

BAY-DELTA ESTUARY / ENVIRONMENTAL JUSTICE ISSUE

Cleanup of marsh set to start next week

San Francisco Chronicle - 10/2/04

By Kelly St. John, staff writer

RICHMOND - Work crews will begin cleanup next week of a chemical-laced marsh near the Richmond shoreline near a site where a developer wants to build a high-rise housing complex on a toxic waste pile.

Worries about safety halted the project a month ago, but state officials have given the green light to the \$5 million cleanup near Point Isabel. Crews are expected to begin hauling 25,000 cubic yards of polluted soil from 22 acres of wetlands by next Friday.

The Regional Water Quality Control Board -- which is overseeing the cleanup -- halted the effort Aug. 30 after the state Department of Toxic Substances Control raised questions, including whether the developer had the proper permits and how the public would be protected if contaminated dust was stirred up.

On Thursday, the water board issued a letter allowing the developers to clean up the marsh as long as new safeguards are in place, such as the use of more air monitoring stations to test dust for toxic chemicals and a requirement that trucks carrying contaminated dirt be covered so that particles can't blow away.

Regulators will also monitor air quality based on standards for women and children -- who are more sensitive to pollution -- than on standards for healthy adult male workers, as had been proposed before.

"The single most important thing here is that our neighbors are safe and sound," said Russell Pitto, president of Simeon, a Marin developer that is partnering with Cherokee Investment Partners to develop the property. "The marsh remediation has been put together with the utmost care by the agencies."

The marsh cleanup was required under a water board order issued in 2001 to the previous owner of the land, Zeneca Inc.

But state Assemblywoman Loni Hancock, D-Berkeley, said the water board had not gone far enough to make sure that human health was protected.

Hancock said the water board had dismissed concerns raised by the toxic substances department and given its approval without a proper public hearing. Hancock said she would ask the Assembly Committee on Environmental Safety and Toxic Materials to hold a hearing about the site this month.

"This should stop and not go forward," Hancock said.

In July, Contra Costa County public health officer Dr. Wendel Brunner asked the state's Environmental Protection Agency to transfer oversight of the project to the toxic substances department because it has more experience with complicated toxic sites.

Brunner said this week he was pleased that the water board's staff had promised to be on site overseeing much of the work.

But he has reservations about whether harmful pollutants will be stirred up next spring, when the developer neutralizes the 25,000 cubic yards of polluted soil with vast amounts of limestone.

"It is moving in the right direction, but it still has a way to go," Brunner said.

The wetlands -- which are habitat for the endangered clapper rail -- will be turned over to the East Bay Regional Park District once the restoration is complete in about a year. Pitto also wants to build 1,330 dwellings on a nearby parcel of land, but that project is in preliminary planning stages.

The marsh and adjacent land have a toxic history. A chemical factory stood there for a century, producing sulfuric acid, fertilizers, herbicides and pesticides. Today, the marsh is scarred with red-orange ponds reflecting the color of iron pyrite cinders dumped there over the decades.

In 2002, Zeneca Corp. spent \$20 million to clean up land adjacent to the marsh, bringing it up to industrial standards before selling it to Pitto. Critics said the water board had not safely monitored Zeneca during that cleanup. #

<http://sfgate.com/cgi-bin/article.cgi?file=/chronicle/archive/2004/10/02/BAGN292S3R1.DTL>

GROUNDWATER PROTECTION / ENVIRONMENTAL JUSTICE ISSUE

Too Young to Die

Part Two: Toxic Legacy

Babies born in neighborhoods afflicted by pollution -- from smog to pesticides -- are more likely to die before their first birthday.

San Francisco Chronicle - 10/4/04

By Reynolds Holding, Erin McCormick, staff writers

That warm April midnight, Leslie Guttierrez lay in silence at Kern County Medical Center, hugging her newborn twins. She had named them Marie and Mariah, but she called them her two little angels, because they were no longer of this world.

Guttierrez was young and healthy. She did not smoke or drink or take drugs. She had received the care of a doctor and nurse since early in her pregnancy. She was Hispanic, an ethnic group with a very low rate of infant mortality. No one had a clue why Guttierrez's infants died.

"It was," she said, "almost like something was in the air that took my babies."

Or in the water or the ground.

