

# Post Traumatic Stress Disorder (PTSD)

**Author:** Nancy Evans, BS; Tracey Long, RN, PhD, APRN

Contact hours: 2

Course price: \$19

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## Course Summary

An overview of post traumatic stress disorder (PTSD) and its implication for veterans, their families, and the community. Includes symptoms and diagnostic criteria, populations at risk for PTSD, treatment modalities, and resources for veterans, families, and healthcare providers.

**COI Support**

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**Criteria for Successful Completions**

80% or higher on the post test, a completed evaluation form, and payment where required. No partial credit will be awarded.

# Course Objectives

When you finish this course you will be able to:

1. Define *post traumatic stress disorder* and discuss its implications for the family and community.
2. List 4 categories of PTSD symptoms and their diagnostic criteria.
3. Identify 5 populations at risk for PTSD.
4. Explain the CAPS-5 criteria for assessment and diagnosis of PTSD
5. Compare and contrast 4 treatment modalities for PTSD.
6. List at least 4 resources where families and healthcare professionals can learn more about PTSD.

## Side Effects of Traumatic Events

In today's world your ZIP Code—even more than your genetic code—determines whether you will lead a safe and healthy life. [Your] income, family structure, housing, employment, and educational opportunities affect not only the risk of developing traumatic stress but also access to effective help to address it.

Poverty, unemployment, inferior schools, social isolation, widespread availability of guns, and substandard housing all are breeding grounds for trauma. Trauma breeds further trauma: hurt people hurt other people.

B.A. Van Der Kolk, 2014  
*The Body Keeps the Score*

Mark, a 25-year-old male veteran, wakes up in the middle of night screaming and wide-eyed as he looks frantically about the room for something. His heart is pounding and his face is sweating. He was dreaming of a being in a foxhole again during his military service in the war. It felt so real, again.

Sally, a 52-year-old woman, stops paralyzed with fear as a large hooded man walks by her on a quiet street in the late evening, recalling a night just like that many years ago when she was mugged and raped. It felt so real, again.

Ben, a 13-year-old boy is referred to the school counselor for trouble concentrating, poor grades, irritability, and aggressive outbursts in class. He struggles daily to stop thinking about his mother's brutal beating by his alcoholic father. It felt so real, again.

What do each of these three people have in common?

Post traumatic stress disorder. Although they are different ages and genders, and from different causes, each suffers from recurring emotional distress even though the original physical stressor is gone. As a healthcare professional, could you recognize the symptoms? Do you know what qualifies for the diagnosis and what treatments are available for each of these patients? They need you, to help them feel real, again.

## Defining PTSD

**Post traumatic stress disorder (PTSD)** is a mental health disorder that can develop in anyone who experiences physical or emotional trauma. Anyone who experiences—or witnesses—a *single traumatic event*, such as a terrorist attack or a tornado, or *chronic trauma*, such as war, sexual abuse, or family violence, may develop PTSD. An experience of shock, danger, or fear automatically results in the body's natural sympathetic response of fight or flight; however, when that stress reaction continues even though they are not in danger, PTSD can develop (NIH, 2016). Examples of traumatic events include:

- Robbery or other violent crime
- Sexual assault
- Serious personal injury

- Stalking and bullying (either in person or online)
- Plane crashes or other major transportation accidents
- Sudden death (from other than natural causes) or serious illness of a loved one
- Such natural disasters as earthquakes, hurricanes, floods, and fires (NIH, 2016)

Traumatic events usually occur unexpectedly, triggering fear and the body's natural sympathetic response, known as **stress**. This is a normal response intended to protect a person from harm. Stress stimulates the nervous system, the endocrine system and the immune system, causing the release of adrenergic hormones and chemicals. Heart rate and blood pressure increase, blood glucose levels rise, all in an effort to prepare the person to escape danger or deal with it more effectively if escape is not possible.

Recent advances in neuroscience and imaging technology have made it possible to visualize and measure the physiologic effects of traumatic stress on the brain, the mind, and the body, and the network of connections among them. Imaging studies show distinct changes in the physical brain of those suffering from PTSD, including the hippocampus and prefrontal cortex that involve mental reasoning (Bremner, 2007).

Almost everyone will experience emotional reactions after a traumatic event but most people recover from those responses within a short time. For some people, however, the disturbing images and emotions surrounding the event linger, impeding recovery and possibly leading to either *acute* or *chronic* PTSD. As pioneer researcher and physician Bessel Van Der Kolk explains,

Being traumatized means continuing to organize your life as if the trauma were still going on—unchanged and immutable—as every new encounter or event is contaminated by the past (2014, p. 53).

PTSD is a relatively new name for a mental health disorder that has been around for centuries and is commonly associated with military service. Doctors who treated soldiers during America's Civil War mistook their patients' psychological suffering for a cardiac condition brought on by "overreaction and overwork," and referred to it as "Soldier's Heart" (Wolfinger, 2016). During World War I, what we now call PTSD was called "battle fatigue," and in World War II the term was "shell shock."

Not until 1980 did the American Psychiatric Association create the diagnosis *post traumatic stress disorder (PTSD)*, to describe the cluster of symptoms that reflected what clinicians were seeing in the veterans they treated. This new diagnosis was created in response to lobbying by a group of Vietnam veterans, aided by New York psychoanalysts Chaim Shatan and Robert J. Lifton (Van Der Kolk, 2014).

Since that diagnosis was created, research on the complex effects of trauma on the brain, mind, and body has increased due to better recognition of the disorder and more veterans to study. Better understanding of the physiologic effects of trauma is expanding the possibilities for more effective treatments beyond the currently used psychological and pharmacologic therapies.

