

# Disruptive Mood Dysregulation Disorder (DMDD) Fact Sheet

## What is DMDD?

### What are the signs and symptoms of DMDD?

Children and adolescents with DMDD experience:

- Severe temper outbursts (verbal or behavioral), on average, three or more times per week
- Outbursts and tantrums that have been ongoing for at least 12 months
- Chronically irritable or angry mood most of the day, nearly every day
- Trouble functioning due to irritability in more than one place, such as at home, at school, or with peers

Youth with DMDD are typically diagnosed between the ages of 6 and 10. To be diagnosed with DMDD, a child must have experienced symptoms steadily for 12 or more months.

### What are the risk factors of DMDD?

It is not clear how widespread DMDD is in the general population, and the exact causes of DMDD are not clear. Researchers are exploring risk factors and brain mechanisms of this disorder.

### How is DMDD treated?

DMDD is a relatively new disorder and few DMDD-specific treatment studies have been conducted. Treatment is often based on what has been helpful for other childhood disorders associated with irritability, such as attention-deficit/hyperactivity disorder (ADHD), oppositional defiant disorder (ODD), and anxiety disorders. Treatment for DMDD generally includes certain types of *psychotherapy* (also called talk therapy) and sometimes medications. In many cases, psychotherapy is considered first, with medication added later if needed. However, in some cases, providers recommend that children receive both psychotherapy and medication at the start of their treatment. Parents or caregivers should work closely with their child's health care provider to make treatment decisions that are best for their child.

The National Institute of Mental Health (NIMH) is currently funding studies focused on further improving these treatments and identifying new treatments to address irritability and temper outbursts.

## Psychotherapies

**Cognitive behavioral therapy (CBT)** targets the relationship between thoughts, behaviors, and feelings and is often effective in treating anger and disruptive behavior. Researchers are also using CBT to help children increase their ability to tolerate frustration without having an outburst. This therapy teaches coping skills for controlling anger and ways to identify and relabel the distorted perceptions that contribute to outbursts.

**Parent training** teaches parents or caregivers more effective ways to respond to irritable behavior, such as anticipating events that might lead a child to temper outbursts and working ahead to avert them. Training also emphasizes the importance of predictable and consistent responses to a child's outbursts and rewards for positive behavior.

## Medications

Currently, there are no medications approved by the U.S. Food and Drug Administration (FDA) specifically for treating children or adolescents with DMDD. However, health care providers may prescribe certain *medications*—such as stimulants, antidepressants, and atypical antipsychotics—to help relieve a child's DMDD symptoms.

- **Stimulants** are often used to treat ADHD, and research suggests that stimulant medications also may decrease irritability in youth.
- **Antidepressants** are sometimes used to treat irritability and mood problems that children with DMDD may experience. One small study suggests that the antidepressant citalopram (a serotonin reuptake inhibitor antidepressant), combined with the stimulant methylphenidate, may decrease irritability in youth with DMDD. **Please note:** Antidepressants may increase suicidal thoughts and behaviors in youth, who should be monitored closely by their health care provider.
- Certain **atypical antipsychotic medications** are used to treat children with irritability, severe outbursts, or aggression. The FDA has approved these medications for treating irritability associated with autism, and they are sometimes used to treat DMDD. However, because these medications can cause unwanted side effects, they're usually only tried when other approaches have not worked.

All medications have side effects. Monitor and report your child's side effects and review the medications frequently with your child's health care provider. Visit the [\*FDA website\*](#) for most up-to-date information on medications, side effects, and warnings.

## How can I find a clinical trial for DMDD?

Clinical trials are research studies that look at new ways to prevent, detect, or treat diseases and conditions. The goal of clinical trials is to determine if a new test or treatment works and is safe. Although individuals may benefit from being part of a clinical trial, participants should be aware that the primary purpose of a clinical trial is to gain new scientific knowledge so that others may be better helped in the future.

Researchers at NIMH and around the country conduct many studies with patients and healthy volunteers. We have new and better treatment options today because of what clinical trials uncovered years ago. Be part of tomorrow's medical breakthroughs. Talk to your health care provider about clinical trials, their benefits and risks, and whether one is right for your child.

To learn more or find a study, visit:

- [\*NIMH's Clinical Trials webpage\*](#): Information about participating in clinical trials
- [\*Clinicaltrials.gov: Current Studies on DMDD\*](#): List of clinical trials funded by the National Institutes of Health (NIH) being conducted across the country
- [\*Join a Study: Children – DMDD\*](#): List of NIMH studies being conducted on the NIH Campus in Bethesda, MD

## Where can I learn more about DMDD?

### Free fact sheets

- [\*Disruptive Mood Dysregulation Disorder: The Basics\*](#): This fact sheet provides information about DMDD, including a description of the condition, signs and symptoms, how it is diagnosed, treatment options, and tips for parents and caregivers. Also available *en español*.

### Multimedia

- [\*Facebook Live: Childhood Irritability\*](#): Learn about symptoms of irritability, why it's important to study irritability, NIMH-supported research in this area, and new treatments for severe irritability in youth.
- [\*Severe Irritability in Youth\*](#): Dr. Melissa Brotman, Assistant Clinical Investigator in the NIMH Emotion and Development Branch, discusses NIMH research on irritability in children.
- [\*Depression in Adolescents: Mechanisms and Treatment of a Global Health Concern and Mechanism-based Treatments for Irritability in Youth\*](#): Dr. Melissa Brotman, Assistant Clinical Investigator in the NIMH Emotion and Development Branch, describes NIMH research on treatments for DMDD. Her presentation starts at approximately minute 30 of the video.

- ***Disruptive Mood Dysregulation Disorder***: Dr. Ellen Leibenluft, Senior Investigator and Chief of the NIMH Emotion and Development Branch, explains the history of DMDD.

## **Research and statistics**

- ***Journal Articles*** : including references and abstracts from MEDLINE/PubMed (National Library of Medicine)
- The ***NIMH Neuroscience and Novel Therapeutics Unit***, led by Melissa A. Brotman, Ph.D., is working to develop brain-based treatments for children with serious psychiatric disorders.
- ***Psychosocial and Pharmacologic Interventions for Disruptive Behavior in Children and Adolescents*** is an evidence report from the Agency for Healthcare Research and Quality (AHRQ) which provides comprehensive, science-based information on treatment strategies for disruptive behavior in children and adolescents.