



Air Pollution

The Clean Air Act (CAA) requires the national monitoring of six kinds of pollutants in the outside air. Those six kinds of pollution are sulfur dioxide, carbon monoxide, lead, particles, ozone, and nitrogen oxides. As a part of the CAA, the Environmental Protection Agency set healthy standards for each of these pollutants. Every geographic area in the country is classified as *attainment* (meeting the healthy standard for each of the six pollutants) or *nonattainment* (not meeting the healthy standard). The Kansas City area is defined as the Wyandotte and Johnson counties in Kansas and Jackson, Clay and Platte counties in Missouri. The Kansas City area was considered attainment in 1992.

Where does air pollution come from?

Five of the six kinds of air pollution above come directly out of a stack or pipe. These are called primary pollutants. Sulfur dioxide is the result of a combustion process. It is usually associated with power plants because of the burning of coal containing sulfur. Carbon monoxide is also the result of combustion processes, such as boilers used for heating or vehicle exhaust. Lead was primarily from leaded gasoline. Since lead was removed from gasoline, lead levels have dropped dramatically. Particles are generated from a variety of sources, such as dust from construction, roadways, barren ground areas, or burning. Particles are the only one of the six kinds of pollution that is visible with the naked eye. Nitrogen oxides are also primarily the result of combustion processes. Ozone is a secondary pollutant that comes from pollution (such as car exhaust) + sunlight + heat. Ozone cannot form on windy days.

Where does Kansas City's air pollution come from?

- Over 50% come from vehicles, lawnmowers, small trucks, boats
- Less than 15% comes from industry

What are the effects of air pollution?

- Those with existing respiratory problems suffer more
- The elderly and young are more adversely affected
- Non-attainment areas receive economic disincentives (such as reduced revenue for highways)
- Long-term exposure may have chronic effects on respiratory systems

**For more information, contact the Kansas City, Missouri Health Department
Air Quality Program, 816.513.6314**