

# Fertility problems and treatment facts & figures

(data based on treatment carried out between 1 January and 31 December 2005)

## Latest annual figures

	2004	2005	% difference
Number of cycles of IVF treatment	40164	41932	Up 4.4%
Number of patients undergoing IVF	30861	32626	Up 5.7%
Number of children born through IVF	8251 successful births – giving rise to 10242 children	9058 successful births – giving rise to 11262 children	
Number of cycles of Donor Insemination treatment	6893	5865	Down 14.9%
Number of Patients undergoing Donor Insemination	2953	2624	Down 11.1%
Number of children born through Donor Insemination	749 successful births - giving rise to 707 children	606 successful births - giving rise to 645 children	

## The scale of fertility problems

It is estimated that one in seven UK couples have difficulty conceiving –approximately 3.5 million people. Though the majority of these will become pregnant naturally given time, a significant minority will not.

Of 100 couples trying to conceive naturally:

- 20 will conceive within one month
- 70 will conceive within six months
- 85 will conceive within a year
- 90 will conceive within 18 months
- 95 will conceive within two years

The National Institute for Clinical Excellence (NICE) define infertility as failing to get pregnant after a two years of regular unprotected sex. Infertility is the commonest reason for women aged 20-45 to see their GP, after pregnancy itself.

## Treatment and success

The average success rate 2005 for IVF treatment using fresh eggs in the UK is

- 29.6% (for women under 35)
- 23.6% (for women aged 35-37)
- 18.2% (for women aged 38-39)
- 10.0% (for women aged 40-42)
- 3.2% (for women aged 43-44)
- 0.8% (for women aged 44+)

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The average success rate for Donor Insemination treatment in the UK is

- 13.4% (for women under 35);
- 9.7% (for women aged 35-39)
- 3.9% (for women aged 40-42)
- 1.7% (for women aged 43-44)

## Notes

- ICSI represents 43% of all IVF treatment in the UK. The remainder is conventional IVF
- Around 1% of all births are the result of IVF and Donor Insemination
- In the UK, about 25% of IVF treatments are funded by the NHS.
- The National Institute for Clinical Excellence (NICE) guidelines suggest that couples should be offered up to 3 cycles of IVF on the NHS if the woman is aged 23-39 years and the couple has an identified cause for their infertility, or have not conceived after 3 years.
- NICE recommended that it was appropriate to fund IVF treatment when the chances of success were more than 10%
- The Government has said that, from 1 April 2005, all women with appropriate clinical need should have at least 1 cycle of treatment paid for by the NHS. Local health bodies will apply their own eligibility criteria
- A typical cost of a cycle of IVF treatment alone is approximately £3000. On top of this, the couple will have to pay for the costs of consultation, drugs and tests. Other procedures, such as embryo freezing, will also be charged for separately.
- There are currently 122 HFEA-licensed clinics in the UK, 57 of which see NHS patients. This includes clinics who have come under HFEA regulation following the introduction of the EU Tissue Directive in July 2007. This means that clinics offering treatments such as Intra Uterine Insemination (IUI) using husband's or partner's sperm, or Gamete Intra Fallopian Transfer (GIFT) now come under the HFEA's remit.

## The risk of treatment

The single biggest risk from IVF treatment is multiple births, and particularly triplet births. These carry potential health effects for both the mother and the unborn child

On 4<sup>th</sup> December 2007, the HFEA called for a professionally-led, coordinated national strategy to reduce the number of multiple births that occur following fertility treatment which contribute to significant numbers of premature and low birth weight babies. **See** <http://www.hfea.gov.uk/en/1625.html>

- Multiple birth babies are more likely to be premature and the babies below normal birth weight
- The risk of death before birth or within the first week is more than 4 times greater for twins and almost 7 times greater for triplets than for single births
- The incidence of cerebral palsy is approximately 5 times higher for twins and approximately 18 times higher for triplets than for single births
- In 2005, 24% of IVF births were a twin or a triplet, up from 22.7% in 2004.

## Multiple Births 2005

2005	Total births	Total babies	Singleton births	Singleton babies	Twin births	Twin babies	Triplet births	Triplet babies	Total multiple births	Total babies via multiple birth
Generic IVF live births (inc ICSI and other micromanipulation techniques)	9058	11262	6888	6888	2136	4272	34	102	2170	4374
%	100	100	76.04	61.16	23.58	37.93	1.12	0.9	24.78	38.83
All other treatments (IUI, DI etc)	607	646	569	569	37	74	1	3	38	77
%	100	100	93.73	88.08	6.09	11.45	0.16	0.46	6.25	11.9
Totals	9665	11908	7457	7457	2173	4346	35	105	2208	4451
%	100	100	77.15	62.62	22.48	36.49	0.34	0.88	22.82	37.37

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**IVF & ICSI success rate - own eggs**

