

Down Syndrome

Down syndrome is a genetic disorder caused when abnormal cell division results in an extra full or partial copy of the 21st chromosome. This extra genetic material causes the developmental changes and physical characteristics of Down syndrome. Down syndrome is the most common genetic chromosomal disorder and cause of learning disabilities in children. While it can vary in severity among individuals, it causes lifelong intellectual disability and developmental delays.



Each person with Down syndrome has different intellectual and developmental challenges which can range from mild to severe. Children and adults with Down syndrome have distinct facial features, although not all people with Down Syndrome have the same physical characteristics.

Risk Factors & Causes

Some parents have an increased risk for having a child with Down Syndrome. The most common risks are advanced maternal age (women over 35 are at higher risk), parents who are carriers for the genetic shift of Down Syndrome, and parents who already have one child with Down syndrome. There are three genetic variations that can cause Down syndrome:

- **Trisomy 21** - three copies of the 21st chromosome instead of the normal two (95% of cases).
- **Mosaic Down Syndrome** - a person has only some cells with an extra copy of the 21st chromosome.
- **Translocation Down Syndrome**- a portion of the 21st chromosome becomes attached to another chromosome.

Diagnosis & Treatment

Screening tests can indicate the likelihood that a mother is carrying a baby with Down syndrome, and diagnostic tests are used to determine if a child has Down syndrome. Early interventions for infants and children can increase their quality of life.

If your child has Down syndrome, we can help connect you with services and resources in the community. Call our 24-Hour Helpline at 1.800.928.8000.

Source –Mayo Clinic For more information visit: <https://www.mayoclinic.org/diseases-conditions/down-syndrome/symptoms-causes/syc-20355977>