

## AUTISM SPECTRUM DISORDER

### WHAT IS AN AUTISM SPECTRUM DISORDER?

Autism spectrum disorders (ASD) include impairments in socialization, communication, and/or restricted interests/need for sameness/perseverative behaviors. No two children with ASD display the same symptoms. However, these impairments affect a child's behavior, social skills, and general communication skills. There are different types of ASD's, which are also referred to as *pervasive developmental disorders*. These include Autistic Disorder, Asperger Syndrome, and Pervasive Developmental Disorder, Not Otherwise Specified (PD-NOS).

#### Social Deficits:

- Poor eye contact
- Fails to respond to parental smiling or other facial expressions
- Lack of reciprocal social interaction (e.g. Does not look at objects that are pointed out to them and does not bring objects to show parents)
- Lacks appropriate facial expressions
- Is unable to show concern or empathy for others
- Prefers to play alone; does not know how to make friends
- May be attached to objects, rather than people

#### Communication Deficits:

- Does not say single words by 15-months or two-worded phrases by 24-months
- Repeats exactly what others say without understanding what it means (i.e. echolalia)
- Fails to respond when someone calls his name.
- Pronoun reversal ("you" for "I")
- May use fewer gestures or none at all
- Language skills are delayed, and/or very concrete
- Is unable to "take turns" in conversations. Prefers to talk about topics which are interesting to them, but necessarily to others.
- Lacks imaginative or make-believe play.

#### Behavioral Deficits:

- Displays stereotypic behaviors such as rocking, spinning, swaying, finger twirling, and hand flapping.
- Likes sameness, routines, and predictability. Change is very difficult.
- Plays with parts of toys, rather than how the toy is intended to be used.
- May exhibit "splinter skills" (i.e., strengths in a given area when other areas are significantly delayed.)
- Often have a narrow and intense focus of interest (i.e., "passions")
- Lacks fear and does not cry when in pain
- Repeats the same activities over and over
- May be (but not necessarily) sensitive to smells, sounds, lights, textures and touch

## WHAT CAUSES ASD'S

Studies continue to explore the causes of autism, although at this time we do not know what causes ASD. However, we do know that if a family has a child diagnosed with ASD, there is a 10x greater likelihood that future children may also have an ASD. Studies have demonstrated that in families with autism, there are often other developmental concerns (i.e., language delays, learning disorders, anxiety, mood disorders). We also know that certain medical conditions tend to occur more often with ASD's, especially autistic disorder. These conditions include fragile X syndrome, tuberous sclerosis, congenital rubella syndrome, and untreated PKU.

***Current scientific evidence does not support a link between the measles-mumps-rubella (MMR) vaccine or any combination of vaccines and ASD. There is also no scientific proof to support a link between thimerosal (a mercury-containing preservative) and ASD. Regardless, vaccines no longer contain mercury.***

About 25% of children diagnosed with ASD will have normal developmental until about 18-months of age, after which they gradually or suddenly lose many skills (i.e., stop talking, stop waving good-bye, stop looking when their names are called, more withdrawn). However, upon careful review of video tapes of these children at 1-year birthdays, subtle signs of ASD were actually shown.

## HOW IS AN ASD DIAGNOSED?

Because children with ASD have weaknesses in a variety of domains, several professionals may be involved in the assessment. Depending upon the areas of deficit, the following people may be involved:

- Developmental pediatrician
- Child neurologists
- Speech and language pathologists
- Occupational therapists
- Psychologists
- Child psychiatrist

Comprehensive assessments generally include:

- Careful observation of play and child interactions
- Detailed history and physical examination (including history of seizures)
- Assessment of development (including adaptive functioning)
- Specific tools utilized to examine how many ASD symptoms the child is manifesting
- Hearing test
- Language evaluation

## WHAT ARE THE ASSOCIATED SYMPTOMS OF ASD?

- Seizures (approximately 1:4 children with ASD will have a seizure and they are most common in children younger than 3 years of age and during the teenage years).
- Gastrointestinal problems may occur (i.e., constipation, diarrhea, reflux disease, food selectives)
- Tic behaviors (6% of children with ASK have chronic tics)
- Attentional and behavioral difficulties (including increased hyperactivity and impulsivity)
- Aggression and agitation (especially when they have difficulties communicating)
- Self-injurious behaviors
- Sleep disorders (difficulties falling asleep or frequent night awakenings)
- Emotional concerns (anxiety or depression)
- Mental retardation or cognitive deficits

## WHAT IS THE TREATMENT FOR ASD?

The ultimate goal of all treatment programs is the successful integration of the child into inclusive environments with typically developing peers as soon as possible. Given that no two children with ASD are alike, the treatments will vary.

- Programs should include a variety of behavioral, social, play and cognitive strategies. Speech, occupational, and physical therapies may also be needed.
- The programs should be initiated as soon as possible. They should be intense, with 20-25 hours of planned intervention or instruction per week. It should be provided year-round. The ratio of student to teacher should be at a minimum, 2:1.
- Include parents in all planning and monitoring.
- Promote generalization of learned skills in “real life” settings.
- Address associated symptoms, including sleep problems and aggressive behaviors.
- Monitor progress frequently.
- Utilize social skills interventions