



Connecticut Department of Public Health

Testimony Presented Before the Committee on Children

February 16, 2016

**Commissioner Raul Pino, M.D., M.P.H.
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House Bill # 5139 AN ACT CONCERNING THE USE OF RECYCLED TIRE RUBBER AT MUNICIPAL AND PUBLIC SCHOOL PLAYGROUNDS

The Department of Public Health (DPH) provides the following information regarding the proposed bill.

Health questions have been raised regarding the use of shredded rubber from recycled tires in children's play areas. The basis for this concern is that children may ingest or otherwise contact the shredded rubber chips and become exposed to constituent chemicals, some of which are carcinogenic. This theoretical concern has been evaluated in two separate studies conducted by the State of California and by Rutgers University-Robert Wood Johnson Medical School.

The California (2007) study simulated the ingestion of a shredded piece of recycled tire as well as ingestion of rubber playground dusts by young children. The experimental methods involved acid digestion of the rubber to simulate the release of rubber chemicals into the stomach. The California study found low risks for both the shredded rubber and dust scenarios, well within risk levels common in the environment for such chemicals.

The Rutgers study (Pavilonis et al. 2013) also evaluated the release of chemicals from recycled crumb rubber into a child's stomach, as well as release into sweat and lung fluids to simulate dermal and inhalation exposure. That study found little release of chemicals from the recycled rubber into any of the fluids and thus found that a risk assessment was unnecessary.

Both the California and Rutgers studies concluded that any potential exposures from children's ingestion of these recycled rubber materials would not cause an elevated health risk. DPH recognizes that these studies have limitations and will continue to monitor the literature as new studies are reported.

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References:

State of California (2007) Evaluation of the Health Effects of Recycled Waste Tires in Playground and Track Products. Available at:

<http://www.calrecycle.ca.gov/publications/Documents/Tires/62206013.pdf>

Pavilonis BT, et al. 2013. Bioaccessibility and Risk of Exposure to Metals and SVOCs in Artificial Turf Field Fill Materials and Fibers. Risk Analysis 34: 44-55.