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S. 2995 The Clean Air Act Amendments of 2010

Testimony
of
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Board of Directors
American Lung Association

Before the
Committee on Environment and Public Works
and the
Subcommittee on Clean Air and Nuclear Safety

U.S. Senate

March 4, 2010

Good morning and thank you for the opportunity to testify today. My name is Albert A. Rizzo and I am the Chief of the Pulmonary and Critical Care Medicine Section at Christiana Care Health Systems in Delaware and I have been caring for Delawareans with lung disease for over 25 years. I trained at Johns Hopkins University, Jefferson Medical College and Georgetown University and am board certified in Pulmonary, Critical Care and Sleep Medicine. I am a member of the American Thoracic Society, a Fellow of the American College of Chest Physicians and a Diplomate of the American Board of Sleep Medicine and most importantly today I am a volunteer member of the national Board of Directors of the American Lung Association. I began my volunteer years in Delaware and ultimately served as President of the American Lung Association of Delaware and have now been committed to the Lung Association and its mission for more than 25 years.

The American Lung Association is the nation's oldest voluntary health agency, founded in 1904 to combat tuberculosis. Today our mission has broadened to save lives by improving lung health and preventing lung disease. We fight for healthy air because healthy air saves lives. We work hard to help people stop smoking and prevent kids from starting to prevent the development of lung disease. We help people, like my patients, to understand, manage and cope with their lung cancer, asthma or Chronic Obstructive Pulmonary Disease (COPD) – a disease better known as emphysema and chronic bronchitis. We do this by funding cutting edge medical research, educating the lay and professional public and, as I am doing today, by advocating for policy change that benefits the health of society. Our hundreds of thousands of volunteers across the country support this vital mission.

The American Lung Association urges the Congress to pass S. 2995, the Clean Air Act Amendments of 2010. We are proud to support this bill because it will save lives. We want to thank Senators Carper and Alexander for their bi-partisan leadership along with Senators Klobuchar, Collins and Gillibrand and the other cosponsors.

We see a compelling and urgent need for Congress to strengthen the Clean Air Act and clean up air pollution from power plants. Pollution from these plants puts at risk the lives and health of millions of Americans.

Let me start by describing the health effects of this pollution. Power plants emit tons of sulfur dioxide, nitrogen oxides and mercury. Sulfur dioxide (SO_2) and nitrogen oxides (NO_x) are transformed into fine particles in the air. These tiny particles are less than one-tenth the diameter of a single human hair. They are so tiny that they bypass the body's natural defenses of the nose and upper airways and lodge deep within the lung, where they harm human health. Studies demonstrate that those who are most at risk from the effects of this fine particle pollution include infants and children, the elderly and especially those with asthma or other lung disease or heart disease.[1] The lungs of our infants and children are small and still developing. They breathe more

[1] Many studies show children, the elderly, and persons with respiratory and/or coronary disease as particularly vulnerable to PM. The following are a few of the more recent- Pope, C. Arden III. Mortality effects of longer term exposures to fine particulate air pollution: review of recent epidemiological evidence. *Inhalation Toxicology* 2007; 19 (Suppl. 1): 33-38. Pope CA III, Dockery DW. Health Effects of Fine Particulate Air Pollution: Lines that Connect. *J Air Waste Mange Assoc* 2006; 56:709-742. Pope, CA et al. (2009). Fine Particulate Air Pollution and Life Expectancy in the United States. N Engl J Med 2009; 360:376-386. Eftim SE, Samet JM, Janes H, McDermott A, Dominici F. Fine Particulate Matter and Mortality: A Comparison of the Six Cities and American Cancer Society Cohorts with a Medicare Cohort. *Epidemiology* 2008; 19:209-216. Laden F, Schwartz J, Speizer FE, Dockery DW. Reduction in Fine Particulate Air Pollution and Mortality: Extended Follow-up of the Harvard Six Cities Study. *Am J Respir Crit Care Med* 2006; 173: 667-672 U.S. EPA. Integrated Science Assessment for Particulate Matter (Final Report). U.S. Environmental Protection Agency, Washington, DC, EPA/600/R-08/139F, 2009.

air per pound of body weight than adults and they are more likely to be active in the outdoors on high air pollution days.[2]

Because nitrogen oxides are a key ingredient in the formation of ozone, power plant pollution worsens ozone. Ground level ozone, or smog, that blankets much of the United States during the summer is a powerful respiratory irritant.[3] When inhaled, ozone damages the lung tissue much like the summer sun burns our skin. Ozone air pollution poses health risks for all who are exposed, be they infants, children, teenagers, seniors, and especially those with asthma and other lung diseases. Even healthy adults who work or play outdoors are at risk.

Both particulate matter and ozone cause the most egregious harm – premature death. California recently estimated that some 18,000 of their residents die from breathing particle pollution each year.[4] We know from research that breathing particulate matter shortens life, not by days, but by anywhere from months to years.[5] Studies have shown that ozone pollution at levels we have in the U.S. today also contributes to early death.[6]

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[2] American Academy of Pediatrics Committee on Environmental Health, Ambient Air Pollution: health hazards to children. *Pediatrics* 2004; 114: 1699-1707.

[3] U.S. EPA. Air Quality Criteria for Ozone and Related Photochemical Oxidants (2006 Final). U.S. Environmental Protection Agency, Washington, DC, EPA/600/R-05/004aF-cF, 2006.

[4] California Air Resources Board. Methodology for Estimating Premature Deaths Associated with Long-term Exposure to Fine Airborne Particulate Matter in California: Staff Report. October 24, 2008. Available at http://www.arb.ca.gov/research/health/pm-mort/pm-mort_final.pdf.

[5] Schwartz, Joel. Is There Harvesting in the Association of Airborne Particles with Daily Deaths and Hospital Admissions. Epidemiology, Vol. 12, No. 1, pp 56-61, January 2001; Brunekreef, Burt. Air Pollution and Life Expectancy: Is There a Relation? Occup Environ Med 1997 Nov; 54(11):781-4; Pope, C.A. III, Epidemiology of Fine Particulate Air Pollution and Human Health: Biological Mechanisms and Who's at Risk? Environ Health Perspect 108 (suppl 4):713-723 (2000).

[6] Bell ML, Dominici F, and Samet JM. A Meta-Analysis of Time-Series Studies of Ozone and Mortality with Comparison to the National Morbidity, Mortality, and Air Pollution Study. *Epidemiology* 2005; 16:436-445. Levy JI, Chermerynski SM, Sarnat JA. Ozone Exposure and Mortality: an empiric Bayes metaregression analysis. *Epidemiology* 2005; 16:458-468. Ito K, De Leon SF, Lippmann M. Associations Between Ozone and Daily Mortality: analysis and meta-analysis. *Epidemiology* 2005; 16:446-429. Bates DV. Ambient Ozone and Mortality. *Epidemiology* 2005; 16:427-429.

Death is not the only harm these pollutants produce. For hundreds of thousands of people, smog- and soot- polluted air means more breathing problems, aggravated asthma, fear-filled trips to the emergency room, and even admissions to the hospital and sometimes to the intensive care unit. These are the patients I, and physicians like me, see daily in the hospital and in our practices.

My patients already have reduced lung function from COPD, asthma, pulmonary fibrosis and other chronic lung diseases. Smog and soot exposure further impairs their breathing. I educate my patients to stay indoors or limit their activities, when possible, on "bad air" days. Despite this, we often see a rise in office and ER visits during these days. The impact on the quality of their lives, lost productivity and missed school days take a toll on all of us.

Mercury from power plants is a potent neurotoxin that inflicts permanent damage on the kidneys and the nervous system, and threatens children's neurological and brain development. Mercury leaves the smokestacks and settles into the rivers and lakes. It accumulates in fish making them increasingly toxic. Women of childbearing age and their children who eat these fish are the ones most at risk.[7]

My patients and tens of thousands more like them will benefit from S. 2995. Last year in response to Senator Carper's request, the Environmental Protection Agency analyzed the potential health benefits of several scenarios of NO_x and SO_2 reductions. One of the scenarios, #2, closely matches the bill as introduced, although the scenario sped up the 2018 SO_2 caps

[7] Agency for Toxic Substances and Disease Registry. Toxicological profile for mercury. 1999; National Research Council, Toxicological Effects of Methylmercury, 1999

proposed in this bill to 2015. Using that scenario, EPA estimated that the particulate matter pollution reductions resulting from the bill would prevent between 12,000 and 30,000 premature deaths each year by 2025.[8]

Fortunately, we do not have to wait 15 years to see benefits. In 2012, as power plants install the equipment that will clean up emissions, the EPA predicts that as many as 6,300 to 16,000 lives will be saved each year. Less pollution would prevent tens of thousands of asthma exacerbations, thousands of acute myocardial infarctions, or heart attacks, as well as avoid thousands of emergency room visits and hospital admissions. The ozone pollution reductions, resulting from the NO_x limits, will help reduce premature deaths and cut lost school days, ER and hospital admissions. The U.S. could save more than $1 billion in 2012 and $2.5 billion in 2025.[9] Although some of those benefits may come slightly later under the bill as introduced, these are still significant life-saving improvements in health. These improvements can benefit each of the states.

Each year the American Lung Association publishes the ***State of the Air*** report. In our 2009 report, we show that more than 186 million Americans – 60 percent of our population – live in counties that receive a failing grade for ozone or particulate matter.[10] This is a conservative estimate because our grades are based on the EPA standards that are currently in place – standards that we know are inadequate to protect public health.[11]

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[8] U.S. Environmental Protection Agency U.S. Environmental Protection Agency. *EPA Analysis of Alternative SO2 and NOx Caps for Senator Carper.* Washington DC: US EPA, July 31, 2009.

[9] U.S. Environmental Protection Agency U.S. Environmental Protection Agency. *EPA Analysis of Alternative SO2 and NOx Caps for Senator Carper.* Washington DC: US EPA, July 31, 2009. www.**epa**.gov/airmarkt/progsregs/cair/docs/CABriefing.ppt

[10] American Lung Association. State of the Air 2009 http://www.stateoftheair.org/

[11] In September 2009 EPA announced it would reconsider the existing ozone standards, set at 0.075 ppm in March 2008, EPA proposed revisions to the ozone standard in January, 2010: On February 24, 2009 A federal appeals court ruled that the

As Senator Carper knows, thousands of our neighbors in Delaware are at risk from air pollution. Our ***State of the Air*** report found that all three of Delaware's counties fail for ozone and New Castle, where I live, also fails for daily levels of particulate matter. In New Castle County more than 11,500 children with asthma are at risk from air pollution. Not only from the potential long term worsening of their disease but also from a potential trigger of a life-threatening asthma attack.[12]

Senator Alexander, the American Lung Association thanks you for your dogged commitment to clean air. Your home state has 15 counties that earned failing grades for air pollution. As you know well, Blount County, home to one of the great national treasures – Great Smoky Mountains National Park – bears a sizable burden of air pollution. Our report shows that Blount County suffered seventy-seven days with unhealthful levels of ozone from 2005 to 2007. Roughly 26,000 children and more than 17,000 seniors in Blount County are at risk from pollution. The Clean Air Act Amendments of 2010 will not only help reduce the public health burden of air pollution but also reduce the burden that acid rain, haze, ozone, particulate matter and toxic mercury place on our National Parks.[13]

Attached to my testimony are the summaries from our ***State of the Air*** report for the states of each member of the committee. The summaries show the county-by-county air quality grades and the numbers of your constituents at risk – particularly the most vulnerable, the young,

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particulate matter national ambient air quality standards was deficient and sent them back to the U.S. Environmental Protection Agency for corrective action. EPA is scheduled to announce a new proposal in November, 2010.

[12] American Lung Association. State of the Air 2009 http://www.stateoftheair.org/

[13] American Lung Association. State of the Air 2009 http://www.stateoftheair.org/

the old, those with lung disease like asthma, chronic bronchitis and emphysema as well as those with cardiovascular disease and diabetes. You will see several states, like Rhode Island, where every county with an air pollution monitor fails for ozone. Also appended are the lists of the 25 most polluted cities—with some rankings that may surprise you. As Chairman Boxer knows, despite your state's efforts, it is not a surprise that many California cities make the dirtiest lists. But what may be a surprise to some, is Lancaster, Pennsylvania is tied with New York for the 22nd worst city for annual particle pollution levels. The report shows that air pollution – the pollution that comes from power plants – is a national problem impacting citizens all across the country.[14]

The Carper-Alexander bill sets stringent caps for sulfur dioxide and nitrogen oxides, and ensures that toxic mercury levels will be cut. For sulfur dioxide, the bill caps emissions at 3.5 million tons in 2012, 2 million tons in 2015 and 1.5 million tons in 2018. For nitrogen oxides, the bill caps emissions in the eastern United States at 1.39 million tons in 2012 and 1.3 million tons in 2015. In the West, the cap limits emissions to 520,000 tons in 2012 and 320,000 tons in 2015. Importantly, EPA has the authority to set tighter limits if needed to protect public health or the environment. The mercury provision provides a critical backstop for the forthcoming mercury Maximum Achievable Control Technology or MACT rule. If EPA fails to implement the MACT or is blocked from implementing the rule, the bill will require the plants to cut mercury emissions by 90 percent by 2015.

This legislation builds upon and strengthens the existing Clean Air Act. Because the bill does not change or weaken the underlying Clean Air Act, EPA and states retain their critical

[14] American Lung Association. State of the Air 2009 http://www.stateoftheair.org/

tools and enforcement authorities. We support this bill, as introduced, precisely because it strengthens the ability to get additional pollution reductions without imposing weakening changes to the current law. We will not support – in fact, we will vigorously oppose—any changes that would undermine the enforcement of the New Source Review program or other provisions of the Clean Air Act.

We have heard from some who suggest that it would be better to wait for EPA to promulgate the Clean Air Interstate (CAIR) replacement rule and the MACT. We understand that the CAIR rule will be proposed next month and a utility MACT will be proposed next year. The American Lung Association urges both Congress and EPA to move forward. The American Lung Association will continue to support EPA's efforts to implement the Clean Air Act and we will urge EPA to maximize the reduction of these pollutants.

Congress needs to move forward on the Carper-Alexander bill, because it provides the needed health and environmental benefits. It sets enforceable reductions if litigation or another delay precludes EPA from moving forward on the mercury MACT. Our principal concern is getting the pollution out of the air. Delays have real and dramatic costs – a tragic human toll – paid in thousands of lives lost each year. The EPA and this committee have wrestled with these issues over the past decade. The public has waited too long for power plants to clean up. The Clean Air Act Amendments of 2010 demonstrate broad bi-partisan support for this goal. It is well past time to clean up the nation's power plants. Please pass this life-saving legislation. Thank you.

People at Risk In 25 U.S. Cities Most Polluted by Short-term Particle Pollution (24-hour $PM_{2.5}$)

2009 Rank[1]	Metropolitan Statistical Areas	Total Population[2]	Under 18[3]	65 and Over[3]	Pediatric Asthma[4,10]	Adult Asthma[5,10]	Chronic Bronchitis[6,10]	Emphysema[7,10]	CV Disease[8,10]	Diabetes[9,10]
1	Pittsburgh-New Castle, PA	2,446,703	507,784	419,558	46,163	177,396	69,954	38,243	777,887	171,074
2	Fresno-Madera, CA	1,045,861	309,724	102,399	28,157	55,216	23,939	10,840	244,484	51,388
3	Bakersfield, CA	790,710	237,021	69,710	21,548	41,503	17,709	7,723	177,982	37,077
4	Los Angeles-Long Beach-Riverside, CA	17,755,322	4,737,865	1,849,322	430,719	977,873	428,819	198,167	4,416,799	933,827
5	Birmingham-Hoover-Cullman, AL	1,188,764	289,712	153,673	26,338	78,595	30,989	15,555	331,055	71,441
6	Salt Lake City-Ogden-Clearfield, UT	1,799,959	541,481	166,355	49,226	101,790	40,759	18,220	413,907	86,780
7	Sacramento--Arden-Arcade--Yuba City, CA-NV	2,397,691	591,294	284,980	53,755	135,649	60,679	29,190	636,141	135,775
8	Logan, UT-ID	121,090	38,091	9,654	3,463	6,707	2,549	1,032	24,876	5,073
9	Chicago-Naperville-Michigan City, IL-IN-WI	9,745,165	2,514,619	1,067,601	228,604	601,160	242,586	115,412	2,529,721	539,206
9	Detroit-Warren-Flint, MI	5,405,918	1,344,926	645,820	122,268	380,857	139,501	69,019	1,479,974	318,683
11	Indianapolis-Anderson-Columbus, IN	2,014,267	529,001	225,995	48,091	130,321	50,201	24,207	526,608	112,621
12	Visalia-Porterville, CA	421,553	134,499	39,663	12,227	21,524	9,305	4,190	94,813	19,898
13	Eugene-Springfield, OR	343,591	69,463	48,187	6,315	26,418	9,465	4,780	101,414	21,907
14	Washington-Baltimore-Northern Virginia, DC-MD-VA-WV	8,241,912	2,006,709	872,143	182,430	513,892	209,541	99,161	2,179,127	464,484
15	Hanford-Corcoran, CA	148,875	40,640	11,124	3,695	8,084	3,301	1,299	31,841	6,458
16	New York-Newark-Bridgeport, NY-NJ-CT-PA	21,961,994	5,173,130	2,824,292	470,288	1,447,924	574,690	285,495	6,111,329	1,315,110
17	Modesto, CA	511,263	147,066	52,226	13,370	27,347	11,976	5,529	123,315	26,056
18	Merced, CA	245,514	77,534	23,405	7,049	12,588	5,429	2,438	55,266	11,585
19	Louisville-Jefferson County-Elizabethtown-Scottsburg, KY-IN	1,332,214	324,395	165,296	29,490	89,830	34,720	17,313	369,687	79,721
20	Philadelphia-Camden-Vineland, PA-NJ-DE-MD	6,385,461	1,539,070	834,464	139,917	435,170	167,232	84,143	1,788,499	386,150
20	San Jose-San Francisco-Oakland, CA	7,264,887	1,639,367	861,264	149,035	423,837	190,849	92,528	2,006,694	429,823
22	Provo-Orem, UT	493,306	169,546	31,347	15,413	25,908	9,646	3,611	91,284	18,255
23	San Diego-Carlsbad-San Marcos, CA	2,974,859	741,404	330,820	67,401	167,704	73,751	34,396	762,821	161,535
24	Harrisburg-Carlisle-Lebanon, PA	656,781	146,271	96,234	13,298	47,490	17,925	9,323	194,665	42,344
25	St. Louis-St. Charles-Farmington, MO-IL	2,890,593	703,793	372,199	63,982	184,766	75,542	37,992	807,635	174,421

Notes:
(1) Cities are ranked using the highest weighted average for any county within that metropolitan statistical area.
(2) **Total Population** represents the at-risk populations for all counties within the respective Combined Statistical Area or Metropolitan Statistical Area.
(3) Those **18 & under** and **65 & over** are vulnerable to $PM_{2.5}$ and are, therefore, included. They should not be used as population denominators for disease estimates.
(4) **Pediatric asthma** estimates are for those under 18 years of age and represent the estimated number of people who had asthma in 2007 based on national rates (NHIS) applied to county population estimates (U.S. Census).
(5) **Adult asthma** estimates are for those 18 years and older and represent the estimated number of people who had asthma during 2007 based on state rates (BRFSS) applied to county population estimates (U.S. Census).
(6) **Chronic bronchitis** estimates are for adults 18 and over who had been diagnosed in 2007, based on national rates (NHIS) applied to county population estimates (U.S. Census).
(7) **Emphysema** estimates are for adults 18 and over who have been diagnosed within their lifetime, based on national rates (NHIS) applied to county population estimates (U.S. Census).
(8) **CV disease** estimates are based on National Heart Lung and Blood Institute (NHLBI) estimates of cardiovascular disease applied to county population estimates (U.S. Census).
(9) **Diabetes** estimates are for adults 18 and over who have been diagnosed within their lifetime, based on national rates (NHIS) applied to county population estimates (U.S. Census).
(10) Adding across rows does not produce valid estimates, e.g., summing pediatric and adult asthma and/or emphysema and chronic bronchitis.

