

Down Syndrome

Etiology

The result of a random error in cell division which causes each cell in the individual's body to contain an extra copy of chromosome 21.

There are no identified behaviors of the parents or environmental factors known to cause this error in cell division. Increased age of the mother has been linked to increased chances of having a baby with Down syndrome.

Common Names

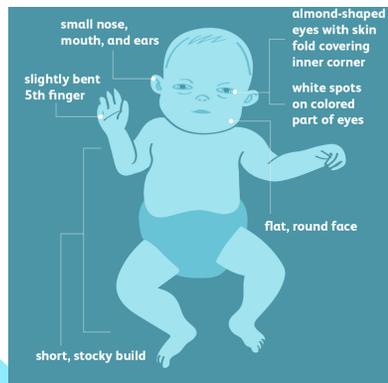
Trisomy 21 – 95%

Translocation Down syndrome – 3%

Mosaic Down syndrome – 2%

Characteristics

- Flattened face, especially the bridge of the nose
- Almond-shaped eyes that slant up
- A short neck
- Small ears
- Tongue that tends to stick out of the mouth
- Small hands and feet
- A single line across the palm of the hand (palmar crease)
- Small pinky fingers that sometimes curve toward the thumb
- Poor muscle tone or loose joints
- Shorter in height as children and adults



Deficits

Higher Risk for:

- Hearing Loss (75%)
- Obstructive sleep apnea (50-75%)
- Ear infections (50-70%)
- Eye diseases, such as cataracts (60%)
- Eye issues requiring glasses (50%)
- Heart defects present at birth (50%)
- Intestinal blockage at birth requiring surgery (12%)
- Hip dislocation (6%)
- Thyroid disease (4-18%)
- Anemia (3%)
- Iron deficiency anemia (10%)
- Intellectual Disability



Long-Term Developmental Outcomes

Children with Down syndrome usually learn and progress more slowly than other children.

Motor skills develop at a slower rate.

Increased risk of developing Alzheimer's disease, endocrine problems, dental problems, seizures, ear infections, and hearing and vision problems in adulthood.

On average, people with Down syndrome live to about 55 to 60 years, and some live into the 70s or 80s.

Incidence

Most common chromosomal disorder

6,000 babies each year

1 in 700 births

Diagnostic Category/Classification

DSM: Unspecified Neurodevelopmental Disorder (315.9)

Under IDEA, a child with Down syndrome may qualify for services under "Intellectual Disability" or "Speech Impairment"

Role of the School Psych

School Psychs can explore ways in which children with Down syndrome can be supported in schools. We can look at attitudes of the school, and the extent to which mainstream teachers assume overall responsibility for the education of these children. We can help ensure the child mixes socially, and is accepted as part of the school community.

Assessment Approaches

The assessment process begins as it would for any other child, with fact finding. The parents are interviewed and asked to share the child's progress, and school, therapy, and medical reports are collected.

Interventions and Treatments

Early intervention is key to improving outcomes for children with Down syndrome.

- Physical therapy
- Speech-language
- Occupational
- Emotional and Behavioral
- Drugs and Supplements
- Assistive Devices

Resources

<https://ectacenter.org/>

<http://day2dayparenting.com/category/child-development-2/special-needs-diagnoses/>

<https://www.familyvoices.org>

The National Professional Resources, Inc.
Down Syndrome Education USA

"Untestable" does not mean "un-assessable". For example, a collection of the student's work over time can serve us in building a portfolio assessment. This may include:

- Tape recordings
- Artwork
- Speech samples
- Printing and writing samples
- Logs journals
- Classroom tests
- Projects