PTSD can only be diagnosed if symptoms persist over 1 month. Symptoms generally begin within 1 month of the traumatic event and are grouped into four classes: intrusive memories, avoidance, negative changes in thinking and mood, and changes in physical and emotional reactions that disrupt personal relationships and behaviors (Mayo, 2016; APA, 2015).

## **Prevalence and Incidence of PTSD**

Unfortunately, trauma is universal and occurs to people of every gender, age, color, ethnicity, socioeconomic status, and religion. A World Health Organization survey (WHO, 2013) of 21 countries found that more than 10% of respondents reported witnessing violence (21.8%) or experiencing interpersonal violence (18.8%), accidents (17.7%), exposure to war (16.2%), or trauma to a loved one (12.5%). An estimated 2.6% of the world's population has suffered from post traumatic stress disorder (PTSD) in the previous year.

PTSD affects 3.5 % to 15% of the U.S. adult population—about 7.7 million Americans. Up to 31% of Vietnam veterans were found to experience PTSD. Women are more than twice as likely to develop the condition as men and about 37% of those cases are classified as severe. While PTSD can occur at any age, the average age of onset is in the early twenties, accounting mostly for those in military service and women victims of sexual violence (National Center for PTSD, 2015).

PTSD, however, is not exclusive to troops, as the incidence occurs even among nurses. One study found that 24% of ICU nurses and 14% of general staff nurses tested positive for PTSD due to job stress and work-related violence in emergency departments and critical care settings (Mealer et al., 2007).

Ordinary people who are exposed to violence or violent people are also at an increased risk of PTSD if they do not know how to handle stressful events effectively themselves. People who experience a sudden death of a loved one—or even observe violence or trauma—are at increased risk to replay the stressful event over and over in their mind until it becomes disruptive to a healthy life.

## **PTSD and Complications**

Although the relived trauma of the triggering event of PTSD is a validated challenge, complications of untreated PTSD compound the problem. PTSD can disrupt relationships as well as the ability to work and function daily. Without diagnosis and treatment, people with PTSD are at greater risk of depression, anxiety, issues with drug and alcohol abuse, eating disorders, and suicidal thoughts and actions than those without the disorder. Most of the additional disorders are due to maladaptive efforts to cope with the relived trauma and emotional distress. Men are far more likely to commit suicide than women, and veterans are more likely than nonveterans to end their own lives (Hudenko et al., 2017).

From 1999 to 2010, the suicide rate in the U.S. population among males was 19.4 per 100,000, compared to 4.9 per 100,000 in females. Based on the most recent data available (fiscal year 2009), the suicide rate among male Veteran VA users was 38.3 per 100,000, compared to 12.8 per 100,000 in females.

Research indicates that there is a correlation between many types of trauma and suicidal behaviors; for example, there is evidence that traumatic events such as childhood abuse may increase a person's suicide risk. A history of **military sexual trauma (MST)** also increases the risk of suicide and intentional self-harm, suggesting a need to screen for suicide risk in this population.

## Test Your Knowledge

Which of the following patients could be diagnosed with PTSD?

- A. A military Veteran who meets with his colleagues to relive his military days.
- B. A college girl who can't focus on school work after being the victim of a date rape 6 weeks ago.
- C. A young man who attends counseling after being the only survivor of a motor vehicle accident with his friends.
- D. A teenager who has hyperactivity disorder for 2 years and can't sit still during class.

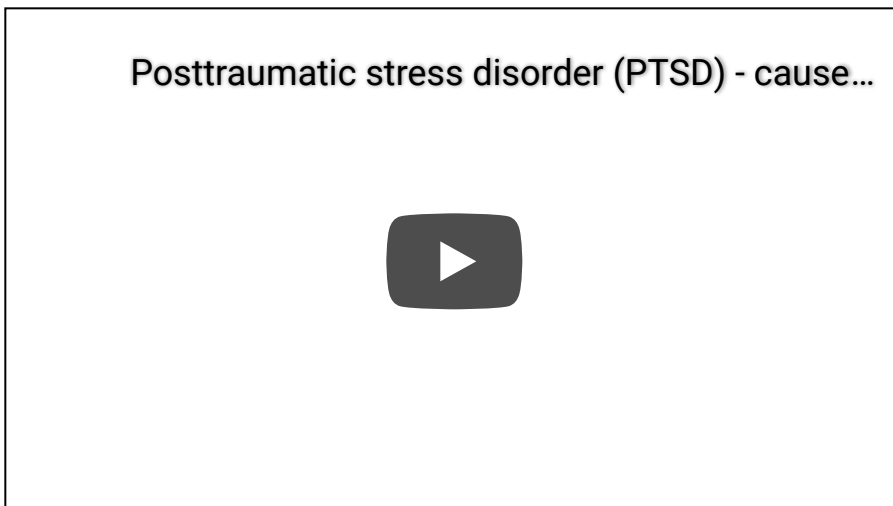
## Apply Your Knowledge

**Q:** What makes the difference between a person who experiences the fight or flight response during a stressful event and someone with PTSD?

**A:** Everyone who experiences stress will have the body's natural response of the sympathetic system. People with PTSD continue to relive the stressful event even after the stressor is gone, causing both physical and emotional stress to continue.

Answer: B

## Video (5:05)



Posttraumatic stress disorder (PTSD): Causes, Symptoms, Treatment and Pathology.

<https://www.youtube.com/watch?v=hZSx4rMyVjI>

# Signs and Symptoms of PTSD



One does not have to be a soldier, or visit a refugee camp in Syria or the Congo, to encounter trauma. Trauma happens to our friends, our families, and our neighbors.

