

# 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?



About 1 in 50 children aged 5-14 years has a persistent tic disorder including Tourette syndrome.

<https://www.cdc.gov/ncbddd/tourette/data.html>

## 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?

About 1.4 million people in the U.S. have a persistent tic disorder, including TS, but the exact number is unknown. Among children aged 5-14 years, about 1 in 50 children has a persistent tic disorder. However, studies suggest that about half of U.S. children with TS are not diagnosed. TS is more common among boys than girls.

## What other disorders occur in people with TS?

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

The two most common conditions are:

- Attention-deficit/hyperactivity disorder (occurs in 50%–70% of children with TS).
- Obsessive-compulsive disorder (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 and support for people with TS and their families, and training for healthcare providers and educators 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.
- Monitoring the prevalence of TS and its impact on health care, parenting, relationships, and education using nationally representative data from the National Survey of Children's Health.
- Partnering with the American Academy of Pediatrics and Tourette Association of America to develop and provide Continuing Medical Education modules for Tourette syndrome.
- Funding data collection to assess healthcare providers' attitudes, knowledge, and experience related to identifying and treating tic disorders including Tourette syndrome among children.
- Analyzing healthcare claims data to estimate expenditures associated with tic disorders.

**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 by visiting** <http://www.cdc.gov/info>.



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