Air Pollution

What Do I Need to Know About Air Pollution?

The United States Environmental Protection Agency (EPA) defines air pollution as "any visible or invisible particle or gas found in the air that is not part of the natural composition of air."

Air pollution comes from many different sources—some are man-made and some are naturally occurring. Air pollution includes gases, smoke from fires, volcanic ash and dust particles.

Research shows that air pollution can worsen asthma symptoms. A study of young campers with moderate to severe asthma showed they were 40 percent more likely to have acute asthma episodes on high pollution summer days than on days with average pollution levels.

Another study found that older adults were more likely to visit the emergency room for breathing problems when summer air pollution was high.

How Can Air Pollution Affect My Asthma?

Ozone

Ozone, a gas, is one of the most common air pollutants. Ozone contributes to what we typically experience as "smog" or haze. It is most common in cities where there are more cars. It is also more common in the summer when there is more sunlight and low winds.

Ozone triggers asthma because it is very irritating to the lungs and airways and directly related to asthma attacks. It has also caused the need for more medication for asthma. Ozone can reduce lung function. Ozone can make it more difficult to breathe.

Airborne particles

Other forms of air pollution may also trigger your asthma. Small particles in the air that enter the lungs. Airborne particles, found in haze, smoke and air pollution, irritate the lungs and can trigger asthma attacks. People with asthma are at greater risk from breathing in small particles. Long-term and short-term exposure can cause health problems such as asthma.

Are There Special Programs for Monitoring Air Pollution?

Recommended for you

https://www.aafa.org/air-pollution-smog-asthma/
The EPA reports air pollution levels using the Air Quality Index (AQI). AQI reports the level of ozone and other air pollutants. When the AQI is 101 or higher, it is dangerous for people with asthma. You may have to change your activities and medicines. If you have asthma, your symptoms can worsen even when ozone levels are moderate (AQI 51-100).

Many local weather forecasts warn the public about high air pollution days. You can find this information anytime at AirNow.gov.

Throughout the United States, when air pollution is high, we have AirNow Action Days. These forecast high air pollution days with unhealthy air. During Action Days, people with asthma should limit their time outdoors, especially from 11 a.m. to 8 p.m. Stay in a well-ventilated, preferably air-conditioned, building. Most of all, do not exercise outdoors on Action Days.

Should I Worry About Air Pollution in My Work Environment?
Yes, but your concern should be appropriate to the type of environment you work in. If you work with certain chemicals, sprayed substances, powders or known carcinogens or allergens, your risk may be high. Occupational Health and Safety Administration (OSHA), the EPA of the workplace, requires your employer to reduce your risk.

Even if you work in what seems to be a chemical-free environment, you may have exposure to indoor or outdoor air pollution. No matter how old the building is, there may be hidden indoor air pollution. Buildings may have mold spores or cockroaches. These are both powerful allergens. Dust mites are in most indoor areas. New carpet may release toxic fumes. Poorly filtered air systems may spread allergens and irritants. If they are damp, they may actually breed mold spores. If your employer allows tobacco smoking in the building, smoke may pollute the air you breathe.

Should I Be Concerned About Air Pollution in My Home?
Yes. Your home might even be a “high priority public health risk.” This is probably where you are exposed to most allergens and irritants.

Home is where you cook, eat, sleep, bathe, groom, relax and play with pets. Indoor air pollution can pose a health risk.

Your home may have small particles in the air or damaging gases such as carbon monoxide.

Sources of indoor air pollution include:
- Household cleaners and air-freshening sprays or devices
- Fuel-burning heat sources (such as a wood-burning stove)
- Smoke from cooking, candles, fireplaces or tobacco
- Toxic fumes that are “off-gassing” from new products (new furniture and new carpet)
- Attached garages that store cars, motorcycles or lawnmowers (can add carbon monoxide to your air)
- Building and paint products (paints, adhesives, solvents)
- Pesticides (such as treatments for cockroaches and fleas)
- Radon (a gas that comes from the ground and enters a home and can rise to dangerous levels)
- Humidity that allows mold to grow
- Cosmetics, perfumes and hair sprays

To reduce your home’s indoor air pollution:
- Remove or reduce allergens
- Do not smoke tobacco products in your home
- Prevent mold growth by lowering the humidity in your home by using exhaust fans in kitchens, bathrooms and laundry rooms (or open a window if necessary)
- If you live in a humid area, consider getting a dehumidifier for your home
- Increase air flow to give your house better ventilation (open windows, doors)
- Store harmful products in a shed that is not attached to your home
- Avoid using scented candles or odor-hiding fragrances
- Install and check carbon monoxide alarms and radon alarms
- Install CERTIFIED asthma & allergy friendly® air filters (do not use air cleaners that emit ozone)

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