



IVF: THE RISKS TO WOMEN AND CHILDREN

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INTRODUCTION

On 18 February 2025, President Trump signed an [executive order](#) titled ‘Expanding access to *in vitro* fertilisation’. His rationale was: ‘We need more children in our country.’ ‘Of course, we want more babies!’ [said](#) a US pro-life commentator. ‘The issue hasn’t to do with the beautiful children created through IVF, but with an industry that takes advantage of the vulnerability of those struggling with infertility and treats human life as expendable.’

For many people, IVF is simply about helping infertile couples have the baby of their dreams. Of course, babies born via IVF should be welcomed and loved as much as any other baby. However, SPUC’s position is that the birth of a baby does not justify the unethical means of IVF.

During each IVF procedure several embryonic human beings, equally worthy of life, are created. But only one or two are transferred to a woman’s body for a chance to continue developing. The rest may be frozen, used in research, or destroyed. Furthermore, IVF involves health risks for women and health risks for any children born.

IVF also has a profound societal impact by creating the idea of the right to have a child. IVF turns children into commercial commodities aimed at fulfilling the needs of adults, even if the parents of IVF children do not think of it in this way. Moreover, IVF has enabled other practices like genetic testing of embryos to discard affected ones, surrogacy, donor egg and sperm, embryo research, cloning, mitochondrial transfer that mixes genes from three people, the creation of human-animal hybrid embryos for research, and sex selection.

IVF has spawned a global multibillion-dollar industry that thrives on the vulnerability of infertile men and women.

However, there is an ethical alternative to IVF, which has mostly been eclipsed by the commercial success of the IVF industry.

WHAT DOES IVF STAND FOR?

IVF stands for *in vitro* fertilisation. ‘*In vitro*’ is Latin for ‘in glass’, referring to scientific or medical procedures which take place outside their normal biological setting, typically in laboratory glassware. IVF is the everyday term that describes the procedure in which a human egg is fertilised by a human sperm in a laboratory dish rather than in the woman’s womb.

WHAT IS INVOLVED IN IVF?

Women who opt for IVF undergo a series of medical procedures. Firstly, a woman takes medication to artificially stimulate her ovaries to produce more eggs than normal. The eggs are collected by a doctor and then fertilised with sperm in the laboratory. After three to five days of development, one or more of the embryos are transferred into the woman's womb. Several days later a pregnancy test will then show whether embryo implantation in the woman's womb to continue the pregnancy has been achieved or not. You can read more about the procedure as described by the NHS [here](#).

HOW SUCCESSFUL IS IVF?

Since the birth of the [first IVF baby](#) in 1978, IVF techniques have improved. However, the success rate has remained fairly static. See the table below given in response to a Parliamentary Question on 24 April 2025.

The [Human Fertilisation and Embryology Authority](#) (HFEA) publishes annual reports on its website which include success rates of in-vitro fertilisation (IVF). The following table shows the success rate of IVF in each of the last ten years for which information is available:

YEAR OF TREATMENT	BIRTH RATE PER EMBRYO TRANSFERRED
2022	23%
2021	23%
2020	24%
2019	24%
2018	23%
2017	23%
2016	22%
2015	21%
2014	20%
2013	19%

Source: HFEA annual report on fertility treatment and the HFEA dashboard.

Notes:

Live births for 2019 to 2022 are preliminary and quality assurance processes with clinics have not yet been completed; and data excludes embryos that have been previously frozen.

HOW EXTENSIVE IS THE IVF INDUSTRY IN THE UK?

Here are some key facts about the IVF industry from the HFEA:

Around **52,500** patients had *in vitro* fertilisation (IVF) and **3,000** had donor insemination (DI) treatment, at HFEA-licensed fertility centres in the UK in 2022.

1991-2021, there were over **390,000** births as a result of fertility treatment.

2023-2024, **107** clinics in the UK were licensed by the HFEA to provide fertility treatments.

WHY DOES SPUC OPPOSE IVF?

