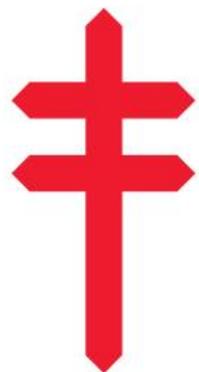


Moderator



Lyndsay Moseley Alexander, MPA
Assistant Vice President and Director
Healthy Air Campaign
American Lung Association





**AMERICAN
LUNG
ASSOCIATION®**

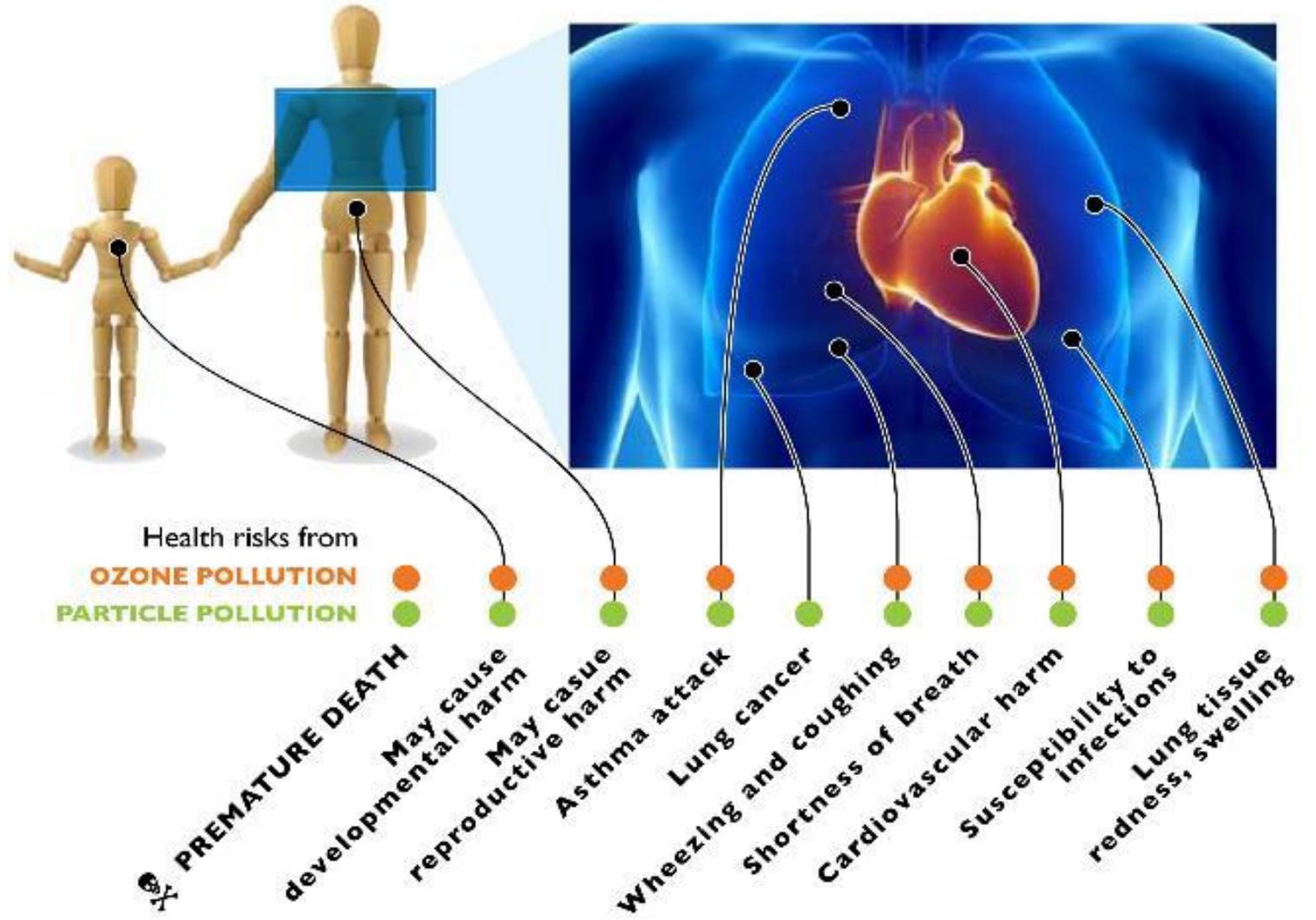
**STATE
OF THE AIR 2017**

What does the report do?

