

# **Understanding Autism**

### What is Autism:

Autism is a neuro-developmental disorder that impacts an individual's ability to regulate sensory input, to communicate, to interact socially and to learn in conventional ways. Autism is not a single, homogenous disorder; rather, it describes a spectrum of disorders. Individuals on this spectrum differ in the severity of their symptoms and the onset and the course of development of these symptoms. In the past, The **Diagnostic and Statistical Manual** of Mental Disorders (**DSM**) IV categorized autistic disorder, pervasive developmental disorder not otherwise specified (PDD-NOS), and Asperger's syndrome separately. However, in 2013, DSM V grouped these disorders under one single umbrella, termed as **Autism Spectrum Disorder** or ASD. According to the CDC, autism:

- Affects 1 in 68 children
- Is 5 times more common among boys than girls
- Affects tens of millions of people around the world.

#### Causes:

There is no single cause for autism. Research indicates that rare gene changes or mutations can be associated with autism. Many forms of autism seem to be caused by a combination of genetic and environmental factors that influence early brain development. In genetically predisposed individuals, certain environmental stresses increase a child's risk of developing autism. These can include factors such as maternal illness during pregnancy, difficulties during a delivery, particularly ones that cause oxygen deprivation, as well as a parent's age at the time of conception (mother and father). Studies suggest that there may also be a link between environmental toxins and autism. But none of these factors on their own seem to cause autism; they only increase the risk of autism in predisposed individuals.

One of the most common myths is that vaccines cause autism. An early concern was that the thimerosal, a mercury-based preservative present in vaccines caused autism. Numerous studies have been conducted to determine whether vaccines can be linked to autism, and there is overwhelming research to indicate that no link exists between vaccines and autism. The CDC supports a scientific review by the Institute of Medicine, which concluded that there is no causal relationship between thimerosal containing vaccines and autism. A study published in the Journal of Pediatrics also supported these findings.

## Symptoms:

Autism has many different symptoms that become noticeable as a baby develops. By 8-10 months of age, babies with autism may show a delay in common

behaviors such as babbling or responding to their name. Between the ages of 1 and 3, other symptoms may emerge, such as a reduced interest in social games and a child may not respond to their parent's cues as expected. Symptoms of high-functioning autism are usually noticed between the ages of 5 and 6, because language development in not affected in the same way as other forms of autism. Autism is characterized by three main symptoms:

- Restricted repetitive behaviors, interests and activities
- Deficits in social communication
- Deficits in social interactions

## Diagnosis:

Diagnosing autism can be challenging because there is no single test for autism, rather, autism is diagnosed based on behavior and development. Most qualified professionals are able to diagnose children at around 2 years of age, though in some cases, a diagnosis may occur when a child is older. Autism is usually diagnosed by a team of health professionals including pediatricians, psychologists, speech and language pathologists and occupational therapists. Developmental screening is a very important step in helping to diagnose autism early and should occur during a well-child doctor's visit at 9 months, 18 months, and 24 or 30 months.

All children develop at different rates and this is true for children with autism as well. It is important to remember that children with autism have their own personalities and interests just as children who are not on the autism spectrum do. If you are concerned that a child you care for may have autism, you should follow up with an assessment from a qualified professional. An early diagnosis is critical for the best long term outcome.

### What it Feels Like to Have Autism:

Many individuals with autism have trouble processing information they receive from the five senses – things that they see, taste, hear, smell and touch. This means that things that feel "normal" to someone else can be processed differently by the brain of someone with autism and cause distress and confusion. Often, individuals with autism hear EVERYTHING that is going on around them, and cannot filter the sounds.

## **Additional Resources:**

- Parents Helping Parents
- Autism Speaks
- Autism Society of America
- The Children's Health Council
- Centers for Disease Control and Prevention (CDC)