



Fact Sheet: Recycled Rubber Infill Safety

The issue of whether or not playing on synthetic turf fields with recycled rubber infill has any connection to long-term health risks has been studied at length.

- There have been dozens of studies, peer-reviewed academic analyses and government reports published that have been analyzed by independent third-parties, and that hold up under peer-review from toxicologists that are committed to science without an agenda. All available science shows no greater long-term health risks to using artificial turf fields than playing on urban or rural soil.

The assertion that there are significant gaps in the evidence supporting the safety of crumb rubber turf fields is false.

- When evaluated individually, some studies may have limitations or data-gaps—which is true of any individual scientific study, in general—and from a scientific perspective, additional research can always be conducted to provide additional evidence.
- However, existing studies have evaluated many aspects of safety; they have looked at a multitude of chemicals, at all major exposure pathways—ingestion, inhalation, skin contact—and have used many methods.
- So when you consider the totality of the evidence with all synthetic turf studies looked at together, the data supporting the safety of crumb rubber turf fields does not leave significant gaps.

Scientific, peer-reviewed studies to date have already extensively examined chemical and non-chemical exposure pathways.

- There have been many exposure assessment studies conducted that adequately examine the three major exposure pathways, which are through ingestion, inhalation, and through the skin.
- One peer-reviewed study did an extraction analysis using a variety of simulated biological fluids to see what happens when we ingest, or inhale, or generally come in contact with these particles, and whether we absorb any chemicals. This particular study found negligible extraction for the chemicals and the scientists concluded the chemicals did not pose a health risk.
- Based on extraction studies, pellets getting into cuts or abrasions would also be unlikely to present any risk.

The mere presence of a chemical does not mean it poses potential health risks.

- The most common four chemicals found in crumb rubber that have been brought up as points of concern in crumb rubber are arsenic, benzene, cadmium, and nickel, but context is needed relating to how often we come into contact with each by simply being part of society:
 - Rubber in turf has less arsenic than rice; less cadmium than in lobster; less nickel than in chocolate; and less benzene than in a can of soda.
- The International Agency of Cancer Research has stated these chemicals are all safe in low amounts and are simply part of the world we live in and the food we don't think twice about.
- Given this, regulatory reports have found that chemical exposures from synthetic turf present a very low risk.