

Joint Statement of the National Society of Genetic Counselors (NSGC), the American Society of Human Genetics (ASHG), the American College of Medical Genetics and Genomics (ACMG)

Autism is a neurodevelopmental condition affecting approximately 1 in 31 children (3.2%) and approximately 2.2% of adults.^{1,2}

Research shows that genetic factors significantly contribute to autism; hundreds of genes and chromosomal variations are known to increase the likelihood of autism.³

Advances in genetic testing – such as genome sequencing – and large-scale collaborative genomic studies have improved the ability to identify likely genetic causes, which can allow early intervention for associated medical conditions to improve outcomes.^{4,5}

¹ Shaw, K. A., Williams, S., Patrick, M. E., et al. (2025). 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 Surveillance Summaries*, 74(SS-2), 1–22. <https://doi.org/10.15585/mmwr.ss7402a1>

² Dietz, P. M., Rose, C. E., McArthur, D., & Maenner, M. (2020). National and state estimates of adults with autism spectrum disorder. *Journal of Autism and Developmental Disorders*, 50(12), 4258–4266. <https://doi.org/10.1007/s10803-020-04494-4>

³ Kim, S. W., & An, J. Y. (2025). Advancing precision diagnosis in autism: Insights from large-scale genomic studies. *Molecules and cells*, 48(8), 100248. <https://doi.org/10.1016/j.mocell.2025.100248>

⁴ Specchio, N., Di Micco, V., Aronica, E., et al. (2025). The epilepsy-autism phenotype associated with developmental and epileptic encephalopathies: New mechanism-based therapeutic options. *Epilepsia*, 66(4), 970–987. <https://doi.org/10.1111/epi.18209>

⁵ Stafford, C. F., & Sanchez-Lara, P. A. (2022). Impact of Genetic and Genomic Testing on the Clinical Management of Patients with Autism Spectrum Disorder. *Genes*, 13(4), 585. <https://doi.org/10.3390/genes13040585>