

# Evaluation of Exposure to Per- and Polyfluoroalkyl Substances (PFAS) in the Pease Tradeport Public Water Supply (PWS) - For Public Comment

Portsmouth, Newington, and Greenland, New Hampshire

## Introduction

The Agency for Toxic Substances and Disease Registry (ATSDR) is a public health agency that evaluates environmental exposures for public health risks. ATSDR has released a health consultation on drinking water contamination at the Pease Tradeport PWS. The health consultation evaluated whether water containing PFAS posed a health threat to people who drank it any time since 1993. Those people included workers at the Pease International Tradeport. They also included children at the two childcare centers at the Pease International Tradeport. This fact sheet summarizes ATSDR's findings, released in April 1, 2019. The full report is titled "Per- and Polyfluoroalkyl Substances (PFAS) in the Pease Tradeport Public Water System (PWS)." You can find the report at <https://www.atsdr.cdc.gov/HAC/PHA/HCPHA.asp?State=NH>.

The Pease Tradeport PWS serves the Pease International Tradeport and the New Hampshire Air National Guard base at the former Pease Air Force Base (AFB). PFAS in the Pease Tradeport PWS likely came from aqueous film-forming foam (AFFF) used on the former Pease AFB, now the site of Pease International Tradeport. The base used AFFF to fight fires.

## Bottom Line

The health consultation concluded that Pease International Tradeport workers and children who attended the childcare centers were exposed to PFAS by drinking contaminated water. The water was supplied to the Pease International Tradeport before the Haven well was shut down in May 2014. Drinking water from the Pease Tradeport PWS during this time might have increased the risk for some harmful health effects. The cancer risk from past exposure to all PFAS in the Pease Tradeport PWS is uncertain.

Though the Haven well has shut down, there are still low levels of PFAS in the water serving the Pease Tradeport PWS. ATSDR does not expect that consuming water containing low levels of PFAS from the Pease Tradeport PWS (after May 2014) will harm people. However, persons who were exposed to PFAS from the Pease Tradeport Water System in the past should be aware of ways to reduce future PFAS exposures. Information on ways to reduce exposures to all sources of PFAS is available at <https://www.atsdr.cdc.gov/pfas/pfas-exposure.html>.

## Summary of Key Findings

- Drinking water from the Pease Tradeport PWS between January 1993 through May 2014 could have increased the risk for harmful health effects to Pease International Tradeport workers and children attending the childcare centers. Other possible sources of exposure to users of the Pease Tradeport PWS include food and consumer products. Those could increase the risk for harmful effects beyond the risk from the drinking water exposures alone.
- Exposure to perfluorooctanoic acid (PFOA), perfluorooctane sulfonic acid (PFOS), and perfluorohexane sulfonic acid (PFHxS) can depress the immune response, increase cholesterol, slow growth and development, and cause liver damage.
- Community members, particularly mothers exposed to PFAS from the Pease Tradeport PWS, have concerns about the possible health effects of PFAS exposures to infants who breastfeed. Based on available scientific information, ATSDR concludes that the health and nutritional benefits of breastfeeding outweigh the risks associated with PFAS in breast milk.
- Consuming water from the Pease Tradeport PWS after May 2014 is not expected to cause people harm.



**U.S. Department of  
Health and Human Services**  
Agency for Toxic Substances  
and Disease Registry

## ATSDR Recommendations to Agencies

The Environmental Protection Agency (EPA), the New Hampshire Department of Environmental Services (NHDES), and the U.S. Air Force (USAF) do the following:

- Continue their studies to better describe PFAS groundwater contamination at the site and monitor the Pease Tradeport PWS for any changes in PFAS amounts
- Continue PFAS removal from the Pease Tradeport PWS and set up a long-term plan to reduce PFAS to the lowest possible levels
- Continue to provide health education regarding PFAS in drinking water to residents who might be exposed, other community members, and health professionals in the site area

## ATSDR Community Recommendations

- Persons who have had long-term exposures to PFAS should be aware of ways to reduce exposures. To learn more, visit: [https://www.atsdr.cdc.gov/pfas/docs/pfas\\_fact\\_sheet.pdf](https://www.atsdr.cdc.gov/pfas/docs/pfas_fact_sheet.pdf).
- Continue to breastfeed babies, even if you have been exposed to PFAS. More than 20 years of research by the Centers for Disease Control and Prevention (CDC) shows that breastmilk nourishes infants and protects them from illness. A woman's decision to breastfeed is an individual choice — one that is made after considering many different factors. ATSDR's health consultation provides information that might help in this decision-making process.
- If you are concerned about exposure you or your family might have had, talk to your health care provider. ATSDR is available to consult with any health care provider, as needed.

