

Drought disaster in East Porterville turns to budding health crisis

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Sweating and wincing in pain, Juana Garcia struggled up the stairs to her first shower in four days, pausing after each step. The single mother battling a chronic disease had just walked five blocks from her waterless home.

Garcia, 49, lives with lupus in East Porterville, the epicenter of California's epic drought. The illness makes her sensitive to the sun and constantly tired. It also mimics rheumatoid arthritis, triggering searing pain to her knees and hips.

At the top of the staircase leading to a row of shower stalls for the public outside Iglesia Emmanuel church, Garcia paused to catch her breath. She reconsidered, opting instead to bathe in one of the handicap stalls with graded ramps.

"Ya me canse," she said in Spanish. "I'm already tired from all this walking."

Garcia's story is about more than dry wells in a place where people already face water contamination, air pollution and poverty, an environment where experts say lives are shortened. While it's easy to imagine the everyday struggles of life here, a drought-related health crisis is rising, catching people like her in its current.

Nearly a year and a half after East Porterville's first dry well was reported, residents and experts say not having running water and breathing increasingly dusty air is worsening their pre-existing health issues and contributing to the development of new ones.

A 75-mile drive southeast of Fresno, East Porterville has been a household name since becoming one of the first Valley communities to shrivel under the drought. It remains the hardest hit, now with around 700 homes — some 3,000 people in the Tulare County town of 7,500 — reporting well failures.



With no central water system, families in town rely on shallow private wells, which started drying up after the nearby Tule River became a mere trickle. Rain and snowmelt replenish water below the ground, but 2013 and beyond have seen many rainless months. Snowmelt runoff in the Tule this season is almost nonexistent, less than one tenth of average.

Right next door, Porterville, which uses a system with several dozen wells, still has water, but the city is enforcing strict watering restrictions and fines for violations.

Health stress

Other Valley communities — including Fairmead in Madera County and rural Clovis in Fresno County — feel the burden of the drought, but none have it quite like East Porterville. American Community Survey figures from 2013 show the town is over 75% Latino, and more than one-third of families live below the federal poverty level. Forty percent of residents never made it to 9th grade. One in three residents over age 16 works in agriculture, forestry, fishing, hunting and mining.

East Porterville's poverty and education shortcomings stand out in a state analysis of communities with the highest

health risks. The analysis from the California Environmental Protection Agency shows the town's poverty level is among the highest 10% in the state. In education, the community ranks worse than 91% of the state.

Poverty and education are among more than 20 factors, including air pollution and groundwater problems, that the state analyzed to arrive at rankings reflecting heightened health risks. East Porterville has more health stress than three-quarters of California.

This community and others nearby are plagued by drinking water high in nitrates, a contaminant that comes from septic systems, fertilizers, dairies and decomposing vegetation. Nitrate contamination is linked to dizziness, upset stomachs, lung infections, diabetes, the potentially fatal blue-baby syndrome and cancer.

Many of those suffering from health problems in East Porterville have little refuge. In 2013, nearly 30% of residents were uninsured.

I never know when I'm going to get that attack.

Angelica Gallegos, suffers from asthma

Angelica Gallegos panicked when she developed asthma two years ago. The illness has become so severe she takes to wearing a protective mask all day and night to keep from breathing in dust.

But Gallegos is uninsured, so she suffers through asthma attacks with only the help of her inhaler and nebulizer machine, which administers medication in mist form, for fear of racking up emergency room bills.

"Depending constantly on the medication, I get traumatized if I don't take my inhaler with me," said the 38-year-old mother of two, whose well went dry a year and a half ago. "I never know when I'm going to get that attack."

The drought is starting a domino effect that can link together numerous health-related issues: pre-existing conditions, worsening air, access to potable water, hygiene and anxiety among them.

'We boil it'

For some immigrants, anxiety can overshadow physical health concerns. More than one-third of East Porterville residents were not born in this country, and the majority of those are not U.S. citizens (they could be legal residents, undocumented or maintain a temporary visa).

Living in rural East Porterville means undocumented immigrants can remain veiled from government watch. But when disaster hits, it exposes another side of that independence.

Pastor Roman Hernandez of Iglesia Emmanuel said many immigrants in town are afraid to seek help because they lack legal status. The church receives donations of bottled water and food to hand out. He said some people ask whether he will need to know their names, phone numbers or request a Social Security number before giving them water.

Hernandez recalled one man who confided that he would go to a nearby park at night to collect water from a duck pond because his family had no running water.

"For a long time, this man and his family were taking water from there," Hernandez said in Spanish. "He said, 'Oh no, it's all right. We boil it.' It took a long time to convince the man there was help elsewhere."

Among the undocumented immigrants who do have running water, Hernandez said, many tell him they suffer from stomach pains and headaches or arrive with visible rashes. He thinks nitrates are to blame.

"I don't know if it's better to not have water or have contaminated water," he said.

