

Environmental Minutes with Dr. Mom  
*Ozone – J. Levin*

Ozone is a gas that occurs both in the Earth's upper atmosphere and at ground level. Ozone can be "good" or "bad" for people's health and for the environment, depending on its location in the atmosphere. The "good" ozone layer, located high in the atmosphere, protects life on Earth from the sun's harmful ultraviolet (UV) rays. The "bad" ozone in the air, closest to the Earth's surface at ground-level, is a pollutant that is a significant health risk, especially for children with asthma. It is a main ingredient of urban smog, but even rural areas are also subject to increased ozone levels.

Motor vehicle exhaust and industrial emissions, gasoline vapors, and chemical solvents as well as natural sources emit the chemical precursors that form ozone. Sunlight and hot weather cause ground-level ozone to form in harmful concentrations in the air. As a result, it is known as a summertime air pollutant.

Too much ground level ozone may cause health problems such as:

- Wheezing, cough, and painful breathing
- Aggravation of asthma and other lung ailments
- Increased susceptibility to pneumonia and bronchitis
- Permanent lung damage with prolonged, intense exposure

What can you do? The choices you make as a consumer at home, while driving, and in other circumstances can help to reduce air pollution. You can also watch for the Air Quality Index (AQI) in your local newspaper, radio station, or news station to see if ozone air pollution is a problem where you live.

Resources\* (accessed 9/23/05):

U.S. Environmental Protection Agency – Ozone <http://www.epa.gov/epahome/ozone.htm>

AIRNOW and the AQI, <http://www.airnow.gov/index.cfm?action=static.aqi>

U.S. Environmental Protection Agency "What you can do to clean the air", <http://www.epa.gov/air/actions/index.html>

\* If the addresses listed above are no longer valid, try searching the internet by the title of the document and/or author