

## Heat turns Valley air unhealthy, prompts warnings about limiting time outdoors

By Barbara Anderson

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The air in the central San Joaquin Valley is hot – and dirty.

Air quality on Wednesday is forecast to reach a “red” Level 5 for at least an hour or two in Fresno, which means unhealthy air for everyone.

And for much of the day, air quality likely will be only slightly better at an “orange” or Level 4. That’s unhealthy for sensitive groups: children, the elderly, people with asthma, other lung problems and heart conditions. People in the sensitive groups need to stay indoors; and healthy people should avoid strenuous outdoor activities.

But during “red” hours everyone should take “a breather” and try to stay inside.

And there’s more bad news: The hot, bad air could stick around until the end of the week.

Ozone, a corrosive gas that irritates lungs and eyes, requires heat to cook into a toxic stew. The Valley has had temperatures higher than 100 degrees since Saturday (July 23), and Wednesday won’t break the streak. The forecast is for a high of 107.

The remainder of the week won’t be much cooler. The forecast for Thursday and Friday is for highs of 106. The Saturday forecast high is 104.

And the Valley could see temperatures higher than 100 degrees through Tuesday, which would mark 11 days of blistering heat, said Christine Riley, a meteorologist at the National Weather Service office in Hanford.

That wouldn’t be a record, though. The Valley had 21 days with temperatures higher than 100 degrees beginning on July 23, 2005, and ending on Aug. 12 of that year.

(Did you notice the beginning of the 2005 heat streak and the beginning of this one? Both started on July 23.) Is it just a coincidence? Will the heat and the bad air stick around to rival 11 years ago?

“I wouldn’t jump to conclusions,” Riley said.

But besides the unrelenting hot weather, there’s another catalyst contributing to the Valley’s unhealthy air this week.

Soot is drifting into the Valley from wildfires burning in Monterey, Los Angeles and on the way to Yosemite National Park, said Jaime Holt, chief communications officer for the San Joaquin Valley Air Pollution Control District.

The tiny bits of particulate pollution are mixing with the ozone to make the air especially unhealthy.

“If you see smoke or smell smoke, stay inside in an air-conditioned environment,” Holt said.

But ozone by itself is a bad pollutant.

It’s sometimes described as a lung sunburn. Scientists know it causes inflammation in the lungs and kills cells.

Research shows that breathing ozone can, in the short term, cause shortness of breath and trigger asthma attacks. Long-term exposure – even at levels below a health alert – may cause scarring of the lungs, birth defects and other chronic health problems. It’s been linked to early death.

But symptoms of the chemical burn can vary. One person may gasp for air and cough or rub stinging eyes. Another may feel little or no discomfort. And symptoms from breathing ozone also can lessen – and even stop – as exposure is repeated.

The disappearance of symptoms doesn’t mean an individual has developed resistance to ozone, according to the federal Environmental Protection Agency. Ozone can continue to cause lung damage even when the symptoms have disappeared, the EPA says.

The most vulnerable to ozone are children, who breathe more air for their body weight than adults, and older people who can have health conditions that weaken their lungs and heart. But a healthy person exercising can breathe as much as 20 times more air than a person at rest. They also tend to breathe through their mouths, which bypasses the nose – the body’s hair-lined air filter.

Dr. A.M. Aminian, a Fresno allergist, said people were running Monday in the heat. “They should not have been doing that,” he said.

The doctor has seen more patients with asthma and other respiratory problems the past two weeks. On the weekend, he had calls from patients in distress, he said. “A lot of people are having problems right now.”

“Ozone is just really irritating to people’s respiratory tracts,” he said. “It creates just a feeling of dull aching in the chest, chest tightness.”

People can monitor ozone levels by going to the air district website.

Ozone levels typically peak in the afternoon with the highest recorded between 3 p.m. and 6 p.m., Holt said. “Morning is the better choice for being outside, at least for this week that we’re having right now.”

## **Wildfires contribute to high air pollution days for Merced**

By Monica Valez

Merced Sun-Star, Wednesday, July 27, 2016

Merced’s air quality has spiked to unhealthy levels for people facing lung or breathing problems, a change since last week that may be partially the result of wildfires burning to the west and south.

According to the San Joaquin Valley Air Pollution Control District, Sunday’s air quality reached the level considered “unhealthy for sensitive groups,” said Anthony Presto, outreach and communication representative for the Valley Air District.

Monday’s air quality was worse, almost reaching into “unhealthy” levels, prompting the Valley Air District to recommend that people exercise indoors and limit outdoor exposure to no more than 30 minutes.

Last week, air quality was consistently in the “good” and “moderate” levels.

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“The spikes very well could be a result of wildfires,” Presto said. “Ozone levels wouldn’t be as high if it wasn’t for the wildfires.”

In Monterey County, the Soberanes fire broke out near Big Sur on Friday. By Tuesday, it had grown to more than 19,000 acres and destroyed at least 20 homes, according to the Cal Fire website.

Presto said the coastal fire has had a greater impact on the Central Valley than the Sand fire burning more than 37,000 acres near Santa Clarita, according to the County of Los Angeles Fire Department website.

Presto said air pollution levels are expected to be high for the remainder of the week and the conditions are dependent on the fire containment and weather patterns driving the pollution through the Central Valley.

When particle pollution from wildfires, such as smoke, dust and soot, mix with the ozone pollutants, Presto said, air quality worsens.

“It’s definitely quite a bit worse when we get both of these together,” Presto said. “It tends to happen in the summer during wildfires.”

Pollutants from wildfires are worse on the health scale, Presto said, because the particles that can be inhaled are so small they can enter the bloodstream, increasing the risk of heart attacks and strokes.

“The best thing to do is stay indoors where there is filtered air,” Presto said.

According to medical officials in Merced, air pollution definitely plays a roll in respiratory conditions and can trigger or worsen any lung disease.

Damage to lung airways, an increased risk of developing and worsening asthma can also be health problems associated with air pollution, according to the Mayo Clinic.

Presto said residents should monitor the air quality frequently on Real-Time Air Monitoring Station, especially during wildfires, to monitor when air quality is at its worst, usually in the afternoon between 1 and 6 p.m.

"We always urge residents in the valley to do whatever they can to reduce pollution," Presto said.