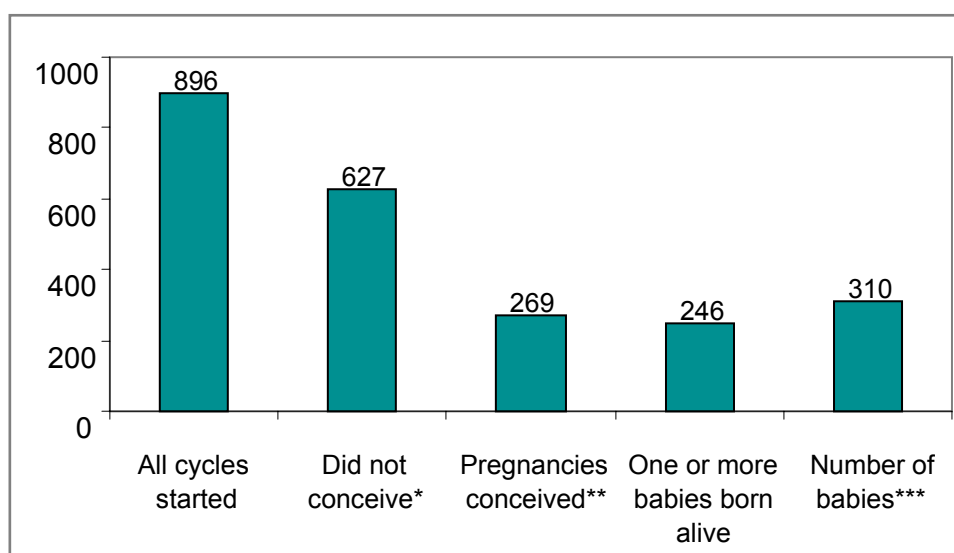


## Other treatments:

### Treatment involving donor sperm

- During 2006 896 fresh treatment cycles of IVF or ICSI were started which involved the use of donor sperm (Figure 1).
  - Of these 896 cycles:
    - 627 did not result in the conception of a pregnancy - 70 in 100 cycles did not lead to a pregnancy (70%).
    - 269 led to a pregnancy confirmed on ultrasound - 30 in 100 cycles resulted in a confirmed pregnancy (30%).
    - 246 women gave birth (live birth) to one or more babies (some as multiple births) - 27 in 100 cycles resulted in the birth of at least one baby from the pregnancy (27%)
- and
- a total of 310 babies were born following treatment involving donor sperm.

**Figure 1: Outcome of IVF or ICSI treatment cycles involving donor sperm started in 2006 [8.1]**



\*Includes some cycles where a pregnancy test may have been positive but the pregnancy was not confirmed on ultrasound

\*\* Ultrasound confirmed pregnancies

\*\*\*Total number of babies born alive – includes multiple births

- Of the 269 ultrasound confirmed pregnancies:
  - 198 women were pregnant with single pregnancy - 74 in 100 pregnancies were singletons (74%)
  - and
  - 71 women had a multiple pregnancy - 26 in 100 pregnancies were multiples (26%).

