A Snapshot of Autism Spectrum Disorder in Tennessee

Findings from the Tennessee Autism and Developmental Disabilities Monitoring Network (TN-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.

1.6% is slightly lower than the average percentage identified with ASD in 2014 (1.7% in all ADDM sites).

1 in 64 8-year-old children were identified with ASD by TN-ADDM in 2014.

Disparities in Identification

Boys were more likely to be identified with ASD than girls. White children were more likely to be identified with ASD than Hispanic children.

- **4.7x MORE LIKELY** among boys vs girls
- **1.5x MORE LIKELY** among white vs Hispanic children
- **NO SIGNIFICANT DIFFERENCE** among white vs black or black vs Hispanic children

Intellectual Disability in Tennessee

Tennessee had **intelligence quotient (IQ) data available for 70.8% of children identified with ASD**. Of those children, 39.4% had intellectual disability.

Of children identified with ASD...

- **...about 61%** 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?
- There are many children living with ASD who need services and support, now and as they grow into adolescence and adulthood.
- This is the first time data from ADDM are available for TN. The percentage of children with ASD in TN (1.6 percent) was very similar to current estimates across the United States (1.7 percent).
- Despite the developmental concerns noted in many of the children's records by 3 years of age, only about one-third (34 percent) of children with ASD received a comprehensive evaluation by this same age. This gap between early concerns and first developmental evaluation may affect when children are diagnosed and the intervention services they need.
- 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.

How can this information be useful?
TN-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 Tennessee might consider different ways to
- Lower the age of first evaluation by community providers.
- Increase awareness of ASD among Hispanic families, and identify and address barriers in order to decrease the age at which all children are evaluated and diagnosed.

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 and living in one of 11 counties in Middle Tennessee in 2014.
- Tracking area: Bedford, Cheatham, Davidson, Dickson, Marshall, Maury, Montgomery, Rutherford, Robertson, Williamson, and Wilson
- Children in tracking area: 24,940 8-year-olds
  - 64 percent white
  - 20 percent black
  - 13 percent Hispanic
  - 3 percent Asian or Pacific Islander
  - Less than 1 percent American Indian or Alaska Native.

What else does TN-ADDM do besides tracking ASD among 8-year-olds?
TN-ADDM is a collaboration between the Tennessee Department of Health, the Tennessee Department of Education, and investigators from Vanderbilt University Medical Center to track the percentage and characteristics of children with ASD and/or intellectual disability. In addition, TN-ADDM has been collaborating with the Tennessee Department of Children's Services in order to better understand the percentage and characteristics of children with ASD who experience allegations of child abuse and neglect. Training and outreach activities associated with TN-ADDM have been designed to build clinical and educational partnerships across our region and to extend knowledge and family support to rural and traditionally underserved communities in Tennessee.