

## **Fresno sees unexplained rise in pollution specks**

By Mark Grossi / The Fresno Bee  
Thursday, June 10, 2010

Along Shaw Avenue in Fresno, researchers say they've found an unexplained midday rise in tiny air pollution specks that might trigger heart problems.

The discovery was among the advances that have unfolded over the past few years as scientists study dangerous bits of dust, soot and chemical debris that are not visible to the naked eye.

Scientists from as far away as New York this week presented the latest research on particulate matter in Fresno as part of a San Joaquin Valley Air Pollution Control District conference.

The advances will be important in the future as policymakers and rule-making entities, such as the U.S. Environmental Protection Agency, consider ways to better protect the public.

More than 6,000 people die prematurely each year in California because of such pollution, according to the California Air Resources Board.

The annual cost of health care and human suffering related to these specks is in the billions of dollars in the Valley alone, economist Jane V. Hall of California State University, Fullerton, found in one study.

The specks discussed Thursday are considered "ultra-fine," which is generally considered about 100 nanometers and smaller -- a human hair is about 100,000 nanometers wide.

Researchers from the University of California at Davis have set up equipment at Shaw Avenue, across the street from Fashion Fair mall, to measure ultra-fine specks. The site was chosen to reflect an urban setting with shopping, restaurants, traffic and nearby neighborhoods.

UC Davis scientist Anthony Wexler said that between noon and 1 p.m. in late summer 2008, researchers detected a consistent spike in these specks.

"Whatever's going on -- and we don't know what that is -- there's an injection into the atmosphere," Wexler said. "This is new to us."

Wexler said the winter-time data from the Shaw Avenue station shows four times the amount of particle pollution. The spikes during the winter typically happen later in the afternoon when people get home from work and burn wood in fireplaces or wood-burning stoves.

The heart problems linked to the tiny pollutants can occur even without lung inflammation, the latest science shows. Terry Gordon, a professor of environmental medicine at New York University's School of Medicine, said some scientists believe the specks pass through the lungs into the blood system.

But he said he suspects there is some kind of reaction in the lungs that helps trigger the heart problems. A lot of research is needed to answer the question.

"It will be 10 years before we find out," he said.

The tiny particles also might trigger allergies, which can inflame asthma, said Kent Pinkerton, a professor in the UC Davis School of Medicine. In laboratory tests on mice, researchers used particles gathered from Shaw Avenue to study allergic reactions.

Pinkerton said there is evidence that these particles triggered an allergic reaction in the mice, and the same tendency may occur in humans.

"What we did," Pinkerton said, "is create a bad-air day, using real-world particles."

## **Market Intelligence: Living green has caught on in Bakersfield**

Bakersfield Californian, Friday, June 11, 2010

The "living green" movement has successfully caught on in Bakersfield. A high number of Bakersfield residents are doing a variety of eco-friendly activities on a regular basis. According to Scarborough Research latest data release (March 2010), 75 percent of Bakersfield adults do three or more eco-friendly

activities regularly. The table below gives a breakdown of the number of eco-friendly activities done on a regular basis by Bakersfield adults.

**Number of eco-friendly activities ... Percent of Bakersfield adults**

1 activity ... 9 percent  
2 activities ... 10 percent  
3 ... 21 percent  
4 ... 15 percent  
5 ... 14 percent  
6 ... 11 percent  
7 ... 6 percent  
8 ... 3 percent  
9 ... 3 percent  
10 or more activities ... 3 percent  
None ... 7 percent

How can your business profit from this eco-conscious market? In addition to boosting public relations, promoting "green" products and services can build customer traffic and sales. Many consumers are now shopping for environmentally friendly products and services, and some are even willing to pay more for these products. Below is a list of the top eco-friendly activities done on a regular basis.

**Eco-friendly activity done regularly ... Percent of Bakersfield adults**

Buy eco-friendly household cleaning products ... 24 percent  
Buy locally grown food ... 22 percent  
Buy organic food ... 14 percent  
Donate money or time to environmental causes ... 5 percent  
Drive less/use alternative transportation ... 29 percent  
Pay more for eco-friendly products and services ... 7 percent  
Plan to buy a hybrid vehicle ... 3 percent  
Recycle electronics (batteries, cell phones, computers, etc) ... 29 percent  
Recycle glass, plastic, or paper ... 75 percent  
Support politicians based on environmental positions ... 5 percent  
Use cloth or other reusable grocery bags ... 35 percent  
Use energy efficient light bulbs ... 76 percent  
Use less water at home ... 41 percent  
Use rechargeable batteries ... 32 percent  
Other eco-friendly activity ... 7 percent  
No eco-friendly activity ... 7 percent

In future columns, we will break down these numbers further to help local green entrepreneurs, green business leaders and others seeking to learn more about Bakersfield's eco-conscious consumers.

Sources: Scarborough Research (2010 R1) and The Bakersfield Californian Market Research Department.

[Fresno Bee Earth Blog, Wed., June 9, 2010:](#)

## **Nice spring, only five zone violations so far**

By Mark Grossi

This is the San Joaquin Valley's cleanest start to ozone season -- I checked back to 1991.

There haven't been any ozone violations yet in June, which is only a little unusual for the early part of the month. But there have only been five violations this year. There hasn't been a total that low in June for at least 20 years.

The Valley had 17 bad days at this point last year. And last year was the best year on record, in terms of ozone violations.

Air quality efforts have stepped up in recent years, but don't ever underestimate the weather in this equation. It has been a cool, breezy spring, one of the nicest in memory around the Valley.

As I have said in the past, the goal is zero violations. Last year, the Valley had 98, second-worst in the country. South Coast had 113.