B.A. Van Der Kolk, 2014  
*The Body Keeps the Score*

Clinical symptoms of PTSD typically appear within the first three months of a traumatic event, but in some cases may appear months or years later. PTSD is often accompanied by depression, substance abuse, or one or more of the other anxiety disorders, such as generalized anxiety disorder, panic disorder, or social anxiety disorder.

Everyone experiences stress and trauma throughout life; however, when the stressful event interferes with normal daily function and relationships, it becomes identified as PTSD, which requires treatment to restore the ability to adapt and cope.

## Clinical Presentation of PTSD

In the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5), symptoms of PTSD are grouped into four categories:

- Intrusion Symptoms (formerly called re-experiencing symptoms)
  - Intrusive thoughts
  - Nightmares
  - Flashbacks
  - Emotional distress after exposure to traumatic reminders
  - Physical reactivity to traumatic reminders
- Avoidance Symptoms (avoiding trauma-related stimuli)
  - Trauma-related thoughts or feelings
  - Trauma-related reminders
- Negative Alterations in Cognition and Mood (negative thoughts or feelings that began or worsened after the trauma)
  - Inability to recall key features of the trauma
  - Overly negative thoughts and assumptions about oneself or the world
  - Exaggerated blame of self or others for causing the trauma
  - Negative or flat affect
  - Decreased interest in activities

- Feeling isolated
- Difficulty experiencing positive affect
- Alterations in Arousal and Reactivity (trauma-related arousal and reactivity and reactivity that began or worsened after the trauma)
  - Irritability or aggression
  - Risk or destructive behaviors
  - Hyper-vigilance
  - Heightened startle reaction
  - Difficulty concentrating
  - Difficulty sleeping

## Criteria for Diagnosis of PTSD

A diagnosis of PTSD is based on criteria established by the American Psychiatric Association. These criteria were revised in 2013 and appear in the fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-5)*. They are included in a new category: Trauma-and Stressor-Related Disorders, which involves exposure to a traumatic or stressful event and include reactive attachment disorder, acute stress disorder, adjustment disorders, and post traumatic stress disorders. All of the conditions included in this classification require exposure to a traumatic or stressful event as a diagnostic criterion.

To be diagnosed with PTSD, DSM-5 criteria require that:

- 1.** The person was exposed to: death, threatened death, actual or threatened serious injury, or actual or threatened sexual violence, in the following way(s):
  - Direct exposure
  - Witnessing the trauma
  - Learning that a relative or close friend was exposed to a trauma
  - Indirect exposure to aversive details of the trauma, usually in the course of professional duties (eg, first responders, medics)
- 2.** Symptoms last for more than 1 month
- 3.** Symptoms create distress or functional impairment (eg, social, occupational)
- 4.** Symptoms are not due to medication, substance use, or other illness

In addition to meeting criteria for the PTSD diagnosis, an individual who experiences high levels of the following in reaction to a trauma-related stimuli may have the diagnosis further differentiated:

- Depersonalization: Experience of being an outside observer of or detached from oneself (eg, feeling as if "this is not happening to me" or one were in a dream)
- Derealization: Experience of unreality, distance, or distortion (eg, "things are not real")
- Delayed specification: Full diagnostic criteria are not met until at least six months after the trauma(s), although onset of symptoms may occur immediately

## **Risk Factors for PTSD**

Each day's news media makes us all witnesses to trauma somewhere in the world. The images are graphic and disturbing. All too often, trauma and violence become personal, putting anyone at risk for PTSD.

Factors that increase risk for PTSD include:

- Living through dangerous events and traumas
- Being physically injured
- Seeing another person hurt or killed
- Adult memories of childhood trauma
- Feeling horror, helplessness, or extreme fear
- Receiving little or no social support after the event
- Dealing with extra stress after the event, such as unexpected loss of a loved one, pain and injury, or loss of a job or home
- Having a history of mental illness or lapses in perception of reality
- Substance abuse

## **Risk Reducers for PTSD**

Resilience factors that may reduce the risk of PTSD include:

- Seeking support from other people, such as friends, family, and community
- Finding a support group after a traumatic event
- Learning to feel good about one's own actions in the face of danger

- Having a positive 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 (NIMH, 2016)

## Test Your Knowledge

Which of the following is NOT a clinical presentation of PTSD?

- A. Difficulty sleeping and eating.
- B. Frequent infections and fatigue.
- C. Nightmares and flashbacks.
- D. Negative or flat affect and depression.

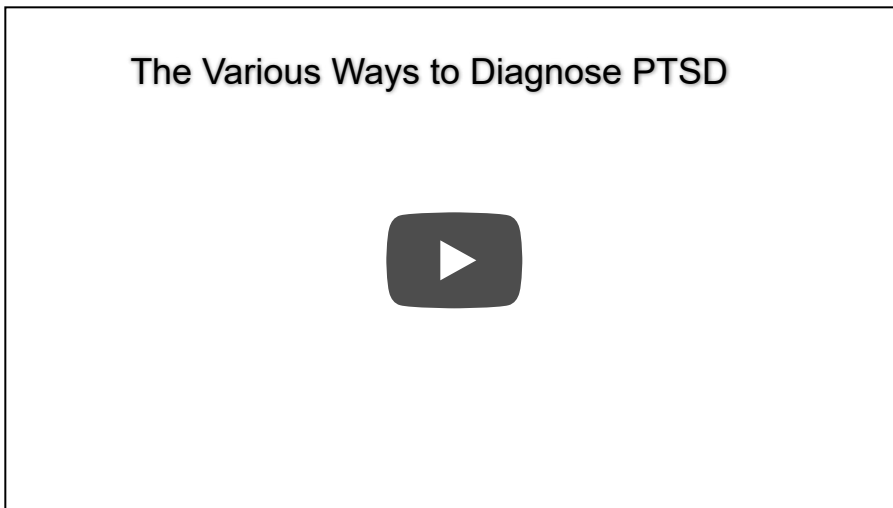
## Apply Your Knowledge

**Q:** How do the clinical manifestations differ between PTSD and depression?

**A:** Although people with PTSD may manifest with depression, the etiology of PTSD comes from a traumatic event or stressor. PTSD may cause depression but depression does not cause PTSD.