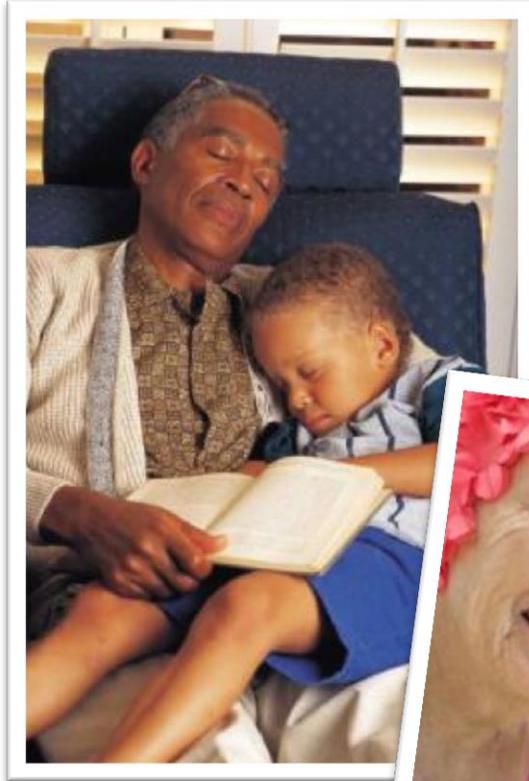
- Focuses attention on ozone and particle pollution – most widespread pollutants
- Makes local air quality data accessible to the public
- Gives **A- F** Grades or **Pass/Fail** to 900 counties with monitors (out of 3,069 counties)
- Ranks 25 metro areas with worst pollution (& identifies the cleanest cities)
- Identifies vulnerable populations at the state and county level (new this year – people with lung cancer)
- Documents impacts of climate change on air quality

Health Effects of Ozone and Particle Pollution

Ozone and particle pollution can shorten life.

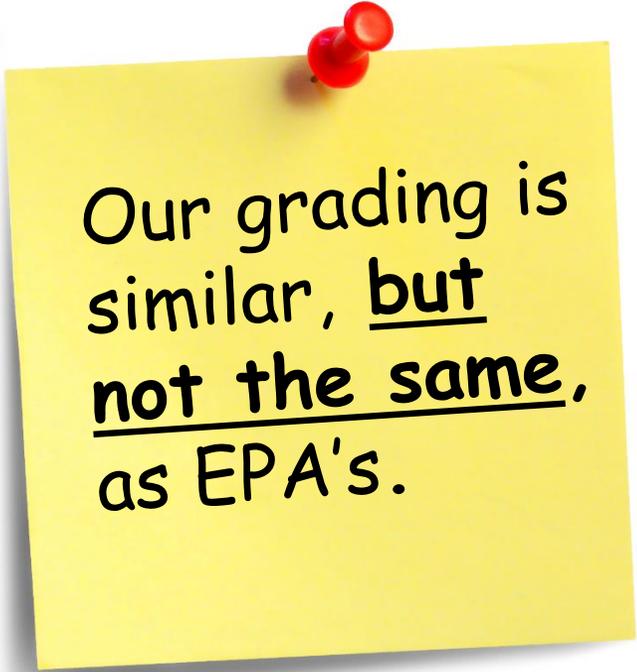


Why raise awareness about air quality?



Someone in every family faces higher risk from air pollution

What we grade



Our grading is similar, but not the same, as EPA's.

