



**HB1147: Environment - Playground Surfacing Materials - Prohibitions  
Senate Committee on Education, Energy and the Environment  
March 26, 2024**

**Position: FAVORABLE**

**Submitted by: Diana Conway, President  
Safe Healthy Playing Fields Inc.**

Good afternoon Chair Feldman, Vice Chair Kagan, and honorable members of the committee,

Thank you for this opportunity to **support HB1147**.

This bill will set important limits on two dangerous, toxic chemicals –**lead and PFAS**– for the thousands of playgrounds across Maryland.

This testimony is submitted on behalf of Safe Healthy Playing Fields Inc. SHPFI is a national, all-volunteer 501-c-3 non-profit. Our mission is to educate communities and their policy makers on the multiple harms created by **synthetic playgrounds** and artificial turf fields. We provide resources on the many benefits of **natural-surface playgrounds**.

**SHPFI urges this committee to support HB1147.** This bill will protect our most vulnerable community members: children, including the very youngest children who have the closest contact with playground surfaces, and longest life-span of additional exposures ahead of them.

The majority of synthetic playgrounds include PIP surfaces, typically made of waste tires. As stated by a leading member of the [federal Pediatric Environmental Health Specialty Unit \(PEHSU\)](#),

**“given the hazards associated with recycled tire rubber, it is our recommendation that [these products never be used](#) as surfaces where children play.”**

Mt. Sinai is one of only ten recognized centers in the US focused on children and environmental exposure.

The increasing use of PIP and loose tire-chunk surfaces is concerning. [Years of research](#) confirm that tires contain alarming levels of **carcinogens**, **heavy metals** and **endocrine disruptors**, as well as contributing to **microplastic contamination** of air, soil and water. There is no statewide inventory of Maryland's playgrounds or their surfaces, but tire-based surfaces are by far the most common.

Importantly, there are good alternatives: [ADA-compliant natural surfaces](#) can and do [provide fall-impact attenuation](#), avoid the shocking heat of tire playgrounds, and do not front-load our children with the toxic load presented by tire-based, synthetic surfaces like [poured-in-place](#) (PIP).

### **Routes of exposure to toxicity of playground surfaces**

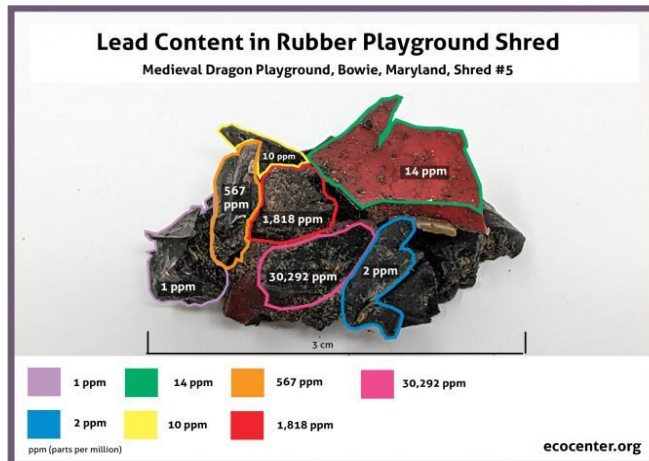
Children, and especially younger children, are uniquely vulnerable to the health effects of toxic environmental exposures. Their close physical contact with the surface increases the risk of ingestion, inhalation or dermal uptake. Young children have a developmentally appropriate tendency to put their hands or objects in their mouths. Children also have rapidly developing organ systems, and immature detoxification mechanisms. Children also [breathe faster](#) per pound of body weight increasing the likelihood of inhalation exposure.

### **Lead and PFAS do not belong on playgrounds:**

These chemicals are well understood to be highly toxic individually. In combination, their impact is certainly **cumulative** and **synergistic**— meaning the sum is greater than the parts. Many children visit playgrounds several times a week or even daily from a very early age, continuing on through elementary school exposure during recess and at before- and after-school activities.

### **Lead:**

The US [Centers for Disease Control and Prevention](#) and the [World Health Organization](#) confirm there is **no safe level of lead exposure**. The [effects of this neurotoxicant](#) are well documented and include developmental delay, hearing loss, seizures, unconsciousness, and at very high levels [lead poisoning can be fatal](#). The only [solution to lead poisoning is prevention](#). HB1147 moves us significantly toward that goal. This will specifically address concerns of high lead reports in playgrounds and schools around [Montgomery County](#), [Prince George's County](#), and [Washington, D.C.](#)



<https://www.ecocenter.org/new-study-lead-crumb-rubber-playgrounds-maryland-and-virginia>

### Per- and Polyfluoroalkyl Substances - PFAS:

PFAS are linked to kidney and testicular cancer, hormone and endocrine disruption, liver and thyroid problems, reduced vaccine effectiveness, reproductive harm and abnormal fetal development, and the list is growing. **EPA action on PFAS levels in drinking water** is a warning shot for jurisdictions to reduce their PFAS contamination sources or face *even greater* costs for PFAS mitigation. In 2023, more than [270 PFAS-related bills](#) were introduced in state legislatures.

### Additional toxic element in tires:

\*\* [More recently](#), tires were identified as the source of [95% mortality](#) among endangered coho salmon due to an additive, [6PPD](#), found in all tires. Removing tire-based toxicity from playgrounds will remove exposure of children to 6PPD, and the runoff that would carry it to Maryland's streams and drinking water. A 2022 study found 6PPD in urine samples from adults, children and pregnant women, leading the authors to write: "Considering that 6PPD-Q was a lethal toxicant to multiple aquatic species, the potential human health risks posed by its long-term exposure [require urgent attention](#)."

### Tires are highly flammable:

[Poolesville MD tire playground fire, 2022](#)



**Conclusion:**

Maryland must stop further installation of toxic playgrounds.

In a world of rising exposure to concerning chemicals, playgrounds should be a safe space for our children.

HB1147 will slash the toxic exposure from playgrounds, directing schools and parks to smarter, safer materials for healthier children, and a healthier environment.

**On behalf of our Maryland network and our national colleagues, SHPFI respectfully urges a favorable report for HB1147.**

Thank you for considering our views.

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Safe Healthy Playing Fields Inc.

[www.safehealthyplayingfields.org](http://www.safehealthyplayingfields.org)

