

Post-Traumatic Stress Disorder (PTSD)

What Is Post-Traumatic Stress Disorder?

Post-traumatic stress disorder, also known as PTSD, is among only a few mental disorders that are triggered by a disturbing outside event, unlike other psychiatric disorders such as depression.

Many Americans experience individual traumatic events ranging from car and airplane accidents to sexual assault and domestic violence. Other experiences, including those associated with natural disasters, such as hurricanes, earthquakes, and tornadoes, affect multiple people simultaneously. Dramatic and tragic events, like the terrorist attacks on the World Trade Center and Pentagon, and wars occur, and with media exposure such as we have today, even people not directly involved might be affected. Simply put, PTSD is a state in which you "can't stop remembering."

In one out of 10 Americans, the traumatic event causes a cascade of psychological and biological changes known as post-traumatic stress disorder. Wars throughout the ages often triggered what some people used to call "shell shock," in which returning soldiers were unable to adapt to life after war. Although each successive war brings about renewed attention on this syndrome, it wasn't until the Vietnam War that PTSD was first identified and given this name. Now, mental health providers such as psychiatrists, psychologists, and other health care professionals can attempt to understand people's response to these traumatic events and help them recover from the impact of the trauma.

Although the disorder must be diagnosed by a mental health professional, symptoms of PTSD are clearly defined. To be diagnosed with PTSD, you must have been in a situation in which you were afraid for your safety or your life, or you must have experienced something that made you feel fear, helplessness, or horror.

The worse the trauma, the more likely a person will develop PTSD, and the worse the symptoms. The most severely affected are unable to work, have trouble with relationships, and have great difficulty parenting their children.

Research has shown that PTSD changes the biology of the brain. MRI (magnetic resonance imaging) and PET (positron emission tomography) scans show changes in the way memories are stored in the brain. PTSD is an environmental shock that changes your brain, and scientists do not know if it is reversible.

- In the United States, 60% of men and 50% of women experience a traumatic event during their lifetimes. Of those, 8% of men and 20% of women may develop PTSD. A higher proportion of people who are raped develop PTSD than those who suffer any other traumatic event. Because women are much more likely to be raped than men (9% versus less than 1%), this helps explain the higher prevalence of PTSD in women than men.
- Some 88% of men and 79% of women with PTSD also have another psychiatric disorder. Nearly half suffer from major depression, 16% from other types of anxiety disorders besides PTSD, and 28% from social phobia. They also are more likely to have risky health behaviors such as alcohol

abuse, which affects 52% of men with PTSD and 28% of women, while drug abuse is seen in 35% of men and 27% of women with PTSD.

- More than half of all Vietnam veterans, about 1.7 million, have experienced symptoms of PTSD. Although 60% of war veterans with PTSD have had serious medical problems, only 6% of them have a problem due to injury in combat.
- African Americans, when they are exposed to trauma, are more likely to develop PTSD than whites.
- People who are exposed to the most intense trauma are the most likely to develop PTSD. The higher the degree of exposure to trauma, the more likely you are to develop PTSD. So, if something happens to you more than once or if something occurs to you over a very long period of time, the likelihood of developing PTSD is increased.
- Sometimes, people who have heart attacks, cancer or other serious medical problems that pose a sudden threat to one's physical integrity and produce feelings of horror and helplessness may develop PTSD.
Refugees (people who have been through war conditions in their native country or fled from conflict) may develop PTSD and often go years without treatment.
- New mothers may develop PTSD after an unusually difficult delivery during childbirth. Also, patients who regain partial consciousness during surgery under general anesthesia may be at risk for developing PTSD.

Causes of Post-Traumatic Stress Disorder

When you are afraid, your body activates the "fight or flight" response -- a reference to our caveman ancestors facing a tiger. In reaction, your body releases adrenaline, which is responsible for increasing blood pressure and heart rate and increasing glucose to muscles (to allow you to run away quickly in the face of immediate danger). However, once the immediate danger (which may or may not have actually existed) is gone, the body begins a process of shutting down the stress response, and this process involves the release of another hormone known as cortisol.

If your body does not generate enough cortisol to shut down the flight or stress reaction, you may continue to feel the stress effects of the adrenaline. Trauma victims who develop post-traumatic stress disorder often have higher levels of other stimulating hormones (catecholamines) under normal conditions in which the threat of trauma is not present. These same hormones kick in when they are reminded of their trauma.

Physically, your body also increases your heart rate. After a month in this heightened state, with stress hormones elevated, you may develop further physical changes, such as heightened hearing. This cascade of physical changes, one triggering another, suggests that early intervention may be the key to heading off the effects of post-traumatic stress disorder.

