

Executive Summary

The Human Fertilisation and Embryology Authority (HFEA) collects data about nearly 50,000 treatments carried out each year in the UK fertility sector. The main way that this data is published is through our Choose a Fertility Clinic website, which provides details of each licensed clinic and the outcomes of the treatment that it provides. Whilst this information is of great help to patients, who can find a clinic which most suits their needs, it does not provide a national picture of the fertility sector as a whole.

With this in mind, we commissioned the Oxford-based National Perinatal Epidemiology Unit (NPEU) to analyse data gathered in 2006 from all licensed fertility centres. This is the most comprehensive analysis of the outcomes of fertility treatment from HFEA data ever undertaken in the UK and this can now be used by clinics, patients and researchers to provide a greater understanding of the outcomes of fertility treatment.

The NPEU's report allows us to have for the first time an in depth picture of the success rates of various fertility treatments by age group, by type of treatment and whether fresh or frozen embryos were used. We have a clear picture of the impact of age on the live birth rate. And we can show the risk of miscarriage in pregnancies following fertility treatment and the prevalence of low birth weight and preterm babies.

In 2006 37,531 women started fertility treatment licensed by the HFEA and 49,391 cycles of treatment were carried out. As a result of fertility treatment started in 2006, a total of 13,052 babies were born. Of these, around 61% were singleton births, around 38% were twins and around 1% were triplets or higher order multiples.

At the time of commissioning the analysis, 2006 was the most recent year for which we had a full set of live birth data. As a result, some of the more recent changes in the sector, brought about by HFEA policy or other factors, are not reflected in the findings. For example, the multiple birth rate following IVF and ICSI was higher in 2006 than today, largely because of HFEA policy which, in 2007 undertook to reduce the multiple births as a result of fertility treatment and in 2009 set a maximum multiple birth rate which clinics should not exceed. The policy aims, over a period of time, to bring the overall rate down to 10%.

The report also shows how the chance of getting pregnant following IVF treatment is strongly related to the age of the woman being treated. Women who are 37 years old or younger are more likely to conceive than women aged 38 years and older. The same is true for the outcomes of these pregnancies. Women who are 37 years old or younger at the start of their treatment are more likely to have a baby than those who are aged 38 years old and older. This is the case for singleton as well as multiple pregnancies with younger women more likely to deliver all the babies from a multiple pregnancy than older women.

The report shows that just 58% of triplet (or more) pregnancies following fertility treatment resulted in the birth of all the babies. This compares to 84% of twin pregnancies following IVF or ICSI resulting in the birth of both the babies and 88% of singleton pregnancies resulting in the birth of a baby following IVF or ICSI treatment.

The data contained in this report brings together all the information about fertility treatment cycles started in 2006 and presents data on:

- IVF involving fresh embryo transfers for women using their own eggs
- IVF treatment involving frozen embryo transfers for women using their own eggs
- ICSI involving fresh embryo transfers for women using their own eggs

- ICSI involving frozen embryo transfers for women using their own eggs
- IVF & ICSI involving fresh embryo transfers using donor eggs
- IVF & ICIS involving frozen embryo transfers using donor eggs
- Other treatments including those using donor sperm, egg sharing arrangements and preimplantation genetic diagnosis.

Of course, this analysis examines one year of activity in UK fertility clinics. It is therefore not yet possible to show any trends in success rates or other outcomes. However, from the long-term data analysis that we have carried out, ([Long Term Trends](#)) it is clear that the success rate of fertility treatment is increasing year on year and that the multiple birth rate is going down.

The HFEA will continue this kind of in depth analysis of its data on an annual basis, adding to the usefulness of the information over time for the benefit of patients and the fertility sector alike.