## Egg sharing arrangements

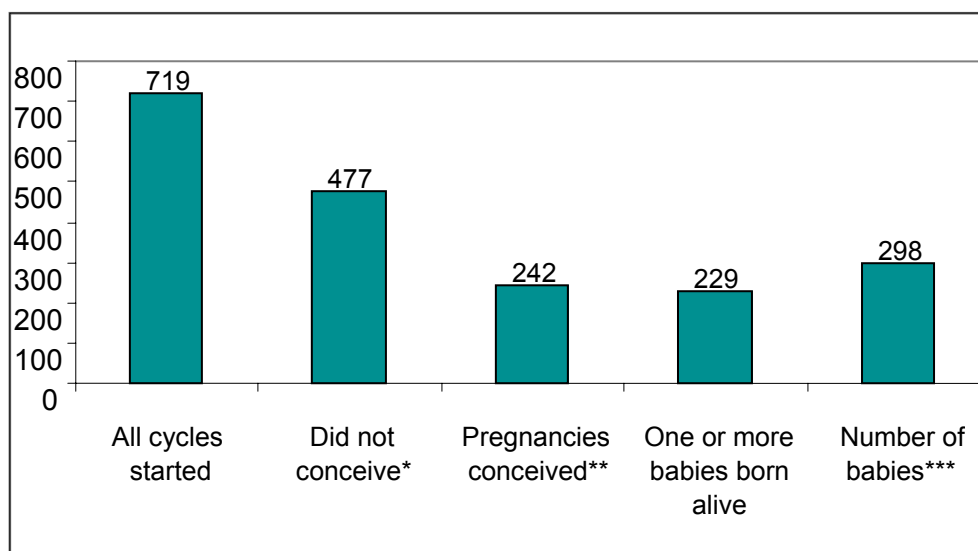
- Some clinics operate egg sharing arrangements which mean that prior to treatment women agree that if they produce a large number of eggs they will share some of their eggs with up to two other women.
- In 2006 606 women underwent 719 cycles of IVF or ICSI where they agreed at the outset of treatment to an egg sharing arrangement.
- Treatment outcomes following an egg sharing agreement can be looked at from the point of view of the women who donate eggs in the arrangement and the women who are the egg recipients in such an arrangement.
- To avoid confusion in the presentation of the treatment outcomes here, the women who agree to share their eggs in an egg sharing arrangement will be referred to as the 'egg donor'. These results are shown in section a. below.
- Results relating to the treatment outcomes for women who received a donated egg - referred to here as the 'egg recipients' – are shown in section b. below.

### ▶ a. Treatment outcomes for the women who donate eggs in an egg sharing arrangement (the egg donor)

- The treatment outcomes of the egg donors will be examined in this section.
- Of the 719 cycles of treatment in which women undertook to be an egg donor 2006 (Figure 2):
  - 477 of the cycles did not result in the conception of a pregnancy for the egg donor - 66 in 100 cycles did not result in conception (66%).
  - 242 cycles resulted in the conception of a pregnancy confirmed on ultrasound - 34 in 100 cycles led to conception (34%).
  - 229 women gave birth to one or more babies (some of which were multiple births) - 32 in 100 cycles resulted in the birth of at least one baby (32%).
  - in total 298 babies were born (live births).

- These outcomes can be compared to cycles where a woman's own eggs were used in a fresh (rather than frozen) cycle of treatment where:
  - 26 in 100 cycles of treatment resulted in the conception of a pregnancy confirmed on ultrasound (26%)
  - and
  - 23 in 100 cycles led to the birth of at least one baby (23%).
- Because of the relatively small numbers of women involved it is not possible to identify the factors which led to apparently better treatment outcomes for women who are the donors in an egg sharing arrangement compared with women overall. This will need to be explored further using information from several years combined, but this may, for example, be related to the age of the women involved.

**Figure 2: Outcome of IVF or ICSI treatment cycles for the women involved in donating eggs in an egg sharing arrangement , treatment started in 2006 [8.4]**



\*Includes some cycles where a pregnancy test may have been positive but the pregnancy was not confirmed on ultrasound