Answer: B

## Video (7:35)



The Various Ways to Diagnose PTSD. <https://www.youtube.com/watch?v=vZ1iJuDXp8Y>

# PTSD in Populations at Risk

They carried malaria tablets, love letters, 28-pound mine detectors, dope, illustrated Bibles, each other. And if they made it home alive, they carried unrelenting images of a nightmarish war that history is only beginning to absorb.

Tim O'Brien, 1998

*The Things They Carried*

While we often associate post traumatic stress disorder with military Veterans who have been exposed to the traumas and violence of war, PTSD may also arise in civilian women, children, and teens. Populations at risk need special attention and careful assessment to not miss the clues of PTSD that may be disguised as other issues such as depression, eating disorders, attention deficient hyperactivity disorders, or mental health disorders.

## PTSD in Veterans

A survey of nearly 1200 Veterans in West Virginia found that approximately 20% reported having been told that they had PTSD. The Veterans studied ranged in age from 19 to 94 years, with an average of 54 years (Gradus, 2017). The age of the Veteran was not as significant as the exposure to a traumatic injury, violence, or exposure during their military service.

The earliest PTSD research occurred when women in the military were not exposed to combat, so the findings reflected a male population. Today women in the military are at an equally high risk for exposure to traumatic events, especially during times of war. Currently, about 15% of all military personnel are women. Although men are more likely to experience combat, a growing number of women are now being exposed to combat. In addition, women in the military are at higher risk for exposure to sexual harassment and/or sexual assault than men. Sexual violence or rape are common triggers for PTSD among women.

The Rand study of Veterans (Rand, 2008) found that only half of those who need treatment for PTSD issues seek treatment. Sadly, the study also showed that only slightly more than half of those who received treatment got *minimally adequate care*.

This study also found that nearly 20% of these service members had experienced a traumatic brain injury (TBI) during deployment, signaling the traumatic injury as the trigger for PTSD. According to the Centers for Disease Control & Prevention (CDC), TBI is more common in the general population than previously thought. In 2013 more than 2.8 million TBI-related emergency visits were reported in the United States (Taylor et al., 2017).

## National Vietnam Veterans Readjustment Study

The Vietnam war sadly resulted in more than 25% of all Veterans later being diagnosed with PTSD. The National Vietnam Veterans Readjustment Study (NVVRS) conducted between November 1986 and February 1988, comprised interviews of 3,016 American Veterans selected to provide a representative sample of those who served in the armed forces during the Vietnam era. The estimated lifetime prevalence of PTSD among these Veterans was 30.9% for men and 26.9% for women. Of Vietnam Veterans, 15.2% of males and 8.1% of females were currently diagnosed with PTSD at the time the study was conducted (Kulka et al., 1990). Much of our current knowledge comes from this early research and population.

## **Gulf War Veterans**

Kang and others (2003) conducted a study to estimate the prevalence of PTSD in a population-based sample of 11,441 Gulf War Veterans from 1995 to 1997. PTSD was assessed using the PTSD Checklist rather than interviews, with those scoring 50 or higher considered to have met criteria for PTSD. The prevalence of current PTSD in this sample of Gulf War Veterans was 12.1%. Further, the authors estimated the prevalence of PTSD among the total Gulf War Veteran population to be 10.1%.

## **Iraq and Afghanistan Veterans**

These Veterans served in the Operation Enduring Freedom and Operation Iraqi Freedom from 2001 (Iraq) and 2003 (Afghanistan) to the present. In 2008 the RAND Corporation, Center for Military Health Policy Research, published a population-based study that examined the prevalence of PTSD among previously deployed Iraq and Afghanistan Veterans, which demonstrated almost 15% of Veterans exhibited symptoms of PTSD (Tanielian & Jaycox, 2008). PTSD was assessed using the PTSD Checklist, as in the Gulf War Veterans study. Among the 1,938 participants, the prevalence of current PTSD or depression was 13.8% (US DVA, 2016).

From all these hallmark studies, and more, clearly our military Veterans are at greater risk to develop PTSD. Knowing this risk and the frequent result of homelessness, healthcare professionals should be more astute at asking assessment questions and using screening tools for early identification of PTSD.

## **PTSD in Civilian Women**

The power we discover inside ourselves as we survive a life-threatening experience can be utilized equally well outside of crisis. I am, in every moment, capable of mustering the strength to survive again—or of tapping that strength in other good, productive, healthy ways.

Michele Rosenthal, 2012  
*Before the World Intruded*

Although women and men report the same kind of symptoms, some symptoms are more common in women than in men. For example, women are more likely to be jumpy, to have more trouble identifying various emotions, and to avoid things that remind them of the trauma than men. Men are more likely to feel angry and to have trouble controlling their anger than women. Women with PTSD are more likely to feel depressed and anxious, while men with PTSD are more likely to have problems with alcohol or drugs. Both women and men who experience PTSD may develop physical health problems (US DVA, 2015).

According to WHO (2013), gender is an important determinant of mental health and mental illness because it determines the differential power and control men and women have over the socioeconomic aspects of their lives, their social position, status, and treatment in society and their susceptibility and exposure to specific mental health risks.

