

Autism 101

This course will take approximately 30 minutes to complete.

The course covers the following areas:

- Introduction to the Autism Spectrum
- Overview of Treatment Options
- Treatment Assistance
- Transition to Adulthood
- More Information and Resources

Before we begin the course, let's dispel a few myths about autism.

When we use the term autism spectrum disorder (ASD) we are referring to all pervasive developmental disorders that make up the autism spectrum – ASP, PDD–NOS.

The myths:

Environmental factors such as stress cause autism.

Autism is the result of bad parenting.

Autism is a mental illness caused by psychological factors such as early–life trauma.

The facts:

While no single specific cause of autism is known, current research links autism to biological or neurological differences in the brain. Some studies of individuals with autism have shown abnormalities in several regions of the brain, including the cerebellum, amygdala, and hippocampus.

There are more misconceptions surrounding autism, which often obscure accurate, scientific information about the disorder.

True:

Autism is the fastest-growing developmental disability in the U.S.

Over 1.5 million individuals in the United States have been diagnosed with autism spectrum disorder.

The diagnosis rate for autism is rising 10–17% each year.

Males are 4 times more likely than females to be diagnosed with autism.

The symptoms and characteristics of autism can present themselves in a wide variety of combinations, from mild to severe.

False:

Most individuals with autism live in institutions.

Children with autism rarely attend college.

Course Objectives

Long before they receive the diagnosis of autism, parents suspect that something is different about their child.

After testing and consultation confirm the parents' suspicions and give a name and explanation for their child's behavior, the first questions that often arise are:

- Where do we go from here?
- What do we do next?

The goal of this course is to provide parents and others touched by autism with the answers to those questions. This course is designed to be helpful to everyone affected by autism, including:

- Parents
 - Family members
 - Doctors
 - Caregivers
 - Friends
 - Community Members
 - Therapists
 - Educators
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What is an Autism Spectrum Disorder?

Autism is a complex neurological disorder affecting individuals in the areas of social interaction and communication. Autism and its associated behaviors have been estimated to occur in 1 in 100 births, and is four times as prevalent among males than females. Autism is a spectrum disorder – meaning the symptoms can occur in any combination and with varying degrees of severity. It is also a lifelong disability.



Characteristic Behaviors of Autism

The characteristic behaviors of ASD may or may not be apparent in infancy (18 to 24 months), but usually become obvious during early childhood (24 months to 6 years). Autism affects individuals in every country and region of the world and knows no racial, ethnic, nor economic boundaries.

What Are PDDs?

Pervasive Development Disorders (PDDs) is the "umbrella term" for a group of disorders that includes:

Autistic Disorder ("Classic Autism"): impairments in social interaction, communication, and imaginative play prior to age 3 years. Stereotyped behaviors, interests, and activities.

Asperger's Disorder: (often called Asperger's Syndrome) is characterized by impairments in social interactions and the presence of restricted interests and activities, with no clinically significant delay in language, and testing in the range of average to above average intelligence.

Pervasive Developmental Disorder – Not Otherwise Specified (PDD–NOS): (commonly referred to as atypical autism) a diagnosis of PDD–NOS may be made when a child does not meet the criteria for a specific diagnosis, but there is a severe and pervasive impairment in specified behaviors.

Rett's Syndrome: a syndrome which occurs primarily in females and rarely in males. Period of normal development and then loss of previously acquired skills, loss of purposeful use of the hands replaced with repetitive hand movements beginning at the age of 1 to 4 years.

Childhood Disintegrative Disorder: characterized by normal development for at least the first 2 years, significant loss of previously acquired skills. (American Psychiatric Association 1994)

The term **Autism Spectrum Disorder (ASD)** generally refer to the first three disorders — Autistic Disorder, Asperger's Disorder, and PDD–NOS.

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What Causes Autism?

Autism has no single cause. It was once thought to be a psychological disorder caused by traumatic experiences, leading to emotional and social withdrawal. Today, researchers believe that several genes, possibly in combination with environmental factors, may contribute to autism.

Some studies of individuals with autism have also shown abnormalities in several regions of the brain, including the cerebellum, amygdala, and hippocampus. While these findings are substantial, they require further study.



How Can Autism Be Treated?

