Cleaning Products and Work-Related Asthma

Cleaning products are used in all workplaces and can cause or trigger work-related asthma. Employers should make sure the safest products and practices are used in the workplace so that people do not get asthma from work.

What is work-related asthma?

Asthma is a chronic (long-term) lung disease where the flow of air is decreased, making it hard to breathe. Symptoms of asthma include: wheezing, chest tightness, cough, shortness of breath, and difficulty breathing.

Asthma is considered work-related when it is caused or made worse by something at work. Even small exposures to certain substances can cause or trigger asthma. Symptoms may start right after you breathe in the substance or may start hours after leaving work. Sometimes a person can suddenly develop work-related asthma from chemicals they have worked with for years.

Work-related asthma in California

The Work-Related Asthma Prevention Program tracks information about workers with asthma in California, and helps workers avoid getting asthma from their job.

The program has found that nearly 10% of all work-related asthma cases were caused by exposure to cleaning products. Most of these cases had new asthma that started only after they began work — the exposures caused their asthma. About one in five people (almost 20%) used cleaning products directly, such as janitors. The other 80% of workers attributed their asthma symptoms to cleaning products used nearby. Many workplaces, like schools, hospitals, and restaurants are places where everyone, including children, can be affected by cleaning products.

Case Report — Bystander Exposure

A 37-year-old woman taught life skills to disabled people. Disinfectants and pine oil cleaners were used at her workplace. These chemicals should have been diluted with water, but were used full strength. Before this job she never had breathing problems; now she takes 5 different asthma medications and has constant breathing problems. She is sensitive to all kinds of chemicals and her doctor told her to avoid them. She was at this job less than 3 years.

Case Report — High School Custodian

A 43-year-old high-school custodian started having breathing problems caused by a bathroom disinfectant and a floor stripper. When he was away from the chemicals for a few months, his breathing problems improved. The problems came back once he returned to work. He visited the emergency room several times, was repeatedly told he had bronchitis, and then finally was diagnosed with asthma. About a year after the diagnosis, he had to leave his job because of his breathing problems.
What should I do if I think I might have work-related asthma?

If you have any of the asthma symptoms listed, whatever the cause, see a doctor. If substances at work seem to cause or bother your asthma, let your supervisor know. Your supervisor may send you to see a doctor specializing in work-related health problems. Write down the names of the products you work with or that are used in your work area. If you can, bring in the Material Safety Data Sheets (MSDSs) to show the doctor. The MSDS lists the product ingredients and health effects. Employers must have an MSDS for each product. Tell the doctor when your symptoms have occurred.

Work-related asthma can be serious and can affect people even while they are not at work. The earlier you stop the exposure, the more your asthma will improve. If something at work is causing your asthma, there may be a safer product to use. Doctors can treat asthma with medicine, but to prevent asthma it’s best to use a safer product.

How can asthma from cleaning products be prevented?

1. Use safer products
Safer products are available. For example, Green Seal GS-37 certified products do not contain ingredients that are known to cause asthma. Safer disinfectants can be found by looking for the Environmental Protection Agency’s Design for the Environment label. Using safer products protects workers and others in these work settings.

2. Use safer work methods
NEVER mix cleaning products together.
NEVER use a cleaner at full strength when the instructions say to dilute it.
DON’T disinfect too much. Disinfect only in areas where it is necessary or required.
ALWAYS:
• Work with as much ventilation as possible, Open windows and doors if needed.
• Avoid using spray products and aerosols. Instead, pour cleaner onto a cloth to wipe on the surface. Microfiber cloths are best because less cleaning chemical is required.
• Use personal protective equipment such as goggles and gloves. Wear a respirator if your employer says one is necessary. CAUTION: dust masks will NOT prevent these chemicals from entering your lungs.
• Read product warning labels and MSDSs.

For more information, call the Work-Related Asthma Prevention Program in California: 1-800-970-6680 or go to www.cdph.ca.gov/wrapp. CA Relay Service: 711. To obtain a copy of this document in an alternate format, please contact us at (510) 620-5757. Allow at least 10 days to coordinate alternate format services.

Additional Resources

Purchase safer cleaning chemicals and disinfectants:
(www.greenseal.org/FindGreenSealProductsAndServices.aspx) — Search for GS-37, GS-52, and GS-53 Green Seal certified products
(https://tinyurl.com/y7n2oq2d) — Look for UL 2759 certified products
(www.epa.gov/pesticides/regulating/labels/design-dfe-pilot.html) — Look for List of Authorized DfE Products

Safer cleaning and disinfecting fact sheets and guidelines:
(www.informedgreensolutions.org)