People at Risk In 25 U.S. Cities Most Polluted by Year-Round Particle Pollution (Annual $PM_{2.5}$)

2009 Rank[1]	Metropolitan Statistical Areas	Total Population[2]	Under 18[3]	65 and Over[3]	Pediatric Asthma[4,10]	Adult Asthma[5,10]	Chronic Bronchitis[6,10]	Emphysema[7,10]	CV Disease[8,10]	Diabetes[9,10]
1	Bakersfield, CA	790,710	237,021	69,710	21,548	41,503	17,709	7,723	177,982	37,077
2	Pittsburgh-New Castle, PA	2,446,703	507,784	419,558	46,163	177,396	69,954	38,243	777,887	171,074
3	Los Angeles-Long Beach-Riverside, CA	17,755,322	4,737,865	1,849,322	430,719	977,873	428,819	198,167	4,416,799	933,827
4	Visalia-Porterville, CA	421,553	134,499	39,663	12,227	21,524	9,305	4,190	94,813	19,898
5	Birmingham-Hoover-Cullman, AL	1,188,764	289,712	153,673	26,338	78,595	30,989	15,555	331,055	71,441
6	Hanford-Corcoran, CA	148,875	40,640	11,124	3,695	8,084	3,301	1,299	31,841	6,458
7	Fresno-Madera, CA	1,045,861	309,724	102,399	28,157	55,216	23,939	10,840	244,484	51,388
8	Cincinnati-Middletown-Wilmington, OH-KY-IN	2,176,749	548,199	258,266	49,837	144,472	55,519	27,209	586,626	125,943
9	Detroit-Warren-Flint, MI	5,405,918	1,344,926	645,820	122,268	380,857	139,501	69,019	1,479,974	318,683
10	Cleveland-Akron-Elyria, OH	2,896,968	685,096	411,961	62,282	193,475	77,860	40,524	845,716	184,099
11	Charleston, WV	303,950	66,486	47,045	6,044	21,312	8,505	4,551	93,571	20,506
11	Huntington-Ashland, WV-KY-OH	284,026	61,030	44,610	5,548	19,934	7,856	4,139	85,861	18,713
11	Louisville-Jefferson County-Elizabethtown-Scottsburg, KY-IN	1,332,214	324,395	165,296	29,490	89,830	34,720	17,313	369,687	79,721
14	Macon-Warner Robins-Fort Valley, GA	386,534	102,065	45,073	9,278	21,597	9,673	4,727	102,072	21,892
14	St. Louis-St. Charles-Farmington, MO-IL	2,890,593	703,793	372,199	63,982	184,766	75,542	37,992	807,635	174,421
16	Weirton-Steubenville, WV-OH	122,580	24,215	23,297	2,201	8,616	3,623	2,050	40,970	9,079
17	Atlanta-Sandy Springs-Gainesville, GA-AL	5,626,400	1,521,556	467,243	138,325	311,600	133,797	59,199	1,351,339	283,618
18	Indianapolis-Anderson-Columbus, IN	2,014,267	529,001	225,995	48,091	130,321	50,201	24,207	526,608	112,621
18	Rome, GA	95,618	23,801	13,654	2,164	5,441	2,476	1,264	26,675	5,765
20	Canton-Massillon, OH	407,180	93,626	62,939	8,512	27,270	11,182	5,969	122,909	26,899
20	York-Hanover-Gettysburg, PA	521,828	120,265	71,421	10,933	37,560	13,972	7,131	150,396	32,584
22	Lancaster, PA	498,465	125,753	71,955	11,432	34,753	13,026	6,767	141,433	30,724
22	New York-Newark-Bridgeport, NY-NJ-CT-PA	21,961,994	5,173,130	2,824,292	470,288	1,447,924	574,690	285,495	6,111,329	1,315,110
24	Hagerstown-Martinsburg, MD-WV	261,198	62,892	33,213	5,718	16,957	6,731	3,309	71,251	15,281
24	Houston-Baytown-Huntsville, TX	5,729,027	1,612,940	469,062	146,633	337,275	133,968	59,157	1,351,987	283,571

Notes:
(1) Cities are ranked using the highest design value for any county within that metropolitan statistical area.
(2) **Total Population** represents the at-risk populations for all counties within the respective Combined Statistical Area or Metropolitan Statistical Area.
(3) Those **18 & under** and **65 & over** are vulnerable to $PM_{2.5}$ and are, therefore, included. They should not be used as population denominators for disease estimates.
(4) **Pediatric asthma** estimates are for those under 18 years of age and represent the estimated number of people who had asthma in 2007 based on national rates (NHIS) applied to county population estimates (U.S. Census).
(5) **Adult asthma** estimates are for those 18 years and older and represent the estimated number of people who had asthma during 2007 based on state rates (BRFSS) applied to county population estimates (U.S. Census).
(6) **Chronic bronchitis** estimates are for adults 18 and over who had been diagnosed in 2007, based on national rates (NHIS) applied to county population estimates (U.S. Census).
(7) **Emphysema** estimates are for adults 18 and over who have been diagnosed within their lifetime, based on national rates (NHIS) applied to county population estimates (U.S. Census).
(8) **CV disease** estimates are based on National Heart Lung and Blood Institute (NHLBI) estimates of cardiovascular disease applied to county population estimates (U.S. Census).
(9) **Diabetes** estimates are for adults 18 and over who have been diagnosed within their lifetime, based on national rates (NHIS) applied to county population estimates (U.S. Census).
(10) Adding across rows does not produce valid estimates, e.g., summing pediatric and adult asthma and/or emphysema and chronic bronchitis.

People at Risk In 25 Most Ozone-Polluted Cities

2009 Rank[1]	Metropolitan Statistical Areas	Total Population[2]	Under 18[3]	65 and Over[3]	Pediatric Asthma[4,8]	Adult Asthma[5,8]	Chronic Bronchitis[6,8]	Emphysema[7,8]
1	Los Angeles-Long Beach-Riverside, CA	17,755,322	4,737,865	1,849,322	430,719	977,873	428,819	198,167
2	Bakersfield, CA	790,710	237,021	69,710	21,548	41,503	17,709	7,723
3	Visalia-Porterville, CA	421,553	134,499	39,663	12,227	21,524	9,305	4,190
4	Fresno-Madera, CA	1,045,861	309,724	102,399	28,157	55,216	23,939	10,840
5	Houston-Baytown-Huntsville, TX	5,729,027	1,612,940	469,062	146,633	337,275	133,968	59,157
6	Sacramento--Arden-Arcade--Yuba City, CA-NV	2,397,691	591,294	284,980	53,755	135,649	60,679	29,190
7	Dallas-Fort Worth, TX	6,498,410	1,798,184	559,482	163,473	385,101	152,456	67,352
8	Charlotte-Gastonia-Salisbury, NC-SC	2,277,074	585,184	238,952	53,199	131,101	56,689	26,761
9	Phoenix-Mesa-Scottsdale, AZ	4,179,427	1,140,354	472,541	103,670	260,150	101,155	48,005
10	El Centro, CA	161,867	47,423	16,913	4,311	8,571	3,713	1,691
11	Hanford-Corcoran, CA	148,875	40,640	11,124	3,695	8,084	3,301	1,299
12	Las Vegas-Paradise-Pahrump, NV	1,880,449	494,380	199,688	44,944	94,854	46,154	21,674
13	San Diego-Carlsbad-San Marcos, CA	2,974,859	741,404	330,820	67,401	167,704	73,751	34,396
14	Washington-Baltimore-Northern Virginia, DC-MD-VA-WV	8,241,912	2,006,709	872,143	182,430	513,892	209,541	99,161
15	Cincinnati-Middletown-Wilmington, OH-KY-IN	2,176,749	548,199	258,266	49,837	144,472	55,519	27,209
16	Philadelphia-Camden-Vineland, PA-NJ-DE-MD	6,385,461	1,539,070	834,464	139,917	435,170	167,232	84,143
17	St. Louis-St. Charles-Farmington, MO-IL	2,890,593	703,793	372,199	63,982	184,766	75,542	37,992
17	New York-Newark-Bridgeport, NY-NJ-CT-PA	21,961,994	5,173,130	2,824,292	470,288	1,447,924	574,690	285,495
19	Knoxville-Sevierville-La Follette, TN	1,029,155	227,580	148,377	20,689	69,468	27,885	14,317
20	Birmingham-Hoover-Cullman, AL	1,188,764	289,712	153,673	26,338	78,595	30,989	15,555
21	Baton Rouge-Pierre Part, LA	793,028	202,254	81,268	18,387	37,014	19,552	9,051
22	Kansas City-Overland Park-Kansas City, MO-KS	2,053,928	530,224	233,084	48,203	128,867	51,779	25,151
23	Atlanta-Sandy Springs-Gainesville, GA-AL	5,626,400	1,521,556	467,243	138,325	311,600	133,797	59,199
24	Merced, CA	245,514	77,534	23,405	7,049	12,588	5,429	2,438
25	Memphis, TN-MS-AR	1,280,533	352,214	130,189	32,020	76,368	31,237	14,812

Notes:
(1) Cities are ranked using the highest weighted average for any county within that metropolitan statistical area.
(2) **Total Population** represents the at-risk populations for all counties within the respective Combined Statistical Area or Metropolitan Statistical Area.
(3) Those **18 & under** and **65 & over** are vulnerable to $PM_{2.5}$ and are, therefore, included. They should not be used as population denominators for disease estimates.
(4) **Pediatric asthma** estimates are for those under 18 years of age and represent the estimated number of people who had asthma in 2007 based on national rates (NHIS) applied to county population estimates (U.S. Census).
(5) **Adult asthma** estimates are for those 18 years and older and represent the estimated number of people who had asthma during 2007 based on state rates (BRFSS) applied to county population estimates (U.S. Census).
(6) **Chronic bronchitis** estimates are for adults 18 and over who had been diagnosed in 2007, based on national rates (NHIS) applied to county population estimates (U.S. Census).
(7) **Emphysema** estimates are for adults 18 and over who have been diagnosed within their lifetime, based on national rates (NHIS) applied to county population estimates (U.S. Census).
(8) Adding across rows does not produce valid estimates, e.g., summing pediatric and adult asthma and/or emphysema and chronic bronchitis.

Cleanest U.S. Cities for Short-term Particle Pollution (24-hour $PM_{2.5}$)[1]

Metropolitan Statistical Area	Population
Alexandria, LA	149,837
Amarillo, TX	242,240
Austin-Round Rock, TX	1,598,161
Bismarck, ND	103,242
Brownsville-Harlingen-Raymondville, TX	407,723
Cheyenne, WY	86,353
Colorado Springs, CO	609,096
Corpus Christi-Kingsville, TX	414,376
Fargo-Wahpeton, ND-MN	215,333
Farmington, NM	122,427
Fort Collins-Loveland, CO	287,574
Grand Junction, CO	139,082
Longview-Marshall, TX	267,115
Midland-Odessa, TX	255,978
Oklahoma City-Shawnee, OK	1,262,027
Portland-Lewiston-South Portland, ME	619,917
Pueblo, CO	154,538
Redding, CA	179,427
Salinas, CA	407,637
San Luis Obispo-Paso Robles, CA	262,436
Santa Barbara-Santa Maria-Goleta, CA	404,197
Santa Fe-Espanola, NM	183,782
Sioux Falls, SD	227,171
Tucson, AZ	967,089

Notes:
(1) This list represents cities with the lowest levels of short term $PM_{2.5}$ air pollution. Monitors in these cities reported no days with unhealthful $PM_{2.5}$ levels.

Top 25 Cleanest U.S. Cities for Long-term Particle Pollution (Annual $PM_{2.5}$)[1]

Rank[2]	Design Value[3]	Metropolitan Statistical Area	Population
1	4.3	Cheyenne, WY	86,353
2	4.7	Santa Fe-Espanola, NM	183,782
3	4.9	Honolulu, HI	905,601
4	5.8	Great Falls, MT	81,775
4	5.8	Farmington, NM	122,427
6	6.0	Anchorage, AK	362,340
6	6.0	Tucson, AZ	967,089
8	6.7	Bismarck, ND	103,242
9	6.9	Flagstaff, AZ	127,450
9	6.9	Salinas, CA	407,637
11	7.2	Redding, CA	179,427
12	7.4	Fort Collins-Loveland, CO	287,574
13	7.6	Duluth, MN-WI	274,308
14	7.7	Colorado Springs, CO	609,096
14	7.7	Pueblo, CO	154,538
14	7.7	Fargo-Wahpeton, ND-MN	215,333
17	7.8	Albuquerque, NM	835,120
18	7.9	San Luis Obispo-Paso Robles, CA	262,436
19	8.0	Midland-Odessa, TX	255,978
20	8.2	Palm Bay-Melbourne-Titusville, FL	536,161
20	8.2	Boise City-Nampa, ID	587,698
20	8.2	Reno-Sparks-Fernley, NV	462,751
23	8.3	Cape Coral-Fort Myers, FL	590,564
24	8.5	Port St. Lucie-Sebastian-Vero Beach, FL	531,958
25	8.6	Billings, MT	149,657
25	8.6	Lincoln, NE	292,219

Notes:
(1) This list represents cities with the lowest levels of annual $PM_{2.5}$ air pollution.
(2) Cities are ranked by using the highest design value for any county within that metropolitan area.
(3) The **Design Value** is the calculated concentration of a pollutant based on the form of the National Ambient Air Quality Standard, and is used by the EPA to determine whether the air quality in a county meets the standard. The source for the Design Values is the EPA, Office of Air Quality Planning & Standards, available at http://www.epa.gov/air/airtrends/values.html, downloaded September 12, 2008.

Cleanest U.S. Cities for Ozone Air Pollution[1]

Metropolitan Statistical Area	Population
Billings, MT	149,657
Carson City, NV	54,939
Coeur d'Alene, ID	134,442
Fargo-Wahpeton, ND-MN	215,333
Honolulu, HI	905,601
Laredo, TX	233,152
Lincoln, NE	292,219
Port St. Lucie-Sebastian-Vero Beach, FL	531,958
Sioux Falls, SD	227,171

Notes:
(1) This list represents cities with no monitored ozone air pollution in unhealthful ranges using the Air Quality Index based on 2008 NAAQS.

State Table

Notes for all state data tables

1. **Total Population** is based on 2007 US Census and represents the at-risk populations in counties with ozone or $PM_{2.5}$ pollution monitors; it does not represent the entire state's sensitive populations.
2. Those **18 & under** and **65 &** over are vulnerable to ozone and $PM_{2.5}$. They should not be used as population denominators for disease estimates.
3. **Pediatric asthma** estimates are for those under 18 years of age and represent the estimated number of people who had asthma in 2007 based on national rates (NHIS) applied to county population estimates (US Census).
4. **Adult asthma** estimates are for those 18 years and older and represent the estimated number of people who had asthma during 2007 based on state rates (BRFSS) applied to county population estimates (US Census).
5. **Chronic bronchitis** estimates are for adults 18 and over who had been diagnosed within 2007 based on national rates (NHIS) applied to county population estimates (US Census).
6. **Emphysema** estimates are for adults 18 and over who have been diagnosed within their lifetime based on national rates (NHIS) applied to county population estimates (US Census).
7. **CV disease** estimates are based on National Heart Lung and Blood Institute (NHLBI) estimates of cardiovascular disease applied to county population estimates (U.S. Census). CV disease includes coronary heart disease, hypertension, stroke and heart failure.
8. **Diabetes** estimates are for adults 18 and over who have been diagnosed within their lifetime based on national rates (NHIS) applied to county population estimates (US Census).
9. Adding across rows does not produce valid estimates. For example, because of differences in the surveys used to gather the information, adding pediatric and adult asthma does not produce an accurate estimate of total population with asthma. Adding emphysema and chronic bronchitis will double count people with both diseases.

