Tourette Syndrome (TS) is a neurobehavioral disorder that begins in childhood. It often co-occurs with other neurobehavioral disorders and can impact educational outcomes, relationships, and health. Learn about TS and what the Centers for Disease Control and Prevention (CDC) are doing about it.

What is TS?

TS is a condition of the nervous system. It causes people to have “tics.” Tics are sudden twitches, movements, or sounds that people do repeatedly. 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, like blinking; and vocal tics, involving sounds made with the voice, like grunting. The tics occur many times a day, nearly every day, for at least a year. Symptoms usually begin when a child is 5 to 10 years of age. The media often portray people with TS as involuntarily shouting out swear words (coprolalia), or repeating the words of other people (echolalia). However, these symptoms are rare, and are not required for a diagnosis of TS.

What conditions are associated with TS?

TS often occurs with other related conditions. Among children diagnosed with TS, more than 80% also have been diagnosed with at least one additional mental health, behavioral, or developmental condition. The two most common conditions are attention-deficit/hyperactivity disorder (50% to 70%) and obsessive-compulsive disorder (30% to 50%). People with TS also have higher rates of depression, anxiety, and learning disabilities.

How many people are affected by TS?

The exact number of people with TS is unknown. Centers for Disease Control and Prevention (CDC) scientists recently used data from 2011-12 to estimate that 1 out of every 360 U.S. children (about 138,000) 6 through 17 years of age had been diagnosed with TS. Since estimates from community studies are often higher, it likely means that there are a significant number of individuals who have TS, but who have not been diagnosed. TS is three to four times more common among boys than girls.

How is TS managed?

Management of TS should include timely and accurate diagnosis, education, and behavioral or medication treatment, if needed. Related conditions must be considered and also might require treatment.

What is CDC doing about TS?

- CDC funds and partners with the Tourette Syndrome Association (TSA) to provide health education and training to physicians, nurses, social workers, and educators on the standard diagnostic and treatment practices for TS and related disorders.
- CDC assisted in developing a module on TS for inclusion in the 2007 and 2011 National Survey of Child Health, a nationally representative survey. The 2007 data provided the first ever U.S. prevalence of TS among youth 6 through 17 years of age, including data on racial and ethnic disparities, severity, and related conditions.
- CDC supported research at the University of Oklahoma to conduct an epidemiology study of tics and TS among school-aged children to better understand the prevalence, associated behaviors, and related conditions among children with TS.
- CDC sponsored the University of Rochester and the University of South Florida in studying the impact of tic disorders, including TS, among youth, on individuals, families, and communities.
- CDC supports the University of South Carolina and the University of Colorado Denver for a new, community-based study of children’s mental health that includes TS and tic disorders.

For more information about TS, please visit the CDC website: http://www.cdc.gov/tourette