

Molly Jennings
Central Maine in Address Confidentiality Program
LD 1177

TESTIMONY OF MOLLY JENNINGS, RETIRED PHYSICIAN
ASSISTANT in Central Maine
In SUPPORT of LD 1177

Resolve, Establishing a 3-year Moratorium on the Installation or Reinstallation of Synthetic Turf and Requiring a Study of the Public Health and Environmental Risks of Synthetic Turf Before the Health Coverage, Insurance and Financial Services Committee

March 4th, 2025

Good morning, Senator Tepler, Representative Doudera, and members of the Environment and Natural Resources Committee. My name is Molly Jennings. I am a retired P.A. after > 40 yrs of practice in Maine. Please accept this testimony in support of LD 1177, which would create a three-year moratorium on the use of new artificial turf.

I am a PA, mother and grandmother and my life's work has been focused on the health and well-being of the people of Maine. I did a little research when I heard that my grandchildren's school, RSU 2, wanted to consider installing Artificial turf, trading off the supposed "ease" of this turf for our CHILDRENS' HEALTH.

Scientific facts show that this turf poses serious health risks to all people and the environment and it is imperative that you carefully study the data and legislate against the continuing use of this toxic turf at our schools and in our State.

Parents and schools are entrusted with the wellbeing of their children and must be provided with scientific evidence that synthetic turf is SAFE for the still-developing bodies of their children/teens, and the local environment. However, studies are not reassuring and instead have raised increasing concerns and questions, with more studies underway now.

I appreciate this simple statement (backed up by studies) "In 2024, the last thing we should be doing is putting down acres of a plastic fossil fuel product ... with chemicals that are going to get all over athletes' skin, and into soil and water," ... "It just boggles my mind that people are still considering using this stuff."

<https://www.theguardian.com/environment/2024/mar/15/athletes-higher-pfas-levels-artificial-turf>

PLEASE CAREFULLY CONSIDER THESE FACTS:

- Artificial turf is made of plastic and infused with toxic chemicals that have known health harms, especially for children. Plenty of scientific evidence confirms the presence of a large number of hazardous substances, including PFAS, phthalates, and heavy metals, in artificial turf. Children who play on artificial turf are more exposed to these toxics through inhalation, absorption through their skin, or even swallowing tiny particles.

- Synthetic turf contains plasticizers, flame retardants and stabilizers. Shredded waste tire contains at least 60 complicated compounds, including LEAD. Even very small concentrations of these compounds mimic the hormones that regulate bodily functions and the changes they produce are especially harmful to children's growing bodies and may not show up for decades. These are called ENDOCRINE DISRUPTORS and can cause early puberty, infertility, diabetes, obesity, breast or prostate cancer and more.

- Artificial turf releases microplastics and contaminates groundwater. Storm water run-off from artificial turf fields has been found to contain zinc. Zinc is poisonous to aquatic life forms, and is toxic to our own nervous system at high levels.

- Each synthetic turf field loses 0.5 to 8.0% of its blades annually, yielding 200 to 3200 pounds of plastic waste to our environment per year. These plastic particles end up in our soil and water.

- This turf creates dangerous heat islands that put kids at risk and affect the

immediate environment. Artificial turf heats up much more quickly than natural grass and can easily rise to dangerous temperatures for children. In one study, researchers found artificial turf reaching 158 F on a sunny day, while an adjacent natural grass field peaked at just over 100 F. The heat radiating from artificial turf causes the temperature to exceed the recommended guideline by the American Association of Pediatrics far more frequently than natural grass.

- In addition to the enormous initial expense of installing this turf, there is considerable money spent on daily/weekly maintenance than anticipated (frequent vacuuming, washing, repairs, & refilling materials.) The least expensive sports field installation is approximately \$700,000 - \$1,500,000. Lower costs often mean lower quality with more chemicals (like crumb rubber) and the expense of much needing to add more “infill” over the years. Despite this enormous expense, synthetic turf only lasts 8-15 yrs. (10 yrs. is typical; 20 is rare) & many fields do not last as long as promised! Proponents of artificial turf often point to the economic savings they expect from these surfaces. However, the savings may not materialize over time. A cost comparison analysis and projection from Montgomery County in Maryland has found that when all of the true costs of artificial turf are accounted for, it can actually cost more.