CALIFORNIA

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AT-RISK GROUPS

				Lung Diseases					
County	**Total Population**	**Under 18**	**65 & Over**	**Pediatric Asthma**	**Adult Asthma**	**Chronic Bronchitis**	**Emphysema**	**CV Disease**	**Diabetes**
ALAMEDA	1,464,202	344,146	157,218	31,286	84,374	37,542	17,715	389,973	83,038
AMADOR	38,678	6,417	7,220	583	2,427	1,150	625	12,765	2,798
BUTTE	218,779	45,837	32,480	4,167	12,972	5,871	2,939	62,721	13,475
CALAVERAS	46,844	8,643	8,316	786	2,883	1,384	761	15,428	3,398
COLUSA	21,302	6,106	2,445	555	1,141	507	243	5,310	1,131
CONTRA COSTA	1,019,640	250,861	120,545	22,806	58,019	26,457	13,091	280,657	60,465
EL DORADO	175,689	38,421	19,893	3,493	10,384	4,750	2,341	50,262	10,841
FRESNO	899,348	268,840	87,342	24,440	47,296	20,503	9,278	209,328	43,995
GLENN	28,111	7,754	3,423	705	1,530	687	336	7,258	1,553
HUMBOLDT	128,864	25,874	16,362	2,352	7,751	3,486	1,695	36,714	7,861
IMPERIAL	161,867	47,423	16,913	4,311	8,571	3,713	1,691	38,026	7,991
INYO	17,449	3,750	2,898	341	1,036	499	274	5,554	1,224
KERN	790,710	237,021	69,710	21,548	41,503	17,709	7,723	177,982	37,077
KINGS	148,875	40,640	11,124	3,695	8,084	3,301	1,299	31,841	6,458
LAKE	64,664	14,095	10,447	1,281	3,812	1,801	965	19,842	4,343
LOS ANGELES	9,878,554	2,582,550	1,030,100	234,780	548,194	240,506	111,145	2,477,053	523,822
MADERA	146,513	40,884	15,057	3,717	7,920	3,436	1,562	35,156	7,393
MARIN	248,096	48,426	37,985	4,402	15,133	7,258	3,917	80,111	17,634
MARIPOSA	18,036	3,162	3,280	287	1,121	534	292	5,942	1,305
MENDOCINO	86,273	19,096	12,710	1,736	5,075	2,391	1,262	26,128	5,710
MERCED	245,514	77,534	23,405	7,049	12,588	5,429	2,438	55,266	11,585
MONO	12,801	2,544	1,501	231	774	349	169	3,663	785
MONTEREY	407,637	111,492	41,037	10,136	22,233	9,686	4,418	99,212	20,905
NAPA	132,565	30,063	18,979	2,733	7,720	3,566	1,831	38,510	8,348
NEVADA	97,027	17,765	17,087	1,615	5,994	2,899	1,605	32,418	7,161
ORANGE	2,997,033	766,234	331,797	69,658	167,815	74,630	35,414	777,475	165,540

		AT-RISK GROUPS							
				Lung Diseases					
County	Total Population	Under 18	65 & Over	Pediatric Asthma	Adult Asthma	Chronic Bronchitis	Emphysema	CV Disease	Diabetes
PLACER	332,920	73,398	49,152	6,673	19,506	8,942	4,559	96,286	20,804
PLUMAS	20,615	3,717	3,970	338	1,278	628	357	7,115	1,581
RIVERSIDE	2,073,571	582,711	233,367	52,974	111,620	48,630	22,507	501,715	105,771
SACRAMENTO	1,386,667	362,861	154,056	32,988	76,932	34,049	16,063	353,901	75,181
SAN BENITO	54,667	16,138	4,793	1,467	2,904	1,278	585	13,095	2,772
SAN BERNARDINO	2,007,800	597,417	165,379	54,311	105,834	45,095	19,471	451,164	93,887
SAN DIEGO	2,974,859	741,404	330,820	67,401	167,704	73,751	34,396	762,821	161,535
SAN FRANCISCO	764,976	109,614	111,471	9,965	49,180	21,977	10,673	231,519	49,432
SAN JOAQUIN	670,990	195,322	66,579	17,757	35,714	15,585	7,136	159,899	33,722
SAN LUIS OBISPO	262,436	49,420	37,506	4,493	16,011	7,257	3,611	77,270	16,608
SAN MATEO	706,984	157,575	93,090	14,325	41,460	19,101	9,669	204,771	44,325
SANTA BARBARA	404,197	95,877	51,842	8,716	23,136	10,319	4,991	108,502	23,145
SANTA CLARA	1,748,976	419,320	186,665	38,120	100,048	44,224	20,662	457,498	97,105
SANTA CRUZ	251,747	54,512	26,162	4,956	14,887	6,653	3,141	69,084	14,738
SHASTA	179,427	39,759	27,066	3,614	10,518	4,890	2,546	53,151	11,554
SISKIYOU	44,296	8,659	8,299	787	2,692	1,314	742	14,842	3,290
SOLANO	408,599	104,966	44,312	9,542	22,875	10,233	4,888	106,882	22,820
SONOMA	464,435	103,746	60,044	9,432	27,236	12,561	6,354	134,594	29,146
STANISLAUS	511,263	147,066	52,226	13,370	27,347	11,976	5,529	123,315	26,056
SUTTER	92,040	24,467	11,246	2,224	5,072	2,263	1,093	23,777	5,072
TEHAMA	61,114	14,785	9,266	1,344	3,482	1,609	835	17,466	3,787
TULARE	421,553	134,499	39,663	12,227	21,524	9,305	4,190	94,813	19,898
TUOLUMNE	55,806	9,523	10,700	866	3,486	1,672	925	18,712	4,120
VENTURA	798,364	208,953	88,679	18,996	44,410	19,958	9,630	209,392	44,807
YOLO	195,844	44,882	18,541	4,080	11,297	4,758	2,023	47,337	9,789
TOTALS	**36,389,217**	**9,346,169**	**3,984,168**	**849,661**	**2,032,502**	**898,072**	**421,607**	**9,313,518**	**1,976,780**

CALIFORNIA

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HIGH OZONE DAYS/2005–2007

County	Orange	Red	Purple	Wgt. Avg	Grade
ALAMEDA	12	2	0	5.0	F
AMADOR	30	2	0	11.0	F
BUTTE	58	0	0	19.3	F
CALAVERAS	58	8	0	23.3	F
COLUSA	1	0	0	0.3	B
CONTRA COSTA	17	0	0	5.7	F
EL DORADO	113	24	0	49.7	F
FRESNO	152	24	0	62.7	F
GLENN	2	0	0	0.7	B
HUMBOLDT	*	*	*	*	*
IMPERIAL	94	3	0	32.8	F
INYO	49	1	0	16.8	F
KERN	221	71	2	110.5	F
KINGS	93	3	0	32.5	F
LAKE	0	0	0	0.0	A
LOS ANGELES	185	55	11	96.5	F
MADERA	24	0	0	8.0	F
MARIN	0	0	0	0.0	A
MARIPOSA	79	2	0	27.3	F
MENDOCINO	0	0	0	0.0	A
MERCED	65	1	0	22.2	F
MONO	*	*	*	*	*
MONTEREY	1	0	0	0.3	B
NAPA	0	0	0	0.0	A
NEVADA	130	11	1	49.5	F
ORANGE	27	3	0	10.5	F

PARTICLE POLLUTION DAYS/2005–2007

	24-Hour					Annual	
County	Orange	Red	Purple	Wgt. Avg	Grade	Design Value	Pass/ Fail
ALAMEDA	6	0	0	2.0	C	9.4	PASS
AMADOR	DNC	DNC	DNC	DNC	DNC	DNC	DNC
BUTTE	11	2	0	4.7	F	12.1	PASS
CALAVERAS	0	0	0	0.0	A	7.8	PASS
COLUSA	1	0	0	0.3	B	DNC	INC
CONTRA COSTA	18	0	0	6.0	F	8.9	PASS
EL DORADO	DNC	DNC	DNC	DNC	DNC	DNC	DNC
FRESNO	117	24	0	51.0	F	17.4	FAIL
GLENN	DNC	DNC	DNC	DNC	DNC	DNC	DNC
HUMBOLDT	0	0	0	0.0	A	DNC	INC
IMPERIAL	7	2	0	3.3	F	12.7	PASS
INYO	2	0	1	1.3	C	5.5	PASS
KERN	102	27	0	47.5	F	20.3	FAIL
KINGS	31	5	0	12.8	F	17.6	FAIL
LAKE	0	0	0	0.0	A	4.5	PASS
LOS ANGELES	77	6	0	28.7	F	17.1	FAIL
MADERA	DNC	DNC	DNC	DNC	DNC	DNC	DNC
MARIN	DNC	DNC	DNC	DNC	DNC	DNC	DNC
MARIPOSA	DNC	DNC	DNC	DNC	DNC	DNC	DNC
MENDOCINO	0	0	0	0.0	A	5.9	PASS
MERCED	33	1	0	11.5	F	14.7	PASS
MONO	*	*	*	*	*	DNC	INC
MONTEREY	0	0	0	0.0	A	6.9	PASS
NAPA	DNC	DNC	DNC	DNC	DNC	DNC	DNC
NEVADA	0	0	0	0.0	A	6.4	PASS
ORANGE	35	1	0	12.2	F	14.4	PASS

	HIGH OZONE DAYS/2005–2007					PARTICLE POLLUTION DAYS/2005–2007						
						24-Hour					Annual	
County	Orange	Red	Purple	Wgt. Avg	Grade	Orange	Red	Purple	Wgt. Avg	Grade	Design Value	Pass/ Fail
PLACER	103	18	0	43.3	F	3	0	0	1.0	C	9.7	PASS
PLUMAS	*	*	*	*	*	9	1	0	3.5	F	11.5	PASS
RIVERSIDE	245	77	14	129.5	F	105	8	0	39.0	F	19.6	FAIL
SACRAMENTO	81	19	2	37.5	F	60	7	0	23.5	F	DNC	INC
SAN BENITO	11	0	0	3.7	F	*	*	*	*	*	DNC	INC
SAN BERNARDINO	226	95	24	138.8	F	30	6	0	13.0	F	18.5	FAIL
SAN DIEGO	84	3	0	29.5	F	25	3	0	9.8	F	13.0	PASS
SAN FRANCISCO	0	0	0	0.0	A	14	0	0	4.7	F	9.3	PASS
SAN JOAQUIN	26	3	0	10.2	F	23	0	0	7.7	F	12.8	PASS
SAN LUIS OBISPO	55	0	0	18.3	F	0	0	0	0.0	A	7.9	PASS
SAN MATEO	0	0	0	0.0	A	1	1	0	0.8	B	8.9	PASS
SANTA BARBARA	17	0	0	5.7	F	0	0	0	0.0	A	10.1	PASS
SANTA CLARA	14	1	0	5.2	F	33	0	0	11.0	F	11.1	PASS
SANTA CRUZ	0	0	0	0.0	A	0	0	0	0.0	A	DNC	INC
SHASTA	24	0	0	8.0	F	0	0	0	0.0	A	7.2	PASS
SISKIYOU	0	0	0	0.0	A	*	*	*	*	*	DNC	INC
SOLANO	13	0	0	4.3	F	9	0	0	3.0	D	9.8	PASS
SONOMA	0	0	0	0.0	A	1	0	0	0.3	B	8.1	PASS
STANISLAUS	45	2	0	16.0	F	32	2	0	11.7	F	14.6	PASS
SUTTER	36	1	0	12.5	F	11	0	0	3.7	F	9.7	PASS
TEHAMA	60	0	0	20.0	F	DNC	DNC	DNC	DNC	DNC	DNC	DNC
TULARE	239	43	0	101.2	F	36	3	0	13.5	F	19.3	FAIL
TUOLUMNE	33	0	0	11.0	F	DNC	DNC	DNC	DNC	DNC	DNC	DNC
VENTURA	92	7	0	34.2	F	5	0	0	1.7	C	11.1	PASS
YOLO	24	0	0	8.0	F	8	0	0	2.7	D	8.7	PASS

Notes:
(1) The weighted average was derived by adding the three years of individual level data (2005-2007), multiplying the sums of each level by the assigned standard weights, i.e. 1=orange, 1.5=red, 2.0=purple and calculating the average. (2) Asterisk (*) indicates incomplete monitoring data for all three years. Therefore, those counties are excluded from the grade analysis or received an Incomplete. (3) DNC indicates that data on that particular pollutant is not collected in that county. (4) Grades are as follows: A=0.0, B=0.3-0.9, C=1.0-2.0, D=2.1-3.2, F=3.3+.

DELAWARE

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AT-RISK GROUPS

				Lung Diseases					
County	**Total Population**	**Under 18**	**65 & Over**	**Pediatric Asthma**	**Adult Asthma**	**Chronic Bronchitis**	**Emphysema**	**CV Disease**	**Diabetes**
KENT	152,255	38,771	19,341	3,525	8,896	3,857	1,904	40,919	8,783
NEW CASTLE	528,218	126,878	61,837	11,534	31,332	13,655	6,649	143,844	30,847
SUSSEX	184,291	39,997	36,500	3,636	11,179	5,267	2,992	59,722	13,211
TOTALS	**864,764**	**205,646**	**117,678**	**18,695**	**51,408**	**22,779**	**11,545**	**244,484**	**52,841**

HIGH OZONE DAYS/2005–2007

County	Orange	Red	Purple	Wgt. Avg	Grade
KENT	31	0	0	10.3	F
NEW CASTLE	44	2	1	16.3	F
SUSSEX	48	1	0	16.5	F

PARTICLE POLLUTION DAYS/2005–2007

	24-Hour					Annual	
County	Orange	Red	Purple	Wgt. Avg	Grade	Design Value	Pass/ Fail
KENT	5	0	0	1.7	C	12.4	PASS
NEW CASTLE	27	0	0	9.0	F	14.7	PASS
SUSSEX	4	0	0	1.3	C	13.4	PASS

Notes:
(1) The weighted average was derived by adding the three years of individual level data (2005-2007), multiplying the sums of each level by the assigned standard weights, i.e. 1=orange, 1.5=red, 2.0=purple and calculating the average. (2) Asterisk (*) indicates incomplete monitoring data for all three years. Therefore, those counties are excluded from the grade analysis or received an Incomplete. (3) DNC indicates that data on that particular pollutant is not collected in that county. (4) Grades are as follows: A=0.0, B=0.3-0.9, C=1.0-2.0, D=2.1-3.2, F=3.3+.

IDAHO

American Lung Association in Idaho

8030 Emerald St. Suite 175
Boise, ID 83704
(208) 345-5864
www.lungusa.org/idaho

AT-RISK GROUPS

				Lung Diseases					
County	**Total Population**	**Under 18**	**65 & Over**	**Pediatric Asthma**	**Adult Asthma**	**Chronic Bronchitis**	**Emphysema**	**CV Disease**	**Diabetes**
ADA	373,406	99,135	36,371	9,012	23,668	9,081	4,185	93,362	19,764
BANNOCK	79,925	22,722	8,228	2,066	4,942	1,902	891	19,702	4,182
BENEWAH	9,243	2,225	1,526	202	606	258	143	2,890	639
BONNEVILLE	96,545	29,290	10,106	2,663	5,807	2,271	1,092	23,788	5,084
BOUNDARY	10,872	2,722	1,543	247	703	293	156	3,220	706
BUTTE	2,771	708	452	64	178	76	43	855	189
CANYON	179,381	56,201	18,270	5,109	10,665	4,026	1,853	41,419	8,733
ELMORE	28,856	8,519	2,352	774	1,758	645	275	6,421	1,331
FRANKLIN	12,203	4,076	1,446	371	704	277	138	2,953	635
GEM	16,496	4,134	2,836	376	1,072	444	244	4,954	1,089
IDAHO	15,345	3,103	2,960	282	1,059	460	265	5,246	1,170
KOOTENAI	134,442	33,351	18,555	3,032	8,741	3,522	1,808	38,022	8,244
LEMHI	7,717	1,610	1,429	146	527	230	132	2,621	585
POWER	7,684	2,277	907	207	467	188	95	2,015	436
SHOSHONE	12,838	2,627	2,426	239	883	382	220	4,352	969
TOTALS	**987,724**	**272,700**	**109,407**	**24,791**	**61,782**	**24,054**	**11,541**	**251,819**	**53,758**

	HIGH OZONE DAYS/2005–2007					PARTICLE POLLUTION DAYS/2005–2007						
						24-Hour					Annual	
County	Orange	Red	Purple	Wgt. Avg	Grade	Orange	Red	Purple	Wgt. Avg	Grade	Design Value	Pass/ Fail
ADA	22	0	0	7.3	F	1	0	0	0.3	B	DNC	INC
BANNOCK	DNC	DNC	DNC	DNC	DNC	*	*	*	*	*	DNC	INC
BENEWAH	DNC	DNC	DNC	DNC	DNC	4	0	0	1.3	C	9.7	PASS
BONNEVILLE	DNC	DNC	DNC	DNC	DNC	*	*	*	*	*	DNC	INC
BOUNDARY	DNC	DNC	DNC	DNC	DNC	*	*	*	*	*	DNC	INC
BUTTE	0	0	0	0.0	A	DNC	DNC	DNC	DNC	DNC	DNC	DNC
CANYON	*	*	*	*	*	5	0	0	1.7	C	8.2	PASS
ELMORE	*	*	*	*	*	DNC	DNC	DNC	DNC	DNC	DNC	DNC
FRANKLIN	DNC	DNC	DNC	DNC	DNC	23	4	0	9.7	F	7.7	PASS
GEM	DNC	DNC	DNC	DNC	DNC	*	*	*	*	*	DNC	INC
IDAHO	DNC	DNC	DNC	DNC	DNC	3	0	0	1.0	C	9.6	PASS
KOOTENAI	0	0	0	0.0	A	DNC	DNC	DNC	DNC	DNC	DNC	DNC
LEMHI	DNC	DNC	DNC	DNC	DNC	*	*	*	*	*	DNC	INC
POWER	DNC	DNC	DNC	DNC	DNC	*	*	*	*	*	DNC	INC
SHOSHONE	DNC	DNC	DNC	DNC	DNC	7	0	0	2.3	D	12.0	PASS

Notes:
(1) The weighted average was derived by adding the three years of individual level data (2005-2007), multiplying the sums of each level by the assigned standard weights, i.e. 1=orange, 1.5=red, 2.0=purple and calculating the average. (2) Asterisk (*) indicates incomplete monitoring data for all three years. Therefore, those counties are excluded from the grade analysis or received an Incomplete. (3) DNC indicates that data on that particular pollutant is not collected in that county. (4) Grades are as follows: A=0.0, B=0.3-0.9, C=1.0-2.0, D=2.1-3.2, F=3.3+.

