What is Autism?

Autism Spectrum Disorder (ASD) is a complex neurodevelopmental disorder defined by impairments in social communication and patterns of restricted, repetitive behaviors or interests. The most recent data from the Centers for Disease Control (CDC, 2020) indicate that 1 in 44 children in the U.S. has an autism spectrum disorder. ASD can be associated with other neurodevelopmental, mental, and/or behavioral disorders including ADHD, mood disorder, anxiety disorder, and Obsessive-Compulsive Disorder.

What is the Prevalence of Autism in the US?

- About 1 in 44 US children are diagnosed with autism spectrum disorder (ASD) according to estimates from CDC’s Autism and Developmental Disabilities Monitoring (ADDM) Network.
- ASD is reported to occur in all racial, ethnic, and socioeconomic groups.
- ASD is more than 4 times more common among boys than among girls.
- About 1 in 6 (17%) children aged 3–17 years were diagnosed with a developmental disability, as reported by parents, during a study period of 2009-2017. These included autism, attention-deficit/hyperactivity disorder, blindness, and cerebral palsy, among others.

What are the Symptoms of Autism?

Some common indicators of a possible autism spectrum disorder include:

- Not responding to their name by 12 months of age
- Not pointing at objects to show interest (like an airplane flying over) by 14 months
- Not playing “pretend” games by 18 months
- Avoiding eye contact
- Having trouble understanding other people’s feelings or talking about their own feelings
- Repeating words or phrases over and over (echolalia)
- Giving unrelated answers to questions
- Getting upset by minor changes
- Having obsessive interests
- Flapping hands, rocking, or spinning in circles (known as stereotypies or stimming)
- Having unusual reactions to the way things sound, smell, taste, look, or feel

The presence of ASD signs and symptoms tends to be consistent over time. Many symptoms persist such as lack of social interaction, language difficulties, repetitive behaviors, and resistance to change. Some symptoms may decrease such as stereotypies and problems with eye contact. Most individuals with ASD improve over time, especially with proper interventions.

How is Autism Diagnosed?

At this time, there is no blood or medical testing that can detect ASD. Rather, diagnosis is based on a pattern of behaviors which are described in the Diagnostic and Statistical Manual of Mental Disorders (DSM). Diagnosis of an ASD requires a comprehensive evaluation using specialized assessment tools and completed by a professional with extensive knowledge and training related to autism. Appropriate evaluations provide assessment across a range of areas (e.g., motor functioning, communication, socialization, play, thinking skills, coping skills).
Assessments may include:

- Screening/clinical interview
- History and mental status exam
- Standard diagnostic instruments [Autism Diagnostic Interview (ADI) and Autism Diagnostic Observation Schedule (ADOS)]
- Psychological testing (cognitive, educational, and other)
- Adaptive function (Vineland Adaptive Behavior Scale, behavioral data collection)
- Physical examination, including neurological and sensory exams (to rule out deafness and blindness)
- Laboratory testing (used only if clinically indicated)

A diagnosis of autism in adults is much more difficult to complete than a diagnosis in children. Most adults with autism will experience other mental-health disorders like anxiety or ADHD. By the time most people with autism reach adulthood, they have learned to mask their behaviors that would otherwise be identified as a symptom in children. According to a recent article by the CDC, an estimated 2.21% of adults in the United States are autistic. The states with the highest numbers include California, Texas, New York, and Florida. Despite the high numbers of adults with autism living in the United States, less than 30% are employed.

**How is Autism Treated?**

Interventions for ASD must be developmentally appropriate and suited to the individual’s interest to maintain engagement and may include:

- Speech and language therapy
- Educational programming
- Social skills training
- Behavior therapy
- Family interventions: education and parent training
- Individual psychotherapy
- Pharmacotherapy

Doctors and therapists use the treatments to improve the rate at which individuals with ASD acquire social and cognitive skills and the ability to live as independently as possible. Since individuals with ASD have different symptoms, the treatment plans target symptoms and must address the unique profile of each individual.