

# CDC/ATSDR PFAS Exposure Assessment Community Level Results

Moose Creek, Fairbanks North Star Borough, AK

INFORMATION TO PROTECT OUR COMMUNITIES



In 2019, the Centers for Disease Control and Prevention (CDC) and the Agency for Toxic Substances and Disease Registry (ATSDR) started exposure assessments (EAs) in communities near current or former military bases known to have had per- and polyfluoroalkyl substances (PFAS) in their drinking water. Individuals who participated in the EAs provided blood and urine samples to CDC/ATSDR for analysis. We sent letters with lab results to the participants.

We are also reviewing additional information, like age and location, to better understand the community's exposure. Once our full analysis is complete, CDC/ATSDR will host a community meeting to share our findings and recommendations.

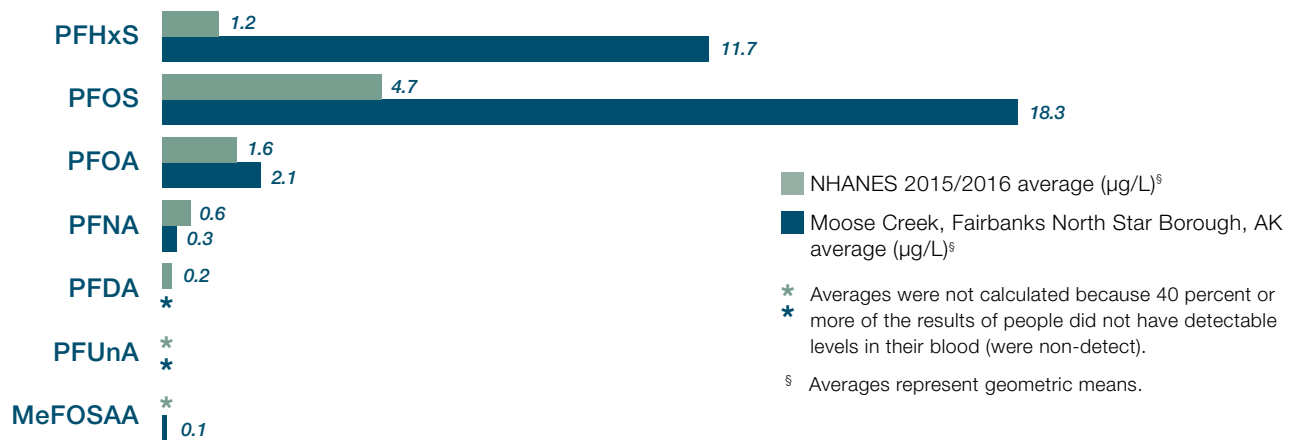
The assessment focused on the area of Moose Creek, AK near Eielson Air Force Base. A map of the sampling area can be found at: <https://www.atsdr.cdc.gov/pfas/activities/assessments/sites/fairbanks-north-star-borough-ak.html>

## PFAS Levels in Blood

The lab tested participants' blood for 7 different PFAS. PFAS levels are measured in micrograms per liter (µg/L).

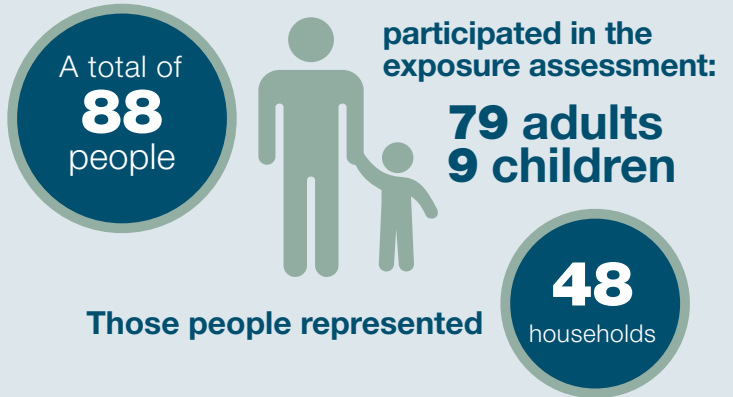
CDC/ATSDR compared the levels of PFAS in participant's blood across the community to the levels found in the U.S. population. Three PFAS (PFHxS, PFOS, PFOA) were detected above national averages. The levels of PFNA, MeFOSAA, PFUnA, and PFDA were similar to or below national averages.

