

Household cleaning products like detergents, cleaning compounds, polishes and disinfectants can contain harmful ingredients, including volatile organic compounds, or VOCs. Exposure to VOCs in cleaning products has been linked to an increased risk of asthma and other respiratory problems, especially for vulnerable groups like young children, professional cleaners and those with pre-existing heart or lung conditions.

What Are VOCs? VOCs are organic chemicals that contain carbon and vaporize (become a gas) at room temperature, releasing gas into the air we breathe. Cleaning products can contain hundreds of VOCs that are used to enhance their effectiveness. Concentrations of VOCs are consistently higher indoors (up to 10 times higher) than outdoors, making them a major contributor to indoor air pollution. They can linger indoors for hours, days or even months.

How Are VOCs Harmful to Health? VOCs can irritate the eyes, nose and throat and cause headaches, nausea and respiratory problems. In sensitive individuals, VOCs can also trigger inflammation in the airways, worsening asthma symptoms. Long-term exposure to some VOCs has been linked to a range of serious health problems, including reproductive issues, nervous system damage, cancer and the development of certain lung diseases like asthma.

How to Know if Your Cleaning Products Contain VOCs? Product labels may not disclose all ingredients, so it can be difficult to know if harmful VOCs are present. Labels that contain signal words like: “POISON,” “DANGER,” or “WARNING” indicate they are toxic to humans and animals. Products labeled with “CAUTION” may be somewhat less harmful. Fragrance-free options may have lower levels of VOCs.

Myth: Clean = strong scent **Reality:** Clean doesn't have a scent. Fragrance is created using hundreds of different chemicals, many of which can be hazardous even at low levels. Fragrance chemicals can be toxic to the neurological, respiratory, immune and endocrine systems. Even “natural” scents contain high levels of VOCs and harmful chemicals. Fragrance-free products are better for your health, avoiding harmful chemicals.

How do you Limit Exposure to VOCs from Cleaning Products? The best way to eliminate exposure is to stop using products that contain VOCs. Here's how:

- Read product labels and avoid products with signal words like “POISON,” “DANGER” or “WARNING”.
- Look for safer products certified by Safer Choice, Green Seal or EcoLogo programs.
- Use everyday items like vinegar and baking soda that clean without the use of harmful chemicals.

If you must use cleaning products that contain VOCs, you can reduce exposure by taking these steps:

- Always follow product directions.
- Wear protective gear, including gloves and an N-95 mask.
- Ensure good ventilation when using cleaning products: open doors and windows and use exhaust fans to reduce VOC concentration indoors.
- Never combine cleaning products, since some products (like bleach and ammonia) can create toxic, sometimes fatal gases.
- Buy and use only the amount of product you need.
- Store unused products in a well-ventilated area away from main living areas.