

Valley study links ER visits with bad air days

By Kellie Schmitt, staff writer

Bakersfield Californian, Wed., Oct. 19, 2011

Children's asthma-related emergency room visits rise in the San Joaquin Valley at a similar rate as fine particulate levels do -- even on days where air quality is considered in the moderate range.

That's a key finding of a yearlong study by the Central Valley Health Policy Institute at Fresno State, which examined the short-term impacts of air quality changes in Bakersfield, Fresno and Modesto.

Although nationwide studies have found similar connections between heightened pollution and hospital visits, the report is the first of its kind using valley-specific data.

The results are also compelling for the proportional findings, meaning that asthma-related visits climb in lockstep with increased pollution, even on days considered "yellow" or moderate.

"The study really validates the difficult things we ask of businesses and households," said David Lighthall, the health science adviser for the San Joaquin Valley Air Pollution Control District, which funded the \$125,000 study. "It gives our board and staff reassurance to continue making tough regulations to reduce the exposure, particularly for fine particulates."

The study calculated that children with asthma in the three regions surveyed make an extra 1,596 hospital visits a year as a result of elevated fine particulate matter (PM 2.5), and 217 because of high ozone levels, according to Tim Tyner, the co-author of the report and the associate director of the Center for Clinical and Translational Research at the University of California at San Francisco-Fresno, a partner in the study.

Each of those ER visits costs an average of about \$1,500, and hospitalizations can cost ten times that, Tyner said.

While exacerbated childhood asthma as a result of the fine particulate matter was the most significant correlation found, the study also discovered other health connections, such as increased emergency visits for children with pneumonia and adults with asthma and cardiovascular problems.

It was also troublesome to see the correlation even on days when air pollution is at levels parents might consider healthy for their asthmatic children. The correlation began at a level of 20 to 30 micrograms per cubic meter, which is below the national fine particulate standard of 35.

Particulate pollution tends to burden the valley more heavily from October to March. Summertime ozone pollution didn't pose as serious a short-term health threat, though experts cautioned there are numerous national reports linking that pollutant to longer-term health consequences such as respiratory and heart problems.

This study's findings could be used with ongoing research that examines particulates' distinct parts such as metals or ammonium nitrate. If a component is found to be more closely tied to the days with high emergency room visits, the district could focus its efforts on that element.

Historically, the district had treated all particulates the same, according to federal law, said Seyed Sadredin, the air district's executive director. Pinpointing the most unhealthy particulates potentially could convince the federal government to adopt a more targeted pollution-reducing policy.

"It gives us the biggest bang for our buck since we can find which pollutants are causing the most problems," he said. "We may find ammonium nitrate is different than the particulates you get from a leaf blower or diesel combustion."

The study also demonstrates that the job of cleaning the air is far from complete, said Kevin Hamilton, the deputy chief of programs at Clinica Sierra Vista.

"We're far, far, away from protecting families and children from the impact of air pollution," he said. "The so-called protective levels are indeed not as protective as we've been led to think."

Hamilton also emphasized the financial burden on the healthcare system from pollution-tied ER visits.

Sarah Sharpe, community health director at Fresno Metro Ministry, said the results are a wake-up call to decision-makers as well as residents, many of whom "are in denial about how serious the health impacts are."

From the public health perspective, more research -- especially valley-based reports -- can help the department alert and educate more people, said Kirt Emery, the health assessment and epidemiology program manager for the Kern County Department of Public Health.

While Emery said he's aware of the reported link between air pollution and hospital visits, studies are more relevant if done in one's own region, he said. That could translate into public health efforts to prevent exposure, thereby limiting expensive emergency room visits, he said.

Emergency room doctors say the study isn't surprising, though it is significant.

Anecdotally, Dr. Manish Amin, an emergency room physician at the Bakersfield Heart Hospital, said he notices increased asthma visits when the air is particularly dusty.

At Kern Medical Center, emergency medicine chairman Dr. Rick McPheeters said the additional patients might not be enough to notice at one hospital. He said the link between inhaling irritants and exacerbating health conditions isn't surprising though he pointed out that this study does not demonstrate that air pollution causes asthma.

When children are taken to the emergency room for asthma complications, they typically receive breathing treatment and oral medications, emergency room doctors say. Sicker kids have to stay longer in the emergency room and receive medications intravenously.

Bad cases could require a several-day hospital stay, and, very rarely, patients can die, despite medical treatment.

Cycling and health advocates have high hopes for bicycle master plan

By Steven Mayer, staff writer

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Dozens of city and county officials and agency staffers from Taft to Tehachapi crowded into a meeting room in downtown Bakersfield on Tuesday to discuss a topic that 20 years ago would probably not have gained much traction. Bicycles.

How to encourage their use. How to improve the safety of those who ride them. And maybe most importantly, how more cyclists on the streets can improve the quality of life for everyone in Kern by reducing air pollution, improving the overall health of residents and slowing the "brain drain" caused when educated young people leave the area in search of more livable communities.

