Understanding Autism Spectrum Disorder and Other Developmental Disabilities

The Autism and Developmental Disabilities Monitoring (ADDM) Network is the only collaborative network to track the number and characteristics of children with autism spectrum disorder (ASD) in multiple communities in the United States. CDC encourages partners to use information from the ADDM Network in their local communities and across the country to move forward initiatives, policies, and research that help children with ASD.

What Do ADDM Data Tell Us About Autism Spectrum Disorder (ASD)?

- About 1 in 68 children has been identified with ASD, based on tracking in multiple areas of the United States. It is important to remember that this estimate is based on 8-year-old children living in 11 communities. It does not represent the entire population of children in the United States.
- Almost half of children identified with ASD have average or above average intellectual ability; over a decade ago, a third of children identified with ASD had average or above average intellectual ability.
- ASD occurs among all racial, ethnic, and socioeconomic groups. However, white children are still more likely to be identified with ASD than black or Hispanic children.
- Boys are about 4.5 times more likely to be identified with ASD than girls.
- Most children with ASD are diagnosed after age 4, even though ASD can be diagnosed as early as age 2.

“While typical children are scheduling play dates and extracurricular activities, our children’s lives are about therapies, day after day, year after year, usually seven days a week. People on the outside cannot grasp the necessary skills that our children require help with. My ultimate hope is that one day soon my children will live in a world where they will be accepted and appreciated, despite their differences. As long as I am here, I try to surround them with people who love and accept them as they navigate this world, because autism never takes a day off.”

–Mary Elizabeth, parent of two children with autism spectrum disorder.
Building the Public Health Infrastructure for ASD

To understand the scope of ASD in the United States, the Children’s Health Act of 2000 authorized the CDC to create the Autism and Developmental Disabilities Monitoring (ADDM) Network. Since the launch of the ADDM Network in 2000, CDC has funded 16 sites in areas of Alabama, Arizona, Arkansas, Colorado, Florida, Maryland, Minnesota, Missouri, New Jersey, North Carolina, Pennsylvania, South Carolina, Tennessee, Utah, West Virginia, and Wisconsin. ADDM Network sites track the number and characteristics of children with ASD and other developmental disabilities using a technique modeled after CDC’s Metropolitan Atlanta Developmental Disabilities Surveillance Program (MADDSP). MADDSP represents the ADDM Network site located in Georgia.

There are several major advantages to using the ADDM Network method for tracking the number and characteristics of children with ASD.

- The ADDM Network is the largest, ongoing ASD tracking system in the United States.
- The ADDM Network’s method is population-based, which means that we study ASD and other developmental disabilities among thousands of children from diverse communities across the country.
- The ADDM Network is able to look at not only how many children have ASD in multiple communities across the United States, but also which groups of children are more likely to be identified with ASD and at what age they are likely to be diagnosed.
- The ADDM Network method is rigorous. We maintain quality and precision by collecting and reviewing information on all children the same way using the same criteria. These steps help ensure that ADDM Network results are accurate and unbiased.

Because of the depth and breadth of ADDM data, we know that the number of children identified with ASD remains high and that ASD affects children and communities in very different ways. Some of the children who are most severely affected by ASD are not getting help as early as possible, and most children with ASD are not being diagnosed as early as they could be. We understand more about ASD than ever before, including which children are more likely to be identified, at what age they are likely to be diagnosed, and what factors may be putting children at risk for ASD, but many important questions remain unanswered.

Moving Forward

CDC will continue tracking the changing number and characteristics of children with ASD, researching what puts children at risk for ASD, and promoting early identification, the most powerful tool we have now for making a difference in the lives of children.

Learn More

The Autism and Developmental Disabilities Monitoring Network. Please visit: www.cdc.gov/addm

The Study to Explore Early Development. Please visit: www.cdc.gov/seed

The Learn the Signs. Act Early. Campaign. Please visit: www.cdc.gov/actearly