PSYCHOLOGY WORKS Fact Sheet: Tourette Syndrome and Other Tic Disorders

What Are Tics?

A tic is a sudden, rapid movement or sound, made by a person, that happens repeatedly and is difficult to control (APA, 2022). Tics can be motor (movements) or vocal (sounds). Many people who display tics feel an uncomfortable sensation or "urge" before the tic, followed by a sense of relief after it happens. Tics are more forceful compared to voluntary actions or utterances. Tics can interfere with the flow of an individual's behaviour or speech, and they can occasionally disrupt the intended action or communication.

Tics often change over time - they may wax and wane in severity (i.e., frequency and intensity) and sometimes disappear for weeks or months. Typically, tics usually begin in early childhood (around ages 4 to 6 years), and peak severity occurs between ages 10 and 12, with a decline in severity during adolescence.

Tics are classified as simple or complex:

- **Simple Vocal Tics** – Brief sounds such as throat clearing, sniffing, chirping, barking, or grunting.
- **Complex Vocal Tics** – Longer or more meaningful sounds, such as words or phrases. Can include repeating one's own words, repeating others' words, or saying socially inappropriate words.
- **Simple Motor Tics** – Quick movements involving a small number of muscles, such as eye blinking, facial grimacing, shoulder shrugging, or hand movements.
- **Complex Motor Tics** – Coordinated or longer movements that may look purposeful (but are not), such as head movements, touching objects, imitating others, or making sexual/taboo gestures.

What Are the Different Types of Tic Disorders?

- **Tourette Disorder (also known as Tourette Syndrome)** is a neurodevelopmental disorder where multiple motor tics **and** at least one vocal tic has been present since the tics first started. Tics must have persisted for **at least 1 year** and must begin before age 18.
- **Persistent (Chronic) Motor or Vocal Tic Disorder** is a tic disorder where motor tics **or** vocal tics must be present, but not both. The tics must have persisted for **at least 1 year**.
- **Provisional Tic Disorder** is a tic disorder that has involves motor and/or vocal tics that have been present for **less than 1 year**.

Many people with tic disorders also experience other mental health or developmental disorders. **Common co-occurring conditions** include Attention-Deficit Hyperactivity-Disorder (ADHD), Obsessive

Compulsive Disorder (OCD), anxiety disorders, and depression. It is important to monitor other symptoms to support overall well-being and management of tics. The presence of tics may also be associated with other life challenges, such as low self-esteem, and difficulties with family functioning, social relationships, life transitions, and school functioning.

What Psychological Treatments Are Used to Treat Tourette Syndrome and Other Tic Disorders?

There is no single medical or psychological intervention recommended for all individuals with Tourette Disorder and other tic disorders. Treatment recommendations depend on the severity of symptoms, how much they affect daily life, and the individual's age. The following interventions have evidence supporting their use:

- **Habit Reversal Training (HRT)** is one of the most studied behavioural interventions for tics (Martino, 2020). HRT helps people notice when a tic is coming **(awareness training)** and replace it with a movement or action that makes the tic impossible **(competing response).** For example, if someone has a throat-clearing tic, they might learn to take a sip of water when they feel the tic is coming on in place of clearing their throat.
- **Cognitive Behavioural Intervention for Tics (CBIT)** builds on HRT and adds education about tics **(psychoeducation)** and strategies to manage stress **(relaxation training).** CBIT is also strongly evidence-based and effective for reducing tic severity and the impact of tics on daily life in both children and adults (Martino, 2020).
- **Parent Training** has been shown to work well for children with tic disorders, especially when combined with HRT or CBIT. It can help parents understand tic disorders and learn ways to support their child, including using positive reinforcement, responding effectively to tics, and ignoring the tics themselves rather than punishing them or drawing attention to them (Evans et al., 2015).
- **Medications** can help when tics are severe or interfering with daily life. Behavioural treatments like HRT or CBIT are usually recommended first, with medications considered if tics are severe or disabling. There is no single medication that works for everyone, and finding the right one often involves trial and error, especially if other conditions like ADHD or OCD are present. Common options include medications that reduce dopamine activity (e.g., risperidone, haloperidol, or Alpha-2 agonists, such as clonidine, guanfacine; Eddy et al., 2011, Martino, 2020).
- **Deep Brain Stimulation (DBS)** is a treatment option for severe tics that do not respond to other therapies. DBS uses a small device implanted in the brain to deliver electrical stimulation to areas controlling movement. This approach is still experimental and is only used in rare cases (Martino, 2020).

