



# LET'S TALK

... FOR PEOPLE WITH SPECIAL COMMUNICATION NEEDS

## Autism

Autism is a lifelong, developmental disability that affects social interaction and communication. This rare syndrome occurs in 10–20 of every 10,000 individuals. Autism occurs four times more frequently in males than in females and is found in families of all racial, ethnic, and social backgrounds. Speech and language difficulties are hallmark characteristics of children with autism. Other symptoms may include rocking behavior, hand flapping, sensory sensitivities, and behavior differences. Talent may exist in a specific area such as music or mathematics when basic living and survival skills are greatly deficient. There is also a great range in intellectual functioning, with approximately 60% having an IQ below 50. Speech-language pathologists, certified by the American Speech-Language-Hearing Association (ASHA), screen for, evaluate, and treat speech and language disorders secondary to the primary diagnosis of autism. Speech-language pathologists may also be part of the interdisciplinary team involved with the diagnosis of autism.

### Cause

Some researchers have found abnormalities in brain structure and function in individuals with autism. These abnormalities may result from severe infections during early infancy such as celiac disease, phenylketonuria, encephalitis, meningitis, tuberous sclerosis; or illnesses in the mother (for example, rubella, cytomegalovirus or chemical exposure during pregnancy). Primary areas of abnormality include the limbic system (involving memory, learning, emotion, and behavior) and the

cerebellum, which is responsible for the coordination of muscles and maintenance of balance.

Other researchers have found biochemical imbalances and a genetic predisposition in individuals with autism. A correlation with fragile X syndrome and families with several members diagnosed with autism have been reported. There is no known psychological cause.



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### Diagnosis

There are no medical tests to diagnose autism. Diagnosis is made based on observations of behavior. Characteristic symptoms include:

- 1. Atypical responses to sensations (hearing, sight, touch, taste, and smell).**
  - poor attention to sights and sounds
  - withdrawal from sight, sound, or touch (e.g., lack of eye contact and facial responsiveness; indifference to or dislike of affection and physical contact, such as cuddling)
  - inappropriate smelling, licking, or staring
  - self-stimulating movements (e.g., rocking, hand flapping, or finger flicking)
  - hyperactivity (over-responsiveness)

or hypoactivity (underactivity)

### 2. Delayed development of motor skills.

- problems with large muscle skills (e.g., crawling, walking, or running)
- problems with small muscle skills (e.g., speaking, grasping, using small objects)
- apraxia (difficulty controlling voluntary movements)
- clumsiness (awkward hand or finger movements, walking on tiptoes)

### 3. Communication disorders.

- absent receptive and/or expressive language in some cases
- immature grammatical structure
- inability to name objects
- inability to use abstract terms
- inappropriate speech rhythm or inflection
- lack of appropriate nonverbal communication such as facial expression and gesture
- poor understanding of the names of common objects and actions
- difficulty understanding and using pronouns (he/she/they; his/hers/theirs)
- echolalia (echoing or repeating what is said)
- difficulty communicating basic wants or needs
- difficulty answering and asking questions

### 4. Difficulties with socialization

- inappropriate social interactions
- inappropriate emotional behavior such as giggling, laughing, anger, tantrums, crying, or aggression for no known reason

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- inappropriate or unusual use of or attachment to objects
- resistance to changes in routine
- rituals or repetitive and unusual motions
- failure to develop cooperative play and friendships
- no fear of real dangers

It should be noted that diagnosis does not depend on the presence of all symptoms listed. The individual may be able to complete large muscle activities such as walking, but not small muscle activities such as writing; alternatively, he or she may comprehend basic concepts; but be unable to talk. Some individuals may permit or even enjoy cuddling and have some eye contact when listening.

## **Pervasive Developmental Disorder**

Sometimes the term pervasive developmental disorder (PDD) is used to refer to any of a group of disorders characterized by delays in the development of multiple basic functions including socialization and communication. At times, the term is used almost interchangeably with autism. Professional disagreement exists about the definite boundaries of different diagnoses.

PDD includes five diagnoses under the autism spectrum: autistic disorder, Asperger's disorder, childhood disintegrative disorder, Rett syndrome, and pervasive developmental disorders—not otherwise specified (PDD-NOS). Children with PDD do not behave as if they are passing through an earlier normal developmental stage. They have severe qualitative abnormalities that are not typical for any stage of development because the disturbance is a distortion in development. Individuals with classic autism show three types of symptoms: impaired social interaction, problems with verbal and nonverbal communication, and unusual or severely limited activities and interests. Symptoms of autism usually appear by 30 months of age and continue throughout life.

Although there is no cure, appropriate early intervention may improve social and communication development and reduce undesirable behaviors. People with autism have a normal life expectancy.

Estimates are that twice as many children have PDD as autism. Many of the characteristic symptoms of PDD are similar to those of autism. In addition, bizarre ideas and fantasies and preoccupation with morbid thoughts or interests may occur, but there typically are no delusions, hallucinations, or periods of incoherence. Unlike autism, the onset of PDD occurs after 36 months.

## **Treatment**

There is no known cure for autism. Various methods of treatment have been tried and are based on individual needs. Some medications, for example, antidepressant and seizure drugs, and dietary restrictions, may be used to control symptoms. Educational programs and supportive counseling services are also important components of the treatment plan. Evaluation by an ASHA-certified audiologist would identify any hearing loss so that appropriate recommendations can be

made. An ASHA-certified speech-language pathologist would develop a treatment program designed to maximize communication effectiveness. This program may include any combination of traditional language treatment and manual, alternative, or augmentative communication systems.

For more information, contact:  
Autism Society of America  
[www.autism-society.org](http://www.autism-society.org)  
800-3AUTISM or 301-657-0881

To locate an ASHA-certified speech-language pathologist near you, call ASHA at 800-638-8255, access ASHA's Web site at [www.asha.org](http://www.asha.org), or contact your local school's ASHA-certified speech-language pathologist. )))

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