The informational workshop, presented by local nonprofit Bike Bakersfield in partnership with the Kern Transportation Foundation, was held in the conference room at Kern Council of Governments, which entered into a \$100,000 contract this week with Alta Planning & Design, a nationwide company that helps transform cities into bike-friendly communities.

Alta's job, which is estimated to take between eight and 18 months, is to develop a bicycle master plan for the unincorporated areas of Kern, as well as 11 cities outside of the Bakersfield metro area.

"This is a document you really want to have on your books," said Brian Gaze, an Alta Planning associate and one of several people on Tuesday's panel.

The ultimate goal of the master plan, Gaze told attendees, is a "cleaner, happier, and frankly more healthy and active community."

But how do you get there?

You start by recognizing that the bicycle is a legitimate form of transportation. And you do that not just by word, but by deed.

"The culture follows the infrastructure," said Bike Bakersfield founder Bob Smith.

By creating attractive, well-marked and well-maintained bike lanes, shared-use paths and bike-friendly roadways that offer direct and interconnected routes to key destinations, communities encourage more people to travel on two wheels, Smith and other advocates said.

And when others see the culture changing, many will join the trend.

Other infrastructure improvements could someday include end-of-trip facilities, including secure bike racks and changing stations. Well-planned connections to mass transit, traffic calming elements, signage components, and parking restrictions along selected bike lanes have been used in other bike-friendly cities.

Of course, all of that costs money.

"Most of the bike master plans have a lot of great ideas," Gaze said. "But funding these improvements is an issue."

On the other hand, there's a growing sense that bold steps are needed to address Kern's chronic air pollution problem, while at the same time action is needed to stem the tide of obesity and diabetes that has overtaken Kern County.

"Some 200,000 deaths yearly (in the U.S.) are attributed to lack of physical activity," said Dr. Avtar Nijjer-Sidhu, a senior health educator at the Kern County Department of Public Health.

"Is your environment supporting you to be physically active?" she asked. "That is the question."

Another level of urgency is embedded in state law, including AB 32, which will limit greenhouse gas emissions across California beginning in 2020. Cycling advocates note that every time someone opts to use pedal power rather than drive, they are reducing ozone pollution for all residents, while at the same time cutting greenhouse gas emissions.

Cycling proponents also say a master plan will open doors to new infrastructure funding sources not currently available locally.

Two Bakersfield City Council members -- Jacquie Sullivan and Russell Johnson -- participated in Tuesday's panel. But so far, the city of Bakersfield is not on board with the bicycle master plan. City Planning Director Jim Eggert, who also attended the workshop, said Bakersfield has had a bike master plan on the books since 1990.

But Bike Bakersfield's Smith said he's concerned the city's plan is not consistent with the requirements of California's Bicycle Transportation Account, a program that provides up to \$7.2 million annually for city and county projects across the state that improve safety and convenience for bicycle commuters.

Besides, he said, it just makes sense for Kern's largest population center to be integrated into the new master plan for the county. KernCOG planner Peter Smith agreed.

"This would be a good time for the city to come in with an integrated plan," Smith said.

Panelist Dave Snyder, executive director of the Sacramento-based California Bicycle Coalition, said the number of people who have taken up biking has increased 58 percent since 2006 -- and that growing transportation revolution is sure to come to Kern.

"There's bound to be a growing movement and transformation in this community," he said.

Lodi City Council still weighing climate plan

By Maggie Creamer, staff writer
Lodi News Sentinel, Wednesday, Oct. 19, 2011

The Lodi City Council learned more about state mandates requiring a climate action plan at its shirtsleeves meeting on Tuesday morning.

The state-mandated plan will measure the city's greenhouse gases and offer suggestions on how to reduce emissions.

The council requested more information in September after a dozen local residents questioned the science behind global warming, and the city's affiliation with the Smart Valley Growth Compact.

The city joined the compact about a year ago to receive \$120,000 in federal funds, which were needed to hire a consultant to create a climate action plan.

The conversation on Tuesday focused mainly on whether the council wanted to stand up to the state and not move forward with a climate action plan, which is an unfunded state mandate.

At a meeting in September, residents asked the council to turn down the grant funds and not move forward with the plan.

Councilman Alan Nakanishi said the city should not draft the plan because of the effect it could have on the local economy.

"Ultimately, the way we are going, we will have clean water and air, but the businesses will move away," he said.

City Manager Rad Bartlam said the council could decide not to move forward with the plan, but it is a state-mandated study that cities must complete once they pass a General Plan, which is the city's blueprint for growth over the next 20 years.

If the council decides to pass on the grant, Bartlam said he believes the state will require them to create a plan anyway, but using city money.

"The question is, do we use a federal grant to complete a plan that I think we are going to have to do anyway? Or are we going to say that we aren't going to use the grant funds, and then down the road have to use General Fund money that we don't have?" Bartlam said.

The four other council members besides Nakanishi said they probably will move forward with using the grant funds to play for the plan.

Councilman Larry Hansen said it is a losing battle to try and stand up to the state, and it could be more costly in the end.

"We have to be pragmatic here. To take a philosophical or hardcore stand here is ultimately a gamble with the taxpayers' money. I'm not willing to do that," Hansen said.