The main reason SPUC opposes IVF is because it involves the destruction of huge numbers of human embryos. SPUC is dedicated to protecting the lives of unborn children from the moment of conception. Therefore, it has always opposed IVF.

The following table was provided by the HFEA [given on 25 April 2025 in response to a Parliamentary Question]. It shows the number of human embryos discarded in each of the last ten years for which information is available:

YEAR	EMBRYOS DISCARDED
2022	160,285
2021	172,665
2020	137,296
2019	173,130
2018	177,765
2017	175,616
2016	174,327
2015	175,478
2014	176,661
2013	170,654

Source: HFEA annual report on fertility treatment and the HFEA dashboard.

Notes:

The data is as recorded by the HFEA on 16 October 2024, so these figures reflect the data on this day and are likely to change over time; data for 2019 to 2022 is preliminary and quality assurance processes with clinics have not yet been completed.

There is no further information collected by the HFEA after an embryo is discarded.

WHY DOES IT MATTER IF HUMAN EMBRYOS ARE DISCARDED DURING IVF?

It matters because each human embryo created in the IVF process is a unique human being at the earliest stage of his or her life. It is within SPUC's remit to defend embryonic human beings from experimentation and deliberate, or even unintentional, destruction. Even if just one embryo were created and transferred to a woman's body, a practice the IVF industry would never accept, the entire process places that embryo at heightened risk of demise.

IVF is an assault, in most cases fatal, on the dignity and lives of the tiniest human beings.

For an in-depth review of the moral status of the early stages of human life, see [‘A Handbook of Bioethical Considerations Regarding Nascent Human Beings and Their Cells \(Handbook II\)’](#).

WHAT HAPPENS TO HUMAN EMBRYOS NOT TRANSFERRED TO THE WOMB?

More embryos are created in an IVF cycle than will be transferred into the woman's womb. Embryos considered viable may be frozen for later use by the couple or donated to another woman. Some embryos are given for experimental use involving their eventual destruction. Other embryos, considered unusable, are discarded as medical waste.

Experimenting on embryos

From the 1980s onwards when 'spare' embryos became available, the IVF industry has been supplying human embryos for scientists to use in experiments. Thus, IVF is intricately linked to embryo experimentation.

Early claims that experimenting on human embryos would bring cures for diseases such as Parkinson's, Alzheimer's, diabetes and spinal cord injuries have come to nothing. [No cures have been found.](#)

Research projects using human embryos are focussed on creating healthy embryos, understanding pregnancy loss, refining genetic tests, training technicians, and improving IVF and related treatments. The HFEA lists the [embryo research projects](#) taking place in the UK.

The [WMA \(World Medical Association\) Declaration of Helsinki – Ethical Principles for Medical Research Involving Human Participants](#) states that: 'Medical research involving human participants is subject to ethical standards that promote and ensure respect for all participants and protect their health and rights.'

Using this definition, we can say of human embryos used in scientific experiments that:

- There is no respect for their innate human dignity.
- Their right to life is disregarded, as the experiments end in their destruction.
- There is no health benefit for them.

Freezing embryos

The risks and dangers of freezing tiny embryonic human beings include:

- Freezing those embryos who are not transferred to the womb is inherently discriminatory as only 'good quality' embryos are selected for freezing.
- The HFEA presents [embryo freezing](#) as a way for women or couples to 'preserve' their fertility. This is inaccurate, as fertility is not preserved, but lost with time, leading to the eventual use of IVF to treat infertility.
- Storing embryos in liquid nitrogen against a time when a woman decides to use them is to treat unique human beings as a commodity - as indeed does the entire IVF process.
- There are risks to women around ovarian stimulation and egg retrieval. See below.
- There are also potential health risks for children when they are frozen as embryos. See below.
- The societal impact of freezing embryos also promotes the idea of a 'right' to have children.

Donating embryos to another couple

Donating embryos to another couple at least means that these tiny babies have a chance to live, although as with all IVF procedures, a live birth is not guaranteed, and the embryos involved have been placed at higher risk of destruction by their creation *in vitro*.

