

# What is autism spectrum disorder (ASD)?

## The discovery of autism

Autism is a lifelong developmental disorder that appears in children before the age of 3. It was first described in 1943 by psychiatrist Leo Kanner, who published an article about a group of children who struggled to relate and communicate with others and displayed an “insistence on sameness” in their daily routines. A year later, pediatrician Hans Asperger published a study about children with similar behaviors but stronger language skills.

## From autism to autism spectrum disorder (ASD)

In recent decades, the medical community introduced the term “autism spectrum disorder” (ASD) to better reflect the wide variability found in children with autism. Doctors have learned that symptoms can range from mild to severe. In turn, the need for care and treatment can vary greatly. For example, a child with no verbal communication can require a very different intervention than a child who learns to speak on schedule.

Today, the ASD category includes three main diagnostic classifications:

- Autistic disorder (or “classic” autism)
- Asperger syndrome
- Pervasive developmental disorder - not otherwise specified (PDD-NOS) (sometimes referred to as “atypical autism”)

Children with autistic disorder display impaired social interaction, impaired communication, and restricted, repetitive behavior.

Children with Asperger syndrome share all of these characteristics with the exception of impaired communication. Quite the opposite, in the area of language abilities, they show no significant delays, and, in fact, may be highly verbal—although speech may center on very limited topics of interest.

Lastly, PDD-NOS is the diagnosis for children who do not meet the full criteria for autism or Asperger syndrome but have severe problems with social interaction associated with language deficiencies or restricted, repetitive behavior.

## Primary symptoms of ASD

As you can see, the cornerstone of ASD is a pronounced difficulty with social interaction. Some of the main characteristics of this difficulty include:

- Poor eye contact
- Limited interactive play
- Difficulty making friends
- Lack of awareness of others
- Abnormal facial expressions
- An aloof or withdrawn manner
- Failure to respond to one’s name
- Tendency to isolate from the group
- Limited cuddling or comfort-seeking
- Abnormal body postures or gestures
- Difficulty empathizing with others
- Content to be left alone

Keep in mind that a child with ASD may not display all of these characteristics. Every child will be different, and symptoms can vary dramatically.

(cont.)

## Prevalence and causes

The prevalence of ASD has risen sharply in the last few decades. According to a 2007 study by the Autism and Developmental Disabilities Monitoring Network (AADM), funded by the Centers for Disease Control and Prevention (CDC), approximately 1 in 150 8-year-old children have been diagnosed with an ASD. Applying this figure to the overall U.S. population, the CDC estimates that up to 560,000 individuals below the age of 21 have an ASD. Another important statistic concerns gender. For unknown reasons, ASD is four times more common in boys than girls.

The causes of ASD also remain unknown, although researchers suspect that both genes and the environment could play a role. Researchers have,

however, established that autism occurs more often in individuals with certain congenital conditions, such as Fragile X syndrome, tuberous sclerosis, German measles (rubella) contracted in the womb, and untreated phenylketonuria (PKU). Taking the prescription drug thalidomide during pregnancy has also been linked to a higher risk of autism.

Recently, MMR (measles mumps rubella) immunizations and other vaccines have come under scrutiny as possible triggers of ASD. Several large studies have not supported this theory, however. If you have any questions about vaccines and ASD, talk to your child's doctor.

## Moving forward with hope and optimism.

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