# Tardive Dyskinesia (TD) Overview

*Actor Portrayal*

## What Is Tardive Dyskinesia (TD)?

TD is a persistent, involuntary movement disorder that is characterized by uncontrollable, abnormal and repetitive movements of the face, torso, limbs, and fingers or toes.[1-4] These involuntary movements may be rapid and jerky or slow and writhing.[2,4,5] This can be disruptive and negatively impact people living with TD.[5] TD is a chronic condition that is unlikely to improve without treatment.[1,3]

## What Causes TD?

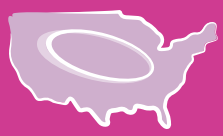
TD is associated with prolonged use of antipsychotic medication that may be necessary to treat individuals living with mental illnesses such as the following disorders[3,6]:

- Major depressive disorder
- Bipolar disorder
- Schizophrenia
- Schizoaffective disorder

Certain prescription medicines (metoclopramide and prochlorperazine) used to treat gastrointestinal disorders may also cause TD.[7,8]

## How Common Is TD?

Approximately **600,000 people in the U.S.** are living with TD and approximately **65% have not yet been diagnosed.**[1,6,9]



## What Are Risk Factors for TD?

**Older age** (55 years and older)[10,11]

**Substance use disorder**[11,12]

**Being postmenopausal**[13]

## How Does TD Affect Everyday Lives?

The uncontrollable movements of TD can negatively impact people physically, socially and emotionally.[14] Even mild uncontrollable body movements from TD could have emotional and social consequences.[14,†] These movements can cause worry, frustration and self-consciousness.[15,16]

According to a survey, people with diagnosed or suspected TD (n = 250) reported the condition moderately or extremely affected them in the following three areas[5,*]:

**Ability to fall asleep**

**Ability to type and/or write**

**Ability to eat and drink**

†Results based on a survey of 397 people diagnosed with TD (n=173) or suspected of TD (n=224) who were asked, "Tardive dyskinesia may impact you in many different ways. To what extent has tardive dyskinesia impacted you in each of the following areas?" Answers ranged on a scale of 1 (not impacted at all) to 7 (extremely impacted).

*Responses based on survey questions: "Since first experiencing involuntary movements, how has your ability to physically perform the following daily activities been affected, if at all?" and "How would you describe the severity of your involuntary movements?" Please use a scale of 1 to 5 when 1 means "Not at all affected" and 5 means "Extremely negatively affected." Results shown include the number of responses greater than or equal to 3 on the scale.

## Could It Be TD?

It's important that people who are taking antipsychotic medication be monitored by a healthcare provider for drug-induced movement disorders (DIMDs), such as TD.[4,11] Periodic screenings for abnormal movements in people taking antipsychotic medication are essential for detection, proper diagnosis and appropriate management to help improve therapeutic outcomes.[11]

If you have been taking antipsychotic medication for a while and are experiencing uncontrollable, abnormal and repetitive movements, initiate a conversation with your healthcare provider. U.S. Food and Drug Administration-approved treatments for TD are available.

Please visit **TalkAboutTD.com,** and follow **@Neurocrine** on X (formerly Twitter) and Facebook to learn more about TD and available resources.

**References: 1.** Cloud LJ, Zutshi D, Factor SA. Tardive dyskinesia: therapeutic options for an increasingly common disorder. *Neurotherapeutics.* 2014;11(1):166-176. doi:10.1007/s13311-013-0222-5 **2.** Task Force on Tardive Dyskinesia. Tardive Dyskinesia: A task force report of the American Psychiatric Association. 1992. **3.** American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders.* 5th ed. Text Revision. American Psychiatric Association; 2023. **4.** Guy W. *ECDEU Assessment Manual for Psychopharmacology.* National Institute of Mental Health; 1976. **5.** Data on File. Neurocrine Biosciences, Inc. **6.** Caroff SN, Hurford I, Lybrand J, Campbell EC. Movement disorders induced by antipsychotic drugs: implications of the CATIE schizophrenia trial. Neurol Clin. 2011;29(1):127-148. doi:10.1016/j.ncl.2010.10.002 **7.** Kenney C, Hunter C, Davidson A, Jankovic J. Metaclopramide, an increasingly recognized cause of tardive dyskinesia. *J Clin Pharmacol.* 2008;48(3):379-384. doi:10.1177/0091270007312258 **8.** Sanger GJ, Andrews PLR. A history of drug discovery for treatment of nausea and vomiting and the implications for future research. *Front. Pharmacol.* 2018;9:913. doi: 10.3389/fphar.2018.00913 **9.** Carbon M, Hsieh CH, Kane JM, Correll CU. Tardive dyskinesia prevalence in the period of second-generation antipsychotic use: A meta-analysis. *J Clin Psych.* 2017;78(3):e264–e278. doi:10.4088/JCP.16r10832 **10.** Woerner, MG, et al. Prospective study of tardive dyskinesia in the elderly: rates and risk factors. *Am J Psychiatry.* 1998;155(11):1521-1528. doi:10.1176/ajp.155.11.1521 **11.** Keepers GA, Fochtmann LJ, Anzia JM, et al. The American Psychiatric Association practice guideline for the treatment of patients with schizophrenia. *Am J Psychiatry.* 2020;177(9):868-872. doi:10.1176/appi.ajp.2020.177901 **12.** Miller DD, et al. Clinical correlates of tardive dyskinesia in schizophrenia: baseline data from the CATIE schizophrenia trial. *Schizo Res.* 2005;80(1):33-43. doi:10.1016/j.schres.2005.07.034 **13.** Seeman, MV. Interaction of sex, age, and neuroleptic dose. *Compr Psychiatry.* 1983;24(2):125-128. doi:10.1016/0010-440x(83)90100-1 **14.** Ascher-Svanum H, et al. Tardive dyskinesia and the 3-year course of schizophrenia: results from a large, prospective, naturalistic study. *J Clin Psych.* 2008;69(10):1580-1588. doi:10.4088/jcp.v69n1008 **15.** Boumans CE, de Mooij KJ, Koch PA, van 't Hof MA, Zitman FG. Is the social acceptability of psychiatric patients decreased by orofacial dyskinesia? *Schizophr Bull.* 1994;20(2):339-344. doi:10.1093/schbul/20.2.339 **16.** Yassa R. Functional impairment in tardive dyskinesia: medical and psychosocial dimensions. *Acta Psychiatr Scand.* 1989;80(1):64-67. doi:10.1111/j.1600-0447.1989.tb01301

