

Pervasive Developmental Disorder:

The term "pervasive developmental disorders," also called PDDs, refers to a group of conditions that involve delays in the development of many basic skills, most notably the ability to socialize with others, to communicate, and to use imagination. Children with these conditions often are confused in their thinking and generally have problems understanding the world around them.

Because these conditions typically are identified in children around 3 years of age -- a critical period in a child's development -- they are called developmental disorders. Although the condition begins far earlier than 3 years of age, parents often do not notice a problem until the child is a toddler who is not walking, talking, or developing as well as other children of the same age.

Autism Spectrum Disorders

The forms of autism are thought to overlap considerably. But the fact that there is wide variation in symptoms among children with autism led to the concept of autism spectrum disorder.

Autism seems to be on the rise, and autism spectrum disorders affect between two and six children out of every 1,000 in the U.S. It's unclear, though, whether the growing incidence of autism represents a real increase or just improved detection.

Early diagnosis of an autism spectrum disorder is important. That's because detection leads to treatment, and with early treatment, a child with autism can gain improved language and social skills.

What Conditions Are Considered Pervasive Developmental Disorders?

There are five types of pervasive development disorders:

Autism : Children with autism have problems with social interaction, pretend play, and communication. They also have a limited range of activities and interests. Many (nearly 75%) of children with autism also have some degree of mental retardation.

Asperger's syndrome : Like children with autism, children with Asperger's syndrome have difficulty with social interaction and communication, and have a narrow range of interests. However, children with Asperger's have average or above average intelligence, and develop normally in the areas of language and cognition (the mental processes related to thinking and learning). Children with Asperger's often also have difficulty concentrating and may have poor coordination.

Childhood disintegrative disorder: Children with this rare condition begin their development normally in all areas, physical and mental. At some point, usually between 2 and 10 years of age, a child with this illness loses many of the skills he or she has developed. In addition to the loss of social and language skills, a child with disintegrative disorder may lose control of other functions, including bowel and bladder control.

Rett's syndrome : Children with this very rare disorder have the symptoms associated with a PDD and also suffer problems with physical development. They generally suffer the loss of many motor or movement skills -- such as walking and use of their hands -- and develop poor coordination. This condition has been linked to a defect on the X chromosome, so it almost always affects girls.

Pervasive development disorder, not otherwise specified (PDD-NOS): This category is used to refer to children who have significant problems with communication and play, and some difficulty interacting with others, but are too social to be considered autistic.

What Are the Symptoms of Pervasive Developmental Disorders?

The use of the word "pervasive" to describe these illnesses is somewhat misleading. The definition of pervasive is "to be present throughout," but children with PDDs generally do not have problems in all areas of functioning. Rather, most children with PDDs have specific problem areas and often function very well in other areas.

Children with PDDs, such as autism, can display a wide range of symptoms which can range in severity from mild to disabling. They also vary widely in their individual abilities, intelligence, and behavior.

General symptoms that may be present to some degree in a child with a PDD include:

- Difficulty with verbal communication, including problems using and understanding language
- Difficulty with non-verbal communication, such as gestures and facial expressions
- Difficulty with social interaction, including relating to people and to his or her surroundings
- Unusual ways of playing with toys and other objects
- Difficulty adjusting to changes in routine or familiar surroundings
- Repetitive body movements or patterns of behavior, such as hand flapping, spinning, and head banging
- Changing response to sound; the child may be very sensitive to some noises and seem to not hear others.
- Temper tantrums
- Difficulty sleeping
- Aggressive behavior
- Fearfulness or anxiety

What Causes Pervasive Developmental Disorders?

The cause of pervasive developmental disorders is not known, but researchers are looking for answers. Some studies suggest that PDDs are caused by a problem with the nervous system (brain and spinal cord). Studies currently in progress are examining the structure and function of the brain in people with autism for clues that may help us better understand these conditions, as well as how to treat and/or prevent them.

How Common Are Pervasive Developmental Disorders?

It is estimated that pervasive development disorders occur in about five to 15 children per 10,000 births. In general, PDDs are more common in boys than in girls, with the exception of Rett syndrome, which occurs almost always in girls.

How Are Pervasive Developmental Disorders Diagnosed?

If symptoms of a pervasive development disorder are present, the doctor will begin an evaluation by performing a complete medical history and physical exam, along with a developmental screening questionnaire. Although there are no laboratory tests to diagnose a PDD, the doctor may use various imaging studies and blood tests to determine if there is a physical disorder causing the symptoms.

If no physical disorder is found, the child may be referred to a specialist in childhood development disorders, such as a child and adolescent psychiatrist or psychologist, pediatric neurologist, developmental pediatrician, or other health professionals who are specially trained to diagnose and treat PDDs. The doctor bases his or her diagnosis on the child's level of development and the child's speech and behavior, including his or her play and ability to socialize with others. The doctor often seeks input from the child's parents, teachers, and other adults who are familiar with the child's symptoms.

How Are Pervasive Developmental Disorders Treated?

Because children with pervasive developmental disorders have a range of symptoms and abilities, a plan of therapy must be developed with the child's specific needs in mind. The treatment plan -- or more appropriately, a program of intervention -- will address the child's needs at home and at school. For that reason, intervention planning is a cooperative effort of the parents, health care providers, teachers, and others who may be needed to provide services, such as counselors, social workers and occupational, physical, or speech therapists. The plan aims to promote better socializing and communication, and reduce behaviors that can interfere with learning and functioning.

A plan of care for a child with a PDD may include:

- ***Special education:*** Education is structured to meet the child's unique educational needs.
- ***Behavior modification:*** This may include strategies for supporting positive behavior by the child.
- ***Speech, physical, or occupational therapy:*** These therapies are designed to increase the child's functional abilities.
- ***Medication :*** There are no drugs to treat the PDDs themselves. Medications may be used, however, to treat specific symptoms such as anxiety, hyperactivity, and behavior that may result in injury.

Useful websites:

<http://www.ninds.nih.gov/disorders/pdd/pdd.htm>

<http://oreilly.com/medical/autism/news/discipline.html>

