



**CAMPINA GRANDE:** two-week-old Sophia, born with microcephaly cries during a physical therapy session at the Pedro I hospital. — AP

## IN FIGHT AGAINST ZIKA, BRAZIL BATTLES NEGLECT, CASH FLOW STRING OF PUBLIC FAILINGS CRIPPLING MANAGEMENT

**CAMPINA GRANDE:** In May, as the first cases of the Zika virus were being detected in Brazil, Rossandra Oliveira stopped receiving a critical tool she needed to do her job: insecticide. Monthly shipments from the government to her office at the epicenter of the outbreak stopped. Oliveira, who manages mosquito control for this city of 400,000, was left helpless.

The shortages continued even after President Dilma Rousseff's government declared the mosquito-borne virus a national health emergency Nov 11. It wasn't an isolated case. For several months last year cities and states on the front lines of the epidemic in Brazil's northeast ran out of larvicide, and supplies nationwide had to be rationed, according to interviews with local health officials and documents obtained by The Associated Press from prosecutors investigating the shortages.

The lack of larvicide is only one of a string of public health failings crippling Brazil's ability to manage the Zika outbreak and the surge in rare birth defects thought to be linked to it. A weeklong tour by AP of several cities and towns in the northeast found public hospitals starved for funding and local health officials scrambling to care for the stricken babies.

"In 19 years of working in environmental control I've never seen so much disorganization as I'm seeing now," said Oliveira, whose team of 169 health inspectors in Campina Grande had to carry out door-to-door inspections without the insecticide during the shortage. "We're paying the consequences for having underestimated the enemy."

The immediate culprit is Brazil's deepest recession since the 1930s, which is forcing belt-tightening across Latin America's largest economy. But experts say the collective failure to tackle corruption, crushing inequality and chronic underfunding of the public health system is also to blame.

If addressing such longstanding scourges weren't a steep enough challenge, Rousseff

must now do so while fighting for her political survival. On Sunday, hundreds of thousands of Brazilians poured into the streets to demand she resign over a widening corruption scandal now implicating former President Luiz Inacio Lula da Silva. On Thursday, she entrenched behind her political mentor, swearing in Silva as her chief of staff. Health Minister Marcelo Castro was at a loss to explain what happened.

### Shadowed problem

"If there was this shortage - which I cannot attest to whether there was or not - it was for a short time, and was an isolated incident that does not affect the overall situation," he said in an interview from his office in Brasilia that looks onto the striking modernist presidential palace. But documents obtained by the AP and interviews with local health officials indicate that the shortages lasted for several months and rationing nationwide occurred between August and October, when many women were pregnant and, unbeknownst to them at the time, potentially transmitting Zika to their unborn babies.

The problems occurred despite an alert from the World Health Organization urging nations to strengthen mosquito control in the face of a surge in dengue and chikungunya - viruses transmitted by the same *Aedes aegypti* mosquito that carries Zika. In a technical note sent in September to the 185 municipalities in Pernambuco, the state's top disease control official even discussed substitutes, such as using household bleach to kill mosquito larvae, or small fish to eat them.

Castro said the reported problems coincided with a cooler period of reduced breeding and larvicide shipments have been normalized since he took office in October. He said the most effective way to fight mosquitoes isn't with chemicals but by eliminating the breeding sites lurking inside people's homes - an effort reinforced by Rousseff's decision to deploy the military to carry out house-to-house inspections.

While the effectiveness of almost any strategy to eradicate pesky mosquitoes is debated by some experts, Brazilian authorities consider larvicide an important part of their toolkit, especially when eliminating breeding in makeshift cisterns that proliferate in the northeast due to a lack of reliable running water.

The pesticide's disappearance, however temporary, is a sign of deep-seated government neglect in a battle that, in the tropics, has to be waged every day, said Dr. Artur Timerman, a virologist and president of Brazil's Society of Dengue and Arbovirus. "In a war like the one Brazil is facing, any gap has serious, direct consequences," said Timerman.

### 'Moral, financial crisis'

While Brazilian scientists have won international praise for quickly identifying a possible link between Zika and microcephaly, authorities so far have been unable to leverage those discoveries into public health victories. Instead of focusing on decades of government failures, Rousseff has been appealing to national pride. The T-shirt she wore recently to kick off a nationwide clean-up campaign bore the slogan "A mosquito is not stronger than an entire country." It's a strategy that for weeks seemed to have succeeded in diverting the nation's attention from the debilitating economic and political crisis.

