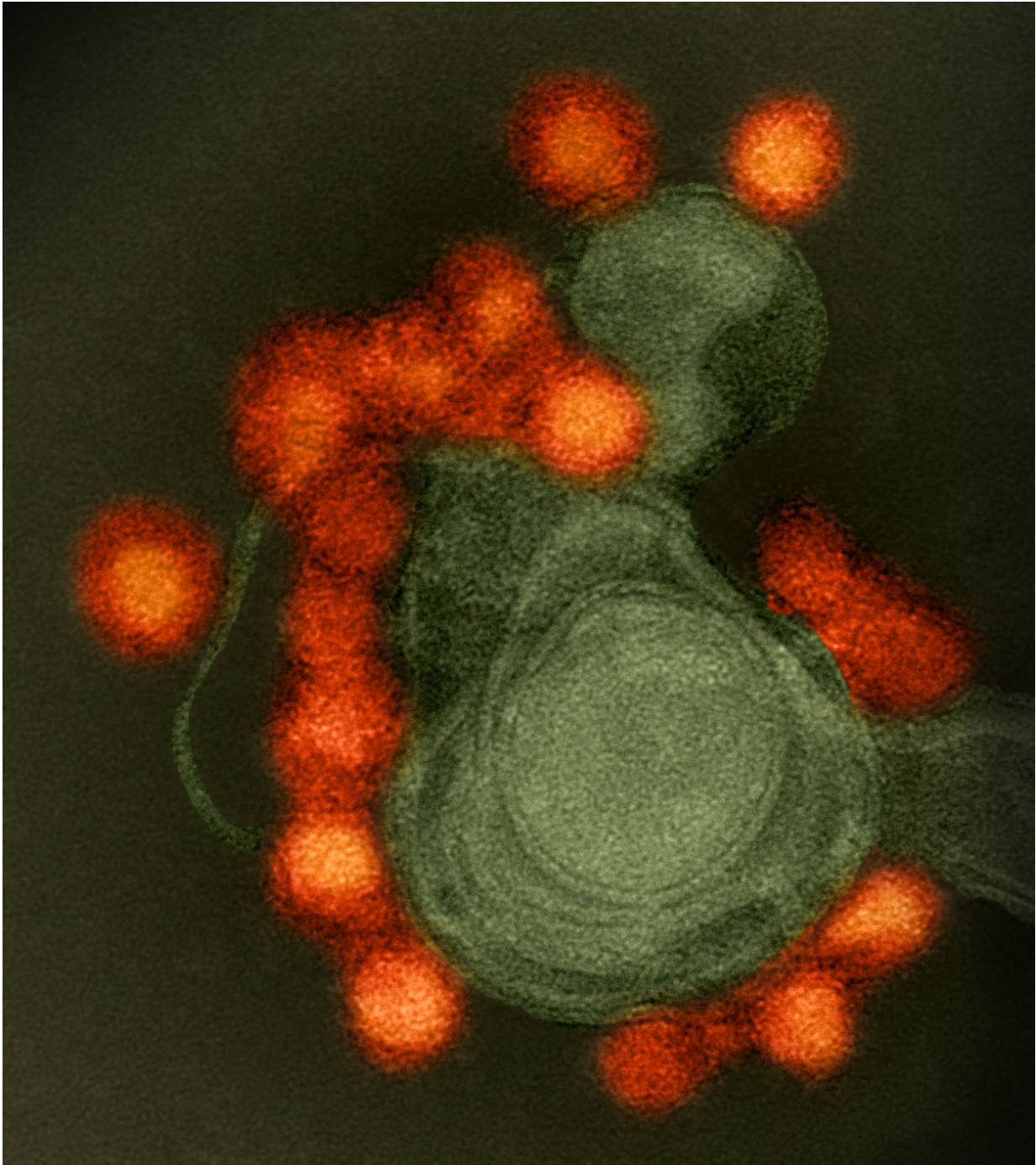


Lab constraints delay Zika test results

October 10 2016, by Shefali Luthra, Kaiser Health News



Transmission electron microscope image of negative-stained, Fortaleza-strain Zika virus (red), isolated from a microcephaly case in Brazil. The virus is associated with cellular membranes in the center. Credit: NIAID

Houston-based Legacy Community Health Services , a federally qualified health center, is trying hard to fight the Zika virus. It's screening pregnant women and following federal guidelines to test people at risk.

But despite best efforts, there's a problem, said Legacy's chief medical officer, Dr. Ann Barnes. Women who could be infected usually have to wait as long as a month to know if their pregnancies are at risk. That's the turnaround time from the state [public health](#) lab, where blood samples are sent for testing.

