

## What is autism?

Autism is a lifelong neurodevelopmental condition. It is characterised by differences in behaviour, social interaction, communication, special interests and sensory processing. These differences can present people on the autism spectrum with challenges in how they interact with their environment. To receive a diagnosis of autism, these symptoms need to be evident from childhood and impair the person's daily functioning.<sup>1</sup>

Some characteristics of autism are common to a greater or lesser extent among many people on the autism spectrum; other characteristics are typical but not necessarily experienced by all people on the autism spectrum. Thus, the word 'spectrum' is used to reflect the wide scope of differences in how individual people experience autism and their environment.

While some people on the autism spectrum also have an intellectual impairment or disability, many others have average intelligence, while others have above-average intelligence.

### Behaviour

People on the autism spectrum may exhibit non-typical skills and focus. This can include:

- unusually intense or focused interests, including savant skills
- excellent memory skills
- high level of attention to details, plans, patterns and codes
- either difficulties, or exceptional skills in planning and self-organisation.

Some people on the autism spectrum may behave in non-typical ways, often in response to the different ways in which they experience their environment. Such behaviours are generally a way to communicate their feelings or to adapt to a situation, or may result from their heightened sensitivity to a sound or something they have seen or felt.

Some people on the autism spectrum may use these behaviours as a way to reduce uncertainty and maintain the predictability of their environment. This can include:

- strict adherence to rules and routines
- repetitive body movements
- repetitive use of objects, such as repeatedly switching lights on and off, or placing objects in a strict order or pattern.



## Social interaction

People on the autism spectrum may to a greater or lesser extent be unable to understand and express their needs and emotions, or unable to interpret and understand the needs and emotions of others. This can affect their ability to share interests and activities with other people. Their non-typical communication styles and skills can lead to their avoidance of any social interaction and withdrawal into repetitive play and behaviour. For these reasons, people on the autism spectrum may sometimes appear distant and aloof and may have challenges in establishing and maintaining relationships. People on the autism spectrum may also show strong loyalty and commitment to honesty.

## Communication

People on the autism spectrum may face communication challenges in one form or another. Many people on the autism spectrum are highly articulate and speak fluently, others may have speech impairments of varying degrees and others are unable to speak at all (non-verbal). Of those who can speak, they can often use language in a limited or non-typical way. People on the autism spectrum may tend to speak their mind and to present and interpret information in 'black and white' concepts. Conversations may involve repeating phrases, asking the same questions over and over, or focussing only on topics that are of interest to them. People on the autism spectrum may either miss or misinterpret non-verbal forms of communication such as facial expressions, hand gestures and other body language.

## Sensory processing

People on the autism spectrum may experience non-typical sensory sensitivities and may seek to avoid everyday sounds and textures such as hair dryers, vacuum cleaners and sand. Some people on the autism spectrum may have unusual sensory interests, such as sniffing objects or staring intently at moving objects. These sensitivities and interests can lead to non-typical behaviours, often as means of adapting to and coping with the sensitivity.

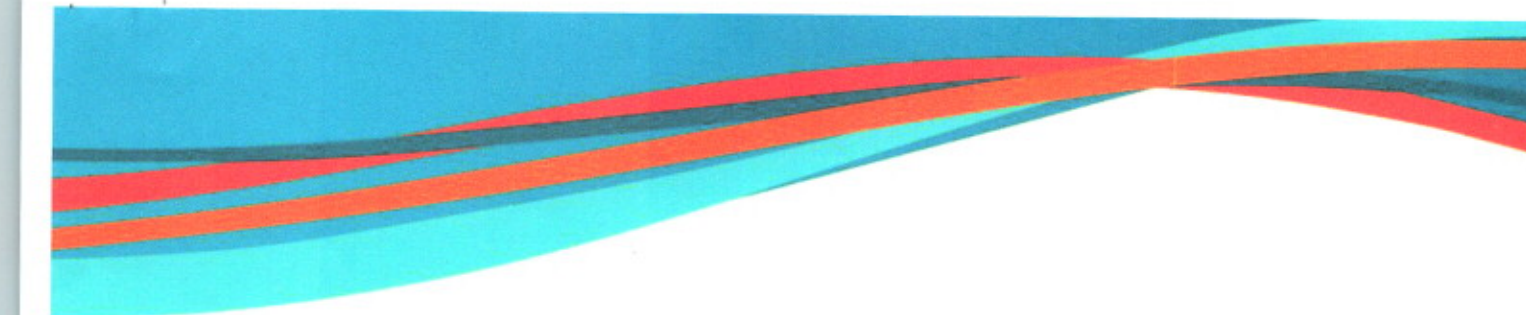
## What causes autism?

Currently, there is no single known cause of autism, however, recent research has identified strong genetic links. Autism is not caused by an individual's upbringing or their social or economic circumstances.