Risk factors more common for women in developing mental health disorders include gender-based violence, socioeconomic disadvantage, low income and income inequality, low or subordinate social status and rank, and unremitting responsibility for the care of others (Wong, 2017). Sexual violence toward women and the associated high rate of sexual violence has identified this as the largest group of people affected by PTSD.

Did You Know. . .

**It is estimated that 1 in 4 women will be raped or a victim of sexual violence.**

Half of all women will experience at least one traumatic event. According to the National Center for PTSD (2015), the most common trauma women experience is sexual assault or child sexual abuse. Approximately one-third of all women will experience sexual assault in their lifetime. Sexual assault is more likely to cause PTSD than other traumatic events. Women are also more likely to be neglected or abused in childhood, or to experience intimate partner violence.

## **PTSD in Civilian Men**

Physicians, especially, do not reach out for mental health counseling or assistance even after exposure to traumatic events. Men generally do not seek help or support as much as women, which puts them at greater risk for PTSD and chronic mental health difficulties. The culture of resistance to seek help among men and especially male physicians is a barrier to much needed emotional help.

## Online Resource



Non-Military PTSD. <https://www.youtube.com/watch?v=3zjlBhmVZf8>

## PTSD in Healthcare Professionals

Just as brave individuals who serve in our military experience trauma that haunts them, so do public service workers and first responders such as firefighters, police, and health workers. It is estimated 1 in 10 emergency workers suffer from PTSD (Eswaran, 2014).

Research shows that the nature of traumatic events can increase the risk of PTSD; these events include dealing with victims of sudden death, dealing with death or resuscitation of a baby or young child, and handling victims of car and train crashes. Studies also reveal that, although 20% of healthcare workers considered changing jobs due to high emotional stress, 71% of those did not reduce their work hours because of stress, nor did they seek professional help to deal with the stress (Laposa & Alden, 2003).

The challenging attitude of healthcare workers and first responders is that they are trained and available to help others, not to be helped themselves. They generally put others before their own needs and therefore become at risk for PTSD when confronted with traumatic events.

Nurses and other health workers are not exempt from trauma. Indeed, they witness physical and psychological trauma every day, and in some practice settings, such as emergency departments, nurses experience violent assaults from patients and visitors. Researchers at the University of Cincinnati found that 94% of ED nurse respondents reported at least one symptom of post traumatic stress disorder after a violent event, and 17% had scores high enough to be considered probable for PTSD (Gates et al., 2011).



The CDC recommends for emergency workers that they recognize the symptoms of PTSD for themselves and their colleagues. During the emergent event it is recommended that workers:

- Pace themselves
- Watch out for their colleagues and be aware of those who are exhausted or stressed
- Take frequent rest breaks away from the work area if possible
- Eat, drink fluids, and sleep regularly
- Utilize formal mental health support provided
- Debrief after traumatic events
- Give themselves permission to feel disturbed about images they may have encountered and know that flashbacks are normal and will diminish with time

After the event, rescue workers, including healthcare professionals, should:

- Reach out for spiritual and emotional support from friends and colleagues
- Consider journaling their feelings
- Avoid making big decisions for a while after an event
- Avoid overuse of drugs and alcohol to feel better
- Spend time doing enjoyable activities
- Give yourself time to heal

## **PTSD in Children and Teens**

Children and teens can also develop PTSD after sexual or other physical abuse, or witnessing family violence. Some children have experienced horrific events such as the 2012 shooting at Sandy Hook School that killed 20 first-graders and 6 adults, or bomb explosions at public events such as the 2013 Boston Marathon. Gun violence in urban communities of color exposes children and families to continuing trauma.

Studies show that about 15% to 43% of girls and 14% to 43% of boys go through at least one trauma (National Center for PTSD, 2015). Of those children and teens who have had a trauma, 3% to 15% of girls and 1% to 6% of boys develop PTSD. Rates of PTSD are higher for those who have the most severe traumas, particularly those that involve people hurting other people, such as rape and assault. Girls are more likely than boys to get PTSD.

Even very young children experience abuse and neglect. Child Protective Services receives reports on the abuse or neglect of about 5.5 million children in a year. The actual number of abused and neglected children is unknown because many go unreported. Infants and young children are at greater risk of abuse than older children. Abuse includes emotional, sexual, and physical abuse as well as neglect. Early stress and trauma can change a child's brain, leading to long-term effects on physical, mental and emotional growth (National Center for PTSD, 2015).

An improved understanding has expanded our knowledge of the population known to suffer from PTSD far beyond those who have served in the military. As Van Der Kolk explains,

In other words, for every soldier who serves in a war zone abroad, there are ten children who are endangered in their own homes. This is particularly tragic since it is very difficult for growing children to recover when the source of terror and pain is not enemy combatants but their own caretakers (Van Der Kolk, 2014, p.21).

Parents and other caregivers are not the only abusers of children. Studies show that violence between siblings is common and may be even more common than abuse by parents (Frazier & Hayes, 1994). An estimated 3 out of 100 children are dangerously violent toward a brother or sister (Strauss & Gelles). A 2005 study found the number of assaults sibling-to-sibling each year is 35 per 100 and the rate was similar in children across all income levels and racial and ethnic groups. Family members often don't view violent acts between siblings as abuse.

According to the CDC, 1 out of 4 girls and 1 out of 6 boys will experience some form of sexual abuse before the age of 18 (CDC, 2016). The perpetrator of childhood sexual abuse is usually someone the child knows.

