

Is the Prevalence of Autism Increasing or Not?



Bonnie Hacker, OT Founder / Director

On March 29, the Centers for Disease Control (CDC) released new numbers from their ongoing tracking of autism spectrum disorder (ASD) prevalence.¹ Currently, the CDC estimates an ASD prevalence of 1 in 88 children and 1 in 54 boys. They used monitoring from 12 states including block Carelina to create this year's providence statement.

North Carolina to create this year's prevalence statement. The current prevalence estimate is 78% higher than the same estimate from 2002 and 23% higher than 2006. The major limitation of the CDC's methods comes from counting 8-year-old children who were *identified* in 2008 as having an ASD. Since, by definition, ASD is present before the age of 3, the current number is based on births from 2000 and is actually measuring a prevalence that is now nine to twelve years old. More importantly, the CDC's method has only included children *identified* with ASD - leaving open to debate whether ASD is occurring more often or just being identified more thoroughly.



Advocates from various camps suggest that the rising prevalence of autism represents an increasing problem, not improved surveillance. There has been growing evidence that pregnancy-related variables are associated with heightened risk of ASD, but Laura Schieve and colleagues find that pregnancy-related variables such as preterm, low birth weight, multiple birth, delivery technique, and assisted reproductive technology could not account for more than 1% of this century's increase in ASD prevalence.² Another theory has been that childhood vaccinations are causing a real increase in the prevalence of ASD. A paper published last year in the *Journal of Toxicology and Environmental Health* supports this theory.³ Gayle DeLong used regression analysis and, controlling for family income, found a positive and statistically significant relationship between the proportion of children who received the recommended vaccinations by age 2 and the prevalence of autism. While DeLong demonstrates that access to care does not affect the correlation, this study was again based only on *identified* cases and suffers limitations similar to the CDC estimates.

Others suggest that an increasing emphasis on early identification is the more likely reason for higher prevalence estimates. The bulk of practice guidelines recommending routine screening for ASD in pediatric care were published after 1999. Victoria Moore Zeiger's 2008 survey of American Academy of Pediatrics members found that 58% of pediatricians did not routinely screen for ASD - demonstrating a large opportunity for increased adoption of surveillance recommendations to affect the CDC's prevalence estimates.³ In addition, the definition of ASD has broadened over time to include previously excluded children (e.g. severe intellectual disability, above-average intelligence, genetic syndromes, and sensory impairments).⁴ Tony Charman, PhD, in an editorial published in the *American Journal of Psychiatry*, points out that diagnosis of ASD relies in part on clinical judgment and is therefore susceptible to "culture drift."⁵ It seems that definitive evidence to answer the question of "more affected or more detected?" has yet to be published.

Regardless of whether you are in the affected camp, the detected camp, or on the sideline, research has produced some important facts about which there is little debate. One, the prevalence of ASD is at least 1 in 88 children, 1in 54 boys, and is quite possibly higher than that.^{1,4} Two, <u>early identification</u> and intensive intervention result in improved outcomes in cognition, language, and educational achievement.⁶⁻¹⁴ Three, because difficulties with communication constitute some of the main challenges for children with ASD, expert consensus promotes the value of pediatric speech therapy combined with occupational therapy as part of the multi-disciplinary intervention.^{15,16}

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