One in five Americans say vaccines and a pesticide can cause birth defect thought linked to Zika virus

PHILADELPHIA – About one in five people incorrectly think that scientists have established that the use of vaccines or a pesticide can cause babies to be born with unusually small heads, according to a new survey on the public’s knowledge of science.

The survey found that most Americans (61 percent) say scientists have established that the Zika virus spreading through Latin America can cause the birth defect known as microcephaly, which is in fact strongly suspected but not confirmed by scientists, according to the Centers for Disease Control. Another 28 percent of people say that scientists are not sure.

The findings come from the second in a series of Annenberg Science Knowledge (ASK) surveys by the Annenberg Public Policy Center (APPC) of the University of Pennsylvania. The survey was conducted by phone among 1,014 respondents from February 17-21.

The ongoing survey tracks the public’s views of scientific knowledge about Zika versus false rumors and conspiracy theories. The survey asked whether scientists have established various claims to be true or false, and found that:

- 26 percent of people say scientists have established that the Zika virus can cause temporary paralysis or Guillain-Barré syndrome, while 43 percent are not sure. The connection is under investigation though it is not proven, according to the CDC.
- 19 percent of people say scientists think that if a pregnant woman drinks water sprayed with a pesticide to stop the spread of mosquitoes, it can cause microcephaly. Forty-five percent of people say scientists are not sure, while 27 percent correctly say scientists regard that as false. The CDC says the pesticide has not been linked with microcephaly.
- 20 percent say that scientists think vaccines have caused microcephaly, while 36 percent correctly say that is false. Thirty-four percent say scientists are not sure. The World Health Organization says there is no evidence of a vaccine link to microcephaly.

The first ASK survey, released Feb. 23, asked whether people thought that genetically modified mosquitoes “have caused” or “could minimize” the spread of the Zika virus. Given that choice, one in three people said GM mosquitoes have caused it. The current survey posed those choices separately and found that:

- 22 percent of people incorrectly said scientists established that genetically modified mosquitoes caused the Zika virus outbreak. Twenty-five percent said that is false and 43 percent said scientists are not sure. It is false, according to FactCheck.org’s science-checking feature, SciCheck.
24 percent of people correctly said scientists think genetically modified mosquitoes could minimize the spread of Zika, 15 percent said that was false, and 51 percent said scientists are not sure. It is true, according to SciCheck.

The survey, conducted for the Annenberg Public Policy Center by the research firm SSRS, has a margin of error for total respondents of +/-3.63 percent. The question about vaccines was added on Feb. 18 and asked of 779 respondents, and has a margin of error of +/-4.14 percent.

For data from the survey and methodology, click here.

The Annenberg Public Policy Center was established in 1994 to educate the public and policy makers about the media’s role in advancing public understanding of political and health issues. APPC’s FactCheck.org is a nonpartisan “consumer advocate” for voters; SciCheck investigates false or misleading scientific claims made to influence public policy.