What Are Some Myths and Facts Regarding Tourette Syndrome and Other Tic Disorders?

Myth: Tics only affect children.

Fact: Tics usually start in childhood and often peak then, but tic disorders are lifelong as they are a neurodevelopmental disorder. Many adults learn strategies to manage tics, resist the "urge", and function well.

Myth: Only males get tics.

Fact: Tics are more common in males, but females can also have tic disorders. There are no differences in tic type, age of onset, or the course of tic disorder. Women with persistent tic disorder may be more likely to experience anxiety and depression**.**

Myth: People with tic disorder do tics on purpose**.**

Fact: Tics are involuntary and are often difficult to resist. Some people can hold them back for a short time but eventually the urge to tic must be released. Most people with tic disorders tend to tic until it feels "just right" and sometimes have a feeling of relief and tension being released afterwards. Tics can be triggered by talking about them or by seeing or hearing tics in others.

Myth: All vocal tics include swearing or saying socially inappropriate statements.

Fact: Most people with vocal tics do not excessively or uncontrollably use inappropriate language (known as *Coprolalia*), despite it being commonly portrayed on television and movies. Coprolalia only affects ~10% of people with Tourette Syndrome.

Where Can I Go for More Information?

- **Tourette Canada Website:** https://tourette.ca
- **Resources and Support for Tourette Syndrome:** https://www.cheo.on.ca/en/resources-and-support/tourette-syndrome.aspx
- **Programs and Supports for Parents, Youth, and Adults:** https://tourette.ca/programs-services/
- **Information about Tourette Syndrome and Tics:** https://cumming.ucalgary.ca/resource/tourette-ocd/children-and-adults/disorder-specific-resources/tourette-syndrome-and-tic-disorder

References

American Psychiatric Association. (2022). Diagnostic and statistical manual of mental disorders (5th ed., text rev.). American Psychiatric Association.

Eddy, C. M., Rickards, H. E., & Cavanna, A. E. (2011). Treatment strategies for tics in Tourette syndrome. *Therapeutic Advances in Neurological Disorders*, *4*(1), 25-45. https://pmc.ncbi.nlm.nih.gov/articles/PMC3036957/

Evans, G., Wittkowski, A., Butler, H., Hedderly, T., & Bunton, P. (2015). Parenting interventions for children with tic disorders: Professionals' perspectives. *Journal of Child and Family Studies, 14*(25), 1594-1604. https://doi.org/10.1007/s10826-015-0317-1

Martino, D. (2020). Update on the treatment of tics in Tourette Syndrome and other chronic tic disorders. *Current Treatment Options in Neurology*, *22*, Article 10. https://doi.org/10.1007/s11940-020-0620-z

My Health Alberta. (2023, December 20). *Myths about Tourette's disorder.* Government of Alberta Personal Health. https://myhealth.alberta.ca/Health/Pages/conditions.aspx?hwid=aa114298&lang=en-ca

Wand, R. R., Matazow, G. S., Shady, G. A., Furer, P., & Staley, D. (1993). Tourette syndrome: Associated symptoms and most disabling features. *Neuroscience and Biobehavioral Reviews*, *17*, 271-275. https://doi.org/10.1016/S0149-7634(05)80010-7

You can consult with a registered psychologist to find out if psychological interventions might be of help to you. Provincial, territorial, and some municipal associations of psychology may make available a referral list of practicing psychologists that can be searched for appropriate services. For the names and coordinates of provincial and territorial associations of psychology, go to https://cpa.ca/public/whatisapsychologist/PTassociations/.

This fact sheet has been prepared for the Canadian Psychological Association by Alzena Ilie (Clinical Psychology PhD Student), Dalhousie University.

Date: July 2026

Your opinion matters! Please contact us with any questions or comments about any of the **PSYCHOLOGY WORKS** Fact Sheets: factsheets@cpa.ca

Canadian Psychological Association
1101 Prince of Wales Drive, Suite 230
Ottawa, Ontario K2C 3W7
Tel: 613.237.2144
Toll free (in Canada): 1.888.472.0657