

## **Sidewalk fireworks not a healthy way to celebrate**

By Barbara Anderson, staff writer

The Fresno Bee, Thursday, July 2, 2015

On the Fourth of July, one of the pleasures is watching as flashes of color light up neighborhoods in the central San Joaquin Valley, but lingering dark plumes of soot, ash and metals from the sidewalk fireworks concern air district and health officials.

Each July 4, fireworks increase levels of dangerous particulate pollution and pose a health threat not only to people who are setting off the fireworks but also their neighbors, the officials say.

Levels of the tiny particulates can be four to five times higher than limits set by health-based federal standards. And the celebratory fireworks add to already smoggy skies. The Valley suffers each summer with high ozone pollution.

The microscopic pieces of pollution from fireworks are similar to the specks of ash and soot spewed each winter from fireplaces, and are so small they can be inhaled and invade the bloodstream, said Heather Heinks, outreach and communications manager at the San Joaquin Valley Air Pollution Control District.

The particles, called PM 2.5, have been linked to heart attacks and stroke, not to mention irritation to lungs, especially for people with asthma and other respiratory problems.

Air district officials are encouraging elderly residents, young children and anyone who already deals with asthma or any respiratory illness to recognize they should avoid engaging in fireworks.

"We urge Valley residents to exhibit their patriotism by attending a professional Independence Day event in their area instead of using personal fireworks," said Seyed Sadredin, the district's executive director and air pollution control officer.

"Each year, people suffer serious health consequences from direct exposure in their neighborhoods where they live and breathe," Sadredin said, and the health risks are "from fireworks activities that are entirely preventable."

Dr. John Gasman, a pulmonologist at Kaiser Permanente Medical Center-Fresno, said doctors deal with the aftermath of July 4 fireworks. "We see people who complain of more respiratory problems like when there are forest fires."

Anyone with lung conditions, such as asthma, should be careful going out into the street when fireworks are being lighted, Gasman said.

The doctor's advice: Stay indoors with air conditioning. "Or I suppose you could be out there with a mask."

## **Air officials discourage personal fireworks use**

Modesto Bee, Friday, July 3, 2015

Air officials are urging residents to leave the July Fourth fireworks to the pros.

The safe-and-sane fireworks so popular on Independence Day increase levels of dangerous particulate matter and pose a health threat to those watching them and surrounding neighbors, according to the San Joaquin Valley Air Pollution Control District.

"We urge Valley residents to exhibit their patriotism by attending a professional Independence Day event in their area instead of using personal fireworks," said Seyed Sadredin, the district's executive director and air pollution control officer, in a news release. "Each year, people suffer serious health consequences from direct exposure in the neighborhoods where they live and breathe ... from fireworks activities that are entirely preventable."

Levels of particulate matter in the Valley on the Fourth historically spike to levels four or five times higher than health-based federal standards, the district reports. That increase is largely attributable to fireworks use throughout neighborhoods.

Fireworks emit large quantities of particulate matter, including soot, ash and metals, which cause serious health impacts, especially to people with respiratory conditions, the elderly and small children. Fine particulate matter, known as PM2.5, can invade the bloodstream and has been linked to heart attacks and stroke, air officials say.

"If you smell smoke, it's entering your lungs and may exacerbate any existing breathing illnesses and increase the risk of heart or stroke," said Anthony Presto, a spokesman at the air district's Modesto office. "It may damage lungs and reduce lung function. Residents who are sensitive to smoke should consider staying indoors that evening if fireworks are being used in their neighborhood."

Dust masks commonly sold in hardware and home-improvement stores would appear to be ineffective. An EPA report says: "Paper 'comfort' or 'dust' masks ... are designed to trap large particles, such as sawdust. These masks generally will not protect your lungs from the fine particles in smoke."

Air quality in the Valley during summer is already burdened by ozone pollution. Air monitors throughout the Valley reflect spikes in particulate pollution every year after Fourth of July fireworks displays.

The air district's Real-time Air Advisory Network makes localized air quality data available from an extensive air-monitoring network at [www.valleyair.org/RAAN](http://www.valleyair.org/RAAN). Hourly air quality data is also available through a free iPhone app, Valley Air, available at the App Store.

For more information about the air district, call the Modesto office, 209-557-6400.

## **Fourth Of July Fireworks Threaten Valley Air Quality**

By Jeffrey Hess

Valley Public Radio, Thursday, June 2, 2015

Officials with the Valley Air District are warning about Fourth of July fireworks worsening air quality and threatening residents' health.

Fireworks can cause damaging air pollution to spike to five times the level considered safe.

When fireworks are set off, they burn, explode and release large amounts of dangerous particulate matter into the atmosphere.

Heather Heinks with the San Joaquin Valley Air Pollution Control District says the tiny particles of soot, ash and metal can bury themselves deep in the body causing short and long term problems.

"Asthma attacks. Irritation of any kind of respiratory issue you might have. Long term exposure can lead to heart attacks. In general it is just not very good for your health," Heinks said.

The increase in air pollution comes on top of negative air quality readings that plague the valley, due in part to the prolonged drought.

Particulate matter is any air pollution including metals, and soil or dust particles that are smaller than 10 millimeters in diameter. Air pollution 2.5 millimeters is consider fine particulate matter and is especially concerning to air quality experts.

The increase in particulate pollution is so intense, that air pollution monitors spike between the hours of 8 pm and midnight on July Fourth when people are setting fireworks off.

"Those levels will jump to three, four, maybe five times higher than the health based standards set by the federal government," Heinks said.

Heinks says people sensitive to the pollution, the elderly and young children should avoid fireworks and stay inside if possible.

## **Air district urges fireworks restraint**

The Business Journal, Thursday, July 2, 2015

The San Joaquin Valley Air Pollution Control District is urging residents to use restraint this Fourth of July weekend, as fireworks are expected to dramatically increase the level of dangerous particulate matter in the region.

"We urge Valley residents to exhibit their patriotism by attending a professional Independence Day event in their area instead of using personal fireworks," said Seyed Sadredin, executive director at the air district. "Each year, people suffer serious health consequences from direct exposure in the neighborhoods where they live and breathe from fireworks activities that are entirely preventable."

Fireworks emit high levels of particulate matter including soot, ash and metals, that can cause serious health issues for those with existing respiratory conditions, the elderly or small children. According to a press release from the air district, fine particulate matter from fireworks can invade the bloodstream and has been linked to heart attacks and stroke.

The Valley's air quality has already been burdened with ozone pollution this summer and officials are concerned a spike in particulates over the weekend could jeopardize the region's progress toward meeting air-quality standards that protect public health.

For more information about the air district and air quality data, visit [www.valleyair.org/RAAN](http://www.valleyair.org/RAAN).