LOUISIANA

American Lung Association in Louisiana

2325 Severn Avenue, Suite 8
Metairie, LA 70001-6918
(504) 828-5864
www.lungusa.org/louisiana

AT-RISK GROUPS

Parish	Total Population	Under 18	65 & Over	Lung Diseases: Pediatric Asthma	Lung Diseases: Adult Asthma	Lung Diseases: Chronic Bronchitis	Lung Diseases: Emphysema	CV Disease	Diabetes
ASCENSION	99,056	28,684	8,025	2,608	4,408	2,277	998	22,910	4,793
BEAUREGARD	34,776	8,865	4,342	806	1,624	883	436	9,368	2,012
BOSSIER	108,705	29,582	12,507	2,689	4,959	2,666	1,287	27,994	5,982
CADDO	252,609	64,165	34,400	5,833	11,813	6,514	3,313	70,036	15,142
CALCASIEU	184,512	47,291	23,019	4,299	8,600	4,701	2,337	50,001	10,763
CONCORDIA	19,058	4,762	2,988	433	896	509	273	5,613	1,229
EAST BATON ROUGE	430,317	107,470	45,289	9,770	20,229	10,687	4,961	110,263	23,356
GRANT	19,758	5,124	2,526	466	917	503	252	5,372	1,158
IBERVILLE	32,501	7,767	3,702	706	1,550	828	394	8,639	1,840
JEFFERSON	423,520	99,906	57,713	9,082	20,281	11,345	5,840	122,573	26,629
LAFAYETTE	204,843	52,804	20,853	4,800	9,526	5,040	2,337	51,965	11,011
LAFOURCHE	92,713	22,659	11,059	2,060	4,390	2,369	1,150	24,929	5,335
LIVINGSTON	116,580	31,723	10,613	2,884	5,316	2,769	1,242	28,138	5,915
ORLEANS	239,124	44,085	30,363	4,008	12,220	6,694	3,298	70,874	15,252
OUACHITA	149,502	39,595	18,309	3,600	6,889	3,710	1,810	39,143	8,377
PLAQUEMINES	21,540	5,652	2,398	514	995	545	267	5,758	1,239
POINTE COUPEE	22,392	5,412	3,290	492	1,064	601	317	6,565	1,432
RAPIDES	130,079	33,485	17,451	3,044	6,055	3,338	1,695	35,854	7,750
ST. BERNARD	19,826	3,382	1,731	307	1,030	551	251	5,627	1,194

AT-RISK GROUPS

Parish	Total Population	Under 18	65 & Over	Lung Diseases: Pediatric Asthma	Lung Diseases: Adult Asthma	Lung Diseases: Chronic Bronchitis	Lung Diseases: Emphysema	CV Disease	Diabetes
ST. CHARLES	52,044	13,862	5,079	1,260	2,392	1,293	614	13,454	2,875
ST. JAMES	21,578	5,602	2,667	509	1,001	549	274	5,847	1,260
ST. JOHN THE BAPTIST	47,684	13,739	4,072	1,249	2,126	1,125	512	11,500	2,433
ST. MARY	51,311	13,553	6,713	1,232	2,367	1,313	669	14,121	3,058
ST. TAMMANY	226,625	58,962	26,429	5,360	10,505	5,787	2,875	61,495	13,264
TANGIPAHOA	115,398	30,410	12,550	2,765	5,326	2,812	1,314	29,105	6,168
TERREBONNE	108,424	28,901	11,720	2,627	4,983	2,671	1,272	27,868	5,943
WEST BATON ROUGE	22,625	5,778	2,367	525	1,055	566	268	5,891	1,256
TOTALS	**3,247,100**	**813,220**	**382,175**	**73,930**	**152,516**	**82,644**	**40,255**	**870,904**	**186,666**

LOUISIANA

American Lung Association in Louisiana

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HIGH OZONE DAYS/2005–2007

Parish	Orange	Red	Purple	Wgt. Avg	Grade
ASCENSION	34	2	0	12.3	F
BEAUREGARD	*	*	*	*	*
BOSSIER	28	0	0	9.3	F
CADDO	31	0	0	10.3	F
CALCASIEU	29	1	0	10.2	F
CONCORDIA	DNC	DNC	DNC	DNC	DNC
EAST BATON ROUGE	56	11	0	24.2	F
GRANT	*	*	*	*	*
IBERVILLE	68	5	0	25.2	F
JEFFERSON	29	1	0	10.2	F
LAFAYETTE	21	0	0	7.0	F
LAFOURCHE	23	1	0	8.2	F
LIVINGSTON	25	0	0	8.3	F
ORLEANS	*	*	*	*	*
OUACHITA	13	0	0	4.3	F
PLAQUEMINES	DNC	DNC	DNC	DNC	DNC
POINTE COUPEE	38	3	0	14.2	F
RAPIDES	DNC	DNC	DNC	DNC	DNC
ST. BERNARD	*	*	*	*	*

PARTICLE POLLUTION DAYS/2005–2007

	24-Hour					Annual	
Parish	Orange	Red	Purple	Wgt. Avg	Grade	Design Value	Pass/ Fail
ASCENSION	DNC	DNC	DNC	DNC	DNC	DNC	DNC
BEAUREGARD	DNC	DNC	DNC	DNC	DNC	DNC	DNC
BOSSIER	DNC	DNC	DNC	DNC	DNC	DNC	DNC
CADDO	4	0	0	1.3	C	DNC	INC
CALCASIEU	3	0	0	1.0	C	10.9	PASS
CONCORDIA	*	*	*	*	*	DNC	INC
EAST BATON ROUGE	5	0	0	1.7	C	13.3	PASS
GRANT	DNC	DNC	DNC	DNC	DNC	DNC	DNC
IBERVILLE	1	0	0	0.3	B	13.0	PASS
JEFFERSON	7	0	0	2.3	D	11.4	PASS
LAFAYETTE	1	0	0	0.3	B	11.0	PASS
LAFOURCHE	DNC	DNC	DNC	DNC	DNC	DNC	DNC
LIVINGSTON	DNC	DNC	DNC	DNC	DNC	DNC	DNC
ORLEANS	3	0	0	1.0	C	DNC	INC
OUACHITA	4	0	0	1.3	C	12.2	PASS
PLAQUEMINES	*	*	*	*	*	DNC	INC
POINTE COUPEE	DNC	DNC	DNC	DNC	DNC	DNC	DNC
RAPIDES	0	0	0	0.0	A	11.0	PASS
ST. BERNARD	3	0	0	1.0	C	DNC	INC

HIGH OZONE DAYS/2005–2007

PARTICLE POLLUTION DAYS/2005–2007

						24-Hour					Annual	
Parish	Orange	Red	Purple	Wgt. Avg	Grade	Orange	Red	Purple	Wgt. Avg	Grade	Design Value	Pass/ Fail
ST. CHARLES	15	0	0	5.0	F	*	*	*	*	*	DNC	INC
ST. JAMES	18	0	0	6.0	F	DNC	DNC	DNC	DNC	DNC	DNC	DNC
ST. JOHN THE BAPTIST	22	0	0	7.3	F	DNC	DNC	DNC	DNC	DNC	DNC	DNC
ST. MARY	*	*	*	*	*	DNC	DNC	DNC	DNC	DNC	DNC	DNC
ST. TAMMANY	DNC	DNC	DNC	DNC	DNC	0	0	0	0.0	A	DNC	INC
TANGIPAHOA	DNC	DNC	DNC	DNC	DNC	3	0	0	1.0	C	12.4	PASS
TERREBONNE	DNC	DNC	DNC	DNC	DNC	0	1	0	0.5	B	10.8	PASS
WEST BATON ROUGE	25	3	0	9.8	F	4	1	0	1.8	C	13.7	PASS

Notes:
(1) The weighted average was derived by adding the three years of individual level data (2005-2007), multiplying the sums of each level by the assigned standard weights, i.e. 1=orange, 1.5=red, 2.0=purple and calculating the average. (2) Asterisk (*) indicates incomplete monitoring data for all three years. Therefore, those counties are excluded from the grade analysis or received an Incomplete. (3) DNC indicates that data on that particular pollutant is not collected in that county. (4) Grades are as follows: A=0.0, B=0.3-0.9, C=1.0-2.0, D=2.1-3.2, F=3.3+.

MARYLAND

American Lung Association in Maryland

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Hunt Valley, MD 21031
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AT-RISK GROUPS

				Lung Diseases					
County	**Total Population**	**Under 18**	**65 & Over**	**Pediatric Asthma**	**Adult Asthma**	**Chronic Bronchitis**	**Emphysema**	**CV Disease**	**Diabetes**
ANNE ARUNDEL	512,154	123,957	56,517	11,269	31,951	13,188	6,360	138,281	29,617
BALTIMORE CITY	637,455	155,155	75,658	14,105	39,656	16,254	7,844	170,623	36,462
BALTIMORE	788,994	177,547	113,302	16,141	50,475	21,266	10,918	229,612	49,766
CALVERT	88,223	22,342	8,686	2,031	5,417	2,220	1,046	23,033	4,911
CARROLL	169,220	41,481	19,741	3,771	10,531	4,397	2,172	46,608	10,041
CECIL	99,695	24,729	11,047	2,248	6,159	2,511	1,192	26,159	5,572
CHARLES	140,444	37,625	11,651	3,420	8,423	3,362	1,494	34,012	7,149
FREDERICK	224,705	58,380	22,530	5,307	13,667	5,575	2,618	57,771	12,296
GARRETT	29,627	6,536	4,920	594	1,911	820	440	9,041	1,977
HARFORD	239,993	60,620	27,176	5,511	14,779	6,143	3,008	64,857	13,942
KENT	19,987	3,737	3,879	340	1,346	581	320	6,493	1,425
MONTGOMERY	930,813	226,246	113,190	20,568	58,144	24,440	12,246	260,713	56,351
PRINCE GEORGE'S	828,770	208,468	74,818	18,952	50,847	20,388	9,191	207,576	43,756
WASHINGTON	145,113	33,189	19,903	3,017	9,211	3,802	1,888	40,449	8,685
WORCESTER	49,374	9,385	10,962	853	3,325	1,471	854	16,872	3,745
TOTALS	**4,904,567**	**1,189,397**	**573,980**	**108,128**	**305,842**	**126,418**	**61,592**	**1,332,099**	**285,696**

	HIGH OZONE DAYS/2005–2007					PARTICLE POLLUTION DAYS/2005–2007						
						24-Hour					Annual	
County	Orange	Red	Purple	Wgt. Avg	Grade	Orange	Red	Purple	Wgt. Avg	Grade	Design Value	Pass/ Fail
ANNE ARUNDEL	48	2	1	17.7	F	7	0	0	2.3	D	14.3	PASS
BALTIMORE CITY	*	*	*	*	*	39	0	0	13.0	F	15.6	FAIL
BALTIMORE	50	5	0	19.2	F	25	0	0	8.3	F	14.5	PASS
CALVERT	29	0	0	9.7	F	DNC	DNC	DNC	DNC	DNC	DNC	DNC
CARROLL	39	1	0	13.5	F	DNC	DNC	DNC	DNC	DNC	DNC	DNC
CECIL	53	6	1	21.3	F	2	0	0	0.7	B	12.5	PASS
CHARLES	38	3	0	14.2	F	DNC	DNC	DNC	DNC	DNC	DNC	DNC
FREDERICK	42	0	0	14.0	F	DNC	DNC	DNC	DNC	DNC	DNC	DNC
GARRETT	13	0	0	4.3	F	DNC	DNC	DNC	DNC	DNC	DNC	DNC
HARFORD	65	9	0	26.2	F	4	0	0	1.3	C	12.4	PASS
KENT	40	1	0	13.8	F	DNC	DNC	DNC	DNC	DNC	DNC	DNC
MONTGOMERY	33	3	0	12.5	F	3	0	0	1.0	C	12.2	PASS
PRINCE GEORGE'S	67	7	0	25.8	F	8	0	0	2.7	D	12.8	PASS
WASHINGTON	24	0	0	8.0	F	2	0	0	0.7	B	13.2	PASS
WORCESTER	*	*	*	*	*	DNC	DNC	DNC	DNC	DNC	DNC	DNC

Notes:
(1) The weighted average was derived by adding the three years of individual level data (2005-2007), multiplying the sums of each level by the assigned standard weights, i.e. 1=orange, 1.5=red, 2.0=purple and calculating the average. (2) Asterisk (*) indicates incomplete monitoring data for all three years. Therefore, those counties are excluded from the grade analysis or received an Incomplete. (3) DNC indicates that data on that particular pollutant is not collected in that county. (4) Grades are as follows: A=0.0, B=0.3-0.9, C=1.0-2.0, D=2.1-3.2, F=3.3+.

MINNESOTA

American Lung Association in Minnesota

490 Concordia Avenue
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(651) 227-8014
www.lungusa.org/minnesota

AT-RISK GROUPS

				Lung Diseases					
County	**Total Population**	**Under 18**	**65 & Over**	**Pediatric Asthma**	**Adult Asthma**	**Chronic Bronchitis**	**Emphysema**	**CV Disease**	**Diabetes**
ANOKA	326,252	86,151	27,263	7,832	18,748	7,955	3,600	81,073	17,138
BECKER	31,964	7,375	5,306	670	1,867	882	479	9,781	2,147
CARLTON	33,893	7,497	5,000	682	2,022	923	478	10,008	2,174
CASS	28,723	6,275	5,403	570	1,693	818	460	9,230	2,039
CROW WING	61,648	14,070	10,807	1,279	3,617	1,694	922	18,821	4,124
DAKOTA	390,478	104,895	32,489	9,536	22,286	9,482	4,304	96,758	20,473
GOODHUE	45,839	10,535	6,995	958	2,691	1,254	665	13,746	3,004
HENNEPIN	1,136,599	267,405	123,283	24,310	67,387	29,393	14,046	306,953	65,603
LAKE	10,741	2,019	2,206	184	653	325	188	3,712	826
LYON	24,695	5,803	3,637	528	1,453	651	333	7,020	1,517
MILLE LACS	26,354	6,297	4,167	572	1,536	699	367	7,632	1,658
OLMSTED	139,747	35,701	16,396	3,246	8,052	3,530	1,719	37,198	7,971
RAMSEY	499,891	121,327	63,534	11,030	29,193	12,982	6,461	138,150	29,748
SCOTT	126,642	38,028	8,151	3,457	7,015	2,795	1,149	27,382	5,645
ST. LOUIS	196,694	38,538	30,762	3,503	12,077	5,584	2,935	60,948	13,288
STEARNS	146,051	33,475	17,291	3,043	8,779	3,714	1,740	38,500	8,154
WASHINGTON	226,475	59,917	19,582	5,447	12,955	5,594	2,589	57,557	12,242
WRIGHT	117,372	33,831	9,972	3,076	6,559	2,706	1,193	27,302	5,717
TOTALS	**3,570,058**	**879,139**	**392,244**	**79,923**	**208,583**	**90,982**	**43,628**	**951,771**	**203,469**

HIGH OZONE DAYS/2005–2007

PARTICLE POLLUTION DAYS/2005–2007

						24-Hour					Annual	
County	Orange	Red	Purple	Wgt. Avg	Grade	Orange	Red	Purple	Wgt. Avg	Grade	Design Value	Pass/ Fail
ANOKA	7	0	0	2.3	D	DNC	DNC	DNC	DNC	DNC	DNC	DNC
BECKER	0	0	0	0.0	A	DNC	DNC	DNC	DNC	DNC	DNC	DNC
CARLTON	0	0	0	0.0	A	DNC	DNC	DNC	DNC	DNC	DNC	DNC
CASS	DNC	DNC	DNC	DNC	DNC	1	0	0	0.3	B	5.7	PASS
CROW WING	4	0	0	1.3	C	DNC	DNC	DNC	DNC	DNC	DNC	DNC
DAKOTA	DNC	DNC	DNC	DNC	DNC	2	0	0	0.7	B	9.6	PASS
GOODHUE	4	0	0	1.3	C	DNC	DNC	DNC	DNC	DNC	DNC	DNC
HENNEPIN	DNC	DNC	DNC	DNC	DNC	2	0	0	0.7	B	9.8	PASS
LAKE	1	0	0	0.3	B	DNC	DNC	DNC	DNC	DNC	DNC	DNC
LYON	0	0	0	0.0	A	DNC	DNC	DNC	DNC	DNC	DNC	DNC
MILLE LACS	8	0	0	2.7	D	2	0	0	0.7	B	6.7	PASS
OLMSTED	2	0	0	0.7	B	2	0	0	0.7	B	DNC	INC
RAMSEY	DNC	DNC	DNC	DNC	DNC	1	1	0	0.8	B	11.2	PASS
SCOTT	2	0	0	0.7	B	2	0	0	0.7	B	9.2	PASS
ST. LOUIS	2	0	0	0.7	B	1	0	0	0.3	B	7.6	PASS
STEARNS	1	0	0	0.3	B	3	0	0	1.0	C	8.5	PASS
WASHINGTON	6	0	0	2.0	C	*	*	*	*	*	DNC	INC
WRIGHT	7	0	0	2.3	D	DNC	DNC	DNC	DNC	DNC	DNC	DNC

Notes:
(1) The weighted average was derived by adding the three years of individual level data (2005-2007), multiplying the sums of each level by the assigned standard weights, i.e. 1=orange, 1.5=red, 2.0=purple and calculating the average. (2) Asterisk (*) indicates incomplete monitoring data for all three years. Therefore, those counties are excluded from the grade analysis or received an Incomplete. (3) DNC indicates that data on that particular pollutant is not collected in that county. (4) Grades are as follows: A=0.0, B=0.3-0.9, C=1.0-2.0, D=2.1-3.2, F=3.3+.

