

# About autism spectrum disorders

## What are autism spectrum disorders?

Autism spectrum disorders are disorders that influence the way the brain develops and works. Many aspects of children's development are affected, causing difficulties with communication, social relatedness and unusual behaviours.

The most common of the autism spectrum disorders are Autism (also known as Autistic Disorder), High Functioning Autism and Asperger's Syndrome. The idea that there is a spectrum of autism disorders highlights that children may have symptoms that range from being very severe with impacts in most areas of their lives, to more moderate symptoms that are less limiting. Children with moderate symptoms of autism spectrum disorders are usually diagnosed with High Functioning Autism or Asperger's Syndrome.

## How are autism spectrum disorders diagnosed?

There is no single test for diagnosing any of the autism spectrum disorders. To make a diagnosis, a thorough assessment is best undertaken by a team of mental health professionals. The team may include a paediatrician or psychiatrist, a speech pathologist, a psychologist and an occupational therapist. They will comprehensively review the child's progress through early development, any prior experience of trauma or ill health, family circumstances, learning and school behaviours. Sometimes teachers and families are asked to fill out questionnaires related to the child's behaviour. The diagnosis is based on all of the information collected.

Children with relatively severe Autism are usually diagnosed by the age of three years. Intellectual disability is common in this group. Those with High Functioning Autism or Asperger's Syndrome may not be given a diagnosis until later in primary school when their difficulties become more obvious in comparison to other children.

## Key features of Autism in children

Autism causes problems (or symptoms) that may range from mild to severe. Difficulties with communication and social interaction are often the first things other people notice. Intellectual disability may occur in as many as three-quarters of those children who have Autism.

As of now, research has not identified any particular cause for Autism. Experts agree that brain development occurs differently in children with autism spectrum disorders, but research has not been able to isolate what makes up the specific differences. There is some evidence of genetic factors influencing the development of autism spectrum disorders.





## What you might notice in a child with High Functioning Autism or Asperger's Syndrome

<b>Language</b>	In children with Autism, speech is usually slow to develop, is often used in unusual ways or may not develop at all. For example, children with Autism may echo speech and sounds made by others. This speech pattern is called 'echolalia'.
<b>Behaviour</b>	<p>In young children with Autism it is common to see repetitive behaviours like hand flapping or walking on toes. These repetitive behaviours do not appear to be voluntary or playful and children may become agitated if stopped from doing them.</p> <p>Low tolerance for stimulation of the senses is common in children with Autism. For example, they may hate to be touched, may over-react to noises that only seem slight to others or may dislike certain textures in food or clothing.</p>
<b>Social interaction</b>	Social relating is very difficult for children with Autism. Some children with Autism may appear aloof and uninterested in relationships with others. Difficulty in understanding what is going on around them may lead to anxiety and avoidant behaviour.
<b>Play</b>	<p>Imagination and the capacity to play are limited in children with Autism. Instead of playing, a child with Autism may be absorbed for hours by something as simple as switching an electric light on and off. The quality of play and use of imagination help to indicate the severity of symptoms of Autism.</p> <p>Children with Autism may have better-developed visual abilities than language abilities and enjoy activities like building toys and drawing, which allow them to use their strengths. The use of pictures and images may assist their learning of verbal material.</p>

## High Functioning Autism or Asperger's Syndrome

Children with High Functioning Autism have a milder form of Autism and average or above-average intelligence. This is similar to Asperger's Syndrome, which many experts believe is a different label for the same set of developmental problems. To be diagnosed with these conditions a child must show unusual use of language, problems in relating in social situations and interests that are narrow, highly specialised and often unusual. Amongst this group of children, the pattern of strengths and weaknesses may vary a lot.