## PFAS Levels in Blood Compared to National Averages<sup>§</sup>



Since 1999, the National Health and Nutrition Examination Survey (NHANES) has measured PFAS levels in blood in the U.S. population. Most people in the United States have been exposed to PFAS and have PFAS in their blood.

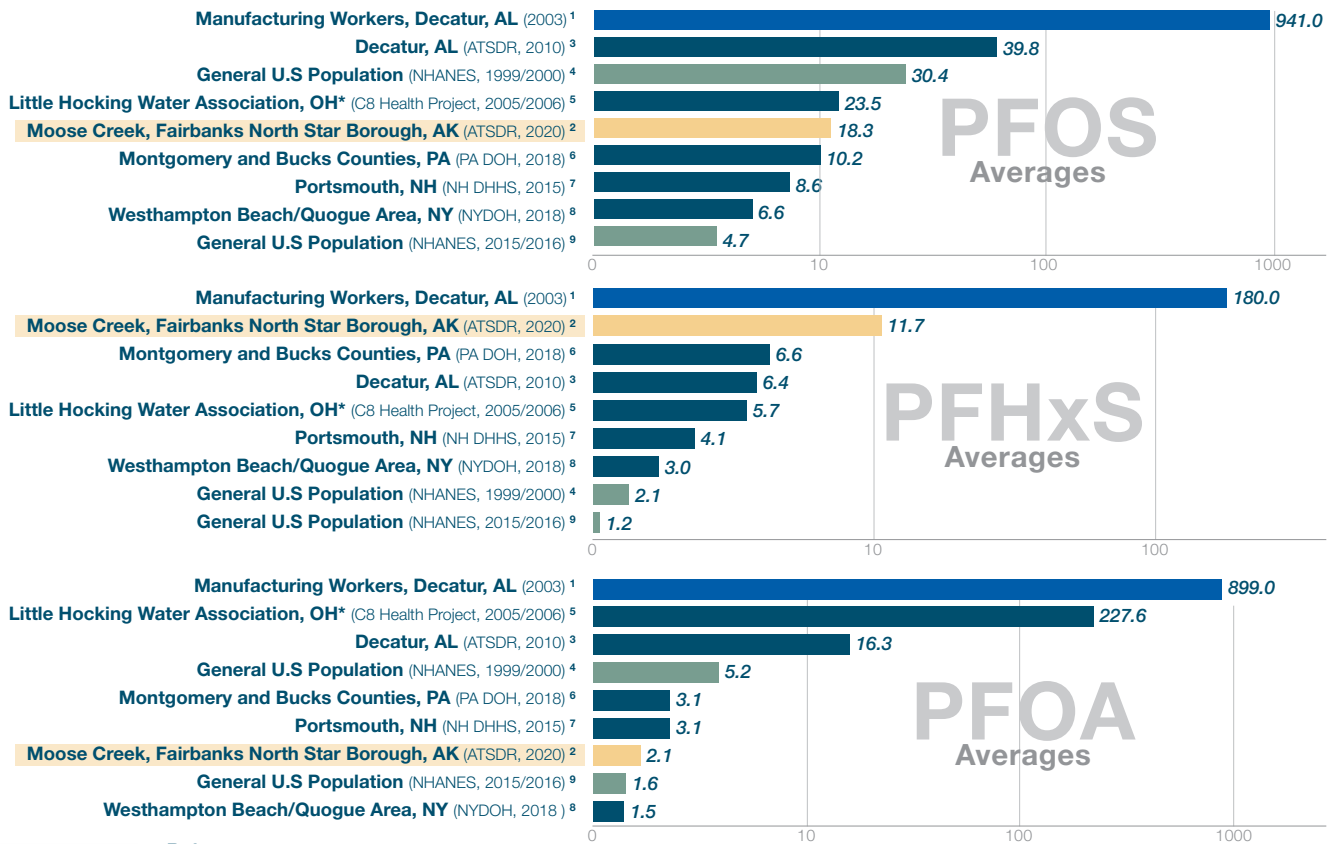
## Moose Creek, AK near Eielson Air Force Base PFAS Exposure Assessment Participation



The numbers below show the **percentage** of participants with PFAS levels above the national average.