MISSOURI

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AT-RISK GROUPS

				Lung Diseases					
County	**Total Population**	**Under 18**	**65 & Over**	**Pediatric Asthma**	**Adult Asthma**	**Chronic Bronchitis**	**Emphysema**	**CV Disease**	**Diabetes**
BOONE	152,435	34,125	13,858	3,102	10,005	3,739	1,586	37,142	7,686
BUCHANAN	86,485	20,381	12,524	1,853	5,595	2,278	1,162	24,532	5,301
CASS	97,133	25,646	11,118	2,331	6,079	2,426	1,179	25,539	5,472
CEDAR	13,729	3,170	2,850	288	891	391	228	4,491	999
CLAY	211,952	54,806	22,676	4,982	13,374	5,288	2,517	55,142	11,764
CLINTON	20,894	5,013	2,948	456	1,350	555	287	6,013	1,306
GREENE	263,980	58,247	35,964	5,295	17,401	6,951	3,421	73,655	15,779
JACKSON	666,890	170,640	81,321	15,513	42,222	17,041	8,464	181,148	39,016
JEFFERSON	216,076	54,575	22,276	4,961	13,775	5,454	2,592	56,811	12,131
LINCOLN	51,528	13,993	5,083	1,272	3,186	1,235	566	12,670	2,676
MONROE	9,205	2,189	1,603	199	595	253	140	2,831	623
PERRY	18,794	4,591	2,926	417	1,203	499	263	5,461	1,189
PLATTE	84,881	20,809	8,148	1,892	5,480	2,166	1,021	22,467	4,796
ST. CHARLES	343,952	90,898	35,172	8,264	21,542	8,476	3,991	87,959	18,722
ST. LOUIS CITY	350,759	88,110	40,756	8,010	22,320	8,882	4,298	93,332	19,970
ST. LOUIS	995,118	232,461	141,481	21,133	65,038	27,098	14,235	295,504	64,532
STE. GENEVIEVE	17,841	4,020	2,653	365	1,175	487	255	5,310	1,157
TOTALS	**3,601,652**	**883,674**	**443,357**	**80,335**	**231,230**	**93,220**	**46,204**	**990,008**	**213,117**

	HIGH OZONE DAYS/2005–2007					PARTICLE POLLUTION DAYS/2005–2007						
						24-Hour					Annual	
County	Orange	Red	Purple	Wgt. Avg	Grade	Orange	Red	Purple	Wgt. Avg	Grade	Design Value	Pass/ Fail
BOONE	DNC	DNC	DNC	DNC	DNC	*	*	*	*	*	DNC	INC
BUCHANAN	DNC	DNC	DNC	DNC	DNC	3	0	0	1.0	C	12.8	PASS
CASS	14	0	0	4.7	F	0	0	0	0.0	A	10.8	PASS
CEDAR	12	0	0	4.0	F	*	*	*	*	*	DNC	INC
CLAY	67	4	0	24.3	F	0	0	0	0.0	A	11.3	PASS
CLINTON	46	0	0	15.3	F	DNC	DNC	DNC	DNC	DNC	DNC	DNC
GREENE	13	0	0	4.3	F	1	0	0	0.3	B	11.8	PASS
JACKSON	*	*	*	*	*	4	0	0	1.3	C	12.6	PASS
JEFFERSON	45	2	0	16.0	F	21	0	0	7.0	F	13.9	PASS
LINCOLN	42	3	0	15.5	F	DNC	DNC	DNC	DNC	DNC	DNC	DNC
MONROE	10	0	0	3.3	F	*	*	*	*	*	DNC	INC
PERRY	36	0	0	12.0	F	DNC	DNC	DNC	DNC	DNC	DNC	DNC
PLATTE	*	*	*	*	*	DNC	DNC	DNC	DNC	DNC	DNC	DNC
ST. CHARLES	73	5	0	26.8	F	7	0	0	2.3	D	13.3	PASS
ST. LOUIS CITY	44	3	0	16.2	F	26	0	0	8.7	F	14.6	PASS
ST. LOUIS	70	7	0	26.8	F	13	0	0	4.3	F	13.4	PASS
STE. GENEVIEVE	31	1	0	10.8	F	3	0	0	1.0	C	13.3	PASS

Notes:
(1) The weighted average was derived by adding the three years of individual level data (2005-2007), multiplying the sums of each level by the assigned standard weights, i.e. 1=orange, 1.5=red, 2.0=purple and calculating the average. (2) Asterisk (*) indicates incomplete monitoring data for all three years. Therefore, those counties are excluded from the grade analysis or received an Incomplete. (3) DNC indicates that data on that particular pollutant is not collected in that county. (4) Grades are as follows: A=0.0, B=0.3-0.9, C=1.0-2.0, D=2.1-3.2, F=3.3+.

MONTANA

American Lung Association in Montana

825 Helena Avenue
Helena, MT 59601-3459
(406) 442-6556
www.lungusa.org/montana

AT-RISK GROUPS

				Lung Diseases					
County	**Total Population**	**Under 18**	**65 & Over**	**Pediatric Asthma**	**Adult Asthma**	**Chronic Bronchitis**	**Emphysema**	**CV Disease**	**Diabetes**
CASCADE	81,775	20,402	12,414	1,855	5,663	2,192	1,174	24,131	5,285
FLATHEAD	86,844	20,471	11,199	1,861	6,136	2,338	1,200	25,217	5,484
GALLATIN	87,359	18,908	7,442	1,719	6,310	2,186	934	21,768	4,524
LAKE	28,438	6,898	4,483	627	1,988	776	421	8,599	1,889
LEWIS AND CLARK	59,998	13,641	7,565	1,240	4,288	1,633	834	17,568	3,819
LINCOLN	18,885	3,855	3,635	350	1,389	568	329	6,494	1,450
MISSOULA	105,650	22,178	10,928	2,016	7,700	2,758	1,265	28,296	5,984
RAVALLI	40,396	9,033	6,936	821	2,896	1,151	642	12,920	2,858
ROSEBUD	9,182	2,676	982	243	603	231	118	2,481	540
SANDERS	11,033	2,162	2,150	197	819	334	193	3,813	851
SILVER BOW	32,652	7,201	5,460	655	2,348	917	500	10,190	2,240
YELLOWSTONE	139,936	33,891	19,115	3,081	9,786	3,710	1,908	40,072	8,700
TOTALS	**702,148**	**161,316**	**92,309**	**14,665**	**49,927**	**18,794**	**9,519**	**201,548**	**43,624**

HIGH OZONE DAYS/2005–2007

PARTICLE POLLUTION DAYS/2005–2007

						24-Hour					Annual	
County	Orange	Red	Purple	Wgt. Avg	Grade	Orange	Red	Purple	Wgt. Avg	Grade	Design Value	Pass/ Fail
CASCADE	DNC	DNC	DNC	DNC	DNC	5	0	0	1.7	C	5.8	PASS
FLATHEAD	0	0	0	0.0	A	2	2	0	1.7	C	9.6	PASS
GALLATIN	DNC	DNC	DNC	DNC	DNC	7	2	0	3.3	F	4.3	PASS
LAKE	DNC	DNC	DNC	DNC	DNC	*	*	*	*	*	DNC	INC
LEWIS AND CLARK	DNC	DNC	DNC	DNC	DNC	7	0	0	2.3	D	8.0	PASS
LINCOLN	DNC	DNC	DNC	DNC	DNC	13	1	0	4.8	F	14.7	PASS
MISSOULA	*	*	*	*	*	14	1	0	5.2	F	10.1	PASS
RAVALLI	DNC	DNC	DNC	DNC	DNC	6	1	0	2.5	D	8.6	PASS
ROSEBUD	DNC	DNC	DNC	DNC	DNC	*	*	*	*	*	DNC	INC
SANDERS	DNC	DNC	DNC	DNC	DNC	0	1	0	0.5	B	6.9	PASS
SILVER BOW	DNC	DNC	DNC	DNC	DNC	15	1	0	5.5	F	10.5	PASS
YELLOWSTONE	0	0	0	0.0	A	0	2	0	1.0	C	8.6	PASS

Notes:
(1) The weighted average was derived by adding the three years of individual level data (2005-2007), multiplying the sums of each level by the assigned standard weights, i.e. 1=orange, 1.5=red, 2.0=purple and calculating the average. (2) Asterisk (*) indicates incomplete monitoring data for all three years. Therefore, those counties are excluded from the grade analysis or received an Incomplete. (3) DNC indicates that data on that particular pollutant is not collected in that county. (4) Grades are as follows: A=0.0, B=0.3-0.9, C=1.0-2.0, D=2.1-3.2, F=3.3+.

NEW MEXICO

American Lung Association in New Mexico

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AT-RISK GROUPS

				Lung Diseases					
County	**Total Population**	**Under 18**	**65 & Over**	**Pediatric Asthma**	**Adult Asthma**	**Chronic Bronchitis**	**Emphysema**	**CV Disease**	**Diabetes**
BERNALILLO	629,292	155,593	75,933	14,145	41,008	16,061	7,833	169,371	36,291
CHAVES	62,595	16,550	9,297	1,505	3,969	1,605	838	17,476	3,795
DONA ANA	198,791	54,656	23,455	4,969	12,443	4,758	2,250	49,548	10,505
EDDY	51,002	13,410	7,011	1,219	3,251	1,320	686	14,327	3,116
GRANT	29,699	6,613	5,728	601	1,984	847	481	9,599	2,126
LEA	58,043	16,529	6,871	1,503	3,589	1,401	683	14,777	3,162
LUNA	26,996	7,402	5,474	673	1,674	714	413	8,176	1,810
SAN JUAN	122,427	33,845	12,827	3,077	7,680	2,965	1,403	30,848	6,568
SANDOVAL	117,866	30,420	12,648	2,765	7,586	2,949	1,408	30,793	6,576
SANTA FE	142,955	30,181	18,725	2,744	9,782	3,951	2,011	42,449	9,212
VALENCIA	71,364	18,614	8,081	1,692	4,571	1,784	862	18,731	4,007
TOTALS	**1,511,030**	**383,813**	**186,050**	**34,892**	**97,537**	**38,356**	**18,868**	**406,097**	**87,168**

HIGH OZONE DAYS/2005–2007

PARTICLE POLLUTION DAYS/2005–2007

						24-Hour					Annual	
County	Orange	Red	Purple	Wgt. Avg	Grade	Orange	Red	Purple	Wgt. Avg	Grade	Design Value	Pass/ Fail
BERNALILLO	15	0	0	5.0	F	2	0	0	0.7	B	7.1	PASS
CHAVES	DNC	DNC	DNC	DNC	DNC	0	0	0	0.0	A	6.6	PASS
DONA ANA	18	0	0	6.0	F	6	0	0	2.0	C	9.7	PASS
EDDY	6	0	0	2.0	C	DNC	DNC	DNC	DNC	DNC	DNC	DNC
GRANT	0	0	0	0.0	A	0	0	0	0.0	A	DNC	INC
LEA	6	0	0	2.0	C	0	0	0	0.0	A	DNC	INC
LUNA	*	*	*	*	*	DNC	DNC	DNC	DNC	DNC	DNC	DNC
SAN JUAN	24	0	0	8.0	F	0	0	0	0.0	A	5.8	PASS
SANDOVAL	7	0	0	2.3	D	2	0	0	0.7	B	7.8	PASS
SANTA FE	*	*	*	*	*	0	0	0	0.0	A	4.7	PASS
VALENCIA	*	*	*	*	*	DNC	DNC	DNC	DNC	DNC	DNC	DNC

Notes:
(1) The weighted average was derived by adding the three years of individual level data (2005-2007), multiplying the sums of each level by the assigned standard weights, i.e. 1=orange, 1.5=red, 2.0=purple and calculating the average. (2) Asterisk (*) indicates incomplete monitoring data for all three years. Therefore, those counties are excluded from the grade analysis or received an Incomplete. (3) DNC indicates that data on that particular pollutant is not collected in that county. (4) Grades are as follows: A=0.0, B=0.3-0.9, C=1.0-2.0, D=2.1-3.2, F=3.3+.

NEW JERSEY

American Lung Association in New Jersey

1600 Route 22 East
Union, NJ 07083-3410
(908) 687-9340
www.lungusa.org/newjersey

AT-RISK GROUPS

				Lung Diseases					
County	**Total Population**	**Under 18**	**65 & Over**	**Pediatric Asthma**	**Adult Asthma**	**Chronic Bronchitis**	**Emphysema**	**CV Disease**	**Diabetes**
ATLANTIC	270,644	65,045	37,532	5,913	17,028	7,116	3,625	76,563	16,562
BERGEN	895,744	197,496	132,209	17,954	57,784	24,722	12,979	269,595	58,817
CAMDEN	513,769	128,429	62,967	11,675	32,060	13,199	6,534	140,105	30,146
CUMBERLAND	155,544	38,024	19,413	3,457	9,765	3,945	1,910	41,492	8,859
ESSEX	776,087	198,343	90,495	18,031	48,128	19,542	9,471	205,500	43,978
GLOUCESTER	285,753	67,124	32,921	6,102	18,242	7,405	3,575	77,712	16,632
HUDSON	598,160	130,946	65,061	11,904	39,035	15,188	6,875	155,093	32,594
HUNTERDON	129,348	30,035	14,459	2,730	8,311	3,504	1,767	37,446	8,136
MERCER	365,449	84,231	43,772	7,657	23,431	9,501	4,593	99,797	21,345
MIDDLESEX	788,629	181,367	94,772	16,488	50,584	20,432	9,833	214,212	45,744
MONMOUTH	642,030	154,596	82,609	14,054	40,536	17,154	8,802	184,980	40,218
MORRIS	488,475	116,696	61,578	10,609	30,944	13,038	6,642	140,120	30,418
OCEAN	565,493	131,100	117,194	11,918	35,242	15,837	9,098	180,668	39,985
PASSAIC	492,115	127,258	59,297	11,569	30,353	12,395	6,072	130,981	28,092
UNION	524,658	130,760	65,865	11,887	32,748	13,571	6,786	144,705	31,213
WARREN	109,737	26,452	14,269	2,405	6,920	2,899	1,472	31,130	6,743
TOTALS	**7,601,635**	**1,807,902**	**994,413**	**164,356**	**481,112**	**199,449**	**100,035**	**2,130,100**	**459,480**

HIGH OZONE DAYS/2005–2007

PARTICLE POLLUTION DAYS/2005–2007

						24-Hour					Annual	
County	Orange	Red	Purple	Wgt. Avg	Grade	Orange	Red	Purple	Wgt. Avg	Grade	Design Value	Pass/ Fail
ATLANTIC	24	0	0	8.0	F	2	1	0	1.2	C	11.5	PASS
BERGEN	*	*	*	*	*	11	0	0	3.7	F	13.2	PASS
CAMDEN	70	8	0	27.3	F	17	0	0	5.7	F	13.5	PASS
CUMBERLAND	30	2	0	11.0	F	DNC	DNC	DNC	DNC	DNC	DNC	DNC
ESSEX	*	*	*	*	*	10	0	0	3.3	F	13.3	PASS
GLOUCESTER	35	2	0	12.7	F	3	0	0	1.0	C	DNC	INC
HUDSON	33	1	0	11.5	F	19	0	0	6.3	F	14.0	PASS
HUNTERDON	50	2	0	17.7	F	DNC	DNC	DNC	DNC	DNC	DNC	DNC
MERCER	44	5	0	17.2	F	9	0	0	3.0	D	12.5	PASS
MIDDLESEX	52	6	0	20.3	F	3	0	0	1.0	C	12.1	PASS
MONMOUTH	37	2	0	13.3	F	DNC	DNC	DNC	DNC	DNC	DNC	DNC
MORRIS	55	4	0	20.3	F	4	0	0	1.3	C	11.3	PASS
OCEAN	51	7	0	20.5	F	5	0	0	1.7	C	10.7	PASS
PASSAIC	29	0	0	9.7	F	9	0	0	3.0	D	12.9	PASS
UNION	*	*	*	*	*	36	0	0	12.0	F	14.5	PASS
WARREN	DNC	DNC	DNC	DNC	DNC	5	0	0	1.7	C	12.7	PASS

Notes:
(1) The weighted average was derived by adding the three years of individual level data (2005-2007), multiplying the sums of each level by the assigned standard weights, i.e. 1=orange, 1.5=red, 2.0=purple and calculating the average. (2) Asterisk (*) indicates incomplete monitoring data for all three years. Therefore, those counties are excluded from the grade analysis or received an Incomplete. (3) DNC indicates that data on that particular pollutant is not collected in that county. (4) Grades are as follows: A=0.0, B=0.3-0.9, C=1.0-2.0, D=2.1-3.2, F=3.3+.