# What you might notice in a child with High Functioning Autism (HFA) or Asperger's Syndrome (AS)

<p><b>Language</b></p>	<p>Language difficulties in children with HFA or AS are related to comprehension. They may speak, read and write fluently as this area of language development is not usually delayed. Some of these children have very advanced word knowledge. However, they often understand and respond to words by taking the actual meaning of particular words, where this is not intended (see examples on the right). They often have difficulty understanding the hidden meanings in jokes or in sarcasm.</p>	<p><b>Watch out for meaning!</b></p> <p>Common sayings like these might be confusing for children with HFA or AS:</p> <ul style="list-style-type: none"> <li>• Looks can kill</li> <li>• A flat battery</li> <li>• Pull yourself together</li> <li>• I caught his eye</li> <li>• If you eat any more you will burst</li> </ul>
<p><b>Social communication</b></p>	<p>Children with HFA or AS have difficulties with awareness of nonverbal social cues as part of social communication. For example, they may not make eye contact with others. They are often overly talkative in conversation and do not take into account whether the person they are talking to is interested in the conversation. They may not notice when someone is upset until they start to cry. They may not register differences in tone of voice and therefore may mistake what others are meaning.</p>	
<p><b>Social interaction</b></p>	<p>Children with HFA or AS may want to have friends but have difficulty in making or keeping them. Because they lack awareness of social cues they may barge into others' games or interrupt their conversations. Other children with HFA or AS may hang back and seem to be very distant. Relationships with other children may be awkward because these children lack understanding of others' needs and perspectives.</p>	
<p><b>Interests</b></p>	<p>Children with HFA or AS often develop highly specialised interests. Sometimes these children have talents in art and music or in mathematics. Sometimes these interests are more eccentric, focused on gathering lots of facts about the specialty area they have chosen. Examples of these 'fact-finding missions' include collecting the engine numbers of all BMW red sports cars, or knowing everything about dinosaurs. Their interests appear obsessive.</p>	
<p><b>Other associated difficulties</b></p>	<p>There are a number of other difficulties that often go along with the diagnosis but are not seen as central to it. Children with HFA or AS may have difficulties with attention and organisation. Clumsiness is not uncommon in this group of children. They may also show hypersensitivity to touch or over-reaction to loud noise. Children with HFA or AS are often reported to have good memories. They may be able to recite the contents of a 60 page book but their ability to use memory, except for rote learning, is usually affected. This reduces their ability to understand meanings that depend on particular circumstances or situations.</p>	

## What professional supports are effective?

There is no one specific type of professional support to help children with autism spectrum disorders. Early intervention so that children and families can get appropriate specialised help is important. Because children with these disorders have different needs, careful assessment is required in order to develop a professional support plan which takes into account their strengths and difficulties.

School curriculum requirements should be adapted to meet the child's needs through the use of individualised learning plans. It is also important to build language skills and social relating skills so that children can engage more effectively in everyday situations. Speech pathologists have an important role to play in providing individualised programs and/or consultation to the school and family.

The school psychologist may help to plan ways the child can be taught, and to manage everyday behaviours at school. Psychological assistance may also be needed to reduce problem behaviours and improve emotional self-control.

- Children with High Functioning Autism or Asperger's Syndrome often experience anxiety, and psychological help in these instances can be particularly useful.
- The Australian Government Department of Health and Ageing (DoHA) has published a booklet which explains the professional support available: *Early Intervention for Children with Autism Spectrum Disorders: Guidelines for Best Practice*.
- Autism spectrum disorders are life-long disorders. Though children grow and learn new skills, difficulties with social interaction and communication may continue into adulthood. Adults with High Functioning Autism or Asperger's Syndrome may have difficulty in roles that involve working closely with other people but may be highly successful in jobs requiring special interests such as technological skills. It is important to focus on developing strengths and to put in place strategies to meet the needs of the individual child.
- To assist children with autism spectrum disorders it is important to have a coordinated approach between home and school.

## How to assist children with autism spectrum disorders

It is important to recognise that while the patterns of symptoms for children diagnosed with autism spectrum disorders are similar, no one child will have the same pattern of strengths and needs as another. Autism varies in severity and children may have very different levels of difficulty.

Helping strategies need to be carefully matched to the individual child and to the needs, goals and strengths of each family. Consistency of approach is crucial for helping children with autism spectrum disorders, so coordinating strategies at home and school is very important. Team work and planning that includes parents, teachers, the school psychologist, speech pathologist and other health professionals will help in achieving the best strategy for each individual student.



## General principles for assisting children with autism spectrum disorders

### Minimise change, maximise predictability

Children with autism spectrum disorders respond best to predictable environments that emphasise routine. They typically do not cope well with change and may become anxious or disruptive when routines are disturbed.

### Provide step-by-step guidance

Children with autism spectrum disorders have difficulty with understanding abstract concepts. They learn best through clear and fully explained instructions and on-going guidance. This applies to learning behaviours and routines at home as well as to schoolwork.

### Help them to learn about others' social and emotional needs

Social interactions are a key difficulty for children with autism spectrum disorders. They need to be shown how to notice others' feelings and points of view and how to respond appropriately.

### Tune into strengths

Children with autism spectrum disorders often have significant strengths as well as difficulties. Tuning into their unique views of the world helps others appreciate what they have to offer. Focusing on strengths builds children's confidence and reduces anxiety.



This resource is part of a range of KidsMatter Primary information sheets for families and school staff. View them all online at [www.kidsmatter.edu.au](http://www.kidsmatter.edu.au)



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