



Counseling Patients - Potential Health Risks Associated with Perfluorooctane Sulfonate (PFOS) and Perfluorooctanoic Acid (PFOA) in Drinking Water

FACT SHEET 95-003-0917

Purpose:

To provide U.S. Army Medical Treatment Facilities and Healthcare Providers with information to facilitate dialogue with patients concerned about possible exposure to PFOS and/or PFOA in drinking water.

Key Talking Points:

- The Army is committed to providing safe and high quality drinking water to all Soldiers, Family Members, and Civilians who work and live on Army installations.
- Recently, the U.S. Environmental Protection Agency (EPA) replaced the 2009 short-term provisional Health Advisory for PFOS and PFOA with a more stringent Lifetime Health Advisory (LHA).
- Researchers identified infants and unborn children as the most sensitive sub-populations.
- The Army is taking rigorous measures to assess whether the drinking water supplies at any installations are contaminated above the LHA.
- Blood testing is not indicated for PFOS and PFOA because it will not aid in the clinical management of an individual.

Army Drinking Water Sampling:

The Army is currently sampling drinking water for the presence of two chemicals, PFOS and PFOA, at Army-owned or operated drinking water facilities. Between 2013 and 2015, the Army conducted PFOS and PFOA sampling as part of the EPA Unregulated Contaminant Monitoring Program that applies to drinking water systems which serve more than 10,000 people. This sampling did not identify Army locations exceeding the EPA's then provisional Health Advisory. In May 2016, EPA issued a more stringent LHA level reducing the acceptable PFOS and PFOA concentrations to 70 parts per trillion or 0.07 micrograms/liter ($\mu\text{g}/\text{l}$) for each chemical, as well as the combined PFOS/PFOA concentration in drinking water. As part of the Army's commitment to supplying quality drinking water to all Soldiers, Family Members, and Civilians, the Army began implementing a more comprehensive PFOS and PFOA monitoring program at Army installations, regardless of size.

What are PFOS and PFOA?

PFOS and PFOA are manmade chemicals that have been used for many years to make products that resist heat, stains, grease, and water. For example, PFOS and PFOA have been used in food packaging, stain-resistant treatments for furniture, carpets and clothing, non-stick cookware, outdoor gear with water repellent coatings, building materials, and firefighting foams. These chemicals are persistent in the environment and bioaccumulate in blood and tissues over time.

ATSDR Facts:

The U.S. Department of Health and Human Services Agency for Toxic Substances and Disease Registry (ATSDR) reports that most people in the U.S. population have PFOS or PFOA in their blood, regardless of age. According to ATSDR, in addition to drinking water, individuals are exposed to PFOS and PFOA by consuming food cooked using cookware with non-stick coatings or inhalation of household dust generated from surface-protective coatings on clothing and carpets. Researchers identified infants and unborn children as the most sensitive sub-populations. Pregnant and nursing mothers can reduce risk by seeking an alternate drinking water source that is known to not contain perfluorinated compounds (PFC) or have PFC levels below the LHA. For formula-fed infants, mothers may choose to use water known to not contain PFC's or have PFC levels below the LHA to mix with powdered or concentrated formula or use formula that does not require adding water (ready-to-feed).

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What is a Lifetime Health Advisory?

The LHA levels established by the EPA represent a level that is not expected to produce an adverse health effect with daily consumption over an entire lifetime. In addition, LHA levels include a significant margin of safety to ensure they are protective of the most sensitive sub-populations.

Communications with Army Water Consumers:

The Army is committed to engaging in open, honest, and transparent communication with Army water consumers at locations where sampling is being conducted. While this will help to maintain or even increase consumer trust and confidence, it will also raise awareness about a potential health risk possibly unknown to consumers. Drinking water quality and safety is often an emotionally-charged issue. Individuals with concerns that they or their children may have been exposed to PFOS/PFOA in drinking water are likely to seek additional information from their healthcare providers regarding possible health effects that might be associated with those exposures. The U.S. Army Public Health Center (APHC) Consumer FAQ is a tool to assist the provider in addressing those questions and concerns. The APHC Consumer FAQ can also be provided to concerned individuals to reinforce the information provided verbally during patient clinical encounters.

https://phc.amedd.army.mil/PHC%20Resource%20Library/PFOSPFOAFAQforConsumers_FS_95-001-0217.pdf

Should Consumers Get a Blood Test?

It is important to note at this time that ATSDR does not recommend blood testing of individuals since the results are neither positive nor negative and have no diagnostic or prognostic value. The usefulness of individual blood testing is limited to the ability to compare those results to the levels seen in the general U.S. population based on the National Biomonitoring Program. There is no treatment to reduce the levels of PFOS/PFOA; blood testing would not be of value in the clinical management of an individual with measurable levels. APHC concurs with this position.

Additional Resources:

Should providers need additional information they can visit the Centers for Disease Control and Prevention website (<http://www.atsdr.cdc.gov/pfc/overview.html>) or contact the APHC, Environmental Medicine – Clinic Consult Service (commercial: 410-436-2714, DSN 584-2714, or electronic mail usarmy.apg.medcom-aphc.mbx.emp@mail.mil).