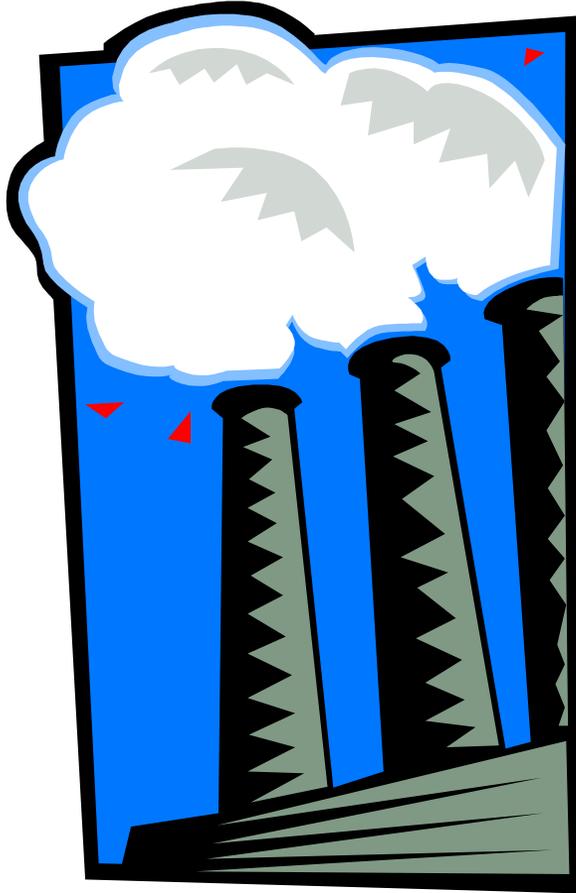
- **Ozone (smog)**
 - Number of days with high 8-hour averages
- **Particle pollution (soot, PM_{2.5})**
 - Short-term (24-hour) measures –number of days with high 24-hr averages, AKA “spikes”
 - Year-round (annual average) measures “day-in and day-out”
- Only counties with monitors get grades
- Grade only air quality—not “effort to clean up”

A-F Grades are Based on the Air Quality Index

Air Quality Index (AQI) Values	Levels of Health Concern
<i>When the AQI is in this range:</i>	<i>..air quality conditions are:</i>
0-50	Good
51-100	Moderate
101-150	Unhealthy for Sensitive Groups
151 to 200	Unhealthy
201 to 300	Very Unhealthy
301 to 500	Hazardous

- EPA yardstick for reporting air quality
- Translates monitored pollution levels into recommendations for action
- Used across the nation
- We use this for grading ozone & short-term particles (A- F grades)

Year-round particle pollution is different



- Day in and day out levels averaged over a year
- Grades are compared to national standard and either **Pass** or **Fail**
- We use EPA's calculation for each county's—called a *design value*
- Fail means county has more than official limit of $12.0 \mu\text{g}/\text{m}^3$

The News in “State of the Air” 2017:

- The Clean Air Act has driven **major progress** in the fight for healthy air:
 - Lower year-round particle pollution
 - Fewer high ozone days
- 125 million Americans live in counties that earned an F for ozone or particle pollution, ***down from 166 million, 2012-2014.***

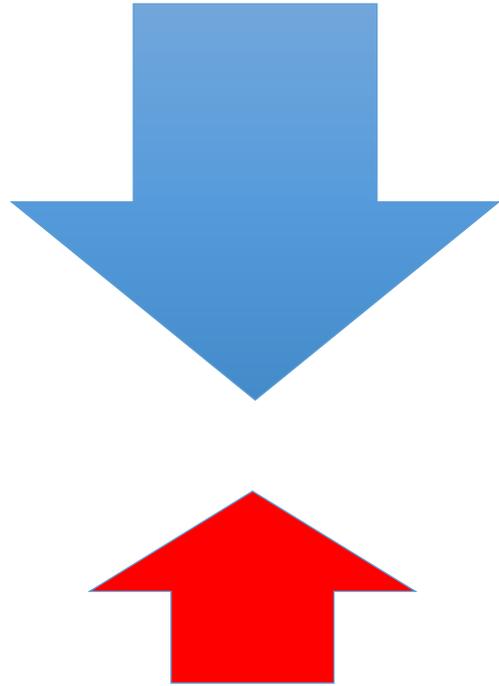
In 2013-2015,
nearly
4 people in 10
live in counties with
an
“F” for air
quality



The News in “State of the Air” 2017:

- More work is clearly needed to protect health:
 - 18 million people live in areas that **got all Fs**
 - **Spikes in short-term particle pollution**, due in part to climate change pose an **alarming threat**.

