Trends in Autism Prevalence Over Time:

Findings from the CDC's 2008 ADDM Network Prevalence Report

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Background

- Autism spectrum disorders (ASDs) are a group of developmental disabilities characterized by impairments in social interaction and communication and by restricted, repetitive, and stereotyped patterns of behavior

- Challenges in tracking the prevalence of ASDs include:
  - Complex nature of the disorders
  - Lack of biologic markers for diagnosis
  - Changes in diagnostic practices over time

Autism and Developmental Disabilities Monitoring (ADDM) Network Sites

⭐ CDC

🟦 Surveillance Year 2008 Sites

ADDM Network Methods

- Multisite, multisource, records-based surveillance methodology

Screening and abstraction of records at multiple data sources in community

↓

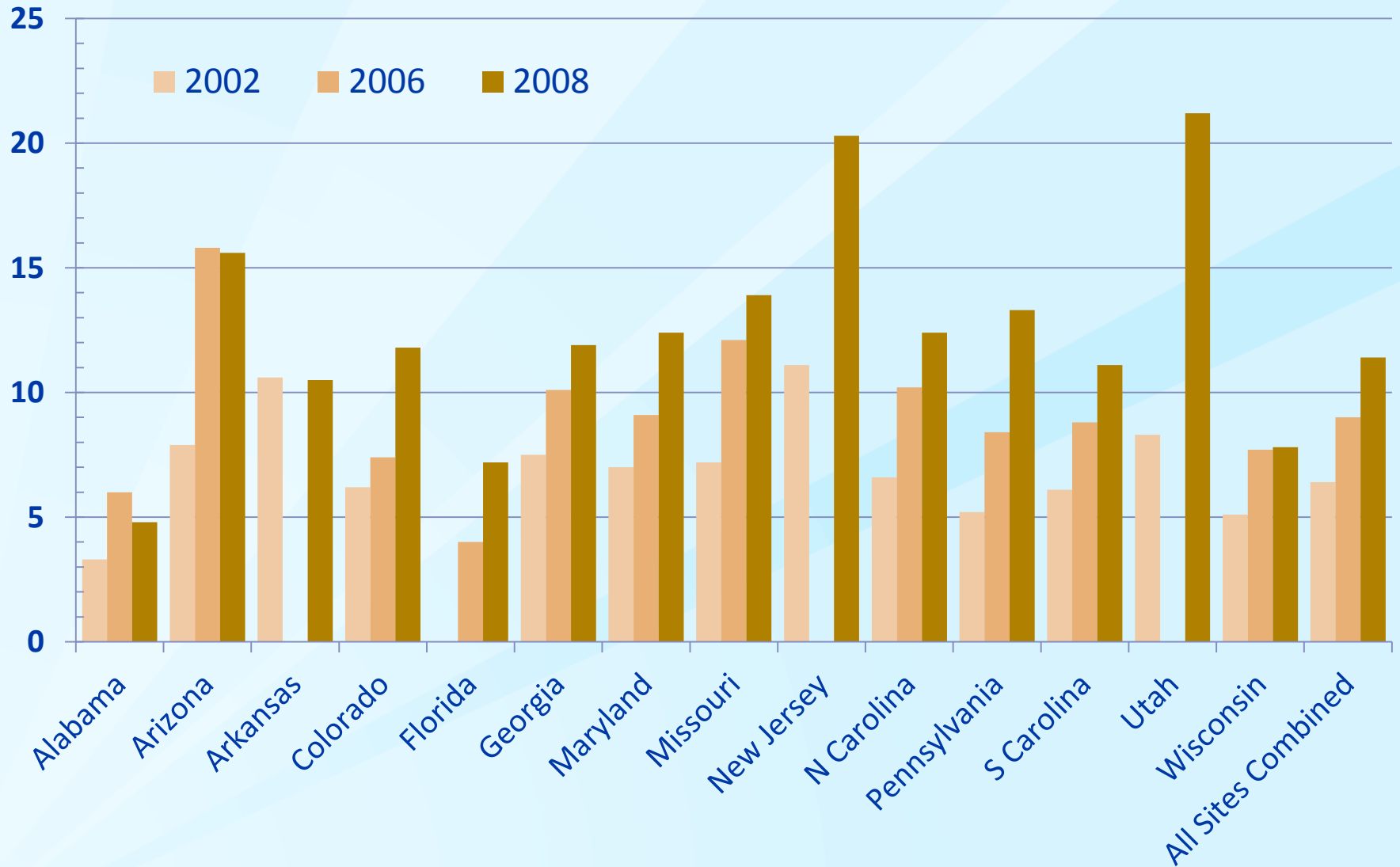All abstracted evaluations reviewed by trained clinicians to determine ASD case status

