

The North Carolina Autism and Developmental Disabilities Monitoring Network

NC-ADDM is part of a national effort to estimate the number of children with autism spectrum disorders (ASD) and intellectual disabilities (ID), funded by the Centers for Disease Control and Prevention (CDC). Our goal is to provide the most accurate data possible on the prevalence of these disorders in order to inform programmatic and fiscal planning to support the education and health of children with these disabilities.

These data also allow us to investigate factors associated with variability in prevalence, monitor prevalence trends over time, and investigate concerns that ASD prevalence is increasing. The data in this report reflect children who were 8 years old in 2010 (born in 2002) in central North Carolina (NC). Counties include Alamance, Caswell, Chatham, Davidson, Durham, Forsyth, Guilford, Orange, Randolph, Rockingham, and Wake.



NC Highlights on the Prevalence of Autism Spectrum Disorders (ASD)

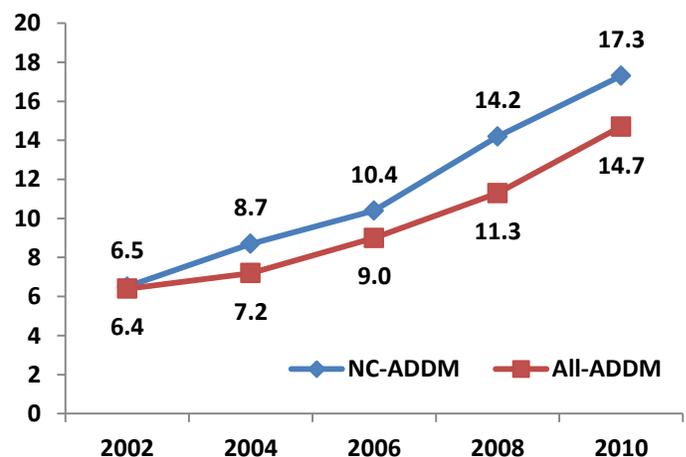
Central NC	All 8 year olds in region No. (% of total)	ASD Prevalence per 1000
All 8 year olds	37,783	17.3
By Race-Ethnicity		
White	53.9%	18.9
Black	25.4%	15.7
Hispanic	15.8%	9.7
Asian-Pacific Islander	4.5%	18.7
American Indian & Alaskan Native	0.3%	*
By Gender		
Boys	49%	28.7
Girls	51%	5.6

**To protect confidentiality, prevalence not reported for small groups*

- In central NC, 655 children were identified with ASD (Autistic Disorder, Asperger Disorder, or Pervasive Developmental Disorder not otherwise specified) from among 37,783* children 8 years of age. (*US census).
- Identification of subgroups with lower prevalence, such as among Hispanic children, pinpoints opportunities for more targeted screening and early intervention efforts.

- The 2010 prevalence of ASD among children born in 2002 in central NC was **17.3 per 1,000 children**, or
 - 1 in 58 children
 - 1 in 35 boys and 1 in 179 girls.
- NC prevalence is slightly higher than, but generally similar to, the estimate of 14.7 per 1,000 (or 1 in 68) children that reflects all 14 sites conducting surveillance under the standardized CDC protocol. The estimates across the 14 sites range from 5.7 per 1,000 to 21.9 per 1,000.

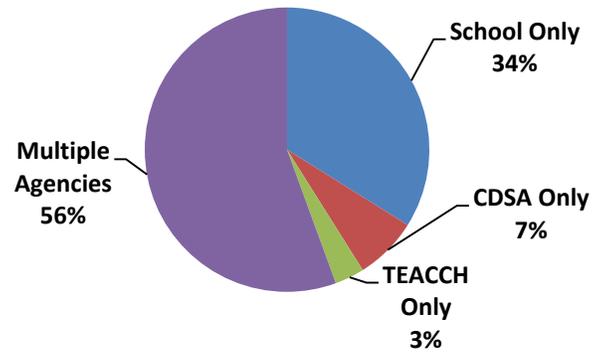
ASD Prevalence per 1000 8-year old Children