NEW YORK

American Lung Association in New York

155 Washington Ave., Suite 210
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(518) 465-2013
www.lungusa.org/newyork

AT-RISK GROUPS

				Lung Diseases					
County	**Total Population**	**Under 18**	**65 & Over**	**Pediatric Asthma**	**Adult Asthma**	**Chronic Bronchitis**	**Emphysema**	**CV Disease**	**Diabetes**
ALBANY	299,307	61,188	40,642	5,563	20,697	8,128	4,033	86,406	18,577
BRONX	1,373,659	387,025	144,266	35,184	85,167	32,337	14,905	332,814	70,239
CHAUTAUQUA	133,945	28,707	21,252	2,610	9,145	3,703	1,951	40,476	8,818
CHEMUNG	88,015	19,347	13,477	1,759	5,978	2,412	1,263	26,288	5,722
DUTCHESS	292,746	65,970	36,677	5,997	19,818	7,767	3,839	82,381	17,723
ERIE	913,338	199,858	141,471	18,169	62,178	25,168	13,259	275,031	59,961
ESSEX	38,119	7,158	6,350	651	2,691	1,093	580	11,986	2,615
FRANKLIN	50,449	9,485	6,677	862	3,550	1,379	668	14,502	3,099
HAMILTON	5,075	848	1,090	77	370	159	93	1,832	409
HERKIMER	62,558	13,312	10,068	1,210	4,289	1,745	929	19,164	4,186
JEFFERSON	117,201	28,862	13,365	2,624	7,587	2,877	1,321	29,574	6,227
KINGS	2,528,050	637,307	307,692	57,938	163,692	63,455	30,635	666,473	142,257
MADISON	69,829	14,743	9,110	1,340	4,801	1,882	931	19,973	4,294
MONROE	729,681	167,562	97,857	15,233	49,087	19,455	9,838	208,542	45,082
NASSAU	1,306,533	301,502	194,619	27,410	88,379	35,998	19,192	395,319	86,610
NEW YORK	1,620,867	273,423	204,078	24,857	116,001	44,125	20,423	455,080	96,056
NIAGARA	214,845	46,837	32,807	4,258	14,675	5,939	3,128	64,886	14,154
ONEIDA	232,304	49,945	36,989	4,541	15,827	6,403	3,370	69,964	15,234

AT-RISK GROUPS

County	Total Population	Under 18	65 & Over	Lung Diseases: Pediatric Asthma	Lung Diseases: Adult Asthma	Lung Diseases: Chronic Bronchitis	Lung Diseases: Emphysema	CV Disease	Diabetes
ONONDAGA	454,010	105,188	61,931	9,563	30,398	12,059	6,108	129,381	27,964
ORANGE	377,169	101,162	37,461	9,197	24,125	9,213	4,305	95,287	20,247
OSWEGO	121,454	27,445	14,338	2,495	8,209	3,184	1,540	33,445	7,159
PUTNAM	99,489	23,571	11,068	2,143	6,734	2,647	1,317	28,129	6,085
QUEENS	2,270,338	485,989	299,388	44,181	154,922	60,582	29,797	641,503	137,609
RENSSELAER	155,318	33,819	20,137	3,074	10,598	4,160	2,063	44,202	9,511
RICHMOND	481,613	114,171	57,621	10,379	32,127	12,538	6,142	132,437	28,439
SARATOGA	215,852	47,726	26,149	4,339	14,713	5,741	2,811	60,628	13,022
SCHENECTADY	150,818	34,541	23,143	3,140	10,126	4,098	2,159	44,786	9,762
ST. LAWRENCE	109,809	22,409	14,804	2,037	7,563	2,950	1,443	31,167	6,671
STEUBEN	96,874	21,801	14,898	1,982	6,551	2,656	1,404	29,065	6,343
SUFFOLK	1,453,229	358,691	185,431	32,609	95,965	38,051	19,260	407,911	88,295
ULSTER	181,860	37,615	24,747	3,420	12,630	5,010	2,538	53,734	11,629
WAYNE	91,291	21,797	12,121	1,982	6,112	2,444	1,258	26,404	5,741
WESTCHESTER	951,325	230,588	133,307	20,963	63,088	25,344	13,163	275,008	59,838
TOTALS	**17,286,970**	**3,979,592**	**2,255,031**	**361,785**	**1,157,796**	**454,702**	**225,669**	**4,833,777**	**1,039,582**

NEW YORK

American Lung Association in New York

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HIGH OZONE DAYS/2005–2007

County	Orange	Red	Purple	Wgt. Avg	Grade
ALBANY	11	0	0	3.7	F
BRONX	12	2	0	5.0	F
CHAUTAUQUA	48	1	0	16.5	F
CHEMUNG	2	0	0	0.7	B
DUTCHESS	15	0	0	5.0	F
ERIE	34	2	0	12.3	F
ESSEX	25	2	0	9.3	F
FRANKLIN	13	0	0	4.3	F
HAMILTON	4	0	0	1.3	C
HERKIMER	3	0	0	1.0	C
JEFFERSON	17	1	0	6.2	F
KINGS	*	*	*	*	*
MADISON	7	0	0	2.3	D
MONROE	19	0	0	6.3	F
NASSAU	DNC	DNC	DNC	DNC	DNC
NEW YORK	*	*	*	*	*
NIAGARA	32	1	0	11.2	F
ONEIDA	3	0	0	1.0	C
ONONDAGA	14	0	0	4.7	F

PARTICLE POLLUTION DAYS/2005–2007

	24-Hour					Annual	
County	Orange	Red	Purple	Wgt. Avg	Grade	Design Value	Pass/ Fail
ALBANY	7	0	0	2.3	D	DNC	INC
BRONX	31	0	0	10.3	F	15.5	FAIL
CHAUTAUQUA	3	0	0	1.0	C	9.7	PASS
CHEMUNG	DNC	DNC	DNC	DNC	DNC	DNC	DNC
DUTCHESS	DNC	DNC	DNC	DNC	DNC	DNC	DNC
ERIE	11	0	0	3.7	F	12.5	PASS
ESSEX	1	0	0	0.3	B	5.9	PASS
FRANKLIN	DNC	DNC	DNC	DNC	DNC	DNC	DNC
HAMILTON	DNC	DNC	DNC	DNC	DNC	DNC	DNC
HERKIMER	DNC	DNC	DNC	DNC	DNC	DNC	DNC
JEFFERSON	DNC	DNC	DNC	DNC	DNC	DNC	DNC
KINGS	8	0	0	2.7	D	14.0	PASS
MADISON	DNC	DNC	DNC	DNC	DNC	DNC	DNC
MONROE	4	0	0	1.3	C	10.6	PASS
NASSAU	5	0	0	1.7	C	11.4	PASS
NEW YORK	15	0	0	5.0	F	15.9	FAIL
NIAGARA	8	0	0	2.7	D	11.8	PASS
ONEIDA	DNC	DNC	DNC	DNC	DNC	DNC	DNC
ONONDAGA	1	0	0	0.3	B	9.9	PASS

HIGH OZONE DAYS/2005–2007

PARTICLE POLLUTION DAYS/2005–2007

						24-Hour					Annual	
County	Orange	Red	Purple	Wgt. Avg	Grade	Orange	Red	Purple	Wgt. Avg	Grade	Design Value	Pass/ Fail
ORANGE	27	2	0	10.0	F	4	0	0	1.3	C	10.8	PASS
OSWEGO	15	0	0	5.0	F	DNC	DNC	DNC	DNC	DNC	DNC	DNC
PUTNAM	23	3	1	9.8	F	DNC	DNC	DNC	DNC	DNC	DNC	DNC
QUEENS	19	0	0	6.3	F	16	0	0	5.3	F	11.8	PASS
RENSSELAER	14	1	0	5.2	F	DNC	DNC	DNC	DNC	DNC	DNC	DNC
RICHMOND	33	7	0	14.5	F	6	0	0	2.0	C	13.2	PASS
SARATOGA	21	0	0	7.0	F	DNC	DNC	DNC	DNC	DNC	DNC	DNC
SCHENECTADY	6	0	0	2.0	C	DNC	DNC	DNC	DNC	DNC	DNC	DNC
ST. LAWRENCE	DNC	DNC	DNC	DNC	DNC	0	0	0	0.0	A	6.9	PASS
STEUBEN	*	*	*	*	*	3	0	0	1.0	C	8.7	PASS
SUFFOLK	34	9	1	16.5	F	3	0	0	1.0	C	DNC	INC
ULSTER	13	0	0	4.3	F	DNC	DNC	DNC	DNC	DNC	DNC	DNC
WAYNE	9	0	0	3.0	D	DNC	DNC	DNC	DNC	DNC	DNC	DNC
WESTCHESTER	29	7	0	13.2	F	4	0	0	1.3	C	11.7	PASS

Notes:
(1) The weighted average was derived by adding the three years of individual level data (2005-2007), multiplying the sums of each level by the assigned standard weights, i.e. 1=orange, 1.5=red, 2.0=purple and calculating the average. (2) Asterisk (*) indicates incomplete monitoring data for all three years. Therefore, those counties are excluded from the grade analysis or received an Incomplete. (3) DNC indicates that data on that particular pollutant is not collected in that county. (4) Grades are as follows: A=0.0, B=0.3-0.9, C=1.0-2.0, D=2.1-3.2, F=3.3+.

OHIO

American Lung Association in Ohio

1950 Arlingate Lane
Columbus, OH 43228-4102
(614) 279-1700
www.lungusa.org/ohio

AT-RISK GROUPS

				Lung Diseases					
County	**Total Population**	**Under 18**	**65 & Over**	**Pediatric Asthma**	**Adult Asthma**	**Chronic Bronchitis**	**Emphysema**	**CV Disease**	**Diabetes**
ALLEN	105,233	25,952	15,318	2,359	6,949	2,779	1,448	30,210	6,569
ASHTABULA	101,141	24,069	14,799	2,188	6,733	2,721	1,427	29,666	6,467
ATHENS	63,275	10,488	6,335	953	4,887	1,615	653	15,757	3,209
BUTLER	357,888	89,436	39,670	8,131	23,987	8,992	4,269	93,688	19,956
CLARK	140,477	32,976	21,884	2,998	9,369	3,816	2,032	41,911	9,160
CLERMONT	193,490	50,740	20,784	4,613	12,691	4,838	2,326	50,663	10,840
CLINTON	43,071	10,736	5,422	976	2,870	1,101	543	11,677	2,508
CUYAHOGA	1,295,958	307,509	195,936	27,956	86,090	35,135	18,656	385,273	84,217
DELAWARE	160,865	44,429	13,236	4,039	10,552	3,765	1,646	37,841	7,913
FRANKLIN	1,118,107	285,167	108,297	25,925	75,107	27,278	12,355	278,434	58,653
GEAUGA	95,029	23,251	13,673	2,114	6,197	2,599	1,397	28,642	6,297
GREENE	154,656	33,782	19,321	3,071	10,736	4,107	2,008	43,353	9,297
HAMILTON	842,369	205,266	112,942	18,661	56,046	22,139	11,277	238,097	51,559
JEFFERSON	68,730	13,635	13,066	1,240	4,729	2,023	1,141	22,843	5,057
KNOX	58,961	13,731	8,253	1,248	3,999	1,554	786	16,667	3,596
LAKE	233,392	52,197	34,369	4,745	15,780	6,441	3,396	70,372	15,374
LAWRENCE	62,609	14,424	9,198	1,311	4,232	1,681	870	18,218	3,954
LICKING	156,985	38,555	19,757	3,505	10,449	4,087	2,047	43,611	9,413

AT-RISK GROUPS

County	Total Population	Under 18	65 & Over	Lung Diseases: Pediatric Asthma	Lung Diseases: Adult Asthma	Lung Diseases: Chronic Bronchitis	Lung Diseases: Emphysema	CV Disease	Diabetes
LOGAN	46,279	11,528	6,444	1,048	3,046	1,218	630	13,193	2,867
LORAIN	302,260	73,577	39,961	6,689	20,132	7,933	4,025	85,158	18,426
LUCAS	441,910	110,939	56,247	10,085	29,254	11,376	5,687	121,307	26,148
MADISON	41,499	9,473	4,996	861	2,855	1,079	520	11,318	2,418
MAHONING	240,420	52,864	41,051	4,806	16,197	6,793	3,735	75,745	16,681
MEDINA	169,832	42,190	19,669	3,835	11,268	4,398	2,174	46,624	10,047
MIAMI	101,038	23,816	14,672	2,165	6,745	2,727	1,429	29,714	6,477
MONTGOMERY	538,104	127,349	78,851	11,577	36,001	14,397	7,495	156,457	34,020
PORTAGE	155,869	33,208	18,043	3,019	10,967	4,102	1,942	42,691	9,087
PREBLE	41,739	9,637	6,071	876	2,804	1,134	594	12,349	2,692
SCIOTO	75,958	17,437	11,688	1,585	5,143	2,039	1,062	22,174	4,814
STARK	378,664	87,280	58,696	7,935	25,341	10,392	5,551	114,267	25,010
SUMMIT	543,487	129,095	75,511	11,736	36,308	14,531	7,507	157,290	34,184
TRUMBULL	213,475	47,170	35,469	4,288	14,383	6,004	3,276	66,697	14,669
UNION	47,234	12,644	4,304	1,149	3,112	1,139	517	11,629	2,454
WARREN	204,390	54,349	19,956	4,941	13,474	4,964	2,286	51,022	10,798
WASHINGTON	61,576	13,166	10,334	1,197	4,194	1,741	947	19,311	4,242
WOOD	125,399	26,464	14,586	2,406	8,880	3,279	1,535	33,965	7,203
TOTALS	**8,981,369**	**2,158,529**	**1,188,809**	**196,232**	**601,504**	**235,915**	**119,190**	**2,527,834**	**546,275**

OHIO

American Lung Association in Ohio

1950 Arlingate Lane
Columbus, OH 43228-4102
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HIGH OZONE DAYS/2005–2007

County	Orange	Red	Purple	Wgt. Avg	Grade
ALLEN	26	0	0	8.7	F
ASHTABULA	42	4	0	16.0	F
ATHENS	DNC	DNC	DNC	DNC	DNC
BUTLER	64	5	0	23.8	F
CLARK	32	2	0	11.7	F
CLERMONT	40	0	0	13.3	F
CLINTON	52	1	0	17.8	F
CUYAHOGA	30	2	0	11.0	F
DELAWARE	26	0	0	8.7	F
FRANKLIN	58	2	0	20.3	F
GEAUGA	21	0	0	7.0	F
GREENE	26	0	0	8.7	F
HAMILTON	78	5	0	28.5	F
JEFFERSON	32	0	0	10.7	F
KNOX	22	1	0	7.8	F
LAKE	41	3	1	15.8	F
LAWRENCE	12	0	0	4.0	F
LICKING	20	0	0	6.7	F

PARTICLE POLLUTION DAYS/2005–2007

	24-Hour					Annual	
County	Orange	Red	Purple	Wgt. Avg	Grade	Design Value	Pass/ Fail
ALLEN	DNC	DNC	DNC	DNC	DNC	DNC	DNC
ASHTABULA	DNC	DNC	DNC	DNC	DNC	DNC	DNC
ATHENS	3	0	0	1.0	C	12.7	PASS
BUTLER	15	0	0	5.0	F	15.6	FAIL
CLARK	7	0	0	2.3	D	14.8	PASS
CLERMONT	5	0	0	1.7	C	14.2	PASS
CLINTON	DNC	DNC	DNC	DNC	DNC	DNC	DNC
CUYAHOGA	20	0	0	6.7	F	16.8	FAIL
DELAWARE	DNC	DNC	DNC	DNC	DNC	DNC	DNC
FRANKLIN	10	0	0	3.3	F	14.9	PASS
GEAUGA	DNC	DNC	DNC	DNC	DNC	DNC	DNC
GREENE	5	0	0	1.7	C	13.6	PASS
HAMILTON	22	0	0	7.3	F	17.3	FAIL
JEFFERSON	14	0	0	4.7	F	16.1	FAIL
KNOX	DNC	DNC	DNC	DNC	DNC	DNC	DNC
LAKE	7	0	0	2.3	D	DNC	INC
LAWRENCE	9	0	0	3.0	D	15.4	FAIL
LICKING	DNC	DNC	DNC	DNC	DNC	DNC	DNC

	HIGH OZONE DAYS/2005–2007					PARTICLE POLLUTION DAYS/2005–2007						
						24-Hour					Annual	
County	Orange	Red	Purple	Wgt. Avg	Grade	Orange	Red	Purple	Wgt. Avg	Grade	Design Value	Pass/ Fail
LOGAN	*	*	*	*	*	DNC	DNC	DNC	DNC	DNC	DNC	DNC
LORAIN	11	1	0	4.2	F	3	0	0	1.0	C	13.0	PASS
LUCAS	34	2	0	12.3	F	9	0	0	3.0	D	14.4	PASS
MADISON	31	0	0	10.3	F	DNC	DNC	DNC	DNC	DNC	DNC	DNC
MAHONING	24	0	0	8.0	F	10	0	0	3.3	F	14.8	PASS
MEDINA	17	1	0	6.2	F	3	0	0	1.0	C	DNC	INC
MIAMI	12	0	0	4.0	F	DNC	DNC	DNC	DNC	DNC	DNC	DNC
MONTGOMERY	13	0	0	4.3	F	12	0	0	4.0	F	15.5	FAIL
PORTAGE	35	1	0	12.2	F	6	0	0	2.0	C	13.6	PASS
PREBLE	13	0	0	4.3	F	7	0	0	2.3	D	13.9	PASS
SCIOTO	DNC	DNC	DNC	DNC	DNC	9	0	0	3.0	D	14.8	PASS
STARK	53	2	0	18.7	F	5	0	0	1.7	C	16.0	FAIL
SUMMIT	46	2	0	16.3	F	9	0	0	3.0	D	14.8	PASS
TRUMBULL	46	0	0	15.3	F	8	0	0	2.7	D	14.5	PASS
UNION	*	*	*	*	*	DNC	DNC	DNC	DNC	DNC	DNC	DNC
WARREN	64	4	0	23.3	F	*	*	*	*	*	DNC	INC
WASHINGTON	41	1	0	14.2	F	DNC	DNC	DNC	DNC	DNC	DNC	DNC
WOOD	17	0	0	5.7	F	DNC	DNC	DNC	DNC	DNC	DNC	DNC

Notes:
(1) The weighted average was derived by adding the three years of individual level data (2005-2007), multiplying the sums of each level by the assigned standard weights, i.e. 1=orange, 1.5=red, 2.0=purple and calculating the average. (2) Asterisk (*) indicates incomplete monitoring data for all three years. Therefore, those counties are excluded from the grade analysis or received an Incomplete. (3) DNC indicates that data on that particular pollutant is not collected in that county. (4) Grades are as follows: A=0.0, B=0.3-0.9, C=1.0-2.0, D=2.1-3.2, F=3.3+.

