Potential Exposure to Lead in Artificial Turf

Recent tests by the New Jersey Department of Health and Senior Services (NJDHSS) of artificial turf playing fields in that state have found these fields contain potentially unhealthy levels of lead dust. The initial tests were conducted on a limited number of playing fields. NJDHSS sampling of additional athletic fields and other related commercial products indicates that artificial turf made of nylon or nylon/polyethylene blend fibers contains levels of lead that pose a potential public health concern. Tests of artificial turf fields made with only polyethylene fibers showed that these fields contained very low levels of lead.

Information provided by NJDHSS to CDC and ATSDR indicates that some of the fields with elevated lead in either dust and/or turf fiber samples were weathered and visibly dusty. Fields that are old, that are used frequently, and that are exposed to the weather break down into dust as the turf fibers are worn or demonstrate progressive signs of weathering, including fibers that are abraded, faded or broken. These factors should be considered when evaluating the potential for harmful lead exposures from a given field.

The risk for harmful lead exposure is low from new fields with elevated lead levels in their turf fibers because the turf fibers are still intact and the lead is unlikely to be available for harmful exposures to occur. As the turf ages and weather, lead is released in dust that could then be ingested or inhaled, and the risk for harmful exposure increases. If exposures do occur, CDC currently does not know how much lead the body will absorb; however, if enough lead is absorbed, it can cause neurological development symptoms (e.g. deficits in IQ). Additional tests are being performed by NJDHSS to help us better understand the absorption of lead from these products.

Learn About Lead Contamination in Artificial Turf

Potential Exposure to Lead in Artificial Turf
CDC Health Alert Network (HAN) Advisory from June 18, 2008, 16:10 EDT.

New Jersey Artificial Turf Investigation [External Link]
Additional information about testing, dust suppression measures, and other topics related to New Jersey's artificial turf investigation.

Learn About Lead

CDC's Lead Poisoning Prevention Program
Learn more about the CDC's efforts to eliminate childhood lead poisoning in the United States.

ToxFAQs™
Frequently asked questions from the Agency for Toxic Substances & Disease Registry (ATSDR).

Toxicological Profile
Toxicologic & adverse health effects information from the Agency for Toxic Substances & Disease Registry (ATSDR).

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