The Centers for Disease Control and Prevention (CDC) and the Agency for Toxic Substances and Disease Registry (ATSDR) will be conducting exposure assessments in communities near current or former military bases and that are known to have had PFAS in their drinking water. The primary goal of these exposure assessments is to provide information to communities about levels of PFAS in their bodies. The exposure assessments will also measure PFAS in drinking water and indoor dust samples from some homes. This information will also be used to help inform future studies evaluating the impact of PFAS exposure on human health.

Overview

What is an exposure assessment?

An exposure assessment is a way to look at whether people in a community might have been exposed to a certain type of substance in their environment. People are tested to see whether they have been exposed. Using this information, public health professionals provide guidance to help people reduce or stop exposure. An exposure assessment does not look at what types of health problems the exposure might cause.

In 2018, CDC/ATSDR partnered with the Pennsylvania Department of Health and the New York State Department of Health through a grant program with the Association of State and Territorial Health Officials (ASTHO) to begin assessing PFAS exposure in the communities of Bucks and Montgomery Counties (PA) and Westhampton, New York. Building on that work, the exposure assessments will take place in the following communities:

- Berkeley County, WV near Shepherd Field Air National Guard Base (Berkeley County)
- El Paso County, CO near Peterson Air Force Base (El Paso County)
- Fairbanks North Star Borough, AK near Eielson Air Force Base (Fairbanks North Star Borough)
- Hampden County, MA near Barnes Air National Guard Base (Hampden County)
- Lubbock County, TX near Reese Technology Center (Lubbock County)
- New Castle County, DE near New Castle Air National Guard Base (New Castle County)
- Orange County, NY near Stewart Air National Guard Base (Orange County)
- Spokane County, WA near Fairchild Air Force Base (Spokane County)

The information that is gathered in communities that participate in an exposure assessment can be used to see if the exposure in that community is different compared to the general U.S. population. Scientists can then better understand PFAS exposure in that community.

Where will the exposure assessments take place?

CDC/ATSDR funded two pilot exposure assessments that were conducted by the Pennsylvania and New York State Health Departments in Bucks and Montgomery Counties, Pennsylvania, and Westhampton, New York. Building on that work, the exposure assessments will take place in the following communities:
How were communities chosen for the exposure assessments?

CDC/ATSDR used a rigorous process to choose sites for the exposure assessments, starting by identifying communities that were known to have PFAS in their drinking water. Due to directions in the legislation authorizing the exposure assessments, CDC/ATSDR focused on communities near military sites. They then considered other factors, such as what kind of water supply the community had and how much PFAS was in the water. In addition, they looked at how long the exposure may have lasted, and how many people might have been exposed in the community. The sites were selected by making sure that they fit specific scientific criteria, so that they will give CDC/ATSDR a good chance of learning information that is valuable to the community. They will also likely give information that can help other communities facing similar PFAS exposure.

How will the exposure assessments benefit communities?

Human exposure to PFAS is a public health concern that CDC/ATSDR is helping to address. The body of science about PFAS exposure and health effects is growing rapidly. Some, but not all, scientific studies have shown that exposure to some PFAS may be linked to harmful health effects.

The exposure assessments will provide information to participants about their individual exposures. The results of these exposure assessments will help individual participants and their communities better understand their exposure to PFAS and provide information that the communities can use to reduce PFAS exposure.

The benefits of the exposure assessments will extend beyond the communities identified, as the lessons learned can also be applied to communities facing similar PFAS drinking water exposures. The exposures assessments will produce information that can be used by public health professionals across the nation to help communities impacted by PFAS. The exposure assessments will also inform CDC/ATSDR’s multi-site health study, which will investigate the relationship between PFAS exposures and health outcomes. The findings of the upcoming multi-site health study can be applied to communities across the nation, including those that were not selected for the multi-site health study.

Participating in an exposure assessment

Who is eligible to participate in the exposure assessments?

