

Health Effects of Ground Level Ozone (www.epa.gov/glo)

Ozone in the air we breathe can harm our health—typically on hot, sunny days when ozone can reach unhealthy levels. Even relatively low levels of ozone can cause health effects. People with lung disease, children, older adults, and people who are active outdoors may be particularly sensitive to ozone.

Children are at greatest risk from exposure to ozone because their lungs are still developing and they are more likely to be active outdoors when ozone levels are high, which increases their exposure. Children are also more likely than adults to have asthma.

Breathing ozone can trigger a variety of health problems including chest pain, coughing, throat irritation, and congestion. It can worsen bronchitis, emphysema, and asthma. Ground level ozone also can reduce lung function and inflame the linings of the lungs. Repeated exposure may permanently scar lung tissue.

These effects may lead to increased school absences, medication use, visits to doctors and emergency rooms, and hospital admissions. Research also indicates that ozone exposure may increase the risk of premature death from heart or lung disease.

Ozone is particularly likely to reach unhealthy levels on hot sunny days in urban environments. It is a major part of urban smog. Ozone can also be transported long distances by wind. For this reason, even rural areas can experience high ozone levels. And, in some cases, ozone can occur throughout the year in some southern and mountain regions.

The [AIRNow Web site](#) provides daily air quality reports for many areas. These reports use the Air Quality Index (or AQI) to tell you how clean or polluted the air is. EnviroFlash, a free service, can alert you via email when your local air quality is a concern. Sign up at www.enviroflash.info.

For more information on ground-level ozone, health and the environment, visit:

[Ozone and Your Health \(PDF\)](#) This short, colorful pamphlet tells who is at risk from exposure to ozone, what health effects are caused by ozone, and simple measures that can be taken to reduce health risk.

[Ozone: Good Up High, Bad Nearby \(PDF\)](#) Ozone acts as a protective layer high above the earth, but it can be harmful to breathe. This publication provides basic information about ground-level and high-altitude ozone.

[Smog - Who Does it Hurt? \(PDF\)](#) This 8-page booklet provides more detailed information than "Ozone and Your Health" about ozone health effects and how to avoid them.

[Summertime Safety: Keeping Kids Safe from Sun and Smog \(PDF\)](#) This document discusses summer health hazards that pertain particularly to children and includes information about EPA's Air Quality Index and UV Index tools.

[Air Quality Criteria Document for Ozone](#) This comprehensive assessment of scientific data about the health and environmental effects of ground-level ozone is an important part of EPA's review of its ozone standards.