Fewer days with high Ozone

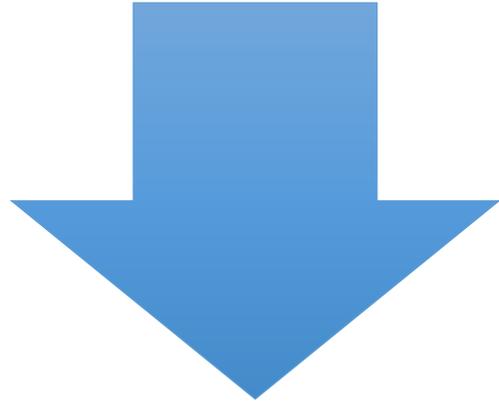


- 20 of the 25 cities most polluted by ozone had fewer unhealthy days in 2013-2015
 - 12 had their fewest days ever
- 4 cities had more days; one remained unchanged

Most Polluted Cities for Ozone

2017 Rank ¹	Metropolitan Statistical Areas
1	Los Angeles-Long Beach, CA
2	Bakersfield, CA
3	Fresno-Madera, CA
4	Visalia-Porterville-Hanford, CA
5	Phoenix-Mesa-Scottsdale, AZ
6	Modesto-Merced, CA
7	San Diego-Carlsbad, CA
8	Sacramento-Roseville, CA
9	New York-Newark, NY-NJ-CT-PA
10	Las Vegas-Henderson, NV-AZ

Less Particle Pollution Year-round



- 15 of the 25 cities most polluted by particles year-round had improved annual levels in 2013-2015
 - 12 cities saw their lowest levels ever
- 8 cities had increased year-round levels; two remained unchanged

Most Polluted for Year-round Particle Pollution

2017 Rank¹	Metropolitan Statistical Areas
1	Visalia-Porterville-Hanford, CA
2	Bakersfield, CA
3	Fresno-Madera, CA
4	San Jose-San Francisco-Oakland, CA
5	Los Angeles-Long Beach, CA
6	Modesto-Merced, CA
7	El Centro, CA
8	Pittsburgh-New Castle-Weirton, PA-OH-WV
9	Cleveland-Akron-Canton, OH
10	San Luis Obispo-Paso Robles-Arroyo Grande, CA

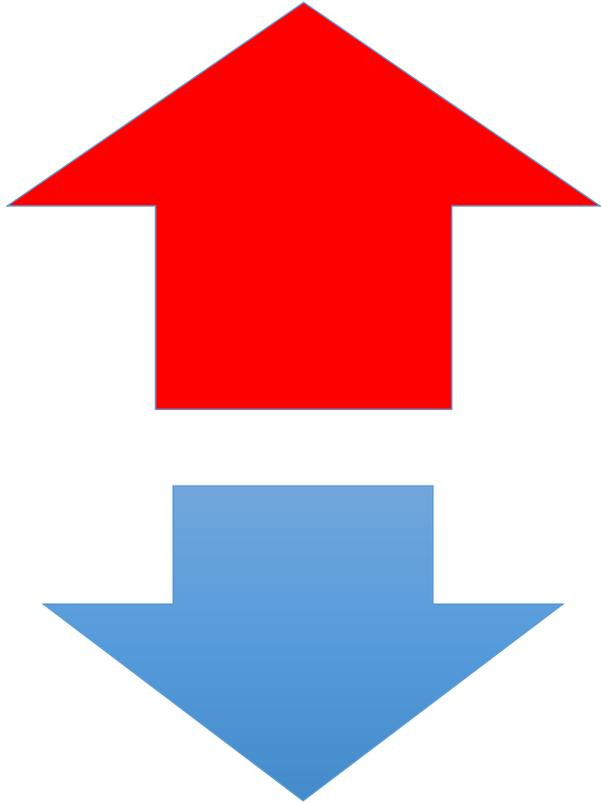
Reasons for improvement—Clean Air Act

The **Clean Air Act** tools at work:

- New emissions control equipment on coal-fired power plants
- Retirement of coal plants and increased use of renewables
- Retirement of fleets of old, dirty diesel trucks, buses, trains, barges, tractors and heavy equipment



More spikes in particle pollution, *again*



- **15 of the cities most polluted by short-term levels had more high particle days in 2013-2015**
 - **8 had their worst averages on record**
- **7 of the cities on the list did better than in 2012-2014**
 - **1 had its lowest average on record**
- **Two were unchanged**

Short Term PM

2017 Rank¹	Metropolitan Statistical Areas
1	Bakersfield, CA
2	Visalia-Porterville-Hanford, CA
2	Fresno-Madera, CA
4	Modesto-Merced, CA
5	Fairbanks, AK
6	San Jose-San Francisco-Oakland, CA
7	Salt Lake City-Provo-Orem, UT
8	Logan, UT-ID
9	Los Angeles-Long Beach, CA
10	Reno-Carson City-Fernley, NV

