

Down Syndrome is the most commonly occurring genetic condition associated with developmental disabilities. Down Syndrome is the most commonly occurring genetic condition associated with developmental disabilities. Down Syndrome is the most commonly occurring genetic condition associated with developmental disabilities. Down Syndrome is the most commonly occurring genetic condition associated with developmental disabilities.



## Associated Medical Problems (contd.)

### Endocrine Abnormalities;

Thyroid dysfunction and infertility. 15% of children manifest hypothyroidism before adolescence.

### Gastrointestinal Disorders;

- Constipation and gut abnormalities;
- Seizure disorders;
- Visual Impairments;
- Atlantoaxial instability - due to increased laxity of ligaments of the upper cervical spine.

## Management

Most people with Down syndrome have IQs that fall in the mild to moderate range of mental retardation.

The main objective of management is to provide optimal medical and surgical care to all persons with Down syndrome.

Persons with Down Syndrome are definitely educable, i.e.: They can go to school.

With appropriate early intervention programs and special education strategies, many persons will be able to hold a job, and function well in society.



**The Barbados Council for the Disabled is a national grouping of all organizations for and of persons with disabilities, dedicated to the health and well-being of its members and all other persons with disabilities in our society.**

For additional information, contact:  
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**Mon - Fri 9:00am to 5:00pm**

**Closed weekend and public holidays**

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## Down Syndrome

**Down Syndrome is the most commonly occurring genetic condition associated with developmental disabilities.**

In every 800 to 1,000 live births is one child with Down syndrome, representing approximately 4 - 5 births per year in Barbados alone.

Boys outnumber girls 1.3 - 1.

Ninety- five percent (95%) of cases are caused by trisomy 21, whereas the remainder are translocations or mosaics.

Eighty percent of children born with Down Syndrome are born to women younger than 35-years-old.

However, the incidence of births of children with Down syndrome increases with the age of the mother.

The diagnosis of Down Syndrome can be made at birth on the basis of the physical examination or before birth by a combination of blood tests or amniocentesis. Chromosomal testing can also be done for a definitive diagnosis.

*Many of the physical characteristics of Down Syndrome are found to some extent in the general population. Among the most common traits are:*

- **Muscle hypotonia** - low muscle tone.
- **Flat facial profile** - a somewhat depressed nasal bridge and a small nose.
- **Oblique palpebral fissures** - an upward slant to the eyes.
- **Dysplastic ear** - an abnormal shape of the ear.
- **A single deep crease across the center of the palm.**
- **Hyperflexibility** - an excessive ability to extend the joints.
- **Dysplastic middle phalanx of the fifth finger** - fifth finger has one flexion furrow instead of two.
- **Epicanthal folds** - small skin folds on the inner corner of the eyes.
- **Excessive space between large and second toe.**
- **Relative enlargement of tongue in relation to size of mouth.**

## Associated Medical Problems

**Heart disease:** Up to 50 percent of individuals with Down syndrome are born with congenital heart defects.

The majority of heart defects in children with Down syndrome can now be surgically corrected with resulting long-term health improvements.

**Leukemia:** Individuals with Down syndrome have a 15 to 20 times greater risk of developing leukemia. The majority of cases are categorized as acute megakaryoblastic leukemia, which tends to occur in the first three years of life.

A transient form of leukemia is also seen in newborns with Down syndrome, disappearing spontaneously during the first two to three months of life.

**Alzheimer's disease:**

Estimates vary, but it is reasonable to conclude that 25% or more of individuals with Down syndrome over the age of 35 will develop the clinical signs and symptoms of Alzheimer's type dementia.

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