A Snapshot of Autism Spectrum Disorder in Missouri

Findings from the Missouri Autism and Developmental Disabilities Monitoring (MO-ADDM) Project help increase understanding 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 in 41**

Or 2.5% of 8-year-old children were identified with ASD by the MO-ADDM Project in 2020.

Among 8-year-olds, Black children were 1.2 times as likely and Asian/Pacific Islander (A/PI) children were 1.5 times as likely to be identified with ASD as White children. Children with two or more races were less likely to be identified with ASD compared with all other races except Hispanic children.

Children who were born in 2016 (16%) were almost 1.8 times as likely to receive an ASD diagnosis or ASD special education classification by 48 months of age compared to children born in 2012.

IQ data available for 61% of children identified with ASD by MO-ADDM

32% had Intellectual Disability

IQ = Intelligence Quotient

Values indicate prevalence per 1000.

Overall, 81% of 8-year-olds who met the ADDM case definition had an ASD diagnosis by a health care provider; 54% had autism special education eligibility; and 72% had an ASD International Classification of Disease (ICD) code.

40% of 8-year-old children & 75% of 4-year-old children identified with ASD received a Comprehensive Developmental Evaluation by age 3 years

4-year-old boys were 2.6x as likely to be identified with ASD than girls

IQ SCORE*

<table>
<thead>
<tr>
<th>IQ</th>
<th>Value</th>
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<tbody>
<tr>
<td>≤70</td>
<td>32%</td>
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<tr>
<td>71-85</td>
<td>34.3%</td>
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<tr>
<td>&gt;85</td>
<td>23.4%</td>
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*Percentages may not total 100 due to rounding

The COVID-19 pandemic disrupted many aspects of life, including the ability to evaluate children for autism. Before the pandemic, 4-year-old children had higher ASD identification than 8-year-old children had when they were aged 4 years. In the first few months of the pandemic, 4-year-old children were less likely to have an evaluation than 8-year-old children had when they were the same age.
What are the key take-away messages from Missouri ADDM?

- For the first time, ASD prevalence was higher for Black and A/PI children than White children in MO-ADDM.
- Black children continue to be more likely to have ASD and ID compared with children of other races/ethnicities in communities included in the MO-ADDM network.
- A higher percentage of children born in 2016 had evaluations by 36 months of age and a diagnosis or special education eligibility by 48 months of age compared with children born in 2012.

How can this information be useful?

MO-ADDM’s latest findings can be used to
- Plan for ASD services and training.
- Promote early identification and service initiation.
- Guide future ASD research.
- Inform policies promoting improved health and education outcomes for individuals with ASD.

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 and special education records of children who were 4 years old and 8 years old and living in one of five counties in Missouri in 2018.

Tracking area: Franklin, Jefferson, St. Charles, St. Louis counties and the City of St. Louis

8-year-old children in tracking area: 24,561
- 63% White
- 24% Black
- 5% Hispanic
- 3% Asian or Pacific Islander
- <1% American Indian or Alaska Native
- 5% Multiracial

4-year-old children in tracking area: 24,476
- 63% White
- 24% Black
- 5% Hispanic
- 4% Asian or Pacific Islander
- <1% American Indian or Alaska Native
- 5% Multiracial

What else does MO-ADDM do besides provide estimates of ASD?

MO-ADDM investigators at Washington University in St. Louis collaborate with the Missouri Department of Health and Senior Services and community partners to track the number and characteristics of 8-year-olds and 4-year-olds with ASD. In addition, MO-ADDM conducts various ASD-related public health, research, and clinical activities to inform several types of partners (such as clinicians, educators, and families) on the latest scientific developments, best practices for early intervention, and clinical care for children with ASD.

“The Missouri ADDM ASD surveillance data, with its combination of health and educational data sources, provides a more comprehensive picture of where and when children with ASD are being identified in our region than we would otherwise have. As a diagnostic center, these data can help us to advocate for targeted community resources for our patients to better serve them in a more timely and economical way.” -

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