

Tics and Tourette Syndrome

What are tics?

Tics are repetitive, involuntary body movements and/or vocalizations. Tics might start with a sensation or feeling, such as tingling or itching, that triggers a movement or vocalization. Tics are often worse during times of extreme tiredness, anxiety, or stress and may improve when the child is relaxed or calm. While some children can consciously stop or minimize their tics briefly, tics are involuntary. They are not a “bad habit” and are not done “on purpose.” Because tics are involuntary, children should never be punished for the tics or rewarded for tic suppression.



There are two main types of tics:

- **Motor tics** are sudden, brief, repetitive movements usually involving the head, neck, and face, but they can include the body and limbs as well. These tics can be simple (eye blinking, facial grimacing, etc.) or complex types (jumping, bending, twisting, etc.).
- **Vocal tics** are repetitive, involuntary vocalizations. These tics can be simple (sniffing, throat clearing, etc.) or complex (severe and disruptive such as saying inappropriate words).

What is Tourette syndrome?

Tourette syndrome (TS) is a form of chronic tic disorder in which a person displays a persistent pattern of motor and/or vocal tics for longer than 1 year. Often a child with TS may have other neurobehavioral or emotional issues, including anxiety, obsessive-compulsive disorders (OCD) and behaviors, or attention and/or impulsivity problems (such as ADHD).

How are tics or TS diagnosed?

There are no specific tests or studies that confirm diagnosis of tics or Tourette syndrome. Usually your child's neurology provider can make the diagnosis through history taking, observation, and examination. Occasionally, blood work, EEG, or other studies may be ordered to rule out other medical conditions.

What causes tics? Can they be inherited?

The cause of tics has not been identified, although research suggests that dysfunction in certain areas of the brain or imbalances in certain chemicals in the brain may be responsible. Tics and TS can run in the family (be inherited). Tics are also associated with other conditions such as ADHD, OCD, learning disability, depression, and anxiety. Children from families with these types of problems may be at higher risk for tics and TS.

Who gets tics? Do they get better?

Tics are more common in males than females, although both are affected. Tics usually first start between the ages of 3 and 9 years. They can often get worse during periods of stress or illness. Tics also change in appearance and may grow more complex over time. They tend to peak in severity during the elementary and middle school years and gradually improve through adolescence and young adulthood. About 10-15% of people will continue to experience tics throughout adulthood. Tics do not cause

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disease or harm to the body (although they can cause muscle soreness or strain, and emotional and social distress). Individuals with tics or TS are expected to live full, healthy lives.

How are tics and Tourette syndrome treated?

There is no cure for tics or TS. Because tics are not harmful, most people with tic disorder or TS do not require treatment. If the tics cause impairment at home or school, or if they cause the child significant social or emotional distress, medicines can be used to suppress the tics. Unfortunately, there is no single medication that works for every person with tics. Medicine may reduce tics but usually does not eliminate them. As with all medications, medicines used to suppress tics carry a risk of side effects, which should be discussed with your child's neurology provider. Children with other medical conditions such as depression, anxiety, OCD, or ADHD may have fewer tics when those problems are treated with medication and therapy.

A type of therapy called cognitive behavioral therapy may help reduce tics in certain cases. Therapy often helps children address anxiety associated with the disorder and develop appropriate coping skills. Children may also benefit from accommodations in school. Your neurology provider can provide documentation for school.



Resources and References:

<https://www.ninds.nih.gov/health-information/disorders/tourette-syndrome>

<https://www.kidshealth.org/en/teens/tics.html#cat146>

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