A Snapshot of Autism Spectrum Disorder in Minnesota

Findings from the Minnesota Autism and Developmental Disabilities Monitoring Network (MN-ADDM) help us to understand more about the number of children with autism spectrum disorder (ASD), the characteristics of those children, and the age at which they are first evaluated and diagnosed.

About 1 in 36
Or 2.8% of 8-year-old children were identified with ASD by MN-ADDM in 2018

IQ data were available for 81%
Of 8-year-old children identified with ASD

IQ = Intelligence Quotient
Intellectual disability = IQ ≤ 70

By 3 years of age
45% of 8-year-old children received a comprehensive developmental evaluation

By 63 months of age
Half of 8-year-old children were diagnosed with ASD by a community provider

Among 8-year-old
Black children were 1.8x as likely to be identified with ASD as Hispanic children and 1.3x as likely to be identified with ASD as White children

Among 8-year-olds Among 4-year-olds

8-year-old boys
Were 4.2x as likely to be identified with ASD as girls

Children who were born in 2014 (1.9%) were 1.7x as likely to be identified with ASD by 4 years of age as children who were born in 2010 (1.1%)

Values indicate prevalence per 1,000 children.

Cumulative incidence of ASD identified per 1000 children.
What are the key take-away messages?

- MN-ADDM identified the third highest prevalence of ASD in the ADDM Network among 8-year-olds and the second highest prevalence of ASD in the ADDM Network among 4-year-olds. (refer to the Morbidity and Mortality Weekly Report (MMWR) for more details)
- In MN-ADDM there were differences between percentage of boys and girls identified, with more boys identified with ASD than girls. This is consistent with previous estimates and in the overall ADDM network.
- MN-ADDM findings also reveal some differences in prevalence across racial and ethnic groups. Black children in MN-ADDM were identified with ASD more frequently than White children in 2018 among both 4-year-old and 8-year-old children. Among 4-year-olds, Asian or Pacific Islander children were twice as likely to be identified with ASD than White children. (refer to the MMWR for more details)
- In the areas of Minnesota included in MN-ADDM, children with ASD are often being identified at much later ages than is recommended. MN-ADDM had the latest median age of diagnosis across all of the ADDM Network, and less than half of 8-year-old children with ASD had received a comprehensive evaluation by age 3 years. However, it is encouraging that a higher percentage of 4-year-old children were identified with ASD in early childhood compared to 8-year-old children; this means identification is happening earlier in the younger cohort. ASD can be reliably diagnosed by age 2 years or even younger.

How can this information be useful?

MN-ADDM’s findings can be used to:
- Inform policies that promote early identification of ASD.
- Plan for the service needs of individuals with ASD and provide training to ASD service providers and families.
- Guide future ASD research.

Partners in Minnesota might consider different ways to:
- Increase access to early comprehensive evaluations by community providers
- Decrease age of ASD identification in educational and health care settings

How and where was this information collected?

MN-ADDM uses a record review method. Specifically, this information is based on the analysis of data collected from the health and special education records of children who were 4 years old and 8 years old living in parts of three counties in 2018.

Tracking area
Parts of Anoka, Ramsey, and Hennepin counties

8-year-old children in tracking area: 10,081
- 51% White
- 25% Black
- 14% Hispanic
- 8% Asian or Pacific Islander
- 2% American Indian or Alaska Native

4-year-old children in tracking area: 10,529
- 53% White
- 25% Black
- 11% Hispanic
- 8% Asian or Pacific Islander
- 2% American Indian or Alaska Native

*Estimates may not sum to 100% due to rounding.

“I use information from the Minnesota ADDM program in my work as a parent advocate with Minnesota legislators. To be able to show that over 2% of children in Minnesota have autism, and that Minnesota has one of the higher autism rates compared to other states, helps to motivate people to action. It helps us understand the needs of children with autism in Minnesota today and what needs we should plan for as children become adults.”

KELLY KAUSEL
mother of a child with autism and parent advocate