A life-threatening illness such as childhood cancer can also lead to PTSD in both the child and the parent, according to research from the Children's Hospital of Philadelphia (NCTSN, 2017). Researchers have been studying pediatric cancer-related PTSD and PTSS (post traumatic stress symptoms) since the 1990s. Among their findings, an estimated 30% to 45% of parents and siblings, and 15% to 20 % of childhood cancer survivors experience PTSS years after treatment ended. Their studies suggest a range of risk factors for persistent PTSS, including pre-existing vulnerabilities, prior behavioral or emotional concerns, and personal opinions about the medical event.

Researchers at Children's Hospital Los Angeles (CHLA) found that between 25% and 35% of their young patients develop chronic medical PTSD. Those with chronic pain and retinoblastoma and those hospitalized in the pediatric intensive care unit (PICU) were at highest risk of developing PTSD.

Parents and other family members are also at risk:

A serious medical diagnosis is like throwing a rock into a pond—it has a ripple effect into every aspect of life. This is especially true in children, as they are still developing many of their coping and behavioral skills. If left untreated, PTSD can have long-term effects on sleep, cognitive development, peer and interpersonal relationships, schooling and education, and on how emotions are regulated (CHLA, 2015).

Traumatized children and teens may have different symptoms than adults, depending on the child's age. Very young children may regress in their behaviors and life skills. For example, they may:

- Wet the bed, even though they have been toilet trained
- Forget how or refuse to talk. The late author Maya Angelou, who was raped when she was 6 years old, was mute for 5 years, during which time she read every book she could find, and as an adult told her story in *I Know Why the Caged Bird Sings*.
- Act out the traumatic event during playtime
- Being unusually clingy with a parent or other caregiver (NIMH, 2016)

Older children and teens are likely to react to trauma much like adults. However, they may also develop disruptive, disrespectful, or destructive behaviors, and have thoughts of revenge. Older children and teens may blame themselves for failing to prevent injury or deaths, which also increases their risk of chronic mental health disorders or even suicide (Finkelhor, 2005).

## Test Your Learning

PTSD is what was once known as battle fatigue, and today we still identify it exclusively with Veterans.

- A. True
- B. False

## Apply Your Knowledge

How can you help your own healthcare colleagues to assess and recognize symptoms of PTSD in each other? What resources do your own facility have for maintaining good mental health for its employees?

# Diagnosing PTSD

Assessment and diagnosis always includes a comprehensive history and physical exam. In order to be diagnosed with PTSD, three different types of symptoms must be manifest: re-experiencing symptoms, avoidance and numbing symptoms, and arousal/stress-related symptoms. For diagnosis, each of these must disrupt normal activities and functions of living.

Initial screening questions can last from 15 minutes to 1 hour. If the screening questions are positive, then a formal structured interview should take place. Standardized questions are then asked by the interviewer and can come from either the CAPS questionnaire or the Structure Clinical Interview for DSM (SCID). Self-report questionnaires can also be helpful and used as screenings (Kilpatrick et al., 2013). Additional interviews and screening tools may be used to further diagnose and differentiate between PTSD and other mental health disorders such as generalized anxiety or depression (Friedman et al., 2011).

The Clinician Administered PTSD Scale for SDM-5 (CAPS-5) is the gold standard for assessing and diagnosing PTSD. Clinicians must be trained how to ask the questions to patients with possible PTSD. Professional courses are available through the U.S. Department of Veterans Affairs to train clinicians on how to orient a client to the CAPS interview and assess for trauma exposure. The course is free to VA Employees through their VHA TRAIN program and non VA employees who work in mental health as a clinician.

The CAPS-5 is a 30-item, semi-structured interview to assess PTSD symptoms and given a severity rating. Sample questions include:

- In the past month, have you had any unwanted memories of an event while you were awake?
- How does it happen that you start remembering the event?
- How much do these memories bother you?
- Are you able to put them out of your mind and think about something else?

## Test Your Learning

Which of the following can diagnose PTSD?

- A. The patient declares that he suffers from PTSD because of a trauma experienced.
- B. A trained clinician diagnoses the disorder after clinical interviews and screening tools are completed.
- C. A nurse diagnoses a patient as having PTSD based on clinical manifestations.
- D. Family members can complete online screening tools and determine if their loved one has PTSD.

## Apply Your Learning

If you noticed someone is exhibiting symptoms of PTSD where would you direct them for additional help?

They can complete online screening questions and if they are positive, they need to be referred to a professional mental health counselor or clinician for further evaluation. The trained clinician can then have them complete the CAPS-5 survey.

Answer: B

# Treatments and Therapies

Because of the improvement in recognizing and diagnosing PTSD, a more robust patient population has provided research that now identifies an evidence-based treatment guideline:

- Immediate response by sympathetic health professionals is effective.
- Trauma-focused cognitive behavioral therapy (TFCBT) has been beneficial within a few months after the trauma.
- Eye movement desensitization and reprocessing is effective to help the brain refocus.

In addition, eye movement reprocessing supports the hypothesis that appropriately qualified and trained healthcare professionals can become a solution to both acute and chronic PTSD (Shalev et al., 2017).

Although there are effective treatments for PTSD, not everyone who experiences a trauma seeks treatment. Women may be more likely than men to seek help after a traumatic event. At least one study found that women respond to treatment as well as or better than men. This may be because women are generally more comfortable sharing feelings and talking about personal issues with others than men (PTSD, 2015).

The preeminent treatments for people with PTSD are medication, psychotherapy (“talk therapy”), or both. Because everyone responds to trauma and stress uniquely, 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 provider who is experienced with PTSD. People with PTSD may need to try a variety of treatments to find what works best for them.

