

AUTISM SPECTRUM DISORDERS



What is Autism Spectrum Disorder (ASD)?

Autism spectrum disorders include a continuum of developmental disorders of the brain. Children with ASD have impairments in social development, difficulties with verbal and non-verbal communication, and repetitive or stereotyped behaviors and interests. Some children with ASD have intellectual disability. Every child with ASD exhibits a unique combination of symptoms, ranging from mild to severe, prompting experts to recommend use of the term Autism Spectrum Disorder (ASD) to describe this population. Children previously diagnosed with classic autism, Asperger's syndrome, and PDD-NOS are all on the autism spectrum.

What are the common signs and symptoms of ASD?

Communication difficulties: Speech delay is very common in children with ASD. Atypical speech patterns, including repetitive speech, "echoing" other people, a formal or awkward speech style, and unusual cadence, pitch, or rhythm of speech are all characteristic. In severe cases, children are non-verbal.

Social challenges: Children with ASD often have difficulty relating to and interacting with other people. Poor eye contact is common. Difficulty interpreting social cues, like facial expressions and hand gestures, is also typical. Children with ASD often prefer to be alone, and can have difficulty expressing their feelings and showing affection.

Repetitive behaviors: Examples would include hand-flapping, spinning, ordering and arranging objects, pacing, and repeating words or phrases.

Restricted range of interests: This refers to a preoccupation or obsession with a certain interest, such as an everyday object (trains, doors, fans, etc.), or an unusual depth of knowledge in a certain subject area (television show, science topic, math abilities). Children with ASD often require a very controlled and predictable environment, and become anxious when routine is disrupted.

What causes ASD?

There is no one single cause of autism, just as there is not a single type of autism. Research indicates that both

genetics and environmental factors play a role. Several genes associated with autism have been identified and family studies suggest that autism can be inherited. Researchers have also found differences in brain chemistry and function in children with autism. While the complex causes of autism aren't completely understood, it is likely that genetic risk factors and environmental stressors combine to affect fetal brain development, resulting in ASD. More research is needed to fully answer this question.

How common is ASD?

Research indicates that somewhere around 1 out of 100 children has ASD. It is more common in boys than girls. In the US, an estimated 1 in every 54 boys has autism and 1 in every 245 girls. Autism occurs in individuals of all races and ethnicities, across the world.

How is ASD diagnosed?

There is no single test or diagnostic study for autism, although your neurologist may order blood work, brain imaging, or genetic studies to rule out other conditions. Often, history and observation are enough to make the diagnosis. Children must meet certain established diagnostic criteria to be diagnosed with ASD. Sometimes the diagnosis is made easily, and in other cases, a child may need more extensive evaluation and screening with a variety of professionals.

Is there a cure? How is ASD treated?

There is no cure for ASD, although symptoms can improve over time. ASD is managed using behavioral therapy, speech and occupational therapy, parent training, and school interventions. Medications can be used to treat problems like anxiety, irritability, hyperactivity, and aggression that are common in children with ASD. A specific diet or supplement regimen is not supported by current medical evidence. Children with ASD may have other conditions, including seizures, ADHD, learning disabilities, or tics that require medical treatment, educational interventions, or other therapies.

References and Resources

<http://www.autismspeaks.org/what-autism>

http://www.ninds.nih.gov/disorders/autism/detail_autism.htm