However, while embryo donation may give women the chance to be a mother and the embryo a chance to live, the impact on children as they grow up cannot be ignored.

A 2023 [study](#) highlights some of the issues: ‘Embryo donation raises unique challenges that are not present in gamete donation alone. Children who are full genetic siblings are raised in different households which raises the question of how the children will feel about this. For the child who is raised by their genetic parents, what do they believe knowing that they have a full sibling being brought up in a different household and by different parents? Moreover, for the child born after embryo donation, how will they perceive being relinquished by their genetic parents? For the moment, the answers to these questions remain unknown.’

These questions are similar to those encountered in adoption, and it is already known that some children experience significant difficulties with identity and relationships.

Freezing gametes

[The Other Half](#), a UK research centre focussed on the interests of women, has identified [egg freezing](#) as a matter of concern. As women delay motherhood later and later, egg freezing is being promoted as a perk for women employees by large companies, in the US and now in the UK, with broker organisations linking companies with fertility clinics.

The Other Half is rightly worried about the health impacts of egg retrieval and also that the interests of women are not at the heart of egg freezing promotion.

WHAT ARE THE PHYSICAL RISKS TO WOMEN IN THE IVF PROCEDURE?

There are risks to a woman when:

- Her ovaries are artificially stimulated to produce more eggs
- Her eggs are collected.

Below are the risks cited by the [Guy's and Thomas's NHS Foundation Trust](#). This information is given in the context of women freezing their eggs before cancer treatment, but is also applicable to ovarian stimulation and egg collection in IVF and related practices.

Ovarian stimulation

‘Ovarian stimulation involves daily hormone injections over approximately 2 weeks. A potential risk of this process is ovarian hyperstimulation syndrome (OHSS), which can lead to:

- increased risk of blood clots
- build-up of fluid in the abdomen, chest, or both, which may need drainage
- rarely, hospitalisation for severe cases’

Egg retrieval

‘We use ultrasound guidance for egg retrieval but there is a small risk of:

- infection
- bleeding
- damage to surrounding organs (such as bladder or bowel). This risk is rare due to the use of advanced ultrasound technology.’

Heart disease

The authors of a 2024 [study](#) titled ‘Infertility treatment is associated with increased risk of postpartum hospitalisation due to heart disease’, found: ‘Although the absolute risk of postpartum heart disease hospitalisation is low, infertility treatment is associated with an increased risk, especially for hypertensive disease.’

WHAT IS THE EMOTIONAL IMPACT OF IVF?

There is also an emotional and psychological toll on men and women undergoing IVF.

[Inspire North](#), a mental health support organisation operating in the north of England, while not taking a pro-life position on IVF, nonetheless acknowledges the [mental health impact](#) of IVF: ‘IVF treatment itself involves a rollercoaster of emotions. The anticipation of each treatment cycle, the highs of hope, and the lows of disappointment can create an intense emotional journey. The repeated cycle of hope and despair can be exhausting and emotionally draining. IVF has a high rate of miscarriage.’

WHAT ARE THE RISKS TO CHILDREN OF IVF?

Premature birth

Premature birth is a risk for children conceived through IVF, with all the attendant health problems this can bring.

A 2022 [study](#) found that: ‘IVF, IUI [intrauterine insemination aka artificial insemination], and ovulation drugs were all associated with a higher incidence of preterm birth and low birth weight, predominantly related to multiple gestation births.’ Multiple births have always been a part of IVF because of the transfer of multiple embryos to a woman’s womb.

A 2023 [Romanian study](#) titled, ‘Incidence of complications among *in vitro* fertilization pregnancies’ found that ‘25.9% of participants had preterm newborns, 2.5 times higher than the global prevalence for prematurity, and there was no statistically significant difference between the age of the mothers with preterm newborns’.

Leukemia

A 2024 French [study](#) that looked at over 8.2 million children found that ‘children born after FET [frozen embryo transfer] or fresh ET [embryo transfer] had an increased risk of leukemia compared with children conceived naturally. This risk, although resulting in a limited number of cases, needs to be monitored in view of the continuous increase in the use of ART [artificial reproductive technology].’

