

# Breaking the ISOLATION

Early and intensive intervention is crucial for autistic children

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It all started when her little boy was about two. Diane Serret's youngest child, William, wasn't talking and would never turn around when his name was called. Diane, a mother of five in Terrebonne, Que., first feared that her son was deaf. She had him tested by an audiologist but found he had no hearing problem.

At the same time, Diane did a bit of research online on her son's behaviour. When she typed in a description, the word *autism* kept popping up. Little by little, a suspicion began to plant itself in her mind. Then, after hearing a doctor on a TV program explain how autistic kids tend to look at objects and people sideways, she had little doubt. And when staff at Rivière-des-Prairies Hospital in Montreal confirmed a diagnosis of autism in three-year-old William, Diane knew that her life was about to change.

Autism is a neurological disorder that interferes with normal brain development and usually appears in the first three years of life. "This developmental disorder changes the way the brain deals with information, so the autistic child develops in a different way — and at a different pace — from other children," explains Dr. Laurent Mottron, a researcher in the hospital's Autism Information-Processing Laboratory and a professor of psychiatry at the University of Montreal.

## Autistic behaviour

In terms of behaviour, the disorder translates into a lack of serious interest in social activities and relationships (*autism* derives from the Greek word for *self*). Autistic children generally do not interact with kids their own age and have a tendency to avoid direct eye contact and to glance at other people sideways rather than directly face to face.

The disorder is also characterized by communication problems. In autistic people, for example, the development of verbal expression is generally delayed and, in rare cases, it's non-existent.

Finally, the disorder manifests itself in a restricted and repetitive repertoire of behaviours, activities and interests. This range of activities will broaden as life unfolds but it will always remain more restricted than that of a normal person. Autistic children, for instance, tend to engage in repetitive actions such as twirling a stick or clapping their hands. They are also inclined to stick firmly to routines and to resist any changes that disturb their restricted universe.

In addition, these youngsters have frequent bouts of anxiety, as well as eating issues and sleep disturbances. They are prone to sudden fits of anger and to displays of aggression toward others and themselves.



## A genetic origin

The causes of autism have not been clearly explained. The only thing known for certain is that this disorder is genetic in origin, even if the precise genes involved have not been identified. “Genetics does not explain everything, however,” says Dr. Dominique Cousineau, a pediatrician who heads the child development division at Montreal’s Ste-Justine Hospital Centre. In fact, in homozygous (genetically identical) twins, one twin may have autism while the other will not, or may suffer from a different developmental disorder. “It seems there are also one or two non-genetic factors that contribute to whether or not this disorder develops, but their nature and mechanisms of action are not clear at present,” Cousineau adds.

No external environmental factor has been established with any certainty, but researchers continue to study the potential effects of toxins such as lead and mercury and prenatal influences on the fetus during gestation, such as viruses and the mother’s immune system. One thing is clear: vaccinations have nothing to do with autism. Mottron and others are unshakable on this subject. “The hypothesis that vaccines are responsible for the apparent increase in the number of persons with autism has been totally disproven at the scientific level. It’s a

## WHAT CAUSES AUTISM SPECTRUM DISORDERS (ASDs)?

It is generally accepted that autism is the result of abnormalities in brain structures or functions. People with ASDs appear to have chemical and structural differences in their brains and other body systems. It is known that autism interferes with the usual intricate connections in the brain that control and coordinate the areas of social interaction, sense perception and communication. Researchers are now investigating underlying brain differences in autism through new methods of brain imaging. Studies are examining how the human cerebellum (the part of the brain at the back of the skull) processes information, how different brain regions function in relation to one another, and how changes in these relationships during brain development might result in the symptoms of autism. One theory is that certain types of cells may migrate to places in the brain where they are not meant to be — as can be the case in epilepsy.

— Source: Autism Society Canada

## THE SYMPTOMS OF AUTISM

The autistic child may display several of the following behaviours.

- Exhibits delays or anomalies of language (uses repetitive jargon, repeats questions back rather than answering them, recites whole blocks of dialogue from films with no communicative purpose, seems not to understand what is said to him).
- Does not react when called by name.
- Does not ask for things, copes on her own most of the time.
- Is fascinated by objects that turn.
- Prefers to keep to himself.
- Seems not to feel pain.
- Finds it difficult to establish contact with others, is not interested in children of the same age.
- Resists being cuddled.
- Is hyperactive (runs aimlessly, goes around and around objects, jumps all over everything) — or hypoactive (is very quiet and undemanding).
- Shows more interest in objects than people.
- Finds it difficult to establish eye contact.
- Has restricted and repetitive interests (opens or closes doors, twirls objects).
- Resists any changes to routines, has out-of-proportion tantrums when asked to stop an activity.

If your child shows behaviours or symptoms like these, consult a doctor specializing in autism as soon as you can. Early treatment is very important.

Learning that their child has autism is a very challenging experience for parents. Diane admits that in the first six months after William's diagnosis, she and her spouse cried every single day. "We kept asking ourselves why and how this happened," she says. "We simply couldn't understand why we had four normal children and one with autism." And, even today, she finds it hard to accept that her little son is autistic.

myth," he says. The origin of this falsehood may be that the MMR (measles, mumps and rubella) vaccine is given to children at 18 months of age, around the same time the first symptoms of autism emerge.