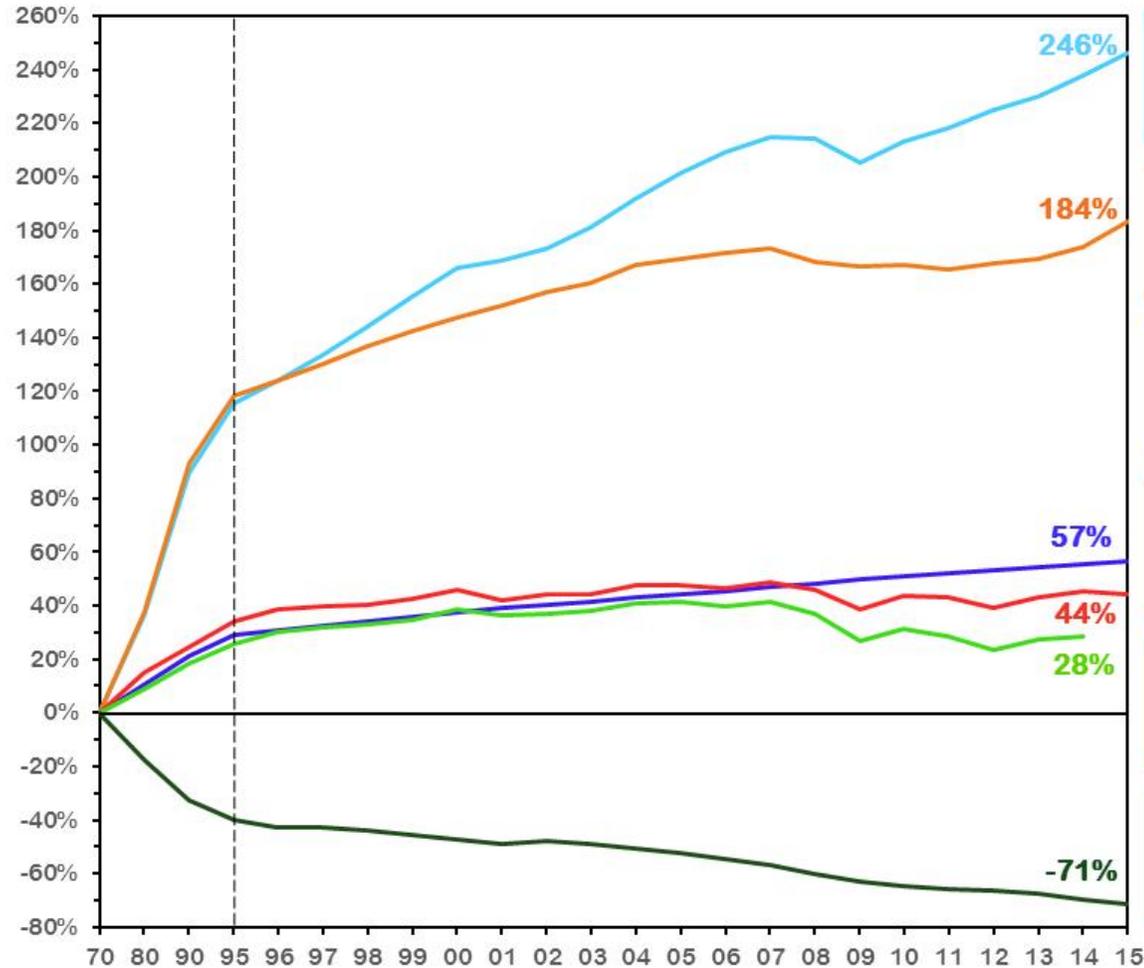
Reason for more particles?

- ✓ Weather changes, including warmer temperatures, less rainfall
 - Drought, forest fires, grassfires, dust
- ✓ Weather inversions trapping particles
- ✓ High woodstove smoke
 - Wintertime episodes