Guttierrez lives in rural Kern County, by several measures one of the most polluted counties in the nation. Dense smog, agricultural waste and unknown doses of dangerous chemicals create an environment that ranks third worst among U.S. metropolitan areas for ozone and daily particle pollution, according to the American Lung Association.

Kern County also contains four of the 10 California ZIP codes with the highest rates of infant death from 1992 through 2001, according to a Chronicle analysis. Guttierrez's hometown of Shafter, ZIP code 93263, ranked No. 2.

Although dirty air and water cannot explain any one death, new research suggests that the risk of infant mortality -- death before the age of 1 -- is dramatically higher for women who live amid heavy pollution. Studies published in the past few years link pesticides, carbon monoxide and tiny airborne particles with birth defects, prematurity, low birth weight and respiratory ailments that can lead to an infant's demise.

"It means," said UC Berkeley Professor Kenneth Chay, co-author of a 2003 study on air pollution and infant death, "that there are a huge set of health benefits from cleaner air that have been ignored."

Almost two decades since the United States began a campaign against infant mortality, the cost of ignoring those benefits is beginning to emerge.

Public health officials tried to reduce the infant death rate by stressing better medical care rather than a cleaner environment or healthier urban neighborhoods. Today, the overall rate is down, from 10.6 deaths per 1,000 births in 1986 to 7 in 2002. But under the World Health Organization's 2002 rankings, the latest available, the United States was 36th among 196 countries. Although national figures show that Hispanic babies typically have even better survival rates than whites, infants in the rural Kern County ZIP codes that include Shafter, Lamont and McFarland are an exception. Over the 10-year period examined by The Chronicle, the Hispanic infant-mortality rate was twice as high for those Central Valley ZIP codes as it was for California.

"It's shocking that it's that high," said Dr. Elena Fuentes-Afflick, a UCSF professor who has studied infant mortality rates among Hispanic women.

Kern health officials say they run countywide programs to prevent infant deaths, but they were unaware of the high death rates among Hispanics in the county's rural ZIP codes until notified by The Chronicle. While researchers have connected pollution and infant mortality elsewhere, no one has studied these ZIP codes.

"This problem wasn't known before," Chay said. "It raises real questions about what the causes are. As a public policy matter, trying to find some answers may be important, not just to these towns, but to other areas as well."

Effects of air pollution

The first suggestions of a link between pollution and newborn deaths came from London, where the number of infant deaths doubled during a weeklong weather inversion that trapped noxious smog in December 1952.

It was not until the 1990s, though, that researchers developed scientific evidence that bad air could kill babies. In 1995 and 1997, two studies from China found close associations between air pollution and premature and low-weight births. A 1999 study of the Czech Republic connected high levels of air particles with infant deaths from respiratory problems. The same year, a study from Mexico City showed the number of infant deaths rising several days after sharp increases in air particles, ozone and nitrogen dioxide.

In the United States, substantially lower levels of pollution obscured the connection between air quality and infant death. Still, such a link "made a lot of sense," said Dr. Beate Ritz, professor of epidemiology at UCLA School of Public Health, "because we already knew that air pollution increased adult mortality, especially among the elderly and people with cardiovascular problems."

Ritz and other researchers have established that polluted air increases infant mortality in the United States as well as abroad. But the potential dangers from other sources of pollution -- contaminated wells, toxic dumps, dairy farms -- remain a mystery.

From the cab of his Chevy pickup, Tom Frantz, a high school teacher, environmental activist and son of a Kern County almond farmer, points out one pollution problem after another.

Driving down a county road lined with cotton fields and almond orchards, Frantz gestures to the crescent of barren mountains surrounding Kern to the east, south and west. The rounded peaks are barely visible through the smog.

"We're in a bowl here, there are mountains all around us, so the air pollution all gets trapped," he said. "Smog all the way from Sacramento blows down and just stays here."

With trapped vehicle emissions and agricultural pollutants ranging from dust to pesticides, Kern and the rest of the San Joaquin Valley threaten to overtake Los Angeles as the smog capital of the nation, Frantz explained.

The smell of manure fills the air as Frantz drives his truck along a sprawling dairy farm where thousands of Holstein cows huddle in huge, muddy enclosures. Along one side is a small mountain of feed covered in plastic held down with old tires. The gases from cattle urine and manure produced by these farms mix with the air to worsen the smog problems, Frantz said. Until this year, dairies were not subject to clean air regulations.

