

About Autism

Autism, also called infantile autism or autistic disorder, is a lifelong disorder that causes abnormal neurological development. It is one of five pervasive development disorders (PDDs) that also include Asperger's syndrome, childhood disintegrative disorder, Rett disorder, and pervasive development disorder-not otherwise specified (PDD-NOS). Autism is usually diagnosed by the age of 3.

Autism causes impaired social interaction, communication difficulties, and restricted or repetitive activities and interests. People with autism often exhibit abnormal responses to sensory stimulation (e.g., touch, sound, light), usually have moderate mental retardation, and have a higher risk for developing epilepsy. Some autistic patients exhibit aggression and self-injurious behavior (e.g., head banging, biting themselves).

About one-third of patients with autism have normal or nearly normal intelligence quotients (IQs). Many are able to display emotion and affection and respond to their environment. Terms used to describe patients with the disorder include autistic-like, autistic tendencies, autism spectrum, and high-functioning or low-functioning autism.

High-functioning patients may have minor delays in language and development and difficulty with social interactions. They may have problems initiating and maintaining conversation and efforts may be described as "talking at others" (e.g., may talk incessantly about a favorite subject despite attempts by others to speak).

With early intervention and appropriate treatment, some autistic patients are able to learn and function productively. There is no cure for the disorder and most patients require lifelong care.

Incidence and Prevalence

Autism affects 1 to 2 out of every 1000 people and as many as 1.5 million adults and children in the United States have some form of the disorder. The overall incidence increases by about 10–17% each year. The disorder occurs about 4 times more often in boys.

Causes and Risk Factors

The cause of autism is unknown. The disorder results from abnormalities in brain structure or function and the underlying cause usually cannot be identified. Patients with autism often have abnormalities in several areas of the brain. This may indicate that a disruption in fetal brain development contributes to the disorder.

Brain abnormalities may result from genetic (hereditary) or environmental (e.g., exposure to toxins) factors, metabolic disorders (e.g., serotonin deficiency), viral infections (e.g., German measles), or complications during pregnancy and delivery.

A single gene for autism has not been identified, but a group of unstable genes may trigger the disorder in some patients. According to a recent study, approximately 11% of autism cases may have a genetic component.

The measles-mumps-rubella vaccine (MMR) may contribute to autism in some cases. Although more research is necessary to evaluate this potential risk factor, recent studies have raised questions about this possible link.

Medical conditions associated with an increased risk for autism include the following:

- Fragile X syndrome (more common in males; may cause mental retardation)
- Tuberous sclerosis (syndrome that causes seizures, mental disorders, and tumors)
- Congenital rubella syndrome (results from transmission of the rubella virus [causes German measles] in utero)
- Untreated phenyl ketonuria (PKU; hereditary disease caused by a defective enzyme)