ADDM Network 2000-2008
Identified Prevalence of ASDs
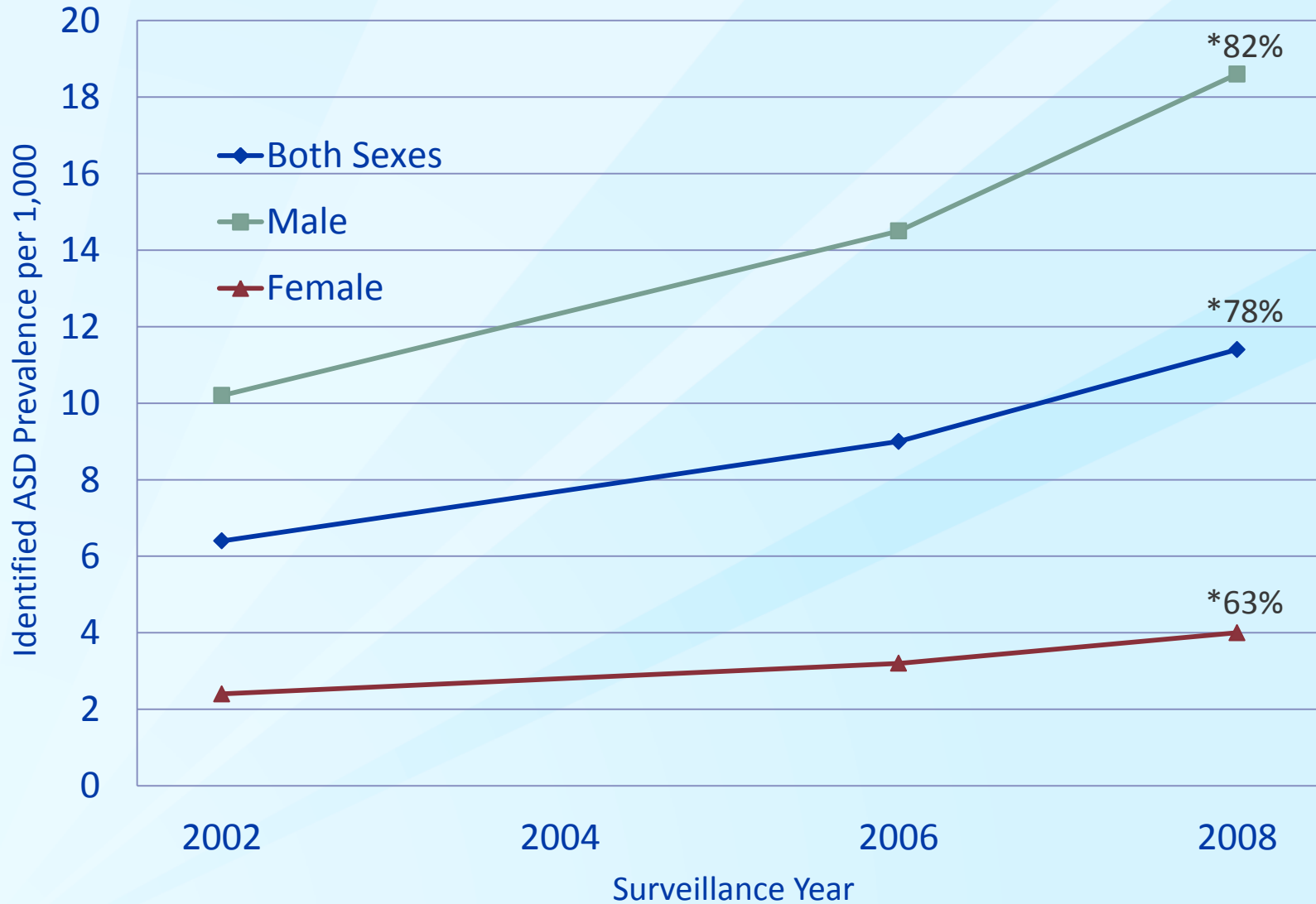### Combining Data from All Sites