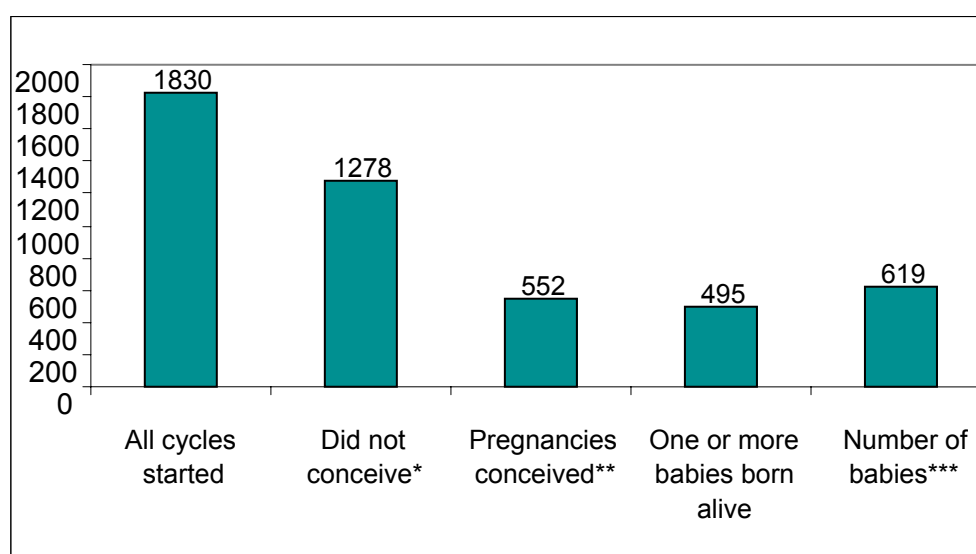
\*\* Ultrasound confirmed pregnancies

\*\*\*Total number of babies born alive – includes multiple births

► **b. Treatment outcomes for the women who are the recipients of donated eggs (the egg recipient)**

- Because of the way in which the information is collected in the HFEA register it is not possible for us to distinguish between eggs which are donated for use by other women as part of an egg sharing arrangement which was agreed before treatment started, and those eggs which are donated once treatment has started where the woman produces more eggs available than she needs. This section looks at women who received eggs from both sources.
- In 2006 1,830 IVF or ICSI cycles were started in which donated eggs were used in the treatment cycle by 1,485 women (the egg recipients) (Figure 3).
- Of the 1,830 cycles of treatment in which women were egg recipients:
  - 1,278 of the cycles did not result in the conception of a pregnancy - 70 in 100 cycles did not result in conception (70%).
  - 552 cycles resulted in the conception of a pregnancy confirmed on ultrasound - 30 in 100 cycles led to conception (30%).
  - 495 women gave birth to one or more babies (some of which were multiple births) - 27 in 100 cycles led to the birth of at least one baby (27%).
  - In total 619 babies were born (live births).

**Figure 3: Outcome of IVF or ICSI treatment cycles for the women who used donated eggs (egg recipients) in their treatment which started in 2006 [8.5]**



\*Includes some cycles where a pregnancy test may have been positive but the pregnancy was not confirmed on ultrasound

\*\* Ultrasound confirmed pregnancies

\*\*\*Total number of babies born alive – includes multiple births

## Surrogacy

- In 2006 there were 85 cycles of IVF or ICSI carried out in a surrogacy arrangement and 61 women surrogates received treatment:
  - 16 surrogate pregnancies resulted from the 85 cycles of treatment - 19 in 100 cycles of surrogacy led to the conception of a pregnancy (19%).
  - 10 of the women gave birth to at least one baby and a total of 15 babies were born (live births).

## Storage of eggs and embryos

### ▶ a. Egg storage

- In 2006 56 cycles were started in order to store eggs by 52 women and a total of 550 eggs were frozen.

### ▶ b. Embryo storage

- In 2006 a total of 174 IVF or ICSI treatment cycles were carried out for 161 women with the original intention of storing embryos, rather than trying to conceive in that treatment cycle.
- A total of 973 embryos were stored with an average of 9 embryos stored per cycle.
- The overview section of this report gives details of all embryos stored following treatment started in 2006.

