### Pervasive Developmental Delay BIRTH DEFECT RESEARCH FOR CHILDREN

#### What is Pervasive Developmental Disorder?

Pervasive Developmental Disorder (PDD) is an umbrella term referring to a group of disorders of social interaction, communication, behavior, and cognition. There has been considerable debate among the experts in the medical community regarding the labels for disorders classified within the PDD group.



# Pervasive Developmental Disorder



The current classification includes:

Autistic Disorder--significant difficulties in play, nonverbal communication, and language; may have delayed/impaired cognitive development

**Asperger's Disorder**-- diminished social interaction and nonverbal communication; normal language and cognitive development

Pervasive Developmental Disorder Not Otherwise

**Specified**--diminished social interaction and nonverbal communication and delayed language; may have delayed cognitive development; does not meet the criteria for a specified PDD (Some doctors use the label PDD when referring to PDDNOS; also sometimes referred to as mild Autism)

**Rett's Disorder**--communication, social, and play difficulties after a period of normal development; dramatic loss of purposeful hand movement resulting in hand-flapping or hand-wringing; deceleration of head growth; severe psychomotor retardation; very rare disorder mainly reported in girls

**Childhood Disintegrative Disorder**--normal development for the first two years and then significant loss in some of the following: language, social skills, play, motor skills, bowel or bladder control; very rare disorder

Due to the changing labels for classifications of the disorders within PDD, many diagnosticians do not use them or do not use them accurately. For practical purposes, many professionals and others refer to the PDD subcategories as the "autism spectrum" and to the first three disorders listed above as PDD. Autism is the most severe disorder of this group. There is clinical evidence suggesting that Autism and PDDNOS are on a continuum. The main focus of the remainder of this fact sheet is PDDNOS.

How many children have PPDNOS?

PDDNOS is more common than Autism. Both conditions seem to be increasing in frequency. Recent

research suggests that PDD may be as common as 1:500 children and autism may occur in 1:1,000 children. There is some debate, however, about these statistics being related to new diagnostic criteria.

How do you know if your child has PDDNOS?

PDDNOS is usually diagnosed later than cases of Autism because children are usually 3-4 years old before they exhibit enough symptoms for parents to seek a diagnosis. Symptoms which may cause parents to seek help include failure to develop language skills and inconsistent responses to sound (overreacting to some sounds, ignoring other sounds). Children may have deficits in peer relations; however, social skills are usually less impaired than in classical Autism. Intellectual deficits are not common.

There is no set pattern of symptoms and signs of PDDNOS, and symptoms can present in varying degrees. There are no diagnostic medical tests for PDDNOS. The diagnosis is based on the presence of specific behaviors. However, a thorough medical work-up is often done in the diagnostic process to identify associated problems. Children are diagnosed as having PDDNOS if they have some, but not all, of the features of Autism or the other specified categories of PDD. A child could be diagnosed as either Autistic or PDDNOS based on the exhibited behaviors and the doctor's familiarity with the disorder.

Diagnosis requires a variety of information including developmental history and observation of speech, communication, social and play skills, and sensory integration. Generally, a multidisciplinary team that includes a speech pathologist, a psychologist, a developmental pediatrician, and an audiologist, work together to diagnose and treat PDDNOS.

## Pervasive Developmental Disorder



#### What causes PPDNOS?

There is no indication that PDDNOS is caused by any factors in a child's social or psychological environment. Various nervous system problems have been found in children with PDDNOS, but no single problem has been consistently found and no specific causes have been identified. While some experts suspect psychiatric disorders, others believe there are biochemical causes. Some believe dietary factors and immune dysfunction interacting with environmental toxins cause PDD. One area of investigation has been focusing on the possibility that children with PDD lack the ability to detoxify mercury and mercury-derived chemicals used as preservatives in medical and health products.

How can you help a child with PDDNOS?

Treatment is similar to that for autism. Treatment falls into the categories of educational programming and medical management of any associated difficulties such as hyperactivity or anxiety. No one therapy or method will work for all individuals. Most families will use a combination of treatments simultaneously to minimize negative behaviors and to promote more typical communication and social behavior. Under the guidance of the multi-disciplinary team, treatment often includes structured educational approaches, behavior modification, occupational therapy, speech therapy, counseling, and medications.

What's in the future for a child with PDDNOS?

The ability to live an adult life of self-sufficiency depends on the number of symptoms and their severity. Most children make progress although they may continue to have problems in the areas of social and communication skills. Children of normal intelligence who receive early diagnosis and intensive treatment and who develop speech before age five have the best prognosis. There have been major increases in research in recent years, both in the number of studies conducted and their scope. Recent studies have included attention to genetics, immunology, movement and sensory-related disorders, serotonin synthesis, and gastrointestinal disorders and treatment with dietary restrictions and the hormone secretin. Some experts are working with a screening tool called Checklist for Autism in Toddlers (CHAT) to predict children who will develop PDD. As scientific efforts continue, experts hope to experience breakthroughs in their understanding of the causes of PDD and the development of treatments and a cure.

#### Fact Sheet by:

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