Symptoms of Post-Traumatic Stress Disorder

Although terrorism may cause the symptoms of post-traumatic stress disorder (PTSD) in people directly involved, most people are resilient and won't have serious lingering effects. They will have memories, certainly, but will go on to live their lives without debilitating fear.

No one knows who will develop long-term effects. Seek medical care if you suspect you or someone you know has after-effects that just aren't going away a few weeks after a traumatic event. These are the behaviors to watch for in loved ones, coworkers, friends, and family. The main symptoms of PTSD are flashbacks, emotional detachment, and jumpiness.

- **Flashbacks:** Imagine experiencing the most terrifying horror movie you've ever seen playing over and over in your mind. You can't make the images go away. These are the flashbacks so commonly associated with PTSD and usually are thought of in connection with combat veterans in war.
 - Survivors of 9/11, for example, may keep seeing the plane hitting the building, hearing the sound of the crash, or reliving their desperate escape, and these images may occur either while the person is asleep (nightmares) or awake.
 - Flashbacks take the person out of reality. They are truly living the experience over again. Holocaust survivors are one example of a group of people with a common horrifying experience. Many of them experienced flashbacks of wartime Berlin and being herded to concentration camps when they heard the sound of police-car sirens more than 30 years later.
- **Emotional detachment:** Emotional detachment is a second symptom of PTSD, which is often not as obvious outwardly to anyone other than the person experiencing it. For these people, their emotional systems are in overdrive. They have a hard time being a loving family member. They avoid activities, places, and people associated with the traumatic event. They are simply drained emotionally and have trouble functioning every day.
 - A parent who is emotionally detached, or numb, might be unable to cope with raising children.
 - The children, in turn, may develop poor social relationships, as was seen with some children of Holocaust survivors. They can't form loving bonds. This is the second generation of fallout from PTSD on a mass scale.
- **Jumpiness:** Any sudden noise might startle you, but for someone with PTSD, that noise would make them practically "jump out of their skin" (known as hyperactive startle reflex). These people might overreact to small things and have difficulty concentrating, which would affect their job performance. They may always be looking around as if searching their environment for danger (this is hypervigilance). Trouble falling asleep or staying asleep in this high state of arousal is also a common consequence.

When to Seek Medical Care for PTSD

Most people bounce back from traumatic events such as car crashes or assaults. Short-term, most of us would experience some of these symptoms of PTSD. But if any symptoms last more than a month and affect job performance or the ability to function in day-to-day life, consult a licensed mental health professional.

Similar symptoms that begin immediately after a traumatic event and last more than two days might be considered acute stress disorder -- a condition similar to PTSD. When symptoms start weeks, months, or years after the experience and last longer than a month, it becomes PTSD.

Some World War II veterans developed PTSD 50 years after the war and only after they retired. These children of the Depression didn't talk about their war experiences. They came home, went to work, and built families. It wasn't until their retirement, when they were no longer responsible for keeping it together for their families, that flashbacks from combat began.

Children and PTSD

Today, children are exposed to various forms of traumatic events and violence. Natural disasters, such as tornados or earthquakes, have little potential for being personalized, so they lie on one end of this continuum. In contrast, victims of rape or torture usually face their assailants. In between are technological disasters, such as dam bursts or airplane crashes, that usually occur as the result of human error on a grand scale.

Children question whether someone is trying to hurt them. They want to know what's wrong with them. Someone they trust may betray that trust, for example, if a child is sexually abused by a parent or trusted caregiver or authority figure.

The more personal the trauma, evidence suggests, the more likely long-term psychological problems are to arise from it. Such traumas are also more likely to include elements of anger and hostility. In addition, childhood experiences such as sexual abuse may interfere with a child's development and affect him or her throughout life. For example, women who had been sexually abused as children, according to research, almost universally experienced trauma later in life as well. In contrast, women who were physically but not sexually abused as children had a rate of trauma later in life that was similar to that of people who were not physically abused.

- Five million children are exposed to a traumatic event in the United States every year, amounting to 1.8 million new cases of PTSD. Some 36% of children who experience traumatic events develop PTSD, compared with 24% of adults.
- The younger a child is at the time of the trauma, the more likely he or she is to develop PTSD. Thirty-nine percent of preschoolers develop PTSD in response to trauma, while 33% of middle school children and 27% of teens do.
- By age 18 years, one in four children has experienced a personal or community act of violence. (It is estimated that, during their lifetime, 4 million teenagers have been victims of serious physical assaults, and 9 million have witnessed an act of serious violence. More than 3 million

children are exposed to domestic violence every year.)