## Is there an epidemic?

Today, with more and more discussion of autism, some people talk in terms of an epidemic. Mottron and Cousineau, however, are clear on this point, too: there is no epidemic of autism. True, more people are being designated as autistic now than 20 years ago, but the increase is linked to the way in which the disorder is currently defined and the inclusion of people with symptoms that are not typical of the classic disorder.

## TODAY, ONE CHILD IN 165 (60 IN 10,000) IS DIAGNOSED WITH AUTISM

Autistic people display such a variety of symptoms and characteristics that specialists have come to see the condition not as a single disorder but as an entire spectrum covering different types of problems and itself belonging to the broader category of pervasive developmental disorders. "It's as if the mesh of the net has now tightened around people who formerly would never have been classified as having this developmental disorder," explains Mottron. Simply put, what's currently called autism does not consist exclusively of pure or classic cases; it also includes less severe, or less typical, forms. That is why we speak instead of autism spectrum disorders, of which there are five: autism, Asperger's syndrome, childhood disintegrative disorder, pervasive developmental disorder not otherwise specified and Rett's syndrome.

## Toppling prejudices

Contrary to popular belief, autistic children are not less intelligent than kids deemed normal and, according to Mottron, the intellectual deficiencies of autistic people are overestimated. "It was formerly estimated that 70% of affected people suffered from intellectual deficits, but now the figure is more like 40%," he says. "Furthermore, this 40% includes those with false deficits: that is, children who have normal intelligence but cannot utilize it, since they don't have access to material they can process."

So many autistic kids are of normal — perhaps even superior — intelligence. And many autistic people have special powers and skills. "Their concentration capacity is superior to that of non-autistics," Mottron notes. They also exhibit a much sharper sense of precision and can deal with information with tremendous accuracy. That clearly explains why autistic people excel in such areas as math, physics, music and technology.

## AUTISM AFFECTS BOYS FOUR TIMES MORE OFTEN THAN GIRLS, AND EVEN MORE OFTEN IF CHILDREN WITH INTELLECTUAL DEFICITS ARE EXCLUDED

### Detection and early diagnosis

As was the case with Diane, it's often when their child is about two years old that parents begin to notice developmental delays. They realize that their child is not talking, perhaps, or fails to use gestures (pointing at a desired object) in order to be understood. Perhaps the toddler doesn't react at the sound of his name, doesn't hold out his arms to be picked up and repeats the same actions over and over with toys and other objects.

According to Cousineau, however, some autistic children display symptoms right from birth. These, adds Mottron, are the cases that will exhibit the most serious developmental delays in adulthood. "The parents soon realize that their infant is not normal because he doesn't like being held in their arms or because he's too quiet or is always irritable and can't be comforted, Perhaps he won't look them in the eye," says Cousineau.

In each case, it's important to screen for and diagnose the disorder early. "That allows parents to change the way they approach the child and to ensure that the child is taught in a way that maximizes his learning and development," she says. Current criteria for establishing a diagnosis of autism appear in the fourth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) and include delays or abnormal functioning in at least one of these areas: social interaction, language used in social interaction and symbolic or imaginative play. Autistic children often appear fixated on certain objects: Diane's son, now five, is fascinated with water (see "The Symptoms of Autism," opposite page).

### No miracle cure

There is no curative treatment for autism. It's essential to understand that the autistic brain is truly different from the norm on several levels. "You can't turn a whale into a fish or a fish into a whale just by giving medications, because the genetic differences are too fundamental," says Mottron. "Well, it's the same with autism. The differences are so great that there's no possibility of restoring the autistic individual to the norm."

That said, even though autism is a handicap that lasts

a lifetime, many of its debilitating symptoms can be improved and the functional capacity of autistic children can be greatly enhanced. Autism itself is not treated with drugs, but drugs are used to treat associated disorders such as epilepsy, hyperactivity, anxiety and depression. Professionals use a wide range of educational programs and support techniques to help autistic kids. "Since autistic children do not process information the same way we do, and therefore do not learn the way we do, we have to approach their education differently," says Cousineau. To start teaching them how to communicate their needs before they develop the ability to speak, for example, experts use gestures and pictographs. But the biggest challenge is promoting the desire to communicate and interact with others.

For Diane, the educational techniques and parental support programs have been a true blessing. "At first, I did not have a clue what to do with my son when he didn't want to eat, when he screamed for hours because his dad had left for work or when he jumped up and down endlessly on the sofa in front of the TV," she says. Even with support, caring for an autistic child requires a huge amount of time and effort from parents. William needs intensive support and constant supervision just to get through the day without hurting himself.

Today, Diane has a better understanding of her son's condition and is better set up to deal with it. And William has made a lot of progress in the past two years. He's now starting to repeat words in a practice called echolalia — the first step in using verbal language for autistic children. He also understands and uses some of the signing employed by deaf-mute people. Even though Diane has few illusions about her son's future, she continues to make every effort to help him become as independent as possible. "Autistic children have a treasure hidden deep within themselves. It's up to us to give them the tools to use it," she says.

Contact Autism Society Canada at 1 800 476 8440

or go to [www.autismsocietycanada.ca](http://www.autismsocietycanada.ca). Also contact Autism

Central at 514 345 1300 or go to: [www.autismcentral.ca](http://www.autismcentral.ca) 