





What You Should Know about Formaldehyde

What is formaldehyde?

Formaldehyde is a colorless, strong-smelling gas. It is used to make building materials and household products. Formaldehyde is used to make walls, cabinets, and furniture.

What happens when someone breathes too much formaldehyde?

Formaldehyde can make you feel sick if you breathe a lot of it. People can have symptoms such as:

- sore throat
- cough
- scratchy eyes
- nosebleeds

Scientists use the words "exposed" or "exposure" to talk about how people come in contact with a substance, such as formaldehyde. Some people are more sensitive than others, so an exposure that causes no problems for some people can make other people sick or uncomfortable. Some of these symptoms also happen with other upper respiratory illnesses, such as colds/flu and seasonal allergies, so if you have these symptoms we recommend that you see a doctor or another medical professional.

In general -

- If you are more sensitive to formaldehyde and are exposed to more of it for a longer time, you are more likely to have symptoms.
- If you are exposed to less formaldehyde for a shorter time, you are less likely to have symptoms, especially if you are not sensitive to formaldehyde.

Formaldehyde is known to cause cancer. The cancer of greatest concern is cancer of the nose and throat. Scientific research has not yet shown that a certain level of formaldehyde exposure causes cancer. However, the higher the level and the longer the exposure, the greater the chance of getting cancer. Exposure to formaldehyde might increase the chance of getting cancer even at levels too low to cause symptoms.

Sources of formaldehyde

Formaldehyde is a common chemical that can be emitted from a number of products in the home. Smoking, pressed wood, and particle board have all been shown to be sources of formaldehyde. Higher formaldehyde levels are usually found in newer homes or homes with new construction. The levels decrease over time. Formaldehyde levels also increase with increases in temperature and humidity.







| 1000 ppb | High | If your reading falls into the higher range , you need to place a high priority on lowering your exposure to formaldehyde. This is especially important if family members are elderly, young children, or have health conditions such as asthma. |
|-------------|--------|---|
| 100 ppb | Medium | If your reading falls into the intermediate range , your risk of irritation from formaldehyde exposure is lower, but it is still |
| rr - | | important to take steps to reduce your formaldehyde exposure. This |
| | | is especially important if family members are elderly, young |
| | | children, or have health conditions such as asthma. |
| 10 ppb | Low | If your reading falls into the lower range, these levels are found on |
| | | the streets of many cities and in many buildings. The risk of health |
| | | problems at these levels is low. |

Note: Levels are expressed at parts per billion (ppb). To convert to parts per million (ppm), divide by 1000.

In addition to the formaldehyde level, you should think about other factors.

Age. Formaldehyde exposure is a special concern for children and the elderly. Children may become sensitive to formaldehyde more easily, which may make it more likely they will become sick. Elderly people may be less able to tolerate high formaldehyde exposures. If children or elderly people are in your home, it is important to reduce their exposure to formaldehyde.

Health conditions. Formaldehyde irritates the airways. People with asthma, bronchitis, or other breathing conditions are especially sensitive to formaldehyde. People with other chronic diseases also may be less able to tolerate formaldehyde exposure. Pregnant women and their unborn children may not be at higher risk, but they should be careful about exposure. If anyone in your home has any of these conditions, it is important to reduce their exposure to formaldehyde.

How can I improve the air quality in my home?

To protect yourself from formaldehyde exposure:

- Do not smoke, and especially do not smoke indoors.
- Open windows as much as possible to let in fresh air.
- Try to keep the temperature inside homes at the lowest comfortable setting.
- Run the air conditioner or dehumidifier to control mold.
- Also, spend as much time outdoors in fresh air as possible. This is especially important for families with children, elderly people or those with chronic diseases such as asthma.







To control mold:

- Fix water leaks to help keep mold away.
- Clean away any mold you see or smell with detergent and water.

In addition:

- Be sure to bring in fresh air when you use cleaning products and insecticides. To do this, open windows or run the air conditioner. Be sure the air conditioner is bringing in air from outside.
- If you smell gas, do not light any flames or sparks and leave the building right away.
- If you have health concerns, see a doctor or another medical professional.