

American Lung Association *State of the Air 2011* Report FAQ

Q. What is the State of the Air report?

A. The State of the Air report found at www.stateoftheair.org provides an annual national air quality “report card,” based on the color-coded Air to assign grades to counties. The 2011 report—the 12th annual release—uses the most recent quality—assured air pollution data, collected in 2007, 2008 and 2009. These data come from official monitors for the two most widespread types of pollution: ozone—or smog—and particle pollution—or soot. Particle pollution data are graded according to both year-round and short-term levels. The report ranks cities and counties based on their scores.

Q. Where did you get the data, and what time period does the report cover?

A. We get the data from the official Environmental Protection Agency (EPA) data base. We do not collect it ourselves. The states and some federal agencies measure air pollution on a daily or other regular basis. The states and local governments report that data to EPA, which maintains the databases for the nation. The EPA releases their air quality data to the public and the American Lung Association translates the monitored data into grades and recommendations for action. The State of the Air: 2011 report is based on 2007, 2008, and 2009 data, which is the most recent, complete and quality-assured data sets for the entire country.

Q. What is ozone smog and what does it do to people?

A. Ozone, sometimes called smog, is a molecule of 3 oxygen atoms that is highly irritating to the lungs. Breathing in ozone is like having sunburn on your lungs. When ozone is inhaled, the body’s lung tissues become inflamed or swollen. Breathing ozone can cause coughing and asthma attacks and send people to the emergency room or hospital. Ozone can even shorten your life.

Q. Where does ozone come from?

A. Ozone is made by a chemical reaction in the air. Two kinds of gases—volatile organic compounds (VOCs) and nitrogen oxides—combine in sunlight and heat to create ozone. VOCs come from burning gasoline or oil or from using petroleum-based products like paint or chemicals. VOCs can also come from the production of gas or oil. Nitrogen oxides come from the burning of fuels like natural gas, diesel or coal.

Q. What is particle pollution and how does it get into people’s lungs?

A. Particles are microscopic solids – like tiny bits of dust or soot – and liquid droplets formed in the air from chemical reactions with other pollutants. The microscopic particles are 30 times smaller than the width of a human hair and can penetrate the body’s natural defense systems. When inhaled, these tiny particles get trapped in the deepest part of the lungs. Some are small enough to pass through the lungs into the blood.

Q. Where does particle pollution come from?

A. Particle pollution comes from many sources. The smallest particles come primarily from burning fuel—which can mean anything from wood fires to exhaust fumes from diesel trucks and buses, to emissions from power plants and factories. Larger particles come primarily from other sources, including windblown dust and soil and agricultural processes.

Q. Who are most at risk by air pollution?

A. Air pollution is more dangerous for some people than others. Infants, children, senior citizens, anyone with lung diseases like asthma, people with heart disease or diabetes, people with low incomes and anyone who works or exercises outdoors are at risk. These groups are more vulnerable to the harm air pollution can have on their bodies.

Q. What can people do to clean up the air and protect themselves from air pollution?

A. Take steps to clean up the air in your community and to protect your family: drive less; walk, bike, carpool or take transit. Don’t burn wood or trash. Make sure your local school system uses clean school buses. Use less electricity. Don’t exercise on high pollution days and don’t ever exercise near

busy freeways. For more information about ozone air pollution, lung health and local air quality control, contact the American Lung Association at 1-800-LUNG-USA, or visit www.lungusa.org.

Q. What is being done by the American Lung Association to clean up the air we breathe?

A. The American Lung Association has been leading the fight for clean air for more than 20 years. Right now we are fighting to defend that the Clean Air Act and EPA's ability to enforce the law from some in Congress who want to weaken it. We have taken legal action to ensure EPA follows the law and sets standards that protect our health. The Lung Association is fighting to make power plants clean up smog-forming emissions, and we have been on the front lines pushing for cleaner diesel fuels and diesel trucks, buses, heavy equipment, locomotives and marine vessels.