

CENTER FOR AUTISM AND EARLY CHILDHOOD MENTAL HEALTH**AUTISM FACT SHEET- November 2014****What is autism?**

Autism represents a difference in the structure, function and processing of the human brain that often leads to distinct behavioral patterns. Autism spectrum disorders (ASDs) are a group of developmental disorders that are characterized by significant social, communication and behavioral challenges. People with ASDs handle information in their brain differently than other people. The range of individual differences, and the likely “causes” are varied, leading the field to use the phrase, “spectrum disorders.” ASDs affect each person differently, and problems in the social, communicative and behavioral/emotional areas can be mild to severe.

How common are ASDs?

ASDs occur in all ethnic and socioeconomic groups and are present in children and adults of all ages. The frequency of the ASDs has increased dramatically, partly due to better awareness and diagnosis. The Centers for Disease Control and Prevention (CDC) released a March 2012 report based on sample sites in 14 states and estimated that 1 in 88 children had an ASD. In 2013, in a telephone survey of 100,000 families, the overall rates was cited as 1 in 50, a dramatic increase. In 2014, using a more careful methodology as in the 2012 report, the rate of autism was reported as 1 in 68, 1 in 42 boys and 1 in 189 girls. Of the 11 states examined, New Jersey was the second highest with 1 in 45 children diagnosed with autism by age 8. This represented a 30% increase since 2012. Among boys, the rate was 1 in 29. Males are four times more likely to have an ASD than females.

What Causes ASD?

As a “spectrum” of disorders, ASDs do not have a singular cause, but are likely related to genetics, neurological, and environmental factors. Researchers have identified a number of genes associated with the disorder. Studies of people with ASD have found irregularities in several regions of the brain. Twin and family studies strongly suggest that some people have a genetic predisposition to autism. Identical twin studies show that if one twin is affected, there is up to a 90 percent chance the other twin will be affected. In families with one child with ASD, the risk of having a second child with the disorder is approximately 5 percent, or one in 20. ASDs are not caused by faulty parental care.

How are ASDs treated?

There are a number of intervention programs. The most frequently used are structured, skill- oriented training programs based on principles of Applied Behavioral Analysis (ABA) that focus on behavioral/symptom change. Other interventions, rooted in developmental perspectives, emphasize “engagement” and understanding a child’s unique “bio-psycho-social” profile, including neurosensory systems, to promote developmental and communicative progress. There are a growing number of medications that are helpful in addressing certain emotional and behavioral symptoms. Most critical is determining a child’s “individual differences” and creating a program to support developmental growth. Educational programs that promote inclusion are critically important. All interventions must be supported by rigorous study and research. The nature of intervention and support must involve parental, familial, educational and community support with the engagement of multidisciplinary interventionists including psychologists, psychiatrists, educators, speech/language pathologists, occupational and physical therapists and other allied professionals. In 2013, the NIMH called for an approach to diagnosis and treatment of ASD that does not rely solely on “symptoms” but recognizes that in “brain disorders, symptoms are generally a late manifestation of a years-long process.” (<http://www.nimh.nih.gov/about/director/2013/ten-best-of-2013.shtml>).