Six Common Air Pollutants

What Are the Six Common Air Pollutants?

The Clean Air Act requires EPA to set National Ambient Air Quality Standards for six common air pollutants. These commonly found air pollutants (also known as "criteria pollutants") are found all over the United States. They are particle pollution (often referred to as particulate matter), ground-level ozone, carbon monoxide, sulfur oxides, nitrogen oxides, and lead. These pollutants can harm your health and the environment, and cause property damage. Of the six pollutants, particle pollution and ground-level ozone are the most widespread health threats. EPA calls these pollutants "criteria" air pollutants because it regulates them by developing human health-based and/or environmentally-based criteria (science-based guidelines) for setting permissible levels. The set of limits based on human health is called primary standards. Another set of limits intended to prevent environmental and property damage is called secondary standards.

Click on one of the pollutants below for information on sources of the pollutant, why the pollutant is of concern, health and environmental effects, efforts underway to help reduce the pollutant, and other helpful resources.

- Ozone
- Particulate Matter
- Carbon Monoxide
- Nitrogen Oxides
- Sulfur Dioxide
- Lead

Air Pollution Trends

For each of these pollutants, EPA tracks two kinds of air pollution trends: air concentrations based on actual measurements of pollutant concentrations in the ambient (outside) air at selected monitoring sites throughout the country, and emissions based on engineering estimates of the total tons of pollutants released into the air each year. Despite the progress made in the last 30 years, millions of people live in counties with monitor data showing unhealthy air for one or more of the six common air pollutants. For EPA's most recent evaluation of air pollution trends for these six pollutants, click on the following:

- Latest Findings on National Air Quality, Status and Trends

Health Effects Information

Exposure to these pollutants is associated with numerous effects on human health, including increased respiratory symptoms, hospitalization for heart or lung diseases, and even premature death. Try these helpful resources:

- Air Quality Index (AQI)
- Ozone - Good Up High, Bad Nearby
- Ozone and Your Health
- Particle Pollution and Your Health
- Air Quality Guide for Ozone
- Air Quality Guide for Particle Pollution
- Smog - Who Does it Hurt?

State Implementation Plan Status and Information

EPA must designate areas as meeting (attainment) or not meeting (nonattainment) the standard. The Clean Air Act (CAA) requires states to develop a general plan to attain and maintain the NAAQS in all areas of the country and a specific plan to attain the standards for each area designated nonattainment for a NAAQS. These plans, known as State Implementation Plans or SIPs, are developed by state and local air quality management agencies and submitted to EPA for approval. Detailed information about state SIP elements and their status can be found on the State Implementation Plan Status and Information page.