OKLAHOMA

American Lung Association in Oklahoma

1010 East 8th Street
Tulsa, OK 74120
(918) 747-3441
www.lungusa.org/oklahoma

AT-RISK GROUPS

				Lung Diseases					
County	**Total Population**	**Under 18**	**65 & Over**	**Pediatric Asthma**	**Adult Asthma**	**Chronic Bronchitis**	**Emphysema**	**CV Disease**	**Diabetes**
ADAIR	21,902	6,195	2,557	563	1,344	533	261	5,627	1,206
CADDO	29,296	7,560	4,196	687	1,861	759	394	8,236	1,789
CANADIAN	103,559	26,186	10,677	2,381	6,640	2,605	1,234	27,096	5,779
CARTER	47,582	11,901	7,373	1,082	3,059	1,266	676	13,923	3,043
CHEROKEE	45,393	10,725	5,567	975	2,955	1,152	549	12,031	2,558
CLEVELAND	236,452	53,092	21,572	4,827	15,657	5,916	2,590	59,514	12,438
COMANCHE	113,811	32,953	12,110	2,996	6,900	2,675	1,253	27,722	5,876
COTTON	6,299	1,551	976	141	407	168	89	1,843	402
CREEK	69,073	16,701	10,193	1,518	4,496	1,852	976	20,237	4,415
DEWEY	4,338	905	899	82	295	129	76	1,490	333
GARFIELD	57,657	14,594	9,164	1,327	3,690	1,533	825	16,926	3,705
JEFFERSON	6,273	1,449	1,213	132	413	176	100	1,998	442
JOHNSTON	10,402	2,499	1,569	227	678	279	147	3,046	664
KAY	45,638	11,516	7,512	1,047	2,930	1,234	678	13,750	3,027
LATIMER	10,508	2,385	1,708	217	693	283	149	3,092	672
LINCOLN	32,272	7,918	4,659	720	2,091	860	451	9,369	2,042
LOVE	9,112	2,166	1,534	197	596	250	137	2,781	611
MARSHALL	14,830	3,556	2,738	323	963	404	224	4,533	997

AT-RISK GROUPS

County	Total Population	Under 18	65 & Over	Lung Diseases: Pediatric Asthma	Lung Diseases: Adult Asthma	Lung Diseases: Chronic Bronchitis	Lung Diseases: Emphysema	CV Disease	Diabetes
MAYES	39,627	9,524	6,069	866	2,579	1,060	559	11,588	2,525
MCCLAIN	31,849	7,809	4,152	710	2,060	828	416	8,857	1,911
MUSKOGEE	71,116	17,054	11,008	1,550	4,626	1,897	998	20,726	4,512
OKLAHOMA	701,807	185,702	86,814	16,882	44,137	17,536	8,636	185,796	39,868
OKMULGEE	39,300	9,650	5,902	877	2,541	1,043	549	11,394	2,482
OTTAWA	32,474	7,665	5,465	697	2,122	882	476	9,755	2,135
PITTSBURG	44,711	9,711	7,786	883	2,995	1,247	677	13,826	3,029
SEQUOYAH	41,024	10,121	5,745	920	2,649	1,078	555	11,653	2,528
TULSA	585,068	154,409	70,081	14,037	36,899	14,697	7,240	155,674	33,447
TOTALS	**2,451,373**	**625,497**	**309,239**	**56,864**	**156,275**	**62,343**	**30,912**	**662,481**	**142,436**

OKLAHOMA

American Lung Association in Oklahoma

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(918) 747-3441
www.lungusa.org/oklahoma

HIGH OZONE DAYS/2005–2007

County	Orange	Red	Purple	Wgt. Avg	Grade
ADAIR	17	0	0	5.7	F
CADDO	*	*	*	*	*
CANADIAN	23	0	0	7.7	F
CARTER	*	*	*	*	*
CHEROKEE	6	1	0	2.5	D
CLEVELAND	21	0	0	7.0	F
COMANCHE	20	0	0	6.7	F
COTTON	*	*	*	*	*
CREEK	20	1	0	7.2	F
DEWEY	7	0	0	2.3	D
GARFIELD	DNC	DNC	DNC	DNC	DNC
JEFFERSON	*	*	*	*	*
JOHNSTON	*	*	*	*	*
KAY	23	0	0	7.7	F
LATIMER	*	*	*	*	*
LINCOLN	*	*	*	*	*
LOVE	*	*	*	*	*
MARSHALL	*	*	*	*	*

PARTICLE POLLUTION DAYS/2005–2007

	24-Hour					Annual	
	Orange	Red	Purple	Wgt. Avg	Grade	Design Value	Pass/ Fail
ADAIR	DNC	DNC	DNC	DNC	DNC	DNC	DNC
CADDO	1	0	0	0.3	B	8.6	PASS
CANADIAN	DNC	DNC	DNC	DNC	DNC	DNC	DNC
CARTER	*	*	*	*	*	DNC	INC
CHEROKEE	2	0	0	0.7	B	12.3	PASS
CLEVELAND	DNC	DNC	DNC	DNC	DNC	DNC	DNC
COMANCHE	DNC	DNC	DNC	DNC	DNC	DNC	DNC
COTTON	DNC	DNC	DNC	DNC	DNC	DNC	DNC
CREEK	DNC	DNC	DNC	DNC	DNC	DNC	DNC
DEWEY	DNC	DNC	DNC	DNC	DNC	DNC	DNC
GARFIELD	*	*	*	*	*	DNC	INC
JEFFERSON	DNC	DNC	DNC	DNC	DNC	DNC	DNC
JOHNSTON	DNC	DNC	DNC	DNC	DNC	DNC	DNC
KAY	2	0	0	0.7	B	10.3	PASS
LATIMER	DNC	DNC	DNC	DNC	DNC	DNC	DNC
LINCOLN	*	*	*	*	*	DNC	INC
LOVE	DNC	DNC	DNC	DNC	DNC	DNC	DNC
MARSHALL	DNC	DNC	DNC	DNC	DNC	DNC	DNC

HIGH OZONE DAYS/2005–2007

PARTICLE POLLUTION DAYS/2005–2007

						24-Hour					Annual	
County	Orange	Red	Purple	Wgt. Avg	Grade	Orange	Red	Purple	Wgt. Avg	Grade	Design Value	Pass/ Fail
MAYES	29	0	0	9.7	F	2	0	0	0.7	B	11.8	PASS
MCCLAIN	7	0	0	2.3	D	DNC	DNC	DNC	DNC	DNC	DNC	DNC
MUSKOGEE	*	*	*	*	*	3	0	0	1.0	C	12.0	PASS
OKLAHOMA	44	0	0	14.7	F	0	0	0	0.0	A	10.2	PASS
OKMULGEE	*	*	*	*	*	DNC	DNC	DNC	DNC	DNC	DNC	DNC
OTTAWA	12	0	0	4.0	F	0	0	0	0.0	A	12.0	PASS
PITTSBURG	7	0	0	2.3	D	2	0	0	0.7	B	11.4	PASS
SEQUOYAH	*	*	*	*	*	5	0	0	1.7	C	13.0	PASS
TULSA	47	2	0	16.7	F	6	0	0	2.0	C	11.6	PASS

Notes:
(1) The weighted average was derived by adding the three years of individual level data (2005-2007), multiplying the sums of each level by the assigned standard weights, i.e. 1=orange, 1.5=red, 2.0=purple and calculating the average. (2) Asterisk (*) indicates incomplete monitoring data for all three years. Therefore, those counties are excluded from the grade analysis or received an Incomplete. (3) DNC indicates that data on that particular pollutant is not collected in that county. (4) Grades are as follows: A=0.0, B=0.3-0.9, C=1.0-2.0, D=2.1-3.2, F=3.3+.

OREGON

American Lung Association in Oregon

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AT-RISK GROUPS

				Lung Diseases					
County	**Total Population**	**Under 18**	**65 & Over**	**Pediatric Asthma**	**Adult Asthma**	**Chronic Bronchitis**	**Emphysema**	**CV Disease**	**Diabetes**
CLACKAMAS	376,251	85,284	45,573	7,753	28,081	10,151	5,102	108,406	23,474
COLUMBIA	48,996	11,220	5,759	1,020	3,648	1,309	651	13,909	3,003
DOUGLAS	104,119	21,281	20,827	1,935	7,917	3,062	1,756	34,866	7,741
HARNEY	6,767	1,526	1,267	139	501	198	115	2,265	506
JACKSON	199,295	43,134	33,249	3,921	14,987	5,594	3,029	61,927	13,584
JOSEPHINE	81,056	16,469	16,961	1,497	6,165	2,410	1,405	27,658	6,161
KLAMATH	66,512	15,557	10,331	1,414	4,895	1,822	976	20,063	4,395
LAKE	7,277	1,466	1,450	133	555	218	126	2,492	556
LANE	343,591	69,463	48,187	6,315	26,418	9,465	4,780	101,414	21,907
LINN	113,264	26,828	17,053	2,439	8,310	3,044	1,600	33,233	7,241
MARION	311,449	82,763	37,465	7,524	22,072	7,738	3,776	81,644	17,484
MULTNOMAH	701,986	160,395	71,920	14,582	52,425	18,148	8,498	187,816	39,961
UMATILLA	73,491	19,287	9,094	1,753	5,228	1,863	930	19,853	4,279
UNION	24,753	5,399	3,789	491	1,861	683	360	7,464	1,628
WASCO	23,762	5,483	4,108	498	1,752	668	372	7,493	1,655
WASHINGTON	522,514	137,217	47,321	12,474	37,341	12,725	5,788	130,045	27,476
TOTALS	**3,005,083**	**702,772**	**374,354**	**63,889**	**222,155**	**79,098**	**39,265**	**840,548**	**181,053**

HIGH OZONE DAYS/2005–2007

PARTICLE POLLUTION DAYS/2005–2007

						24-Hour					Annual	
County	Orange	Red	Purple	Wgt. Avg	Grade	Orange	Red	Purple	Wgt. Avg	Grade	Design Value	Pass/ Fail
CLACKAMAS	1	1	0	0.8	B	DNC	DNC	DNC	DNC	DNC	DNC	DNC
COLUMBIA	0	0	0	0.0	A	*	*	*	*	*	DNC	INC
DOUGLAS	DNC	DNC	DNC	DNC	DNC	*	*	*	*	*	DNC	INC
HARNEY	DNC	DNC	DNC	DNC	DNC	*	*	*	*	*	DNC	INC
JACKSON	3	0	0	1.0	C	6	0	0	2.0	C	10.0	PASS
JOSEPHINE	DNC	DNC	DNC	DNC	DNC	0	0	0	0.0	A	DNC	INC
KLAMATH	DNC	DNC	DNC	DNC	DNC	17	0	0	5.7	F	11.2	PASS
LAKE	DNC	DNC	DNC	DNC	DNC	*	*	*	*	*	DNC	INC
LANE	8	0	0	2.7	D	38	1	0	13.2	F	11.5	PASS
LINN	*	*	*	*	*	*	*	*	*	*	DNC	INC
MARION	4	0	0	1.3	C	DNC	DNC	DNC	DNC	DNC	DNC	DNC
MULTNOMAH	1	0	0	0.3	B	5	0	0	1.7	C	9.0	PASS
UMATILLA	*	*	*	*	*	*	*	*	*	*	DNC	INC
UNION	DNC	DNC	DNC	DNC	DNC	2	0	0	0.7	B	8.2	PASS
WASCO	DNC	DNC	DNC	DNC	DNC	*	*	*	*	*	DNC	INC
WASHINGTON	DNC	DNC	DNC	DNC	DNC	5	0	0	1.7	C	DNC	INC

Notes:
(1) The weighted average was derived by adding the three years of individual level data (2005-2007), multiplying the sums of each level by the assigned standard weights, i.e. 1=orange, 1.5=red, 2.0=purple and calculating the average. (2) Asterisk (*) indicates incomplete monitoring data for all three years. Therefore, those counties are excluded from the grade analysis or received an Incomplete. (3) DNC indicates that data on that particular pollutant is not collected in that county. (4) Grades are as follows: A=0.0, B=0.3-0.9, C=1.0-2.0, D=2.1-3.2, F=3.3+.

PENNSYLVANIA

American Lung Association in Pennsylvania

3001 Old Gettysburg Road
Camp Hill, PA 17011
(717) 541-5864
www.lungusa.org/pennsylvania

AT-RISK GROUPS

				Lung Diseases					
County	**Total Population**	**Under 18**	**65 & Over**	**Pediatric Asthma**	**Adult Asthma**	**Chronic Bronchitis**	**Emphysema**	**CV Disease**	**Diabetes**
ADAMS	100,779	22,604	14,195	2,055	7,338	2,702	1,373	29,035	6,277
ALLEGHENY	1,219,210	253,521	205,511	23,048	88,567	34,705	18,848	384,708	84,479
ARMSTRONG	69,059	13,999	12,735	1,273	4,993	2,015	1,129	22,668	5,012
BEAVER	173,074	35,777	31,630	3,252	12,443	5,029	2,818	56,593	12,516
BERKS	401,955	95,598	56,560	8,691	28,680	10,637	5,447	114,713	24,846
BLAIR	125,527	26,644	21,520	2,422	9,079	3,546	1,929	39,343	8,636
BUCKS	621,144	143,312	84,064	13,029	44,301	16,896	8,762	183,106	39,895
CAMBRIA	144,995	28,199	27,048	2,564	10,648	4,235	2,353	47,483	10,469
CENTRE	144,658	23,511	15,998	2,137	12,016	3,764	1,582	37,307	7,669
CHESTER	486,345	119,360	59,067	10,851	34,435	12,712	6,361	135,531	29,279
CLEARFIELD	81,452	16,213	14,460	1,474	5,987	2,340	1,277	26,014	5,712
CUMBERLAND	228,019	46,679	34,547	4,244	16,927	6,327	3,273	68,561	14,882
DAUPHIN	255,710	60,287	34,950	5,481	18,170	6,873	3,552	74,395	16,182
DELAWARE	554,399	132,836	78,371	12,076	39,288	14,756	7,632	159,838	34,724
ERIE	279,092	64,329	39,904	5,848	20,070	7,480	3,847	80,828	17,528
FRANKLIN	141,665	32,584	23,396	2,962	10,100	3,855	2,061	42,444	9,269
GREENE	39,503	7,880	5,933	716	2,950	1,105	571	11,961	2,597
INDIANA	87,690	16,273	13,826	1,479	6,708	2,463	1,262	26,582	5,747

AT-RISK GROUPS

County	Total Population	Under 18	65 & Over	Lung Diseases				CV Disease	Diabetes
				Pediatric Asthma	Adult Asthma	Chronic Bronchitis	Emphysema		
LACKAWANNA	209,330	43,290	37,619	3,935	15,217	5,968	3,277	66,536	14,624
LANCASTER	498,465	125,753	71,955	11,432	34,753	13,026	6,767	141,433	30,724
LAWRENCE	90,991	19,388	16,696	1,763	6,509	2,609	1,458	29,329	6,477
LEHIGH	337,343	79,588	50,971	7,235	23,923	9,081	4,776	99,158	21,608
LUZERNE	312,265	62,461	56,760	5,678	22,884	8,985	4,939	100,227	22,035
LYCOMING	116,811	24,740	19,097	2,249	8,499	3,273	1,751	36,026	7,880
MERCER	116,809	25,170	20,743	2,288	8,381	3,306	1,821	36,906	8,121
MONROE	164,722	40,084	19,314	3,644	11,788	4,256	2,083	44,930	9,649
MONTGOMERY	776,172	180,296	114,326	16,391	55,135	21,119	11,123	230,656	50,348
NORTHAMPTON	293,522	64,674	42,435	5,880	21,372	7,980	4,109	86,274	18,717
PERRY	45,163	10,440	5,713	949	3,245	1,212	613	12,984	2,813
PHILADELPHIA	1,449,634	363,648	186,573	33,059	103,046	36,802	18,128	390,049	83,636
TIOGA	40,681	8,492	7,079	772	2,962	1,149	624	12,740	2,793
WASHINGTON	205,553	42,168	35,282	3,833	14,952	5,892	3,219	65,498	14,402
WESTMORELAND	362,326	71,731	66,171	6,521	26,341	10,643	5,952	119,641	26,455
YORK	421,049	97,661	57,226	8,878	30,222	11,270	5,758	121,361	26,307
TOTALS	**10,595,112**	**2,399,190**	**1,581,675**	**218,111**	**761,927**	**288,010**	**150,473**	**3,134,858**	**682,305**

PENNSYLVANIA

American Lung Association in Pennsylvania

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Camp Hill, PA 17011
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HIGH OZONE DAYS/2005–2007

County	Orange	Red	Purple	Wgt. Avg	Grade
ADAMS	26	0	0	8.7	F
ALLEGHENY	52	5	0	19.8	F
ARMSTRONG	43	3	0	15.8	F
BEAVER	35	2	0	12.7	F
BERKS	32	0	0	10.7	F
BLAIR	7	0	0	2.3	D
BUCKS	47	4	2	19.0	F
CAMBRIA	8	0	0	2.7	D
CENTRE	15	0	0	5.0	F
CHESTER	45	2	1	16.7	F
CLEARFIELD	15	0	0	5.0	F
CUMBERLAND	DNC	DNC	DNC	DNC	DNC
DAUPHIN	35	0	0	11.7	F
DELAWARE	34	1	0	11.8	F
ERIE	30	3	0	11.5	F
FRANKLIN	7	0	0	2.3	D
GREENE	32	0	0	10.7	F
INDIANA	29	0	0	9.7	F

PARTICLE POLLUTION DAYS/2005–2007

	24-Hour					Annual	
	Orange	Red	Purple	Wgt. Avg	Grade	Design Value	Pass/ Fail
ADAMS	17	0	0	5.7	F	12.6	PASS
ALLEGHENY	147	13	0	55.5	F	19.8	FAIL
ARMSTRONG	DNC	DNC	DNC	DNC	DNC	DNC	DNC
BEAVER	14	0	0	4.7	F	16.5	FAIL
BERKS	13	0	0	4.3	F	DNC	INC
BLAIR	DNC	DNC	DNC	DNC	DNC	DNC	DNC
BUCKS	8	0	0	2.7	D	13.2	PASS
CAMBRIA	10	0	0	3.3	F	15.3	FAIL
CENTRE	23	0	0	7.7	F	12.2	PASS
CHESTER	5	0	0	1.7	C	DNC	INC
CLEARFIELD	DNC	DNC	DNC	DNC	DNC	DNC	DNC
CUMBERLAND	27	0	0	9.0	F	13.9	PASS
DAUPHIN	29	0	0	9.7	F	14.6	PASS
DELAWARE	10	0	0	3.3	F	15.0	PASS
ERIE	22	1	0	7.8	F	12.6	PASS
FRANKLIN	DNC	DNC	DNC	DNC	DNC	DNC	DNC
GREENE	DNC	DNC	DNC	DNC	DNC	DNC	DNC
INDIANA	DNC	DNC	DNC	DNC	DNC	DNC	DNC

	HIGH OZONE DAYS/2005–2007					PARTICLE POLLUTION DAYS/2005–2007						
						24-Hour					Annual	
County	Orange	Red	Purple	Wgt. Avg	Grade	Orange	Red	Purple	Wgt. Avg	Grade	Design Value	Pass/ Fail
LACKAWANNA	18	0	0	6.0	F	13	0	0	4.3	F	11.5	PASS
LANCASTER	45	1	0	15.5	F	16	0	0	5.3	F	15.9	FAIL
LAWRENCE	8	0	0	2.7	D	DNC	DNC	DNC	DNC	DNC	DNC	DNC
LEHIGH	33	0	0	11.0	F	*	*	*	*	*	DNC	INC
LUZERNE	16	0	0	5.3	F	*	*	*	*	*	DNC	INC
LYCOMING	15	0	0	5.0	F	DNC	DNC	DNC	DNC	DNC	DNC	DNC
MERCER	40	1	0	13.8	F	17	0	0	5.7	F	13.0	PASS
MONROE	*	*	*	*	*	DNC	DNC	DNC	DNC	DNC	DNC	DNC
MONTGOMERY	49	0	0	16.3	F	6	0	0	2.0	C	DNC	INC
NORTHAMPTON	28	1	0	9.8	F	25	0	0	8.3	F	13.4	PASS
PERRY	18	0	0	6.0	F	*	*	*	*	*	DNC	INC
PHILADELPHIA	54	6	0	21.0	F	33	0	0	11.0	F	DNC	INC
TIOGA	10	0	0	3.3	F	DNC	DNC	DNC	DNC	DNC	DNC	DNC
WASHINGTON	31	0	0	10.3	F	35	0	0	11.7	F	15.5	FAIL
WESTMORELAND	23	1	0	8.2	F	11	0	0	3.7	F	15.5	FAIL
YORK	37	1	0	12.8	F	15	0	0	5.0	F	16.0	FAIL

Notes:
(1) The weighted average was derived by adding the three years of individual level data (2005-2007), multiplying the sums of each level by the assigned standard weights, i.e. 1=orange, 1.5=red, 2.0=purple and calculating the average. (2) Asterisk (*) indicates incomplete monitoring data for all three years. Therefore, those counties are excluded from the grade analysis or received an Incomplete. (3) DNC indicates that data on that particular pollutant is not collected in that county. (4) Grades are as follows: A=0.0, B=0.3-0.9, C=1.0-2.0, D=2.1-3.2, F=3.3+.

