

An Overview of ATSDR's PFAS Related Activities and Resources

INFORMATION TO PROTECT OUR COMMUNITIES



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National Center
for Environmental Health
Agency for Toxic Substances
and Disease Registry

Agency for Toxic Substances and Disease Registry (ATSDR)



- Helps reduce exposure to hazardous chemicals
- Identifies how people in a community might be exposed to chemicals
- Assesses exposure to chemicals and determines if there is a threat to health
- Works with the community, federal/state/local agencies, and non-government organizations



Our Role in Addressing PFAS



- Investigate exposure to PFAS and possible health effects associated with PFAS



- Address community health concerns



- Take action on the basis of scientific information



- Provide information to communities and healthcare providers so they may take action

History of PFAS Exposure and Health Studies



1930s-1950s

PFAS are first synthesized.
Production for use in nonstick coatings and stain- and water-resistant products begins.

1980s

Preliminary PFAS toxicity studies in rodents suggest possibility of health effects.

2006

Eight major PFAS manufacturers begin to phase out PFOA and related compounds

1968

Evidence of PFAS in human serum first observed

1999

PFAS detected in >98% of serum samples collected from the general U.S. population

Federal Response



January 2009

EPA's Office of Water established provisional health advisories to assess potential risk from short-term exposure via drinking water.

August 2015

ATSDR released draft Toxicological Profile for perfluoroalkyls.

August 2017

PFOA, PFOS, PFNA, and PFHxS joined ATSDR's Substance Priority List.

April 2018 - present

NCEH and ATSDR continue to investigate the relationship between PFAS and human health and provide resources to communities.

May 2012

EPA required all community water systems serving >10,000 customers to monitor for PFCs twice in a 12-month period during 2013-2015.

May 2016

EPA issued Lifetime Health Advisory of 70 ppt for PFOA and PFOS, individually or combined.

March 2018

CDC/ATSDR receives funding to conduct PFAS exposure assessments and a multisite health study.

What are the health effects of PFAS?



- Human exposure to PFAS is a public health concern
- Some studies in humans have shown that PFAS may:
 - Interfere with the body's natural hormones
 - Increase cholesterol levels
 - Affect the immune system
 - Increase the risk of some cancers
- More research is needed, especially in humans



Our Activities Related to PFAS



- Assess PFAS exposure in communities near current or former military installations
- Compare PFAS levels in blood and urine from each community to levels in the general population
- Identify and assess environmental factors that affect exposure

- Expands science on the relationship between PFAS exposure and health outcomes
- Helps people better understand their risk for health effects

Multi-Site Health Study

- Expands science on the relationship between PFAS exposure and health outcomes
- Evaluates study procedures and methods to improve the design of multi-site health study

Exposure Assessments★ Pease Study

ATSDR PFAS Related Activities



Exposure Assessments

- Assess PFAS exposure in communities near current or former military installations.
- Compare PFAS levels in blood and urine from each community to levels in general population
- Identify and assess environmental factors that affect exposure



Pease Study

- Looks at relationship between PFAS exposure and health outcomes
- Evaluates study procedures and methods to improve the design of Multi-Site Health Study
- Serves as the first site in the Multi-Site Health Study



Multi-Site Health Study

- Expands science on the relationship between PFAS exposure and health outcomes
- Helps people better understand their risk for health effects



PFAS Exposure Assessment Technical Tools (PEATT)

- Resource available to State, local, tribal, and territorial health departments
- Includes a protocol for statistically-based representative biomonitoring, risk communication materials, questionnaires, and EPA's water sampling protocol



Tox Profile

- Characterizes the toxicology and adverse health effects information related to PFAS
- Includes an overview of PFAS and U.S. exposures, including a summary of health effects and minimal risk levels
- Currently available in DRAFT form while undergoing finalization



PFAS Guidance for Clinicians

- Continuing education materials and resources for clinicians responding to concerns about PFAS exposures
- Guidance on how to address patient concerns based on peer-reviewed, up-to-date literature, including what is known about the potential health effects associated with PFAS exposure

For More Information



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