Prevalence and Characteristics of Autism Spectrum Disorder Among 8-year-old Children

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Autism and Developmental Disabilities Monitoring (ADDM) Network

- Active, population-based biannual surveillance of autism spectrum disorder (ASD) since 2000
  - Multiple source record review
    - Health sources
    - Education sources

- Goals:
  - Estimate prevalence and characteristics of ASD
  - Estimate prevalence trends of ASD
  - Understand the impact of ASD in US communities
Current ADDM Network Sites, Surveillance Years 2010 and 2012

Monitoring 8 year olds
Monitoring 4 and 8 year olds

- Autism
- Autism, Cerebral Palsy
- Autism, Intellectual Disability
- Autism, Cerebral Palsy, Intellectual Disability, Vision Impairment, and Hearing Loss
## ADDM Network: 2012 ASD Prevalence

<table>
<thead>
<tr>
<th>Category</th>
<th>Prevalence (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>14.6 (14.2, 15.0)</td>
</tr>
<tr>
<td>Education + Health</td>
<td></td>
</tr>
<tr>
<td>Health only</td>
<td>17.1 (16.5, 17.6)</td>
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<tr>
<td></td>
<td>10.7 (10.2, 11.3)</td>
</tr>
<tr>
<td>Male</td>
<td>23.6 (22.9, 24.3)</td>
</tr>
<tr>
<td>Female</td>
<td>5.3 (4.9, 5.6)</td>
</tr>
<tr>
<td>Non-Hispanic white</td>
<td>15.5 (14.9, 16.1)</td>
</tr>
<tr>
<td>Non-Hispanic black</td>
<td>13.2 (12.4, 14.0)</td>
</tr>
<tr>
<td>Hispanic</td>
<td>10.1 (9.4, 10.9)</td>
</tr>
</tbody>
</table>
ADDM Network: 2012 Age at Earliest Evaluation

- 87% had developmental concerns noted in record by age 36 months
- Overall age at earliest known comprehensive evaluation
  - ≤36 months: 43%
  - 37-47 months: 19%
  - ≥48 months: 38%
- Healthy People 2020 goal: 47% will have first evaluation by age 36 months
- Non-Hispanic white children more likely to have earliest evaluation ≤36 months (44%) compared with non-Hispanic black (40%) and Hispanic (39%) children
ADDM Network: 2012 Key Findings

- ASD prevalence in 2012 was similar to 2010 prevalence
  - Too soon to say that prevalence is stabilizing
    - Additional data points needed
    - Variation in prevalence by race/ethnicity and geography
    - Prevalence change at some sites
- Disparities in ASD prevalence by race/ethnicity may indicate that some children are not receiving appropriate services and support
- Progress needed to lower age at first evaluation among all children, particularly non-Hispanic black and Hispanic children
The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.