

## **A deadly poison in your yard?**

By Gilbert Woolley/Special To The Tab  
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If you've been reading these pages recently, you've heard a lot about toxins; mercury in dental amalgam, tires loaded with heavy metals and toxins in pesticides and herbicides. These are all genuine toxins, but they don't have an immediate effect. There is one toxic present in many yards in Newton that does have immediate and also long-term effects. That toxic is arsenic, the spouse poisoner's favorite. If you have a deck, or anything made from wood in your yard that was built before 2004, it is almost certain to have been built with "Pressure Treated Lumber" which, until 2004 meant wood treated with CCA: Copper Chromated Arsenic. We are not talking about parts per million. A typical deck contains several ounces of arsenic, enough to kill the neighborhood. Even a playhouse contains enough arsenic to kill the family. The Pressure Treated Lumber now in the stores should be free from toxics.

When adding a deck to our house some 15 years ago on a hot summer's day, I developed a nasty rash on my face. I discovered that this was caused by the arsenic in the dust from sawing and sanding the CCA-treated wood sticking to my sweaty face. At that time I had no idea what Pressure Treated meant and the lumber store gave no warnings. Irritation of the skin is one immediate effect of arsenic, and inhaling dust can cause burning of the throat and lungs.

After rain, the CCA still bleeds out of our deck and is identifiable by a pale green deposit on the surface. The green is from the copper, but more arsenic than copper bleeds out. This arsenic can be absorbed through the skin and by children by sucking contaminated fingers. Children must be trained to wash their hands before eating after possible contact with CCA-treated wood. Animals kept in cages made from CCA-treated wood have become very sick. The most important warning is never to burn CCA-treated wood, indoors or outdoors. Some of the arsenic is released as a vapor, and the effects of inhaling arsenic over a period are very serious. The vapor also deposits a film of arsenic on the ground and on vegetation. The remainder of the arsenic is concentrated in the ash, and a teaspoon of ash is a fatal dose for an adult. Exposure to arsenic over time is suspected as causing cancer, particularly in young children.

The harmful effects of CCA are so undisputed that the Bush administration, usually skeptical about environmental and health hazards, signed on to an agreement between the U.S. Environmental Protection Agency and the lumber industry to stop shipment of CCA-treated lumber to retailers after Dec. 31, 2003. This agreement prevents additional CCA wood from entering the market place, but does nothing to address the millions of cubic feet of lumber already in the environment.

The US EPA recommends that CCA-treated wood which can be contacted by people should be coated every year with an oil-based varnish, such as polyurethane. Any

time you see a green deposit on the surface of the varnish, it's time to repaint. Wear waterproof gloves whenever you may be in contact with CCA.

As decks and other pressure-treated lumber structures reach end of life, they will pass into the waste stream. There is no perfect solution to how to prevent the arsenic from passing into the atmosphere, groundwater and drinking water, but the worst possible scenario is that municipalities like Newton, that rely on incineration to dispose of wood, will ship the CCA-treated wood to an incinerator. People living downwind of the incinerator will be subject to large doses of arsenic and the ash will be highly toxic.

Until there is a practical method of extracting CCA from the wood, a properly lined landfill is the least harmful method of disposal, but the landfill should not be upgrade from a drinking water well and the adjacent groundwater must be monitored. Arsenic is said to become attached to soil particles so that any release to the environment should be slow.

At present, most jurisdictions in the U.S., including Massachusetts, do not classify CCA-treated lumber as hazardous and it can be disposed of in unlined landfills. Unless corrected, this is going to result in serious health problems in the future. The long-term problem is that millions of pounds of arsenic have been used to treat wood and if not controlled much of this will eventually be released into the environment. (The amount of arsenic used is known because there are records of arsenic imports and almost all is used in CCA-treated wood.)

NOTE. A major reason why action to limit use of CCA-treated wood was so long delayed and why so little attention is paid to the health hazards is that many doctors do not recognize the symptoms of low-level exposure to arsenic.

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