



Information About Chromated Copper Arsenate-Treated Wood (Pressure-Treated Wood)

What is chromated copper arsenate (CCA)-treated wood?

Chromated copper arsenate (CCA)-treated wood is often referred to as pressure-treated wood. CCA is a chemical wood preservative containing chromium, copper and arsenic that protects wood from damage by insects, mould, sun and water.

Chromium, copper and arsenic can leach out of CCA-treated wood. Small amounts of these chemicals have been measured on wood surfaces and in soil and ground cover near the wood.

The risk of illness from exposure to chemicals leaching from CCA-treated wood is low. The following information has been prepared to assist those who wish to minimize their exposure to CCA-treated wood chemicals.

What is CCA-treated wood used for?

CCA-treated wood is commonly used for outdoor structures such as decks, fences, picnic tables and play structures. It is also used for landscaping and has many industrial uses. New pressure-treated wood has a greenish tint. Since the green tint fades with time, it may be hard to tell if an older wooden deck or play structure was made from CCA-treated wood. Check with the builder. Manufacturers are now

labeling all new CCA-treated wood to indicate that it contains arsenic.

Is CCA-treated wood a health concern?

To date, Health Canada has not concluded that CCA-treated wood poses any unreasonable risk to the public. The risk of immediate illness from short-term exposure to chemicals from CCA-treated wood is very low. However, arsenic is a known carcinogen and it is possible that levels of arsenic leaching from CCA-treated wood **may** cause long-term health effects. Health Canada has, therefore, stated that any reduction in the levels of potential exposure to arsenic is desirable. The other two elements in CCA, copper and chromium, are relatively less toxic to humans.

How are people exposed to arsenic from CCA-treated wood?

People can be exposed to arsenic through residues present on wood surfaces and from the soil or sand beneath structures made of CCA-treated wood. The main route of potential exposure is through the **ingestion** of sand or soil containing levels of arsenic and through residue from sandy hands or toys being placed in the mouth.

Who can be exposed?

Young children (under 6 years of age) who play on CCA-treated wood structures are likely to have the greatest exposure because of their frequent hand-to-mouth activity. They are also most likely to play for periods of time underneath play structures where they could be exposed to arsenic in the soil. People who spend considerable amount of time eating on CCA-treated picnic tables, or playing on or working with CCA-treated wood may also be exposed.

What precautions can I take to reduce exposure?

- Wash hands thoroughly after contact with various surfaces/materials including CCA-treated wood and soil, especially prior to eating and drinking.
- Discourage children from eating sand or soil.

In addition:

- Use a tablecloth when eating on a picnic table made of CCA-treated wood.
- Insert a plastic lining on the base and sides of fruit and vegetable garden boxes made of CCA-treated wood to separate the wood from the soil.
- Never burn CCA-treated wood or use it as compost or mulch. Burning CCA-treated wood is a serious health concern as it releases harmful amounts of chemicals into the air and the ash.

Is it safe for children to play on structures made with CCA-treated wood?

At present, since Health Canada has not concluded that CCA-treated wood poses

any unreasonable risk to public health, it is not recommended that existing structures be avoided or removed. As part of its re-evaluation of CCA, Health Canada is conducting a thorough scientific assessment of risks to children playing on CCA-treated wood. This includes consideration of any special sensitivities children may have and unique behaviours, such as hand-to-mouth transfer. It is expected that this re-evaluation will be completed within the next year.

Canada is making a voluntary transition away from the use of CCA to treat wood for use in residential applications by the end of 2003. If you plan to build a play structure for children, look for alternatives to CCA-treated wood such as cedar, redwood, metal, and plastic. Consult your local hardware or building store for wood treated with non-arsenic containing preservatives.

What should I do if I have an existing structure made of CCA-treated wood?

If you have an existing structure (e.g. deck or playground equipment) made of CCA-treated wood, it is **not** necessary to remove the structure.

To minimize exposure, consider using a penetrating oil-based wood-finishing sealant on the structure. Some studies suggest that applying certain penetrating coatings (e.g. oil-based, semi-transparent stains) on a regular basis (e.g. once a year or every other year depending on wear and weathering) may reduce the migration of chemicals from CCA-treated wood. 'Film-forming' or non-penetrating stains (e.g. latex semitransparent, latex opaque and oil-based opaque stains) on

outdoor surfaces are not recommended, as subsequent peeling and flaking may ultimately have an impact on durability as well as exposure to the preservatives in the wood. Do not use deck washes or bleaches on CCA-treated wood as they are likely to accelerate leaching. Consult your local hardware or building store for appropriate products.

Elevated arsenic levels may exist in the soil or sand beneath structures made of CCA-treated wood. If there is only bare soil or sand under the structure, consider the following:

- Fence or screen off areas underneath decks to prevent access by children and pets.
- Plant a dense ground cover (e.g. grass) to provide a barrier between the soil and human/animal contact.
- If exposed to soil or sand beneath the wood, remove shoes or wipe feet before entering the house.

Some municipalities in Canada have made a decision to measure arsenic levels in the base materials of public playgrounds which contain CCA-treated wood and to remove arsenic-impacted material and replace it with clean base material.

Where can I get more information?

For more information contact:

- Health Links 788-8200 or 1-888-315-9257
- Health Canada - Pest Management Information Service, (toll free 1-800-267-6315)
- Fact sheet on Chromated Copper Arsenate (CCA) Treated Wood http://www.hc-sc.gc.ca/pmra-arla/english/pdf/fact/fs_cca-june2003-e.pdf

This document is based on *CCA-treated Wood* Fact Sheets produced by Health Canada and by the City of Toronto, Department of Health.