Letter from NCHR about Dangerous Playgrounds and Athletic Fields to the Mayor and City Council of Washington, DC

August 28, 2017

Dear Mayor Bowser and Council Members,

I am writing as the president of the National Center for Health Research to express my strong concerns about the safety of the synthetic turf that the DC government has used and is continuing to use across the city, including installation that will soon be underway at Janney Elementary.

As a scientist who has worked on health policy issues for 30 years, I don’t shock easily. However, the fact that school athletic fields and playgrounds are exposing D.C. children on a daily basis to chemicals and materials that are known to increase obesity, cause early puberty, cause ADD and other attention problems, harbor deadly bacteria, and exacerbate asthma is very disturbing. Surely these are exactly the types of health problems that the DC government should be doing its best to reduce, not increase. Federal agencies are investigating the safety of these products – even during the Trump Administration – and yet neither District officials nor parents are being provided with accurate information about the products being used.

Whether natural grass or synthetic materials, all types of turf have risks and benefits. However, some materials are well known to have substantial risks. For example, DCPS is installing synthetic turf with Envirofill at Janney Elementary and possibly other schools, even though the Department of Parks and Recreation has already determined that product to be too unsafe to install at city parks. Envirofill was slated for installation at Friendship (Turtle) Park, but after local parents briefed DC officials about problems with the product on June 9th, the District revised its plans and did not install that material. Since children play on school fields five days a week, under the direction of their teachers, this is a particularly questionable decision on the part of DCPS, for safety reasons and in terms of legal liability. How does it make sense that a product is not safe enough for a public park but is safe enough for a school field or playground?
I don’t know if you are aware of the number of synthetic turf fields across the District that have been condemned because of failing safety tests. Gmax is a score that tests for hardness to determine if a surface is safe for playing. A Gmax over 200 is considered extremely dangerous and is considered by industry to pose a death risk. The synthetic turf industry and ASTM suggest that scores should be below 165 to ensure safety comparable to a grass field. It is my understanding that there are at least six fields in the city that are over the 200 level. That information should be made public to all parents, so that they understand why fields are closed and can protect their children’s safety. Since the Gmax score varies with the weather, synthetic fields should be tested at least quarterly, all scores should be posted publicly, and scores over 165 should have warning signs in order to prevent traumatic brain injuries.

This has not happened. For example, the Gmax score at Janney Elementary tested over 200 in June, and yet that information was not made public and the field was used by camp children all summer. Despite the repeated requests of concerned parents for the last few months, the field wasn’t closed until the day before school started last week. Parents were justifiably upset that the field was closed when school started, and some parents claimed to have been told by school staff that the Mayor’s office stated that the field would be closed all year and perhaps forever. It seems unlikely to me that the Mayor’s office would have said such a thing, but it resulted in ugly and unfair accusations. The many parents who were concerned about the safety of the synthetic field were bullied into silence, and a small number of parents who wanted the field available immediately erroneously claimed that all parents agreed that synthetic field was best.

As a result of that controversy, DC officials have recently stated that Envirofill will be used at Janney. Envirofill is basically a type of infill underneath a plastic carpet. It is composed of materials resembling plastic polymer pellets (similar in appearance to tic tacs) with silica inside. Silica is classified as a hazardous material according to OSHA regulations, and the American Academy of Pediatrics specifically recommends avoiding it on playgrounds. The manufacturers and vendors of these products claim that the silica is contained inside the plastic coating. However, sunlight and the grinding force from playing on the field breaks down the plastic coating. For that reason, even the product warranty admits that only 70% of the silica will remain encapsulated. The other 30% can be very harmful as children are exposed to it in the air; here’s a screen grab from a November 2016 Patriots vs. Seahawks game, which shows how the silica sand infill is kicked up when players dive on a synthetic surface with silica sand infill.

In addition, the Envirofill pellets are coated with an antibacterial called Microban, which is a trade name for triclosan. Triclosan is registered as a pesticide with the United States Environmental Protection Agency (EPA), and last year the FDA banned triclosan from soaps because manufacturers did not prove that that the ingredients are safe for long-term use, since it is associated with liver and inhalation toxicity and hormone disruption. In addition to microscopic particles of synthetic turf infill being inhaled by children, visible and invisible particles come off of the field, ending up in shoes, socks, pockets, and hair.

I have appreciated the opportunity to meet with several Councilmembers’ staff in the last few weeks, and I commend the Council for banning crumb rubber in FY 2018. Unfortunately, however, Envirofill, “poured in place” rubber (PIP), EPDM, and all the other synthetic materials currently on the market all share some of the same health risks. While the companies that sell these products claim they are safe and meet federal safety standards, the sad truth is that there are currently no federal safety tests required to prove that these products are safe, and as noted earlier, the Gmax safety tests have until recently been ignored by DC.
officials. Most important, none are proven to be as safe as natural grass in well-constructed fields such as the Maryland Soccerplex. Although a well-respected grass expert offered a free consultation on how to install well-engineered grass designed to withstand rain and play. DGS did not respond to his offer.

I am one of many parents and scientists in DC that are asking DC officials to provide essential safety information about the materials being used for fields and playgrounds. We are offering our expertise on these issues and would welcome the opportunity for public meetings so that parents across the city can be informed.

Sincerely,

Diana Zuckerman, Ph.D.
President
National Center for Health Research
Thank You