TO: The Honorable Shane E. Pendergrass, Chair  
Members, House Health and Government Operations Committee  
The Honorable Sara Love  
FROM: Dr. Michael Ichniowski  
DATE: February 9, 2022  

The Maryland Chapter of the American Academy of Pediatrics (MDAAP) is a statewide association representing more than 1,100 pediatricians and allied pediatric and adolescent healthcare practitioners in the State and is a strong and established advocate promoting the health and safety of all the children we serve. On behalf of MDAAP, we submit this letter of support for House Bill 275.

PFAS (Per- and Poly-Fluoro Alkyl Substances) are known as “forever chemicals” because they do not break down and will persist unchanged in our environment. They contain one or more fully fluorinated carbon atoms and are found in many commonly used products, including fire-fighting foam, non-stick cookware, stain-resistant carpeting, stain-resistant and waterproof fabrics and mattresses, and oil- and grease-resistant food packaging. They have also been found in pesticides, both as active and inactive ingredients and as possible contaminants, leaching from the containers in which they are stored or shipped. At present, there are over 9000 chemicals identified as PFAS.

PFAS have been widely detected in human blood samples and can enter the body by ingestion of contaminated food or water, or through inhalation of sprayed PFAS or contaminated dust particles. Once present, they are poorly excreted and persist in the human body, with half-lives often measured in years to decades for some of the longer carbon chain PFAS; these chemicals have also been found to bioaccumulate within tissues in the body. PFAS can cross the placenta and enter the fetal circulation. With this environmental and circulatory persistence, the potential for lifetime exposure and accumulation of PFAS is substantial, especially in children, who would have higher levels of exposure relative to their weight over more years.

Only a few of the many PFAS chemicals have been studied for health effects, but a growing body of research has identified the following risks in association with exposures to PFAS chemicals:

- Cancer of the kidneys, testicles, ovaries, prostate; non-Hodgkins lymphoma (PFOA, other PFAS)
- Bladder cancer (PFOS)
- Immune suppression: reduced levels of vaccine-induced antibodies (tetanus, diphtheria, rubella, mumps, Hemophilus influenza B, Hepatitis A&B) (PFAS); increased risk of infections in exposed children (PFOS, PFHxS, PFOA, PFNA)
- Increased risk (PFOS, PFOA, total PFAS) and severity (PFBA, a PFAS that accumulates in lung tissue) of COVID-19 infections
- Thyroid disease, primarily hypothyroid, both congenital and acquired (PFAS)
- Low birth weight, decreased birth length and head circumference (PFOA, PFOS)
- Pre-eclampsia (PFOA)
- Increased liver enzymes and non-alcoholic fatty liver disease (PFOS, PFHxS)
- Increased total and LDL cholesterol (PFOA, total PFAS)
- Impaired kidney function (decreased glomerular filtration rate) (PFAS)
- Increased serum uric acid (marker of risk for kidney disease) (PFAS)

House Bill 275 would prohibit the use of PFAS in fire-fighting foam, personal protective equipment for fire-fighters, rugs and carpets, and certain kinds of food packaging. It would also prohibit the environmental release of PFAS and require containment or disposal of these chemicals in ways that prevent environmental contamination. Such prohibitions would lower environmental exposures to PFAS and their associated health risks while research to further define and quantify these risks continues.

Children in Maryland would be expected to benefit from these measures through reduced risk of PFAS exposures. Because children frequently crawl and play on carpeted floors, their hand-to-mouth activities increase the potential for ingestion. Eliminating PFAS from food packaging and preventing environmental release that could contaminate drinking water would further lower the risk of ingestion. Because House Bill 275 intends to reduce uses of PFAS that would have an impact on children’s exposures to these chemicals, MDAAP requests a favorable report on this proposed legislation.

For more information:
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