## **HEALTH REPORT**

## HEALTH REPORT – Study Links Ozone Pollution to Increased Deaths - 2004-12-07

December 07, 2004

Broadcast: December 08, 2004

I'm Gwen Outen with the VOA Special English Health Report.

American researchers say they have found the strongest link yet between ozone pollution and damage to health. Their findings show that short-term increases in ozone lead to higher death rates in cities.

Ozone is a form of oxygen. The gas is produced naturally in the upper atmosphere to protect the Earth against radiation from the sun. But human activity can also create ozone in the lower atmosphere.

Gasses from vehicles and industry react with sunlight to form this ozone. Levels usually increase in the warmer months. Ozone is the main chemical in smog, the air pollution that is a combination of fog and smoke.

Ozone has been linked to heart and lung problems especially, and to higher rates of hospital cases.

Researchers from Yale University and Johns Hopkins University did the study. Michelle Bell of Yale was the lead investigator. The Journal of the American Medical Association published the results.

The researchers collected information on ninety-five American cities. These contain about forty percent of the national population. The study compared deaths rates to ozone levels between nineteen eighty-seven and two thousand.

The research suggests that even a small increase in ozone, ten parts per thousand million, can lead to higher death rates the following week. The study found that the average daily number of deaths rose point-five percent. Heart and lung related deaths rose point-six percent. And deaths among older people rose point-seven percent.

The researchers controlled for other possible causes of death, such as hot weather or pollution from particle matter. The study linked even a single day of increased ozone to more deaths the following week.

The study is one of the largest ever done of ozone and death rates. The researchers note that ozone is widespread in the United States and many other countries.

The United States Environmental Protection Agency is re-examining its air pollution rules. The current limit for ozone is eighty parts per thousand million for an eight-hour period. Limits were higher in the past. But the researchers say they found an increase in deaths even below the current levels.

They say that if ozone decreased by one-third in those ninety-five cities, almost four thousand lives per year might be saved.

This VOA Special English Health Report was written by Cynthia Kirk. I'm Gwen Outen.