

# CDC/ATSDR PFAS Exposure Assessment Community Level Results

El Paso County (CO) near Peterson Air Force Base

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.

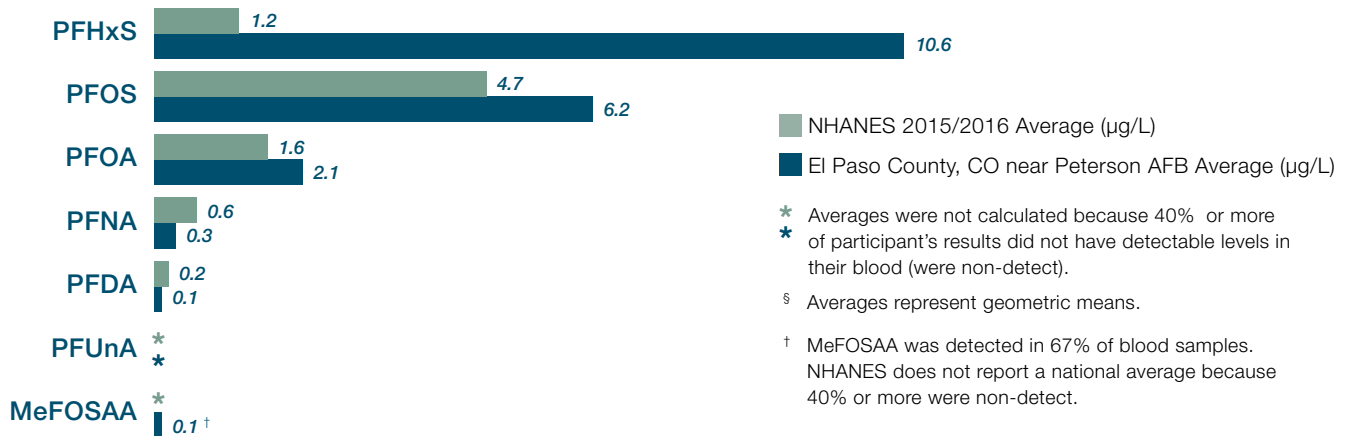
The assessment focused on El Paso County, CO, near Peterson Air Force Base (AFB). A map of the sampling area can be found at <https://www.atsdr.cdc.gov/pfas/activities/assessments/sites/el-paso-county-co.html>.

## PFAS Levels in Blood

The lab tested participants' blood for seven 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, and 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.

### El Paso County (CO) near Peterson Air Force Base PFAS Exposure Assessment Participation

A total of **346** people participated in the exposure assessment:

