CURRENT CDC/ATSDR ACTIVITIES TO ADDRESS PFAS CONCERNS – December 2019

¹ Christopher M. Reh, PhD; ¹Rachel D. Rogers, PhD; ¹Ben Gerhardstein, MPH; ¹Jamie B. Rayman, MPH; ¹Ana Pomales, MSc; ¹Brad Goodwin, PhD; ¹Jona Johnson, PhD, MPH, CPH; ¹Pamela Tucker, MD; ²Stephanie Lane, MA ¹ Rhonda S., Kaetzel, PhD, DABT; ¹Agency for Toxic Substances and Disease Registry, ²Guidehouse LLP.

EXPOSURE ASSESSMENTS AND HEALTH STUDIES

EXPOSURE ASSESSMENTS

CDC/ATSDR is conducting exposure assessments in communities near current or former military bases that had PFAS in their drinking water. The information will be used to inform residents about levels of PFAS in their bodies and to support future health studies.

PEASE STUDY

The Pease Study, named for the Pease Tradeport center in Portsmouth, NH, is exploring the association between PFAS exposure and health outcomes. In addition to the health study, CDC/ATSDR will reconstruct the community's past exposure to PFAS in drinking water. CDC/ATSDR evaluated the study procedures and methods of the Pease Study to improve the design of the Multi-Site Health Study. The Pease Study will also serve as the first site in the Multi-Site Health Study.

PUBLIC HEALTH RESOURCES AND TOOLS

TOX PROFILE

CDC/ATSDR's toxicological profile characterizes the toxicology and adverse health effects information related to PFAS. The profile includes an overview of PFAS and U.S exposures, including a summary of health effects and minimal risk levels. Additional information is provided on the chemical and physical properties, toxicology, health effects, and potential for human exposure.

COMMUNITY STRESS AND RESILIENCE

Psychosocial stress related to environmental contaminants can affect community wellbeing. To reduce stress and build resilience in affected communities, ATSDR is increasing awareness of contamination-related stressors and developing tools, resources, and strategies to address them. ATSDR is also developing new ways to report back **PFAS** biomonitoring results to participants.

For more information contact ATSDR Region 10: Rhonda Kaetzel at 206-553-0530 or rkaetzel@cdc.gov

Human exposure to PFAS is a public health concern. CDC/ATSDR and our state health partners are investigating **PFAS** exposure to and possible health effects in more than 40 communities across the U.S.; identifying research priorities, filling knowledge gaps, and developing PFAS-focused tools and resources for states, territories, and affected communities.

BREASTFEEDING SYSTEMATIC REVIEW

Some PFAS can partition into breast milk. ATSDR is conducting a systematic literature review to evaluate the state of knowledge on exposure to PFAS in breast milk and health outcomes in infants and children. Results will inform recommendations to breastfeeding mothers who may have been exposed to PFAS.

PFAS EXPOSURE ASSESSMENT TECHNICAL TOOLS (PEATT)

ATSDR developed the PEATT to help State, local, tribal, and territorial health departments conduct PFAS exposure assessments in communities where drinking water is thought to be the primary source of PFAS exposure. The PEATT includes a protocol for statistically-based representative biomonitoring, risk communication materials, questionnaires, and EPA's water sampling protocol to help characterize **PFAS** exposure in communities.

PFAS GUIDANCE FOR CLINICIANS

CDC/ATSDR has developed continuing education materials and resources for clinicians responding to concerns about PFAS exposures. CDC/ATSDR's guidance on how to address patient concerns is based on peer-reviewed, up-to-date literature, including what is known about the potential health effects associated with PFAS exposure.

MULTI-SITE HEALTH STUDY

CDC/ATSDR has established research cooperative agreements in Colorado, Michigan, Pennsylvania, New Jersey, Massachusetts, New York, and California to carry out a health study of 6,000 adults and 2,000 children modeled on the Pease Study. The goal is to learn more about PFAS exposure and certain health outcomes in different populations and help people understand their risk for health effects.

COMMUNITY-LEVEL STUDY OF CANCER AND OTHER HEALTH OUTCOMES

CDC/ATSDR is designing a study that will compare rates of certain health outcomes, including many adult and pediatric cancers, ir communities that have been exposed to PFAS through drinking water and those that have not.

PFAS COMMUNITY ENGAGEMENT SUMMIT

The Summit, occurring in early 2020, will bring together members of communities and representatives of government agencies and NGOs to promote environmental health through action and partnership.

NATIONAL BIOMONITORING PROGRAM

The Division of Laboratory Science (DLS) provides high quality biomonitoring measurements of populations exposed to environmental chemicals, including measurement of PFAS in participants in the **National Health and Nutrition Examination Survey** (NHANES) and collaborative studies of exposure and health. DLS also provides funds to increase states' biomonitoring capacity. Four 2019 awardees (MI, NH, NJ, NY) are conducting PFAS activities.

WATER-TO-SERUM CONVERSION

ATSDR is developing pharmacokinetic (PK) models to estimate PFAS levels in blood resulting from consumption of PFAS-contaminated drinking water.

4770 Buford Highway SE Atlanta, GA 30341 https://www.atsdr.cdc.gov

