

Fertility Facts and Figures 2007

About these statistics

The information collected and published by the HFEA is a snap shot of data provided by licensed clinics at a particular time. This information may be subject to change as individual clinics notify the HFEA of amendments.

The figures supplied in this document are derived from the HFEA data warehouse containing Register data as at 28/09/2009 unless otherwise stated and include treatments carried out between 1st January and 31st December 2007. Some minor changes may have been made to the data for individual clinics since then and these will be reflected in the data provided on Choose a Fertility Clinic. The national figures given in this document may be updated in due course. Any changes are likely to be very minor and not make a significant difference to the versions published on 29/09/2009.

Before publication, a preliminary validation process is performed on the data, and clinics are asked to confirm its accuracy, for which they remain responsible.

The latest HFEA statistics, including information about individual clinics, can be found on www.hfea.gov.uk

The HFEA website – www.hfea.gov.uk – provides further information about fertility treatments including a glossary of terms.

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Latest annual figures - 2007*

	2005 [†]	2006 [‡]	2007	% change 2006-2007
In vitro fertilisation (IVF)				
Number of cycles of IVF treatment	41,932	44,275	46,829	Up 5.8%
Number of patients undergoing IVF	32,626	34,855	36,861	Up 5.8%
Number of babies born through IVF	<i>9,058 successful births – giving rise to 11,262 babies</i>	<i>10,242 successful births giving rise to 12,596 babies</i>	11,091 successful births giving rise to 13,672 babies	Births up 8.3% Babies up 8.5%
IVF Live birth rate per cycle started	21.6%	23.1%	23.7%	Up 0.6%
Multiple birth rate following IVF	24%	22.7%	23.0%	Up 0.3%
Donor insemination (DI)				
Number of DI treatment cycles	5,865	4,225	3,881	Down 8.1%
Number of patients undergoing DI	2,624	2,106	1,779	Down 15.5%
Number of babies born through DI	<i>606 successful births - giving rise to 645 babies</i>	<i>455 successful births giving rise to 489 babies</i>	442 births giving rise to 472 babies	Births down 2.9% Babies down 3.5%
DI live birth rate per cycle started	10.3%	10.8%	11.4%	Up 0.6%
DI multiple birth rate	6.3%	6.8%	6.6	Down 0.2%

* IVF figures include all IVF, ICSI, PGD, PGS, natural cycles, treatments using donated eggs and those where fresh and frozen embryos were transferred in the same cycle. Treatments carried out between 1st January and 31st December 2007

[†] 2005 figures published 7 December 2007

[‡] 2006 figures published 02 October 2008

Success rates by age group

The average success rate 2007 (2006) for **IVF treatment** using own fresh eggs in the UK is:

2007	(2006)
32.3% for women under 35	(31%)
27.7% for women aged 35-37	(26.4%)
19.2% for women aged 38-39	(18.6%)
11.9% for women aged 40-42	(11.1%)
3.4% for women aged 43-44	(4.6%)
3.1% for women aged 44+	(4.0%)

The average success rate for **Donor Insemination** treatment in the UK in 2007 (2006) is:

2007	(2006)
14.3% for women under 35	(13.5%)
12.1% for women aged 35-39	(9.2%)
4.6% for women aged 40-42	(5.3%)
1.4% for women aged 43-44	(1.2%)
0% for women aged 44+	(0%)

Includes IVF and ICSI. Does not include natural cycles, PGD cycles or cycles where both fresh and frozen embryos were used in the same cycle.

Additional figures

- ICSI represents 48% of all IVF treatment in the UK in 2007. The remainder is conventional IVF.
- Currently (Sept 2009), there are 114 HFEA-licensed treatment clinics in the UK.
- In 2007, the year to which these latest statistic relate, 70 clinics provided IVF. 74 provided DI. Some provided both.
- The number of licensed clinics increased in July 2007. Clinics offering treatments such as Intra Uterine Insemination (IUI) using husband's or partner's sperm, and Gamete Intra Fallopian Transfer (GIFT) came under HFEA regulation following the introduction of the EU Tissues and Cells Directive in July 2007.
- Around 1.5% of all births and 1.8% of all babies born in the UK were the result of IVF or donor insemination that occurred in 2007.

Fresh v frozen IVF

	FRESH OWN IVF inc ICSI (but NOT natural, PGD, PGS, fresh/frozen)	FROZEN OWN IVF inc ICSI (but NOT natural, PGD, PGS, fresh/frozen)
Number of cycles	35,785	8,541
Number of patients	30,435	7,489
Number of births	9,011	1,534
Number of babies	11,180	1,809
Live birth rates by age	<35 = 32.3%	<35 = 20.4%
	35-37 = 27.7%	35-37 = 19.0%
	38-39 = 19.2%	38-39 = 16.3%
	40-42 = 11.9%	40-42 = 12.5%
	43-44 = 3.4%	43-44 = 10.8%
	>44 = 3.1%	>44 = 12.5%

Other IVF treatments

Donated eggs

- Number of cycles – 1,748
- Number of patients - 1529
- Number of births - 450
- Number of babies - 573
- Live birth rate - 25.7%
- Number of clinics offering this treatment in 2007 – 66

PGD

- Number of cycles – 198
- Number of patients - 169
- Number of births - 39
- Number of babies - 42
- Number of clinics offering this treatment in 2007 – 6

Multiple births

All types of IVF

includes all IVF, ICSI, PGD, PGS, natural cycles, treatments using donated eggs and those where fresh and frozen embryos were transferred in the same cycle.

