

Autism Spectrum Disorder Overview

Autism spectrum disorder (ASD) is a lifelong, neurodevelopmental disorder that may cause social, communication, and behavioral challenges. The Minnesota Department of Health is committed to continuing to provide essential data on ASD and develop resources to help to identify individuals with ASD as early as possible.

What is ASD?

ASD is a [neurodevelopmental disorder](#), something that occurs in the early formation of the brain. There is usually nothing about how a person with ASD looks that sets them apart from other people, but they may communicate, interact, behave, and learn in ways that are different from most people.

The word "spectrum" in ASD means that no two individuals with ASD are the same. The strengths and support needs of autistic individuals range in areas like sensory processing and communication. It is estimated that one third of autistic individuals are nonverbal and one third have an intellectual disability.

In the United States, [1 in 59](#) children were identified with ASD, according to the latest estimates. Boys are 4 times more likely to be identified with ASD than girls. ASD occurs in all racial, ethnic and socioeconomic groups.

Causes of ASD

Scientists are still learning about the biology of ASD. Research suggests that there is no single cause of ASD, but there are likely multiple different factors that may make a child more likely to have autism across the spectrum. Most scientists believe genes play an important role, with other external factors also contributing to the likelihood of having ASD. Additionally, many studies have looked into whether there is a relationship between vaccinations (and their ingredients) and ASD. To date, these studies continue to show there is **not** a relationship between autism and vaccines.

Importance of early diagnosis

People with ASD can live fulfilling lives. Children do not "outgrow" ASD, but studies show that early diagnosis and individualized supports lead to significantly improved outcomes in the long-term. It is important to [learn the signs and act early](#). The earlier you get support, the better for your child.

What are the signs of autism spectrum disorder?

[Social differences](#)

- Resists snuggling when picked up; arches back instead
- Makes little or no eye contact
- Shows no or less expression in response to parent's smile
- Less likely to bring objects to show to parents just to share his interest
- Less likely to show appropriate facial expressions
- Difficulty in recognizing what others might be thinking or feeling by looking at their facial expressions

[Communication differences](#)

- Says no single words by 15 months or 2-word phrases by 24 months
- Responds to sounds (like a car horn) but less likely to respond to name being called
- May refer to self as "you" and others as "I"
- Shows no or less interest in communicating
- Less likely to start or continue a conversation
- Less likely to use toys or other objects to represent people or real life in pretend play
- May have a good rote memory, especially for numbers, songs, TV jingles, or a specific topic

[Behavioral differences](#)

- May rock, spin, sway, twirl fingers, or flap hands
- Likes routines, order and rituals
- May be interested in only a few activities, doing them repeatedly during the day

- More likely to play with parts of toys instead of the whole toy (for example, spinning wheels of a toy truck)
- May not cry if in pain or seem to have any fear
- May be very sensitive or not sensitive at all to smells, sounds, lights, textures, and touch

Next Steps: Diagnosis

A medical diagnosis will more specifically determine a child's disabilities and therefore his or her need for and access to services, as well as ensure that the child's primary and other health care needs are addressed. A medical evaluation may be necessary to receive services through medical insurance or to access other funding resources such as, but not limited to: Medical Assistance (MA/TEFRA), Supplemental Security Income (SSI), or county case management. A medical diagnosis is most often assigned by a psychologist or physician who specializes in children with developmental differences.

A school evaluation is required to determine eligibility for school district special education and related services. The evaluation is completed by a team of professionals and helps to identify a child's strengths, learning style, and areas of need. If a child meets criteria for school district services, the educational team will meet with parents to develop an educational plan for the child.

Either a medical diagnosis or school evaluation may lead to recommendations for a broad range of interventions; for example, referrals to medical specialists, neurologists, private rehabilitation services, county social services, financial support, family support and family guidance or therapy.

It is important to [learn the signs and act early](#). The earlier you get help, the better for your child.

Comprehensive Care

There is no cure for autism; however, certain supports and therapies can greatly improve your child's opportunities to do well in life.

A health care home, also known as a medical home, is an approach to health care in which primary care providers, families, and patients work in partnership to improve health outcomes and quality of life. A team of health professionals work together with patients and families to provide the best care. A care coordinator will make sure that all providers, including specialists, share needed information about patients' health through patient tracking and care plans. Comprehensive care includes preventive, acute and chronic care. Care coordinators help patients manage their care.