Lodi resident Ed Miller originally asked the city to fight back against the state, but changed his mind on Tuesday. Miller is the council representative for Lodi's Tea Party affiliate, Citizens In Action.

"We should do the grant and then when it comes back ... do the absolute minimum to stay within the letter of the law and not an iota more. And that's as best as we can do until there is a change in California," he said.

The council will vote on the issue at its meeting at 7 p.m. tonight at Carnegie Forum, 305 W. Pine St., Lodi.

2 railroads face unique pollution lawsuit in Calif

By Noaki Schwartz, Associated Press

In the S.F. Chronicle and other papers, Tuesday, Oct. 18, 2011

LOS ANGELES (AP) -- When the lump on her toddler's tummy turned out to be a rare cancer, Carla Hernandez wondered if living just a half-mile from two rail yards emitting a constant veil of near-invisible pollution was somehow responsible.

"When she was diagnosed they kept asking me if I smoked or if anyone smoked around her, but no one did," said Hernandez, sitting beside her 4-year-old daughter, who was sleeping after her latest treatment at Children's Hospital Los Angeles.

Such accounts of families and children living near transportation corridors and experiencing health problems helped prompt a conservation group and two environmental justice groups to file a lawsuit Tuesday against two of the nation's biggest rail road companies.

The Natural Resources Defense Council filed the suit under a unique legal theory that diesel exhaust is hazardous waste and companies should be held accountable for health problems suffered by residents living near California rail yards.

The lawsuit filed in federal court against Union Pacific Corp. and BNSF Railway Co. accuses the companies of violating the Resource Conservation and Recovery Act, which regulates hazardous solid waste disposal. The lawsuit alleges problems at 17 rail yards across California, from Oakland to San Bernardino.

The conservation group claims minute particles in diesel exhaust, including lead, cadmium, arsenic and other toxic elements, are solid waste. If the novel suit is successful, a senior attorney with the council believes it could open the door for legal action against similar air pollution sources such as ports, airports or anyplace with a lot of diesel equipment.

"We really believe it's hazardous and a product of the rail company's operations," said Angelo Logan, executive director for East Yard Communities for Environmental Justice, one of the litigants. "It's being emitted into the air and the local residents have to bear the brunt of the toxic waste the locomotives and other equipment are producing."

Lena Kent, a spokeswoman for Fort Worth, Texas-based BNSF called the lawsuit unreasonable and said the railroad has spent hundreds of millions of dollars to reduce emissions and replace outdated locomotives.

"The NRDC and environmental justice groups have refused to acknowledge any of the work we've done," she said. "They're being unreasonable and it's another attempt to attack the region's goods movement industry."

Aaron Hunt, a spokesman for Omaha, Neb.-based Union Pacific said in an email the company would comment later in the day. He previously said the railroad has worked with state and federal regulators for more than a decade to reduce emissions in and around California rail yards.

Millions of cargo containers loaded on trucks and trains travel by freeway and railway through Southern California then to the rest of the country. West Coast ports are the nation's principal gateway for cargo container traffic from Asia, with the ports of Los Angeles and Long Beach handling about 40 percent of the nation's cargo.

Rail yards have long been blamed for health problems in communities around transit corridors. Diesel exhaust contains tiny particles that can penetrate deep into the lungs, carrying a variety of toxins that have been linked to acute bronchitis, lung disease, heart attacks and other ailments.

Exposure to such pollution can be especially dangerous for children whose lungs are still developing and the elderly, whose immune systems may be compromised, studies show.

Hernandez said she worries about bringing her daughter back to their Commerce home between hospital visits because of high pollution levels.

She and other residents who live near rail yards and see a constant film of fine pollution particles settle like dust on their windows and elsewhere in their homes say they support the lawsuit.

"It's not like we have the luxury to move out of there," said Hernandez, whose daughter has a 20 percent chance of getting cured. "The pollution is still there."

[Fresno Bee Earth Blog, Tuesday, Oct. 18, 2011:](#)

Asthma problems begin before bad air exceeds health standard

By Mark Grossi

When winter-time plumes of soot, chemicals and other tiny debris spike in the San Joaquin Valley, asthmatics start showing up at emergency rooms, a new health study shows. But that's no surprise.

The surprise in the 18-month study by the Central Valley Health Policy Institute at Fresno State? People with sensitive lungs are getting sick before the air is considered dirty by federal standards.

Said one of the researchers, Tim Tyner: "Kids with asthma are more likely to end up in the ER even when the air quality is rated as moderate."

It is good reason to pursue tougher regulations for tiny pollution specks known as PM-2.5, said researchers at a news conference Tuesday morning. An air quality official said leaf blowers, old vehicles, motorcycles and diesel engines are among the bigger problems within cities.

The study, funded with \$70,000 from the San Joaquin Valley Air Pollution Control District, focused on emergency room visits and hospital admissions in Fresno, Bakersfield and Modesto. The work was done by Tyner, associate director of the Center for Clinical and Transitional Research, UCSF-Fresno, and John Capitman, director of the health policy institute.