PFAS & Reproductive Health

What to know about "forever chemicals" and infertility

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14,000+	~98%	1 in 6	~$2 billion
synthetic PFAS compounds[1]	of Americans tested have detectable PFAS (NHANES)[1]	people worldwide experience infertility (WHO)[2]	estimated health cost of PFAS on infertility[3]

Per- and polyfluoroalkyl substances (PFAS), or "forever chemicals," have been used since the 1940s in nonstick cookware, food packaging, stain- and water-resistant fabrics, cosmetics, and firefighting foam.[1] They resist breakdown in the environment and in the human body. CDC biomonitoring (NHANES) detects PFAS in the blood of an estimated 98% of Americans tested.[1]

WHAT THE SCIENCE SHOWS

Reproductive tissues and fluids	PFAS are repeatedly detected in tissues of conception and fetal development, including follicular fluid, placental tissue, amniotic fluid, cord blood, and breast milk.[4]
Fertility	Preconception exposure is associated with diminished ovarian reserve, reduced pregnancy rates, and poorer IVF/ART outcomes, including lower fertilization and blastocyst rates.[4] Exposure is linked to reduced sperm motility and sperm DNA damage.[5] Roughly half of all infertility cases involve a male factor.[6]
Endocrine disruption	PFAS interfere with estrogen, testosterone, and thyroid signaling, the hormonal systems that direct the reproductive cycle.[4,7]
Pregnancy complications	Studies have associated exposure to certain PFAS with preeclampsia, impaired fetal growth, and preterm birth.[4]

Why this matters in reproductive medicine

Patients seeking fertility care are already navigating one of the most consequential decisions of their lives. **Environmental exposures are potentially modifiable risk factors, and unlike many causes of infertility, exposure prevention is a population-level intervention.**

WHAT POLICY MAKERS SHOULD KNOW

1	**PFAS are a class of chemicals, not one chemical.** Regulating single compounds one at a time invites "regrettable substitution." Newer replacement PFAS, introduced as legacy chemicals are phased down, do not consistently test safer. The concern is the chemical class.
2	**PFAS are a public health problem.** Exposure is nearly universal and difficult to avoid, driven by drinking water, food packaging, and everyday products. It cannot be prevented by individual choice alone.
3	**Infertility and PFAS exposure are both common and costly.** WHO estimates roughly 1 in 6 people worldwide experience infertility, and researchers estimate the health cost of PFAS on infertility at nearly $2 billion. Reducing a modifiable environmental contributor is a concrete public health opportunity.
4	**Research gaps remain, but the evidence is enough for concern.** More work is needed on paternal exposure, chemical mixtures, and cumulative body burden. Continued federal research investment (National Institutes of Health and the National Institute of Environmental Health Sciences) matters.
5	**Leading medical societies are calling for action.** FIGO has called for the removal of PFAS from global use.[8] The Endocrine Society, European Society of Endocrinology, and European Society for Paediatric Endocrinology have jointly called for a universal PFAS restriction in the EU, with phase-out as safer alternatives become available.[9] ACOG and ASRM have jointly urged reproductive clinicians to advocate for policies that identify and reduce exposure to toxic environmental agents.[10]

THE OPPORTUNITY FOR CONGRESS

Support effective protections against PFAS contamination, invest in rigorous reproductive health research, and advance policies that reduce avoidable exposure while improving transparency and accountability.

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STATE LEADERSHIP

11

states set enforceable PFAS drinking water standards[11]

ME, MA, MI, NH, NJ, NY, PA, RI, VT, WA, WI

16

states have advisory or action levels for some PFAS[11]

AK, CA, CO, CT, HI, IL, IN, MD, MN, MS, MT, NM, NC, OH, OR, WI

2

states have banned PFAS as a class, with exceptions for essential use, set to take effect in several years[12]

ME, MN

FEDERAL LEVEL

LEGISLATION	**Ban non-essential PFAS uses.** H.R.8016, the Forever Chemical Regulation and Accountability Act of 2026, is a comprehensive bill that provides a decade-long phaseout of PFAS and prohibits non-essential use. It also addresses research, remediation, regulation, and enforcement.
PENDING	**Federal drinking water protection is being decided now.** The EPA's 2024 rule set the first enforceable PFAS drinking water limits. In 2026, the EPA proposed extending the compliance deadline from 2029 to 2031 and rescinding limits for four of the six regulated PFAS. A final decision is pending.
OPPOSE	**Oppose efforts to weaken protections against environmental toxicants.** In October 2025, the EPA proposed modifying Section 8(a)(7) of the Toxic Substances Control Act (TSCA) to add exemptions for PFAS reporting, which would reduce the information available to regulators and the public.

WHAT EFFECTIVE POLICY LOOKS LIKE

✓

Regulates PFAS as a class[13]

Uses a broad, agreed-upon scientific definition. Industry is attempting to narrow the definition to exclude newer compounds.

✓

Addresses the full spectrum

Goes beyond bans to include research, timed phase-outs, consumer product transparency, and industry accountability.

✓

Sets enforceable water standards

Establishes enforceable drinking water testing and standards in line with the EPA 2024 recommendations

RECOMMENDED RESOURCES FOR POLICY STAFF

Agency for Toxic Substances and Disease Registry *Toxicological Profile for PFAS*	The federal benchmark for human exposure and clinical health outcomes, detailing organ-system toxicity including reproductive and developmental hazards.
National Academies of Sciences, Engineering, and Medicine *Guidance on PFAS Exposure, Testing, and Clinical Follow-Up*	Evidence-based advice for clinicians on patient blood testing, health screening, and risk reduction for exposed populations.
National Institute of Environmental Health Sciences *PFAS & Reproductive Health Research Portfolio*	Synthesizes epidemiologic studies associating PFAS blood levels with prolonged time to pregnancy, pregnancy loss, and endocrine disruption.
Safer States *Policy Database*	Tracks state legislative models, with model bill language for water standards and accountability measures.
Center for Environmental Health *Consumer product testing and PFAS accountability*	Nonprofit that tests consumer products and pursues legal and market action on PFAS in cosmetics, food packaging, and plastic containers.
Environmental Working Group *PFAS contamination map and Tap Water Database*	Interactive map of known PFAS contamination sites and drinking water data, plus a ZIP code searchable tap water database.
UCSF-Stanford Environmental Research and Translation for Health Center *PFAS research and resources*	Academic center studying environmental exposures that affect reproduction and human development, with PFAS fact sheets, including one from FIGO.
Silent Spring Institute *PFAS Exchange*	Independent nonprofit research institute whose PFAS Exchange offers free guidance on reducing exposure and medical guidance for clinicians.
Endocrine Society *Endocrine-disrupting chemicals resources*	Professional society with a 2024 report on endocrine-disrupting chemicals and a 2025 joint statement urging a universal PFAS restriction in the EU.

Scan for the full reference list

Numbered references and resource links