

# 2020 SUMMARY OF ADVANCES

## *in Autism Research*



The Interagency Autism Coordinating Committee (IACC) is a group that provides advice to the Secretary of Health and Human Services. The IACC includes federal agency representatives and members of the public. They voted for the top 20 most significant autism research advances published in 2020. The articles are divided into categories that correspond to categories in the *IACC Strategic Plan*. This is an easy-read version that has short summaries of each research article. The full publication is available here: <https://iacc.hhs.gov/publications/summary-of-advances/2020/>.

## SCREENING AND DIAGNOSIS

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- Most children in the U.S. are screened for autism, but disparities persist and implementation of screening across medical practices remains inconsistent. [[LINK](#)]
- African American children on the spectrum experience delays in diagnosis and have a greater chance of being identified with an intellectual disability. [[LINK](#)]
- The Developmental Check-In is a new picture-based autism screening tool that can help to identify autism in children of parents with low literacy levels. [[LINK](#)]

## BIOLOGY

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- Infants who develop autism are more likely to have sleep challenges in the first year of life and show differences in brain development. [[LINK](#)]
- Improvement in IQ does not consistently reduce challenges face by children on the autism spectrum, but mainstream school attendance is associated with better outcomes. [[LINK](#)]

## GENETIC AND ENVIRONMENTAL FACTORS

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- Patterns of inheritance through the female and male parents of people with autism do not support the hypothesis of a “female protective effect.” [[LINK](#)]
- A large-scale genetic sequencing study identified 102 autism-related genes involved in early brain development. [[LINK](#)]



## INTERVENTIONS

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- Parents of children with autism can be effectively trained with telehealth support to increase functional communication and reduce challenging behaviors. [\[LINK\]](#)
- While 15-25 hours of high-quality early behavioral/social skills intervention has been shown to have benefits for children on the autism spectrum, there is little evidence that more than 25 hours per week of early intervention leads to better outcomes. [\[LINK\]](#)
- An analysis of research describing seven types of early interventions for children with autism summarizes their benefits and limitations and provides recommendations for more research. [\[LINK\]](#)
- Cognitive behavioral therapy helps reduce anxiety in children and youth with autism, especially when the therapy is specifically adapted for autism. [\[LINK\]](#)

## SERVICES AND SUPPORTS

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- Disparities in dual eligibility for Medicaid and Medicare benefits across race and ethnicity in autistic adults contribute to disparities in access to services. [\[LINK\]](#)
- Racial and ethnic disparities persist in Medicaid enrollment and use of services for children with autism. [\[LINK\]](#)
- Project SEARCH is a promising intervention program to improve employment outcomes for young adults on the autism spectrum. [\[LINK\]](#)

## LIFESPAN

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- Autistic individuals who belong to sexual and gender minority groups report higher rates of unmet health care needs and negative experiences with providers. [\[LINK\]](#)
- Young adults on the autism spectrum are three times more likely to have an anxiety disorder than non-autistic adults. [\[LINK\]](#)

## RESEARCH INFRASTRUCTURE AND PREVALENCE

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- An estimated 1 in 45 adults in the United States have autism, indicating a critical need for diagnostic tools and services for adults. [\[LINK\]](#)
- Autistic adults older than 65 years have higher rates of nearly all health conditions that typically affect older adults, indicating a need for more supports and services. [\[LINK\]](#)
- CDC data from 2016 estimates that 1 in 54 eight-year-old children are diagnosed with autism. [\[LINK\]](#)
- CDC data from 2016 estimates that 1 in 64 four-year-old children are diagnosed with autism, showing improvements in early identification and evaluation for autism. [\[LINK\]](#)