

Toxic Chemicals in Breast Milk

How we can solve this problem



Breast milk is widely regarded to be one of the healthiest food sources for babies. However, results from a new study give breastfeeding mothers a cause for concern when it comes to protecting their babies' health. Toxic-Free Future's latest study published in *Environmental Science & Technology* found that breast milk from all 50 moms who provided samples contained dangerous PFAS chemicals. Nursing mothers may have been exposed to these toxics through consumer products, materials in their homes or workplaces, contaminated drinking water or food. **The good news is that we can take action to solve the problem.**

Scientific evidence shows that, when possible, breastfeeding is [healthiest for babies and moms](#). Breastfed babies have fewer infections and reduced risk of asthma, obesity, diabetes, and other health problems. Breastfeeding can also improve mothers' health, reducing risk of high blood pressure, diabetes, breast cancer, and other health problems.

"While we know that PFAS chemicals may be harmful, it is important to remember that breast milk provides significant benefits to newborn and child health. Breast milk is still best for newborns."

—Dr. Sheela Sathyanarayana, Associate Professor of Pediatrics at the University of Washington and Seattle Children's Research Institute



WHAT WE FOUND

PFAS: Chemicals of Concern

PFAS, or poly- and perfluoroalkyl substances, are a group of synthetic chemicals that companies put in products like food packaging, stain-resistant carpet and fabrics, water-repellent outdoor gear, firefighting foam, waxes and sealers for flooring and other building products, nonstick cookware, and household items like makeup.

PFAS are released into air and water by manufacturers and escape from products while we use them, contaminating our air, soil, food, water, homes, and workplaces. They also leach out of products discarded in landfills. As a result, PFAS **contaminate drinking water** supplies for millions of Americans.

Furthermore, PFAS are highly persistent, meaning they remain in the environment for long periods of time, and some build up in our bodies. While **industry-funded analysis** claims that newer, current-use PFAS are not bioaccumulative, research—including this study—indicates otherwise.

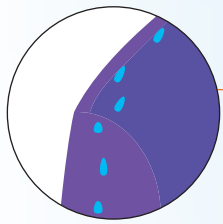


How PFAS Threaten Our Health

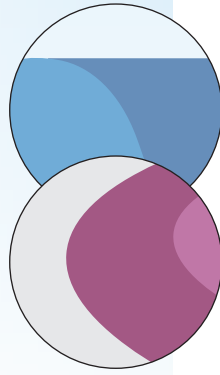
Studies **link exposure to PFAS** with a weaker immune system, cancer, increased cholesterol levels, and increased risk of thyroid disease. In laboratory studies, PFAS are also associated with reproductive, neurodevelopmental, liver, and kidney problems.

An increasing number of scientists have made strong **statements of concern** based on studies showing that PFAS can weaken the immune system and make people more vulnerable to infectious diseases like colds, stomach bugs, and Covid-19. PFAS exposure may weaken infectious disease resistance, meaning that people are more likely to get sick from viruses after being exposed.

PFAS EXPOSURES



Water-repellent fabrics for clothing



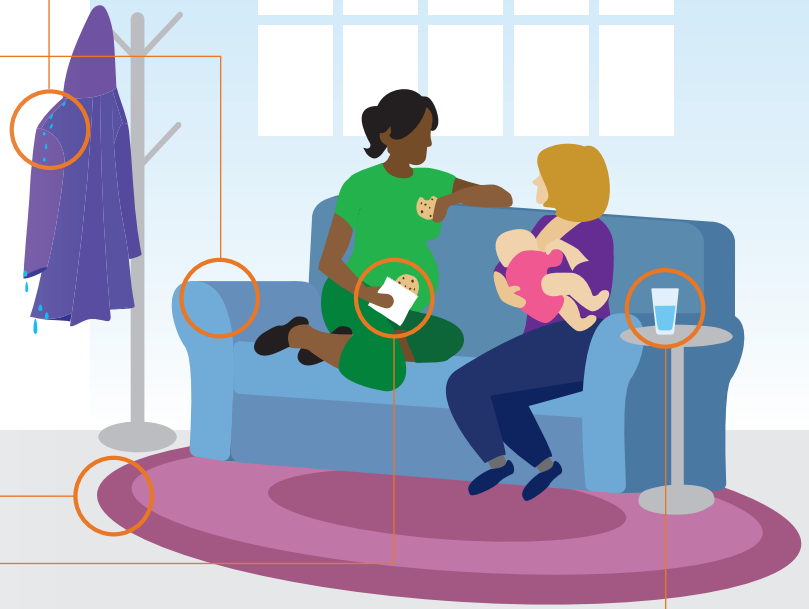
Textile treatments to make fabrics and carpets stain-repellent



Food packaging treatment with grease-repellent coatings



Drinking water contaminated by manufacturing, disposal, or firefighting foam



Infant Exposure to PFAS Through Breast Milk

We analyzed breast milk collected from 50 mothers in and around Seattle, WA, for the presence of PFAS. One hundred percent of breast milk samples tested positive for PFAS.