Allergic to air

Some of the nation's worst air is found in California, and the San Joaquin Valley dominates dirty-air rankings. An American Lung Association analysis released in April revealed the drought is making the Valley's already unhealthy air worse.

Sierra View Medical Center sees over 25% more emergency room patients primarily complaining of breathing issues since 2010

East Porterville feels the impact. Dr. Jaisi Sidhu of Sequoia Family Medical Center in Porterville spends 30% of each day treating people with allergies, COPD (chronic obstructive pulmonary disease) and asthma. She said respiratory conditions have gotten "out of control."

Sidhu thinks the drought will eventually affect the health of everyone in the area.

"I'm sure these things are going to be linked in the future medically," she said. "Not having the proper climate control, I'm sure it's going to do some damage here."

John Capitman, executive director of the Central Valley Health Policy Institute, said the drought has already created a public health emergency in terms of the worsening air quality. But he said it will take a few years before health researchers can really demonstrate any other drought impacts on health.

Sidhu said the drought affects her patients in more ways than the obvious. One example is that more people are coming in with urinary tract infections and skin infections.

Coughs that once lasted 10 days now remain two to three weeks, Sidhu said. For people with underlying health conditions, that time frame is longer. Some of her patients say they've been coughing for two months.

"Even people who don't have airway issues, they are becoming hyper-reactive to everything," she said. "The air itself is becoming an allergen."

Doctors at Sierra View Medical Center in Porterville agreed. Spokeswoman Ramona Chiapa said doctors have seen increases in chronic bronchitis, COPD and asthma. Hospital data show the number of patients visiting the emergency room primarily complaining of breathing issues has increased by more than 25% since 2010.

"We are seeing that these individuals are having more trouble as far as breathing is concerned and they are coming in to see us a little bit more frequently than we are used to," she said. "We suspect that it is due to the drought."

No one-stop solutions

Solutions for East Porterville involve a long, patchwork process. To fill immediate water needs, nonprofits and volunteers give away water bottles, some donated by Tulare County. Households with an annual income under \$50,000 may qualify to receive drinking water deliveries paid for with state funding. But the state only provides eight cups per person per day.

3,000 people in East Porterville who have no running water

Tulare County emergency services director Andrew Lockman said that's not enough, especially for people working in the heat or cooking for large groups. Potable water is also used for washing dishes and brushing teeth.

For everything else — showering, watering plants, laundry — residents can fill up their own bins for free at the local fire station.

Longer-term solutions are complicated. Families drilling deeper wells pay up to \$30,000. The county's temporary

solution is to distribute 2,500-gallon black tanks, which cost around \$1,500 and are usually free through state disaster funding.

As of mid-June, 120 of those tanks had been installed countywide, 52 of them in East Porterville. Meanwhile, more than 1,100 wells are reported dry. Lockman suspects the actual number is higher.

He said the county prioritizes sick people to receive the tanks first but that depends on available water sources and economy of scale. So, if one sick person lives next to three healthy people whose wells are also dry, the county would likely install tanks for the entire row of homes to save time and resources.

Another solution is in the works through the city of Porterville. The Tulare County Board of Supervisors earlier this month accepted \$1.2 million from the state to drill a well that would increase the city's water supply and eventually carry truckloads of water to fill the black tanks.

But that could take a year. And it could be another four years, at best, to extend the city's water system to its eastern neighbor — a project that's still just conceptual.

Until then, water security is fickle.

Certain uncertainty

Lockman said the county can supply water tanks, but it can't guarantee water to fill them. Deals with suppliers can reverse by the day or the hour, as those with water to share change their minds amid their own worries about running out.

"Overnight," he said, "we can go from having multiple water sources to having one or none."

For residents like Yolanda Frausto, the uncertainty is scary.

Frausto's 4-year-old son Xavier has cystic fibrosis, a life-threatening genetic disease that clogs his lungs with thick mucus and keeps his digestive system from absorbing vital nutrients.

Xavier's treatment includes donning a vest connected to a machine that makes it shake for 35 minutes at least twice a day, dislodging the mucus from the walls of his lungs. Meanwhile, Frausto cycles through four other vapor treatments. The masks and tubes must be sterilized after each use.

For the nine months Frausto didn't have running water, she disinfected Xavier's treatment equipment using buckets of water. Her husband, a forest firefighter, is not home to help during the summers.

In April, she got a county tank.

Even with Frausto's water woes solved for now, the dust is hard to escape. Xavier rarely goes outside. He was hospitalized with bronchitis for two weeks twice last year.

Frausto wants to take Xavier to preschool but worries the teachers won't administer his treatment correctly. She wants to move but can't afford it. Without running water, who would buy their house?

So Frausto tries to make the best of it. But that's never easy.

"Every time he starts coughing, I freak out."

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This story is the first in an occasional series about the drought's effects on health. Andrea Castillo's reporting was undertaken for the California Health Journalism Fellowship, a program of USC's Annenberg School of Journalism.	