Surveillance Year	Birth Year	Number of ADDM Sites Reporting	Prevalence per 1,000 Children (Range)	About 1 in X Children...
2000	1992	6	6.7 (4.5-9.9)	1 in 150
2002	1994	14	6.6 (3.3-10.6)	1 in 150
2004	1996	8	8.0 (4.6-9.8)	1 in 125
2006	1998	11	9.0 (4.2-12.1)	1 in 110
2008	2000	14	11.3 (4.8-21.2)	1 in 88

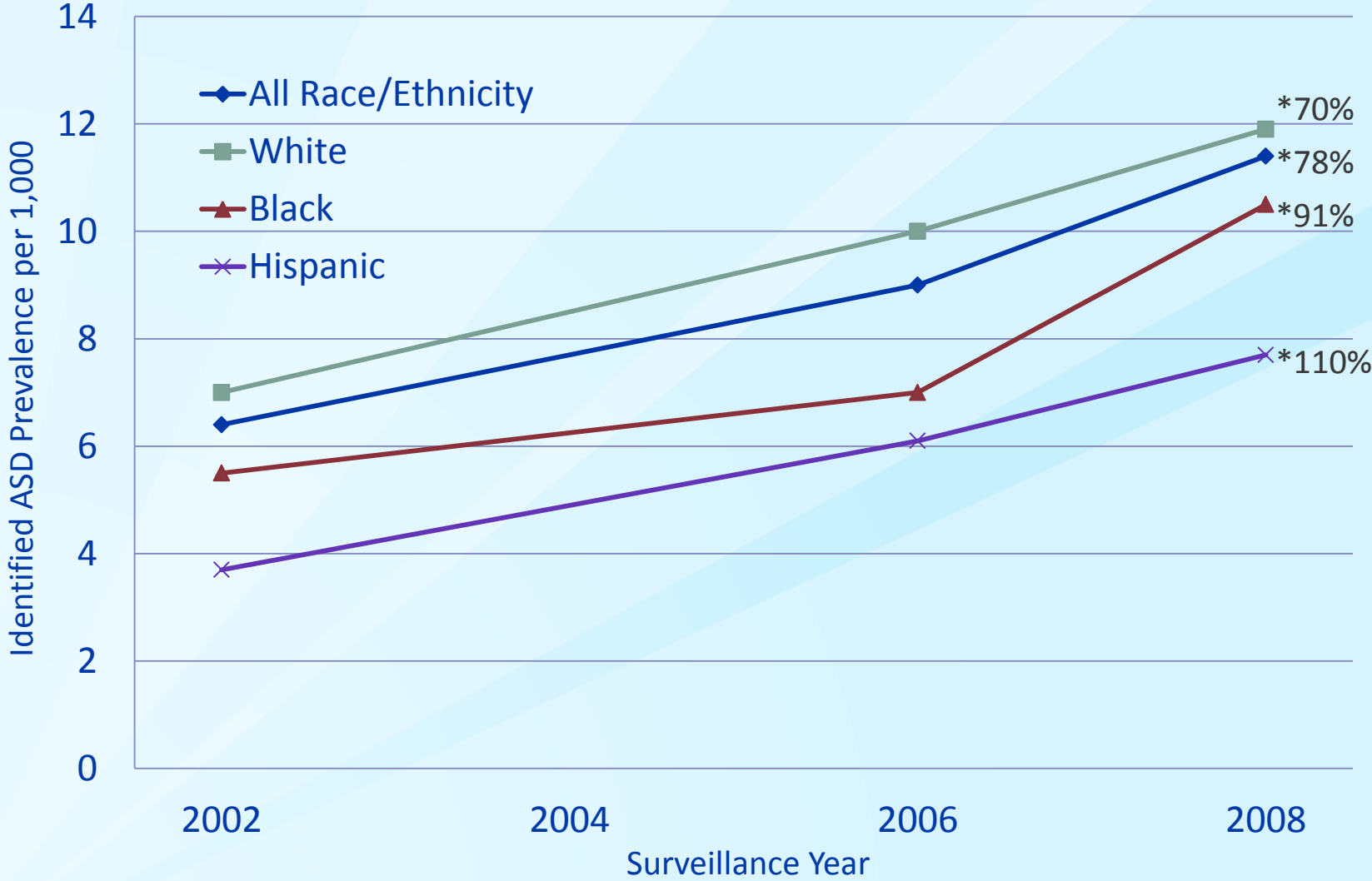Change in Identified ASD Prevalence Among ADDM Sites

