

Post-Traumatic Stress Disorder (PTSD)



National Institute of Mental Health

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES • National Institutes of Health



Contents

What is post traumatic stress disorder, or PTSD?	1
Who gets PTSD?	1
What are the symptoms of PTSD?	1
Do children react differently than adults?	3
How is PTSD detected?	3
Why do some people get PTSD and other people do not?	4
How is PTSD treated?	5
Psychotherapy	5
Medications	6
Other medications	8
Treatment after mass trauma	8
What efforts are under way to improve the detection and treatment of PTSD?	10
How can I help a friend or relative who has PTSD?	11
How can I help myself?	11
Where can I go for help?	12
What if I or someone I know is in crisis?	13
Citations	13
For more information on post traumatic stress disorder (PTSD)	14



What is post-traumatic stress disorder, or PTSD?

PTSD is an anxiety disorder that some people get after seeing or living through a dangerous event.

When in danger, it's natural to feel afraid. This fear triggers many split-second changes in the body to prepare to defend against the danger or to avoid it. This “fight-or-flight” response is a healthy reaction meant to protect a person from harm. But in PTSD, this reaction is changed or damaged. People who have PTSD may feel stressed or frightened even when they're no longer in danger.

Who gets PTSD?

Anyone can get PTSD at any age. This includes war veterans and survivors of physical and sexual assault, abuse, accidents, disasters, and many other serious events.

Not everyone with PTSD has been through a dangerous event. Some people get PTSD after a friend or family member experiences danger or is harmed. The sudden, unexpected death of a loved one can also cause PTSD.

What are the symptoms of PTSD?

PTSD can cause many symptoms. These symptoms can be grouped into three categories:

1. Re-experiencing symptoms:

- Flashbacks—reliving the trauma over and over, including physical symptoms like a racing heart or sweating
- Bad dreams
- Frightening thoughts.

Re-experiencing symptoms may cause problems in a person's everyday routine. They can start from the person's own thoughts and feelings. Words, objects, or situations that are reminders of the event can also trigger re-experiencing.

2. Avoidance symptoms:

- Staying away from places, events, or objects that are reminders of the experience
- Feeling emotionally numb
- Feeling strong guilt, depression, or worry
- Losing interest in activities that were enjoyable in the past
- Having trouble remembering the dangerous event.



Things that remind a person of the traumatic event can trigger avoidance symptoms. These symptoms may cause a person to change his or her personal routine. For example, after a bad car accident, a person who usually drives may avoid driving or riding in a car.

3. Hyperarousal symptoms:

- Being easily startled
- Feeling tense or “on edge”
- Having difficulty sleeping, and/or having angry outbursts.

Hyperarousal symptoms are usually constant, instead of being triggered by things that remind one of the traumatic event. They can make the person feel stressed and angry. These symptoms may make it hard to do daily tasks, such as sleeping, eating, or concentrating.

It's natural to have some of these symptoms after a dangerous event. Sometimes people have very serious symptoms that go away after a few weeks. This is called acute stress disorder, or ASD. When the symptoms last more than a few weeks and become an ongoing problem, they might be PTSD. Some people with PTSD don't show any symptoms for weeks or months.

Do children react differently than adults?

Children and teens can have extreme reactions to trauma, but their symptoms may not be the same as adults.¹ In very young children, these symptoms can include:

- Bedwetting, when they'd learned how to use the toilet before
- Forgetting how or being unable to talk
- Acting out the scary event during playtime
- Being unusually clingy with a parent or other adult.



Older children and teens usually show symptoms more like those seen in adults. They may also develop disruptive, disrespectful, or destructive behaviors. Older children and teens may feel guilty for not preventing injury or deaths. They may also have thoughts of revenge. For more information, see the NIMH booklets on helping children cope with violence and disasters.

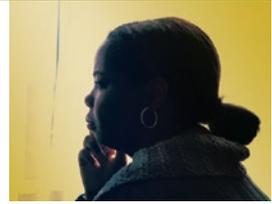
How is PTSD detected?

A doctor who has experience helping people with mental illnesses, such as a psychiatrist or psychologist, can diagnose PTSD. The diagnosis is made after the doctor talks with the person who has symptoms of PTSD.

To be diagnosed with PTSD, a person must have all of the following for at least 1 month:

- At least one re-experiencing symptom
- At least three avoidance symptoms
- At least two hyperarousal symptoms
- Symptoms that make it hard to go about daily life, go to school or work, be with friends, and take care of important tasks.

Why do some people get PTSD and other people do not?



It is important to remember that not everyone who lives through a dangerous event gets PTSD. In fact, most will not get the disorder.