There is currently no cure for autism. However, continued research has provided a clearer understanding of the disorder and has led to better treatments and therapies. Studies have shown that appropriate interventions can positively change autism's associated behaviors. Early intervention can significantly improve the quality of life for individuals with autism. However, the majority of individuals with ASD will continue to exhibit some symptoms in varying degrees throughout their lives.

The most effective programs share an emphasis on early, appropriate, and intensive interventions. To accommodate the diverse needs of individuals with ASD, effective approaches should be individualized, flexible, re-evaluated regularly, and provide the child with opportunities for generalization. Parents should investigate any and all treatments thoroughly and use caution before subscribing to any particular treatment.

On the following pages we will look at some of the most common approaches for treating ASD.



Introduction to Treatment Options

In the next few pages we will look at some of the various options for treating ASD. After viewing these pages you should be able to:

- Better explain the various categories (e.g., biological, educational, communication, etc) of treatment options for autism; and
 - Identify and better understand what types of financial and other assistance are available to help families cope with autism.
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Treatment Options

There are a number of options for treating autism and the optimal treatment option depends on the individual in question. Although this list is by no means exhaustive, the treatment options can be grouped into the following categories:

- Educational
- Biological
- Speech–Language Therapy Related Services – OT, PT
- Communication
- Intensive Autism Services
- Sensory Therapies

On the following pages we will look at some of the particular options, which fall into each of these categories.

Educational Treatment

Educational treatment includes, but is not limited to:

- Applied Behavioral Analysis (ABA); consists of several approaches including Lovaas, Discrete Trial Teaching, and Intensive Behavioral Intervention
- Relationship-based developmental approach; also known as Floortime
- Social Skills
- TEACCH (Treatment and Education of Autistic and Related Communication-Handicapped Children)
- **Biological or Biomedical Treatment**
- Biological treatment includes, but is not limited to:
 - Diet
 - Vitamins
 - Medication (e.g., to reduce aggression, self-injury, hyperactivity, mood disorders, etc.)

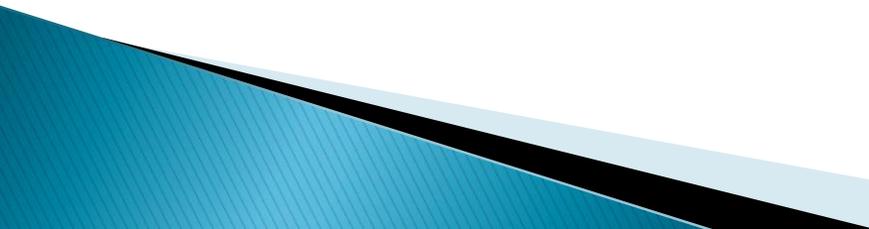
Speech–Language Therapy

Speech–Language Therapy includes, but is not limited to:

- Treatment for associated processing disorders
- Treatment for auditory processing disorders

Communication

Treatment by Communication includes, but is not limited to:

- Picture Exchange Communication System (PECS)
 - American Sign Language (ASL)
 - Visual strategies; using pictures for communication
 - Facilitated communication
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Intensive Autism Services

Intensive Autism Services include, but are not limited to:

- Treatment provided by a team of individuals in the home, classroom, or community
- May include Applied Behavioral Analysis (ABA) services

Sensory Therapies

Sensory Therapies include, but are not limited to:

- Occupational therapy
 - Sensory Integration therapy
 - Auditory Integration Training
 - Developmental Optometry
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Insurance

Services such as speech, physical, and occupational therapy may be covered by the family's health insurance plan or Medical Assistance. Parents and physicians can work together to understand what services insurance plans provide for children with autism. Parents are advised to: **Review your insurance materials and contact your case manager.** Contact your insurance company to request the most up-to-date plan materials. After reviewing the materials, contact the insurance company to get the name of your case manager. The case manager can provide additional information and assistance as he or she oversees your child's case. **To understand your insurance plan fully, enlist your physician's help.** After reading through your insurance plan, ask your physician what sort of referrals might be made and if there are local specialists who might be of assistance. Are there other physicians within the practice that focus on autism? **Check to see if supplementary health insurance for children with autism is available in your state.** All states offer coverage for people with disabilities through Medicaid; income eligibility varies. Some states offer special health plans for people with disabilities, often through the Division of Medical Assistance.

