

FAQs: Synthetic Turf Use in Arlington

What is synthetic turf? Are there synthetic turf fields in Arlington?

Synthetic turf is a grass-like ground cover that replicates natural grass. It is commonly used in sporting facilities and playgrounds around the country.

Arlington County has twelve synthetic turf fields, all made with ground up rubber called crumb rubber infill. Crumb rubber infill is made from sources like recycled tires.

Why do we use synthetic turf instead of natural grass?

Synthetic turf fields have many advantages compared with natural grass:

- A consistent, flat playing surface that can be used all year. There is no need to worry about muddy or drought-affected fields, or uneven surfaces that could cause injury.
- Synthetic turf fields do not need to be watered or painted, reducing runoff and saving resources.
- Synthetic turf fields do not need insecticides or pesticides.
- Synthetic turf allows us to recycle rubber materials that would otherwise end up in landfills.

What health concerns have been raised about synthetic turf fields?

Concerns about synthetic turf fields include:

- Synthetic turf surfaces can give off more heat. This increases the need for athletes to stay hydrated to prevent heat-related illness.
- “Turf burn” skin abrasions may occur if athletes fall and slide on synthetic turf.
- Current research does not indicate that synthetic turf fields pose adverse health risks to athletes.
- Recent news articles have raised concern about possible cancer risk among people who play on synthetic turf crumb rubber infill.
 - The Northern Virginia Health Directors asked the Virginia Department of Health (VDH) to look at cancer rates among children in our region to see if there is more than expected.
 - VDH’s Virginia Cancer Registry analyzed their cancer data.
 - There was no evidence of increased pediatric cancer incidence in NOVA compared to Virginia and to the US in the time period before (2002 – 2006) and after (2007 – 2012) the introduction of crumb rubber in NOVA.
 - While the Virginia Cancer Registry analysis could not analyze crumb rubber as an independent variable, the Health Directors are reassured by the review of the cancer data.
- Even though there is no current evidence to link crumb rubber with cancer, Arlington County continues to monitor the studies and look for guidance from national public health agencies to advise our community and elected officials about potential health risks.

How can I keep myself or my child healthy while playing on synthetic turf?

You can keep yourself healthy by taking the same steps you use when playing on natural grass:

- Stay hydrated, especially in the summer. Rest if you feel dizzy or too warm, and remember to take breaks in play.
- Clean any scrapes as quickly as possible.
- Cover any scrapes, burns, or open wounds before playing.
- Wash your hands with soap and warm water for 20 seconds after playing on a synthetic turf field. Showering after play is useful, too.
- Do not eat food while on the synthetic turf field.
- Wear athletic shoes while playing on the synthetic turf field.

Where can I go for additional information?

Call the Arlington County Parks and Recreation Department at 703-228-7529. You can also visit the references page below.

References

1. Birkholz et al. (2003). *Toxicological Evaluation for the Hazard Assessment of Tire Crumb for Use in Public Playgrounds*. Available at: <http://www.tandfonline.com/doi/abs/10.1080/10473289.2003.10466221?src=recsys#.VKK4WsCB>
2. Bjørneboe, J. et al. (2010). *Risk of injury on third-generation artificial turf in Norwegian professional football*. Available at: <http://bjsm.bmj.com/content/44/11/794.abstract?sid=b53cca15-5434-495d-aff8-17ea221cede8>
3. California Office of Environmental Health Hazard Assessment, Pesticide and Environmental Toxicology Branch (2010). *Safety Study of Artificial Turf Containing Crumb Rubber Infill Made From Recycled Tires: Measurements of Chemicals and Particulates in the Air, Bacteria in the Turf, and Skin Abrasions Caused by Contact with the Surface*. Available at: http://c.ymcdn.com/sites/www.syntheticturfCouncil.org/resource/resmgr/docs/ca_oeaha_safety_study_vocs_a.pdf
4. Connecticut Department of Health, Environmental and Occupational Health Assessment Program (2010). *Human Health Risk Assessment of Artificial Turf Fields Based Upon Results from Five Fields in Connecticut*. Available at: http://www.ct.gov/deep/lib/deep/artificialturf/dph_artificial_turf_report.pdf
5. New York State Department of Environmental Conservation and New York State Department of Health (2009). *An assessment of chemical leaching, releases to air and temperature at crumb-rubber infilled synthetic turf fields*. Available at: http://www.dec.ny.gov/docs/materials_minerals_pdf/crumbrubr.pdf
6. Norwegian Institute of Public Health and the Radium Hospital (2006). *Artificial turf pitches – an assessment of the health risks for football players*. Available at: <http://www.iss.de/conferences/Dresden%202006/Technical/FHI%20Engelsk.pdf>
7. Ruffino et al. (2013). *Environmental-sanitary risk analysis procedure applied to artificial turf sports fields*. Available at: <http://www.ncbi.nlm.nih.gov/pubmed/23329128>
8. Steffen et al. (2007). *Risk of injury on artificial turf and natural grass in young female football players*. Available at: http://bjsm.bmj.com/content/41/suppl_1/i33.abstract?sid=f489440c-9455-4157-9e3a-a3b0a264469e
9. United States Environmental Protection Agency Office of Research and Development (2009). *A Scoping-Level Field Monitoring Study of Synthetic Turf Fields and Playgrounds*. Available at: http://www.epa.gov/nerl/download_files/documents/tire_crumbs.pdf
10. United States Environmental Protection Agency Office of Research and Development (2013). *The Use of Recycled Tire Materials on Playgrounds & Artificial Turf Fields*. Available at: http://www.epa.gov/nerl/features/tire_crumbs.html