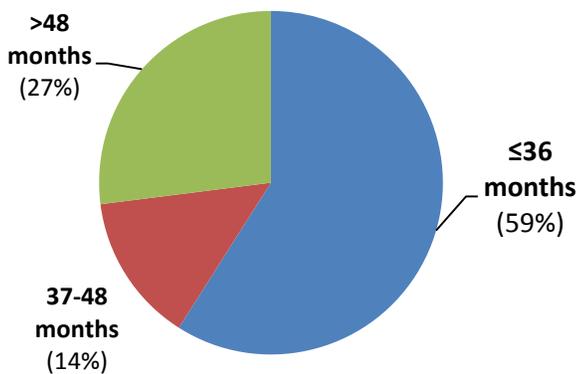
How Children in NC are Identified and Served

- Most children (90%) identified with ASD were previously diagnosed or suspected to have ASD.
- Most children (87%) identified with ASD by NC-ADDM were receiving special education services.
 - Among those receiving special education in school, 66% were receiving services specifically for ASD.
- Because most children are served by more than one agency and under multiple classifications, prevalence estimates for ASD from any single agency considerably underestimate the prevalence of ASD in North Carolina.

Agencies Serving Children with ASD in NC



Age at First Evaluation for Children Identified with ASD



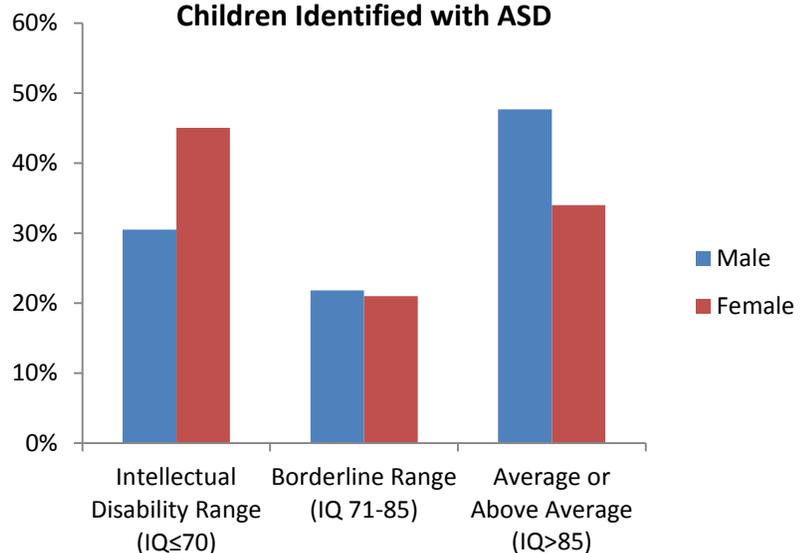
Early Signs of ASD

- DSM-V emphasizes the early identification of deficits in social communication and social interactions, along with restricted interests or repetitive patterns of behavior.
- General development and language delays are often the first signs of concern noted, but the age at which these signs are first documented varies.
- In recent years, documentation concerns about social and imaginative play have become more common, but are usually after 2 years of age.

Intellectual Disability & ASD

- Co-occurrence of intellectual disability differs across gender. Intellectual disability (IQ<70) is more prevalent among girls identified with ASD.
- Out of the children identified with ASD, the prevalence of intellectual disability is 31% for boys and 45% for girls.
- Compared to previous years, a smaller proportion of children identified with ASD fall in the intellectual disability range (IQ < 70).

Intellectual Disability among Children Identified with ASD



In NC, ADDM relies on successful collaboration between the University of North Carolina at Chapel Hill, The Department of Public Instruction, TEACCH Autism Program, Children's Developmental Service Agencies (CDSA), Early Intervention Branch, Women's & Children's Health Section, Division of Public Health, NC Department of Health and Human Services.