Medical Assistance

There are several types of Medical Assistance (MA), sometimes referred to as Title 19, available to parents. Acquiring assistance may depend on income, age, or disability. MA may cover expenses related to various therapies as well as other medical benefits.

For information on Medical Assistance in your state, contact the [US Department of Health and Human Services](#) at 1.877.619.0257.

Early Intervention Services: Birth to 3 Years

All states have an Infants and Toddlers with Disabilities program to provide developmental and other supportive services to children with developmental disabilities from birth up to age three.

To be eligible for this program, a child must:

- be between birth and 36 months of age, and
- have a diagnosed developmental disability or be significantly delayed in one or more aspects of development.

Families concerned about their child's development can contact the Early Intervention Program in their county. A team of professionals will come to the home, evaluate the child and provide necessary services at no cost to the family. For the Early Intervention Program in your area, visit the National Early Childhood Technical Assistance Web site by [clicking here](#).

Early Childhood Programs

Once a child reaches the age of 3, the Birth to 3 Program will assist in the transition to the public school-based Early Childhood Program. If a child has not participated in the Birth to 3 Program or is over the age of three, families should contact their local or county special education program to enroll their child in the Early Childhood Program.

The Early Childhood Program typically serves children ages 3 to 6. Programs are typically 2.5 hours per day, four days a week. Another option for families is the [Head Start](#) program. Head Start is a daycare program that is required to accept a certain number of children with disabilities. Daycare agencies in some communities will accept children with ASD.

Educating Children on the Autism Spectrum

All public schools must provide appropriate educational services for children with ASD from ages 3 through 21. The public school must evaluate your child for a suspected disability, develop an individualized education plan (IEP), and provide related services (speech, OT, PT) as indicated by the evaluation. The role of the evaluation is to identify if an educational disability exists, **NOT** to make a medical diagnosis. The educational evaluation team must include a professional with knowledge and experience in the area of autism. A child must have an educational evaluation to receive services in the public schools.

Special Education for School-aged Children

The determination of an appropriate educational approach for students on the autism spectrum must be based on the needs of each individual child. Careful assessment by a team of professionals in consultation with parents or guardians will help determine an appropriate educational program for each student. Regardless of the child's level of disability, studies show that children with ASD respond well to a highly structured educational setting with appropriate support and accommodations tailored to individual needs. The educational program should be based on the child's specific strengths/needs and build on their interests (this is why it is called an *individualized* education plan), it is also often helpful if visuals are used to accompany instruction. When necessary, it should incorporate other related services, to help students with challenges in communication, motor skill development and sensory integration issues.

Special Education for School-aged Children – Continued

Children with ASD may be educated in fully or partially-integrated classrooms within the regular school, or in a specialized school for children with special needs. Individuals with less intense needs may be included (in classrooms with their typically developing peers) for all or a portion of their school day. Others may require placement in a special education setting to receive an appropriate education. The Individuals with Disabilities Education Improvement Act (commonly known as IDEA) states that children are entitled to receive a free appropriate public education (FAPE) in the least restrictive environment (LRE). This means that students with disabilities should be included in regular classrooms with their nondisabled peers, in the school they would attend if not disabled, to the maximum extent possible with appropriate services to progress and meet their educational goals.

For more information regarding education, contact:

[Office of Special Education and Rehabilitative Services](#)

US Department of Education

400 Maryland Avenue SW

Washington, DC 20202

Telephone: 1.800.U.S.A.LEARN (1.800.872.5327)

Transition to Adulthood

In the next few pages we will look at some of the various challenges and opportunities facing individuals with ASD as they make the transition from the security of mandated service provided through the public school system to the uncertainty of adult services. After studying these pages you should be able to:

- Better understand what types of work and post-secondary schooling are best suited for autistic individuals.
- Plan for the transition period when an autistic individual reaches the age of 21 and begins to transition from the assistance of the public school system to adult services.

Transition to Adulthood – 1

One of the critical times comes when individuals with ASD and their families begin to look to the future. The transition from high school to continuing study or employment can be made easier through transition planning, which must be included in the child's educational program, beginning at age 14.

