

Recycled Rubber Playground Cover

Information for parents, school and park officials, and other members of the public

Background

The Wisconsin Department of Health Services has received a number of questions from parents regarding the safety of recycled rubber on playgrounds. Recycled rubber, which is also called tire crumb, is produced by shredding or grinding old tires into small pieces. This material is used to reduce the risk of injuries on playgrounds and is also used to surface some running tracks and water parks. The chemical makeup of tire crumb varies depending on the type of tire used, date manufactured and source.



Health concerns

There appears to be very little health risk associated with children's exposure to recycled rubber during normal playground activities. However, there is still uncertainty and additional studies are needed. Until more is known, people who are concerned about the safety or unsure of the benefits of recycled rubber on playgrounds may prefer to use wood mulch or clean sand.

The US Environmental Protection Agency encourages the use of tire crumb on playgrounds as part of its recycling program. However, the agency has not conducted research to evaluate risks to children. This has raised concerns because some of the chemicals found in tire crumb have been associated with higher risks of cancer, learning delays and other health problems.

Exposure to these substances can occur as a result of inhalation of volatized chemicals or fine particulates, and by incidental or intentional ingestion. Ingestion is likely increased when children eat near the playgrounds or when toddlers exhibit hand to mouth activity.

General recommendations

Both the US Environmental Protection Agency (EPA) and the Consumer Product Safety Commission support the safety of crumb rubber. However, until more is known about the safety of this product, we encourage parents to not allow children to eat while playing on a recycled rubber treated surface and to wash children's hands after contact with this material. These simple actions will help to prevent ingestion of rubber particles.

In addition, a report by the California Environmental Protection Agency found that, depending on the thickness of the rubber cover, it may not meet safety requirements. The study found wood chips to be more effective in cushioning falls, which are a major cause of fractures.

For more information

- <http://www.calrecycle.ca.gov/Publications/Tires/62206013.pdf>
- http://www.health.state.ny.us/environmental/outdoors/synthetic_turf/crumb-rubber_infilled/fact_sheet.htm
- http://www.epa.gov/nerl/documents/fs_tire_crumbs.pdf

