

# More evidence preterm birth could raise autism risk

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(HealthDay)—According to a new study, very premature infants may

have an increased risk of being diagnosed with autism by age 4, although the research questions just how high the odds are.

The Australian study, published online Jan. 21 in *Pediatrics*, found that just under 2 percent of tiny preemies were later diagnosed with [autism](#) between 2 and 4 years of age.

That prevalence, the researchers say, is lower than what's been seen in past studies—where figures have ranged from roughly 4 percent to 13 percent.

They also said there are reasons to trust the reliability of their findings. This study is one of the few to directly evaluate children, rather than using parent questionnaires, said lead researcher Margo Pritchard, a professor of neonatal nursing at Australian Catholic University, in South Brisbane.

"What we found is that being born very preterm is a risk factor, which is consistent with previous studies," Pritchard said. "But when diagnostic rigor is applied, using direct assessment, the rate of autism is lower than reported in other studies."

However, Dr. Paul Wang, [senior vice president](#) of medical research for the nonprofit organization Autism Speaks, said it's not clear what to make of the lower prevalence.

Studies differ in their methods, and some have followed children for longer periods—to age 8 and beyond—so it's hard to know which estimates are closer to the truth, Wang said.

Instead, he saw the new findings as further support for the overall picture. "Prematurity and [low birth weight](#) are risk factors for autism," Wang said.

He also stressed, however, that there is no single contributing factor to autism spectrum disorder—a developmental disorder thought to affect one in 68 children in the United States, according to the U.S. Centers for Disease Control and Prevention.

Autism is complex, Wang said, and the mix of causes varies from one child to the next. But in general, experts believe it starts with a genetic vulnerability, in combination with certain environmental exposures at a critical point in development—particularly in the womb.

Researchers are still trying to understand the environmental influences, Wang said.

According to Autism Speaks, studies have implicated a number of factors other than preterm birth. Those include older age of the parents at conception, as well as prenatal exposure to certain infections, air pollution or particular medications—such as the anti-seizure drug valproic acid (Depakote).

For the new study, Pritchard's team assessed 169 young children born before the 29th week of pregnancy. They were screened at ages 2 and 4 years for possible signs of autism—such as language delays, or a lack of interest in other children.

Overall, 13 percent of the children screened "positive" and underwent further evaluation. In the end, just under 2 percent were diagnosed with autism.

Still, Wang pointed out, nearly all of the children who screened positive but did not get a formal diagnosis did have significant problems—with communication, imaginative play or repetitive behavior, for example.

And since very preterm babies are at risk of various developmental

problems, it can be hard to definitively diagnose autism at a young age, Wang said.

Pritchard agreed that it's challenging to pinpoint autism in those children. But, she added, "gold standard" assessments such as the Autism Diagnostic Observation Schedule—which was used in this study—can help identify the disorder at an early age.

Whatever the true prevalence of autism is among preemies, it's important that these children have routine developmental screenings, Wang and Pritchard said.

"These children all need to be followed closely and screened," Wang said. That way, any impairments—physical, mental or social—can be caught early and addressed.

"Identifying early differences in development can help to link children with effective intervention practices," Pritchard agreed.

"The take-home message," she added, "is to take advantage of developmental monitoring and keep [children](#) born very preterm on these programs through childhood."

**More information:** Autism Speaks has more on [environmental risk factors for autism](#).

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