Number of births by age	singleton	multiple births ^a
<35	4,071	1,487
35-37	2,373	666
38-39	1,178	196
40-42	717	128
43-44	110	27
>44	95	42

^a Triplets and higher order multiple births account for around 1% of all these multiple births.

Donor insemination

Number of births by age	singleton	multiple births ^b
<35	223	17
35-37	109	7
38-39	57	3
40-42	22	2
43-44	2	0
>44	0	0

^b Triplets and higher order multiple births account for around 3.5% of all multiple births conceived as a result of donor insemination.

Average age of women treated

	IVF	DI
1991	33.6	31.9
1992	33.8	31.9
1993	33.8	32.1
1994	33.8	32.2
1995	33.7	32.4
1996	33.8	32.5
1997	33.9	32.6
1998	33.9	33.0
1999	34.0	33.3
2000	34.2	33.6
2001	34.3	34.1
2002	34.5	34.2
2003	34.6	34.4
2004	34.8	34.6
2005	34.9	34.6
2006	35.1	35.0
2007	35.2	35.1

Couples experiencing infertility by region

NHS figures suggest that around 1 in 6 or 1 in 7 couples are likely to experience problems conceiving. Based on 2001 ONS population estimates.

	TOTAL UK population aged 16-45	Estimated people experiencing fertility problems	Estimated couples with difficulty conceiving – 1 in 7
East Midlands	1,693,105	250,000	125,000
East of England	2,166,977	300,000	150,000
London	3,487,035	500,000	250,000
North East	1,018,655	150,000	75,000
North West	2,722,999	400,000	200,000
Northern Ireland	728,647	100,000	50,000
Scotland	2,096,719	300,000	150,000
South East	3,259,664	500,000	250,000
South West	1,838,416	250,000	125,000
Wales	1,125,021	150,000	75,000
West Midlands	2,125,068	300,000	150,000
Yorkshire & the Humber	2,026,872	300,000	150,000
UK Total	24,289,178	3,350,000	1,750,000

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IVF around the UK 2007

The number of patients treated at clinics in each region. Patients can and do travel from other regions and from abroad to received particular types of treatment.

GOR	IVF Clinics	Total number of patients	Total number of treatment cycles	IVF live birth rate	Multiple IVF live birth rate	Total singleton births	Total multiple births ^c	Total live babies
East Midlands	4	2,418	2,884	29.3	23	651	195	1,041
East of England	4	2,247	2,818	22.9	19.3	520	124	769
London	16	11,106	14,016	24.1	24.6	2,549	830	4,227
North East	5	1,349	1,641	21.1	22.3	269	77	423
North West	4	3,902	5,117	20	20.1	817	205	1,228
Northern Ireland	2	1,116	1,306	22.8	23.8	227	71	371
Scotland	6	2,657	3,522	23.6	23	640	191	1,023
South East	8	3,324	4,422	24	20	849	212	1,274
South West	7	2,014	2,622	25.6	22.5	521	151	826
Wales	2	815	982	21	29.1	146	60	268
West Midlands	7	2,934	3,741	23.1	25.8	642	223	1,092
Yorkshire & Humber	5	2,975	3,747	24.6	22.6	713	208	1,130

^c Triplets and higher order multiple births account for around 1% of all these multiple births.

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DI around the UK 2007

The number of patients treated at clinics in each region. Patients can and do travel from other regions and from abroad to received particular types of treatment.

	Clinics	Total number of patients	Total number of treatment cycles	DI live birth rate	Multiple DI live birth rate	Total singleton births	Total multiple births ^d	Total live babies
East Midlands	6	88	165	15.8	++	26	0	26
East of England	6	60	130	15.4	++	20	0	20
London	17	640	1350	10.7	6.2	136	9	154
North East	4	63	144	10.4	++	13	2	17
North West	4	241	575	9.6	5.5	52	3	58
Northern Ireland	1	2	3	++	++	1	0	1
Scotland	7	137	346	11	++	36	2	40
South East	9	199	433	12.9	8.9	51	5	61
South West	6	71	157	11.5	++	17	1	19
Wales	2	53	81	25.9	++	16	5	27
West Midlands	7	132	233	10.7	++	23	2	27
Yorkshire & Humber	5	93	264	8.7	++	23	0	23

++ - number too small to be statistically valid

^d Triplets and higher order multiple births account for around 3.5% of all multiple births conceived as a result of donor insemination.

The scale of fertility problems

Infertility is defined as 'failing to get pregnant after two years of regular unprotected sex' by the National Institute for Health and Clinical Excellence (NICE).

Infertility is the most common reason for women aged 20–45 to see their GP, after pregnancy itself.