**Success Rate (per cycle started) - 2005 Data**

	<b>Age range</b>	<b>Live birth rate per cycle started</b>	<b>Total live births</b>	<b>Cycles started</b>
<b>Fresh Cycles</b>	Below 35	<b>30%</b>	4134	/ 13990
	35-37	<b>24%</b>	1887	7995
	38-39	<b>18%</b>	837	4613
	40-42	<b>10%</b>	397	3971
	43-44	<b>3%</b>	27	836
	Over 44	<b>1%</b>	2	238
<b>Frozen Cycles</b>	Below 35	<b>18%</b>	595	3230
	35-37	<b>17%</b>	335	1961
	38-39	<b>12%</b>	136	1171
	40-42	<b>12%</b>	107	930
	43-44	<b>3%</b>	7	221
	Over 44	<b>9%</b>	7	80

Percentage of IVF (57%) vs ICSI (43%).

**IVF & ICSI success rate - own eggs**  
**Success Rate (per cycle started) - 2005 Data**

Fresh eggs	Below 35	35-37	38-39	40-42	43-44	Over 44
<b>Cycles started</b>	29.5% (4134/13990)	23.6% (1887/7995)	18.1% (837/4613)	10.0% (397/3971)	3.2% (27/836)	0.8% (2/238)
<b>Egg collections</b>	31.3% (4134/13191)	25.2% (1887/7476)	19.4% (837/4305)	11.0% (397/3605)	3.7% (27/739)	1.0% (2/201)
<b>Embryo transfers</b>	34.0% (4134/12172)	27.1% (1887/6968)	21.1% (837/3976)	12.1% (397/3273)	4.1% (27/654)	1.3% (2/157)
<b>Implantation rate*</b>	25.3% (5937/23484)	19.3% (2560/13278)	15.3% (1151/7513)	8.6% (601/6997)	3.1% (44/1427)	0.9% (3/316)
<b>Singleton live births</b>	20.8% (2911/13990)	18.5% (1478/7995)	15.1% (698/4613)	8.3% (331/3971)	3.1% (26/836)	0.8% (2/238)
<b>Twin live births</b>	8.6% (1202/13990)	5.0% (402/7995)	3.0% (139/4613)	1.6% (65/3971)	0.1% (1/836)	0
<b>Triple &amp; higher live births</b>	0.2% (21/13990)	0.1% (7/7995)	0	0.0%(1/3971)	0	0

Frozen embryos	Below 35	35-37	38-39	40-42	43-44	Over 44
Thaw cycles	18.4% (595/3230)	17.1% (335/1961)	11.6% (136/1171)	11.5% (107/930)	3.2% (7/221)	8.8% (7/80)
Embryo transfers	20.1% (595/2954)	19.0% (335/1765)	12.9% (136/1058)	12.7% (107/843)	3.6% (7/192)	10.6% (7/66)
Implantation rate*	14.1% (764/5416)	13.4% (429/3199)	9.2% (174/1895)	8.7% (143/1641)	2.8% (11/387)	8.6% (11/128)
Singleton live births	<b>14.5%</b> (469/3230)	<b>15.0%</b> (294/1961)	<b>10.1%</b> (118/1171)	<b>10.4%</b> (97/930)	<b>2.7%</b> (6/221)	<b>6.3%</b> (5/80)
Twin live births	3.8% (124/3230)	2.1% (41/1961)	1.5% (17/1171)	1.1% (10/930)	0.5% (1/221)	2.5% (2/80)
Triple & higher live births	0.1% (2/3230)	0	0.1% (1/1171)	0	0	0

\* **Implantation Rate** - An implantation rate is an alternative form of pregnancy rate which takes into account the risks associated with multiple embryo transfer. Some people regard this as a fairer measure of a clinic's success as once an embryo has implanted the clinic is less able to control the progress of the pregnancy

### Donor insemination

#### Success Rate (per cycle started) - 2005 Data

*From 5856 treatment cycles there were 606 live births*

	Below 35	35-39	40-42	43-44	Over 44
Treatment cycles	13.5% (368/2733)	9.7% (204/2094)	3.9% (31/798)	1.7% (3/176)	0.0% (0/55)
Singleton live births	12.7% (347/2733)	9.0% (189/2094)	3.8% (30/798)	1.1% (2/176)	0
Twin live births	0.7% (20/2733)	0.7% (15/2094)	0.1% (1/798)	0.6% (1/176)	0
Triple & higher live births	0.0% (1/2733)	0	0	0	0

### IVF & ICSI success rate - donated eggs

#### Success Rate (per cycle started) - 2005 Data

	Fresh embryos	Frozen embryos
Transfers	30.9% (414/1338)	18.6% (118/635)
Implantations*	22.6% (588/2605)	13.9% (160/1149)

\*An implantation rate is an alternative form of pregnancy rate which takes into account the risks associated with multiple embryo transfer. Some people regard this as a fairer measure of a clinic's success as once an embryo has implanted the clinic is less able to control the progress of the pregnancy.