

Arsenic and pressure-treated wood: the argument moves to the playground

Florida has closed dozens of playgrounds because of “disturbing” levels of arsenic in the soil beneath play structures made from pressure-treated wood. Connecticut is warning children not to play under them, and Minnesota has considered banning the wood. In Ottawa, the chief medical officer says playground soil should be tested for contamination. The culprit? Arsenic that leaches from pressure-treated wood into soil (see page 69).

Although some scientists, the government and the industry itself maintain that the wood poses no or minimal risk, the US has demanded that the lumber industry put handling advisories (www.ccasafetyinfo.com/) on each piece of wood; Environment Canada followed suit this fall. In the US, the industry advises consumers to apply a sealer to the green-tinted wood, but its Canadian counterpart says there’s no need.

Chromated copper arsenate (CCA) wood, which has excellent fungicidal and insecticidal properties, is the most widely used pressure-treated lumber, but it is known that arsenic leaches from it and accumulates in the soil.

A recent Connecticut study (*Bulletin of Environmental Contamination and Toxicology* 1997;58:22-9) found that soil samples taken from beneath CCA-wood decks contained, on average, 20

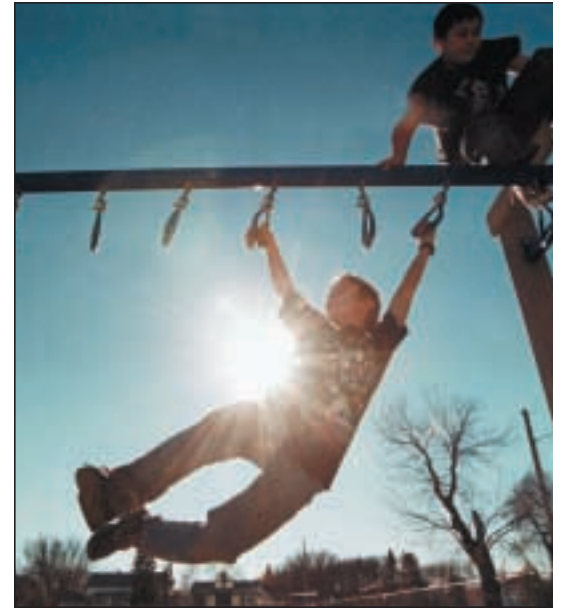
times more arsenic, 76 mg/kg, than control soil, a level that is more than 7 times higher than the state’s legal limit of 10 mg/kg and nearly twice as high as the US Environmental Protection Agency’s regulatory guideline of 41 mg/kg. “Clearly, the arsenic levels pose a potential environmental problem,” the study concluded.

The Connecticut Department of Public Health responded by warning that because “young children are most at risk . . . they should be prevented from playing underneath CCA-treated structures.” It also cautioned against growing edible products near decks made from CCA-treated wood.

“It’s also pretty clear there is a dislodgeable residue that can be removed with casual contact,” says Connecticut Department of Health toxicologist Gary Ginsberg. This can’t be absorbed through the skin but is readily ingested.

The department says the “prudent public health message” is to seal structures made from the wood every 2 years with an oil-based stain. “I don’t disagree with Environment Canada,” says Ginsberg, but with the data that exist, “the less [exposure], the better.”

Dr. Robert Cushman, Ottawa’s chief medical officer, says the issue should be addressed immediately. He wants the city to test sites where pressure-treated wood is used and has advised day-care



centres to use alternative materials in their play structures. A Health Canada study conducted in the early 1990s found arsenic around 10 play structures made from CCA-treated wood, with soil samples from one structure having an arsenic content 10 times higher than Canadian guidelines recommend.

In the US, the Consumer Product Safety Commission has launched a petition that could lead to a ban on the sale of CCA-treated wood; Holland has already banned its use. Environment Canada spokesperson Barry Munson calls such bans a “knee-jerk response. I don’t think the science justifies it.” He points to a University of Toronto study by Dr. Paul Cooper, which shows that the concentration of arsenic leaching off a deck is between 1 and 5 ppm. Despite his evidence, Cooper, a professor of forestry, says: “It doesn’t look good for the industry. Everyone is saying CCA is going to go, and that’s a shame because I think it’s a safe, good product.”

Munson, the head of Environment Canada’s industrial contaminants section, says the actual danger to children is “small to nil. CCA is a good product, and it’s a safe product as long as safety precautions are followed.”

The Canadian Institute of Child Health, meanwhile, says that CCA-treated wood “probably shouldn’t be used in places where kids can come into regular contact with it.” — *Barbara Sibbald, CMAJ*

CMA demands lower legal blood-alcohol level

The CMA has joined forces with Mothers Against Drunk Driving (MADD) and called for the federal government to reduce Canada’s legal blood-alcohol content to .05 from .08. In a Nov. 27 news release, the CMA said Canada is lagging behind countries such as Austria, Australia, Belgium, Denmark, France and Germany, which have already introduced the .05 legal limit. “The injuries and deaths resulting from impaired driving must be recognized as a major public health concern,” said CMA President Henry Haddad. MADD says impaired driving kills an average of 4.5 Canadians a day and injures another 125.

In a separate development, Senator Marjorie LeBreton, a member of MADD’s National Board of Directors, presented the Citizens of Distinction Long-Term Service Award to the CMA in December. It recognizes “efforts in research, prevention/education, legal issues and victim issues.” The CMA was nominated by Dr. Robert Burns, former executive director of the Alberta Medical Association. — *CMAJ*