athenainsight

Today's data. Tomorrow's healthcare.

athenainsight.com

Anxiety returns: What to expect from Zika this year

By Chelsea Rice | May 23, 2017

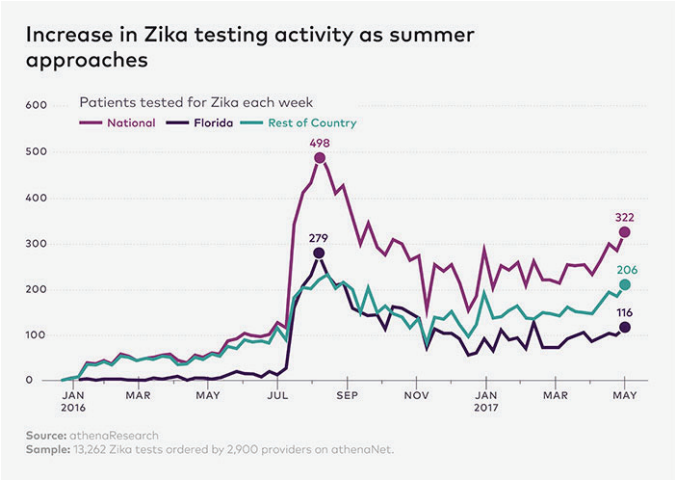
It's that time of year when people are starting to think about mosquitoes in the United States — especially in the South. And data from the athenahealth network reveal that as the summer months approach, more patients and doctors are also thinking about Zika.

Testing for the mosquito-borne virus slowed down over the winter. But the volume of patients getting Zika tests in May has returned to levels previously seen last August during the height of Zika anxiety, when four locally-transmitted cases were confirmed in Florida.

For the first 14 weeks of 2017, an average of 235 Zika tests per week were conducted nationally, and 87 per week in Florida, at medical practices on the athenahealth network. But in the past four weeks, those rates have started to climb. As of May 12, the most recent data available, testing nationwide increased 37 percent above the baseline rate to 322 tests in one week.

It's a similar story in Florida, where testing has increased 34 percent above the baseline rate to 116 tests in one week.

There are a few reasons for this sudden increase, epidemiologists say. Last fall, the Centers for



Disease Control and Prevention recommended that all pregnant women who have visited areas with active Zika transmission should be tested, whether or not they show symptoms of the virus. For pregnant women living in affected areas, such as Florida's Miami-Dade County, officials recommended two tests during the pregnancy.

As of May 8, the CDC expanded that recommendation. Now, the agency says that all pregnant women who have no symptoms of Zika infection, but who may have been infected due to travel or other exposure, should be given two different types of Zika tests at various stages of their pregnancies.

The guidelines have also changed for at-risk women who may become pregnant. The CDC is now advising women who live in Zika-affected areas — or who have recently traveled to areas where Zika is prevalent — to get tested before pregnancy, in order to establish a baseline sample of Zika antibodies in the blood.

The new CDC recommendation comes in response to the limits of some Zika tests, which make it difficult to distinguish between Zika and other vector-borne viruses in the blood. Public health experts say it's most important for physicians to know if an infection was contracted before conception — posing little to no risk to the fetus — or during the pregnancy.

The additional testing recommendation is expected to exacerbate already limited testing and outbreak response resources this season. For context, physicians performed a total of 13,262 Zika tests across the athenahealth network between January 2016 and May 12, 2017. But as a recent Government Accountability Office report points out this week, performance and accuracy has varied among the 16 different Zika tests authorized so far, and providers have had limited training to interpret the results.

According to Maimuna Majumder, a biostatistician and epidemiologist at HealthMap, it's hard to say whether another Zika outbreak will occur this year, or how it might resemble last summer's.

"Public health responders in Florida are definitely better equipped from the vantage point of experience this year than they were last year," says Majumder, whose project operates out of Boston Children's Hospital and tracks disease outbreaks worldwide. "However, experience alone won't successfully prevent another outbreak — not without the money to do the job."

Last year, Congress appropriated $1.1 billion for prevention and response efforts related to the Zika outbreak, including testing. But it wasn't enough. At-risk states like Texas are appealing to the federal government for additional funding to increase limited testing resources and do more active surveillance.

In Texas and Florida, which are home to large populations of the mosquitoes known to carry the virus, federal funding is key to the success of control and prevention efforts. Mosquito control can limit the volume of human carriers, who can spread to virus to other humans and also back to mosquitoes, Majumder says.

"Adequate vector control measures can still successfully prevent sustained vector-borne transmission of Zika virus — I can't emphasize this enough," she says.

With Zika continuing to afflict Puerto Rico and American Samoa, as well as countries in South and Central America, the primary means of exposure in the United States is still travel to and from these affected areas.

But since the "newness" of the mosquito-borne virus has worn off since last summer, public health officials expect to be fighting an additional challenge this year: complacency.

"What folks see on the news will still influence their behavior," Majumder says. "It's our job as public health practitioners to make sure we keep getting the word out — especially when communicating with groups that are especially at risk, like pregnant women and their partners."

Data analysis by Stewart Richardson. Chelsea Rice is a senior writer for athenaInsight.