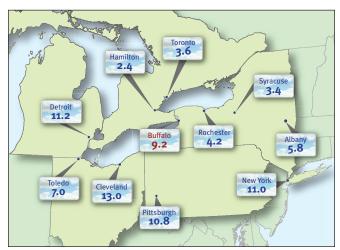


# **Every Breath We Take**

The region's air is cleaner now than in decades past, but certain measures of air quality highlight ongoing problems that affect public health and quality of life. Current state and local initiatives can be broadened, positioning New York to lead national and global air quality efforts.

## Average Annual Days with "Unhealthy" Ozone Levels, 2001-2005



<sup>1</sup>Days where 8-hour average ozone concentration exceeds .084ppm Sources: USEPA, Ontario Ministry of the Environment

#### Annual rates for illnesses affected by air pollution

|                  | Lung Cancer<br>Mortality,<br>per 100,000 | Cardiovascular<br>Disease<br>Mortality,<br>per 100,000 | Child Asthma<br>Hospitalizations<br>(Ages 5-14),<br>per 100,000 |
|------------------|--|--|---|
| Allegany         | 65                                       | 319  | 56  |
| Cattaraugus      | 56                                       | 381  | 61  |
| Chautauqua       | 57                                       | 355  | 29  |
| Erie             | 61                                       | 339  | 126   |
| Genesee          | 60                                       | 331  | 51  |
| Niagara          | 66                                       | 393  | 85  |
| Orleans          | 72                                       | 363  | 5   |
| Wyoming          | 59                                       | 319  | 30  |
| Western New York | 61                                       | 349  | 97  |
| New York State   | 49                                       | 330  | 231   |

Lung cancer rate is 1999-2003 average. Cardiovascular and asthma rates are 2001-2003 averages.

2001-2003 averages. Source: New York State Department of Health

### How clean is our air?

Compared to the region's industrial heyday when acrid clouds spewed from factories and locomotives, our air is easier to breathe today. But there's room for improvement. Between 2001 and 2005, metro Buffalo averaged 9.2 days per year with unhealthy levels of ground-level ozone—the major component of smog that results from reactions between pollutants emitted by transportation and industrial sources. Although slightly lower than in nearby Cleveland, Pittsburgh and Detroit, this average was double or triple the days in other cities in upstate New York and Southern Ontario. Metro Buffalo ranked 25th on the American Lung Association's 2006 list of U.S. metros most affected by ozone pollution and five of WNY's eight counties— Chautauqua, Erie, Genesee, Niagara and Orleans—did not meet EPA standards for ozone in 2005. Compared to many areas in Ohio and Pennsylvania, however, WNY had much lower levels of particulate matter.

#### Does the air make us sick?

Outdoor air pollution—including ground-level ozone—can cause or exacerbate a range of illnesses, leading to 2 million premature deaths worldwide each year, according to the World Health Organization. Having the state's highest mortality rates from lung cancer (61 deaths per 100,000 residents) and cardiovascular disease (349 per 100,000), WNY is especially vulnerable to the health effects of air pollution, particularly in the summer when heat and sunlight stimulate ozone formation. Although child asthma hospitalizations in WNY are well below the state average—which is inflated by very high rates in New York City—studies have found clusters of high

child and adult asthma rates in urban areas near major sources of pollution, including neighborhoods near the Peace Bridge in Buffalo.





#### What's being done about it?

Because the effects of air pollution are felt regionally and globally, states and localities must look both within and outside their borders for solutions. Beyond public health, the issues of climate change and quality of life also come into play. In New York, some current and potential initiatives—at various scales—include:

#### Regional

- · Air quality monitoring: Municipalities and community groups can work with the state and universities to enhance monitoring and better pinpoint locations with the worst air quality. Better data can bolster state enforcement efforts and be used to develop pollution reduction strategies and target the treatment of pollution-related illnesses.
- · Mobility options: Expanding transportation choices can reduce auto emissions—a major contributor to ozone pollution. The Greater Buffalo-Niagara Regional Transportation Council's new Good Going program helps by making it easier for commuters to organize carpools and identify public transit options. Municipalities can help by discouraging car-dependent development patterns.
- · Trees: Vegetation plays a key role in controlling ground-level ozone, making it vital to restore and expand the tree cover damaged by the October 2006 storm.

#### State

- · Clean energy: To promote clean energy sources and energy efficient buildings, New York has established programs like New York Energy \$mart and the New York State Green Buildings Tax Credit. These and other incentives can be boosted
- · Emissions standards: New York has adopted California's latest auto emission standards, scheduled to take effect with the 2009 model year. The state's innovative pollution reduction programs for school and other buses have proven successful and should be expanded.
- · 'Green' economy: To develop clean technologies and reap their economic development potential, the state has established the Center of Excellence in Environmental and Energy Systems in Syracuse.

#### Multi-state/Bi-national

- · Good neighbors: New York has spearheaded the Regional Greenhouse Gas Initiative (RGGI) between seven Northeast and Mid-Atlantic states to cap power plant emissions of carbon dioxide (and eventually other pollutants) and develop a system to trade pollution credits. In October 2006, California signaled its intent to link its pollution credit system with RGGI. Local governments should endorse RGGI and assist its implementation.
- · Crossing the border: In addition to RGGI, New York is a member of NESCAUM, a group of agencies in northeastern states that coordinates regional air quality efforts. In October 2006, Ontario agreed to form a relationship with NESCAUM.
- · Looking westward: Because air pollution moves west-to-east, efforts should be made to bring Great Lakes and Midwestern states into the fold.

#### Global

- · The power of states: When Gov. Schwarzenegger of California signed an agreement with British Prime Minister Tony Blair in the summer of 2006 to collaborate on climate change and clean energy strategies, he reinforced the important role that states can play as laboratories for cuttingedge policies. The agreement calls for scientific cooperation, implementing an emissions trading system, and coordinating technology research.
- · New York and the world: As the world's tenth largest economy, New York can use its size and influence to build global partnerships and get a jump on the emerging 'green' economy while protecting public health and improving quality of life.

#### For more information:

Air Now online at airnow.gov

USEPA Air Trends online at www.epa.gov/air/airtrends/index.html

Ontario Ministry of the Environment online at www.airqualityontario.com

NYS Department of Environmental Conservation online at www.dec.state.ny.us/

NYS Department of Health online at www.health.state.ny.us/statistics

NYS Energy Research and Development Authority, online at www.nyserda.org

Regional Greenhouse Gas Initiative online at www.rggi.org

American Lung Association, State of the Air, online at www.alanys.org/files/sota06\_ny.pdf World Health Organization (http://www.who.int/phe/health\_topics/outdoorair\_agg/en/)



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