THE PULSE: Breathing in Bakersfield can be harmful to your health
By Courtenay Edelhart
Bakersfield Californian, Wednesday, April 30, 2014

BREATHE EASIER: Bakersfield air quality has improved by two key measures, but it's still some of the worst in the nation, according to the American Lung Association's annual State of the Air report.

Kern County saw its lowest-ever reported levels of short-term and year-round particulate pollution since the report started tracking them in 2000.

Short-term particulates cause spikes in bad air that last a few hours or days, as opposed to long-term particulates, which hang around all year.

There were an average of 33.8 unhealthy short-term particulate matter days in the three-year period from 2010 to 2102, compared with 46.5 in the previous three years, according to the report.

For some perspective, that's down from an average of 73.7 days in the years 2000-2002.

Kern County's year-round particulates fell to an average of 15.6 bad air days in the last three years the report examined, down from an average 18.2 days in the previous three years.

Great news and nothing to sneeze at, but it still ranked the metro area third nationally for ozone and both kinds of particulate pollution, behind No. 2 Hanford-Visalia and the Los Angeles-Long Beach-Riverside metro area, which had the worst air in the United States.

"Absolutely no surprise to us," said Jaime Holt, spokeswoman for the San Joaquin Valley Air Pollution Control District. "We have known and continue to know about the challenges we have in the valley due to our topography and meteorology.

"We don't produce more pollution. It's just that we have some natural challenges."

Nine of the nation's most polluted metro areas were in California, and the San Joaquin Valley was the most polluted region in the state.

Improving valley air quality is particularly hard because of its hot summers and a mountainous terrain that traps pollution, said Bonnie Holmes-Gen, senior director of policy and advocacy for the American Lung Association in California.

"Initiatives that have been effective in other areas often take longer to produce the same results in the valley, so we need to step up our efforts there," she said.

Poor air quality poses a health risk to all people, but is especially dangerous to the young, elderly and those with respiratory illnesses.

Kern County has about 22,000 children with asthma, and 52,000 adults struggle with the disease.

Another 26,000 county residents have chronic obstructive pulmonary disease, or COPD.

Holmes-Gen praised policies designed to clean the air, including limiting wood burning in the winter and incentives to upgrade old diesel trucks.

But there's a lot more work to do, said Janice Nolen, assistant vice president of national policy and advocacy for the American Lung Association.

The association is lobbying for caps on carbon emissions, more pedestrian-friendly development, cleaner vehicles and a stricter national ozone standard.

"Scientists are looking at research that shows clearly that the standard that we have now is not sufficient," she said. "Studies show health harms well below the current standard."

Kern County's ozone pollution was nearly flat in the last two periods scrutinized in the report.

Ozone is a molecule that's found naturally in the stratosphere, but generally only turns up in the lower part of the atmosphere as a result of air pollution from engines and power plants.
We like ozone to stay up high where it protects us from ultraviolet sunlight, but ozone in the lower part of the atmosphere causes respiratory problems such as coughing, wheezing and shortness of breath.

Kern County had an average 78.5 unhealthy ozone days over the three-year period from 2010 to 2012, according to the report, compared with 78.3 in the previous three years.

One other thing.

The 2014 report relies on data that's a little behind, so it does not include air quality measures from this year or last, when we've been ravaged by drought.

Pollution thrives in dry years in which a lot more dust flies around and parched mountains are prone to wildfires.

None of that bodes well for next year's report.

Stay tuned.

**Fresno-area air problem ranks as nation's worst**

By Mark Grossi - The Fresno Bee  
In the Modesto Bee, Wednesday, April 30, 2014

The American Lung Association says people in the Fresno-Madera area suffer the nation's worst exposure to soot, chemicals and other tiny pollution specks -- a dubious first for this area.

Last year, the Bakersfield area was the worst. The Fresno-Madera area has never been to the top of the list for this pollutant, known as PM-2.5.

The rankings in the Lung Association's 15th annual "State of the Air" report again show that stagnant weather and the Valley's bowl shape can stifle improved pollution control.

"Even though there has been improvement, the San Joaquin Valley continues to be a very difficult challenge," said Bonnie Holmes-Gen, Sacramento-based senior director of policy and advocacy for the Lung Association. "We have to recognize the problem."

Lung Association leaders said air quality is noticeably better around the country and parts of California, but millions of people still live with dirty air.