## How common is autism?

It is estimated that worldwide there are 52 million people on the autism spectrum and research suggests that there is little variation from one region to another in the proportion of the population who are on the autism spectrum.<sup>2</sup>

March 2017



Estimates of the number of people on the autism spectrum rely largely on the reported number of people who have received a diagnosis. Diagnosis is now more common in childhood, and this means that the reported number of children with an autism diagnosis is higher than for adults. In Australia, up to 2.5%, or 1 in 40 parents with children born in 2004-2005 reported that their child had received an autism diagnosis by the age of 7 years, whereas 1 in 67 parents with children born in 1999-2000 reported that their child had received an autism diagnosis by the age of 7 years.<sup>3</sup> The United States Centers for Disease Control and Prevention has estimated that about 1 in 68 children in the United States are identified as being on the autism spectrum.<sup>4</sup> Consistent with the understanding that autism is a lifelong condition, researchers from the United Kingdom have shown that the prevalence of autism in the adult population is similar to that identified in children.<sup>5</sup> The rate of diagnosis in children is higher for males than for females.<sup>5,6</sup>

Over the last two decades the reported prevalence of autism has increased dramatically from its 1995 count of around 1 in 500.<sup>7</sup> Current research suggests that the increased rate of autism diagnosis is due to changes in reporting practices<sup>8</sup> and changes in the diagnostic criteria, which now includes a broader range of diagnostic features.<sup>9</sup>

## Symptoms of autism in children

No single indicator necessarily signals autism – usually, a child will present with several indicators from some of the following categories:

### Behaviour

- Has inexplicable tantrums
- Has unusual interests or attachments
- Has unusual motor movements such as flapping hands or spinning
- Has extreme difficulty coping with change

### Sensory

- Afraid of some everyday sounds
- Uses peripheral vision to look at objects
- Fascination with moving objects
- High tolerance of temperature and pain

### Communication

- Not responding to his/her name by 12 months
- Not pointing or waving by 12 months
- Loss of words previously used
- Speech absent at 18 months
- No spontaneous phrases by 24 months
- Selective hearing – responding to certain sounds but ignoring the human voice
- Unusual language patterns (e.g. repetitive speech)

March 2017



### Social skills

- Looks away when you speak to him/her
- Does not return your smile
- Lack of interest in other children
- Often seems to be in his/her own world
- Does not seek to share interests with others

### Play

- Prefers to play alone
- Very limited social play (e.g. "Peek-a-boo")
- Play is limited to certain toys
- Plays with objects in unusual ways such as repetitive spinning or lining up
- Shows very strong interest in or attachment to a limited number of games or toys

## Diagnosis

Autism is diagnosed by developmental paediatricians, psychiatrists and psychologists who are qualified and experienced in assessing people on the autism spectrum. An assessment includes observations, standardised tests or questionnaires, and meeting with the individual, their family and service providers. Information is gathered about the individual's strengths and difficulties, particularly in the areas of social interaction and social communication, sensory processing, and restricted and repetitive interests, activities and behaviours. There is no single behaviour that indicates autism. Currently, there are no blood tests that can detect autism.

In Australia, as in the UK and USA, professional diagnosis commonly uses the classification provided by the Diagnostic Statistical Manual of Mental Disorders (DSM 5), produced by the American Psychiatric Association. Under the most recent version (DSM 5) there is now a single diagnosis of autism spectrum disorder, with a severity ranking of 1, 2 or 3 allocated according to individual's support needs. An alternative diagnostic tool used for the clinical identification and classification of autism is the International Classification of Diseases (ICD), produced by the World Health Organisation (WHO). The most recent version (ICD-10) provides four separate classifications for Autistic Disorder, Asperger's syndrome, Other pervasive developmental disorders; and Pervasive developmental disorder, unspecified.

Autism is usually diagnosed in early childhood, but can be done at any age.

If you would like an assessment for autism, your GP can refer you to a developmental paediatrician or diagnostic assessment service in your area. Aspect provides specialist autism assessment and diagnostic services in New South Wales.

March 2017



## Giving your child the best opportunities

For children, an early diagnosis can provide access to effective early intervention programs, which are an important first step to help ensure that the child and their family can enjoy the best possible quality of life.

For families of young children, the period following a diagnosis can be an extremely stressful for the family. Not only are you experiencing many emotions, you are also faced with decisions regarding intervention options for your child. This period of decision-making can be overwhelming for parents, given the nature of waiting lists, the number of different service providers, and the desire to help your children as quickly as possible.

## Leading a quality life in adulthood

For people who receive a diagnosis later in their life, many support services and therapies are also available to help them make the most of their abilities, access services, find employment develop social relationships and enjoy a good quality of life. Many of the adults on the autism spectrum who have received a diagnosis after childhood express the relief that the diagnosis provided them in explaining why they had felt different from other people for all or most of their life, and enabled them to find the right services and treatments after many years of unsatisfactory therapies, as well as make contact and rewarding social relationships with other people on the autism spectrum.

