



Wood Dust Hazards and Controls

HS98-134C(2-07)

A 5-Minute Safety Training Aid

Wood is used to create products from fine furniture to the home that you live in. While many people may admire the workmanship in these items, how many of us take the time to consider the hazards a worker undergoes to build these products?

Wood is a complex biological and chemical material, which creates a variety of hazards when used to build a product. One hazardous byproduct created when using wooden building materials is wood dust.

Wood dust can cause numerous health problems for the worker. Significant respiratory problems such as asthma, chronic bronchitis, and other respiratory problems caused by allergies, have all been attributed to the exposure to wood dust. Wood dust can also cause dermatitis, hives, as well as lung, gastrointestinal and nasal cancers. Dust from some woods has even been proven to be toxic to the human body.

Wood dust thrown from woodworking machines can cause eye injuries. Eye injuries can also occur when workers wipe the sweat from their foreheads and inadvertently rub wood dust into their eyes.

Wood dust also creates fire and explosion hazards. When wood dust accumulates on woodworking machinery it acts as an insulator trapping in the heat. If enough heat is formed then the wood dust will ignite, causing a fire. If the dust floating in the air is concentrated and is a fine dust then a fire can cause an explosion.



Other hazardous conditions occur when walking or working on surfaces such as floors or stairways that have become covered in wood dust. These floors can become slick and slippery to work or walk on when the wood dust dries out.

Using a few precautions can prevent hazards associated with wood dust. To prevent these hazards:

- Vacuum wood dust when cleaning. Using compressed air to clean will only stir up more dust.
- Wear dust respirators when working with high levels of dust and when cleaning ventilation systems.
- Wear adequate personal protective equipment when operating woodworking machinery. Even if face shields are worn, wear safety glasses for additional protection.
- For best results, remove wood dust with local and point of generation exhaust ventilation systems to prevent fire and respiratory hazards.

Remember:

- Maintain adequate duct velocity to prevent system blockage.
- Check duct velocity pressure at regular intervals.
- Regularly clean and maintain ventilation systems.
- Regularly check belts on the drive units of exhaust fans for slippage or breaks.
- Lubricate bearings to prevent overheating that can cause dust fires and explosions.



Wood dust may not look like much of a danger at first, but if ignored, it can be as deadly as any other hazard. Be aware of your work environment. Don't be in such a hurry that you can't take a few moments to clean up a little dust for your safety and that of your fellow workers.