

97% of Countries Will Soon Be Unable to Sustain Populations as Fertility Rates Drop

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STORY AT-A-GLANCE

- › A report published in The Lancet predicts that by 2100, the global infertility problem will be so severe that 97% of countries will be unable to sustain their populations. According to the World Health Organization, 1 in 6 people globally are now infertile
- › Exposure to electromagnetic fields (EMFs) and radiofrequency radiation may be the most significant factor for the observed decrease in male sperm count
- › Endocrine-disrupting chemicals like phthalates and bisphenols are also a key culprit to infertility and declining sperm count rates in men
- › Several factors can compromise your ability to reproduce, but following some basic common-sense strategies and healthy lifestyle habits can help address the root of infertility

Americans are now having difficulty conceiving, with one-third of adults in the U.S. turning to fertility treatments or are acquainted with someone who has.¹ According to the National Institutes of Health, 9% of men and 11% of women in the U.S. are now struggling with fertility problems, and in healthy couples below 30 years old, 40% to 60% fail to conceive in the first three months of having unprotected sex.²

But infertility isn't just an American dilemma; it's a worldwide crisis. According to the World Health Organization,³ 1 in 6 people globally are now infertile — and it's going to get much worse, unless we do something about it.

'Dramatic Decline' in Fertility Will Cause Populations to Drop in Most Countries

A report published in *The Lancet*⁴ predicts that by 2100, the global infertility problem will be so severe that 97% of countries will be unable to sustain their populations. Published in March 2024, the featured report⁵ estimates that there will be a dramatic decline in fertility globally, with majority of countries experiencing a significant drop in fertility rates. According to an article by Euronews Health:⁶

"Researchers led by the University of Washington's Institute for Health Metrics and Evaluation (IHME) in the US found that three-quarters of countries will not have fertility rates high enough to sustain population size by 2050.

By 2100, they project that this will be the case in 97% of countries, estimating that the global total fertility rate will drop from 2.23 births per female in her lifetime in 2021 to 1.68 in 2050 and 1.57 in 2100."

Taking into the account the margins of error, the projected fertility rates in the featured report are not far off from the United Nations projections, which state "global fertility is projected to fall from 2.3 children per woman in 2021 to 2.1 in 2050."⁷ This is based on their *World Population Prospects* report published in 2022.⁸

A separate commentary⁹ about the featured report, also published in *The Lancet*, notes, "Although projections are by their nature hypothetical, they ought to offer an avenue for scrutiny, objective comparisons with other forecasts, and improvement, and should inform actions that countries could take to influence, or not, the rate of TFR [total fertility rate] declines."

What's Causing Fertility Rates to Decline?

Gitau Mburu, one of the authors of the commentary, reached out to Euronews Health, stating that declining fertility rates can be caused by multiple factors, including "education, contraception access, and postponing parenthood." He also says economic

reasons, such as the cost of raising children and changes in the work force, may also be to blame.¹⁰

However, I believe environmental factors, such as being exposed to toxic substances that are ubiquitous in our lives today, could play a more significant role. A 2000 study¹¹ explored several environmental factors affecting fertility, including cigarette smoking, alcohol and exposure to chemicals and pesticides in the workplace. The authors state:

"Although infertility can be caused by many different factors, most infertility is caused by abnormal oocyte and/or sperm production, tubal defects, or endometriosis.

It is important to note, however, that a significant proportion of infertility is unexplained. Investigators hypothesize that environmental factors have the potential to alter male and female reproductive tissues and thus affect the ability of couples to conceive healthy offspring."

Microwaves – The Invisible Factor Damaging Your Reproductive Health

One stealth factor that can make you infertile is your exposure to electromagnetic fields (EMFs) and radiofrequency radiation from wireless technologies, like cellphones and Wi-Fi. In fact, I believe this may be the most significant reason why sperm counts are dwindling today.¹²

According to a 2023 study published in the journal *Fertility and Sterility*,¹³ men who use their cell phones more than 20 times a day have significantly lower sperm concentrations and sperm counts than those who use their phones once a week or less.

