



Company Name: _____ Job Site Location: _____

Date: _____ Start Time: _____ Finish Time: _____ Foreman/Supervisor: _____

Topic 264: Wood Dust (Health Hazards)

Introduction: Wood dust becomes a potential health problem when wood particles from processes such as sanding and cutting become airborne. Breathing these particles may cause allergic respiratory symptoms, mucosal and non-allergic respiratory symptoms, and cancer. Other common symptoms associated with wood dust exposure include eye irritation, nasal dryness and obstruction, prolonged colds, and frequent headaches.



As a general rule, hardwoods (oak, mahogany, beech, walnut, birch, elm, and ash) are more hazardous to human health than softwoods.

- There are exceptions, (e.g. western red cedar, which is softwood), is usually identified as one of the most hazardous to human health.
- The health effects appear to be related to the concentration of tannin and similar compounds in the wood.

Biological Hazards: The health effects associated with wood dust come not only from the wood dust itself but also biological organisms such as mold and fungi which grow on the wood. Hazardous chemicals such as formaldehyde, copper naphthanate, and pentachlorophenol are used in the processing of some woods. A chart of all woods and there health hazards is available.

- There are a number of ways to check the workplace for airborne wood dust. The only way to be certain of excessive levels is to monitor the air for wood dust. Communicate to your supervisor any signs of extreme dust build-ups in the working area.

Work Practices: Local exhaust ventilation and good work practices are important means of controlling wood dust exposure and protecting against health hazards from it. Always wear protective safety glasses or goggles. Wear a dust mask or respirator when needed.

- Dust collection is best accomplished at the source; at the point of operation of the equipment, if feasible. For many pieces of equipment, well-designed ducts and vacuum hoods can collect most of the dust generated before it even reaches the operator.
- Very fine dust that manages to escape the point-of-source collection can be captured from above by general exhaust points located along the ceiling. These control technologies are effective for most equipment, excepting machines that commonly produce the very finest dust or large quantities of dust.
- Keep your shop clean. Good housekeeping extends to periodic hand cleaning of the entire facility.
- Some dust will escape from even the best exhaust system and will eventually accumulate on rafters and other out-of-the- way spots.
- It is extremely important to inspect and clean the exhaust ventilation system on a regular basis to maintain maximum efficiency.



Good practices for work involving wood dust:

- Avoid unnecessary breathing of dust. If certain operations are especially dusty, a dust respirator should be used. When a dust respirator is used, all provisions of the respirator standard must be met. Change filters as often as needed. Clean each day after use.
- Good personal hygiene is important to avoid skin problems. Wash frequently with a mild non-irritating soap. Use gloves where skin abrasion or splinters are likely. In some cases, long sleeves should be worn.
- Wear safety glasses. Safety goggles will protect the eyes during extreme dust conditions.
- Avoid unnecessary blowing or stirring of dust during cleaning operations.
- Vacuum or suction collection devices are always preferable to blowing. HEPA filters can be used.
- Keep cutting tools sharp and in good repair so as to avoid excess friction and burning of the wood.
- Know the chemicals in your workplace. Under the hazard communication standard, workers must be provided with material safety data sheets for hazardous chemicals and must receive training on chemical hazards and safeguards. Wood dust (a *byproduct* rather than a product of wood) is not exempt from the hazard communication standard, as are wood and wood products.
- Know the species of wood with which you are working. If it is an allergenic, be especially alert for possible allergenic problems.



Medical: Report any skin rashes promptly and seek medical attention if they persist. Early detection is important.

- Report any signs of allergy, hay fever, or asthma. These symptoms may be caused by a variety of things in the environment or workplace, and qualified medical opinion is necessary to differentiate the potential source and cause.

Conclusion: Monitor dust levels as often as possible to ensure a safe working environment. Use that dust mask or respirator.

Work Site Review

Work-Site Hazards and Safety Suggestions: _____

Personnel Safety Violations: _____

Material Safety Data Sheets Reviewed: _____ (Name of Chemical)

Employee Signatures:

(My signature attests and verifies my understanding of and agreement to comply with, all company safety policies and regulations, and that I have not suffered, experienced, or sustained any recent job-related injury or illness.)

Foreman/Supervisor's Signature: _____

These guidelines do not supercede local, state, or federal regulations and must not be construed as a substitute for, or legal interpretation of, any OSHA regulations.