Violence on TV: Parents should guide this kind of television viewing, either making sure that they talk to their children about what they are reading and seeing -- or, for very young children, limiting it or turning it off altogether. As kids get older, limiting even then is important so they are not constantly barraged by these images. Coming up with other ways to try to process what is happening, such as talking with adults, rather than just watching it over and over and over again, is helpful.

Stress at home: Kids know what's going on in their environments, even if parents don't think they do. Children can pick up on our feelings, whether it's stress over a traumatic event or worries about a parent losing a job. Children notice the subtle, outward signs, both happy and sad. How parents react to a trauma often affects how the children are going to react.

Signs and symptoms of PTSD in children (according to the National Center for PTSD):

Young children (1-6 years)

- Helplessness and passivity, lack of usual responsiveness
- Generalized fear
- Heightened arousal and confusion
- Cognitive confusion
- Difficulty talking about the event
- Difficulty identifying feelings
- Nightmares, sleep disturbances
- Separation fears and clinging to caregivers
- Regressive symptoms (for example, returning to bed-wetting or loss of speech/motor skills)
- Inability to understand death as permanent
- Anxieties about death
- Grief related to abandonment by caregiver
- Physical symptoms (such as stomach aches, headaches)
- Startle response to loud noises
- Freezing (sudden immobility)
- Fussiness, uncharacteristic crying, neediness
- Avoidance of or alarm response to specific trauma-related reminders involving sights/physical sensations

School-aged children (6-11 years)

- Feelings of responsibility and guilt
- Repetitious traumatic play
- Feeling disturbed by reminders of the event

- Nightmares, other sleep disturbances
- Concerns about safety, preoccupation with danger
- Aggressive behavior, angry outbursts
- Fear of feelings, trauma reactions
- Close attention to parents' anxieties
- School avoidance
- Worry/concern for others
- Behavior, mood, personality changes
- Physical symptoms (complaints about bodily aches/pains)
- Obvious anxiety/fearfulness
- Withdrawal
- Specific trauma-related fears, general fearfulness
- Regression (behaving like a younger child)
- Separation anxiety
- Loss of interest in activities
- Confusion, inadequate understanding of traumatic events (more evident in play than in discussion)
- Unclear understanding of death, causes of "bad" events
- Giving magical explanations to fill in gaps in understanding
- Loss of ability to concentrate at school, with lower performance
- Spacey or distractible behavior

Preadolescents and adolescents (12-18 years)

- Self-consciousness
- Life-threatening re-enactment
- Rebellion at home or school
- Abrupt shift in relationships
- Depression, social withdrawal
- Decline in school performance
- Trauma-driven acting out, such as sexual activity or other reckless risk-taking
- Effort to distance self from feelings of shame, guilt, humiliation
- Excessive activity/involvement with others, or retreat from others in order to manage inner turmoil
- Accident proneness
- Wish for revenge, action-oriented responses to trauma
- Increased self-focusing, withdrawal

- Sleep/eating disturbances, including nightmares

Treatment: Treatment of children with PTSD should include the involvement of parents and other important people such as teachers and school counselors in the child's life. Treatment of traumatic stress in adults is generally focused on individual treatment or group therapy with other individual adults who have experienced a similar type of trauma.

Medical Care for PTSD

Talk about it: Early on, grief counseling can be helpful. Cognitive psychotherapy in which a trained mental health professional helps the traumatized person talk through the distressing event is also supportive. Dealing with the thoughts and emotions with a counselor is important.

Exposure therapy is a form of cognitive behavioral therapy used to treat post-traumatic stress disorder. In this therapy, you are gradually helped to process your memories or cues associated with your traumatic experience. In other words, the therapist helps you "get back on the horse" and helps you deal with the memories -- a process you may not be able to do yourself, even though you relive the memories yourself.

Medication: Two drugs, sertraline (Zoloft) and paroxetine (Paxil), have been approved for the treatment of post-traumatic stress. They work much like Prozac and similar antidepressants in helping to overcome the symptoms of depression and anxiety.

With medication or counseling and usually both, the movie inside a person's head stops playing and fades with time. Symptoms may get better without treatment, too.

Prevention of PTSD

Those most at risk for developing PTSD are the survivors of trauma, of course. The next most vulnerable are the rescue workers and volunteers at disasters, untrained in psychological techniques. They are seeing and smelling and feeling vivid, unimaginable horrors and fearing for their lives working in unstable structures. Firefighters and police officers, doctors, nurses, and EMTs may have more coping skills. However, all need mental health counseling during the recovery phase.

No prevention for PTSD exists, because traumatic events are often unpredictable and random. In some experimental studies, though, certain blood pressure drugs, if given immediately and taken over time, have shown promise in lowering the intensity of the symptoms, if symptoms are going to develop at all. The problem is that health care providers cannot predict who will develop symptoms and who will not.