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Case Western Reserve Environmental Health and Safety

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Dec. 2011
Jan. 2012

In this issue:

Safety is our responsibility!

The one thing environmental health and safety professionals hate to hear from faculty and staf in the laboratory is “can’t you take care of that, safety is your job”. Not so: safety in your lab is part of all of our jobs. All supervisors are responsibl

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Bloodborne Pathogens and Needlestick Prevention

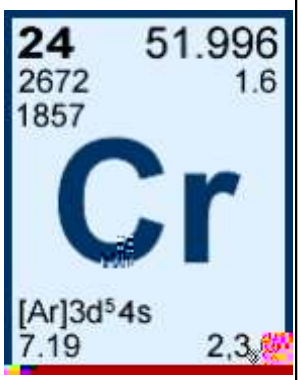
needlestick injuries is the best way to protect yourself from infec-

Yes. Past studies have shown that needlestick injuries are often associated with these activities:

use of needles where safe and effective alterna-tives are

Hexavalent Chromium Cr(VI)

chromium may also be present in fumes generated during the production or welding of chrome



Hexavalent chromium (Cr(VI)) is a toxic form of the element chromium. Hexavalent chromium is rarely found in nature and is generally man-made. Cr(VI) is widely used in pigments, metal finishing (electroplating), wood preservatives and fungicides, and in chemical synthesis as an ingredient and catalyst. Hexavalent chromium may also be present in fumes generated during the production or welding of chrome alloys. Chromium metal is often alloyed with other metals or plated on metal and plastic substrates to improve corrosion resistance and provide protective coatings. The steel industry is a major consumer of chromium metal in the production of stainless steel. Since 2000, there has been a decline in the use of chromates in:

- pigments for paints and coatings
- printing inks
- ceramic glass and construction materials
- Roofing and plastics.

Employers are substituting less toxic inorganic and organic pigments where possible (SRI Consulting, 2008).

Workplace exposure to Cr(VI) may cause the following health effects:

- Lung cancer in workers who breathe airborne Cr(VI);
- Irritation or damage to the nose, throat and lungs (respiratory tract) if Cr(VI) is inhaled; and
- Irritation or damage to the eyes and skin if Cr(VI) contacts these organs.

Workers can inhale airborne Cr(VI) as a dust, fume or mist while, among other things, producing chromate pigments, dyes and powders (such as chromic acid and chromium catalysts); working near chrome electroplating; performing hot work and welding on stainless steel, high chrome alloys and chrome-coated metal; and applying and removing chromate-containing paints and other surface coatings. Skin exposure can occur while handling solutions, coatings and cements containing Cr(VI).

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Holiday Fire Safety

Decorating for the winter holidays is fun but can lead to tragedy if you don't practice fre safety. Below are a few simple fre safety tips for you to keep in mind while you decorate this holiday season.

If using a live Christmas tree

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USE OF EXTENSION CORDS IS PROHIBIT-ED IN THE RESIDENCE

Cr(VI) rule establishes an 8-hour TWA permissible exposure limit (PEL) of 5 g/m³

OSHA has separate standards for Cr(VI) exposures in general industry, shipyards and construction. Most of the requirements are the same for all sectors, with the exception of provisions for regulated areas, hygiene areas and practices, and housekeeping. The standards generally apply to occupational exposures to Cr(VI) in all

Fire Safety, cont.

(Continued from page 5)

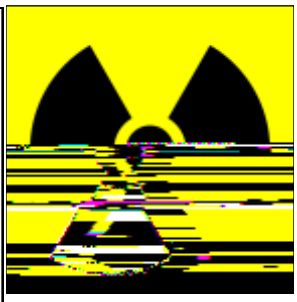
Do not leave lights on unattended.

For more information regarding holiday fire safety visit: http://www.usfa.fema.gov/citizens/focus/holiday.shtm

Everyone from the EHS staff wish all campus associates a safe and happy holiday.

our responsibility!

Radiation surveys must be recorded in units of activity (DPM, or disintegrations per minute), not in count rates, or CPM.



Radiation Safety Office calibrates all Geiger counters once per

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case.edu/ehs -hand column!