15q13.3 Deletion

Is a chromosomal change in which a small piece of chromosome 15 is deleted in each cell. The deletion occurs on the long (q) arm of the chromosome at a position designated q13.3

THIS CHROMOSOMAL CHANGE INCREASES THE RISK OF

INTELLECTUAL DISABILITY

that is usually mild or moderate. Many of these individuals have delayed speech and language skills.

BEHAVIORAL PROBLEMS

including a short attention span, aggression, impulsive behavior, and hyperactivity

PSYCHIATRIC DISORDERS

particularly schizophrenia or bipolar disorder

SEIZURES (EPILEPSY)

in about one-third of people with this chromosomal change

DEVELOPMENTAL DISORDER

that affects communication and social interaction (autism spectrum disorders)

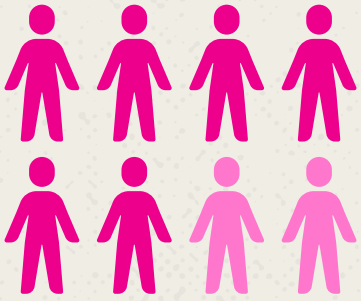
OTHER SIGNS AND SYMPTOMS

can include heart defects, minor abnormalities involving the hands and arms, and subtle differences in facial features

However, some people with a 15q13.3 deletion do not appear to have any associated features.

15q13.3 DELETION LIKELY OCCURS IN ABOUT

PEOPLE IN THE GENERAL POPULATION



75% individuals with 15q13.3 deletion inherit the chromosomal change from a parent

15q13.3 microdeletion is **inherited** in an autosomal dominant pattern, which means one copy of the deleted region on chromosome 15 in each cell is sufficient to increase the risk of intellectual disability and other characteristic features. However, not everyone with the deletion is going to have the same symptoms, or any symptoms at all.

In the remaining cases, 15q13.3 microdeletion occurs in people whose parents do not carry the chromosomal change, which we call **de novo**. In these individuals, the deletion occurs most often as a random event during the formation of reproductive cells (eggs and sperm) or in early fetal development.