

Copper Chrome Arsenate (CCA) Treated Wood



Delivering a Healthy WA

What can I do to decrease my child's exposure to arsenic?

Trace amounts of arsenic are commonly found in the environment, in food and in drinking water.

Regular exposure to certain uses of CCA treated timber may add an additional level of exposure to arsenic. Children can be exposed to arsenic from playground equipment primarily through hand-to-mouth contact when they touch the wood and then place their hands in their mouths.

International research looking at additional arsenic exposure in children who play on CCA treated playgrounds found it contributed between 2-8% of their daily tolerable intake set by the World Health Organisation and the acceptable daily intake set by the Department of Health and Ageing.

Even when this exposure is added to the estimated average arsenic intake from food, drinking water and soil, a child is still consuming less than a third of the tolerable amount (the amount that can be ingested which has no appreciable health risk for a lifetime exposure). Basic hygiene practices, such as washing hands after playing on play equipment and putting food on to plates/napkins rather than directly on the picnic bench ensures that exposure to arsenic through contact with CCA structures is kept at a level that has negligible impact on health.

The enHealth Council of Australia notes that whilst the intentions of APVMA in eliminating a source of environmental contamination are acknowledged, there is no evidence that existing CCA treated timber structures in parks and throughout the community pose a risk to public health, or that replacement or removal of these existing structures is warranted.

Will painting arsenic treated timber reduce the risk of arsenic leaching to the surface?

Information is limited on the possible benefits of painting treated timber to reduce possible risks. Some scientific studies indicate that certain penetrating coatings, such as oil-based semi-transparent stains, when used on a regular basis may reduce the potential for CCA exposure. However, the coating may need to be repeated every 6-12 months to be fully protective.



Can the arsenic leach from the timber into my vegetable patch?

Arsenic may leach from treated timber into soil, although this is variable depending on a number of factors and is generally contained to the immediate area surrounding the wood. Uptake of arsenic by plants is generally limited due to the distance from the source, the low amount in the soil and limited uptake by vegetables generally.

A review conducted by the APVMA concluded that the affected zone of soil is very limited and plants growing near CCA treated posts did not have elevated levels of arsenic.

As an additional precaution, a plastic liner could be placed between the soil and the timber.

Further Information

Toxicology, Department of Health

Telephone: (08) 9388 4997

Facsimile: (08) 9388 4902

or

Australian Pesticides and Veterinary Medicines Authority

Telephone: (02) 6210 4700

<http://www.apvma.gov.au/index.asp>

or

enHealth Council

Telephone: (03) 9603 8338

http://enhealth.nphp.gov.au/con_enh.htm



Government of **Western Australia**
Department of **Health**

Produced by Environmental Health Directorate

© Department of Health 2009

What is Copper Chrome Arsenate?

Copper Chrome Arsenate (CCA) consists of three active constituents—copper, chromium and arsenic—which are used for wood preservation. CCA protects wood from dry rot, fungi, mould, termites and other pests that can threaten the integrity of wood products.

Where is Copper Chrome Arsenate found?

CCA treated pine has been the most common type of treated timber in Australia and is mainly used to preserve wood intended for outdoor use. It can be found in decks, garden furniture, picnic tables, playground equipment, landscaping timbers, retaining walls, fences, gazebos and patios.



Is it poisonous?

The Australian Pesticides and Veterinary Medicines Authority (APVMA), the Commonwealth Authority responsible for the registration of pesticide products, completed a review of CCA. The APVMA concluded that “From its assessment of the information available, it had insufficient information to be satisfied that the continuing use of CCA is safe for timber used in structures with which the general community (and particularly children) are likely to come into frequent and intimate contact”.

The APVMA has determined that CCA should no longer be used for new garden furniture, picnic tables, exterior seating, children’s play equipment, patio, domestic decking and handrails.

There is no requirement to remove existing CCA structures. However, you cannot use CCA treated timber to repair existing structures. Structures should be repaired with alternative treated timber or removed.



How can I tell if a timber structure has been manufactured from material treated with arsenic based products?

Wood that is freshly treated with CCA has a greenish tinge which fades over time. However, some other wood treatments may also have a green colour. Generally, unless your deck has been constructed with hardwood or cedar, it is possible that the deck was constructed with CCA treated wood.



Restrictions on treated wood use

- ✗ **Do not** make baby toys or furniture from treated wood that may be chewed or sucked on by infants e.g. playpens, cots and wooden blocks.
- ✗ **Do not** prepare food on treated wood or store in treated wood containers.
- ✗ **Do not** make food utensils from treated wood.
- ✗ **Do not** use to make containers for storing drinking water.
- ✗ **Do not** use in beehives where it may come in contact with honey.
- ✗ **Do not** use for firewood.

How can you dispose of treated wood?

- ✓ **Do** dispose of CCA treated wood with your ordinary rubbish or by burying it or by taking it to your local tip.
- ✗ **Do not** burn treated or painted wood. The burning liberates the chemicals tightly bound to the wood into the smoke. The ashes may also contain residual chemicals.

Handling Precautions

- ✓ **Do** dispose of treated wood by ordinary rubbish collection or burial.
- ✓ **Do** wear a dust mask when sawing and machining treated wood.
- ✓ **Do** perform these operations outdoors, whenever possible, to avoid indoor accumulation of contaminated sawdust.
- ✓ **Do** wear goggles to protect eyes from flying particles when machining treated wood.
- ✗ **Do not** burn treated wood in open fires or stoves, fireplaces, or residential boilers because copper, chromium and arsenic will be released and dispersed into the environment through the smoke and ashes.
- ✗ **Avoid** frequent or prolonged inhalation of sawdust from treated wood.

