

## Autism fact sheet

Autism Spectrum Disorder (ASD) refers to a group of developmental disabilities that are typically associated with challenges of varying severity in the areas of social interaction, communication, and repetitive/restricted behaviors. It is a brain disorder that typically appears during the first three years of life. As its name implies, ASD is a spectrum disorder that affects individuals differently and with varying degrees of severity; no two people with ASD are the same. ASD is typically diagnosed in children, but it is a lifelong disorder that affects individuals of all ages. ASD also is often found in combination with other disabilities.

### Prevalence

Nationally, about 1 in 68 8-year-old schoolchildren may be diagnosed with autism. In North Carolina, the prevalence rate is higher; about 1 in 59 children may be diagnosed with autism. (Centers for Disease Control and Prevention and Autism and Developmental Disabilities Monitoring Network, 2016)

More than 16,000 students with autism are enrolled in North Carolina's public schools, including all 107 school districts. (NC Statistical Profile 2014-2015, NC Department of Public Instruction)

More than 65,000 individuals in North Carolina live with ASD.

ASD occurs in all racial, ethnic, and socioeconomic groups, but is about five times more common among boys than among girls.

### Causes

Although it was first identified in 1943, no one knows exactly what causes ASD, and research to discover its cause is ongoing. Recent research suggests that there is a strong genetic component. Some research suggests a physical problem that affects the parts of the brain that process language and information; other research points to an imbalance of brain chemicals. A variety of external and environmental triggers are also being studied. It is possible that ASD is caused by a combination of several factors.

### Signs and Symptoms

People with ASD may have problems with social, behavioral, and communication skills. They might repeat behaviors and might not understand change in their daily activities. Many people with ASD also have different ways of learning, paying attention, or reacting to things.

#### A person with ASD might:

- have severe language deficits or differences
- talk about or show interest in a restricted range of topics
- not point at objects to show interest (point at an airplane flying over)



- not look at objects when another person points at them
- have trouble relating to others or not have an interest in other people at all
- avoid eye contact and want to be alone
- have trouble understanding other people's feelings or talking about their own feelings
- prefer not to be held or cuddled or might cuddle only when they want to
- appear to be unaware when other people talk to them but respond to other sounds
- repeat or echo words or phrases said to them, or repeat words or phrases in place of normal language (echolalia)
- have trouble expressing their needs using typical words or motions
- laugh, cry, or show distress for no apparent reason
- repeat actions over and over again, often in a very stereotyped manner.
- have trouble adapting when a routine changes
- have unusual reactions to the way things smell, taste, look, feel, or sound
- be oversensitive or under-sensitive to pain
- lose skills they once had (for instance, stop saying words they were once using)