CDC and ATSDR are preparing to conduct a health study at multiple U.S. sites to learn more about the health effects of exposure to per- and polyfluoroalkyl substances (PFAS). This project will expand the science about the relationships between PFAS exposure and certain health outcomes, and will help people understand their risk for health effects.

Background and Project Structure

CDC/ATSDR received $20 million to lay the groundwork for a multi-site study. This foundation has three parts:

1) Exposure assessments in 8 or more communities associated with current or former military sites with known PFAS exposure

2) Community engagement activities to effectively communicate about our work, and to learn and respond to people’s questions and concerns

3) A health study at the Pease International Tradeport in New Hampshire to evaluate procedures and methods before embarking on the multi-site study

These projects will give important information needed to plan for the multi-site health study.

CDC/ATSDR will receive additional funding in fiscal year 2019 to begin the multi-site study that looks at PFAS exposure and health outcomes.

A variety of factors will influence the project timeline, including scientific clearances, implementation of the exposure assessments, and study design.

Exposure Assessments

CDC/ATSDR will assess exposure in at least 8 communities. These assessments will

- Measure PFAS levels in blood and urine of community members exposed to contaminated drinking water
- Compare results from each community to PFAS levels in the general U.S. population
- Identify and assess environmental factors that affect exposure

CDC/ATSDR are currently evaluating sites for potential inclusion in the study and hope to announce study locations in the beginning of 2019.

Expected Outcomes of the Exposure Assessments

The exposure assessments will provide information to communities and individuals about their PFAS exposures. Within each community, results will be generalizable. This means that the results will help estimate PFAS exposure for community members that were not tested.

The exposure assessments will generate information about the pathways of exposure in the community, which can inform future studies evaluating the impact of PFAS exposure on human health.

Community Engagement

CDC/ATSDR will conduct community engagement activities for the projects. These activities include

- Communicating information to each participating community
• Producing strategies that identify local concerns, connect with a variety of local audiences, and encourage participation

Activities will start early and continue throughout the process so that communities have the support and information they need.

**Expected Outcomes of Community Engagement**

Community engagement will encourage participation in the projects, and efforts to promote community understanding and transparency will enhance relationships with communities.

Working closely with communities will also improve the design and delivery of communications about all aspects of the projects from recruitment to dissemination of results.

**Pease Study**

The Pease Study will look at the association between health outcomes and PFAS exposure to expand the PFAS science base. CDC/ATSDR can evaluate the study procedures and methods of the Pease Study to improve the design of the multi-site health study.

In August 2018, CDC/ATSDR published the Pease study protocol in the Federal Register. We are evaluating public comments to strengthen the study.

**Expected Outcomes of the Pease Health Study**

Understanding the relationship between exposure and health outcomes can better prepare community members to follow-up with health care providers and monitor their health.

Expanding the science will allow further tailoring of the design of the multi-site health study. Additionally, the Pease Study data will be integrated with data from others sites in the multi-site health study to maximize the impact and provide information to communities across the nation.

**Multi-Site Health Study**

The goal of the health study is to learn more about the relationship between PFAS exposure and health outcomes among differing populations.

CDC/ATSDR is in the process of designing the health study, and will use the lessons learned from the exposure assessments, community engagement activities, and Pease Study when deciding how to best implement the study.

Participation in any of the previous projects, including the exposure assessments, is not a requirement for consideration as a location for the multi-site study. ATSDR intends to look at all available data, including data collected from other groups, when selecting sites for the study.

**Expected Outcomes of the Multi-Site Health Study**

The information about the relationship between PFAS exposure and health outcomes can be applied to communities across the nation, including those that are not selected as a site.

Understanding the relationship between exposure and health outcomes will allow communities and governmental agencies to make better decisions about how to protect public health.

Individuals will be better prepared to follow-up with health care providers and monitor their health.