Research by Martin Pall, Ph.D., can help explain why this occurs. Nearly a decade ago, he discovered a previously unknown mechanism of biological harm from microwave radiation. Your cell membranes contain voltage-gated calcium channels (VGCCs) which, when activated by microwaves release about 1 million calcium ions per second.

This massive excess of intracellular calcium then stimulates the release of nitric oxide (NO) inside your cell and mitochondria, which combines with superoxide to form peroxynitrite. Peroxynitrites not only cause oxidative damage, but also create hydroxyl free radicals, which are the most destructive free radicals known to man.

Hydroxyl free radicals decimate mitochondrial and nuclear DNA, their membranes and proteins, resulting in mitochondrial dysfunction. In a 2013 children's health expert panel on cellphone and Wi-Fi exposures,¹⁴ it was noted that "The testicular barrier, that protects sperm, is the most sensitive of tissues in the body ... Besides sperm count and function, the mitochondrial DNA of sperm are damaged three times more if exposed to cellphone radiation."

Many in-vivo and in-vitro studies have also demonstrated the potential implications of EMF exposure to reproductive function. In a paper published in *Clinical and Experimental Reproductive Medicine*,¹⁵ researchers noted that EMFs can affect sperm motility, and the degree of damage can vary depending on the frequency, duration of exposure and strength of EMFs.

Endocrine-Disrupting Chemicals Are Also Making You Infertile

Environmental and reproductive epidemiologist Shanna Swan, Ph.D., says that sperm counts in Western men have been declining for decades, as the rates in 2011 were less than half of what they were in 1973.¹⁶ She notes another key culprit for this decline — endocrine-disrupting chemicals (EDCs).

Swan, who authored the book "Count Down: How Our Modern World Is Threatening Sperm Counts, Altering Male and Female Reproductive Development, and Imperiling the Future of the Human Race," says that phthalates and bisphenols are one of the key culprits to infertility and declining sperm count rates in men. If the curve continues to decline, the median sperm count will be zero by 2045.¹⁷ Couples who want to have children will then have no choice but to seek fertility treatments.

Endocrine-disrupting chemicals work by adhering to hormone receptors and directly interfere with the functioning of your steroid hormones, which are crucial for pregnancy and fetal development. As a result, these chemicals can change how many receptors are present in cells, as well as affect the creation, movement, levels and breakdown of hormones in your blood.

This is a cause for concern, considering how ubiquitous EDCs are in our everyday lives. Plastics, cosmetics, personal care products, and processed and packaged foods all contain EDCs. In an article published in Salon,¹⁸ Swan comments:

"We also see declines in testosterone in several studies around the world. We see increases in erectile dysfunction. We see increases in rates of genital abnormalities ... We see increases in testicular cancer rates."

France's national public health agency, Santé Publique France (SPF), recently released [21 health effects linked to endocrine-disrupting chemicals](#) that they consider a priority for surveillance.¹⁹ The findings were part of the 2021 PEPS'PE study, and unsurprisingly, "infertility," "decreased fertility" and "alteration of sperm quality" are on the list.²⁰

'Forever Chemicals' Are Just as Problematic

Per- and polyfluoroalkyl chemicals (PFAS) are dubbed "forever chemicals" because aside from having the ability not to break down easily in the environment, they can also bioaccumulate in wildlife and people. When these EDCs enter your body, they can have half-lives of two to five years.²¹

Forever chemicals are used in food packaging, clothing, personal care products and other stain- and grease-resistant products. It can even be found in your clothes – including your children's school uniform. A 2022 study²² notes that about 3 tons of PFAS are used in U.S. school uniforms annually, exposing children to 1.03 ng/kg bw/day of PFAS, which can be absorbed via their skin.