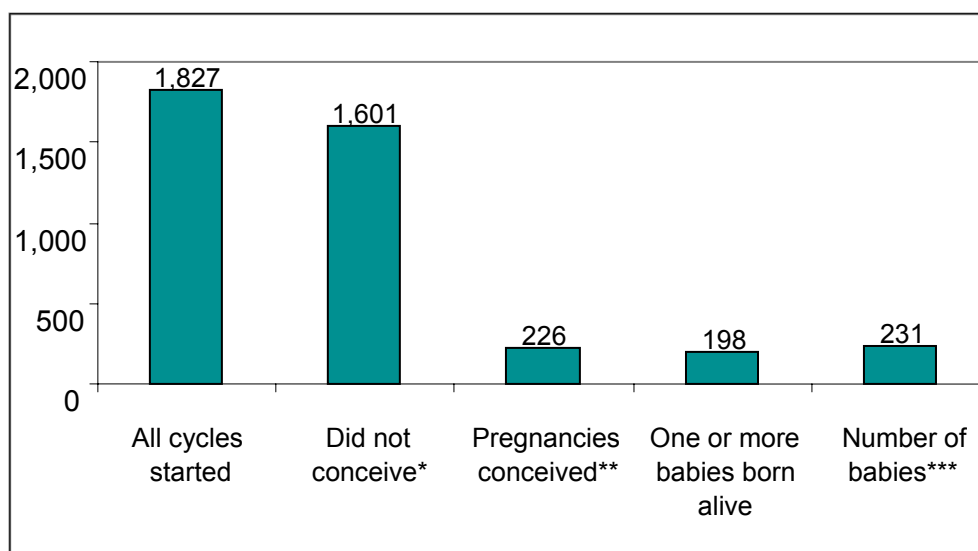
## Donor insemination (DI)

- In 2006 a total of 2,076 women underwent 4,236 cycles of donor insemination (DI) treatment with women receiving an average of 2 cycles of treatment each.
- Of the 2,076 cycles:
  - 1,827 cycles involved ovarian stimulation treatment
  - and
  - 2,409 cycles were un-stimulated, natural cycles.

## Stimulated donor insemination

- Of the 1,827 cycles of stimulated donor insemination (Figure 4):
  - 1,601 did not result in the conception of a pregnancy - 88 in 100 cycles did not lead to a pregnancy (88%)
  - and
  - 226 led to a pregnancy confirmed on ultrasound - 12 in 100 cycles resulted in a confirmed pregnancy (12%).
  - 198 women gave birth (live birth) to one or more babies (some as multiple births) - 11 in 100 cycles resulted in the birth of at least one baby from the pregnancy (11%)
  - and
  - a total of 231 babies were born following treatment involving stimulated donor insemination.
  - 15 in 100 pregnancies conceived following simulated donor insemination were multiple pregnancies (15%).

Figure 4: Outcome of stimulated donor insemination for treatment which started in 2006 [8.2]



\*Includes some cycles where a pregnancy test may have been positive but the pregnancy was not confirmed on ultrasound