Many factors play a part in whether a person will get PTSD. Some of these are **risk factors** that make a person more likely to get PTSD. Other factors, called **resilience factors**, can help reduce the risk of the disorder. Some of these risk and resilience factors are present before the trauma and others become important during and after a traumatic event.

Risk factors for PTSD include:²

- Living through dangerous events and traumas
- Having a history of mental illness
- Getting hurt
- Seeing people hurt or killed
- Feeling horror, helplessness, or extreme fear
- Having little or no social support after the event
- Dealing with extra stress after the event, such as loss of a loved one, pain and injury, or loss of a job or home.

Resilience factors that may reduce the risk of PTSD include:³

- Seeking out support from other people, such as friends and family
- Finding a support group after a traumatic event
- Feeling good about one's own actions in the face of danger
- Having a coping strategy, or a way of getting through the bad event and learning from it
- Being able to act and respond effectively despite feeling fear.

Researchers are studying the importance of various risk and resilience factors. With more study, it may be possible someday to predict who is likely to get PTSD and prevent it.

How is PTSD treated?

The main treatments for people with PTSD are psychotherapy (“talk” therapy), medications, or both. Everyone is different, so a treatment that works for one person may not work for another. It is important for anyone with PTSD to be treated by a mental health care provider who is experienced with PTSD. Some people with PTSD need to try different treatments to find what works for their symptoms.

If someone with PTSD is going through an ongoing trauma, such as being in an abusive relationship, both of the problems need to be treated. Other ongoing problems can include panic disorder, depression, substance abuse, and feeling suicidal.

Psychotherapy

Psychotherapy is “talk” therapy. It involves talking with a mental health professional to treat a mental illness. Psychotherapy can occur one-on-one or in a group. Talk therapy treatment for PTSD usually lasts 6 to 12 weeks, but can take more time. Research shows that support from family and friends can be an important part of therapy.

Many types of psychotherapy can help people with PTSD. Some types target the symptoms of PTSD directly. Other therapies focus on social, family, or job-related problems. The doctor or therapist may combine different therapies depending on each person’s needs.

One helpful therapy is called **cognitive behavioral therapy**, or **CBT**. There are several parts to CBT, including:

- **Exposure therapy.** This therapy helps people face and control their fear. It exposes them to the trauma they experienced in a safe way. It uses mental imagery, writing, or visits to the place where the event happened. The therapist uses these tools to help people with PTSD cope with their feelings.
- **Cognitive restructuring.** This therapy helps people make sense of the bad memories. Sometimes people remember the event differently than how it happened. They may feel guilt or shame about what is not their fault. The therapist helps people with PTSD look at what happened in a realistic way.
- **Stress inoculation training.** This therapy tries to reduce PTSD symptoms by teaching a person how to reduce anxiety. Like cognitive restructuring, this treatment helps people look at their memories in a healthy way.



Other types of treatment can also help people with PTSD. People with PTSD should talk about all treatment options with their therapist.

How Talk Therapies Help People Overcome PTSD

Talk therapies teach people helpful ways to react to frightening events that trigger their PTSD symptoms. Based on this general goal, different types of therapy may:

- Teach about trauma and its effects.
- Use relaxation and anger control skills.
- Provide tips for better sleep, diet, and exercise habits.
- Help people identify and deal with guilt, shame, and other feelings about the event.
- Focus on changing how people react to their PTSD symptoms. For example, therapy helps people visit places and people that are reminders of the trauma.

Medications

The U.S. Food and Drug Administration (FDA) has approved two medications for treating adults with PTSD:

- sertraline (Zoloft)
- paroxetine (Paxil)

Both of these medications are **antidepressants**, which are also used to treat depression. They may help control PTSD symptoms such as sadness, worry, anger, and feeling numb inside. Taking these medications may make it easier to go through psychotherapy.

Sometimes people taking these medications have side effects. The effects can be annoying, but they usually go away. However, medications affect everyone differently. Any side effects or unusual reactions should be reported to a doctor immediately.

The most common side effects of antidepressants like sertraline and paroxetine are:

- Headache, which usually goes away within a few days.
- Nausea (feeling sick to your stomach), which usually goes away within a few days.

- Sleeplessness or drowsiness, which may occur during the first few weeks but then goes away. Sometimes the medication dose needs to be reduced or the time of day it is taken needs to be adjusted to help lessen these side effects.
- Agitation (feeling jittery).
- Sexual problems, which can affect both men and women, including reduced sex drive, and problems having and enjoying sex.

