

OSHA Training Toolbox Talk: Hazardous Substance Awareness – Arsenic

[Reference: Parts 1910, 1915, and 1926, subpart Z; 1926 subpart Z]

Arsenic is a toxic substance that was widely used in the past in wood preservatives, certain pesticides, smelting and metal processing operations, and some industrial chemicals. Today, its use has been curtailed or eliminated in many applications, but arsenic may still be found in older treated lumber, wood structures, and other materials that were preserved using arsenic-based compounds. As a result, exposure is most likely to occur during maintenance, renovation, repair, or demolition work when arsenic-treated materials are handled, cut, sanded, drilled, or otherwise disturbed.

The primary concern with arsenic exposure is inhalation of airborne dusts or fumes, as well as absorption through the skin. When arsenic enters the body, it can affect the skin, lungs, and other organs. Repeated or prolonged exposure above permissible limits has been associated with serious health effects, including skin irritation, respiratory problems, and an increased risk of certain cancers over time. Brief or incidental contact is generally not the primary concern, but ongoing exposure without proper controls can significantly increase risk.

Arsenic-containing materials may not always be easy to recognize. Treated wood, older structural components, pesticides, and chemical products may appear ordinary until they are worked on. Activities such as cutting, sanding, grinding, or demolition can release arsenic-containing dust into the air, creating a potential inhalation hazard. Dust can also settle on surfaces, tools, and clothing, increasing the chance of skin contact or ingestion if proper hygiene is not followed.

Precautions to reduce exposure include identifying arsenic-containing materials before work begins and following established procedures when those materials are present. Engineering controls such as ventilation and dust suppression can help reduce airborne exposures. Safe work practices, along with wearing gloves and protective clothing, are important to limit skin contact. When required, appropriate respiratory protection must be used. Good hygiene practices, such as washing hands and face before eating, drinking, or leaving the work area, are essential. Contaminated clothing should be handled according to established procedures to prevent bringing arsenic particles home, where they could pose a risk to family members.

If you are working with or around arsenic, or if you see a label or warning sign indicating its presence, remember that merely being near arsenic does not necessarily mean you are overexposed or at imminent risk. Following proper controls, procedures, and safety measures helps ensure exposure remains below OSHA's permissible limits.

If you have any questions or concerns about arsenic hazards or exposure, please direct them to your safety manager, supervisor, or other workplace representative. And please be sure to sign the training certification form to ensure you get credit for attending today's OSHA toolbox talk.

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Company Name: _____

Date: _____

Training led by: _____

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