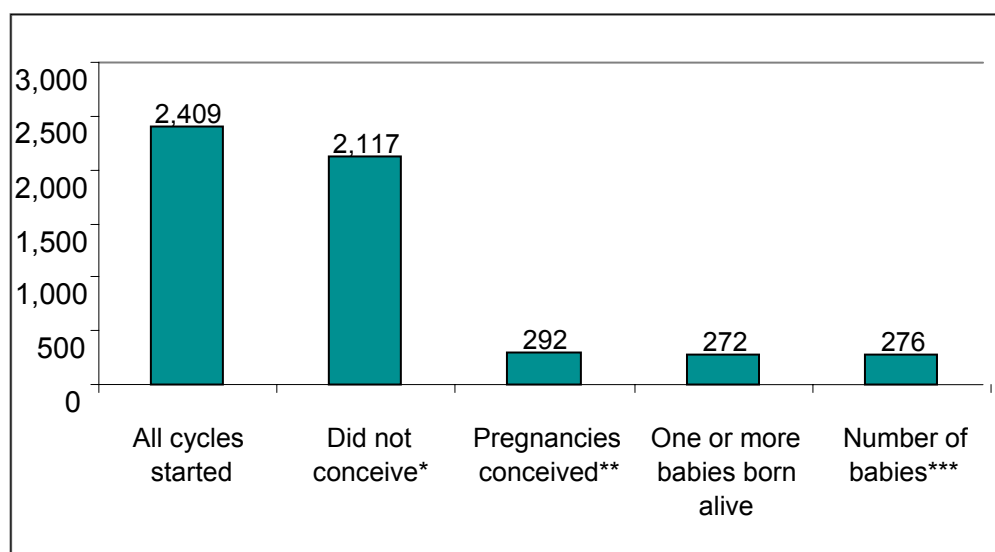
\*\* Ultrasound confirmed pregnancies

\*\*\*Total number of babies born alive – includes multiple births

## Un-stimulated, natural cycle donor insemination

- Of the 2,409 cycles of un-stimulated donor insemination (Figure 5):
  - 2,117 did not result in the conception of a pregnancy - 88 in 100 cycles did not lead to a pregnancy (88%)
  - and
  - 292 led to a pregnancy confirmed on ultrasound - 12 in 100 cycles resulted in a confirmed pregnancy (12%).
  - 272 women gave birth (live birth) to one or more babies (some as multiple births) - 11 in 100 cycles resulted in the birth of at least one baby from the pregnancy (11%)
  - and
  - a total of 276 babies were born following treatment involving donor insemination.
  - 1 in 100 pregnancies conceived following un-stimulated, natural cycle, donor insemination were multiple pregnancies (1%).

**Figure 5: Outcome of un-stimulated, natural cycle, donor insemination for treatment which started in 2006 [8.3]**



\*Includes some cycles where a pregnancy test may have been positive but the pregnancy was not confirmed on ultrasound

\*\* Ultrasound confirmed pregnancies

\*\*\*Total number of babies born alive – includes multiple births

## Natural cycle un-stimulated IVF

- In 2006 175 natural (unstimulated) IVF cycles were started by 148 women which produced a total of 6 pregnancies.

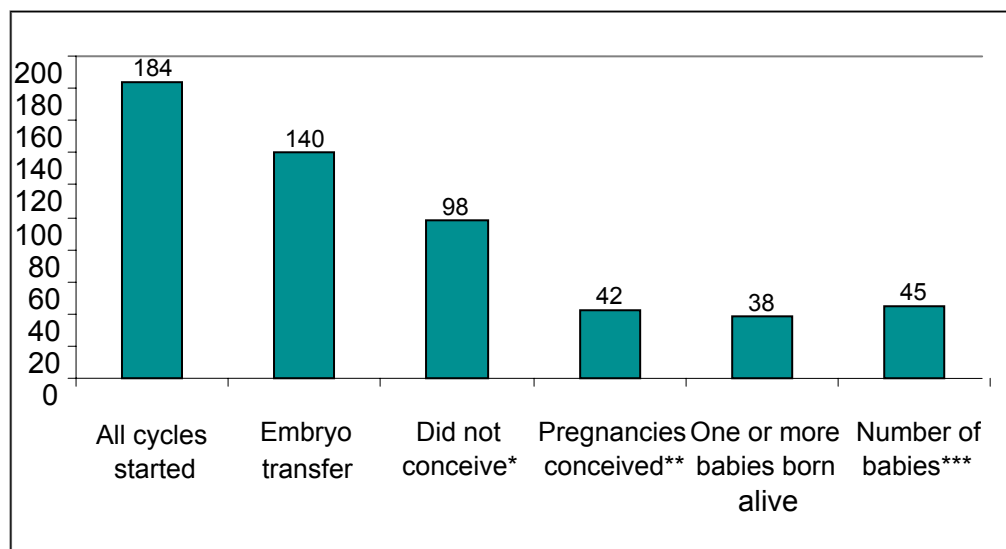
## Pre-implantation genetic diagnosis (PGD)

- In 2006 184 cycles of infertility treatment were started with the intention of carrying out pre-implantation genetic diagnosis (PGD) on the embryos created.
- Of the 184 cycles started 44 cycles did not proceed to embryo transfer because:
  - 10 cycles resulted in abnormal fertilisation or fertilisation did not take place.
  - 2 cycles resulted in a risk of ovarian hyper-stimulation syndrome (OHSS) and the cycles were cancelled

and

  - 32 cycles had a positive result on genetic testing (PGD positive) so none were suitable for transfer.
- Of the 140 cycles which proceeded to embryo transfer (Figure 6):
  - 98 embryo transfers did not result in the conception of an ultrasound confirmed pregnancy - 70 in 100 embryo transfers did not result in a pregnancy (70%)
  - 42 embryo transfers resulted in conception of an ultrasound confirmed pregnancy - 30 in 100 embryo transfer cycles led to the women becoming pregnant (30%)
  - 38 of the women gave birth to at least one baby - 27 in 100 embryo transfer cycles following PGD resulted in the birth of at least one baby (27% of cycles that reached embryo transfer)
  - and a total of 45 babies were born (live births).