## PFAS Levels in Blood Compared to Other Studies in micrograms per liter (µg/L)<sup>§†</sup>



**References:**

- <https://www.tandfonline.com/doi/pdf/10.1080/15428110308984859?needAccess=true>
- CDC/ATSDR, 2020
- [https://www.atsdr.cdc.gov/HAC/pha/Decatur/Perfluorochemical\\_Serum%20Sampling.pdf](https://www.atsdr.cdc.gov/HAC/pha/Decatur/Perfluorochemical_Serum%20Sampling.pdf)
- [https://www.cdc.gov/exposurereport/pdf/FourthReport\\_UpdatedTables\\_Volume1\\_Jan2019-508.pdf](https://www.cdc.gov/exposurereport/pdf/FourthReport_UpdatedTables_Volume1_Jan2019-508.pdf)
- <https://ehp.niehs.nih.gov/doi/pdf/10.1289/ehp.0800379>
- <https://www.health.pa.gov/topics/Documents/Environmental%20Health/PEATT%20Pilot%20Project%20Final%20Report%20April%202019.pdf>
- <https://www.dhhs.nh.gov/dphs/documents/pease-pfc-blood-testing.pdf>
- [https://www.health.ny.gov/environmental/investigations/drinkingwaterresponse/docs/westhampton\\_quogue\\_group\\_level\\_blood\\_testing](https://www.health.ny.gov/environmental/investigations/drinkingwaterresponse/docs/westhampton_quogue_group_level_blood_testing)
- [https://www.cdc.gov/exposurereport/pdf/FourthReport\\_UpdatedTables\\_Volume1\\_Jan2019-508.pdf](https://www.cdc.gov/exposurereport/pdf/FourthReport_UpdatedTables_Volume1_Jan2019-508.pdf)

\* The study reported medians instead of averages. § Averages represent geometric means. † Logarithmic scale (base 10)

### PFAS Levels in Urine

Most participants provided a urine sample, approximately 10% of the samples were analyzed. Averages were not calculated because no PFAS were detected in urine samples.

### PFAS Levels in Tap Water

CDC/ATSDR collected and tested tap water samples from 14 locations. PFAS levels in all alternative drinking water samples were below all federal and applicable state guidelines for PFAS in drinking water.

PFAS levels from two untreated wells not used for drinking water, were above the EPA lifetime health advisory for PFOA and PFOS combined.

### PFAS Levels in Dust

CDC/ATSDR collected and analyzed indoor dust samples from 14 locations. CDC/ATSDR is evaluating the dust sample results and will have more information in the final report.

### About the Results

CDC/ATSDR is evaluating data collected from the PFAS EA to better understand exposure in the community. The PFAS EA measures PFAS levels in people’s bodies but is not able to identify health effects associated with these levels of exposure. We are working to better understand health effects from PFAS exposure through the Multi-site Health Study: [www.atsdr.cdc.gov/pfas/Multi-Site-Health-Study.html](http://www.atsdr.cdc.gov/pfas/Multi-Site-Health-Study.html).

We are also reaching out to doctors, nurses, and other health care providers in your area to provide PFAS information. PFAS clinician guidance and continuing medical education can be found at <https://www.atsdr.cdc.gov/pfas/docs/clinical-guidance-12-20-2019.pdf>.

### For More Information:

Visit [www.atsdr.cdc.gov/pfas](http://www.atsdr.cdc.gov/pfas) or contact:  
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