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.

- **Boys** were 4.6 times more likely to be identified with ASD than girls. No significant differences were found in the percentage of white, black, and Hispanic children identified with ASD.

- **2.4%** is higher than the average percentage identified with ASD in 2014 (1.7% in all ADDM sites).

- **1 in 42** 8-year-old children were identified with ASD by MN-ADDM in 2014.

### Disparities in Identification

- **Boys** were 4.6 times more likely to be identified with ASD than girls. No significant differences were found in the percentage of white, black, and Hispanic children identified with ASD.

- **ASD can be diagnosed as early as 2 years of age**; however, about half of children were not diagnosed with ASD by a community provider until after 4 years, 8 months of age.

### Intellectual Disability in Minnesota

Minnesota had **intelligence quotient (IQ) data available for 79.9%** of children identified with ASD. Of those children, **28.1%** had intellectual disability.

- Intellectual disability is defined as an IQ score of 70 or lower.

### Of children identified with ASD...

- **...about 73%** had developmental concerns by 3 years of age.

- **...but only about 34%** received a comprehensive developmental evaluation by 3 years of age.
Frequently Asked Questions

What are the key take-away messages?

• This is the first time MN has been a part of the ADDM network, and we are building our geographic area. The findings in this report reflect a small number of children concentrated in a large metropolitan area. The higher prevalence estimate is not unanticipated for a large metropolitan area.

• In Minnesota, there are differences between percentage of boys and girls identified, with more boys than girls. This is consistent with previous studies.

• We found varying prevalence rates across racial and ethnic groups in Minnesota. The small number of children in some of these groups makes it difficult to determine whether the rates of children with autism truly are different across groups. As the geographic area for MN-ADDM grows, we will be better able to judge whether there are true differences in prevalence estimates. If differences are found, it will be important to focus on general health disparities that may influence these differences.

• In Minnesota, we identify autism much later than when first concerns are reported. The lag between first concern and diagnosis is concerning due to what we know about the importance of early intervention.

How can this information be useful?

MN-ADDM’s findings can be used to

• Promote early identification of ASD,

• Plan for ASD services and training,

• Guide future ASD research, and

• Inform policies promoting improved outcomes in health care and education for individuals with ASD.

Stakeholders in Minnesota might consider finding ways to lower the age of first evaluation by community providers.

How and where was this information collected?

This information is based on the analysis of data collected from the health and special education records of children who were 8 years old in 2014. In addition to the race/ethnicity categories routinely studied by CDC, in MN we are interested in understanding prevalence for Hmong and Somali immigrant populations.

• Tracking area: Parts of two counties (Hennepin and Ramsey) including the large metropolitan cities of Minneapolis and St. Paul

• Children in tracking area: 9,767 8-year-olds
  - 39 percent white non-Hispanic
  - 28 percent black/non-Somali
  - 15 percent Hispanic
  - 8 percent Hmong
  - 8 percent Asian or Pacific Islander/non-Hmong
  - 6 percent Somali
  - 2 percent American Indian or Alaska Native

What else does MN-ADDM do besides tracking ASD among 8-year-olds?

MN-ADDM collaborates with a wide variety of community ASD organizations and several Minnesota state agencies including the Minnesota Departments of Education (MDE), Human Services (DHS), and Health (MDH). MN-ADDM uses an active community advisory board consisting of parents/family members, advocates, researchers, service providers, administrators, faith leaders, educators, clinicians, and community organizers to inform, guide and support the work of MN-ADDM. In Minnesota, we also partner with the CDC funded “Learn the Signs. Act Early” (LTSAE) project and Help Me Grow MN to conduct outreach and educational activities on early developmental screening and early identification in under-identified communities such as Latino, Hmong, and Somali communities. MN-ADDM together with MN Act Early has translated and customized ASD and LTSAE outreach materials and resources for our local diverse communities. A short film series was developed in partnership with MN DHS to raise awareness of ASD for local diverse communities (e.g., Somali, Hispanic, Hmong, African American, and American Indian). They are designed to help families access evaluation resources, early intervention services, and ASD support resources.

“MN-ADDM data are important to find out if autism is specific to us or is something that we share with other communities. How do the characteristics of autism affect us compared to other communities?”

- Yusuf Samatar, Somali Parent and Community Advisory Board Member