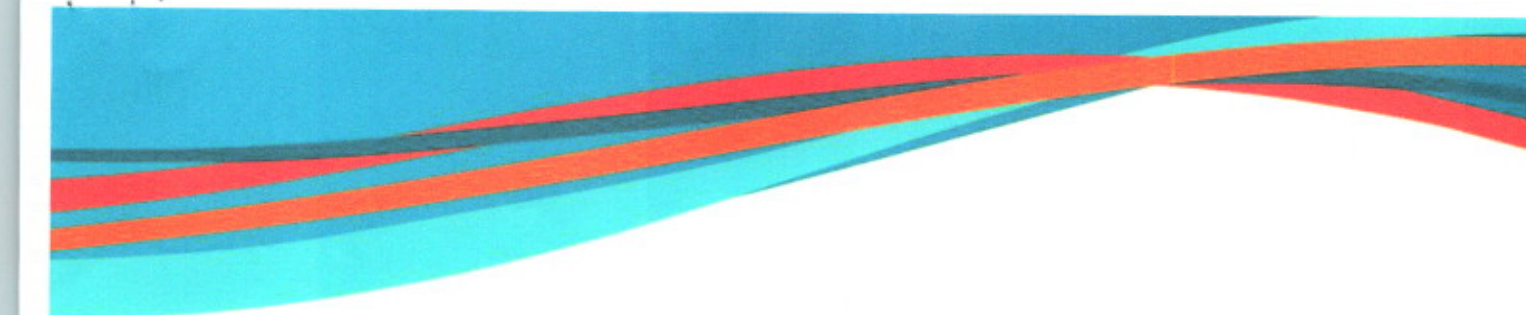
## Choosing services and supports

Choosing services and supports that will best suit the needs of each individual, and those of their family/carers, requires thought, discussion and information.

Questions to consider include:

- Does this program or practitioner respect and incorporate my role and knowledge?
- Can I or we learn how to implement this approach in our everyday life situations?
- Is it clear what type of intervention is offered and why it would help?
- What does the intervention involve, who will be involved in delivering it and how will the approach be introduced?
- Was the approach specifically developed for use with children/adults on the autism spectrum?
- Does this approach benefit all people on the autism spectrum, or is it designed for specific use with one sub-group?
- Is this approach flexible? Does it take into account the differences of individuals on the autism spectrum and their needs?
- Has this approach been evaluated? Is there any research published which supports the safety and effectiveness of this type of intervention?

March 2017

- 
- How long has this approach been used with people on the autism spectrum?
  - Can this approach be used in conjunction with other approaches?
  - To what extent will it affect my/our whole family's lifestyle?
  - Is it home-based, centre-based, and can the approach be used and generalised across all situations?
  - How does this approach address the individual's communication, social, behavioural and sensory processing needs?
  - How much will it cost?
  - How will I know if the approach is working?

Typically, a co-ordinated approach is taken that may involve some or all of the following professions working together with the individual and where applicable their family, depending on the needs that have been identified:

- General Practitioner (GP)
- Paediatricians
- Psychiatrists
- Psychologists
- Occupational therapists
- Speech pathologists
- Early Intervention specialists
- Behavioural support specialists
- Teachers
- Teachers' aides
- Education consultants
- Specialist educators
- Counsellors

## Finding help

If you have concerns, your GP may refer you to a developmental paediatrician or diagnostic assessment service in your area.

Alternatively, you can contact Aspect about information on autism-related services.

## Contact Aspect customer service

Telephone 1800 277 328 or (02) 8977 8377 9am-5pm Monday to Friday  
Web <http://www.autismspectrum.org.au/>  
Email [customerservice@autismspectrum.org.au](mailto:customerservice@autismspectrum.org.au)

March 2017



## References

1. American Psychiatric Association (APA). Diagnostic and Statistical Manual of Mental Disorders 5. Arlington, VA: American Psychiatric Association; 2013.
2. Baxter AJ, Brugha TS, Erskine HE, Scheurer RW, Vos T, Scott JG. The epidemiology and global burden of autism spectrum disorders. *Psychological medicine*. 2014;1-13.
3. Randall M, Sciberras E, Brignell A, Ihsen E, Efron D, Dissanayake C, Williams K. Autism spectrum disorder: Presentation and prevalence in a nationally representative Australian sample. *Australian & New Zealand Journal of Psychiatry*. 2016 Mar;50(3):243-53.
4. Baio J. Prevalence of Autism Spectrum Disorder among children aged 8 years—Autism and Developmental Disabilities Monitoring Network. *Surveillance Summaries March*. 2014;28(63):1-21.
5. Brugha TS, McManus S, Bankart J, Scott F, Purdon S, Smith J, et al. Epidemiology of autism spectrum disorders in adults in the community in England. *Archives of General Psychiatry*. 2011;68(5):459-66.
6. Taylor, J., & Seltzer, M. (2011). Employment and post-secondary educational activities for young adults with autism spectrum disorder during transition to adulthood. *Journal of Autism and Developmental Disorders*, 41, 566-574.
7. Weintraub K. Autism counts. *Nature*. 2011;479(7371):22-4.
8. Hansen SN, Shendel DE, Parner ET. Explaining the prevalence of autism spectrum disorder: The proportion attributable to changes in reporting practices. *JAMA Pediatrics*. 2015;169(1):56-62.
9. Polyak A, Kubina RM, Girirajan S. Comorbidity of intellectual disability confounds ascertainment of autism: Implications for genetic diagnosis. *American Journal of Medical Genetics Part B: Neuropsychiatric Genetics*. 2015:600-8.

March 2017