FDA Warning on Antidepressants

Despite the relative safety and popularity of SSRIs and other antidepressants, some studies have suggested that they may have unintentional effects on some people, especially adolescents and young adults. In 2004, the Food and Drug Administration (FDA) conducted a thorough review of published and unpublished controlled clinical trials of antidepressants that involved nearly 4,400 children and adolescents. The review revealed that 4 percent of those taking antidepressants thought about or attempted suicide (although no suicides occurred), compared to 2 percent of those receiving placebos.

This information prompted the FDA, in 2005, to adopt a “black box” warning label on all antidepressant medications to alert the public about the potential increased risk of suicidal thinking or attempts in children and adolescents taking antidepressants. In 2007, the FDA proposed that makers of all antidepressant medications extend the warning to include young adults up through age 24. A “black box” warning is the most serious type of warning on prescription drug labeling.

The warning emphasizes that patients of all ages taking antidepressants should be closely monitored, especially during the initial weeks of treatment. Possible side effects to look for are worsening depression, suicidal thinking or behavior, or any unusual changes in behavior such as sleeplessness, agitation, or withdrawal from normal social situations. The warning adds that families and caregivers should also be told of the need for close monitoring and report any changes to the physician. The latest information from the FDA can be found on their Web site at www.fda.gov.

Results of a comprehensive review of pediatric trials conducted between 1988 and 2006 suggested that the benefits of antidepressant medications likely outweigh their risks to children and adolescents with major depression and anxiety disorders.⁴ The study was funded in part by the National Institute of Mental Health.



Other medications

Doctors may also prescribe other types of medications, such as the ones listed below. There is little information on how well these work for people with PTSD.

- 1. Benzodiazepines.** These medications may be given to help people relax and sleep. People who take benzodiazepines may have memory problems or become dependent on the medication.⁵
- 2. Antipsychotics.** These medications are usually given to people with other mental disorders, like schizophrenia. People who take antipsychotics may gain weight and have a higher chance of getting heart disease and diabetes.
- 3. Other antidepressants.** Like sertraline and paroxetine, the antidepressants fluoxetine (Prozac) and citalopram (Celexa) can help people with PTSD feel less tense or sad. For people with PTSD who also have other anxiety disorders or depression, antidepressants may be useful in reducing symptoms of these co-occurring illnesses.

Treatment after mass trauma

Sometimes large numbers of people are affected by the same event. For example, a lot of people needed help after Hurricane Katrina in 2005 and the terrorist attacks of September 11, 2001. Most people will have some PTSD symptoms in the first few weeks after events like these. This is a normal and expected response to serious trauma, and for most people, symptoms generally lessen with time. Most people can be helped with basic support, such as:

- Getting to a safe place
- Seeing a doctor if injured
- Getting food and water
- Contacting loved ones or friends
- Learning what is being done to help.

But some people do not get better on their own. A study of Hurricane Katrina survivors found that, over time, more people were having problems with PTSD, depression, and related mental disorders.⁶ This pattern is unlike the recovery from other natural disasters, where the number of people who have mental health problems gradually lessens. As communities try to rebuild after a mass trauma, people

may experience ongoing stress from loss of jobs and schools, and trouble paying bills, finding housing, and getting health care. This delay in community recovery may in turn delay recovery from PTSD.

In the first couple weeks after a mass trauma, brief versions of CBT may be helpful to some people who are having severe distress.⁷ Sometimes other treatments are used, but their effectiveness is not known. For example, there is growing interest in an approach called *psychological first aid*. The goal of this approach is to make people feel safe and secure, connect people to health care and other resources, and reduce stress reactions.⁸ There are guides for carrying out the treatment, but experts do not know yet if it helps prevent or treat PTSD.

In single-session *psychological debriefing*, another type of mass trauma treatment, survivors talk about the event and express their feelings one-on-one or in a group. Studies show that it is not likely to reduce distress or the risk for PTSD, and may actually increase distress and risk.⁹

Mass Trauma Affects Hospitals and Other Providers

Hospitals, health care systems, and health care providers are also affected by a mass trauma. The number of people who need immediate physical and psychological help may be too much for health systems to handle. Some patients may not find help when they need it because hospitals do not have enough staff or supplies. In some cases, health care providers themselves may be struggling to recover as well.

NIMH scientists are working on this problem. For example, researchers are testing how to give CBT and other treatments using the phone and the Internet. In one study, people with PTSD met with a therapist to learn about the disorder, made a list of things that trigger their symptoms, and learned basic ways to reduce stress. After this meeting, the participants could visit a Web site with more information about PTSD. Participants could keep a log of their symptoms and practice coping skills. Overall, the researchers found the Internet-based treatment helped reduce symptoms of PTSD and depression.¹⁰ These effects lasted after treatment ended.

