Air Pollution

You can't always see it!

Arkansas Department of Environmental Quality

What are the five major air pollutants?

• Carbon monoxide is an odorless, colorless gas that forms when fuels don't burn completely.

• Nitrogen dioxide forms when fuels burn at high temperatures.

• Ozone forms at ground level when emissions from cars, machinery, power plants, and volatile organic compounds found in products like oil-based paint and paint thinners chemically react in heat and sunlight.

• Sulfur dioxide is a nonflammable, colorless gas produced by factories and plants that burn coal or oil.

• Particulate matter includes microscopic pieces of liquids or solids found in smoke, soot, dust and industrial emissions. The smallest particulate matter cannot be seen.

Why should we be concerned about these pollutants?

Carbon monoxide damages organs and tissues by reducing oxygen in the blood. People with cardiovascular disease are at most risk from exposure. When exposed to higher levels of carbon monoxide, healthy individuals may experience slow reactions, impaired judgment and vision, headaches, dizziness, nausea, and strain on the heart.

Nitrogen dioxide, ozone, sulfur dioxide and particulate matter all aggravate symptoms of respiratory illnesses and can bring on illness for healthy people at higher levels. They can also damage plants and affect crop yields. Most of these pollutants even corrode metals

(continued on back)

and discolor buildings and statues.

How can you know if these pollutants are at dangerous levels?

ADEQ's air chemistry laboratory has air monitoring equipment at several sites in the Little Rock metropolitan area and in northwest Arkansas.

Data gathered by the equipment determines the Air Quality Index (AQI) for these areas. ADEQ posts the AQI each weekday at https://www.adeq.state.ar.us/techsvs/air_chem_lab/.

AirNow (http://www.airnow.gov/) posts the AQI for all states.

What should you do when air pollutant levels are too high?

Limit outdoor activity when levels are high outside.

What can you do to reduce air pollutants?

While the U.S. Environmental Protection Agency and ADEQ work to enforce regulations to make our air safe to breathe, you can do your part to reduce harmful emissions by:

• Turning off appliances and lights when not in use

• Keeping woodstoves and fireplaces well maintained so that they produce less smoke

• Mowing early in the morning or after sundown on high ozone days

• Washing clothes with warm or cold water instead of hot

•Lowering the thermostat on the water heater to 120 degrees F.

•Using paints, stains, and paint strippers that are water-based or low-VOC (volatile organic compounds)

• Walking or biking instead of driving when possible.

• Recycling paper, cardboard, plastic, glass bottles and aluminum cans

Find more suggestions at http://www3.epa.gov/airquality/peg_caa/reduce.html.

Published March 2016 by ADEQ's Community Environmental Solutions Branch.