Change in Identified ASD Prevalence by Sex
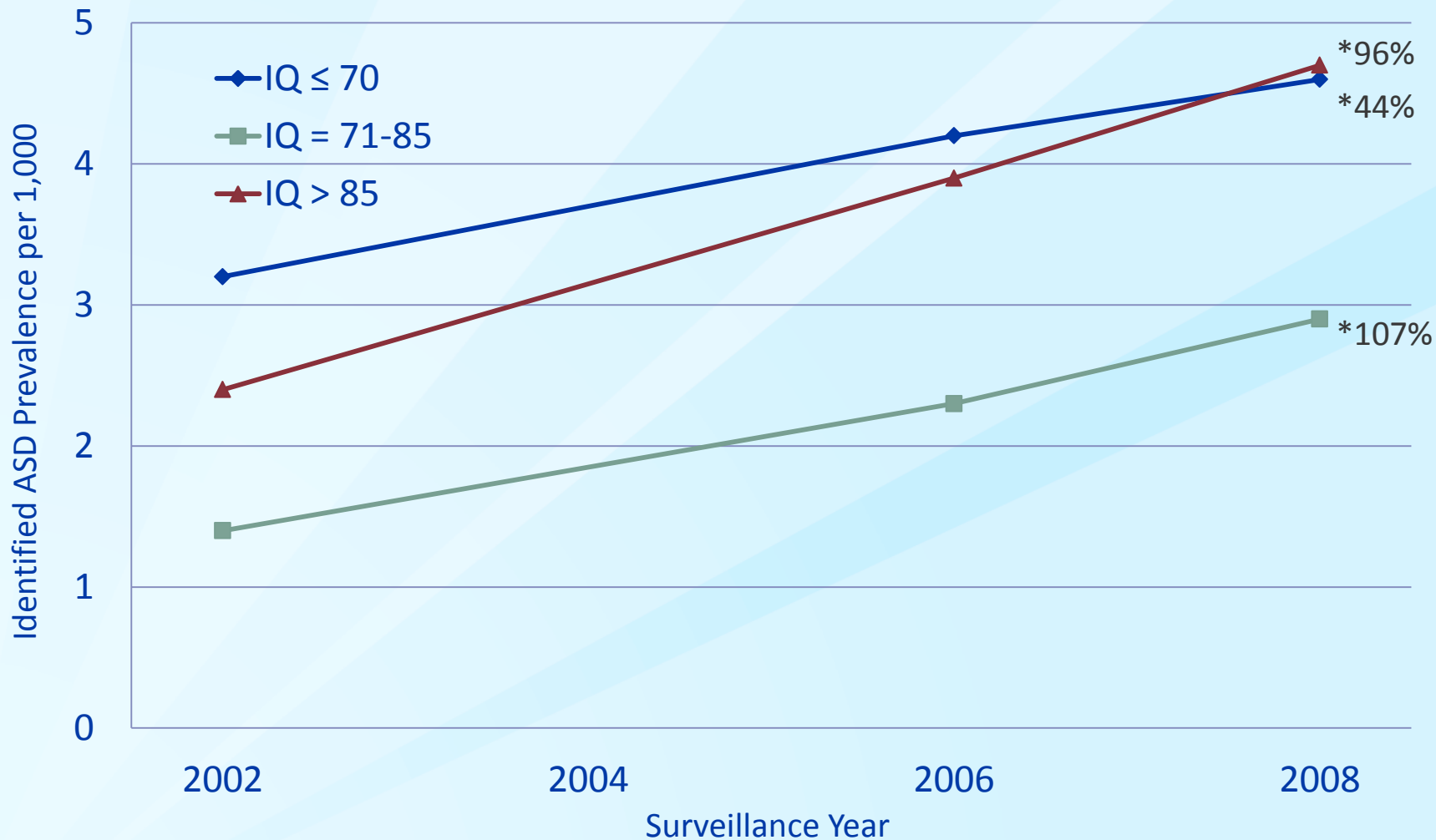(*Percent change in 13 sites completing both 2002 & 2008 surveillance years)

