

1,2-DCA in Indoor Air

Indoor air samples taken by Hill Air Force Base detected 1,2-DCA in your home. . .

What is 1,2-dichloroethane (DCA)?

1,2-Dichloroethane, also called ethylene dichloride, is a manufactured chemical that is not found naturally in the environment. It is a clear liquid and has a pleasant smell and sweet taste.

The most common use of 1,2-dichloroethane is in the production of vinyl chloride, which is used to make a variety of plastic and vinyl products, including but not limited to; polyvinyl chloride (PVC) pipes, furniture and automobile upholstery, wall coverings, house wares, molded plastic decorations and automobile parts.

How might I be exposed to 1,2-DCA?

When a chemical is released into the environment it does not always lead to an exposure. You can be exposed through skin contact, by breathing, eating, or drinking the substance. If you are exposed to 1,2-DCA, many factors determine whether you will become sick. These factors include the dose (how much), the duration (how long), and (the source) how you came into contact with it. All people respond to chemical exposures differently.

A groundwater plume is a typical source of 1,2-DCA exposure. However, 1,2-DCA exposure may also be associated with off-gassing from indoor sources such as molded plastic decorations and household chemicals.

How can 1,2-DCA affect my health?

Breathing high concentrations of 1,2-DCA will first affect the central nervous system. Early symptoms can include headache, dizziness, weakness, nausea, vomiting and stomach pain. Long term exposure to 1,2-DCA can lead to damage of the liver, kidneys and lungs and may cause cancer. Children, pregnant women and the elderly are especially susceptible to the adverse health effects related to 1,2-DCA exposure.

What can I do to reduce my exposure to 1,2-DCA?

- Be aware of indoor sources of 1,2-DCA in your home, such as molded plastic decorations. These types of decorations look either ceramic or wooden, are lightweight and sound like plastic (rather than glass or ceramic) when tapped. Remove these products from your home when possible.

Although all items tested thus far have these general characteristics in common, it is important to note that other household items may be identified in the future as off-gassing 1,2-DCA. Further studies are recommended.

- Read manufacturer labels when purchasing new items and be cautious of items manufactured in China.
- Ventilate your home. Concentrations will be higher in homes that are not well ventilated.
- Do not store chemicals (including solvents, paints, pigments and dyes) in attached garages or in your home.



For Additional Information Contact:
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