

Staying Safe around Treated Wood

Wood preservatives are pesticides used for the long-term protection of wood against fungi, insects and marine borers. A water-repellent treatment may also be applied to help prevent checking and splitting when treated wood is used on a flat surface, such as decking. These preservatives extend the service life of wood, and help reduce demand for forest resources.

Scientific studies suggest that, over time, chemicals slowly leach from treated wood. The amount and rate at which these chemicals leach depend on factors such as the species of wood, rainfall, acidity of the rain and soil in contact with the wood, and the age of the structure. Generally, the concentration of chemicals in soil leached from treated wood decreases rapidly within a short distance. Over time, or from damage, small amounts of chemical may also be dislodged in the form of wood dust and splinters from the surface of wood.

Aged treated wood may be indistinguishable from untreated wood in colour. With the exception of creosote-treated wood, which has a distinctive, petroleum-based scent, treated wood tends to have little or no odour.

Treated Wood Preservatives in Canada

In residential settings, people may come into contact with wood treated with the following:

- Ammoniacal Copper Quaternary (ACQ)
- Copper Azole (CA-B)
- Chromated Copper Arsenate (CCA)

Wood treated with ACQ or CA-B can be purchased at hardware or lumber stores and used for residential construction projects. Until recently, ACQ and CA-B treated wood was light green in colour. Today, the vast majority of treated wood for residential construction contains dyes or stains and is available in various shades of brown.

Since 2004, CCA-treated wood is no longer available for residential construction projects such as decks, fences or playground structures. It is still used in many industrial applications such as utility poles, marine timbers and pilings, and highway construction. When it is new, CCA-treated wood has a light green colour.

Old structures made with CCA-treated wood should be monitored carefully and replaced before the wood begins to break down or decompose, in order to avoid the release of arsenic. Residential decks or fences built prior to 2004 are likely to have been made from CCA-treated lumber.

People may also come in contact with wood for industrial uses that has been treated with the following:

- Creosote
- Pentachlorophenol





Creosote-treated wood is predominantly used for railroad crossties, while Pentachlorophenl-treated wood is mostly used for utility poles.

Safety Tips

Follow these safety tips to stay safe around treated wood:

- Do not use treated wood where it may come into direct contact with food, such as cutting boards, counter tops, beehives, animal feed storage, silos, water troughs, compost bins, mulch, or as an edging for an edible garden.
- Do not serve food directly from the surface of treated wood, such as picnic tables. Instead, use plates or a plastic tablecloth.
- Do not use treated wood where it may come into contact with drinking water (for example, wells or reservoir covers).
- **Never burn treated wood**. Burning this type of wood concentrates and releases the preservative chemicals into the ash and smoke.
- Do not use bleaching or cleaning agents such as sodium hypochlorite, sodium hydroxide, sodium percarbonate or citric or oxalic acid on treated wood. These can cause the wood to release chemicals that may be inhaled or come in contact with skin.
- Do not place treated wood or sawdust in a compost bin, and do not use it as mulch.

Unless you are exposed to smoke or ash from the burning of treated wood for prolonged periods, it is unlikely that contact with or working with pressure-treated wood would result in enough exposure to cause symptoms. However, if you do suspect poisoning, you should seek medical attention immediately.

Handling Treated Wood

If you have CCA-treated wood structures on your property such as a deck or fence, and are concerned about the leaching of arsenic from the treated wood, consider applying a sealant to the wood annually.

Sealing the wood with an oil- or water-based stain at least once a year can reduce the likelihood of exposure to arsenic. Paints and other film-formers are not recommended for this purpose since they can chip or flake over time, requiring scraping or sanding, which increases the potential for exposure to arsenic.

For home projects such as removal or construction of a deck or fencing with treated wood:

- Wear gloves and long sleeves when handling treated wood.
- Wear a dust mask, eye protection, gloves and long sleeves when sawing, sanding, shaping or otherwise machining treated wood to avoid skin contact with or inhalation of sawdust.



- Only work with treated wood outdoors.
- Wash hands and other exposed skin after working with the wood, and before eating, drinking, or smoking.
- Launder clothing before reuse. Wash separately from other clothing.
- After construction, all cut ends, sawdust and construction debris should be cleaned up and disposed of in accordance with local regulations.

All wood waste must be disposed of in accordance with the manufacturer's guidelines and with local and provincial regulations.

For more Information

- <u>About the Pest Management Regulatory Agency</u>
- Environment and Climate Change Canada Wood Preservation
- How to Report a Pesticide Incident
- <u>Natural Resources Canada Treated Wood</u>
- <u>Precautions for Using Pressure-Treated Wood Products</u>

More information on this topic is available from Health Canada's <u>Pest Management</u> <u>Information Service</u>.