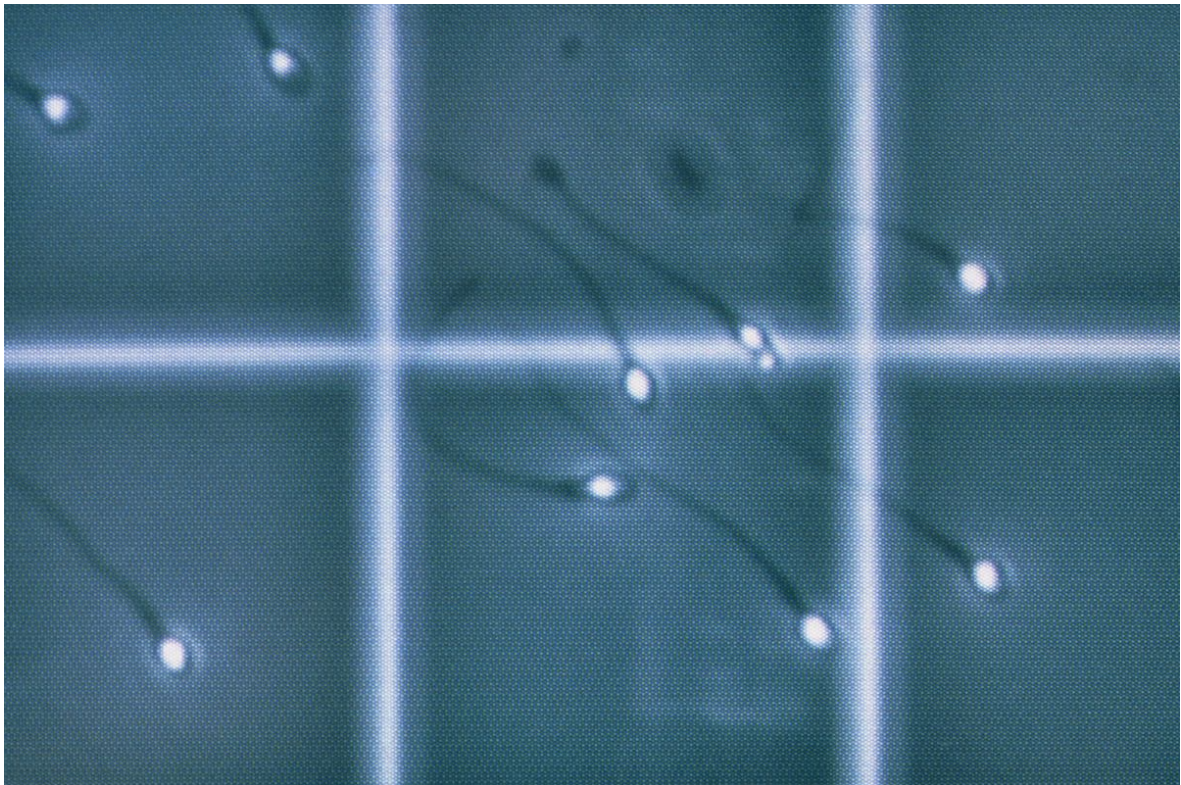


25 July 2017

# Sperm count has fallen by nearly 60 per cent in richer countries



**Enough for the job?**

Science Photo Library

**By New Scientist staff and Press Association**

An analysis of research into [male fertility](#) suggests that there has been a steep decline in sperm counts for men living in richer nations.

The review pooled data from 185 different studies, and found a 59.3 per cent drop between 1973 and 2011 in the average amount of sperm produced by men from North America, Europe, Australia and

New Zealand. No similar pattern was seen in South America, Asia and Africa, although fewer studies had been conducted in these countries.

“Given the importance of sperm counts for male fertility and human health, this study is an urgent wake-up call for researchers and health authorities around the world to investigate the causes of the sharp, ongoing drop in sperm count,” says [Hagai Levine](#), of the Hebrew University of Jerusalem, who worked on the analysis.

“The fact that the decline is seen in Western countries strongly suggests that chemicals in commerce are playing a causal role in this trend,” says team-member [Shanna Swan](#), of the Icahn School of Medicine at Mount Sinai, New York.

## **Confirmation**

Exposure to chemicals in the womb, adult exposure to pesticides, smoking, stress and obesity have all previously been linked to lower sperm counts. But previous studies reporting falling sperm counts have been challenged by some for being unreliable.

“Previous smaller studies have suffered from confounding factors, including the fact that methods of counting sperm in the laboratory might have changed over the years, or that the populations of men being studied might have changed,” says [Daniel Brison](#), at the University of Manchester, UK.

“This new analysis overcomes those problems by including a large number of studies of varying design and location around the world, to confirm that the decline in sperm counts is likely to be real,” says Brison.

[Allan Pacey](#), of the University of Sheffield, UK, says that, despite the decline found in the study, average sperm counts still remain in the normal range.

The work appears in [Human Reproduction Update](#)

15 November 2017

# **Why the male infertility crisis could be good news for women**

The steep decline in sperm counts is an opportunity to finally dispel the idea that fertility is primarily a women's issue



**What would happen if humans stopped being able to reproduce?**

Sean Gallup/Getty

THE plot of P.D.James's dystopian novel *The Children Of Men* revolves around a provocative thought experiment: what would happen if humans stopped being able to reproduce? In the story, set in 2021, no child has been born in the past 25 years and *Homo sapiens* is heading for extinction. With no future to plan for, society is spiralling into the ultimate fin-de-siècle decadence.

By the time 2021 comes around for real, life may be starting to imitate art. In July, Israeli scientists reported that [sperm counts in developed countries have declined](#) by more than half in the past 40 years and continue to fall by about 1.6 per cent a year. “Shocking” and “a wake-up call” were two of the responses from other scientists.

The cause of the fertility crisis in *The Children Of Men* was a global disease. The cause of ours is not known (see “[We're heading for a male fertility crisis and we're not prepared](#)”). To say that we urgently need some research into it is not an exaggeration. We are almost certainly not heading for a total collapse of male fertility,

but sperm counts are approaching dangerously low levels. Around one in 10 couples already experience fertility problems. And yet our scientific understanding of male infertility remains rudimentary, with some researchers complaining that they struggle to get funding to do the long-term, large-scale studies needed to get to the bottom of the problem.

For many women, the news that men are suddenly in the spotlight will feel like a welcome role reversal. Difficulty conceiving has long been treated as a “women thing” by society and medicine alike. In the UK, for example, even if a couple’s fertility problems lie with the man, it is still the woman’s GP who makes the referral; the man isn’t even considered to be the patient. Men are also largely exempt from the social pressure of the ticking body clock, even though recent research suggests that this is dangerously complacent.

If the male fertility crisis has a silver lining, it is an opportunity to discuss and redress these long-standing gender inequalities.

Would-be fathers need to be part of this process. In the UK, women’s reproductive health needs are addressed by the Royal College of Obstetricians and Gynaecologists. There is no equivalent body for men. Men could legitimately argue that this represents an uncommon case in which they are subject to gender discrimination.

But this hand must not be overplayed. Discrimination largely runs the usual way, with women on the receiving end. The way we treat infertility resembles the patriarchy in Margaret Atwood’s *The Handmaid’s Tale*, another dystopian novel with an infertility crisis at its heart, where failure to conceive is routinely blamed entirely on females.

In recent weeks the world has had to confront some sobering realities about women's rights. In too many walks of life, women are still not treated as equals: consider the sexual abuse scandals rocking Hollywood, the UK parliament and elsewhere. The science and medicine of infertility are not mired in similar scandal, but need to examine their prejudices nonetheless.