

United States Senate

WASHINGTON, DC 20510

September 18, 2019

The Honorable Robert R. Redfield, M.D.
Director
Centers for Disease Control and Prevention
Department of Health and Human Services
1600 Clifton Road
Atlanta, GA 30329

Dear Director Redfield:

As communities in New Hampshire and across the country continue to deal with the wide-ranging health risks associated with exposure to per- and polyfluoroalkyl substances (PFAS), I write to urge the Centers for Disease Control and Prevention (CDC) to develop health monitoring protocols for medical care for children and adults exposed to PFAS.

New Hampshire is at the forefront of the present challenge of PFAS contamination. I have heard from families of children exposed to PFAS who are concerned that their children's exposure to these harmful chemicals could have long-lasting detrimental impacts on their children's health. I have also spoken with Granite Staters who will be participating in the forthcoming PFAS health impact study and are concerned that their health care providers will not have enough information and guidance on how to address clinical issues raised by their test results from the PFAS study. These families and the physicians and other providers who care for them need better guidance on clinical factors to monitor and screenings to conduct for people who were exposed to PFAS.

Research demonstrates that a child's exposure to PFAS in utero and via breastfeeding from a mother who has ingested certain forms of PFAS can be associated with low birth weight¹, adverse effects on growth, learning and behavior in infants² and poor responses to childhood vaccines.³ I appreciate the work of CDC and the Pediatric Environmental Health Specialty Units (PEHSU) to acknowledge these risks for children. I also appreciate CDC's involvement with ongoing research conducted by the National Institute of Environmental Health Sciences (NIEHS) to evaluate potential harmful effects on the immune systems of young children exposed to PFAS, which will include children living near the Pease International Tradeport in Portsmouth, NH.

¹ Washino, Noriaki et al, "Correlations between Prenatal Exposure to Perfluorinated Chemicals and Reduced Fetal Growth," *Environmental Health Perspectives*, April 2009. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2679613/pdf/ehp-117-660.pdf>

² Agency for Toxic Substances and Disease Registry, "Per- and Polyfluoroalkyl Substances (PFAS) and Your Health: What Are the Health Effects?" January 10, 2018. Available at: <https://www.atsdr.cdc.gov/pfas/health-effects.html>

³ Grandjean P, Andersen EW, Budtz-Jørgensen E, et al., "Serum Vaccine Antibody Concentrations in Children Exposed to Perfluorinated Compounds," *Journal of the American Medical Association*, 2012; 307(4):391-397. Available at: <https://jamanetwork.com/journals/jama/fullarticle/1104903>

State agencies are starting to provide guidance⁴ for health professionals about how to address health concerns for patients who have been exposed to PFAS. However, given that significant uncertainty remains among medical professionals about the appropriate health monitoring procedures and screenings that should be conducted for these children over the long-term, additional guidance and suggested models of care and monitoring are needed.

While more research is also needed on the correlations between adult exposure to PFAS and adverse health outcomes, CDC has acknowledged that studies have shown that PFAS exposure can lower a woman's chance of getting pregnant, interfere with the body's natural hormones, increase cholesterol levels, affect the immune system and increase the risk of cancer.⁵ For adults who are participating in the PFAS health impact study, these risks and the uncertainty around them can be troubling. These individuals and their physicians would benefit from more guidance and information from CDC on best practices for monitoring clinical factors and warning signs for health conditions that can be associated with PFAS exposure.

I ask that CDC work expeditiously to develop these health monitoring protocols for patients who have been exposed to PFAS. I appreciate your commitment to addressing ongoing concerns surrounding the health impact of PFAS exposure. Should your staff have any questions regarding this inquiry, please do not hesitate to contact _____ in my office at 202-224-2841.

Sincerely,



Jeanne Shaheen
United States Senator

CC: Dr. Patrick Breyse, Director, Agency for Toxic Substances and Disease Registry
Dr. Linda Birnbaum, Director, National Institute of Environmental Health Sciences

⁴ Minnesota Department of Health, "About Perfluoroalkyl Substances (PFAS) in Drinking Water: For Health Professionals," June 20, 2017. Available at: <https://www.health.state.mn.us/communities/environment/hazardous/docs/pfas/pfcshealthprov.pdf>

⁵ Agency for Toxic Substances and Disease Registry, "Per- and Polyfluoroalkyl Substances (PFAS) and Your Health: What Are the Health Effects?" January 10, 2018. Available at: <https://www.atsdr.cdc.gov/pfas/health-effects.html>