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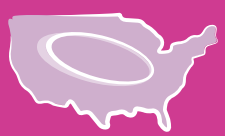

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## How Does TD Affect Everyday Lives?

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According to a survey, patients with diagnosed or suspected TD (n = 250) reported the condition moderately or extremely affected them in the following three areas[5,*]:

**64%**
**Ability to fall asleep**

**48%**
**Ability to type and/or write**

**37%**
**Ability to eat and drink**

†Results based on a survey of 397 people diagnosed with TD (n=173) or suspected of TD (n=224) who were asked, "Tardive dyskinesia may impact you in many different ways. To what extent has tardive dyskinesia impacted you in each of the following areas?" Answers ranged on a scale of 1 (not impacted at all) to 7 (extremely impacted).

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Proactive recognition and treatment of TD can make a positive impact in the lives of many patients managing their mental illness. Once a TD diagnosis has been established, talk with your patient about managing symptoms. There are U.S. Food and Drug Administration–approved treatment options for TD.

Please visit **MIND-TD.com** for helpful information on identification of TD and differentiation from other movement disorders.

**References: 1.** Cloud LJ, Zutshi D, Factor SA. Tardive dyskinesia: therapeutic options for an increasingly common disorder. *Neurotherapeutics*. 2014;11(1):166-176. doi:10.1007/s13311-013-0222-5 **2.** Task Force on Tardive Dyskinesia. Tardive Dyskinesia: A task force report of the American Psychiatric Association. 1992. **3.** American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders*. 5th ed. Text Revision. American Psychiatric Association; 2023. **4.** Guy W. *ECDEU Assessment Manual for Psychopharmacology*. National Institute of Mental Health; 1976. **5.** Data on File. Neurocrine Biosciences, Inc. **6.** Caroff SN, Hurford I, Lybrand J, Campbell EC. Movement disorders induced by antipsychotic drugs: implications of the CATIE schizophrenia trial. Neurol Clin. 2011;29(1):127-148. doi:10.1016/j.ncl.2010.10.002 **7.** Kenney C, Hunter C, Davidson A, Jankovic J. Metaclopramide, an increasingly recognized cause of tardive dyskinesia. *J Clin Pharmacol*. 2008;48(3):379-384. doi:10.1177/0091270007312258 **8.** Sanger GJ, Andrews PLR. A history of drug discovery for treatment of nausea and vomiting and the implications for future research. *Front. Pharmacol*. 2018;9:913. doi: 10.3389/fphar.2018.00913 **9.** Carbon M, Hsieh CH, Kane JM, Correll CU. Tardive dyskinesia prevalence in the period of second-generation antipsychotic use: A meta-analysis. *J Clin Psych*. 2017;78(3):e264–e278. doi:10.4088/JCP.16r10832 **10.** Woerner, MG, et al. Prospective study of tardive dyskinesia in the elderly: rates and risk factors. *Am J Psychiatry*. 1998;155(11):1521-1528. doi:10.1176/ajp.155.11.1521 **11.** Keepers GA, Fochtmann LJ, Anzia JM, et al. The American Psychiatric Association practice guideline for the treatment of patients with schizophrenia. *Am J Psychiatry*. 2020;177(9):868-872. doi:10.1176/appi.ajp.2020.177901 **12.** Miller DD, et al. Clinical correlates of tardive dyskinesia in schizophrenia: baseline data from the CATIE schizophrenia trial. *Schizo Res*. 2005;80(1):33-43. doi:10.1016/j.schres.2005.07.034 **13.** Seeman, MV. Interaction of sex, age, and neuroleptic dose. *Compr Psychiatry*. 1983;24(2):125-128. doi:10.1016/0010-440x(83)90100-1 **14.** Ascher-Svanum H, et al. Tardive dyskinesia and the 3-year course of schizophrenia: results from a large, prospective, naturalistic study. *J Clin Psych*. 2008;69(10):1580-1588. doi:10.4088/jcp.v69n1008 **15.** Boumans CE, de Mooij KJ, Koch PA, van 't Hof MA, Zitman FG. Is the social acceptability of psychiatric patients decreased by orofacial dyskinesia? *Schizophr Bull*. 1994;20(2):339-344. doi:10.1093/schbul/20.2.339 **16.** Yassa R. Functional impairment in tardive dyskinesia: medical and psychosocial dimensions. *Acta Psychiatr Scand*. 1989;80(1):64-67. doi:10.1111/j.1600-0447.1989.tb01301

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