



## **AUTISM FACT SHEET**

### **Definition**

Autism is one of a group of serious developmental disabilities called autism spectrum disorders (ASD) that appear in early childhood — usually before age 3. Though symptoms and severity vary, all autism disorders affect a child's ability to communicate and interact with others.

It's estimated that three to six out of every 1,000 children in the United States have autism — and the number of diagnosed cases is rising. It's not clear whether this is due to better detection and reporting of autism, a real increase in the number of cases, or both.

What is clear is that though there is no cure for autism, intensive, early treatment can make an enormous difference in the lives of many children with the disorder.

### **Statistics from the Autism Society of America**

- 1 in 150 births
- 1 to 1.5 million Americans
- Fastest-growing developmental disability
- 10 – 17% annual growth
- Growth comparison during the 1990s
  - U. S. population increase: 13%
  - Disabilities increase: 16%
  - Autism increase: 172%
- \$90 billion annual cost
- 90% of costs are adult services
- Cost of lifelong care can be reduced by 2/3 with early diagnosis and intervention
- In 10 years, the annual cost will be \$200 – 400 billion

### **Symptoms**

Children with autism generally have impairments in three crucial areas of development — social interaction, language and behavior. But because the symptoms of autism vary greatly, two children with the same diagnosis may act quite differently and have

strikingly different skills. In most cases, though, the most severe autism is marked by a complete inability to communicate or interact with other people.

Many children show signs of autism in early infancy. Other children may develop normally for the first few months or years of life but then suddenly become withdrawn, aggressive or lose language skills they've already acquired. Though each child with autism is likely to have a unique pattern of behavior, these characteristics are common signs of the disorder:

### **Social skills**

- Fails to respond to his or her name
- Has poor eye contact
- Appears not to hear you at times
- Resists cuddling and holding
- Appears unaware of others' feelings
- Seems to prefer playing alone — retreats into his or her "own world"

### **Language**

- Starts talking later than other children
- Loses previously acquired ability to say words or sentences
- Does not make eye contact when making requests
- Speaks with an abnormal tone or rhythm — may use a singsong voice or robot-like speech
- Can't start a conversation or keep one going
- May repeat words or phrases verbatim, but doesn't understand how to use them

### **Behavior**

- Performs repetitive movements, such as rocking, spinning or hand-flapping
- Develops specific routines or rituals
- Becomes disturbed at the slightest change in routines or rituals
- Moves constantly
- May be fascinated by parts of an object, such as the spinning wheels of a toy car
- May be unusually sensitive to light, sound and touch and yet oblivious to pain

Young children with autism also have a hard time sharing experiences with others. When read to, for example, they're unlikely to point at pictures in the book. This early-developing social skill is crucial to later language and social development.

As they mature, some children with autism become more engaged with others and show less marked disturbances in behavior. Some, usually those with the least severe problems, eventually may lead normal or near-normal lives. Others, however, continue to have great difficulty with language or social skills, and the adolescent years can mean a worsening of behavior problems.

The majority of children with autism are slow to acquire new knowledge or skills and some have signs of lower than normal intelligence. Other children with autism have normal to high intelligence. These children learn quickly yet have trouble communicating, applying what they know in everyday life and adjusting in social situations. An extremely small number of children with autism are "autistic savants" and have exceptional skills in a specific area, such as art, math or music.

## Causes

Autism has no single, known cause. Given the complexity of the disease, the range of autistic disorders and the fact that no two children with autism are alike, it's probable that there are many causes. These may include:

- **Genetic errors.** Researchers have discovered a number of genes that appear to be involved in autism. Some may make a child more susceptible to the disorder; others affect brain development or the way brain cells communicate. Still others may determine the severity of symptoms. Each genetic error may account for a small number of cases, but taken together, the influence of genes may be substantial. Some genetic errors seem to be inherited, whereas others occur spontaneously.
- **Environmental factors.** Many health problems are due to both genetic and environmental factors, and this is likely the case with autism as well. Researchers are currently exploring whether viral infections and air pollutants, for instance, play a role in triggering autism.
- **Other causes.** Other factors under investigation include problems during labor and delivery and the role of the immune system in autism. Some researchers believe that damage to the amygdala — a portion of the brain that serves as a danger detector — may play a role in autism.

One of the greatest controversies in autism centers on whether a link exists between autism and certain childhood vaccines, particularly the measles-mumps-rubella (MMR) vaccine and vaccines with thimerosal, a preservative that contains a small amount of mercury. Though most children's vaccines have been free of thimerosal since 2001, the controversy continues. To date, extensive studies have found no link between autism and vaccines.

## Risk factors

Autism affects children of all races and nationalities, but certain factors are known to increase a child's risk. They include:

- **Your child's sex.** Studies show that boys are three to four times more likely to develop autism than girls are.
- **Family history.** Families who have one child with autism have an increased risk of having another child with the disorder. It's also not uncommon for the parents or

relatives of an autistic child to have minor problems with social or communication skills themselves or to engage in certain autistic behaviors.

- **Other disorders.** Children with certain medical conditions have a higher than normal risk of having autism. These conditions include fragile X syndrome, an inherited disorder that causes intellectual impairment; tuberous sclerosis, a condition in which benign tumors develop in the brain; the neurological disorder Tourette syndrome; and epilepsy, which causes seizures.
- **Paternal age.** Research increasingly suggests that having an older father may increase a child's risk of autism. One large study showed that children born to men 40 years or older were almost six times more likely to have autism spectrum disorder than were children born to men younger than 30 years. Maternal age, on the other hand, seems to have little effect on autism risk.