Individuals in randomly selected households will be eligible to participate if they are three years of age or older, have lived in the community for at least one year, and do not have a bleeding disorder or are not anemic. People exposed to PFAS occupationally, such as firefighters, active duty military, and veterans, will be able to participate if their household is randomly selected.

How will participants be selected?

CDC/ATSDR identified communities near current or former military bases and that are known to have had PFAS in their drinking water. From these communities, a random selection of households impacted by PFAS in their drinking water will be identified. Though not everyone exposed to PFAS through drinking water in a community will have the opportunity to participate, by including a random selection of households the results will help estimate exposure for all community members, even those who were not tested.

Why does ATSDR want people to participate?

ATSDR wants people to participate because without sufficient participation, ATSDR’s ability to answer questions and provide useful information about PFAS exposure is limited. Human exposure to PFAS is a public health concern that CDC/ATSDR is helping to address. The body of science about PFAS exposure and health effects is growing rapidly. Some, but not all, scientific studies have shown that exposure to some PFAS may be linked to harmful health effects.

Additional research is needed to better understand the health effects of PFAS exposure. In addition to providing information to communities about levels of exposure, the exposure assessments might provide clues about how people within a given community were exposed. This information can guide future studies evaluating the impact of PFAS exposure on human health.

Can the exposure assessments give us information about health effects?

The exposure assessments are not designed to determine connections between PFAS exposure and health effects. CDC/ATSDR will not be able to tell
INFORMATION TO PROTECT OUR COMMUNITIES

you if the PFAS levels in your blood or urine will make you sick now or later in life. Your participation in an exposure assessment is one of the first steps CDC/ATSDR is undertaking to better understand the health effects associated with PFAS exposure.

The body of science about PFAS exposure and health effects is growing rapidly. However, at this time knowledge about PFAS does not allow scientists or medical providers to predict if your PFAS exposure is connected to current or future illness.

What happens if I am asked to participate?

You will receive a letter in the mail from CDC/ATSDR explaining the exposure assessment and registration process. You’ll also get a phone call from a member of the study team who can answer questions and register you if you’re interested in participating.

If you choose to participate, a representative will help you set up an appointment time. You will be asked to give a blood sample and urine sample and answer a questionnaire asking you some general questions about yourself, your health, and your possible exposure to PFAS through water, food, and your environment.

All information provided by participants will be kept confidential and not shared without expressed permission. Presentations and reports intended for public use will only contain community-level information; in other words, data from individual participants will be closely safeguarded and not made public.

Should I expect that my blood sample will contain PFAS?

Yes. Most people in the United States have PFAS in their blood. People can be exposed to PFAS through air, water, or soil containing PFAS from fire-fighting foam and industrial sources. They can also be exposed through PFAS-containing consumer products and food that has come in contact with PFAS-containing packaging or cookware. Residents in areas with PFAS in their drinking water may have blood levels of PFAS that are higher than the U.S. average.

Can I volunteer for the Exposure Assessment?

No. CDC/ATSDR will use representative sampling to identify and include participants for the exposure assessments. This means that participants will be chosen at random. The advantage of this sampling strategy is that results from participants can give information about community-level exposure. If CDC/ATSDR were to accept volunteers, results could not be used to estimate exposure across a community.

Are there any costs to participate?

No. You do not have to pay to be part of the exposure assessment. The tests and their results are free to you.

What can I learn from the results?

Participants will be sent a letter with their own test results, along with a comparison to PFAS levels in the general U.S. population. CDC/ATSDR will also share the combined findings from each community through information sessions, where community members will be given an opportunity to ask questions.

While PFAS are in the blood of nearly all people in the United States, some people may feel worried or anxious about their results. If you would like to talk about your results, a specialist working on the exposure assessment will be available to you free of charge.

How can I find out more information?

CDC/ATSDR believes that each person in a community should have an opportunity to have their questions and concerns heard. CDC/ATSDR is working closely with communities throughout the exposure assessments to promote transparency and community understanding about these projects. You can visit the ATSDR website, email pfas@cdc.gov, or visit the PFAS website for more information.