"The pollution from these dairies is worst in the winter," he said, "because tons of ammonia evaporate into the air and mix with fog to become dangerous particles of ammonium nitrate" that can lodge in people's lungs.

Frantz points out the cotton, grape and almond fields that dot the area. Here, the pesticides change with the seasons. In April, farmers spray herbicides to clear their fields for planting. In May, hormones are applied to make the grapevines bloom. In June, agricultural crews use a chemical fungicide to prevent fruit from rotting. In August, they add sulfur to get rid of mildew.

Though many Kern residents share Frantz's concerns, a substantial portion of them believe agriculture gets a bad rap.

Loron Hodge, 65-year-old executive director of the Kern County Farm Bureau, remembers growing up in Tulare County and helping his father in the alfalfa fields.

"I never had any adverse reactions," he said. "Now, why would I have such a good life? I don't think you can explain it. There are people who adapt to this valley and people who do not."

Hodge said he finds it "difficult to grasp" that infant deaths would be connected to agriculture. "My opinion is that we are seeing more pollution in the valley because we have more people coming, bringing their automobiles," he said. "The frustration we (farmers) have is that we get this broad brushstroke that says agriculture is doing bad things, when all we want to do is provide food and fiber to the people we serve."

A family tragedy

Off the truck-choked lanes of Route 99, down the Elmo Highway through hazy acres of cotton and grapes, left at the tire shop, Carlos Hernandez lives with his wife, Manuela, and their daughter, Mireya.

They live in McFarland, "cancer town," site of a childhood-cancer cluster from 1975 through 1995 and, now, the ZIP code with the eighth-highest infant mortality rate in California.

State investigators found no environmental cause for the cancers, but the infant deaths are harder to dismiss. They approach a rate seen in Tonga, Fiji and other developing nations. Hernandez makes light of the pollution around him -- "I figure, whatever you're going to die of" -- but cannot account for what happened to his son.

Carlos Jr. arrived in March 2003. He was a bruiser, at three weeks "so big and long that I couldn't lay him on my arm no more," said Hernandez, short but strong himself.

Everyone loved Carlos Jr. He was his grandfather's "Little Buddy" and his father's dream fulfilled.

One day after Father's Day last year, at his grandfather's home nearby, Carlos Jr., 3 months old, began to fall asleep as aunts and uncles and sisters passed him from lap to lap. Hernandez carried him to the bedroom.

"I kept going back, three or four times," to check him, Hernandez recalls. The last time, "my brother went in and my brother said he didn't see him there. I went in and said he's right there."

There, but no longer breathing.

"I just dropped to the ground. I didn't know what to do, so I took him to the hospital, but ..." Hernandez's hand goes to his brow and jars the bill of his 49ers cap. He begins to sob. Manuela Hernandez sits next to him, lips quivering, her words locked inside because she cannot speak English.

The doctors at the hospital could not offer any answers. They told them it was just something that happens.

But researchers are finding that it sometimes happens because the air contains too much microscopic dust, called particulate matter 10 microns wide or less, or PM10.

In 1997, federal environmental experts published a study showing that air rich in particles increased the death rate from sudden infant death syndrome - - 26 percent for babies of Carlos Jr.'s age and birth weight. The amount of particles in the areas studied ranged from 11.9 to 68.8 micrograms per cubic meter. The findings squared with research on infants in Taiwan, Korea and the Czech Republic and with studies linking adult mortality to high particle levels.

Measurements are unavailable for particles in McFarland, but nearby Bakersfield ranks No. 3 nationally in particle pollution, just behind Visalia (Tulare County) and Los Angeles, according to the American Lung Association. According to the California Air Resources Board, the average amount of particles in Bakersfield over the past three years was about 60 micrograms per cubic meter.

Whatever took his son does not much matter to Hernandez now. He still grieves hard, visiting the grave once a week in Delano (Kern County) and keeping Carlos Jr.'s room just the way it was.

He draws strength from his family and, most of all, from 6-year-old Mireya.

On a particularly difficult night, they sat together remembering.

"She said, 'Don't cry, Daddy. My little brother is with God, and he's already a little star, watching over us. We can sit at night and look at the sky and see him,' " Hernandez said.