Infertility is estimated to affect around one in six or one in seven UK couples – approximately 3.5 million people – at some point. Although 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

Treatment abroad

The HFEA licenses and regulates clinics in the UK only. Clinics in other countries may, or may not, be regulated to local standards and regulations.

The EU Tissues and Cells Directive sets out standards of quality and safety that should be met within countries within the EU/EEA, but the HFEA recommends that in any case, would-be patients should research their chosen clinic thoroughly and ask about its standards of treatment and care.

Important differences between treatment in the UK and what patients may encounter at clinics abroad include:

- standards of quality and safety
- success rate reporting
- patient confidentiality
- donor anonymity and responsibility for offspring
- complaints and legal issues
- ethical issues such as payment to donors and limits on live births from a single donor
- records of fertility treatment abroad using sperm, eggs, or embryos exported from the UK, which are not held on the HFEA Register
- surrogacy arrangements where the child is born abroad
- sex selection.

Risks of treatment

Risks involved in fertility treatment can include reactions to fertility drugs that may be prescribed, and also the risks associated with any pregnancy. The main risks are:

Multiple births (twins, triplets or more) – the single greatest health risk associated with fertility treatment. For this reason, the HFEA has restricted the number of embryos that can be transferred in IVF to a maximum of two for women under 40; and three for women aged 40 or over who are using their own eggs (for those using donated eggs, the maximum is two because these eggs will be from donors who are not older than 35).

Multiple births carry risks to both the health of the mother and the unborn babies.

- The babies are more likely to be premature and to have a low birth weight.
- The risk of death before birth, or within the first week of life, is more than four times greater for twins than for a single baby.
- For triplets, the risk is seven times greater than for a single baby.
- The risk of cerebral palsy is five times higher for twins and 18 times higher for triplets than for a single baby.

Drug reactions – some women have mild reaction, such as headaches or nausea, to fertility drugs.

Ovarian hyper-stimulation syndrome (OHSS) – a potentially dangerous over-reaction to fertility drugs. A report for the HFEA in 2005, updated in 2008, found that severe OHSS occurs in approximately 1% of cycles.

Ectopic pregnancy – when an embryo develops in the fallopian tube rather than in the womb. The chances of having an ectopic pregnancy seem to be slightly higher in women having fertility treatment than those with a natural pregnancy.

Funding

The typical cost of a cycle of IVF treatment alone is approximately £5000. This figure varies, depending on the consultations, drugs and tests that may be required for treatment. Procedures such as embryo freezing may also be charged separately.

The National Institute for Clinical Excellence (NICE) guidelines suggest that couples should be offered up to three 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 recommend that it is appropriate to fund IVF treatment when the chances of success are 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.

In June 2009, the Department of Health's expert group on commissioning NHS infertility provision published a report for PCT commissioners to help them implement the NICE fertility guideline in their area.

One at a time

- In June 2008, doctors, embryologists, nurses, other clinical staff, patient groups and the HFEA launched a new national strategy to reduce the number of multiple pregnancies. Those involved in the development of the national strategy believe that change will only be facilitated through improved funding for assisted conception treatment
- Focusing initially on IVF, the strategy aims to reduce the rate of multiple births from the 2005 national average of 24 per cent of all IVF births to 10 per cent over three years. In the first year (from January 2009), all clinics will be expected not to exceed the 24 per cent maximum.
- The strategy includes:
 - the One at a Time website providing authoritative information for professionals and patients;
 - a series of regional workshops for health professionals;
 - new professional guidelines published by the British Fertility Society (BFS) and the Association of Clinical Embryologists (ACE), setting out professional best practice.

ONS statistics for comparison

Comparing our statistics to ONS birth statistics is not straightforward. Here we give the ONS figures for births that occurred in 2007. Our figures for IVF and DI births are those that occurred as a result of treatment in 2007.

This table shows the number of all live births and babies registered in the UK in 2006, whether conceived naturally or through fertility treatment.

Published by the Office for National Statistics (England and Wales), the General Registry Office Scotland and the General Registry Office Northern Ireland.

	<i>England and Wales</i>	<i>Scotland</i>	<i>Northern Ireland</i>	UK Total
All live birth events (maternities or confinements) 2007*	682,999	57,202	24,186	737,679
All babies born in 2007	708,711	57,781	24,451	790,943

A table giving a further breakdown by geographic region is published by the [UK Statistics Authority](#).

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Reasons for patients undergoing fertility treatment in 2008	National average
Male Factor infertility	29.8%
Female factor infertility of which	28.0%
<i>Ovarian failure</i>	1.0%
<i>Tubal disorders</i>	12.4%
<i>Endometriosis</i>	3.5%
<i>Ovulatory disorders</i>	7.0%
<i>Multiple female factors</i>	4.0%
Multiple factors male and female	10.3%
Menopausal	0.2%
Avoid genetic disorder	0.5%
No male partner	1.4%

Age of patients treated in 2008	
Under 35	40.3%
35-37	24.6%
38-39	15.5%
40-42	13.9%
43-44	3.8%
Over 44	1.7%
Average length of time since infertility first identified	4.9 years