FORMALDEHYDE AT THE WORKPLACE

Formaldehyde is an organic chemical that is often a part of resin glue. One use of this glue is in the production of medium density fiberboard (MDF), a commonly used wood product made with both hardwood and softwood fibers.

When MDF is cut, it emits formaldehyde gas into the air. This puts those who work with MDF, like carpenters, at risk for formaldehyde exposure.

Formaldehyde can also be found in preservatives in medical labs, particle board, permanent press fabrics, industrial fungicides, and disinfectants. People who work with these materials are also at risk for formaldehyde exposure.

HOW CAN FORMALDEHYDE AFFECT MY HEALTH?

SHORT-TERM EXPOSURE

IRRITATION
Short-term exposure can cause irritation of the eyes, nose, throat, and skin that can cause or make coughing, wheezing, and nausea worse.

ALLERGIC REACTIONS
Repeated exposure can cause bronchitis, skin allergies, and asthma-like symptoms depending on the individual’s sensitivity to formaldehyde.

CANCER
Uncontrolled exposure can cause leukemia and cancers of the nose, throat, and sinuses. Formaldehyde is classified as a Class 1 carcinogenic by the International Agency for Research on Cancer (IARC).

LONG-TERM EXPOSURE

WOOD DUST
In addition to formaldehyde gas, wood dust is released into the air when MDF is broken or cut. When inhaled, wood dust can cause health problems similar to formaldehyde, like irritation, respiratory diseases, and cancer.
HOW CAN EXPOSURE BE PREVENTED?

**EMPLOYERS SHOULD:**

**IMPLEMENT WORKPLACE CONTROLS:** Effective ventilation, safe tools, safe environmental conditions that reduce wood dust and formaldehyde gas release, and work hours limit exposure.

** PROVIDE PERSONAL PROTECTIVE EQUIPMENT:** Respirators and eye masks. Showers and eyewash stations should also be available.

**SAFER PRACTICES:** Processes that produce less wood dust than others, and on how to use equipment and safety gear.

**PROVIDE SAFER MATERIALS:** Solid woods or MDF with no or low levels of formaldehyde should be used if possible.

**LABEL MATERIALS:** Materials capable of releasing formaldehyde into the air at concentrations at or above 0.1 ppm or solutions composed of greater than 0.1% formaldehyde.

WHAT YOU CAN DO:

Keep your work area clean, practice good hygiene, and use personal protective equipment. Stop smoking! Smoking can further aggravate symptoms caused by formaldehyde exposure.

WHAT IF I HAVE ALREADY BEEN EXPOSED?

**MEDICAL ATTENTION**

If you believe you have been exposed to formaldehyde, get fresh air and flush eyes and skin if exposed. Seek medical attention, and notify your doctor if you have a history of asthma or allergies.

Formaldehyde-exposed workers should be screened by a physician with expertise in occupational diseases to detect any health conditions early. Depending on your exposure level, your doctor may monitor you for bronchitis and exacerbation of asthma.

The worker exposure limit for formaldehyde set by the Occupational Safety and Health Administration (OSHA) is 0.75 ppm, averaged over an 8 hour work shift. However, symptoms of exposure can appear at concentrations as low as 0.1 ppm.

To learn more, contact us at **888-702-0630** or visit us at [www.mountsinai.org/selikoff](http://www.mountsinai.org/selikoff)