



Navy Region Mid-Atlantic Drinking Water Website:

<http://1usa.gov/1QbwtwN>

EPA Emerging Contaminants Fact Sheet:

<http://1usa.gov/1QbweBl>



WHAT ARE PFOS, PFOA and PFNA?

Perfluorooctane sulfonate (PFOS), perfluorooctanoic acid (PFOA), and perfluorononanoic acid (PFNA):

- ▶ Are all perfluorinated compounds (PFCs) and have similar properties.
- ▶ Are man-made compounds.
- ▶ Break down slowly, making them useful for home and industrial purposes, but long-lasting in the environment.
- ▶ Have been used since the 1950s in many products because of their stain and water repellent properties:
 - ▶ Fire-fighting foam
 - ▶ Stains, paints, and grease
 - ▶ Fabric for upholstered furniture
 - ▶ Carpets
 - ▶ Nonstick cookware
 - ▶ Floor wax
 - ▶ Food packaging (e.g., lining of microwave popcorn bags, fast food wrappers)
- ▶ Are globally distributed in the environment and have been detected in the blood of humans, wildlife, and fish.

U.S. EPA CONTINUES TO INVESTIGATE AND WORK TO ELIMINATE SOURCES.



WHAT WE KNOW

- ▶ Exposure through a variety of sources to PFCs appears to be widespread globally.
- ▶ 98% or more of the general U.S. population has PFCs in their blood (CDC 2007).
- ▶ Some studies on exposed human populations indicate PFCs may cause elevated cholesterol, effects on the liver and immune system, and possibly low infant birth weight. New studies are continually becoming available.
- ▶ When animals are given large doses, they exhibit developmental, reproductive, and liver effects. Some human and animal studies suggest a link with certain cancers.
- ▶ Exposure through ingestion is the primary concern.



WHAT WE DON'T KNOW

- ▶ It is not possible to definitively link exposures to PFCs in water to a person's individual health issues.
- ▶ Blood tests are not routinely done because they provide limited information. The results can be inconclusive, do not allow for a determination of the source of the exposure, and do not predict health effects.
- ▶ Long-term exposure effects are still being investigated by the U.S. EPA and State regulatory agencies.