Researchers will carry out more studies to find out if other such approaches to therapy can be helpful after mass trauma.



What efforts are under way to improve the detection and treatment of PTSD?

Researchers have learned a lot in the last decade about fear, stress, and PTSD. Scientists are also learning about how people form memories. This is important because creating very powerful fear-related memories seems to be a major part of PTSD. Researchers are also exploring how people can create “safety” memories to replace the bad memories that form after a trauma. NIMH’s goal in supporting this research is to improve treatment and find ways to prevent the disorder.

PTSD research also includes the following examples:

- Using powerful new research methods, such as brain imaging and the study of genes, to find out more about what leads to PTSD, when it happens, and who is most at risk.
- Trying to understand why some people get PTSD and others do not. Knowing this can help health care professionals predict who might get PTSD and provide early treatment.
- Focusing on ways to examine pre-trauma, trauma, and post-trauma risk and resilience factors all at once.
- Looking for treatments that reduce the impact traumatic memories have on our emotions.
- Improving the way people are screened for PTSD, given early treatment, and tracked after a mass trauma.
- Developing new approaches in self-testing and screening to help people know when it’s time to call a doctor.
- Testing ways to help family doctors detect and treat PTSD or refer people with PTSD to mental health specialists.



For more information on PTSD research, please see NIMH’s PTSD Research Fact Sheet (online at <http://www.nimh.nih.gov/health/publications/post-traumatic-stress-disorder-research-fact-sheet.shtml>) or the PTSD Clinical Trials Web site page at <http://www.nimh.nih.gov/health/trials/post-traumatic-stress-disorder-ptsd.shtml>.

How can I help a friend or relative who has PTSD?

If you know someone who has PTSD, it affects you too. The first and most important thing you can do to help a friend or relative is to help him or her get the right diagnosis and treatment. You may need to make an appointment for your friend or relative and go with him or her to see the doctor. Encourage him or her to stay in treatment, or to seek different treatment if his or her symptoms don't get better after 6 to 8 weeks.



To help a friend or relative, you can:

- Offer emotional support, understanding, patience, and encouragement.
- Learn about PTSD so you can understand what your friend or relative is experiencing.
- Talk to your friend or relative, and listen carefully.
- Listen to feelings your friend or relative expresses and be understanding of situations that may trigger PTSD symptoms.
- Invite your friend or relative out for positive distractions such as walks, outings, and other activities.
- Remind your friend or relative that, with time and treatment, he or she can get better.

Never ignore comments about your friend or relative harming him or herself, and report such comments to your friend's or relative's therapist or doctor.

How can I help myself?

It may be very hard to take that first step to help yourself. It is important to realize that although it may take some time, with treatment, you can get better.

To help yourself:

- Talk to your doctor about treatment options.
- Engage in mild activity or exercise to help reduce stress.
- Set realistic goals for yourself.
- Break up large tasks into small ones, set some priorities, and do what you can as you can.

- Try to spend time with other people and confide in a trusted friend or relative. Tell others about things that may trigger symptoms.
- Expect your symptoms to improve gradually, not immediately.
- Identify and seek out comforting situations, places, and people.

Where can I go for help?

If you are unsure where to go for help, ask your family doctor. Others who can help are listed below.



Mental health resources

- Mental health specialists, such as psychiatrists, psychologists, social workers, or mental health counselors
- Health maintenance organizations
- Community mental health centers
- Hospital psychiatry departments and outpatient clinics
- Mental health programs at universities or medical schools
- State hospital outpatient clinics
- Family services, social agencies, or clergy
- Peer support groups
- Private clinics and facilities
- Employee assistance programs
- Local medical and/or psychiatric societies.

You can also check the phone book under “mental health,” “health,” “social services,” “hotlines,” or “physicians” for phone numbers and addresses. An emergency room doctor can also provide temporary help and can tell you where and how to get further help.

What if I or someone I know is in crisis?

If you are thinking about harming yourself, or know someone who is, tell someone who can help immediately:

- Call your doctor.
- Call 911 or go to a hospital emergency room to get immediate help or ask a friend or family member to help you do these things.
- Call the toll-free, 24-hour hotline of the National Suicide Prevention Lifeline at 1-800-273-TALK (1-800-273-8255); TTY: 1-800-799-4TTY (4889) to talk to a trained counselor.
- Make sure you or the suicidal person is not left alone.