RHODE ISLAND

American Lung Association in Rhode Island

260 West Exchange Street, Suite 102-B
Providence, RI 02903
(401) 421-6487
www.lungusa.org/rhodeisland

AT-RISK GROUPS

				Lung Diseases					
County	**Total Population**	**Under 18**	**65 & Over**	**Pediatric Asthma**	**Adult Asthma**	**Chronic Bronchitis**	**Emphysema**	**CV Disease**	**Diabetes**
KENT	168,639	35,723	24,625	3,248	12,929	4,702	2,459	51,176	11,159
PROVIDENCE	629,435	145,180	83,711	13,198	47,548	16,445	8,128	174,554	37,462
WASHINGTON	126,902	25,797	17,314	2,345	9,886	3,523	1,790	37,835	8,197
TOTALS	**924,976**	**206,700**	**125,650**	**18,791**	**70,363**	**24,670**	**12,377**	**263,565**	**56,819**

HIGH OZONE DAYS/2005–2007

PARTICLE POLLUTION DAYS/2005–2007

						24-Hour					Annual	
County	Orange	Red	Purple	Wgt. Avg	Grade	Orange	Red	Purple	Wgt. Avg	Grade	Design Value	Pass/ Fail
KENT	22	3	0	8.8	F	2	0	0	0.7	B	DNC	INC
PROVIDENCE	22	1	0	7.8	F	8	0	0	2.7	D	12.0	PASS
WASHINGTON	30	2	1	11.7	F	DNC	DNC	DNC	DNC	DNC	DNC	DNC

Notes:
(1) The weighted average was derived by adding the three years of individual level data (2005-2007), multiplying the sums of each level by the assigned standard weights, i.e. 1=orange, 1.5=red, 2.0=purple and calculating the average. (2) Asterisk (*) indicates incomplete monitoring data for all three years. Therefore, those counties are excluded from the grade analysis or received an Incomplete. (3) DNC indicates that data on that particular pollutant is not collected in that county. (4) Grades are as follows: A=0.0, B=0.3-0.9, C=1.0-2.0, D=2.1-3.2, F=3.3+.

TENNESSEE

American Lung Association in Tennessee

One Vantage Way, Suite B-130
Nashville, TN 37228
(615) 329-1151
www.lungusa.org/tennessee

AT-RISK GROUPS

				Lung Diseases					
County	**Total Population**	**Under 18**	**65 & Over**	**Pediatric Asthma**	**Adult Asthma**	**Chronic Bronchitis**	**Emphysema**	**CV Disease**	**Diabetes**
ANDERSON	73,471	16,157	12,247	1,469	4,994	2,063	1,123	22,889	5,029
BLOUNT	119,855	26,426	17,666	2,402	8,103	3,266	1,692	35,410	7,691
BRADLEY	95,443	21,893	12,772	1,990	6,354	2,516	1,255	26,818	5,772
COFFEE	51,741	12,428	8,192	1,130	3,403	1,386	736	15,203	3,316
DAVIDSON	619,626	145,918	67,807	13,265	40,880	15,807	7,436	164,022	34,870
DICKSON	47,366	12,118	5,827	1,102	3,051	1,206	597	12,799	2,753
DYER	37,684	9,279	5,203	844	2,466	992	511	10,722	2,327
GILES	29,024	6,435	4,464	585	1,965	801	424	8,771	1,916
HAMBLEN	61,829	14,467	9,191	1,315	4,096	1,649	854	17,876	3,878
HAMILTON	330,168	73,899	47,435	6,718	22,295	9,009	4,678	97,747	21,266
HAYWOOD	19,126	4,885	2,592	444	1,237	497	256	5,372	1,166
HUMPHREYS	18,173	4,136	2,920	376	1,220	500	269	5,517	1,208
JEFFERSON	50,221	11,123	7,268	1,011	3,373	1,344	682	14,441	3,117
KNOX	423,874	94,055	53,860	8,551	28,537	11,248	5,539	119,130	25,590
LAWRENCE	40,887	10,177	6,401	925	2,655	1,079	571	11,817	2,574
LOUDON	45,448	9,730	9,041	885	3,096	1,302	739	14,759	3,263
MADISON	96,518	24,403	11,848	2,218	6,240	2,462	1,215	26,094	5,608
MAURY	79,966	19,811	9,728	1,801	5,216	2,062	1,020	21,871	4,706

AT-RISK GROUPS

County	Total Population	Under 18	65 & Over	Lung Diseases: Pediatric Asthma	Lung Diseases: Adult Asthma	Lung Diseases: Chronic Bronchitis	Lung Diseases: Emphysema	CV Disease	Diabetes
MCMINN	52,131	11,928	7,950	1,084	3,488	1,415	743	15,443	3,364
MEIGS	11,657	2,722	1,510	247	776	309	156	3,311	716
MONTGOMERY	154,460	44,431	12,914	4,039	9,436	3,537	1,540	35,504	7,407
OBION	31,633	7,154	5,149	650	2,133	879	476	9,733	2,137
PUTNAM	69,916	15,581	9,983	1,416	4,660	1,835	910	19,520	4,184
ROANE	53,399	10,989	9,105	999	3,699	1,532	838	17,036	3,748
RUTHERFORD	241,462	64,114	19,218	5,829	15,183	5,634	2,385	55,898	11,585
SEVIER	83,527	18,604	12,193	1,691	5,633	2,270	1,175	24,604	5,344
SHELBY	910,100	249,090	90,883	22,645	57,331	22,283	10,563	231,859	49,474
SULLIVAN	153,519	31,876	26,661	2,898	10,609	4,405	2,422	49,121	10,818
SUMNER	152,721	37,526	17,727	3,411	10,000	3,939	1,930	41,601	8,939
WILLIAMSON	166,128	43,298	14,475	3,936	10,740	4,178	1,966	43,284	9,254
WILSON	106,356	26,591	11,315	2,417	6,931	2,712	1,304	28,396	6,082
TOTALS	**4,427,429**	**1,081,244**	**533,545**	**98,296**	**289,804**	**114,119**	**56,002**	**1,206,568**	**259,101**

TENNESSEE

American Lung Association in Tennessee

One Vantage Way, Suite B-130
Nashville, TN 37228
(615) 329-1151
www.lungusa.org/tennessee

HIGH OZONE DAYS/2005–2007

County	Orange	Red	Purple	Wgt. Avg	Grade
ANDERSON	30	1	0	10.5	F
BLOUNT	77	1	0	26.2	F
BRADLEY	*	*	*	*	*
COFFEE	*	*	*	*	*
DAVIDSON	24	2	0	9.0	F
DICKSON	*	*	*	*	*
DYER	*	*	*	*	*
GILES	*	*	*	*	*
HAMBLEN	*	*	*	*	*
HAMILTON	46	3	0	16.8	F
HAYWOOD	*	*	*	*	*
HUMPHREYS	*	*	*	*	*
JEFFERSON	42	2	0	15.0	F
KNOX	70	0	1	24.0	F
LAWRENCE	*	*	*	*	*
LOUDON	60	1	0	20.5	F
MADISON	DNC	DNC	DNC	DNC	DNC
MAURY	DNC	DNC	DNC	DNC	DNC

PARTICLE POLLUTION DAYS/2005–2007

	24-Hour					Annual	
County	Orange	Red	Purple	Wgt. Avg	Grade	Design Value	Pass/ Fail
ANDERSON	DNC	DNC	DNC	DNC	DNC	DNC	DNC
BLOUNT	8	0	0	2.7	D	14.7	PASS
BRADLEY	DNC	DNC	DNC	DNC	DNC	DNC	DNC
COFFEE	DNC	DNC	DNC	DNC	DNC	DNC	DNC
DAVIDSON	22	0	0	7.3	F	14.3	PASS
DICKSON	DNC	DNC	DNC	DNC	DNC	DNC	DNC
DYER	7	0	0	2.3	D	12.6	PASS
GILES	DNC	DNC	DNC	DNC	DNC	DNC	DNC
HAMBLEN	DNC	DNC	DNC	DNC	DNC	DNC	DNC
HAMILTON	13	0	0	4.3	F	15.2	FAIL
HAYWOOD	DNC	DNC	DNC	DNC	DNC	DNC	DNC
HUMPHREYS	DNC	DNC	DNC	DNC	DNC	DNC	DNC
JEFFERSON	DNC	DNC	DNC	DNC	DNC	DNC	DNC
KNOX	21	0	0	7.0	F	15.7	FAIL
LAWRENCE	4	0	0	1.3	C	12.1	PASS
LOUDON	6	0	0	2.0	C	15.7	FAIL
MADISON	6	0	0	2.0	C	DNC	INC
MAURY	6	0	0	2.0	C	13.5	PASS

	HIGH OZONE DAYS/2005–2007					PARTICLE POLLUTION DAYS/2005–2007						
						24-Hour					Annual	
County	Orange	Red	Purple	Wgt. Avg	Grade	Orange	Red	Purple	Wgt. Avg	Grade	Design Value	Pass/ Fail
MCMINN	DNC	DNC	DNC	DNC	DNC	6	0	0	2.0	C	14.7	PASS
MEIGS	33	1	0	11.5	F	DNC	DNC	DNC	DNC	DNC	DNC	DNC
MONTGOMERY	*	*	*	*	*	18	0	0	6.0	F	13.9	PASS
OBION	*	*	*	*	*	DNC	DNC	DNC	DNC	DNC	DNC	DNC
PUTNAM	*	*	*	*	*	6	0	0	2.0	C	DNC	INC
ROANE	*	*	*	*	*	0	0	0	0.0	A	14.8	PASS
RUTHERFORD	13	1	0	4.8	F	DNC	DNC	DNC	DNC	DNC	DNC	DNC
SEVIER	79	0	0	26.3	F	DNC	DNC	DNC	DNC	DNC	DNC	DNC
SHELBY	60	4	0	22.0	F	22	0	0	7.3	F	13.8	PASS
SULLIVAN	38	3	0	14.2	F	4	0	0	1.3	C	14.5	PASS
SUMNER	60	3	0	21.5	F	7	0	0	2.3	D	13.8	PASS
WILLIAMSON	26	0	0	8.7	F	DNC	DNC	DNC	DNC	DNC	DNC	DNC
WILSON	34	0	0	11.3	F	DNC	DNC	DNC	DNC	DNC	DNC	DNC

Notes:
(1) The weighted average was derived by adding the three years of individual level data (2005-2007), multiplying the sums of each level by the assigned standard weights, i.e. 1=orange, 1.5=red, 2.0=purple and calculating the average. (2) Asterisk (*) indicates incomplete monitoring data for all three years. Therefore, those counties are excluded from the grade analysis or received an Incomplete. (3) DNC indicates that data on that particular pollutant is not collected in that county. (4) Grades are as follows: A=0.0, B=0.3-0.9, C=1.0-2.0, D=2.1-3.2, F=3.3+.

VERMONT

American Lung Association in Vermont

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Williston, VT 05495
(802) 876-6500
www.lungusa.org/vermont

AT-RISK GROUPS

				Lung Diseases					
County	**Total Population**	**Under 18**	**65 & Over**	**Pediatric Asthma**	**Adult Asthma**	**Chronic Bronchitis**	**Emphysema**	**CV Disease**	**Diabetes**
ADDISON	36,760	7,927	4,374	721	2,756	994	491	10,532	2,270
BENNINGTON	36,452	7,448	6,582	677	2,696	1,063	594	11,947	2,642
CHITTENDEN	151,826	32,666	15,919	2,970	11,492	3,998	1,877	41,425	8,819
RUTLAND	63,270	12,555	10,180	1,141	4,756	1,829	987	20,201	4,438
TOTALS	**288,308**	**60,596**	**37,055**	**5,509**	**21,700**	**7,884**	**3,949**	**84,104**	**18,169**

HIGH OZONE DAYS/2005–2007

PARTICLE POLLUTION DAYS/2005–2007

						24-Hour					Annual	
County	Orange	Red	Purple	Wgt. Avg	Grade	Orange	Red	Purple	Wgt. Avg	Grade	Design Value	Pass/ Fail
ADDISON	DNC	DNC	DNC	DNC	DNC	*	*	*	*	*	DNC	INC
BENNINGTON	7	0	0	2.3	D	1	0	0	0.3	B	8.2	PASS
CHITTENDEN	5	0	0	1.7	C	3	0	0	1.0	C	9.0	PASS
RUTLAND	DNC	DNC	DNC	DNC	DNC	2	0	0	0.7	B	11.0	PASS

Notes:
(1) The weighted average was derived by adding the three years of individual level data (2005-2007), multiplying the sums of each level by the assigned standard weights, i.e. 1=orange, 1.5=red, 2.0=purple and calculating the average. (2) Asterisk (*) indicates incomplete monitoring data for all three years. Therefore, those counties are excluded from the grade analysis or received an Incomplete. (3) DNC indicates that data on that particular pollutant is not collected in that county. (4) Grades are as follows: A=0.0, B=0.3-0.9, C=1.0-2.0, D=2.1-3.2, F=3.3+.

WYOMING

American Lung Association in Wyoming

825 Helena Avenue
Helena, MT 59601-3459
(406) 442-6556 ext. 12
www.lungusa.org/wyoming

AT-RISK GROUPS

				Lung Diseases					
County	**Total Population**	**Under 18**	**65 & Over**	**Pediatric Asthma**	**Adult Asthma**	**Chronic Bronchitis**	**Emphysema**	**CV Disease**	**Diabetes**
CAMPBELL	40,433	11,002	2,312	1,000	2,387	961	410	9,539	1,996
CONVERSE	12,868	3,051	1,617	277	786	347	178	3,735	813
FREMONT	37,479	9,324	5,397	848	2,260	998	526	10,905	2,381
LARAMIE	86,353	22,112	10,428	2,010	5,199	2,197	1,085	23,298	5,010
SHERIDAN	27,998	6,170	4,353	561	1,745	786	423	8,668	1,903
SUBLETTE	7,925	1,855	846	169	489	209	101	2,193	471
SWEETWATER	39,305	10,389	3,255	944	2,333	975	451	10,029	2,136
TETON	20,002	3,952	1,671	359	1,301	531	238	5,386	1,137
UINTA	20,195	5,780	1,668	525	1,161	489	229	5,049	1,078
TOTALS	**292,558**	**73,635**	**31,547**	**6,694**	**17,660**	**7,492**	**3,640**	**78,801**	**16,924**

HIGH OZONE DAYS/2005–2007

PARTICLE POLLUTION DAYS/2005–2007

						24-Hour					Annual	
County	Orange	Red	Purple	Wgt. Avg	Grade	Orange	Red	Purple	Wgt. Avg	Grade	Design Value	Pass/ Fail
CAMPBELL	4	0	0	1.3	C	0	0	0	0.0	A	DNC	INC
CONVERSE	DNC	DNC	DNC	DNC	DNC	0	0	0	0.0	A	DNC	INC
FREMONT	*	*	*	*	*	1	0	0	0.3	B	7.6	PASS
LARAMIE	DNC	DNC	DNC	DNC	DNC	0	0	0	0.0	A	4.3	PASS
SHERIDAN	DNC	DNC	DNC	DNC	DNC	1	0	0	0.3	B	9.5	PASS
SUBLETTE	3	0	0	1.0	C	1	0	0	0.3	B	DNC	INC
SWEETWATER	*	*	*	*	*	DNC	DNC	DNC	DNC	DNC	DNC	DNC
TETON	1	0	0	0.3	B	1	0	0	0.3	B	DNC	INC
UINTA	*	*	*	*	*	DNC	DNC	DNC	DNC	DNC	DNC	DNC

Notes:
(1) The weighted average was derived by adding the three years of individual level data (2005-2007), multiplying the sums of each level by the assigned standard weights, i.e. 1=orange, 1.5=red, 2.0=purple and calculating the average. (2) Asterisk (*) indicates incomplete monitoring data for all three years. Therefore, those counties are excluded from the grade analysis or received an Incomplete. (3) DNC indicates that data on that particular pollutant is not collected in that county. (4) Grades are as follows: A=0.0, B=0.3-0.9, C=1.0-2.0, D=2.1-3.2, F=3.3+.