



Chicago metro area earns an F for its air pollution levels

by [Town Travis](#)

May 01, 2008

Despite Chicago's green reputation, it was given a failing grade by the American Lung Association for its levels of short-term particle and ozone pollution.

The ALA issued its State of the Air report Thursday, ranking cities by levels of short-term particle pollution -- usually soot or smog -- year-round particle pollution and ozone.

The report ranked Chicago as one of the nation's most polluted cities on two of the three qualifying lists. For short-term particle pollution, the metropolitan area received an F and ranked 13th worst in the nation - the same as last year.

For ozone pollution, Chicago metro got another F and was ranked 24th most polluted. Last year it was number 20.

"These numbers aren't terribly different," said Brian Urbaszewski, director of environmental health programs at the Respiratory Health Association of Metropolitan Chicago. "We still fail in the Chicago area. We aren't meeting the quality standards."

The ranking is determined by the number of days Chicago failed to meet clean air standards.

"We use the air quality index. We look at the number of days that the area falls into each category and come up with a weighted average," said Janice Nolen, ALA's assistant vice president for national policy and advocacy. "Pollution is generated by a lot of things in a region."

Some of the primary causes of metropolitan pollution include vehicle exhaust, factories, coal-fired power plants and even household items like hairspray and barbecue lighter fluid.

"We still have almost two dozen coal-fired power plants here in Illinois -- some of which date back to the Eisenhower administration," Urbaszewski said.

"Coal-fired plants are one of the biggest sources of particle pollution," Nolen said, and tighter restrictions are needed for those power plants.

“Chicago has taken some huge steps,” Nolen said. “It has definitely taken [environmentalism] to heart.”

“Tighter [federal] tailpipe standards were required for new [diesel] trucks and buses. It's literally 90 percent cleaner than before,” Urbaszewski said. “[But] it's only required on new vehicles, not those that are already out there.”

Chicago's environmental efforts have paid off in some areas.

“Chicago, for short-term exposure, improved a little bit but it did have the same number of days as last year [of particle pollution],” Nolen said.

The city also improved its levels of year-round particle pollution and was therefore removed this year from the “25 most polluted” cities for that category. Last year it was ranked 11th most polluted.

Urbaszewski said Chicago could benefit from stricter standards for older vehicles, construction equipment and railroads. He also pointed to the Clean Car bill in the state legislature to adopt California's emission requirements.

“In terms of ozone pollution, a substantial portion is coming from our tailpipes,” said Jack Darin, director of the Illinois Chapter of the Sierra Club. He said Illinois should adopt the Clean Car bill and join several other states that drive cleaner, and more fuel-efficient, cars.

“If not to prevent asthma attacks and the other negative consequences of smog, it would save us money at the gas pumps,” Darin said.

Despite the city's efforts, it may see a much worse report card next year. The ALA report's data on ozone pollution was produced under old Environmental Protection Agency guidelines. In March 2008, the EPA adopted a stricter standard for ozone, meaning that the State of the Air report isn't entirely correct - pollution levels are actually worse.

“Air pollution is more dangerous than we thought it was a few years ago,” Urbaszewski said. New research from the National Academy of Sciences shows that ozone can be lethal to humans, and is most harmful to people already at risk, such as those with asthma or chronic emphysema.

“The threshold for what is unhealthy air has significantly dropped with the 2008 standard,” Nolen said. “If we use EPA's estimates, we will see more Fs and the Fs will be more severe.”

Related Links

See how your area ranks in the American Lung Association report :

<http://www.stateoftheair.org/>

Plan for the day with daily air quality maps:

<http://www.airnow.org/>

Ozone report from the National Academy of Sciences:

<http://www8.nationalacademies.org/onpinews/newsitem.aspx?RecordID=12198>

What are the pollutants?

Ozone

- Ozone is an invisible gas that is formed most often by a reaction of sunlight and vapors emitted when fuel is burned by cars and trucks, factories, power plants and other sources. Ozone usually peaks in the summer months, from May through October, when temperatures are highest and sunlight is strongest.
- Ozone reacts chemically (“oxidizes”) with internal body tissues with which it comes in contact. Like sunburn irritates the skin, it especially irritates the respiratory tract, and can cause health problems the day you breathe in high levels of smog or after long-term exposure.
- Ozone is particularly dangerous for people with asthma and other chronic lung diseases, senior citizens, children and teens. It can cause asthma attacks, coughing and wheezing, shortness of breath, chest pain when inhaling deeply, and even premature death. Breathing high levels of ozone repeatedly over the long term may also lead to impaired lung function, inflamed lung lining, and increased breathing problems.

Particle Pollution

- Particle pollution is the most dangerous of the widespread outdoor air pollutants. It is typically made up of ash, soot, diesel exhaust, chemicals, metals and aerosols. Particle levels can spike dangerously for hours to weeks on end (short-term) or reach high levels for most of the year (year-round).
- Breathing particle pollution can kill. Breathing particle pollution year-round can shorten life by one to three years. It triggers heart attacks, strokes, irregular heartbeats, and causes lung cancer and premature births. Particle pollution harms people in many ways, even when the particle levels are very low. Particle pollution worsens serious respiratory disorders, including asthma and causes wheezing and coughing.
- In the eastern U.S., many particles come from power plants that burn coal to produce electricity. In the western U.S., particles come from diesel buses, trucks and heavy equipment, agriculture and wood burning.
- The body's natural defenses help to cough or sneeze larger particles out of our bodies. But smaller particles can be so tiny that they can become lodged deep in the lungs and cause major damage, or pass from the lungs into the blood stream and then throughout the rest of the body.

(Source: American Lung Association State of the Air report 2008)