ASD (autism spectrum disorder)

A 2017 [study](#) found that ‘ART was associated with a significantly greater risk of ASD in the offspring.’ While acknowledging the limitation of their study, these researchers found that having accounted for other known factors, IVF children had a third higher chance of having ASD.

A 2023 [study](#) looked at 1.3 million children from Ontario, Canada and found that ‘there was a slightly higher risk of ASD in those born to an individual with infertility independent of fertility treatment, which appeared partly mediated by certain adverse pregnancy outcomes.’

Other health risks

A 2020 German [study](#) found that:

- ‘The risk of congenital malformations is approximately one-third higher in children conceived with the aid of IVF technology than in other children.’
- ‘The risks of preterm birth and low birth weight are, respectively, 1.7 and 1.5 times higher in IVF singleton pregnancies than in non-IVF pregnancies.’
- ‘An association has been revealed between cardiovascular abnormalities and [epigenetic modifications](#); the causes are thought to include not only maternal and paternal factors, but also the IVF techniques that are used.’

Other health problems identified in this study were: cardiac malformations, musculoskeletal malformations, and genitourinary malformations.

The German researchers were clearly concerned enough about the risks to children conceived by IVF to caution that, ‘IVF therapy should only be carried out in cases of infertility that cannot be treated by any other means, as the precise causes of the risks of IVF to child health are unclear’.

DOES THE IVF INDUSTRY EXPLOIT INFERTILITY?

SPUC does not underestimate or dismiss the heartache of infertility. However, we have always recognised that the IVF industry exploits the vulnerability of those suffering with infertility.

A 2024 editorial in The Lancet highlights the way in which the [IVF industry exploits and profits from infertility](#). The Lancet considers that ‘the fertility sector has now spawned an entire industry that risks exacerbating rather than alleviating the psychological toll of infertility.’

The Lancet editorial describes some of the ways in which the IVF industry maximises its profits:

‘Many patients are also offered non-essential procedures related to IVF, so-called add-ons, including time-lapse imaging for embryo selection, pre-implantation genetic testing for aneuploidy screening (PGT-A), and endometrial scratching. These procedures are widely advertised and promoted by private fertility clinics. Yet strong evidence for their effectiveness is often lacking.’

The editorial concludes that a ‘profit-driven fertility industry cannot continue to prey on the vulnerabilities of people who desperately hope to have children.’

ISN'T IVF A GOOD THING IF A BABY IS BORN?

The birth of a baby is always good. However, a distinction must be made between the IVF process and the birth of a baby. IVF is not good, because when people choose IVF, they are deliberately choosing to take risks with the health of the woman and her child. They are also creating a situation in which many embryonic human beings will perish.

While not diminishing the genuine suffering of couples longing for a baby, IVF is a consumer choice. It turns the baby into a commodity, rather than a person in his or her own right, which can be purchased, rather than a gift that couples hope to receive.

IS THERE AN ALTERNATIVE TO IVF?

Yes. [Napro technology](#) offers a natural, non-invasive route to overcoming infertility. This is a pro-life alternative to IVF.

A key point about IVF is that it does not address the causes of infertility; instead, it bypasses infertility by fertilising the egg outside the woman's body and then inserting the new human being into her womb. As only to be expected, there is no meaningful attempt by the IVF industry to treat the causes of infertility.

Napro technology success rates have been [recorded](#) as up to 80% for couples with more straightforward infertility issues and around 50% for couples with more challenging problems.

The Billings Ovulation Method has a [good track record](#) of helping couples achieve a pregnancy. In Scotland couples can find more information [here](#) at and elsewhere in the UK [here](#).



SOCIETY FOR THE **PROTECTION** OF UNBORN CHILDREN
Unit B, 3 Whitacre Mews, Stannary Street, London SE11 4AB, UK
TEL: +44 (0)20 7091 7091 WEB: www.spuc.org.uk