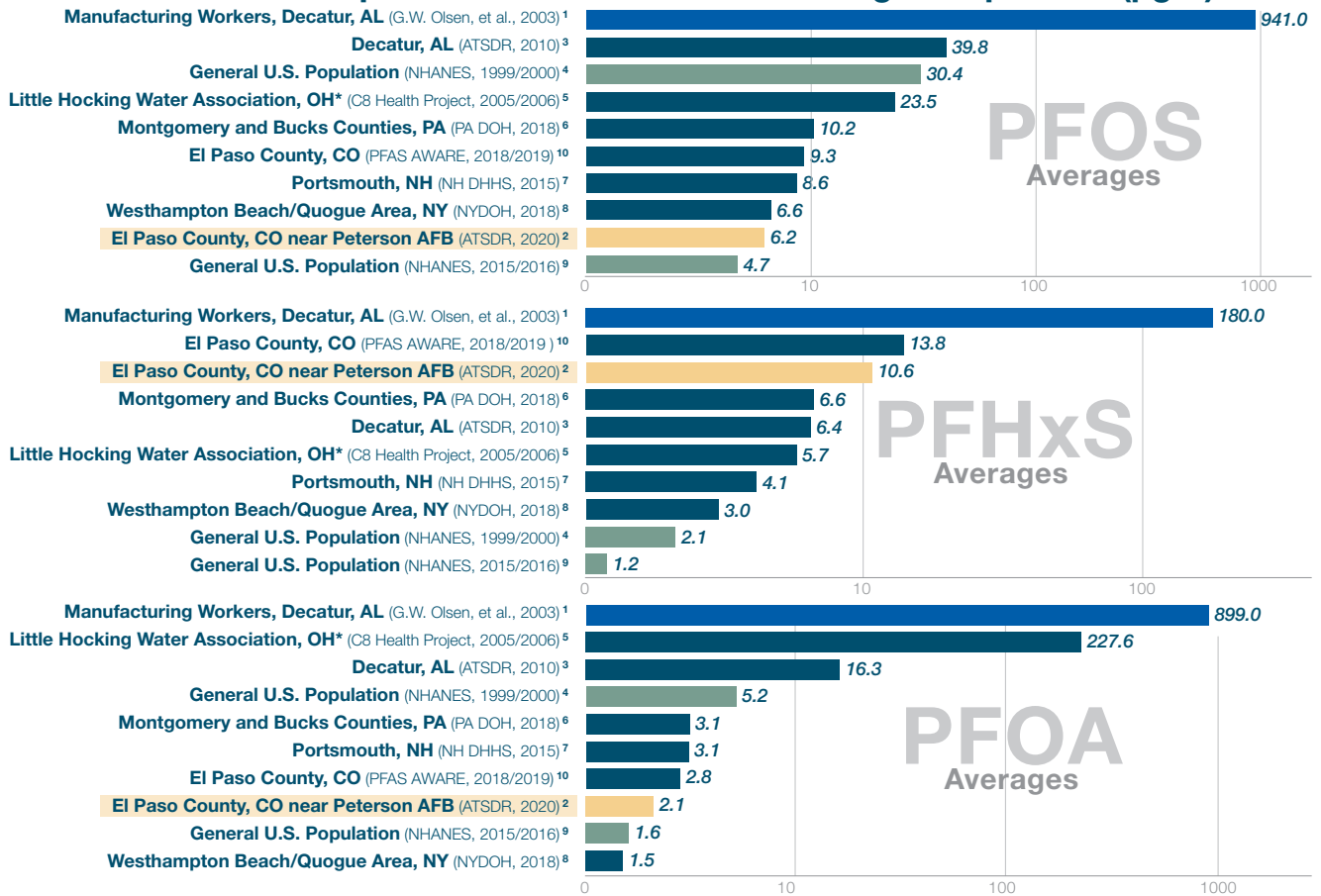
**318 adults**  
**28 children**

Those people represented **188** households

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:

1. <https://www.tandfonline.com/doi/pdf/10.1080/15428110308984859?needAccess=true>
2. CDC/ATSDR data collection completed in 2020
3. [https://www.atsdr.cdc.gov/HAC/pha/Decatur/Perfluorochemical\\_Serum%20Sampling.pdf](https://www.atsdr.cdc.gov/HAC/pha/Decatur/Perfluorochemical_Serum%20Sampling.pdf)
4. [https://www.cdc.gov/exposurereport/pdf/FourthReport\\_UpdatedTables\\_Volume1\\_Jan2019-508.pdf](https://www.cdc.gov/exposurereport/pdf/FourthReport_UpdatedTables_Volume1_Jan2019-508.pdf)
5. <https://ehp.niehs.nih.gov/doi/pdf/10.1289/ehp.0800379>
6. <https://www.health.pa.gov/topics/Documents/Environmental%20Health/PEATT%20Pilot%20Project%20Final%20Report%20April%202029%202019.pdf>
7. <https://www.dhhs.nh.gov/dphs/documents/pease-pfc-blood-testing.pdf>
8. [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)
9. [https://www.cdc.gov/exposurereport/pdf/FourthReport\\_UpdatedTables\\_Volume1\\_Jan2019-508.pdf](https://www.cdc.gov/exposurereport/pdf/FourthReport_UpdatedTables_Volume1_Jan2019-508.pdf)
10. [www.pfas-aware.org](http://www.pfas-aware.org) (Geometric means provided to ATSDR by PFAS AWARE on 4/13/2021)



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

## PFAS Levels in Urine

All participants provided a urine sample but only a subset were analyzed because the laboratory method to detect PFAS in urine is still being refined. In the samples that were analyzed by the laboratory, PFAS was found in less than 3% at a low concentration. Therefore, ATSDR did not analyze the rest of the urine samples for PFAS and was not able to calculate average levels of PFAS in urine because of the small number of detections.

## PFAS Levels in Tap Water

CDC/ATSDR collected and tested tap water samples from some participating households. PFAS levels for all 18 tap water samples were below all federal and applicable state guidelines for PFAS in drinking water.

The drinking water systems of Security Water District, Security Mobile Home Park, and the western portion of the Widefield Water and Sanitation District have taken action to reduce PFAS exposure to customers. Based on the information ATSDR has reviewed, the drinking water supplies currently meet all federal guidelines and Colorado state standards for PFAS. ATSDR does not recommend community members use alternative sources of water.

## PFAS Levels in Dust

CDC/ATSDR collected and analyzed indoor dust samples from 18 participating households. 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 the El Paso County, CO 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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