Change in Identified ASD Prevalence by Race/Ethnicity
(*Percent change in 13 sites completing both 2002 & 2008 surveillance years)

Identified ASD Prevalence per 1,000

- ◆ All Race/Ethnicity
- ■ White
- ▲ Black
- ✕ Hispanic

*70%
*78%
*91%
*110%

Surveillance Year

Change in Identified ASD Prevalence by Intellectual Ability[+]

(*Percent change in 7 sites[+] completing both 2002 & 2008 surveillance years)

Y-axis: Identified ASD Prevalence per 1,000

X-axis: Surveillance Year

Legend:
- IQ ≤ 70
- IQ = 71-85
- IQ > 85

*96%
*44%
*107%

[+]Includes sites having information on intellectual ability available for at least 70% of children who met the ASD case definition

Change in Proportion of Children with Previously Documented ASD Classification

(Combining data from 10 sites completing 2002, 2006 and 2008 surveillance years)

Surveillance Year	2002	2006	2008
% with Previously Documented ASD Classification	72%	77%	79%

- Proportion of children meeting the ASD surveillance case definition with a documented ASD classification in their records increased over time in 7 of 10 sites completing all three surveillance years

Earliest Known ASD Diagnosis
Median Age and Proportion by Diagnostic Subtype
ADDM Network, 2008

(Combining data from 14 sites completing 2008 surveillance year)

Subtype of Earliest Diagnosis:	Autistic Disorder	ASD/PDD	Asperger Disorder
Distribution of Subtypes:	44%	47%	9%
Median Age of Earliest Diagnosis:	48 Months	53 Months	75 Months

Limitations:
1) Diagnostic information obtained from evaluation records may not capture the exact age of each child's earliest diagnosis
2) Instability of diagnostic subtypes over time

Summary of Findings

- Identified prevalence of ASDs continues to rise in most ADDM Network communities.

- Combining data from all sites:
  - **1 in 88** eight-year-old children identified with an ASD
    - 23% increase, 2006-2008
    - 78% increase, 2002-2008
  - Rate of increase higher among Hispanic children, black children, and children without intellectual disability

- Identified prevalence of ASDs varies widely
  - 1) across sites,
  - 2) by sex,
  - 3) by race/ethnicity

Thank You!

For more information, please contact

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