Stillbirth
If baby died, date of death	__/__/__	__/__/__	__/__/__
Any congenital malformations?	[ ] Yes [ ] No	[ ] Yes [ ] No	[ ] Yes [ ] No
Specify malformations or other abnormalities			

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