## Next Steps

- ATSDR will present the findings of this report and provide health education information related to PFAS in drinking water to the affected residents, community members, and health professionals in the site area.
- The USAF is working with the City of Portsmouth, NHDES, and EPA to test a treatment system for the Pease Tradeport PWS. This treatment system will reduce exposure to PFAS from the system's three main source wells. Treated water should continue to be sampled and the system adjusted to prevent exposure above the EPA lifetime health advisory and to reduce exposure to all PFAS as much as possible. EPA has established the health advisory levels at 0.07 parts per billion (0.070 µg/L).

- ATSDR will continue to work with the Pease International Tradeport Community Assistance Panel (CAP) to help understand community concerns and gather input to enhance the understanding of the health effects of PFAS exposures.
- ATSDR is assessing the most appropriate and effective designs for a multi-site PFAS health study to look at the relationship between PFAS exposure and health outcomes. As a foundation for the multi-site health study, ATSDR is preparing for exposure assessments in communities near current and former military installations. ATSDR is also planning a "proof of concept" health study of children and adults exposed to PFAS-contaminated drinking water at the Pease International Tradeport. The study will test procedures for use in the future multi-site study. The study will also evaluate associations between PFAS levels in blood and signs of changes in the body. Those changes will be examined using biomarkers, which can include examining changes in lipids, kidney or thyroid function, and the development of specific diseases.

### Where to Learn More

ATSDR's report is available for review online at <https://www.atsdr.cdc.gov/HAC/PHA/HCPHA.asp?State=NH>. You can also read a copy at:

**Portsmouth Public Library**  
175 Parrott Avenue  
Portsmouth, NH 03801

**Air Force Civil Engineer Center Field Office**  
Former Pease AFB, Site 8  
20 Short Street  
Newington, NH 03801

**Office of the Selectmen**  
205 Nimble Hill Road  
Newington, NH 03801

Your comments will improve the quality of the report. You can send comments by June 3, 2019 to [ATSDRRecordsCenter@cdc.gov](mailto:ATSDRRecordsCenter@cdc.gov), or mail them to the following address:

#### Agency for Toxic Substances and Disease Registry

ATTN: Records Center

RE: Pease Tradeport Public Water System

4770 Buford Highway, NE (MS F-09), Chamblee, GA 30341

Written comments received during the public comment period and ATSDR responses will appear in an appendix to the final report. The report will not include the names of people submitting comments. The names could possibly be released in response to a U.S. Freedom of Information Act request.

### For More Information

#### ATSDR

- Call ATSDR at 1-800-CDC-INFO (232-4636), email [cdc.gov/info](mailto:cdc.gov/info) or visit [www.atsdr.cdc.gov](http://www.atsdr.cdc.gov)
- For a copy of the report, <https://www.atsdr.cdc.gov/HAC/PHA/HCPHA.asp?State=NH>
- PFAS: <https://www.atsdr.cdc.gov/pfas/index.html>
- PFAS Factsheet for Clinicians: [https://www.atsdr.cdc.gov/pfas/docs/pfas\\_clinician\\_fact\\_sheet\\_508.pdf](https://www.atsdr.cdc.gov/pfas/docs/pfas_clinician_fact_sheet_508.pdf)

#### CDC

- Environmental Exposures and Breastfeeding: <https://www.cdc.gov/breastfeeding/breastfeeding-special-circumstances/environmental-exposures/index.html>

#### EPA

- Pease AFB: <https://cumulis.epa.gov/supercpad/cursites/csinfo.cfm?id=0101213>

#### New Hampshire Department of Health and Human Services

- Perfluorochemicals: <https://www.dhhs.nh.gov/dphs/pfcs/index.htm>