### When to seek medical advice

Babies develop at their own pace, and many don't follow exact timelines found in some parenting books. But children with autism usually show some signs of delayed development by 18 months. If you suspect that your child may have autism, discuss your concerns with your doctor. The earlier treatment begins, the more effective it will be.

Your doctor may recommend further evaluation if your child:

- Doesn't babble or coo by 12 months
- Doesn't gesture — such as point or wave — by 12 months
- Doesn't say single words by 16 months
- Doesn't say two-word phrases by 24 months
- Loses previously acquired language or social skills at any age

### Tests and diagnosis

Your child's doctor will look for signs of developmental delays at regular checkups. If your child shows some signs of autism, you may be referred to a specialist in treating children with autism. This specialist, working with a team of professionals, can perform a formal evaluation for the disorder.

Because autism varies widely in severity and manifestations, making a diagnosis may be difficult. There isn't a specific medical test to pinpoint the disorder. Instead, a formal evaluation consists of an expert observing your child and talking to you about how your child's social skills, language skills and behavior have developed and changed over time. To help reach a diagnosis, your child may undergo a number of developmental tests covering speech, language and psychological issues.

Although the signs of autism often appear by 18 months, the diagnosis sometimes isn't made until age 2 or 3, when there may be more obvious delays in language development and social interactions. Early diagnosis is important because early intervention — preferably before age 3 — seems to be associated with the best chance for significant improvement.

## Treatment and drugs

No cure exists for autism, and there is no "one-size-fits-all" treatment. In fact, the range of home-based and school-based treatments and interventions for autism can be overwhelming.

Your doctor can help identify resources in your area that may work for your child. Treatment options may include:

- **Behavior and communication therapies.** Many programs have been developed to address the range of social, language and behavioral difficulties associated with autism. Some programs focus on reducing problem behaviors and teaching new skills. Other programs focus on teaching children how to act in social situations or how to communicate better with other people. Though children don't outgrow autism, they may learn to function well with the disorder.
- **Educational therapies.** Children with autism often respond well to highly structured education programs. Successful programs often include a team of specialists and a variety of activities to improve social skills, communication and behavior. Preschool children who receive intensive, individualized behavioral interventions show good progress.
- **Drug therapies.** No medication can improve the core signs of autism, but certain medications can help control symptoms. Antidepressants may be prescribed for anxiety, for example, and antipsychotic drugs are sometimes used to treat severe behavioral problems.

Because autism is a devastating and so far incurable disease, many parents seek out alternative therapies. Though some families have reported good results with special diets and other complementary approaches, studies have not been able to confirm or deny the usefulness of these treatments. Some of the most common alternative therapies include:

- **Creative therapies.** Some parents choose to supplement educational and medical intervention with art therapy, music therapy or sensory integration, which focuses on reducing a child's sensitivity to touch or sound.
- **Special diets.** Several diet strategies have been suggested as possible treatments for autism, including restriction of food allergens; probiotics; a yeast-free diet; a gluten-free, casein-free diet; and dietary supplements such as vitamin A, vitamin C, vitamin B6 and magnesium, folic acid, vitamin B12 and omega-3 fatty acids. The diet that has been tried most extensively — and with the greatest anecdotal success — eliminates gluten — a protein found in most grains, including wheat — and casein (a milk protein). To learn more, talk to a registered dietitian with special expertise in autism.
- **Chelation therapy.** This treatment, which is recommended by some doctors and parents, is said to remove mercury from the body. But no studies have shown a link between mercury and autism, and chelation has not been shown to be a safe or effective treatment.

## Coping and support

Raising a child with autism can be physically exhausting and emotionally draining. These ideas may help:

- **Find a team of trusted professionals.** You'll need to make important decisions about your child's education and treatment. Find a team of teachers and therapists who can help evaluate the options in your area and explain the federal regulations regarding children with disabilities. Make certain this team includes a case manager or service coordinator, who can help access financial services and government programs.
- **Take time for yourself and other family members.** Caring for a child with autism can be a round-the-clock job that puts stress on your marriage and your whole family. To avoid burnout, take time out to relax, exercise or enjoy your favorite activities. Try to schedule one-on-one time with your other children and plan date nights with your spouse — even if it's just watching a movie together after the children go to bed.
- **Seek out other families of autistic children.** Other families struggling with the challenges of autism can be a source of useful advice. Many communities have support groups for parents and siblings of children with autism.
- **Learn about the disorder.** There are many myths and misconceptions about autism. Learning the truth can help you better understand your child and his or her attempts to communicate. With time, you'll likely be rewarded by seeing your child grow and learn and even show affection — in his or her own way.

## Autism Specialists

**Catholic Charities has two Autism Specialists on staff to provide consultations to people with autism and their families as well as providing available local resources.**

**Katy Barnum in Dane County (608) 821-3119 or [kbarnum@ccmadison.org](mailto:kbarnum@ccmadison.org)  
Jessica Quam in Rock County (608) 752-4993 or [jqum@ccddc.com](mailto:jquam@ccddc.com)**

## Resources

**Resources for people on the autism spectrum and their families are available on the Autism Society of Greater Madison website: <http://www.autismmadison.org>**

Information from this handout was taken from [mayoclinic.com](http://mayoclinic.com)