

Arizona Division of Occupational Safety and Health
Hazard Highlight

WOODWORKING HEALTH HAZARDS

Employees working in the wood products manufacturing industry can be exposed to many health hazards. Employers and employees must be aware of these hazards so as to better protect themselves from long-term illnesses.

The most common types of health hazards found in wood-working employment include the following:

- Noise
- Vibration
- Wood dust (carcinogens)
- Chemical hazards – from exposure to coatings, finishes, adhesives, solvents, etc.

Noise: Noise above 85 decibels can damage some of the structures in the ear, resulting in hearing loss, from which there is no cure. Noise from wood cutting, spray finishing and similar types of operations can exceed these limits.

The best protection against noise is to engineer it out of the work by using machines or processes that include devices that dampen or suppress the noise to acceptable levels. If this is not possible, then it is important to wear appropriate hearing protection such as ear plugs or ear muffs, and to have annual hearing tests.

Vibration: Some woodworking machines or processes produce significant vibration. Excessive or constant vibration can be detrimental to an employee's health, resulting in problems such as back pain, carpal tunnel syndrome and vascular problems. The best solution to minimize exposure to vibration is to engineer it out of the machine

or the process. Additionally, administrative controls, such as ensuring adequate rest periods, can be important in minimizing the effects of vibration.

Wood dust: Exposure to wood dust has long been associated with a variety of adverse health effects, including: dermatitis, allergic respiratory effects and cancer. Skin and respiratory systems can become sensitized to wood dust, possibly resulting in a severe allergic reaction, such as asthma.

Other common symptoms associated with wood dust exposure include eye irritation, nasal dryness, prolonged colds and frequent headaches.

Certain species of hardwood, such as oak, mahogany, beech, walnut and ash, have been reported to cause nasal cancer in woodworkers. This is particularly true when exposures are high.

Chemical hazards: Employees in the woodworking industry can be exposed to a variety of chemicals: solvents, lacquers, stains, strippers, paints, etc. Some of these chemicals can have potentially serious health effects if used improperly or if used without taking adequate precautions.

Employees who work with chemicals must have training on the hazards associated with the chemicals. They must also be provided with appropriate personal protective equipment, such as gloves, respirators and safety glasses. In some cases, it may be necessary to conduct air monitoring to determine whether employees need additional respiratory protection.

For more information:

ADOSH
602-542-5795 or 520-628-5478
www.ica.state.az.us/Divisions/osh/index.html