

TOPIC: Pressure Treated Lumber • CCA - treated lumber and parks/recreation

TREND/ISSUE

- Concerns still are being brought forward about public exposure to chromated copper arsenic (CCA).
- Public health departments across Ontario are seeking information and actions to limit the exposure to CCA-treated lumber in many environments including parks/recreation.

BACKGROUND

- Chromated copper arsenate (CCA) is a preservative containing the elements chromium, copper and arsenic. CCA is used in pressure treated wood to protect against damage from weathering, insects and fungi.
- CCA wood is primarily used for outdoor structures, such as construction lumber and timbers, utility and construction poles, marine timbers and pilings, and fences. CCA wood is often found in the residential setting, such as in play-structures, decks, picnic tables, landscaping timbers, residential fencing, patios and walkways/boardwalks.
- Fresh CCA wood, if not coated, has a greenish tint, which fades over time. Generally, if a deck has not been constructed with redwood or cedar then it was most likely constructed with CCA wood.
- Recently, public health advocates have raised questions regarding the methodology and toxicology employed in the earlier assessments. The US EPA is currently reassessing CCA as part of its ongoing re-registration program for older pesticides. There are currently many unanswered questions regarding CCA wood. These include:
 - How long can pressure treated woods leach CCA?
 - Does exposure risk decrease over time?
 - How effective are sealants?
- Arsenic is a known human carcinogen and can be poisonous at high doses. Health Canada and the US EPA have put forward basic precautions regarding CCA wood use

and handling. These precautions apply to all individuals, but children exposure may be of greatest concern since they are more likely to come into direct contact with CCA wood in play structures, decks and fences and have greater hand-to-mouth activity.

- On February 12, 2002, the US EPA announced a voluntary decision by industry to move consumer use of treated lumber products away from pressure-treated woods that contain arsenic to new alternative wood preservatives.
- The Canadian PMRA released the same statement.

LINKS

This issue affects:

- Association of Municipalities of Ontario (AMO)
- Ontario Parks Association
- Parks and Recreation Ontario
- Day care providers

IMPACT/IMPLICATIONS

- The ongoing reassessment by the US EPA and Health Canada will more accurately determine the risk to the public from exposure to CCA wood, and be able to more adequately answer the question of exposure from existing structures. Until that information becomes available late in 2002 Peel Health feels that the known risk does not warrant replacement of existing structures made with CCA treated wood.
- Some studies suggest that applying certain penetrating coatings (e.g. oil based, semi-transparent stains) on a regular basis (i.e. once every year or two depending upon wear and weathering) may reduce the migration of wood preservative chemicals from CCA wood. Many health units support coating CCA wood structures as a precaution against leaching of chemicals from the wood.
- Some non-penetrating or 'film-forming' stains (e.g., latex semitransparent, latex opaque, and oil-based opaque .../2

stains) are not recommended on outdoor surfaces such as decks and fences since subsequent peeling and flaking may impact the durability of the wood and result in exposure to preservatives in the wood.

Hints:

- 1 - Only purchase CCA wood that is visibly clean and free of excess surface residues
 - 2 - Wear gloves and long sleeves when handling the treated wood
 - 3 - Wear a dust mask, eye protection, gloves, and long sleeves when sawing, sanding, shaping, or otherwise machining treated wood to avoid skin contact or inhalation of sawdust
 - 4 - Wherever possible, work with treated wood outdoors
 - 5 - Wash hands and other exposed skin after contact, and before eating, or drinking.
 - 6 - Wash clothes before wearing them again. Wash separately from other clothing.
 - 7 - After construction, all end cuts, sawdust, and construction debris should be cleaned up and disposed of in accordance with local regulations
 - 8 - Do not use CCA wood for woodchips or mulch
- CCA wood structures can leach chemicals that may contaminate the immediately surrounding soil. For example, CCA wood decks can contaminate the soil beneath them with arsenic levels above normal background level (Stillwell and

Gorny, 1997). Further studies of soil contamination around CCA wood structures are underway.

- It is recommended that children be prevented from playing underneath CCA wood decks and in the soil around other CCA wood structures. This is considered to be an adequate preventive measure as removal of soil is not justified by the level of health risk.

E-LINKS

The US EPA Office of Pesticides Program. CCA Wood web page:

<http://www.epa.gov/pesticides/citizens/1file.htm>

Health Canada Pest Management Regulatory Agency Fact Sheet on CCA wood:

http://www.hc-sc.gc.ca/pmra-arla/english/pdf/fact/fs_cca-e.pdf

CCA wood consumer safety information web page:

<http://www.ccasafetyinfo.ca/index.html>

CCA wood consumer safety information web page:

<http://www.hc-sc.gc.ca/pmra-arla/english/pubs/rev-e.html>

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