

# Artificial Turf & Children's Health

Synthetic or artificial turf is a multi-layer product used as a surface on athletic playing fields, golf courses, and residential lawns.

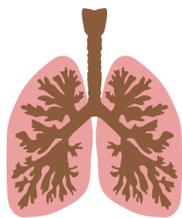
## It typically consists of:

A top layer of fibers usually made of nylon, polypropylene, or polyethylene designed to mimic natural grass blades; infill that provides cushioning and serves as a base for the blades; a backing layer; a drainage layer; and additional padding in some applications.

## Artificial turf poses a health risk to children through chemical exposures.

Chemicals known to be carcinogenic such as heavy metals, volatile organic compounds (e.g. benzene), polycyclic aromatic hydrocarbons, and 1,3-butadiene have been detected in turf infill made from recycled tires. Further study is needed to characterize the complete chemical composition of infill made from materials other than tires.

### Exposure can happen through:



Inhalation of chemicals and particles



Dermal contact and absorption through the skin or open wounds



Ingestion of turf infill particles

## Non-chemical exposures of concern to children are...



**Heat:** Turf surface temperatures can get up to 55°F higher than grass, and recorded as high as 200°F on a summer day.



**Turf burn:** Playing on artificial turf has been shown to result in more skin abrasions than grass.

## Tips for safer play on artificial surfaces:



- Avoid use on very hot days.
- To prevent injury, make sure that fields are properly maintained.
- Ensure indoor fields are well-ventilated.
- Avoid use for passive activities (i.e. sitting, lounging, picnicking).
- Monitor young children to prevent accidental ingestion of the infill.
- Avoid walking with bare feet.
- Wash hands before eating, drinking, or touching mouth.

Clean cuts and abrasions immediately. -----

Brush hair thoroughly after play. -----

Remove and clean shoes and gear outside before getting in car or returning home. -----

Take off shoes and shake out equipment and clothes outside or over the garbage before entering your home. -----

Shower immediately after playing on artificial turf. -----

Vacuum any infill that comes into your home. -----