Over 9,000 PFAS are used today, and exposure is so widespread that 97% of Americans were found to have PFAS in their bodies.²³ And just like phthalates and bisphenols, many

studies^{24,25,26} demonstrate their potential to disrupt reproductive hormones and affect fertility.

A study published in the journal *Environmental Health Perspectives*,^{27,28} for example, notes that there's "a statistically significant association between exposure to a mixture of PFAS in early pregnancy and lower sperm concentration and total sperm count and higher proportion of non-progressive and immotile sperm" in male offspring.

PFAS have also been linked to reproductive health issues in women. A study²⁹ conducted by researchers in Singapore highlighted the dangers of these chemicals on women's fertility, saying that "higher exposure to PFAS, individually and as a mixture, is associated with reduced probability for clinical pregnancy and live birth."

The researchers also note that forever chemicals not only disrupt reproductive hormones, but they can also delay puberty, and increase the risk of endometriosis and polycystic ovary syndrome (PCOS).³⁰

What's on Your Dinner Plate Can Also Affect Your Fertility

It's no secret that we're exposed to dangerous chemicals every day from our environment. However, your food choices could be adding to your toxic load, too. For example, conventional fruits and vegetables today are sprayed with pesticides, including glyphosate, the active ingredient in Roundup. These chemicals are particularly problematic, as they are known endocrine disruptors.

High pesticide exposure from pesticide-treated fruits and vegetables has been associated with an 18% lower in-vitro fertilization (IVF) success rate in women. They were also 26% less likely to have a live birth if they did become pregnant.³¹ This clearly illustrates why it's far better to opt for organic, pesticide-free produce.

And if you're always fond of eating processed foods like frozen pizzas, pancakes and waffles, be warned – these products contain sodium aluminum phosphate, a known neurotoxin that could impact your reproductive health. Used in food products as an

emulsifying agent and stabilizer, this ingredient, albeit classified as "safe to consume,"³² could have long-term damaging effects on your fertility.

According to Dr. Naomi Wolf, exposure to sodium aluminum phosphate may lead to long-term oxidative stress, DNA damage and a negative impact on blood testosterone levels and sperm production.³³ For a more detailed report about this additive, you can read my article "[Food Additive in Pizza, Pancakes Linked to Lower Sperm Counts](#)."

Vaccines Cause Low Testosterone and Miscarriage

Wolf adds that exposure to aluminum-containing products can also be a key factor in the increasing rates of depression, weight gain and sexual disinterest among young men – these may all be associated with decreased levels of testosterone.³⁴

I've warned about aluminum's serious risks for many years now, especially its role in the rising rates of autism and Alzheimer's. You can be exposed to it in many ways, but one of the most significant sources – and potentially one of the worst – is through vaccines. Vaccines contain aluminum adjuvants, which bypass your body's natural filtering and detoxification systems.

Particularly problematic are the mRNA shots, which are likely both ineffective and dangerous. Wolf claims that mRNA shots contain aluminum,³⁵ and although there is no current proof the mRNA shot for COVID does, the European Medicines Agency has approved the use of other COVID vaccines using complete viruses and a dual adjuvant of aluminum hydroxide-CpG 1018. Shots against COVID-19 that contain aluminum adjuvants are also approved in other countries.

Equally alarming is the fact that vaccines can cause miscarriage in pregnant women. In 2009, women reported losing their babies hours or days after getting the H1N1 swine flu vaccine. Not surprisingly, these instances were passed off as coincidental.³⁶

However, a 2017 paper published in the journal *Vaccine*³⁷ found that women who had received a pH1N1-containing flu vaccine two years in a row were more likely to suffer miscarriage within the following 28 days.

The CDC has not made any changes to its recommendation for pregnant women to get vaccinated against influenza, and is recommending getting the vaccine "during any trimester of pregnancy."^{38,39} This is reprehensible public health policy at its worst, as corporations are profiting while the health of moms and their unborn children are being sacrificed.