Progress continues

Comparison of Growth Areas and Emissions, 1970-2015



Gross Domestic Product



Vehicle Miles Traveled



Population



Energy Consumption



CO₂ Emissions



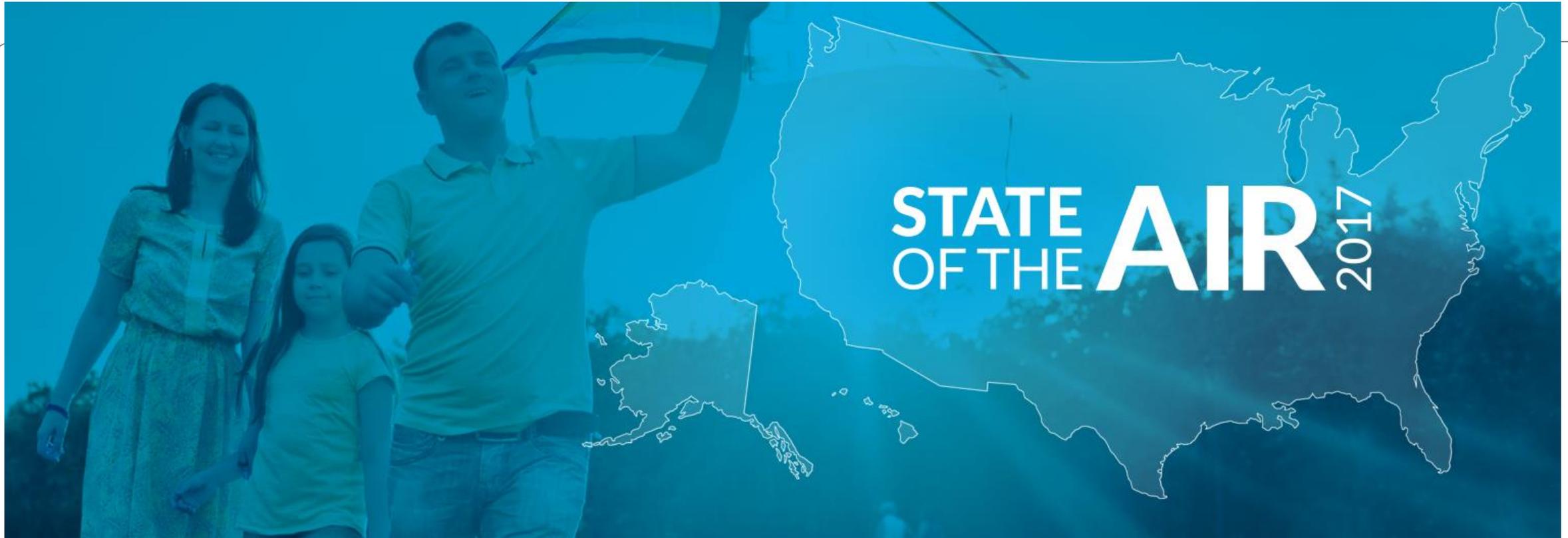
Aggregate Emissions
(Six Common Pollutants)

Cleanest Cities*

- **Burlington-South Burlington, VT** (*also on this list in 2016*)
- **Cape Coral-Fort Myers-Naples, FL** (*also on this list in 2013, 2014 and 2015*)
- **Elmira-Corning, NY** (*also on this list in 2014, 2015, and 2016*)
- **Honolulu, HI** (*also on this list in 2012 and 2016*)
- **Palm Bay-Melbourne-Titusville, FL** (*also on this list in 2013*)
- **Wilmington, NC** (*new to the list*)

**Alphabetical order*

On StateoftheAir.org



For 18 years, the American Lung Association has analyzed data from official air quality monitors to compile the "State of the Air" report. The more you learn about the air you breathe, the more you can protect your health and take steps to make our air cleaner and healthier.

What's on the site?

Key Findings



Nearly 4 in 10 people live where pollution levels are too often dangerous to breathe.

[Learn More](#)

City Rankings



Which cities have the highest levels of air pollution? Which are the cleanest? Check out the lists here.

[Learn More](#)

County Pages Show Grades

This shows the report card for Harford County, Maryland, one county in the DC-Baltimore metro area.

Here are the 3 categories and the grades for each

Maryland: Harford

Harford County Washington-Baltimore-Arlington, DC-MD-VA-WV-PA

If you live in Harford County, the air you breathe may put your health at risk.

Ozone	Particle Pollution 24-hour	Particle Pollution Annual
F	A	PASS

The air you breathe needs your support.
You can make a difference in the air that you breathe.

High Ozone Days [Learn More](#)

[Help us fight for air](#)
[Share your story](#)

Metro Pages Show Rankings

Maryland: Harford

Harford County

Washington-Baltimore-Arlington, DC-MD-VA-WV-PA

For the Washington-Baltimore-Arlington, DC-MD-VA-WV-PA CSA

The air you breathe needs your support.

You can make a difference in the air that you breathe.

