



Learning  
Disabilities  
Association  
of Maine

Committee on Health and Human Services  
In support of LD 164

An Act To Establish Maximum Contaminant Levels under the State's Drinking Water Rules for  
Certain Perfluoroalkyl and Polyfluoroalkyl Substances - Rep. Ralph Tucker of Brunswick  
For public hearing on February 9, 2021

Dear Sen. Claxton, Rep. Meyer, and members of the Committee on Health and Human Services,

My name is Tracy Gregoire and I am the Healthy Children Project Coordinator for the Learning Disabilities Association of Maine.

The Learning Disabilities Association of Maine (LDA-ME) is a statewide, non-profit organization of individuals with specific learning disabilities and attention disabilities, and the families and the professionals who support them. LDA-ME provides education and support to families of children with learning disabilities and adults with learning disabilities.

One in 5 American children have a learning or attention disability<sup>i</sup>. The autism rate continues to rise now affecting 1 in 54 children, which nearly tripled since 2000<sup>ii</sup>. Approximately 17.8% of children in the United States have a developmental disability<sup>iii</sup>.

In Maine, 9,744 children ages 3 to 21 were identified as having a specific learning disability<sup>iv</sup>. Thousands more have Attention Deficit Hyperactivity Disorder (ADHD), about 11.5% of children in Maine, slightly higher than the national average<sup>v</sup>. A little over 16% of students receive special education services in Maine.

The etiology of learning and developmental disabilities may include one or more of a complex variety of factors, including genetics, substance abuse, social environment and environmental exposure to toxic chemicals. According to the National Academy of Sciences Committee on Developmental Toxicology, ***environmental factors, including toxic chemicals, cause about 3 percent of all developmental defects, and contribute to another 25 percent***<sup>vi</sup>. This means that ***360,000 U.S. children (1 in every 200 U.S. children) suffer from developmental or neurological deficits caused by exposure to known toxic substances***<sup>vii</sup>. The good news is that these causes are preventable.

Per- and polyfluoroalkyl substances, also known as PFAS chemicals, are man-made chemicals that are found in our food, water, air and products. They are used to make products more resistant to stains, grease and water. There are nearly 5000 PFAS chemicals and they are used in many products including food

containers, electronics, cleaning products, textiles, and some firefighting foams.

PFAS chemicals pose significant health risks, particularly for pregnant women and children. PFAS are nicknamed “forever chemicals” because they are bio accumulative and don’t break down (also known as PBT chemicals - Persistent, Bioaccumulative and Toxic). There is widespread human exposure and can stay in our bodies for years. They are such a concern that the EPA has set a lifetime health advisory level for a few of these chemicals.

People are exposed to PFAS through contaminated food, water and air, from products containing these chemicals, and worker related exposures. PFAS chemicals are linked to many health concerns including certain types of cancer, disrupting the immune system including poor response to vaccines<sup>viii</sup>, impaired liver function, high cholesterol, preeclampsia (potentially fatal pregnancy complication with high blood pressure), and birth defects.

We also know that studies have linked PFAS to impaired fetal development as well as interfering with the thyroid and low birth weight, which can then affect children’s brains. The CDC states that some studies in people have shown certain PFAS chemicals may affect “learning, and behavior of infants and older children”<sup>ix</sup>.

In testimony before the U.S. Senate in 2019, Dr. Linda Birnbaum, the former head of the National Institutes of Environmental Health Sciences (NIEHS) and National Toxicology Program (NTP), stated: “The research conducted to date reveals associations between PFAS exposures and a variety of specific adverse human health outcomes. These include the potential for effects on children’s cognitive and neurobehavioral development, immune system dysfunction, endocrine disruption, obesity, diabetes, lipid metabolism, and cancer.”

Biomonitoring studies have shown that nearly every person in the US, including newborns, have PFAS in their bloodstream. Diet is likely to be the single largest exposure pathway to PFAS. Across the country and in our state, we continue to see a rise in reporting of contaminated water from PFAS former chemicals.

To tackle contamination by PFAS and other hazardous chemicals that are harming our families, we must first set a health protective limit on PFAS in drinking water.

Maine is behind other New England states in setting a limit for toxic PFAS chemicals. Maine officials have been using an outdated “advisory” level from the US EPA of 70 parts per trillion (PPT). The science is clear that this level is not adequately health protective. New Hampshire, Vermont, and Massachusetts have in recent years adopted standards up to ten times lower than the EPA level.

Mainers deserve the same protections.

LDA-ME supports LD 164, which sets a maximum contaminant level (MCL) of 20 parts per trillion of a combination of the 6 different PFAS found in drinking water. This standard is the same as Massachusetts’ and very similar to Vermont’s standard.

Please add required testing of all public drinking water systems for PFAS, as shared by our partner organizations here today. We also asked that you adopt suggested amendments for monitoring, reporting, treatment and enforcement as presented by Defend Our Health.

LDA-ME also encourages this committee and the state to **treat PFAS chemicals as a class** (consider any PFAS chemicals could be harmful and act accordingly), as recommended by this scientific commentary by leading researchers in the field of neurotoxins<sup>x</sup>.

On behalf of Maine children, Learning Disabilities Association urges this committee to **strengthen this bill, then vote unanimously ought to pass** so that we can better protect all families from unnecessary harmful chemicals, including PFAS chemicals.

Sincerely,



Tracy Gregoire  
Learning Disabilities Association of Maine  
Healthy Children's Project Coordinator  
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<sup>i</sup> [National Center for Learning Disabilities](#) 2015-2016 statistics.

<sup>ii</sup> [John Hopkins Bloomberg School of Public Health](#) and [Center for Disease Control](#), March 2020.

<sup>iii</sup> [Center for Disease Control](#), *Children aged 3-17 years old in 2015-2017*.

<sup>iv</sup> U.S. Department of Education, EDFacts Data Warehouse (EDW): "IDEA Part B Child Count and Educational Environments Collection," 2018-19. Maine Department of Education. (n.d.). [Specific Learning Disability Eligibility Form](#).

<sup>v</sup> [Center for Disease Control](#), 2011.

<sup>vi</sup> [Scientific Frontiers in Developmental Toxicology and Risk Assessment](#), Executive Summary, National Academy of Sciences Committee on Developmental Toxicology, 2000.

<sup>vii</sup> [Polluting Our Future: Chemical Pollution in the U.S. that Affects Child Development and Learning](#)", National Environmental Trust, Physicians for Social Responsibility, and Learning Disabilities Association of America, September 2000.

<sup>viii</sup> Grandjean P, Heilmann C, Weihe P, Nielsen F, Mogensen UB, Timmermann A, Budtz-Jørgensen E. 2017. Estimated exposures to perfluorinated compounds in infancy predict attenuated vaccine antibody concentrations at age 5-years. *J Immunotoxicol.* 14(1):188–195.

<sup>ix</sup> Center for Disease Control and Prevention, September 2019, CDC and ATSDR Award \$7 Million to Begin Multi-Site PFAS Study, <https://www.cdc.gov/media/releases/2019/p0923-cdc-atsdr-award-pfas-study.html>

<sup>x</sup> Scientific Basis for Managing PFAS as a Chemical Class <https://pubs.acs.org/doi/10.1021/acs.estlett.0c00255>, 2020.

Tracy Gregoire  
Learning Disabilities Association of Maine

Told committee would also share this scientific paper on PFAS but only let's me upload one file. Please see <https://pubs.acs.org/doi/10.1021/acs.estlett.0c00255>