Based on high installation costs, cost of replacement and repair, environmental remediation cost for groundwater contamination, healthcare costs from the health harms caused by toxic chemicals. And “safe” disposal of these huge fields is a major problem.

- Many of the new turfs claim they are more environmentally friendly and free of toxics such as PFAS. Those newer turfs have just replaced the infill with safer materials such as cork or coconut. The plastic blades are still just that, plastic. Plastic has several toxic chemicals in it and degrades into microplastics that show up in our soil and water.

- An average 80,000 sq ft. field contains 40,000 lbs of plastic carpeting and 400,000 lbs of infill.

Caution: the new “no-fill” turf contains thin hair-like plastic called “thatch” which flattens down quickly with use. Currently there are many questions about this new product and few answers without a real “track record.”

- Many turf companies claim to be PFAS-Free but, in actuality they are only testing for a small subset of PFAS chemicals, not the entire 14000+. Unless they are testing for total organic fluorine, they cannot claim to be PFAS free, and they pose a real danger to our children.

- FOOT & ANKLE INJURIES ON TURF:** Studies show “a higher rate of foot and ankle injuries on artificial turf, both old-generation and new-generation turf, compared to natural grass,” (2024 article in the American Journal of Sports Medicine) Knee and hip injuries were similar on both surfaces, they wrote. The authors noted that studies reporting a higher rate of injury on natural grass received financial support from the artificial turf industry.

<https://apnews.com/article/nfl-aaron-rodgers-achilles-grass-artificial-turf-79212f5443cd2a0d30fe8c9d981b13c0>

- The National Football League Players Association (NFLPA) issued a call to end the use of synthetic turf and a return to natural grass (i.e. grass turf). And the FIFA World Cup soccer association requires grass playing fields for their games (with special exemptions when there are not enough fields available).

- The EPA admitted that it only did a limited review of the products in synthetic turf, which did not answer the health questions that they were requested of them, and this certainly does not provide the public with any assurance of safety. This report also mentions the difficulty of disposal of old synthetic turf.

<https://www.wvtf.org/news/2022-03-15/new-study-casts-doubt-on-safety-of-synthetic-turf>

•DO WE REALLY WANT OUR CHILDREN/TEENS PLAYING ON A
SURFACE THAT REQUIRES SUCH CARE TO AVOID CONTACT WITH
HAZARDOUS COMPONENTS OF THE TURF:

The Massachusetts State Government issued this advisory: “Here are some steps to minimize potential exposure to potentially harmful chemicals in ATF (artificial turf fields): see below:

While playing on ATF:

Always wear shoes and minimize passive recreation (e.g. laying, sitting)

- Do not swallow any crumb rubber that accidentally enters the mouth. Monitor young children to prevent swallowing.
- If playing indoors, take steps to increase ventilation if possible (e.g., open windows/doors, turn on fans).
- Be aware that crumb rubber absorbs heat which can increase the surface temperature of ATF and lead to heat-related illness.

After playing on ATF:

Wash hands after use and before eating (especially young children).

Clean all clothing and equipment used on ATF.

- Take off shoes before entering the house to prevent tracking in any crumb rubber.
- Clean all turf burns with soap and water (due to turf causing MRSA, Staph infections)

Traditional grass sports fields can typically be maintained at lower costs, and without harming the health of our children and environment, unlike artificial turf fields. There are schools that maintain organic athletic fields (like Portland, etc) or use a combination of organic care and products combined with minimal low-toxicity products, infrequently, and with a safe waiting period after application. Artificial turf fields with toxic chemicals and microplastics should not be installed in Maine.

I urge you to vote unanimously “Ought to Pass’ on LD 1177

I Appreciate Your Work and Thank You for Your time,

Molly Jennings

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