A Snapshot of Autism Spectrum Disorder in Missouri

The latest findings from the Missouri Autism and Developmental Disabilities Monitoring (MO-ADDM) Project provide the 7th “snapshot” of ASD in our community in the past 14 years. The ongoing monitoring of autism spectrum disorder (ASD) adds to our understanding of how the number and characteristics of children with ASD are changing over time in our state.

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. When looking at age of first diagnosis by ASD subtype, children were diagnosed at a range of ages.

<table>
<thead>
<tr>
<th>ASD Subtype</th>
<th>Median* Age of Diagnosis</th>
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<tbody>
<tr>
<td>Autistic disorder</td>
<td>4 years, 6 months</td>
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<tr>
<td>Pervasive developmental disorder-not otherwise specified (PDD-NOS)</td>
<td>4 years, 7 months</td>
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<tr>
<td>Asperger disorder</td>
<td>5 years, 5 months</td>
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*Median is the number in the “middle” within a sorted list of numbers from highest to lowest.

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 black and Hispanic children. No significant differences were found between black and Hispanic children.

- **4.0x MORE LIKELY** among boys vs girls
- **2.9x MORE LIKELY** among white vs Hispanic children
- **1.3x MORE LIKELY** among white vs black children

Of children identified with ASD...

- **...about 72%** had developmental concerns by 3 years of age.
- **...but only about 32%** received a comprehensive developmental evaluation by 3 years of age.
Frequently Asked Questions

What are the key take-away messages?
• Many children are living with ASD who need services and support, now and as they grow into adolescence and adulthood.
• Differences between the percentage of boys and girls identified with ASD continue. It may be that boys are at greater risk for ASD and/or it may be that girls are under-identified due to others factors, such as how providers diagnose and document ASD symptoms among boys versus girls.
• Despite the developmental concerns noted in many of the children’s records by 3 years of age, less than half of children identified with ASD received a comprehensive developmental evaluation by this same age. The lag between first concern and first developmental evaluation may affect when children are being diagnosed and connected to the services they need.
• Efforts may be directed toward evaluating and diagnosing all children with ASD as early as possible so that they can be connected to the services they need.

How can this information be useful?
MO-ADDM's latest 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 Missouri might consider different ways to lower the age of first evaluation by community providers.

How and where was this information collected?
MO-ADDM uses a record review method. Specifically, this information is based on the analysis of data collected from the health records of children who were 8 years old and living in one of 5 counties in Missouri in 2014.
• Tracking area: Franklin, Jefferson, St. Charles, St. Louis, and St. Louis City counties
• Children in tracking area: 25,333 8-year-olds
  - 65 percent white
  - 26 percent black
  - 5 percent Hispanic
  - 4 percent Asian or Pacific Islander
  - Less than 1 percent American Indian or Alaska Native

What else does MO-ADDM do besides tracking ASD among 8-year-olds?
MO-ADDM collaborates with the Missouri Department of Health and Senior Services and investigators from Washington University in St. Louis to track the number and characteristics of 8-year-olds with ASD and/or cerebral palsy. MO-ADDM also monitors the number and characteristics of 4-year-olds with ASD. In addition, MO-ADDM conducts various ASD-related public health, research, and clinical activities to inform various stakeholders (such as clinicians, educators, and families) on the latest science around ASD, best practices for early intervention, and clinical care for children with ASD.