Progesterone Can Help Reduce Miscarriage Risk

If you're pregnant or planning to get pregnant, I advise you to avoid vaccines, including mRNA jabs. Remember, the more mRNA shots you take, the more severe the damage to your immune system could be.

Another way to reduce your risk of a miscarriage is to consider progesterone supplementation. Dubbed the "pregnancy hormone,"⁴⁰ it plays a crucial role in conception, from implantation of the embryo to delivery of the baby.

According to studies published in 2020,⁴¹ progesterone could prevent 8,450 miscarriages each year, especially when given to women with bleeding in early pregnancy. For more information, read my article "[Progesterone for Miscarriage Prevention](#)."

More Strategies to Boost Fertility Naturally

There are indeed various factors that can compromise your ability to reproduce, but I believe following some basic common-sense strategies and healthy lifestyle habits can help address the root of infertility. Here's a summary of my recommendations:

Minimize your exposure to toxic chemicals, including heavy metals, endocrine disruptors, pesticides and herbicides, formaldehyde, organic solvents, dry-cleaning chemicals and paint fumes.

Avoid all vaccines, particularly mRNA shots – If you've already had one or more COVID-19 shots, there are steps you can take to repair from the assault on your

system. The Front Line COVID-19 Critical Care Alliance (FLCCC) also has a treatment protocol for post-job injuries. It's called **I-RECOVER** and can be downloaded from covid19criticalcare.com.⁴²

Avoid drinking unfiltered tap water, as our waterways are constantly being polluted by industrial waste and byproducts.

Eat an optimal fertility diet – An optimal fertility diet is about what to avoid as much as it is about what to include. Eat REAL food, ideally organic, to avoid pesticide residues, and locally grown.

Avoid factory farmed animal products, processed seed and vegetable oils that are loaded with linoleic acid (LA) that destroys mitochondrial function, as well as unfermented soy, as soybeans contain phytoestrogens that act on hormones. Men would do well to add more sperm-enhancing foods⁴³ to their diet, such as organic pastured eggs, bananas, asparagus, broccoli, pomegranates, garlic and all zinc-rich foods (zinc plays a key role in sperm development).

Avoid common allergens – An overactive immune system is more likely to attack its own body cells, and the link between food intolerances and anti-sperm antibodies is well established. The two most widely spread food intolerances are gluten and dairy. Factory-farmed milk can also be a source of estrogen that can harm a man's fertility.

Minimize microwave exposure – Avoid carrying your cellphone on your body while it is on, and avoid using laptops and tablets on your lap. Turn off your Wi-Fi off at night and make your bedroom an EMF-free zone.

Get checked for sexually transmitted diseases (STDs) – Some STDs, like chlamydia, can be asymptomatic. In men, chlamydia can lead to sperm abnormalities including sperm antibodies. In women, it can lead to scarring, blocked tubes and miscarriage.

Avoid coffee, smoking and alcohol – While organic black coffee has several health benefits, fertility does not appear to be one of them. On the contrary, studies suggest

it decreases fertility.⁴⁴ Alcohol, smoking and recreational drugs can also adversely affect fertility, reducing the size of your testes and lowering your sperm count.

Get regular exercise – According to research,⁴⁵ getting at least 30 minutes of exercise three times a week can help boost men's sperm count.

Normalize your weight – Obesity contributes to infertility in both men and women. Normalizing weight can help improve sperm quality and quantity in men and augment a woman's chances of getting pregnant,⁴⁶ in part by normalizing menstrual cycles.⁴⁷

Limit hot baths and saunas – While hot baths and saunas have a myriad of health benefits, it's ideal to limit them during the conception phase, as the heat can take a toll on sperm. In one three-year-long study,⁴⁸ 5 of 11 men who quit taking hot baths were able to raise their sperm count by 491%.

Combat stress – Make sure to get sufficient amounts of sleep and/or incorporate a tool like the Emotional Freedom Techniques (EFT), yoga or meditation to address stress.

Clean up your home environment – Use natural cleaning products or make your own.

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