

Study shows how Zika attacks infant brain

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(HealthDay)—New research paints a chilling portrait of how Zika ravages the infant brain.

Scientists from the U.S. Centers for Disease Control and Prevention report that the mosquito-borne [virus](#) can replicate itself thousands of times in both [fetal brain](#) cells and the placentas of pregnant women. Levels of Zika's genetic material were about 1,000 times higher in the infants' brains than in the placentas, the researchers noted.

Not only that, the virus can persist for more than seven months, which may explain why some babies who appeared normal at birth later developed symptoms of microcephaly, the researchers said. The most common birth defect associated with Zika, microcephaly leaves infants with too small heads and underdeveloped brains.

"Our findings show that Zika virus can continue to replicate in infants' brains even after birth, and that the virus can persist in placentas for months—much longer than we expected," said study author Julu Bhatnagar, lead of the molecular pathology team at the CDC's Infectious Diseases Pathology Branch.

"We don't know how long the virus can persist, but its persistence could have implications for babies born with microcephaly and for apparently healthy infants whose mothers had Zika during their pregnancies," Bhatnagar said. "More studies are needed to fully understand how the virus can affect babies."

In all, the research team tested tissues from 52 patients with suspected Zika infection; 44 [pregnant women](#) and eight infants who had microcephaly and later died.

In their study, published Dec. 13 in the *Emerging Infectious Diseases* journal, the scientists also discovered that the virus appears to gain entry to the fetal brain through a type of migratory immune cells in the placenta known as Hofbauer cells.

Meanwhile, a report released last Friday showed that the tragedy of hundreds of babies born with devastating birth defects linked to the Zika virus is no longer confined to Brazil.

Colombia is now also experiencing a surge in infant microcephaly cases.

A team led by Margaret Honein, of the U.S. Centers for Disease Control and Prevention, reported that between January and November of 2016, there were 476 cases of microcephaly in Colombia, a fourfold increase from the same period in 2015.

There were nine times as many cases of microcephaly in July 2016 than in July 2015, the researchers said.

And because Colombia's surveillance of birth defects relies on voluntary reporting, the new data "likely underestimates the actual prevalence of birth defects, including those defects associated with Zika virus infection during pregnancy," Honein's team said.

The study also found that the peak in cases of microcephaly in Colombia occurred about six months after the highest number of new Zika infections were reported. This suggests that the greatest risk for Zika-related microcephaly likely arises in the first half of pregnancy—especially the first trimester and early in the second trimester.

According to the latest figures from the CDC, there have so far been 32 cases of Zika-related [birth defects](#) to live-born infants in the 50 U.S. states and the District of Columbia.

However, there's also some good news on Zika in the United States: the CDC has declared that the state of Florida is now free of the Zika virus.

But, Texas officials, who recently reported a suspected case of local infection, said last week that they have identified four more cases of suspected locally transmitted Zika virus in Cameron County, near the border with Mexico.

The Colombian study was published Dec. 9 in the CDC's *Morbidity and Mortality Weekly Report*.

More information: The World Health Organization has more on [Zika](#).

This Q & A will tell you [what you need to know about Zika](#).

To see the CDC list of sites where Zika virus is active and may pose a threat to pregnant women, click [here](#).

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