Autism Center for Excellence

Recent reports estimate that, on average, as many as one in every 59 children in the United States has an Autism Spectrum Disorder (ASD). ASD is considered to be a lifelong neurological developmental disability for which there is no known etiology or cure. It affects individuals from all racial, ethnic, and socio-economic backgrounds. ASD is four to five times more common in boys, and the first signs usually appear before the age of three.

QUESTION: What is Autism Spectrum Disorder?

ANSWER: Autism Spectrum Disorder (ASD) represents a complex developmental disability that is the result of a neurological disorder that affects the normal functioning of the brain. ASD impacts an individual’s ability to communicate, understand language, play, and relate to others. The term Autism Spectrum Disorder is used because the range of symptoms can occur in any combination and can range from mild to very severe. Every individual with ASD is unique in their abilities and challenges.

QUESTION: What are the primary characteristics of Autism Spectrum Disorder?

ANSWER: Every individual with ASD is different. However, the Diagnostic and Statistical Manual of Mental Disorders (DSM) published by the American Psychiatric Association (APA) is used by clinicians and researchers to diagnose and classify disorders, including ASD. The DSM 5th edition (DSM-5), released in May, 2013, provides the latest definition of ASD based on what science and research have uncovered over time.

Under the newest changes, the DSM-5 diagnostic criteria for Autism Spectrum Disorder include:

- Impairment in social communication and interaction. Characteristics may include the following:
  - Deficits in reciprocity
  - Deficits in nonverbal communication
  - Difficulty developing peer relationships

- Presence of restricted or repetitive patterns of behavior. Characteristics may include the following:
  - Preoccupation with objects or topics of interest
  - Inflexibility
  - Repetitive movements or speech
  - Hyper- or hyporeactivity to sensory stimulation

For a person to meet criteria, characteristics must be present during a child’s early development. However, the characteristics may not become evident until the child is older and is placed in social situations that exceed his or her social abilities.

Young children who have poorly developed social skills may have inappropriate play skills. They may not be able to use objects including toys and games in an age-appropriate or functional manner, or the ability to do so may be delayed. Youth and teens may not understand social rules such as knowing which jokes to tell a peer and which to tell to an adult. Often, the individual with autism may display difficulties in relating to people and in establishing and maintaining reciprocal relationships. The person with ASD may give the impression that he or she wants to be alone.

Some individuals with ASD develop typical speech, while others will have difficulty with expressive and/or receptive communication. For instance, a person with ASD may use single words or short phrases to communicate, while another may be nonverbal. Language, if present, may have limited function or content. For example, the person may only use words to ask for an item rather than speak in sentences. Additionally, language may sound different, and the person might speak in a loud voice or with a robotic quality.
An individual with ASD may display unusual behaviors or stereotypical body movements. This could present as flapping hands, jumping, lining up blocks, or spinning the wheels on a car rather than playing with the item as intended. The person with ASD might also have difficulty transitioning from one activity to another or show distress over changes in the environment. Sensory sensations (touch, sound, sight, taste, etc.) might also present differently in individuals with ASD. Some individuals with ASD are distressed by loud noises such as sirens and fire alarms, others may only want to wear clothes of a certain texture, and others have a very limited diet because of the unique texture of many foods.

**QUESTION:** Why are more people being diagnosed with ASD?

**ANSWER:**
The number of individuals with ASD has dramatically increased in Virginia and across the nation over the last 20 years. This increase can be attributed to a number of factors. First to consider are the increased awareness of ASD and better diagnostic testing methods and tools. Children who are now accurately being diagnosed with ASD may have been labeled with a different diagnosis in the past. Second, as evidenced in the revisions to the DSM (now 5th edition), there have been many changes to the diagnostic criteria. Despite these solid reasons for increases in the prevalence rate, there may be other unknown factors contributing as well.

**QUESTION:** What causes ASD?

**ANSWER:**
It is now widely accepted that ASD is caused by differences in the shape and structure of the brain. At this time, there is no known etiology or reason for the neurological differences. Many causes have been proposed, but no one main cause has been identified. Researchers are investigating a number of theories including the impact of heredity and genetics. Many studies support a genetic basis to the disorder. While no one gene has been identified as causing ASD, researchers are searching for irregular segments of genetic code in individuals with ASD.

**QUESTION:** Can a person have ASD and another disability?

**ANSWER:**
Many individuals with ASD are also affected by other disabilities/disorders. Some might have, for example, a diagnosis of Down syndrome or visual impairment in addition to their diagnosis of ASD. Some may also have other medical or psychiatric diagnoses. A few of the most frequently reported disabilities are epilepsy, anxiety, depression, attention deficit, and obsessive compulsive disorder.

**SUMMARY**
ASD is a lifelong neurological developmental disability for which there is no known etiology or cure. ASD impacts an individual’s ability to communicate, understand language, play, and relate to others. Every individual with ASD is different. However, DSM 5th edition (DSM-5), released May, 2013, provides the latest definition of ASD based on what science and research have uncovered over time.

While teachers need to understand a student’s disabilities, they must focus on how to promote skill development. This includes supporting individuals in integrated community settings. Additional Fact Sheets will provide information on how to support individuals with ASD in the classroom and community. Please visit the ACE website for these resources.

**REFERENCES**

For additional information, the following resource is recommended.