

At A Glance: Tourette Syndrome

CDC is committed to

- Increasing our understanding of Tourette syndrome (TS);
- Educating communities, families, educators, and providers about TS; and
- Helping improve the lives of people with TS.

Did you know?



5 in 6

children with Tourette syndrome have another mental, behavioral, or developmental disorder

What is TS?

TS is a disorder of the nervous system that causes people to have “tics.”

Tics are sudden and repetitive twitches, movements, or sounds. People who have tics cannot stop their body from doing these things.

People with TS have two forms of tics:

- **Motor tics** involving movements of the body, such as blinking.
- **Vocal tics** involving sounds made with the voice, such as grunting.

Tics are common, but for people to be diagnosed with TS, tics have to occur many times a day, nearly every day, for at least 1 year. Symptoms usually begin when a child is 5–10 years old.

TS can impact children’s school performance, relationships, and health.

The media often portray people with TS as shouting out swear words or repeating the words of other people. These symptoms are rare and are not required for a diagnosis of TS.

How many people have TS?

The exact number of people with TS is unknown. Studies that included children with diagnosed or undiagnosed TS have estimated that 1 of every 162 children has TS. National data from 2016–2017 estimated that 1 of every 333 U.S. children (about 150,000) ages 6–17 years had been diagnosed with TS, suggesting that about half of U.S. children with TS are not diagnosed. TS is more common among boys than girls.

What conditions also occur in people with TS?

More than 5 in 6 children with TS have at least one additional mental, behavioral, or developmental condition.

The two most common conditions are:

- Attention-deficit/hyperactivity disorder (ADHD; occurs in 50%–70% of children with TS).
- Obsessive-compulsive disorder (OCD; occurs in 30%–50% of children with TS).

People with TS are also more likely to have depression, anxiety, and/or learning disabilities than those who do not have TS.



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How is TS treated?

Although there is no cure for TS, there are treatments to help manage tics caused by TS. Many people with TS have tics that do not get in the way of living their daily lives and, therefore, do not need any treatment. Medication and behavioral treatments are available if tics cause pain or injury; interfere with school, work, or one's social life; or cause stress. One promising behavioral treatment is the Comprehensive Behavioral Intervention for Tics (CBIT) that teaches people to become more aware of tics and learn to do competing behavior when they feel the urge to tic.

Management of TS depends on timely and accurate diagnosis, education and, if needed, behavioral or medication treatment. Many people with TS have other conditions, and comprehensive treatment plans include diagnosis and treatment of co-occurring conditions if needed.



CDC in Action

CDC's work on TS includes

- Partnering with the Tourette Association of America to provide health education, training, and support to families, healthcare providers, educators, and the public about TS, its related disorders, and treatment, including CBIT.
- Analyzing data from four sites from the Project to Learn about Youth Mental Health, a community study looking at how frequently certain mental, behavioral, emotional, and tic disorders occur in school-aged children and how those disorders are treated.
- Conducting studies of screening and diagnostic tools to improve identification of children with tics.
- Updating the Diagnostic Interview Schedule for Children to use as an accurate diagnostic interview for mental, emotional, and behavioral disorders including TS.
- Actively monitoring the prevalence of TS using nationally representative data from the National Survey of Children's Health (NSCH), as well as its impact on health care, parenting, relationships, and education.
- Leading research to better understand symptom onset, diagnostic process and timing, and treatment of TS using data from the National Survey of the Diagnosis and Treatment of ADHD and Tourette Syndrome (NS-DATA), a follow-up survey of families who participated in the 2011–2012 NSCH.
- Increasing our understanding of tic disorders and their impact on families and communities through a collaboration with the University of Rochester and the University of South Florida.

For more information about TS, please visit: <http://www.cdc.gov/tourette>

You can also contact CDC at 1-800-CDC-INFO (800-232-4636) or via <http://www.cdc.gov/info>.



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