

Tourette Syndrome

Background

Tourette syndrome (TS) is a neurological disorder characterized by repetitive, involuntary movements and vocal sounds called tics. Motor tics often precede vocal tics and may first appear as involuntary facial movement like an eye blink, nose twitch, or grimace. Both may wax and wane in frequency but often worsen with excitement, stress, or anxiety. Tics do not go away with sleep but are greatly diminished.

Early symptoms often first present in childhood around the ages of 5 to 10. Symptoms often worsen and reach their peak throughout the teen years but can improve into adulthood. Symptoms can be classified by their system and degree of effects, including:

- Simple motor tics
- Complex motor tics
- Simple vocal tics
- Complex vocal tics

Motor tics cause movement and can be classified as simple or complex. Simple motor tics are brief, sudden, and usually involve a limited number of muscle groups. Examples include eye blinking, facial grimacing, jaw movements, head bobbing/jerking, shoulder shrugging, neck stretching, and arm jerking. Complex motor tics involve multiple muscle groups or a combination of movements and tend to appear slower and more purposeful such as facial grimacing with head repositioning, hopping, twirling, and jumping.

Vocal tics produce sounds. Simple vocal tics include sniffing, throat clearing, grunting, whistling, and shouting. Complex vocal tics are words or phrases that may or may not be recognizable but consistently occur out of context. In some cases, language may be inappropriate or socially unacceptable.

People with TS often have co-occurring mental, behavioral, or developmental conditions. Sensory issues, obsessive compulsive symptoms, and attention-deficit/hyperactivity disorder (ADHD) can significantly impact a student's success in the classroom. Associated neurobehavioral problems may persist into early adulthood despite a significant decline in motor and vocal tics.



Top Takeaways for School

Tourette syndrome (TS) causes involuntary motor and vocal tics. A student cannot control these movements and sounds. Stress typically can increase symptoms.

Students with TS often struggle with organization and planning. Transitions can be overstimulating. Routine and structure can help reduce stress and anxiety.

Handwriting issues are common with children with TS. Consider use of assistive technology or providing the student with notes. Consider the impact of vocal tics on oral presentations.

Develop a plan for student to be able to “release” symptoms in safe place. Movement breaks or activities (e.g., change of setting, office errand, bathroom) can also help a student refocus.

Considerations for the Individualized Healthcare Plan (IHP)

- Nursing diagnoses: Impaired thought process and alteration in coping
- Student-specific triggers, avoidance, or intervention strategies
- Consider emergency action plans (EAPs) and emergency evacuation plans (EEPs) related to special health care needs, including staff education/training

Discussion Starters for the Educational Team

1. Would the student benefit from evaluations or assessments in any of the following areas: physical therapy, occupational therapy, speech and language therapy, assistive technology, adapted physical education, functional behavior, psychology, hearing and vision?
2. Would the student benefit from additional academic support and/or modified education (e.g., copies of notes, extra time, reduced workload, simplified instructions, alternative formats for presentation of material, 504/IEP)?
3. Can strategies be implemented to assist the student with executive function (e.g., plan, prompts, organizers, agendas)?
4. Would schedule flexibility support the student?
5. Can rest breaks, safe spaces or reduced stimulation times be built into the student's schedule?
6. Will staff receive education/training to implement the student-specific emergency plan?

Resources

Kennedy Krieger Institute: Tourette Syndrome Center of Excellence
kennedykrieger.org/patient-care/centers-and-programs/tourette-syndrome-center-of-excellence

Your Child's Brain Podcast
kennedykrieger.org/stories/your-childs-brain-podcast

Tourette Association of America
tourette.org/



For more information, please scan the QR code or visit: KennedyKrieger.org/SHNIC

