

Health Risks of MDF

Medium density [fiberboard](#) (MDF) is a manufactured wood product used in a variety of industries. The manufacturing process includes some chemicals that may be hazardous to humans, leading to concerns about the health risks of MDF. There are two primary concerns: exposure to the chemicals used to make it and wood dust. By being aware of the potential risks, people can protect themselves when they work with it.

To make MDF, a company shreds wood, softens it, and turns it into a fine powder. The powder is combined with resins and other bonding agents and compacted into solid boards. A number of different woods can be used to make MDF, and the material is also sometimes treated to be fire, water, or stain resistant. Many lumberyards sell varying types and widths for an assortment of uses.

Toxic chemicals are one of the major health risks of MDF. The chemical of most concern is [formaldehyde](#), which can aggravate [asthma](#) and other lung conditions, irritate mucous membranes, and cause contact [dermatitis](#). Studies on this chemical also suggest that it is a likely carcinogen, and it should be generally avoided. During the manufacturing process, personnel should protect themselves with respirators and adequate clothing. When cutting or working with MDF, nose, mouth, and eye protection should be worn. Finished products may also offgas, raising concerns about its use in the home. Fiberboard should never be burned, except in adequately ventilated facilities.

The second issue with MDF is wood dust, which is especially problematic for the airway, and it may be a possible carcinogen as well. Protective gear will reduce this health risk greatly, and finished products rarely pose a dust risk, since they should be properly sealed. MDF should always be cut and processed in well ventilated locations to reduce the risk of inhaling the dust.

The health risks of MDF should certainly be taken into consideration when the material is used, but they should not rule out its use altogether. Especially for outdoor use, MDF can be versatile, sturdy, and perfectly safe. The risks due to potential off gassing should be a source of potential concern, however, especially to parents, since children are very sensitive to respiratory irritants. Employers also have a responsibility to ensure that their employees are protected in the work equipment.