

Higher Than Expected ASD Prevalence in Toms River, New Jersey in 2016

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Background

Though accurate information about the prevalence and expression of Autism Spectrum Disorder (ASD) may be useful for planning educational and health services, there is scant information from population-based studies on the prevalence and expression of ASD at the county or local level. ASD prevalence in the New Jersey was 3.1%, nearly double the Autism and Developmental Disabilities Monitoring (ADDM) Network average, during the most recent monitoring period.

Setting: Toms River, NJ

Toms River is sprawling suburban town (total population 92,000) 70 miles south of New York City & 55 miles east of Philadelphia. Toms River is NJ's largest suburban school district with approximately 15,000 students.

Objective

Our objective was to provide reliable, population-based, information on ASD prevalence at the school district level in the New Jersey ADDM surveillance region, leading to identification of districts with higher-than-expected and lower-than-expected ASD prevalence.

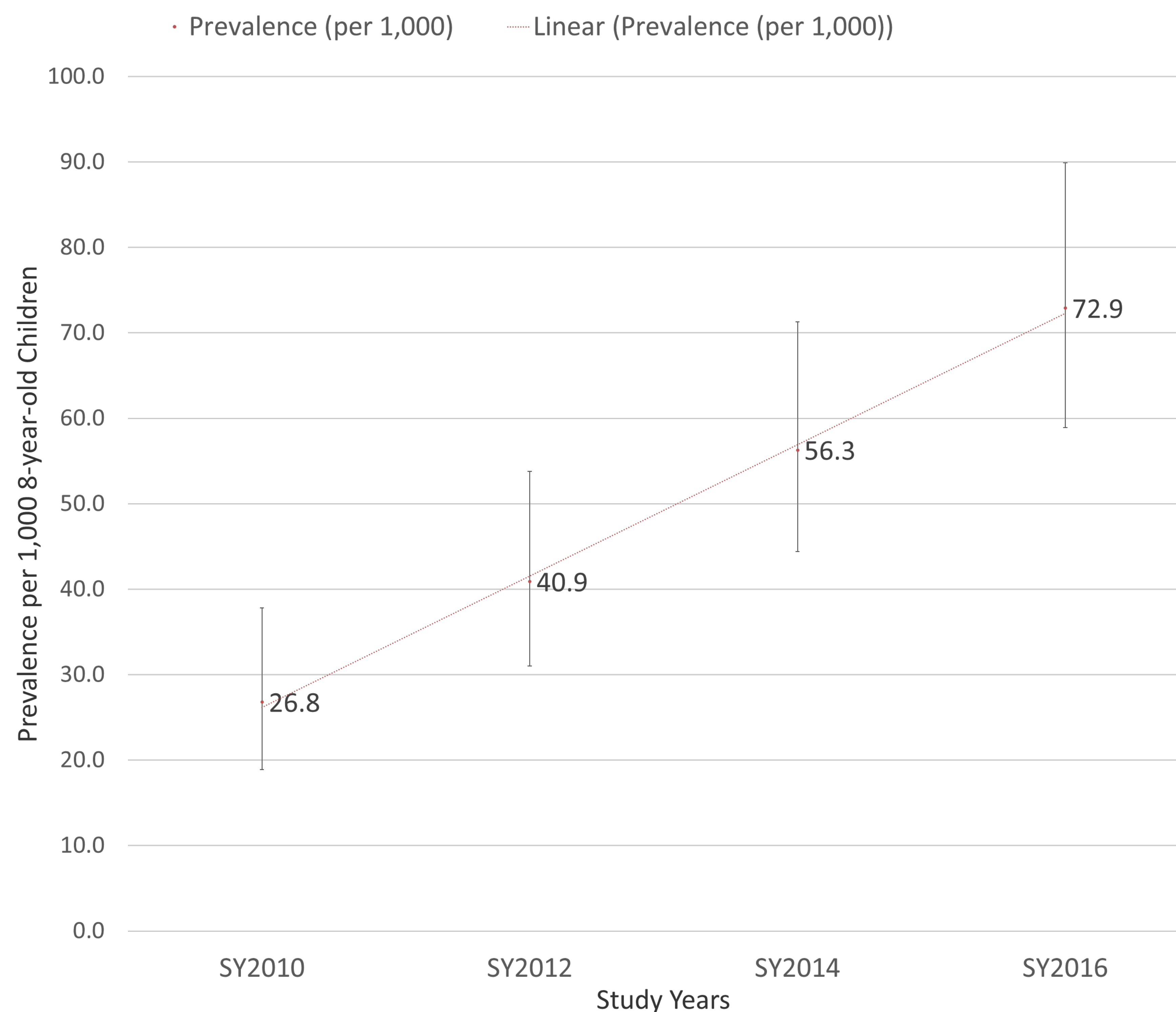
Methods

A cross-sectional study was implemented using data from the 2016 New Jersey surveillance site - a multiple source public health monitoring system that analyzes data from educational and health care sources to determine the number of 8-year-old children with ASD in defined populations. In this study, ASD cases were restricted to include children in public education, in 2016. District level denominators were based on public school enrollment data. Wilson score method was used to calculate 95% confidence intervals.

Results

ASD prevalence across 74 New Jersey districts ranged from 0 to 10.8%. Average prevalence was 3.6%. More than a quarter of the districts had ASD prevalence greater than 4%, including 3 of the 4 largest school districts. Highest ASD prevalence was identified in Toms River, wherein 78 children served by the public school system were identified with ASD (7.3%; 95% CI: 5.9-9.0). Most were boys (n= 66; 85%), from White (Non-Hispanic) (n=60; 77%), middle income families (median household income range \$45,000-\$100,000) (n=70; 90%). Most were born in New Jersey (n=65; 83%). Eighty-eight percent (n=53) with cognitive testing data had a documented Intellectual Quotient (IQ) above 70. Most of the Toms River ASD-confirmed students (n=68; 87%) received special education services during 2016, including (n=29) 38% under an Autism classification, 20% (n=5) under Other Health Impaired and 9% (n=7) under Multiply Disabled classifications. Approximately 13% (n=10) were in general education or received 504 Plan services (n=3). Thirty-seven percent (n=29) of the Toms River ASD-confirmed cases received professional evaluation before 36-months and 45% (n=35) were diagnosed with ASD by 48-months, even though 80% (n=62) had indication of delays before 36 months.

ASD Prevalence: Toms River, New Jersey 2010-2016



Conclusion

ASD prevalence in many areas and districts may be higher than indicated by aggregate (state or system-level) estimates. Approximately one in four New Jersey school districts had ASD prevalence greater than 4%, in 2016. In Toms River, New Jersey's largest suburban public school district, 1-in-14 8-year-olds was identified with ASD (7.4%). Higher-than-expected rates of ASD in Toms River and other New Jersey school districts point to the importance of utilizing local-level population-based ASD estimates for the development of strategies to meet the needs of children with ASD and to determine the future needs of adults with ASD. Additional inquiry is needed to identify the factors responsible for higher-than-expected ASD prevalence in New Jersey. Ongoing ASD surveillance by the same method, going forward, is recommended.

Acknowledgement

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