Figure 6: Outcome of IVF or ICSI treatment cycles involving pre-implantation genetic diagnosis (PGD) started in 2006 [8.7]



\*Includes some cycles where a pregnancy test may have been positive but the pregnancy was not confirmed on ultrasound

\*\* Ultrasound confirmed pregnancies

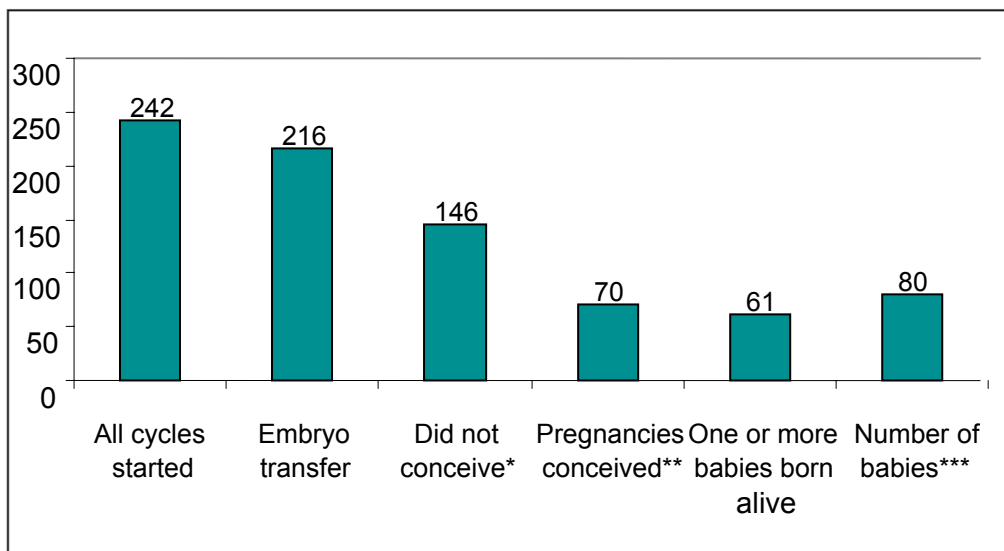
\*\*\*Total number of babies born alive – includes multiple births

## Pre-implantation genetic screening (PGS)

- In 2006 242 cycles of infertility treatment were started with the intention of carrying out pre-implantation genetic screening (PGS) on the embryos created.
- Of the 242 cycles started 26 cycles did not proceed to embryo transfer because:
  - 8 cycles resulted in abnormal fertilisation or fertilisation did not take place
  - 3 cycles resulted in a series of problems
 and
  - 15 cycles had a positive result on genetic testing (PGS positive).
- Of the 216 cycles which proceeded to embryo transfer (Figure 7):
  - 146 embryo transfers did not result in the conception of an ultrasound confirmed pregnancy (although a pregnancy test may have been positive) - 68 in 100 embryo transfers did not result in a pregnancy (68%)
  - 70 embryo transfers resulted in conception of an ultrasound confirmed pregnancy - 32 in 100 embryo transfer cycles led to the women becoming pregnant (32%)

- 61 of the women gave birth to at least one baby - 28 in 100 embryo transfer cycles following PGS resulted in the birth of at least one baby (28% of cycles that reached embryo transfer)
- and a total of 80 babies were born (live births).

Figure 7: Outcome of IVF or ICSI treatment cycles involving pre-implantation genetic screening (PGS) started in 2006 [8.7]



\*Includes some cycles where a pregnancy test may have been positive but the pregnancy was not confirmed on ultrasound

\*\* Ultrasound confirmed pregnancies

\*\*\*Total number of babies born alive – includes multiple births