

What is Down Syndrome? Down syndrome is when an individual is born with an extra chromosome (NHS 2023). This chromosome is usually developed by chance, due to a change in the sperm or egg before they are born. Additionally, Down Syndrome does not appear to run in families. According to Down Syndrome UK (2025), seven hundred and fifty babies are born with Down Syndrome each year. Globally, one in seven hundred babies are born with Down Syndrome.	Different types of Down Syndrome There are three different types of Down Syndrome. These are Trisomy 21 (Nondisjunction), Translocation Down Syndrome, and Mosaic Down Syndrome. Trisomy 21 is typically caused by an error in cell division, which is known as nondisjunction. It results in an embryo with three copies of chromosome 21 rather than the usual two. This type is the most common, affecting 95% of people with the condition. Translocation is when an additional or partial copy of chromosome 21 attaches to another chromosome, which is usually chromosome 14. This additional chromosome is what causes the characteristics of Down Syndrome. This type will affect about 3-4% of cases. Mosaic Down Syndrome is when there is a mixture of two types of cells, some containing the usual 46 chromosomes and some containing 47. Those cells with 47 chromosomes contain an extra chromosome 21. This type is the rarest, affecting only 1-2% of those with Down Syndrome.	Identification and diagnosis Down Syndrome can be identified and diagnosed prior to a child's birth Prenatal screening tests are offered to expecting mothers of any age to identify whether or not their child has Down Syndrome. Though these tests are useful, they are not mandatory.	The impact of Down Syndrome on a child's daily life Many children with Down Syndrome will meet their developmental milestones later than other children. These can include the ability to walk and talk (Boston Children's Hospital 2016). Lipińska-Lokś (2020) notes that individuals with Down Syndrome will have a different physical appearance to those who do not have the condition, their facial features will not be the same. Some of these facial features are slanted eye lids, a flat face profile, loose skin on the neck, a lack of hair, and a wrinkled tongue. Children with Down Syndrome may also have impacted speech (MacDonald 2025).
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Barriers of Down Syndrome Children with Down Syndrome will struggle with their physical development (Barr and Shields 2011). Souto <i>et al.</i> (2024) says that individuals with disabilities participate less than their peers. The reason for this is linked to a child's physical needs and development. communication can appear as a barrier to those with Down Syndrome. Seager <i>et al.</i> (2022) explain that speech and language acquisition can be a challenge for young children with Down syndrome. The website Makaton (2026) suggests that using Makaton as a resource can help children with Down Syndrome to communicate. To ensure they are well supported and can overcome this barrier, early years practitioners should be given the appropriate training so that they can use Makaton as a communication method. Although additional barriers will come with this as training and guidance will need funding and also time for practitioners to undertake the training.	Strategies to support children with Down Syndrome NHS (2023) suggest that communication strategies such as Makaton, and PECS are strategies that are able to support children with Down Syndrome. PECS (Picture Exchange Communication System) is an "Augmentative and Alternative Communication (AAC) system which is widely used to support children with developmental disabilities", as stated by May <i>et al.</i> (2024). May <i>et al.</i> (2024) argues that one of the strengths of PECS is that it is a manualized intervention. This is beneficial for children with Down Syndrome as the system will always require human intervention, rather than things being displayed for them on a digital screen. Baxter (2015) states that children with Down Syndrome can effectively learn from looking. When they can physically see what is happening and being taught, they are more likely to remember it, rather than them just having it explained to them. Using PECS can have positive results. Hotchkiss (no date) explains that using PECS is beneficial as it is easily understood by peers as well as in the community. Although training on this system is more beneficial to those who teach and use it, it can be understood by those who lack knowledge about it. Another positive to this strategy is that PECS is affordable. The main cost of PECS is the training, meaning that once early years practitioners are correctly trained, they are able to share this and support the children who need it. However, in more deprived areas, some settings may not be able to afford the appropriate training so this could also be seen as a negative to this strategy. Hotchkiss (no date) suggests that PECS is suitable for all age groups across a variety of ALN. This means that as children with Down Syndrome get older, they will not need to learn a new system that is more suited towards their age group as they will already have this one, they can use.
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Down Syndrome

UNCRC The United Nations Conventions on the Rights of the Child (UNCRC) (2019) article 23, children with a disability explains that all children with disabilities have the right to live a full and decent life. If a child with Down Syndrome is victim to bullying, then they are not experiencing this right, through no fault of their own. Within childcare settings, all children should be educated about why they shouldn't discriminate against those with any additional learning needs. Article 28, the right to education, explains that education must be available to every child. Within this education, early years practitioners should be providing all of the children with the knowledge of their rights, especially those with additional learning needs as they may not be as aware of their rights.	Challenges of identifying Down Syndrome -an invasive diagnostic test carries a small risk of miscarriage -they did not receive any information in regard to Down Syndrome screening -a lack of availability of resources
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The infographic is titled "TYPES OF DOWNS SYNDROME" in a dark blue rounded rectangle. Below the title, three categories are listed in colored boxes: "TRISOMY 21 NONDISJUNCTION" (purple, 95%), "TRANSLOCATION DOWNS" (blue, 2%), and "MOSAIC DOWN SYNDROME" (orange, 3%). Each box contains a small diagram of chromosomes. The Trisomy 21 diagram shows three chromosomes labeled 21. The Translocation Downs diagram shows two chromosomes, one labeled 21 and one labeled 14. The Mosaic Down Syndrome diagram shows two separate groups of chromosomes, one with two labeled 21 and one with one labeled 21. The infographic is credited to "INDORE INFERTILITY CLINIC" in small text.

Figure 1: Types of Down Syndrome (Bhaduria 2023)