



PFAS Fact Sheet

Background

Synthetic organic chemicals, known as Per and Polyfluoroalkyl Substances (PFAS), are in many of the products that consumers use every day. They are used in food packaging, nonstick cookware, clothing, and many other products. While these chemicals can make items water-resistant or cooking easier, they also leave behind what is known as "forever chemicals." Those forever chemicals can become concentrated in the bodies of people, animals, and other living organisms. Scientists call the process bioaccumulation. While there are thousands of these chemicals, six are currently the focus of the EPA's recently promulgated PFAS regulation: PFOS, PFOA, PFNA, PFHxS, PFBS and HFPO-DA (otherwise known as GenX chemicals).

Scientists, including those at the Division of Public Health (DPH) and Department of Natural Resources and Environmental Control (DNREC), are developing new and more effective methods to better understand the possible health effects these chemicals have on individuals. DPH Office of Drinking Water (ODW) is not recommending an overall alternate source of drinking water currently. Any recommendation to do so would be considered on a case-by-case basis.

Have I been exposed to PFAS?

Almost every person in the U.S. has detectable levels of PFAS in their blood. Finding measurable amounts of PFAS in blood does not imply that the levels of PFAS cause an adverse health effect. PFAS have been manufactured since the 1940s and are found in many consumer products. The nature of PFAS is that they are waterproof, non-stick, and resistant to staining. Because of the number of common products that PFAS are found in, it's not surprising that so many people have been exposed.

How can I get exposed?

People can be exposed to PFAS in a variety of ways including drinking contaminated water (municipal or private), eating fish from contaminated water, breathing and swallowing contaminated dust, eating food that was packaged in material that contains PFAS, contact with stain-resistant carpeting and water repellant clothing.

What consumer products may contain PFAS?

Some products that may contain PFAS include:

- Grease-resistant paper, fast food containers/wrappers, microwave popcorn bags, pizza boxes, and candy wrappers
- Nonstick cookware
- Stain-resistant coatings used on carpets, upholstery, and other fabrics
- Water-resistant clothing
- Cleaning products
- Personal care products (shampoo, dental floss) and cosmetics (nail polish, eye makeup)
- Paints, varnishes, and sealants



DELAWARE HEALTH AND SOCIAL SERVICES Division of Public Health Office of Drinking Water



What are potential health effects of PFAS exposure?

Many studies indicate that exposure to PFAS over certain levels may result in adverse health effects, including low birth weight, accelerated puberty, skeletal variations and other developmental effects, cancer, liver disease, and effects on the immune system, the thyroid, and cholesterol levels.

How is Delaware addressing PFAS exposure?

Delaware has been investigating releases of PFAS within the environment and addressing them through various DNREC actions, including mitigating exposure through consumption at DPH-regulated public water systems using EPA's Health Advisory Limits. Previous actions include Delaware enacting a bill, H.B. 8, *An Act To Amend Title 29 Of The Delaware Code Relating To Drinking Water*, in October 2021. The bill directs the DPH and DNREC to establish state-level maximum contaminant levels (MCLs) for PFAS in drinking water.

Pursuant to the publication of the EPA's National Primary Drinking Water Regulation (NPDWR) for PFAS, Delaware is now implementing the process to finalize PFAS regulatory standards for the state.

Delaware's PFAS regulatory implementation plan is now available at the link below: https://www.dhss.delaware.gov/dhss/dph/hsp/files/MCLimplementationPlanPFAS.pdf

Team Approach to Solutions

DNREC has been visiting water system sites as well as other locations and acquiring representative water samples for testing. As sample test results become available, water systems are notified of the results. Where elevated PFAS have been detected, DNREC and DPH - as well as other organizations such as the Delaware Rural Water Association (DRWA) - assist water systems with guidance, potential funding sources, and technological recommendations for remediation.

Additional information and contacts.

Additional information can be found at <u>Per- and Polyfluoroalkyl Substances (PFAS) | US EPA</u>.

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