

10 Things You Should Know About Synthetic Turf

1. Toxic tire scraps don't belong on playing fields.

Most synthetic turf fields are constructed using crumb rubber from recycled tires as an "infill" or cushioning material. Crumb rubber contains a myriad of toxic chemicals, many of which are regulated by both federal and state health and environmental agencies. Human exposure routes are inhalation, skin absorption and accidental ingestion, all of which can easily occur during normal play activities.

2. Temperatures on synthetic turf fields can rise to unsafe levels. The surface temperature of synthetic turf fields on sunny days can reach 160 or higher. High-powered water cannons (and lots of water!) are required to cool surface temperatures to safe levels. On hot days, this must be done repeatedly to keep temperatures down and reduce the risk of serious heat related illness in athletes.

3. Synthetic turf requires the use of disinfecting chemicals. A synthetic athletic field must be disinfected regularly to remove body fluid spills as well as bacteria that cannot be naturally removed through the action of rainfall and natural processes found in the soil biology. Disinfecting chemicals are registered pesticides and exposure to these toxins present their own health risks. In addition, MRSA skin infections have been documented in athletes playing on synthetic turf fields, and appear to be more common when there are large areas of broken skin from "turf burns" or abrasions.

4. Maintenance and replacement costs are high for synthetic turf. The cost of properly maintaining a synthetic turf field includes regular cleaning and disinfecting, brushing, replacement of crumb rubber infill, seam repair and the amortized cost of eventual field replacement. These costs far exceed the cost of properly maintaining natural turf.

5. Disposal of synthetic turf is costly. There is no easy or inexpensive way to dispose of hundreds of tons of worn out plastic and recycled tire pieces. Landfills charge substantial fees for the disposal of toxic materials, which may have to be tested first. Transportation costs can be significant, especially if the old field has to be taken to a distant landfill.

6. Synthetic turf fields contribute to global warming. Synthetic turf fields appear dark when photographed from the air because of the black crumb rubber and, like tar roofs, contribute to the "heat island" effect. In addition, these fields, made from petroleum, are unable to convert carbon dioxide into oxygen and store carbon in their biomass as their grass field counterparts do.

7. Synthetic turf is not a solution for the problem of turf pesticides. The argument that synthetic turf decreases the use of chemical pesticides wrongly assumes that these chemicals are required for healthy, lush and resilient turf. **They are not.** Properly installed and maintained natural turf fields are rugged, can stand up to heavy use and are completely safe for people, pets and the environment.

8. Synthetic turf fields can contain high levels of lead. The green pigment used in synthetic "grass" fields often contains lead. As the fields age and the elements fade and break down the plastic, it begins to powder, making the lead more accessible and a clear health hazard. Lead is a potent neurotoxin and even tiny amounts can affect the brain, especially in young children. The recent assurance of safety of



synthetic fields made by the Consumer Product Safety Commission was immediately addressed by the Attorney General of Connecticut, who called it "dangerously deceptive" and called for its immediate revision.

9. Synthetic fields are expensive. The cost of installing and maintaining a synthetic turf field over its useful lifetime (usually 7-10 years) can easily exceed one million dollars. Amortized replacement cost adds approximately \$50,000 a year and should be included in annual cost projections.

10. The "Field of Dreams" promotion is misleading. Everyone wants what's best for kids, but there are a growing number of parents, coaches and community leaders who understand the emerging science linking exposure to environmental toxins with human health problems, especially in kids. The fact is, no one - including the synthetic turf companies that profit from these fields - can say for certain that they are safe. The only question is, what is the wise thing to do until we know for certain?