

US EPA ARCHIVE DOCUMENT

Ozone and Your Health:

- Ground-level ozone – the primary component of smog – is formed in the atmosphere on hot, sunny days. The main ingredients of ozone come from cars, trucks, power plants, refineries and other large industrial facilities, and some natural sources.
- When inhaled, even at very low levels, ozone can:
 - ▶ cause acute respiratory problems;
 - ▶ aggravate asthma;
 - ▶ cause significant temporary decreases in lung capacity of 15 to over 20 percent in some healthy adults;
 - ▶ cause inflammation of lung tissue;
 - ▶ lead to hospital admissions and emergency room visits [10 to 20 percent of all summertime respiratory-related hospital visits in the northeastern U.S. are associated with ozone pollution]; and
 - ▶ impair the body's immune system defenses, making people more susceptible to respiratory illnesses, including bronchitis and pneumonia
- The Clean Air Act requires communities with air pollution levels that violate – or contribute to the violations of – the National Ambient Air Quality Standard (NAAQS) for ozone to
 - 1) be designated as “nonattainment,”
 - 2) have an EPA-approved plan in place to correct the problem, and
 - 3) attain each standard by specific dates.
- In 1997, after reviewing the scientific data, EPA changed the way it measured ground-level ozone to better protect human health. The new standard measures ozone levels over 8-hour periods.
- In addition to working with areas that are participating in Early Action Compacts, EPA is also working with local governments, States and Tribes that are not participating in an early action compact to develop an implementation strategy for the 8-hour ozone standard.