With good transition planning, a student with ASD can have an opportunity to experience higher education, employment, and independent living. Parents, school officials and agency personnel work together to make the transition as smooth as possible for the student.

Transition to Adulthood – 2

As adults, some individuals select occupations that involve routines and don't need a great deal of social interaction. Remaining deficits can interfere with the achievement of job status related to their educational level. Some adults with ASD have jobs in areas such as data entry, medical transcription, janitorial services, chemistry, piano tuning, computer analysis, and bookkeeping. Others work in supported or sheltered employment.

Transition to Adulthood – 3

It is important for families to plan for adult services years before the individual reaches the age of 21. There may be long waiting lists for services, and navigating the maze of services can be a challenge. For more information on transitional services contact your state Division of Vocational Rehabilitation.

Parent and Family Support

Raising a child on the autism spectrum can be a challenge. Communication, understanding and support from family and friends can help tremendously. More and more individuals on the spectrum, parents and professionals are coming together to help one another through support groups. The groups are a vital resource for parents looking for answers to their many questions. Part of the mission of the Autism Society includes fostering such groups through local chapters. Your state agencies can also provide you with information on financial assistance, education, and respite.

To find local chapters, professionals, and service providers in your area, visit the Autism Society's free online referral database, [AutismSource™](#).

The Future

Understanding of the autism spectrum in recent years. Now, with appropriate treatment, many people with autism are active, participating members of their communities. People with ASD can learn to compensate for and cope with their disability, often quite well. While each individual is unique, it may help to know that:

- Children with ASD are learning in education classrooms with and from their neuro-typical peers.
- Students with ASD continue their education beyond high school. Some people with ASD graduate from college, and go on to get advanced degrees.
- Adults with ASD, even those who face challenging symptoms, are capable of holding jobs in the community.
- More people with ASD are living in a home or community on their own or with roommates rather than institutions.
- People with ASD are becoming self-advocates. Networks exist where people can share information, support each other and have their voices heard in the public arena. People with ASD attend and/or speak at conferences and workshops on autism. People with ASD are affecting public policy.
- People with ASD are providing valuable insight into the challenges by publishing articles and books and by appearing on TV.

Where Can I Get More Information?

The Autism Society Web site includes extensive and up-to-date information on:

- [The Autism Spectrum](#)
 - [State and local resources](#) (including about 160 local Autism Society chapters)
 - [International organizations](#)
 - [Special events and conferences](#)
 - [News](#)
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National Resources

- [ERIC Clearinghouse on Disabilities and Gifted Children](#)

One of 16 federally-funded ERIC (Educational Resources Information Center) clearinghouses sponsored by the US Department of Education.

- [NICHCY](#)

National Information Center for Children and Youth with Disabilities

- [Office of Special Education and Rehabilitative Services](#)

OSERS supports programs that assist in educating children with special needs, provides for the rehabilitation of youth and adults with disabilities, and supports research to improve the lives of individuals with disabilities.

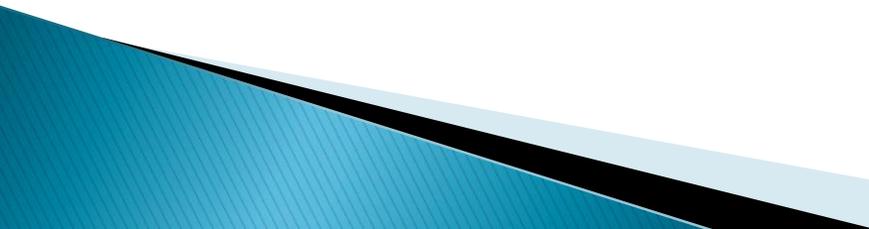
- [Administration for Families and Children: Administration on Developmental Disabilities](#)

Provides information on programs, policies, and activities related to partnerships with state governments, local communities, and the private sector that are assigned to help assist people with developmental disabilities.

- [Americans with Disabilities \(ADA\) Information Line: 800.514.0383](#)

The ADA prohibits discrimination on the basis of disability in employment, programs and services provided by state and local governments, goods and services provided by private companies, and in commercial facilities.

800.514.0383



When complete:

- ▶ For those needing a certificate for training, please email marci.keck@us.army.mil with your name and date of completion. A certificate for 1-hour of training will be mailed to you within 48 hours.