For years, Valley cities have dominated the association's worst-10 lists, sharing the notorious spotlight with Los Angeles and other communities in the South Coast Air Basin.

Most San Joaquin Valley counties, including Fresno, Kings, Tulare, Madera, Merced, Kern and Stanislaus, get failing grades each year.

None of that changed in the association's latest report, which is focused on the last three years of available data -- 2010 through 2012. The association analyzes air quality numbers, adding its own emphasis for days that are significantly above the federal standards.

Fresno-Madera, Visalia-Porterville-Hanford and Bakersfield were ranked among the five worst ozone offenders in the nation. Los Angeles-Long Beach was the worst, as it has been 14 of the last 15 years.

The association's latest analysis does not include 2013, an intense drought year that will show up as pollution spikes in the next report. Droughts sometimes contribute to bad air quality with stagnant air patterns in winter and wildfires in summer.

In dry, sooty December 2013, Hanford spiked a reading for particulates four times higher than the federal standard. Other high pollution levels were recorded throughout the month.

One glimmer of good news from 2013 that is also not in the report: The San Joaquin air basin posted its lowest-ever number of days that exceeded the eight-hour ozone standard.

Jack Broadbent, leader of the Bay Area Air Quality Management District who spoke during the association's media conference, said dust and wildfire are significant threats this summer.

"There's a potential to erode some of the gains we've made in California," he said.
Dr. Alexander Sherriffs, a Fowler family physician and governing board member on the San Joaquin Valley Air Pollution Control District, said everyone needs to pay attention to air quality.

Microscopic particle pollution is particularly dangerous, he said. The lungs can't filter out the smallest debris, which can pass into the blood system. The majority of premature death due to air pollution is blamed on this debris.

"I see the impact of pollution on people's lungs every day in my practice," he said. "We all need to do what we can to protect the air and the people here."

Worst for PM-2.5
1. Fresno-Madera
2. Visalia-Porterville-Hanford
3. Bakersfield
4. Los Angeles-Long Beach
5. Modesto-Merced

Worst for ozone
1. Los Angeles-Long Beach
2. Visalia-Porterville-Hanford
3. Bakersfield
4. Fresno-Madera
5. Sacramento-Roseville

**County fails air report — again**
By Alex Breitler
Stockton Record, Wednesday, April 30, 2014

It's an "F" again for San Joaquin County when it comes to air quality - the same grade our community typically receives from the American Lung Association in its annual "State of the Air" reports.

Lung association officials stressed Tuesday that the air is getting cleaner in many parts of the country. But they said millions of Californians are still at risk, with the most serious pollution hot spots in the San Joaquin Valley, particularly south of Stockton.

"More than 80 percent of all Californians live in areas battling unhealthy air," said Marsha Ramos, chairwoman of the association's California branch.

By the numbers

**San Joaquin County**

Ozone pollution: 27 "orange" days, one "red" day, no "purple" days. Grade: F

Particle pollution: 28 "orange" days, six "red" days, no "purple" days. Grade: F

**Calaveras County**

Ozone pollution: 14 "orange" days, no "red" days, no "purple" days.

Grade: F

Particle pollution: No orange, red or purple days. Grade: A
Orange means unhealthy for sensitive groups; red means unhealthy; purple means very unhealthy.

— Source: American Lung Association

There is good news for our region: Stockton dropped off a list of the top 25 cities in the country most vulnerable to pollution from tiny particles in the air for 2010-12. Last year, the city ranked 12th on that list, its worst showing.

The bad news is, San Joaquin County's population as a whole is still considered to be highly vulnerable to the particles, ranking 16th in the United States. The ranking is based on the number of residents who are considered at risk, including the young and elderly, those who suffer from asthma or other respiratory illnesses, and those who live in poverty.

Overall, the county earned "F" grades for both major types of pollution: summertime ozone, and wintertime particle pollution.

Despite being almost twice as clean as San Joaquin, Calaveras County also earned an "F" for ozone. That underscores concerns among some air quality regulators that the lung association's annual study, while helpful, sometimes paints an overly simplistic picture, lumping dirty counties in with cleaner ones.

Indeed, a pre-emptive report issued one week earlier by an association of air quality districts across California emphasized improvements made over time, saying that despite an increase in population and traffic, smog-forming pollutants in the state have declined by more than 50 percent.