'Something's wrong'

Thirty miles southwest of McFarland in Kern County is Buttonwillow, population 1,266. Its skies routinely fill with the dust of tilled earth and air-dropped pesticides, but its environmental notoriety stems from the deaths 12 years ago of two babies born without brains within eight months of each other. The occurrence of two cases in one year creates a rate 25 times higher than expected for Kern County, according to the California Birth Defects Monitoring Program.

Mary Helen Mendez and other residents suspected the nearby hazardous waste dump. They tried to force the dump's closure by marching through town, but their efforts failed after investigators found nothing to explain the deaths.

Still, with her son and husband sickened by asthma and other ailments, she knew something was wrong with this place. In 2001, they moved northeast across Interstate 5 to Shafter, and it was there that her problems grew worse.

Mendez, 29, was pregnant. She said she was happy at first, living in a one-bedroom apartment and working at a computer in a pistachio warehouse. She quit when the season ended during her fifth month of pregnancy.

"I was healthy," she recalls, "but it was confusing because I was so big."

Much to her surprise, Mendez was pregnant with twins.

On the evening of Oct. 2, she began to feel queasy. By 9 p.m., she was in pain. Her husband hustled her to the hospital, and at midnight she delivered two boys.

"All the scariness and sadness and pain," she said, "went away."

But both sons, Jesus and Jorge, were three months early and weighed less than 2 pounds. They had to stay behind when Mendez left the hospital on Oct. 3.

"That night, I got a phone call from the hospital," she said, furiously wiping her sudden tears, "telling us to come down."

When she arrived, the doctors "were explaining a bunch of medical terms, and I looked into his (Jesus') bed and he wasn't there," Mendez said. "I told my husband, 'Something's wrong, he's not in the incubator,' and he said, 'Yes he is,' and I said, 'No, it's covered,' and that's when they told me my son was dead."

In 2000, three years after the federal study connecting SIDS with air particles, UCLA Professor Ritz and three colleagues published research showing that a pregnant woman's exposure to high doses of particulate matter, as well as carbon monoxide, could cause premature birth. In 2002, they published a second study linking ozone and carbon monoxide with heart defects in newborns.

The researchers studied babies born from 1987 to 1993 in Los Angeles, Orange, Riverside and San Bernardino counties, and Ritz cautions that it is unclear whether the effects were caused by the substances themselves or by undetected toxins that accompany those substances in the air.

In 2001, Shafter exceeded national ozone standards for 30 days, longer than most communities measured in neighboring Los Angeles County. Ozone is not measured in Buttonwillow, and carbon monoxide and air particles are not measured in either Buttonwillow or Shafter.

But the ozone and daily levels of air particulate pollution in the Bakersfield metropolitan area are ranked third worst in the nation in a 2004 study by the American Lung Association.

No one knows whether pollution contributed to Jesus' death, but Ritz's research suggests a connection between bad air and his brother Jorge's problems.

Several days after his birth, Jorge was rushed to UCLA for an operation to close a hole in his heart. Later, he spent three weeks at a Fresno hospital with lung problems that developed into pneumonia. It would be the first of three bouts with the virus.

Now 2, Jorge has chronic lung disease and frequent ear infections. He is deaf in his left ear and very rarely talks.

"Jorge, he just studies people. That's how Jorge is," Mendez said as she chased her little boy pedaling through the parking lot of the apartment complex. "He went through a lot, and at the moment, I don't want any more babies."

Poisoned wells

Tom Frantz swings his truck back toward Shafter and pulls into a dirt road running between a cluster of plywood shacks, each about the size of a one- car garage. Children play by the alley, and laundry hangs above bare patches of soil. The area, known as Myrick's Corner, started as a migrant worker camp during the 1930s "Okie exodus" described in John Steinbeck's "The Grapes of Wrath."

The one-room houses have been rebuilt on the foundations of the old tent cities, Frantz said. Now they are occupied exclusively by Hispanic migrant workers.

"People rent these for something like \$400 a month. Sometimes there are as many as 15 to a house," he said.

Until the mid-1990s, Myrick's Corner and a similar immigrant community on the southwest edge of town, Smith's Corner, got all their water from shallow wells polluted by agricultural chemicals.

City officials sent letters to residents warning them not to drink the water because it was contaminated with nitrates. A component of fertilizer, nitrates cause "blue baby syndrome," a potentially fatal condition that limits the body's ability to distribute oxygen.

