

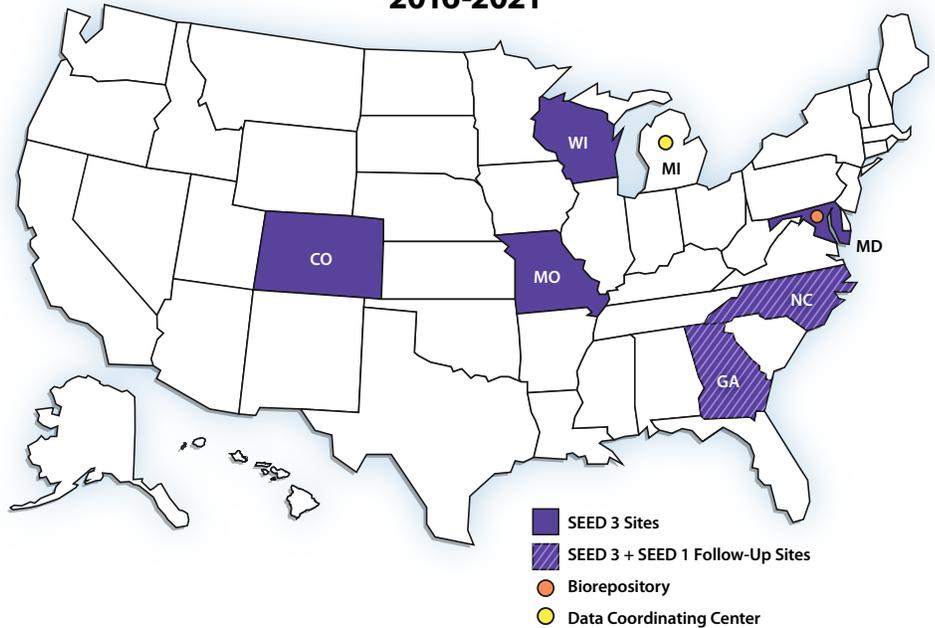
# CDC's Study to Explore Early Development

## Did you know?

- CDC estimates that 1 in 68 children has been identified with ASD based on tracking in multiple areas of the U.S.
- Almost half of children identified with ASD have average or above average intellectual ability; over a decade ago, a third of children identified with ASD had average or above average intellectual ability.
- ASD occurs among all racial, ethnic, and socioeconomic groups. However, white children are still more likely to be identified with ASD than black or Hispanic children.
- Boys are about 4.5 times more likely to be identified with ASD than girls.
- Most children with ASD are diagnosed after age 4, even though ASD can be diagnosed as early as age 2.

The Study to Explore Early Development (SEED) is a multi-year, multisite study in six diverse areas in the United States. Read this fact sheet to learn about how SEED, one of the largest studies of its kind, will help identify factors that might put children at risk for autism spectrum disorder (ASD).

## CDC-funded Study to Explore Early Development (SEED) Sites, 2016-2021



## Overview

- SEED continues to invite children, ages 2 through 5 years, and their parents into the study. Thousands of families have participated. It is one of the largest studies of ASD in the United States.
- There are three study groups in SEED: 1) children with ASD, 2) children with their developmental disabilities, and 3) children without developmental disabilities.
- SEED collects in-depth information from participants to answer questions about many factors that might put children at risk for ASD, including genetic, environmental, pregnancy, and behavioral factors.



## Building the Public Health Infrastructure for Autism Spectrum Disorder (ASD)

To better characterize factors that put children at risk for ASD, the Children's Health Act of 2000 authorized CDC to create regional centers of excellence for autism and other developmental disabilities. These centers make up the Centers for Autism and Developmental Disabilities Research and Epidemiology (CADDRE) Network. Currently, the CADDRE Network is working on the Study to Explore Early Development (SEED). The SEED research study sites are located in Colorado, Georgia, Maryland, Missouri, North Carolina, and Wisconsin. The Data Coordinating Center is in Michigan and it is responsible for data information systems and technology. CADDRE also supports a laboratory at the Maryland SEED site where SEED biological samples are processed and stored.



### Research Goals for SEED

- **Physical and behavioral characteristics of children with ASD, children with other developmental disabilities, and children without a developmental delay or disability**

ASD is complex. CDC wants to learn more about children with ASD—how they behave, grow, think, and interact with the world around them. We also want to know the same things about children with other developmental disabilities and those with typical development.

- **Health conditions among children with ASD, children with other developmental disabilities, and children with typical development**

SEED provides an opportunity to compare health conditions and health-related issues (such as sleeping and eating patterns) among children with ASD, among children with other developmental disabilities, and among children without a developmental delay or disability.

- **Factors that might affect a child's risk for ASD**

We hope that SEED will give us a better idea which of the many possible factors that we will be evaluating seem to be associated with or related to ASD. The factors might be related, for example, to genes, health conditions, experiences of the mother during pregnancy, or the health and development of the child during infancy and the first few years of life.

### Moving Forward

CDC will continue tracking the changing number and characteristics of children with ASD, researching what puts children at risk for ASD, and promoting early identification, the most powerful tool we have now for making a difference in the lives of children.

#### Learn More

The Study to Explore Early Development. Please visit: [www.cdc.gov/seed](http://www.cdc.gov/seed)

The Autism and Developmental Disabilities Monitoring Network. Please visit: [www.cdc.gov/addm](http://www.cdc.gov/addm)

The Learn the Signs. Act Early. Campaign. Please visit: [www.cdc.gov/actearly](http://www.cdc.gov/actearly)

#### National Center on Birth Defects and Developmental Disabilities

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