## Medications

The most studied medications for treating PTSD are antidepressants, which may help control PTSD symptoms such as sadness, worry, anger, and feeling numb inside. Antidepressants and other medications may be prescribed along with psychotherapy. Other medications may be helpful for specific PTSD symptoms.

The current guidelines for psychopharmacology are strongest for use of the selective serotonin reuptake inhibitors (SSRIs), and currently only sertraline (**Zoloft**) and paroxetine (**Paxil**) are approved by the Food and Drug Administration (FDA) for PTSD (Hoskins et al., 2015).

Although it is not currently FDA-approved, research has shown that **Prazosin**, an alpha blocker often used to treat hypertension, may be helpful with sleep problems, particularly nightmares commonly experienced by people with PTSD.

Medications used for PTSD are those that act upon neurotransmitters related to fear, stress, and anxiety such as **serotonin, norepinephrine, gamma-aminobutyric acid (GABA), excitatory amino acids, and dopamine**. Patients must be monitored for comorbidities, depression, and suicidal ideation among the more common side effects. Much research is being done to examine the pharmacokinetics and pharmacodynamics for mood stabilizers, for PTSD and even bipolar disorders.

Doctors and patients can work together to find the best medication or combination, as well as the right dose. Check the FDA website (<http://www.fda.gov/>) for the latest information on patient medication guides, warnings, and newly approved medications.

## Psychotherapy

Psychotherapy (sometimes called “talk therapy”) 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 it can last longer. Research shows that support from family and friends can be an important part of recovery.

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.

## Cognitive Behavior Therapy (CBT)

Effective psychotherapies tend to emphasize a few key components, including education about symptoms, teaching skills to help identify the triggers of symptoms and skills to manage the symptoms. One helpful form of therapy is called cognitive behavioral therapy, or CBT. CBT can include:

- **Prolonged Exposure therapy (PE).** This helps people face and control their fear. It gradually exposes them to the trauma they experienced in a safe way. It uses imagining, writing, or visiting the place where the event happened. The therapist uses these tools to help people with PTSD cope with their feelings.
- **Cognitive Processing Therapy (CPT).** This 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 something that is not their fault. The therapist helps people with PTSD look at what happened in a realistic way.

Studies have provided positive results in both of these types of cognitive therapy, with equal to or greater results than medications alone. There are other types of treatment that can help as well. People with PTSD should talk about all treatment options with a therapist. Treatment should equip individuals with the skills to manage their symptoms and help them participate in activities that they enjoyed before developing PTSD.

### Video (2:41)

## Cognitive Processing Therapy for PTSD



Cognitive Processing Therapy for PTSD. <https://www.youtube.com/watch?v=Jqj5zDbkPxY>

## Talk Therapies

Talk therapies teach people helpful ways to react to the 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 face reminders of the trauma.

## Eye Movement (EMDR)

**Eye movement, desensitization and reprocessing (EMDR)** has shown to help mindfulness, meditation, and yoga are also effective modalities to control and decrease stress for people with PTSD, anxiety, depression, and stress disorders. EMDR is a form of psychotherapy that teaches patients with PTSD to control their eye movements while re-imagining the traumatic event. The client then learns to control their body and eye movements as the memory is reframed and controlled.

\* \* \*

Many other therapies have been shown to be useful. Prominent among them are mindfulness and yoga.



## Test Your Learning

Which statement best summarizes the treatment for PTSD?

- A. Unfortunately, there is no treatment and the patient will suffer from PTSD for the rest of their life.
- B. The best results are from medication for PTSD.
- C. The best medication class is the SSRIs.
- D. The best treatment for PTSD needs to be a customized combination of pharmacotherapy and psychotherapy to help the patient regain control.

Answer: D

# Resources and References

## Resources

## **Health Care Toolbox: Health Care Providers' Responses to Medical Traumatic Stress in their Patients**

<https://healthcaretoolbox.org/self-care-for-providers.html>

# **National Child Traumatic Stress Network**

[www.NCTSN.org](http://www.NCTSN.org)

## National Center for PTSD

<http://www.ptsd.va.gov/>

## Books

Rosenthal M. (2012). *Before the World Intruded: Conquering the Past and Creating the Future, A Memoir*. Published by Your Life After Trauma, LLC.

Van Der Kolk, BA.(2014). *The Body Keeps the Score: Brain, Mind, and Body in the Healing of Trauma*. New York: Penguin Books.

## References

American Psychiatric Association (APA). (2015). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC.

Bremner JD. (2007). Neuroimaging in post traumatic stress disorder and other stress-related disorders. doi: 10.1016/j.nic.2007.07.003.

Centers for Disease Control and Prevention (CDC). (2016). *Adverse Childhood Experiences Study: Data and Statistics*. Atlanta: CDC, National Center for Injury Prevention and Control. Retrieved, July 11, 2017 from <https://www.cdc.gov/violenceprevention/acestudy/index.html>.

Children's Hospital, Los Angeles (CHLA). (2015). PTSD Can Affect Sick Kids? Your Medical PTSD Questions Answered. Retrieved July 11, 2017 from <http://www.newswise.com/articles/ptsd-can-affect-sick-kids-your-medical-ptsd-questions-answered>.

Children's Hospital of Philadelphia (CHOP). (2017). Retrieved July 11, 2017  
<http://www.chop.edu/centers-programs/cancer-center/posttraumatic-stress-pediatric-cancer>.

*Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5)*. Retrieved July 10, 2017 from <http://dsm.psychiatryonline.org/doi/abs/10.1176/appi.books.9780890425596.dsm07>.

Eswaran V. (2014). PTSD in Emergency Workers. *Emergency Public Health*. Retrieved July 10, 2017 from <https://emergencypublichealth.net/2014/07/14/ptsd/>.

