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

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Interagency Autism Coordinating Committee Meeting
Rockville, MD

April 19, 2016
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></th>
<th>Prevalence (95% CI)</th>
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<tbody>
<tr>
<td><strong>Overall</strong></td>
<td>14.6 (14.2, 15.0)</td>
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<tr>
<td><strong>Education + Health</strong></td>
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<tr>
<td><strong>Health only</strong></td>
<td>17.1 (16.5, 17.6)</td>
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<td></td>
<td>10.7 (10.2, 11.3)</td>
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<tr>
<td><strong>Male</strong></td>
<td></td>
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<tr>
<td><strong>Female</strong></td>
<td>23.6 (22.9, 24.3)</td>
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<td></td>
<td>5.3 (4.9, 5.6)</td>
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<tr>
<td><strong>Non-Hispanic white</strong></td>
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<tr>
<td><strong>Non-Hispanic black</strong></td>
<td>15.5 (14.9, 16.1)</td>
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<tr>
<td><strong>Hispanic</strong></td>
<td>13.2 (12.4, 14.0)</td>
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<tr>
<td></td>
<td>10.1 (9.4, 10.9)</td>
</tr>
</tbody>
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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