"In that situation, the anxiety a [pregnant woman](#) has to live with is great," Barnes said. "Ideally, we'd be able to speed up the process."

It's not just an issue in Houston. In areas where Zika is a threat, public health departments are struggling to meet the need to test patients for the mosquito-borne [virus](#), even for those the government has classified as "at risk."

Doctors and health experts say that last month's approval of \$1.1 billion in emergency funding by Congress to fight the virus could help, giving local labs the resources to efficiently determine if people have been infected.

Congress directed \$394 million to the Centers for Disease Control and

Prevention, most of which will support state and local Zika response efforts such as mosquito control and emergency response teams, public education campaigns, efforts to improve diagnostic tests, and research to track how the virus affects children long-term. That includes money for expanding lab capacity - though it is yet unclear exactly how much of that money will be used for that. The U.S. Department of Health and Human Services, which includes the CDC, has until the end of the month to plan how to use the money.

"These funds will hopefully allow the infrastructure for testing to be expanded," said Andrew Pekosz, a professor of microbiology at Johns Hopkins University's Bloomberg School of Public Health.

Zika is spreading in Florida. The CDC has recommended that pregnant women in particular get tested, since the virus can cause birth defects and other complications. About 80 percent of infected people don't show symptoms, so a test is the only way to know if they have contracted Zika.

"Especially for a pregnant woman, getting an answer quickly is a big deal," said Dr. Jesse Goodman, a professor of medicine and infectious diseases at Georgetown University Medical Center in Washington.

"You're going to be very concerned. If that concern can be reduced, that's going to be good for you."

But the additional federal funding will not be an immediate fix.

Given how long processing and budgeting can take, public health labs aren't expecting the cash infusion until early 2017, said Peter Kyriacopoulos, senior director of public policy at the Association of Public Health Laboratories.

While the congressional funding is a promising start, more investment is necessary, said Chris Gould, senior director for federal government

relations at the Association of State and Territorial Health Officials. Local health departments have been shrinking over the past six years. Many don't have staffs large enough to operate labs at the level needed, given the number of samples coming in. They need more people, especially since testing for Zika isn't their only responsibility, he said.

Kyriacopoulos estimated that labs would need about \$39 million to adequately meet these challenges. And public health experts expect the virus to return next summer, he said, which could create a need for more money.

Meanwhile, the CDC has tried to alleviate some lab strain. Last month, it bought \$2.5 million worth of diagnostic supplies for states offering lab testing. And labs have been working on their own to try to expand capacity - especially ones serving areas such as Florida, Texas and California, where the warmer, mosquito-friendly climate heightens the risk that Zika could spread.

But still, local health departments offering Zika testing remain "understaffed and overwhelmed," said Dr. Martha Rac, a maternal-fetal medicine specialist at Texas Children's Pavilion for Women and Baylor College of Medicine, in Houston.

The burden doesn't fall evenly, she said. In urban centers such as Houston, women who may have been infected are more likely to get a Zika test than are those from a poorer, rural town in south Texas. There, the public health clinics or lab systems may not be as well-resourced, so women have fewer options.

"We're not there yet when it comes to turnaround and capacity," said Dr. Umair Shah, executive director of the public health department in Texas' Harris County, which encompasses Houston. The backlog, he said, makes it harder for women in particular to get the medical counsel they

need in an appropriate timeframe.

Predicting future needs is tricky. Even now, states have been encouraging [pregnant women](#) to get tested, along with men who may have been exposed and are showing the virus' flulike symptoms. But that leaves out other groups, such as asymptomatic men who may have contracted Zika and could pass it on to female partners. If states start to push for that testing as well, it could further strain laboratories.

The Health and Human Services Department is also planning to put some of its new Zika funding into developing better tests to detect the virus. Currently, labs use one test to detect the virus within two weeks of exposure, and another that will find it for up to three months. But the second test - which is more commonly used - is less precise and can result in false positives if someone's been exposed to other, similar diseases.

The federal government intends to use some of its funding to support trials for new, better diagnostics. That investment is crucial, Rac said, especially given the magnitude of threat Zika still poses.

"There's still a lot we need to know we need to figure out," she said. "And who knows what's going to happen? ... This mosquito's pretty resilient to destruction. This is something we're going to see for some time."

©2016 Kaiser Health News

Distributed by Tribune Content Agency, LLC.

Citation: Lab constraints delay Zika test results (2016, October 10) retrieved 18 July 2024 from <https://medicalxpress.com/news/2016-10-lab-constraints-zika-results.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private

study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.