"My entire government is engaged in dealing with this emergency," she told lawmakers last month in her annual state of the union address. "There will be no shortage of resources so we can reverse this Zika epidemic in the quickest and most adequate way possible"

"Brazil is going through a financial and moral crisis," said Bernardo Cavalcanti, son of the foundation's founder and a member of its board. "The worst part is the light at the end of the tunnel hasn't yet appeared. Things are very bleak still and we have no idea what's going to happen." — AP

## PARACETAMOL INEFFECTIVE AGAINST ARTHRITIS: STUDY

**PARIS:** Paracetamol, a common over-the-counter pain-reliever, does not work in the treatment of osteoarthritis, a joint disorder afflicting tens of millions of elderly people, according to a study released yesterday. When taken on its own to alleviate pain or enhance mobility, the drug was found to be only marginally-and insignificantly-better than a dummy pill, according to a broad survey of 74 clinical trials covering nearly 60,000 patients.

"Our results suggest that paracetamol at any dose is not effective in managing pain in osteoarthritis," said Sven Trelle, the main architect of the meta-study and a researcher at the University of Bern in Switzerland. Trelle and colleagues evaluated eight different non-steroid anti-inflammatory drugs, taken individually in different doses and in combination with other medications. The drug that worked best for arthritis, they found, was diclofenac, sold in different countries under the brand names Voltaren, Aclonac and Cataflam. The results were published in the medical journal *The Lancet*. Osteoarthritis is the most common form of joint disease and the leading cause of pain among older people.

It occurs when the protective cartilage on the ends of bones wears down over time, causing acute stiffness and pain. The most common joints affected are in the hands, knees, hips and spine. The condition gradually worsens, and no cure exists. Among people over the age of 60, it affects about 18 percent of women and 9.5 percent of men.

"This finding is not entirely unexpected," noted Nicholas Moore and three colleagues from the department of pharmacology at the University of Bordeaux in southwestern France. "Paracetamol has been on the market for as long as most of us remember. Its efficacy has never been properly established or quantified in chronic diseases," they wrote in a comment, also published in *The Lancet*. — AFP

## DOCTORS RUSH TO STOP NEW EBOLA OUTBREAK IN GUINEA

**DAKAR:** Health workers are rushing to the site of a fresh Ebola outbreak in Guinea to bolster efforts to contain the virus and prepare for the likelihood of more cases, aid agencies said on yesterday. Four people in the southern region of Nzerekore were tested on Thursday and two of them were found to have Ebola. They were all from Korokpara, a village where three people from the same family have died in recent weeks from diarrhea and vomiting. The World Health Organisation (WHO) and aid agencies have sent experts to investigate the origin of the new cases and to identify, isolate, vaccinate and monitor all of their contacts. The Alliance for International Medical Action (ALIMA) has reopened its Ebola treatment unit in Nzerekore, while the United Nations children's agency (UNICEF) is reinforcing its team in the region and providing protective equipment and medicine.

"There has been a very professional and experienced response across the board," said Augustin Augier of ALIMA, which admitted the two patients, a child and his mother, to its treatment unit. "We are doing all we can to be ready to receive more cases," he said, adding that ALIMA were flying in more staff from Paris.

More than 28,500 people have been infected and 11,300 have died since the world's worst recorded Ebola epidemic began in December 2013 - mostly in Guinea, Liberia and Sierra Leone. While the epidemic has come under control, experts have warned of the risk of new flare-ups, as Ebola can linger in the eyes, central nervous system and bodily fluids of survivors.

The two fresh cases in Nzerekore, where the Ebola outbreak began in 2013, were reported just hours after the WHO declared neighboring Sierra Leone's latest flare-up over. Guinea had been nearing the end of a 90-day period of heightened surveillance when the fresh cases were reported - the country's first known re-emergence of Ebola after the outbreak was officially declared over there at the end of December 2015. "The heightened surveillance means mechanisms were in place and that we were vigilant and prepared to deal with the flare-up," said Guy Yogo, UNICEF's deputy representative in Guinea.

"The population is now aware of the disease and listening to the guidance it receives from the authorities," Yogo added. It was not immediately clear how the villagers from Korokpara had contracted Ebola but the area had resisted efforts to fight the disease in the initial epidemic. — Reuters