Residents successfully lobbied to get their homes connected to the cleaner water system that serves Shafter proper. Still, they fear their health has been damaged by the polluted water and the pesticides sprayed in nearby cotton fields and almond orchards.

"Whenever they spray, we can smell it. We try to run inside, but it causes headaches," said Sonya Garza, a Smith's Corner resident whose teenage brother suffers from leukemia and whose 44-year-old mother suffers from cirrhosis of the liver, though she has never used alcohol or drugs.

"We don't know what these chemicals do to us," she said.

Stench of chemicals

Leslie Gutierrez grew up just north of Shafter, in Wasco, in a labor camp beside the dog-food plant and the four ribbed silos storing charcoal.

"It would stink," said Gutierrez, 18. "There was a lot of pollution that would make us sick all the time."

When Gutierrez turned 12, her father, a garlic picker, moved the family to a subsidized house he had built near the center of Shafter. It took awhile for Gutierrez to warm to her new neighborhood, but then she met Alonzo.

He was five years her senior, dark and sweet and still two years away from the farm accident that would take his right hand. They dated a year before Gutierrez found out that she was pregnant in November 2001.

She was only 16, and the news did not sit well with her father. He "wouldn't talk to me for like three weeks," she said. "He was just crying."

But when an ultrasound revealed that Gutierrez was having twins, a grandson and a granddaughter, her father hugged her "and said he would always be there to help me."

Gutierrez received lots of help, from her relatives and her doctor and a nurse who visited her home. But all the help in town could not prevent the pains that, in her fourth month, gripped her back. She took to her bed for a few weeks, and the pains went away, only to return about one month later.

The doctor said the pains were normal, but they got worse. And in the dead of night, while she and Alonzo were staying at her sister's house, she felt she could suffer no longer.

"I went into the bathroom," Gutierrez said, "and I hit my knees because my mom had told me to do that for the pain. Then I felt the baby's head, and all of a sudden the little girl came out. I picked her up, and she was alive, and we called an ambulance. Then I passed out."

Since Gutierrez lost her twins two years ago, the evidence linking pollution and infant death has grown stronger. In April 2003, UC Berkeley Professor Chay and his colleague published their study of substantial air pollution reductions that resulted from a decline in manufacturing during the recession of 1981 and 1982. They found that the decreased pollution may have prevented as many as 2,500 infant deaths nationally.

In October, UCLA Professor Janet Currie and a colleague published research showing that air particles, carbon monoxide and, to a lesser extent, nitrogen dioxide from vehicle exhaust contributed to infant mortality throughout California in the 1990s. But the researchers also estimated that an additional 1,366 infants survived because the air actually grew cleaner over that decade.

Gutierrez and Alonzo were married three weeks after their twins died. They buried the twins in the Shafter Cemetery, in a quiet grove with other infants.

They visited the cemetery on a recent afternoon, during the funeral of their friends' 2-year-old, who had been hit by a car.

They turned from their twins' grave and walked toward the tent that sheltered the small white casket of their friends' son. Alonzo joined the gathered crowd, but Gutierrez, 10 weeks pregnant, stood at a distance.

"I can just imagine," she whispered, "how that mom feels."

Incident at Weedpatch

No one saw the plume of noxious gas that drifted over the apartments and shacks of the Lamont farming community known as Weedpatch on the evening of Oct. 4, 2003. But its effect on residents was immediate.

Children playing on the grass around their apartments ran inside with their eyes burning. Babies vomited. Parents, with tearing eyes and burning throats, scrambled to shut windows as a pungent, sweet chemical odor, similar to that of flypaper, exploded into their nostrils.

"I called 911 and said, 'What's happening to us? What's going on?' " said Flora Bautista, a mother of five, who was in her apartment in Weedpatch that evening. Within minutes, she said, her elementary-school-age children were vomiting, eyes stinging, so violently ill that they were rolling on the ground in pain.

After hundreds of people were evacuated from the community, residents learned what had happened.

A pesticide application company, hired by the owner of a nearby onion farm, had injected a highly concentrated fumigant into the soil in an attempt to sterilize it. The chemical, which leaked into the air and

drifted into the homes of Weedpatch, was a 100 percent solution of chloropicrin, the active ingredient in tear gas.

Gabriela Cornejo, 19, was visiting her mother in Weedpatch that evening. She was one of more than 130 people who complained about being sickened by the fumes.