Citations

1. Hamblen J. PTSD in Children and Adolescents: A National Center for PTSD Fact Sheet. http://www.ncptsd.va.gov/ncmain/ncdocs/fact_shts/fs_children.html. Accessed Veterans Administration Web site on February 10, 2006.
2. Brewin CR, Andrews B, Valentine JD. Meta-analysis of risk factors for posttraumatic stress disorder in trauma-exposed adults. *J Consult Clin Psychol*. 2000 Oct;68(5):748-66.
3. Charney DS. Psychobiological mechanisms of resilience and vulnerability: implications for successful adaptation to extreme stress. *Am J Psychiatry*. 2004 Feb;161(2):195-216.
4. Bridge JA, Iyengar S, Salary CB, Barbe RP, Birmaher B, Pincus HA, Ren L, Brent DA. Clinical response and risk for reported suicidal ideation and suicide attempts in pediatric antidepressant treatment, a meta-analysis of randomized controlled trials. *Journal of the American Medical Association*, 2007; 297(15): 1683-1696.
5. PTSD Pharmacotherapy: VA/DoD Clinical Practice Guidelines. http://www.oqp.med.va.gov/cpg/PTSD/G/Interv_Sum508.pdf. Accessed on June 8, 2007.
6. Kessler RC, Galea S, Gruber MJ, Sampson NA, Ursano RJ, Wessely S. Trends in mental illness and suicidality after Hurricane Katrina. *Mol Psychiatry*. 2008 Apr;13(4):374-84. Epub 2008 Jan 8.
7. Foa EB, Cahill SP, Boscarino JA, Hobfoll SE, Lahad M, McNally RJ, Solomon Z. Social, psychological, and psychiatric interventions following terrorist attacks: recommendations for practice and research. *Neuropsychopharmacology*. 2005 Oct;30(10):1806-17.
8. Watson PJ, Shalev AY. Assessment and treatment of adult acute responses to traumatic stress following mass traumatic events. *CNS Spectr*. 2005 Feb;10(2):123-31.
9. Rose S, Bisson J, Churchill R, Wessely S. Psychological debriefing for preventing post traumatic stress disorder (PTSD). *Cochrane Database Syst Rev*. 2002 (2):CD000560.
10. Litz BT, Engel CC, Bryant RA, Papa A. A Randomized, Controlled Proof-of-Concept Trial of an Internet-Based, Therapist-Assisted Self-Management Treatment for Posttraumatic Stress Disorder. *Am J Psychiatry*. 2007 Nov;164(11):1676-84.

For more information on post-traumatic stress disorder (PTSD)

Visit the National Library of Medicine's:

MedlinePlus:

<http://medlineplus.gov>

En Español:

<http://medlineplus.gov/spanish>

For information on clinical trials for PTSD:

<http://www.nlm.nih.gov/health/trials/index.shtml>

National Library of Medicine Clinical Trials Database:

<http://clinicaltrials.gov>

Information from NIMH is available in multiple formats. You can browse online, download documents in PDF, and order paper brochures through the mail.

If you would like to have NIMH publications, you can order them online at:

<http://www.nlm.nih.gov>.

For the most up-to-date information on this topic, please check the NIMH Web site at: <http://www.nlm.nih.gov>.

If you do not have Internet access and wish to have information that supplements this publication, please contact the NIMH Information Center at the following numbers:

National Institute of Mental Health

Science Writing, Press & Dissemination Branch

6001 Executive Boulevard

Room 8184, MSC 9663

Bethesda, MD 20892-9663

Phone: 301-443-4513 or

1-866-615-NIMH (6464) toll-free

TTY: 301-443-8431

TTY: 866-415-8051 toll-free

FAX: 301-443-4279

E-mail: nimhinfo@nih.gov

Web site: <http://www.nlm.nih.gov>

Reprints:

This publication is in the public domain and may be reproduced or copied without permission from NIMH. We encourage you to reproduce it and use it in your efforts to improve public health. Citation of the National Institute of Mental Health as a source is appreciated. However, using government materials inappropriately can raise legal or ethical concerns, so we ask you to use these guidelines:

- NIMH does not endorse or recommend any commercial products, processes, or services, and our publications may not be used for advertising or endorsement purposes.
- NIMH does not provide specific medical advice or treatment recommendations or referrals; our materials may not be used in a manner that has the appearance of such information.
- NIMH requests that non Federal organizations not alter our publications in ways that will jeopardize the integrity and brand when using the publication.
- Addition of non Federal Government logos and Web site links may not have the appearance of NIMH endorsement of any specific commercial products or services or medical treatments or services.

If you have questions regarding these guidelines and use of NIMH publications, please contact the NIMH Information Center at 1 866 615 6464 or e mail at nimhinfo@nih.gov.



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
National Institutes of Health
NIH Publication No. 08 6388