

# Environmental Asthma Triggers: Indoor Air Quality

Asthma symptoms like coughing and wheezing can be triggered by tobacco smoke, animal dander, and gas stoves. Some of these triggers can increase a person's chance of developing asthma.

**Addressing multiple triggers at the same time is the best way to improve asthma.**

## These things can make it hard to breathe.

### CIGARETTES AND E-CIGARETTES

- ▶ Children exposed to tobacco smoke *in utero* or in early childhood are 10 times more likely to develop asthma.
- ▶ All types of e-cigarettes are harmful. Exposure to e-cigarettes increases risks of asthma related symptoms
- ▶ Vaping and smoking damage the lung cells that help fight disease.

### ANIMAL DANDER

- ▶ Dander is in the skin flakes, hair, waste, and saliva of furry animals.
- ▶ It floats in the air and is often found on bedding, walls, floors, furniture, and clothing.

### DUST MITES

- ▶ Dust mites are found in every home and are too small to see.
- ▶ Their waste leads to allergic reactions in many people.

### HOUSEHOLD CHEMICAL FUMES

- ▶ Formaldehyde is found in nail polish, cleaning products, air fresheners, and many other household items.
- ▶ When inhaled, it causes headaches and watery eyes and worsens asthma.

### UNVENTED GAS STOVES

- ▶ Nitrogen dioxide builds up in homes when stoves or other appliances are not well ventilated.
- ▶ Exposure can make asthma worse.
- ▶ Long-term exposure reduces lung function for ALL people.

## Here are steps you can take to improve indoor air quality.



- ▶ **DON'T SMOKE.** Don't allow smoking or vaping in your car or house.
- ▶ **EDUCATE.** Talk to family members, especially children, teens, and pregnant women, about the harmful effects of smoking and vaping.



- ▶ **GIVE PETS SPACE.** Don't sleep with your pets. Make "pet free" areas in your home.
- ▶ **WASH, DRY, AND CLEAN.** Regularly clean bedding. Brush pets and clean cages and litterboxes outside.
- ▶ **FILTER OUT ALLERGENS.** Use a HEPA filter or air purifier to remove animal allergens from the air.



- ▶ **WET CLEAN.** Wet clean floors and any surface where dust collects.
- ▶ **CHANGE BEDDING.** Wash and dry bedding weekly.
- ▶ **VACUUM.** For carpet and furniture, use a vacuum with a High Efficiency Particulate Air (HEPA) filter.



- ▶ **NO SCENT IS A GOOD SCENT.** Avoid air fresheners, plug-ins, and scented candles.
- ▶ **BREATHE FREE.** Use fragrance-free household products.
- ▶ **GIVE THEM SOME AIR.** If you must use products with chemical irritants, open windows and doors to ventilate.



- ▶ **VENT TO THE OUTSIDE.** Make sure exhaust fans in kitchen vent to the outdoors.
- ▶ **USE SAFE HEAT.** Avoid using stoves, kerosene heaters, and other unvented sources to heat the home.