"Suddenly, I couldn't breathe right," she said. "I started feeling dizzy. I'm like, 'What's happening to me?'"

Two days before the pesticide drift incident, Cornejo realized she might be pregnant with her second child. Two days after, still feeling a little sick from the exposure, she went to the doctor to confirm the pregnancy and asked how the chemical might affect her baby. The medical staff couldn't answer her question.

Four months later, "out of nowhere," she said she suddenly started to bleed. She called her doctor, who told her to go to the hospital immediately.

Her baby didn't survive long enough to be considered a live birth. It was miscarried in its fourth month of gestation.

Cornejo, a lifelong resident of the Lamont area, said she'd never been exposed to agricultural chemicals before this. She is one of more than a hundred victims of the Oct. 4 drift who have joined a lawsuit against the pesticide spraying company and the farm owner. Western Farm Service, the pesticide company, agreed to pay \$60,000 to settle state and county allegations that it violated pesticide-handling rules.

Dale Dorfmeier, an attorney representing Western Farm, said that, "to the best of our present knowledge," all precautions and legal permits required to apply the pesticide safely "were followed on this job." He said the drift was caused "by changed atmospheric conditions" rather than by the company's actions.

After the company was told about the drift, he said, its employees "did all they could" to solve the problem.

In Kern County, pesticide drifts happen with some regularity. There were 120 reported pesticide drifts -- resulting in 418 reports of illness -- in the 10 years between 1992 and 2001, according to the California Department of Pesticide Regulation. In these cases, chemicals from an agricultural site drifted off to sicken people in adjacent areas. There were another 353 reports of pesticide exposure incidents in which 417 workers complained of being sickened by pesticides at their work site.

Yet almost nothing is known about the long-term health effects of most pesticides on adults, much less how they affect pregnant women and babies.

Materials-handling advisories describe chloropicrin as "highly toxic" and a "powerful irritant," which can attack the liver, heart, kidneys, lungs and stomach, and can cause death in high enough doses. Studies have shown that exposure to it increases mortality in rats, but there are few studies on its long-term effect on humans.

In March, in one of the few studies that have looked at how pesticides affect unborn children, Columbia University researchers found that pregnant women in New York exposed to high levels of two pesticides had significantly smaller babies than their neighbors.

After the pesticides were restricted, baby size increased in the neighborhood. Both pesticides -- chlorpyrifos and diazinon -- are often used on fields in Kern County.

Cornejo's attorney, Jeff Ponting of the nonprofit group California Rural Legal Assistance, said he cannot know for certain what caused Cornejo's miscarriage.

"But to be exposed to something like this, and to become violently ill as a result of that exposure, seems likely to have a negative effect on a pregnancy," he said.

Cornejo said the incident has left her fearful.

"Where we live, it's all farmland," Cornejo said. "Now, this makes me wonder, 'What if this happens again?'"

'Kind of scared'

Early this year, Carlos and Manuela Hernandez thought they might get a second son.

Manuela was pregnant, and for two months she endured the nausea that she assumed was part of the experience. In her ninth week, though, her doctor measured her girth and concluded that the fetus had not grown.

Two weeks later, Manuela went with her husband to get measured again.

When they returned from the doctor's office, it was clear that the news was not good. Manuela was silent. Carlos Hernandez took a seat on the couch and started toying furiously with a small Cat in the Hat doll.

The fetus had stopped growing, he said. The doctor called that afternoon to tell them that it had to be removed.

"We got to try again," Hernandez said, "at least so my daughter can stop thinking about her little brother."

In late February, Mary Helen Mendez, who had lost her son Jesus, found out that she was also pregnant. She was unsure how another child might fit with a household already strained financially and emotionally.

"I'm kind of scared," she said.

And on April 24, Leslie Gutierrez gave birth to 7-pound 2-ounce, flush-with-health Clarissa.

Gutierrez marveled at how easy the delivery was. A little back pain around midnight, a nudge to Alonzo that it was time, a drive to the hospital and, within about an hour, a new baby girl.

"It was," Gutierrez said, "the happiest day of my life."

THE SERIES

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This series is available online at [SFGate.com](http://www.sfgate.com). To obtain infant death statistics for neighborhoods by ZIP code and track the infant death rate by county over the past decade, go to <http://www.sfgate.com/infantmortality/>. #

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