



This is the third in a series of articles, prepared by Chevy Chase citizens using public sources, that address the growing risks associated with artificial turf playing fields. Hazards of excessive heat and increased injury have long been documented. New findings on the extreme toxicity of PFAS in artificial turf call into serious question its continued use. Maret School plans to install nearly four acres of artificial turf for its field development at the Episcopal Center for Children at Utah and Nebraska Avenues.

3. How much exposure to PFAS is safe?

The National Institute of Environmental Health Sciences, one of the Institutes of the NIH, focuses on the danger of environmental toxins. As a general rule, danger is proportional to exposure. Tests indicate 97% of us already have PFAS in our bodies, and because they are “forever chemicals” they are not going away. What is not yet proven is how much cumulative PFAS exposure is dangerous.

At the moment, it is nearly impossible to avoid exposure to PFAS. PFAS are now in our water, our food, and even in the air we breathe. They are found in thousands of manufactured products, including water resistant fabrics, stain-resistant coatings used on carpets and clothes, non-stick cookware, cleaning products and even dental floss. We can ingest PFAS from many of these articles directly through ordinary use. Over time, these PFAS laden articles can also be worn away, releasing microscopic PFAS into soil, water, and air, which makes its way into our bodies directly or through the food chain. PFAS also enters our bodies directly through dermal exposure.

We have a history of using new plastics until we are faced with irrefutable evidence that these materials are actually harmful. We all remember the revelation that BPA (bisphenol A), another additive in plastics, causes cancer, and the rush to find “BPA free” water bottles and food storage containers. Studies indicate that PFAS could be equally, if not more dangerous.

There is no refuting that plastics can play an essential and necessary role in our lives. Recent research at Children’s National Medical Center focused on the accumulation of plasticizers in the bodies of children with serious chronic diseases. These illnesses can require them to have regular infusions of life saving fluids, in plastic bags, through plastic tubing. This is presently a necessary exposure. It raises concerns, but the benefits outweigh the risks. No one could currently argue that this exposure is not needed.

What about plastic turf? Is this “necessary” exposure? Do we fully understand the risks of this additional exposure? Could this unnecessary exposure be the cumulative tipping point between tolerable and dangerous levels of PFAS for Maret students and their parents? For other athletes and their families who choose to use the field? Do Maret parents know what risks their children will be exposed to?

What about the bystanders, what about the neighbors? If Maret proceeds with installing nearly four acres of plastic turf at the ECC field, over 50 families will suffer very considerable exposure to these toxic chemicals, 24/7, and without having given their consent.

In an article in *The Guardian* about the suspiciously high incidence of a rare brain cancer in Philadelphia Phillies players who played on artificial turf, Kyla Bennett, science policy director of the Public Employees for Environmental Responsibility (PEER), is quoted as follows: “Is artificial turf easier? Yeah, you don’t have to mow it, but that doesn’t mean it’s right to use it,” she said. “We should not have the ability to destroy our planet or health for convenience.”

<https://www.theguardian.com/society/2023/mar/10/phillies-ball-players-cancer-artificial-turf>

Now is the time to invoke the “precautionary principle.” In *Environmental Science* “The precautionary principle, proposed as a new guideline in environmental decision making, has four central components:

- *taking preventive action in the face of uncertainty;*
- *shifting the burden of proof to the proponents of an activity;*
- *exploring a wide range of alternatives to possibly harmful actions; and*
- *increasing public participation in decision making.”*

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1240435/>

DC has already recognized the negative impacts of PFAS. Attorney General Brian Schwalb recently filed a lawsuit against PFAS polluters. Now action is needed by city government to limit additional PFAS contamination.

Maret should test their turf. Let an independent scientific lab confirm whether or not it contains PFAS. Enormous improvements have recently been made in the development of natural grass fields. Organically grown grass should be seriously considered as a viable alternative.

We all care deeply about the health of our families. Neighbors, athletes, and their families should be actively engaged in making these consequential decisions.

###