Today’s piece was prepared by Jen Keene, MD, from an Atlantic article, [How Does Zika Effect the Toddler Brain?](http://www.theatlantic.com/health/archive/2016/09/how-does-zika-affect-the-toddler-brain/498578/)

Despite the somewhat inflammatory title, this article providers a reasonably accurate, approachable review of the known mechanisms of Zika-mediated brain injury in the fetus and possible mechanisms being investigated in childhood. In the fetus, recent evidence (1) suggests that Zika disrupts protein localization and subsequent mitosis of neuroepithelial stem cells, resulting in severely impaired brain development and microcephaly. Although the majority of neural cells have already been created at birth, there is some evidence that there is low level continued neural stem cell activity for the first 1-2 years of life. This leads to speculation that Zika infection within this window may lead to more subtle developmental delays, although this has not yet been clinically studied and it would take a large sample size to detect subtle clinical effects.

**RESOURCES ON PRENATAL ZIKA VIRUS AND BRAIN INJURY:**

[About Zika](http://www.cdc.gov/zika/about/index.html) *CDC*

[Doctors Brace for Zika Babies](http://www.nytimes.com/2016/09/26/well/family/doctors-brace-for-zika-babies.html?_r=0) *NY Times article by Perri Klass, MD, who focuses on child development and behavior*

Medical literature reference citations:

1. Onorati et al "Zika Virus disrupts Phoph-TBK1 Localization and Mitosis in Neuroepithelial Stem Cells and Radial Glia" Cell reports, September 2016. Cited in the Atlantic article
2. Russell K et al. Update: Interim guidance for the evaluation and management of infants with possible congenital zika virus infection – United States, August 2016. Morbidity and Mortality Weekly Report *Tim Brei, MD, of Seattle Children’s, is a co-author for this MMWR report*

And that’s today’s Developmental & Behavioral Pediatrics: IN THE NEWS!