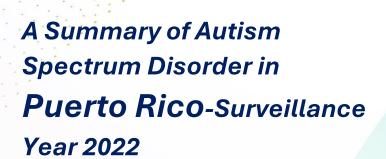
# DEPARTMENT OF HEALTH

SECRETARIAT FOR SURVEILLANCE AND PROTECTION OF PUBLIC HEALTH

DIVISION OF EPIDEMIOLOGY AND RESEARCH



Autism and Developmental Disabilities Monitoring Network-Puerto Rico (ADDM Network-Puerto Rico)

April 2025



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ADDM Network-PR uses a record review method. This summary is based on the analysis of data collected from the health and special education records of children who were 8 or 4 years old and living in 32 municipalities in north, east, south, and central regions of Puerto Rico in 2022.

<u>Reference</u>: Shaw KA, Williams S, Patrick ME, et al. Prevalence and Early Identification of Autism Spectrum Disorder Among Children Aged 4 and 8 Years — Autism and Developmental Disabilities Monitoring Network, 16 Sites, United States, 2022. MMWR Surveill Summ 2025;74(No. SS-2):1–22. DOI: http://dx.doi.org/10.15585/mmwr.ss7402a1

Male: 50.9% Female: 49.1%

## A Summary of Autism Spectrum Disorder in Puerto Rico

Findings from the Autism and Developmental Disabilities Monitoring Network-Puerto Rico (ADDM Network-PR) help us to understand more about the number of children with autism spectrum disorder (ASD), their characteristics, and the age at which they are first evaluated and diagnosed.

#### Population:

8-year-old children: 17,457

32 contiguous municipalities\*

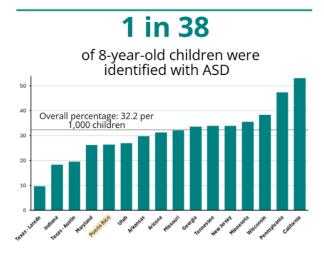
4-year-old children: 12,849 Male: 51.5% Female: 48.5%

\*Aguas Buenas, Aibonito, Barranquitas, Bayamón, Caguas, Canóvanas, Carolina, Cataño, Cayey, Cidra, Coamo, Comerío, Corozal, Dorado, Guaynabo, Gurabo, Jayuya, Juana Díaz, Juncos, Las Piedras, Loíza, Naranjito, Orocovis, Ponce, San Juan, San Lorenzo, Santa Isabel, Toa Alta, Toa Baja, Trujillo Alto, Vega Alta and Villalba.

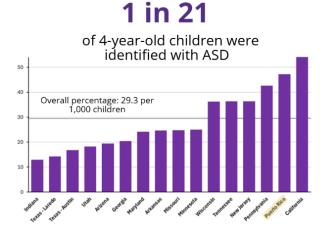
Site tracking area ADDM Network -PR

#### A. ASD PREVALENCE

 About 1 in 38 or 2.6% of 8-year-old children were identified with ASD in 2022. This percentage is lower than the overall percentage identified with ASD (3.2%) in all communities where the ADDM network tracked ASD among 8year-olds in 2022.

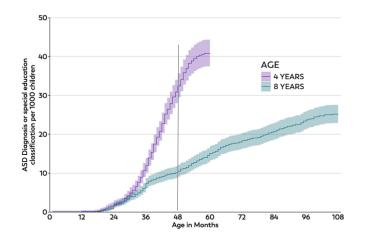


 About 1 in 21 or 4.7% of 4-year-old children were identified with ASD in 2022. This percentage is higher than the overall percentage identified with ASD (2.9%) in all communities where the ADDM network tracked ASD among 4-year-olds in 2022.



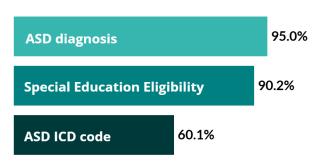
## **B. ASD CUMULATIVE INCIDENCE**

Children who were born in 2018
 (3.3%) were 3 times as likely to receive an ASD diagnosis or ASD special education classification by 48 months of age compared to children who were born in 2014
 (1.1%).



## C. CASE DEFINITION

# 8-year-old children



4. Overall, 95.0% of 8-year-olds who met the ADDM case definition had an ASD diagnosis by a health care provider; 90.2% had autism special education eligibility; and 60.1% had an ASD International Classification of Disease (ICD) code.

#### D. SEX

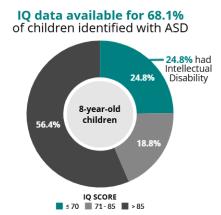
#### 8-year-old children



- 5. 8-year-old boys were 3.2 times as likely to be identified with ASD as girls.
- 6. 4-year-old boys were 3.4 times as likely to be identified with ASD as girls.

#### E. INTELLECTUAL DISABILITY AND ASD

7. Intelligence quotient (IQ) data were available for 68.1% of 8-year-old children identified with ASD. Among the children identified with ASD by PR-ADDM, 24.8% had intellectual disability. Intellectual disability is defined as IQ score equal to or less than 70.



## What are the key take-away messages from Puerto Rico data?

- Higher ASD prevalence and cumulative incidence in the 4-year cohort indicates significant
  improvement in early identification of ASD. The percentage of 4-year-old children identified
  with ASD is higher than the overall ADDM network and the other network sites except for
  California.
- Co-occurring intellectual disability in the 8-year-old cohort who had data on cognitive ability was lower than the overall ADDM network percentage and the other network sites. Over half of the 8-year-old children were classified in the average or higher range. Only a quarter were classified as having intellectual disability.
- The percentage of boys identified with ASD is higher than the percentage of girls. This is consistent with the overall ADDM network prevalence ratio for the 8-year-old cohort but higher for the 4-year-old cohort.

# Importance of these findings:

- Advancement in early identification and diagnosis of ASD plays a crucial role in providing timely intervention and support, significantly improving the long-term outcomes for affected children and their families.
- ASD without intellectual disability is more common than previously reported. In the past, it
  was thought that more than half of autistic children had intellectual disability or
  developmental delay.
- The ASD gender (male to female) gap is narrower than previously reported.

#### These data can be used to:

- Raise awareness of increasing ASD prevalence.
- Promote ASD early identification and diagnosis.
- Identify gender differences and co-occurring conditions' trends and patterns among children diagnosed with ASD.
- Inform public policy and allocate resources to develop effective interventions and support systems for children with ASD and their families.

## How can partners use these data?

- Support initiatives to continue advancing the early identification and diagnosis of ASD.
- Planning to ensure service providers and families are equipped to effectively care for, support, educate, or work with individuals with ASD from early childhood to young adulthood.
- Inform higher education programs about the need of professionals to meet the demand for ASD services.

# Why is partnership with the ADDM Network-Puerto Rico important?

Partnership fosters a network of information-sharing and cooperation, integrating diverse datasets while ensuring compliance with privacy laws, to fulfill the potential of data to improve the lives of individuals with ASD and their families.

## **Quote from community partner:**

"These data are essential to define the ASD burden [in Puerto Rico] and determine the needs of our population to better help children reach their optimal development and fulfill their potential. This effort sets the stage for wide-ranging action to benefit hundreds of children in Puerto Rico and their families. In addition [...] it will help advance existing research directed to improving developmental outcomes among children with ASD and fostering new investigations."

#### GREDIA HUERTA-MONTAÑEZ, MD, FAAP

Puerto Rico American Academy of Pediatrics Chapter (PR-AAP)

#### Webpage with publications and community resources:

https://www.salud.pr.gov/vigilancia\_autismo

Adapted from: ADDM NETWORK SITE SNAPSHOTS | Puerto Rico