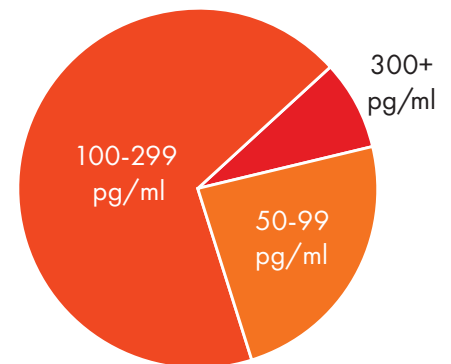
The study tested each sample for 39 PFAS, which included 9 current-use compounds. The results found a total of 16 PFAS detected, with 12 detected in more than 50% of the samples. Our research shows that both current-use and phased-out PFAS now contaminate breast milk, exposing nursing infants to toxic chemicals.

We also found that levels of current-use PFAS appear to be rising in breast milk. These findings make it clear that when companies phased out certain PFAS and switched to others, it didn't solve the exposure problem. Instead, the findings suggest that current-use PFAS are building up in our bodies.

Our results show a concerning buildup of current-use PFAS in breast milk—a baby's first food. With the critical role that breastfeeding plays in child and maternal health, we can't

100% of Tested Breast Milk Samples Contained PFAS

PFAS Levels in Breast Milk from 50 Mothers



delay actions to make it as safe as possible. We must act now to phase out PFAS wherever safer alternatives are available.

Market and Policy Solutions

Since 2018, state and local governments together with companies have led the way by adopting policies and actions to prevent PFAS pollution, focusing on key sources including food packaging, firefighting foam, and textiles.

The first laws, adopted in Washington, Maine, New York, and San Francisco, were groundbreaking—regulating the full class of more than 5,000 PFAS chemicals in food packaging and sending a clear signal to the market to find safer alternatives. Companies from McDonald's to Whole Foods are moving away from PFAS in food packaging. And in July 2020, the major U.S.-based PFAS chemical makers agreed to voluntarily phase certain PFAS out of food packaging by 2024.

Multiple states also led the way by banning PFAS-containing firefighting foam, a major source of PFAS in drinking water, and requiring disclosure of PFAS in firefighting turnout gear. States such as Washington, California, and Vermont are considering restrictions on PFAS in carpets, rugs, and other textiles.

The European Union is developing restrictions on use and manufacture of all PFAS under the European Registration, Evaluation, Authorisation and Restriction of Chemicals program.

Local, state, federal governments and product manufacturers, suppliers, and retailers should:

- Adopt policies to prevent the use of the most dangerous chemical classes, such as PFAS, that wind up in people and breast milk. Phase out these chemicals in uses where safer alternatives are available.
- Require full public disclosure of product ingredients in laws and corporate policies so that suppliers, manufacturers, governments, and consumers know what chemicals are in products.
- Invest in the tools, science, and data that identify and incentivize the use of the safest chemicals and materials.
- Adopt strong standards to require testing and cleanup of PFAS in drinking water, soil, groundwater, sludge (biosolids), and sediment.
- Ensure safe storage and disposal of PFAS-containing products and wastes.

What you can do to protect your family:

- Avoid greasy or oily packaged foods, take-out food and microwave popcorn. These packages often contain grease-repellent coatings like toxic PFAS.
- Avoid stain-resistance treatments on furniture and carpets, as they can contain PFAS.
- Avoid personal-care products made with Teflon™ or containing ingredients that include the words "fluoro" or "perfluoro." PFAS can be found in dental floss and a variety of cosmetics.
- Avoid Teflon™ or non-stick cookware. Stainless steel or cast iron are better alternatives.

Take online action that makes a big difference!

Learn how and when to contact elected officials to prevent PFAS pollution by signing up at Toxic-Free Future's website:
www.toxicfreefuture.org

Learn how to contact retailers to ask them to ban all PFAS and other harmful chemicals in products by signing up at Mind the Store's website:
www.mindthestore.org