

Treated Wood Products

What are treated wood products?

Many Wisconsin residents use wood products to build outdoor structures such as decks, fences and borders around gardens or flowerbeds. Because wood is naturally susceptible to decay, it is common to use chemically-treated lumber for outdoor projects.

Chemical treatments help preserve the structural integrity and appearance of wooden structures. Treated lumber can be used safely in many backyard construction projects if appropriate precautions are taken.

What kind of wood treatments are commonly used?

Wood treatments can be classified into two major categories: oil-based and water-based.

Creosote and *pentachlorophenol* (PCP) are two oil-based treatments that are commonly used to treat railroad ties and utility poles. Because of the toxicity of these chemicals, lumber treated with creosote or PCP should not be used indoors, or for playgrounds, decks, picnic tables or similar structures.

Chromated copper arsenate (CCA) and *ammonium copper quat* (ACQ) are the two most commonly used water-based treatments. CCA-treated wood is commonly used for playgrounds, decks and patios, fences, landscaping and in gardens. CCA contains arsenic, a chemical found to cause skin and lung cancer in people who are exposed over a long period of time. ACQ is a newer, less toxic product that has gained popularity in recent years.

Are there health concerns related to exposure to treated wood products?

The chemicals used to treat wood products are applied at high pressure, and most of the treatment remains effectively bound in the wood. However, recent studies show that rainwater can wash CCA out of the wood and carry it into the soil. Additionally, a thin residue coating of CCA was found to exist on the wood's surface. This residue can easily be picked up on hands or food items resulting in exposure.

Children who play on CCA-treated playground equipment can be exposed to significant amounts of arsenic. To reduce the potential for this type of exposure, the U.S. Consumer Product Safety Commission recommends that playground equipment be painted or sealed with an oil-based sealer every two years.

Research on the use of CCA-treated lumber in gardens has shown that treatment chemicals do not affect the growth or safety of home-grown vegetables.

How can I reduce exposure to wood treatment chemicals?

- Avoid using lumber that has been treated with creosote or PCP in any home construction or landscaping project.
- Do not use treated lumber for any indoor home construction project. Wood treatment chemicals are too toxic for interior uses.
- Seal decks that are constructed with treated lumber with an oil-based sealer every two years. This action is consistent with the wood manufacturer's recommendations for maintenance of CCA-treated wood. Proper sealants will keep the wood from cracking and splintering while reducing the risk of exposure to CCA residues.
- Do not allow children to play under decks that are made with treated lumber. Ensure that children playing on or around structures made with treated lumber wash their hands before eating. Pets that regularly sleep or live under decks could be exposed to arsenic and may carry it into your home.
- Sawing or sanding treated wood is hazardous and requires special precautions. Perform the work outdoors on a dropcloth so the sawdust can be collected and discarded. Wear a dust mask if there will be frequent or prolonged exposure to sawdust. Wash hands and clothing immediately after completing the work.
- Do not use treated wood for countertops, cutting boards, picnic tables, beehives or for other applications where treatment chemicals may come into contact with food.
- Never burn treated wood. Burning releases toxic fumes into the air and has been associated with serious arsenic poisoning.

What should I do if I suspect a problem?

Taking steps such as those outlined above can reduce your family's exposure to toxic wood preservatives. Ask your contractor or retail supplier for more information about the specific materials you are considering using.

For more information

- Contact the Wisconsin Division of Public Health, Bureau of Environmental Health, PO Box 2659, Madison, WI 53701-2659, (608) 266-1120; or
- Visit the department's website, <http://www.dhfs.state.wi.us/eh>



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