- Ranked 32 for high ozone days out of 228 metropolitan areas
- Ranked 49 for 24-hour particle pollution out of 186 metropolitan areas
- Ranked 35 for annual particle pollution out of 184 metropolitan areas

Help us fight for air

Share your story

County & Metro Web Pages Show Trends

High Ozone Days

[Learn More](#)

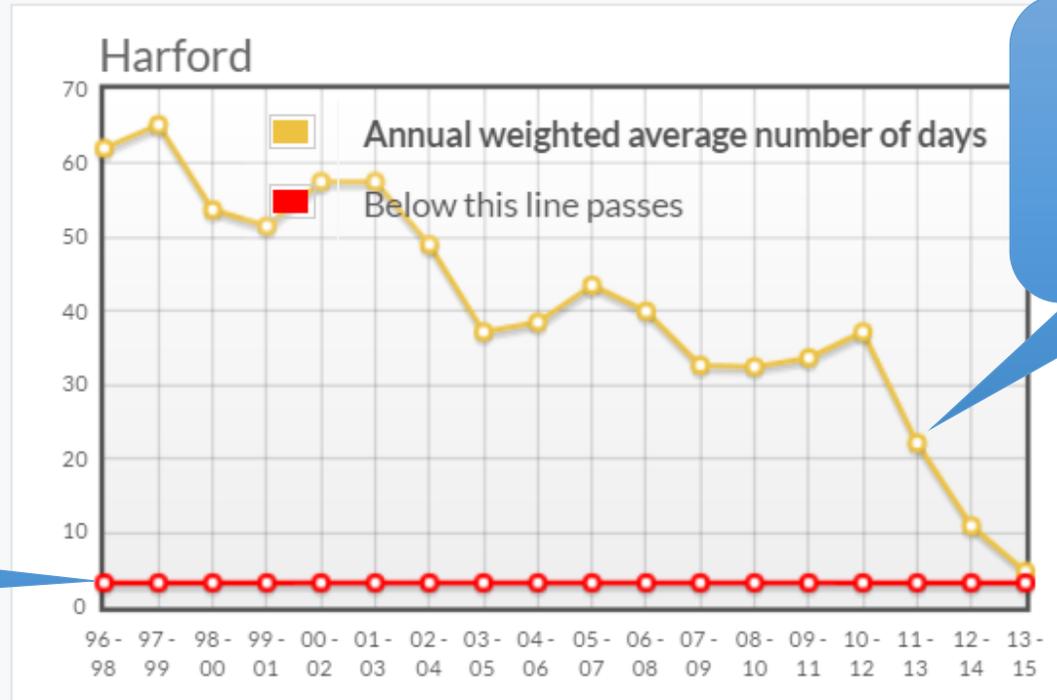
Ozone Grade: F

[How is my grade calculated?](#)

Weighted Average 4.8

Change since 1996: 57.2 fewer days this year

The Red Line is the goal for a passing grade.



The Yellow Line shows weighted average # of days/year

How much has the air in Washington-Baltimore-Arlington improved?

A lot!

- In 1997-1999, using 2015 ozone standard as basis, the Metro Area recorded a weighted average of **90.3 days** of unhealthy ozone each year, in Anne Arundel County
- By 2013-2015, it is much lower: only **6.7 days** each year, recorded in Baltimore City.
 - Still high, but much better, **thanks to the Clean Air Act.**

Threats to Progress on Healthy Air: Administration

- Under the Trump administration, EPA has signaled that it will **pull back key air pollution protections**, including plans to clean up greenhouse gasses from power plants and vehicles.
- The administration has also proposed **massive cuts to EPA's budget**. EPA needs adequate funding to continue monitoring air quality and implementing and enforcing the Clean Air Act.

Threats to Progress on Healthy Air: Congress

- Congress is considering bills that would **permanently weaken the Clean Air Act.**
- Congress is also considering “regulatory reform” bills that would make it **permanently harder for all federal agencies,** including EPA, to set public health safeguards.
- Congress ultimately decides EPA’s funding levels, and must stop **EPA’s budget from being slashed.**

How You Can Help

Your voice is critical!

Health professionals can play a crucial role in advocacy by communicating the health impacts of weakening and defunding clean air protections.

Sign this letter opposing efforts to block, weaken, or delay the Clean Air

Act: <http://bit.ly/2qayl46>



Why do we publish “State of the Air”?



Millions of reasons