AT A GLANCE

Tourette Syndrome (TS)

Tourette syndrome (TS) is a disorder of the nervous system that causes people to have “tics.” Tics are sudden and repetitive twitches, movements, or sounds. CDC is committed to increasing our understanding of TS and persistent tic disorders (PTD); educating communities, families, educators, and providers about TS; and helping improve the lives of people with TS and their families.

What is TS?

TS is a disorder of the nervous system that causes people to have “tics.” There are two forms of tics—motor tics and vocal tics. Tics are sudden and repetitive twitches, movements, or sounds. People who have tics cannot stop their body from doing these things.

People diagnosed with TS have both forms of tics:

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

Tics are common, but for people to be diagnosed with TS, tics have to occur 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 swear words or repeating the words of others. 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 US have TS or a persistent tic disorder (TS/PTD), but the exact number is unknown. Among children aged 5–14 years, about 1 in 50 children has TS/PTD. Studies suggest that about half of US children with TS are undiagnosed.

Did You Know?

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

https://www.cdc.gov/tourette-syndrome/data/

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** (ADHD), which occurs in 50–70% of children with TS
- **Obsessive-compulsive disorder** (OCD), which occurs in 30–50% of children with TS

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

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cdc.gov/tourette-syndrome

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 interfere with 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.

Comprehensive Behavioral Intervention for Tics (CBIT) is an evidence-based behavioral treatment that teaches people to become more aware of their tics and learn to do a 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 works with partners to better understand TS by

- Partnering with the Tourette Association of America (TAA), including through local Centers of Excellence, 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.
- Surveying individuals with TS/PTD and their caregivers to document public health outcomes to inform education and outreach activities.
- Partnering with TAA and the American Academy of Pediatrics to develop and provide Continuing Medical Education modules for TS.
- Conducting studies of screening and diagnostic tools to improve identification of children with tics.
- Monitoring the prevalence of TS and its impact on health care, parenting, relationships, and education using data from the National Survey of Children's Health.
- Funding data collection to assess healthcare providers' attitudes, knowledge, and experience related to identifying and treating tic disorders, including TS, among children.
- Analyzing healthcare claims data to estimate impacts associated with tic disorders, including healthcare costs and prevalence of pain.
- Conducting systematic literature reviews on TS/PTD to better understand impacts related to health care, academics, employment, and health.

For more information about TS, please visit: https://www.cdc.gov/tourette-syndrome.
You can also contact CDC at 1-800-CDC-INFO (800-232-4636) or by visiting https://www.cdc.gov/info.