Friedman M, Resick P, Bryant R, Brewin CR. (2011). Considering PTSD for DSM-5. *Depression & Anxiety*, 28, 750-769. doi:10.1002/da.20767.

Finkelhor D, et al. (2005). The victimization of children and youth: A comprehensive national survey. *Child Maltreatment* Feb:10(1):5-25.

Frazier BH, Hayes KC. (1994). Selected resources on sibling abuse: An annotated bibliography for researchers, educators and consumers. SRB 94-08 Special Reference Briefs. Retrieved July 11, 2017 from <http://www.med.umich.edu/yourchild/topics/sibabusec.htm>.

Gates D, Gillespie G, Succop P. (2011). Violence against nurses and its impact on stress and productivity. *Nursing Economics* 29(2):59–66.

Gradus JL. (2017). Epidemiology of PTSD. Retrieved July 20, 2017 from <https://www.ptsd.va.gov/professional/PTSD-overview/epidemiological-facts-ptsd.asp>.

Hoskins M, Pearce J, Dankova A, et al. (2015). Pharmacotherapy for post traumatic stress disorder: Systematic review and meta-analysis. *British Journal of Psychiatry: The Journal of Mental Science*, 206(2),93-100. Doi: 10.1192/bjpp.114.148551.

Hudenko W, Homaifar BB, Wortzel H. (2017). The Relationship Between PTSD and Suicide. Retrieved July 10, 2017 from <https://ptsd.va.gov/professional/co-occurring/ptsd/suicide.asp>.

Kang HK, Natelson BH, Mahan CM, et al. (2003). Post traumatic stress disorder and chronic fatigue syndrome-like illness among Gulf War Veterans: A population-based survey of 30,000 Veterans. *American Journal of Epidemiology* 157(2):141–48.

Kilpatrick DG, Resnick HS, Milanak ME, et al. (2013). National estimates of exposure to traumatic events and PTSD prevalence using DSM-IV and DSM-5 criteria. *Journal of Traumatic Stress*, 26, 537–47. doi:10.1002/jts.21848.

Kulka R, Schlenger W, Fairbanks J, et al. (1990). *Trauma and the Vietnam Veterans Readjustment Study*. New York: Brunner/Mazel.

Laposa J, Alden L. (2003). Work Stress and Post Traumatic Stress Disorder in ED Nurses/Personnel. *Journal of Emergency Nursing*. 29:23-8. Retrieved July 10, 2017 from <http://www.amsspoedsym.nl/2009/Work%20Stress%20and%20Posttraumatic%20Stress%20Disorder%20in%20ED-Nurses%20%20.pdf>.

Mayo Clinic. (2016). Post traumatic stress disorder: Symptoms and causes. Retrieved July 10, 2017 from <http://www.mayoclinic.org/diseases-conditions/post-traumatic-stress-disorder/symptoms-causes/dxc-20308550>.

Mealer M, Shelton A, Berg B, et al. (2007). Increased prevalence of post traumatic stress disorder symptoms in critical care nurses. *American Journal of Respiratory Critical Care Medicine*. April 1;175(7);693-697. Retrieved July 10, 2017 from <https://www.ncbi.nlm.nih.gov/pubmed/17185650>.

National Center for PTSD. (2015). Retrieved July 10, 2017 from <http://www.ptsd.va.gov/>.

National Child Traumatic Stress Network (NCTSN). (2017). Child Abuse Fact Sheet. Retrieved July 14, 2017 from [http://nctsn.org/nctsn\\_assets/pdfs/caring/ChildSexualAbuseFactSheet.pdf](http://nctsn.org/nctsn_assets/pdfs/caring/ChildSexualAbuseFactSheet.pdf).

National Institute of Mental Health (NIMH). (2016). Post Traumatic Stress Disorder. Retrieved July 10, 2017 from <https://www.nimh.nih.gov/health/topics/post-traumatic-stress-disorder-ptsd/index.shtml>.

O'Brien T. (1998). *The Things They Carried*. Originally published by Broadway Books. Retrieved July 14, 2017 from [https://www.amazon.com/Things-They-Carried-O'Brien-2010-03-22/dp/B01MRIH78U/ref=sr\\_1\\_7?ie=UTF8&qid=1500062766&sr=8-7&keywords=things+they+carried+by+tim+o%27brien](https://www.amazon.com/Things-They-Carried-O'Brien-2010-03-22/dp/B01MRIH78U/ref=sr_1_7?ie=UTF8&qid=1500062766&sr=8-7&keywords=things+they+carried+by+tim+o%27brien).

National Center for PTSD (PTSD). (2015). Retrieved July 10, 2017 from <https://www.ptsd.va.gov/>.

RAND Corporation. (2008). *Invisible Wounds: Mental Health and Cognitive Care Needs of America's Returning Veterans*. Retrieved July 14, 2017 from [http://www.rand.org/content/dam/rand/pubs/research\\_briefs/2008/RAND\\_RB9336.pdf](http://www.rand.org/content/dam/rand/pubs/research_briefs/2008/RAND_RB9336.pdf).

Rosenthal M. (2012). *Before the World Intruded: Conquering the Past and Creating the Future*, A Memoir. Published by Your Life After Trauma, LLC.

Shalev A, Liberzon I, Marmar C. (2017). Post Traumatic Stress Disorder. *NEJM* 22;376(25):2459–69. Doi: 10.1056/NEJRMra1612499. Retrieved July 10, 2017 from <https://www.ncbi.nlm.nih.gov/pubmed/28636846>.

Strauss MA, Gelles RJ, Eds. (1990). *Physical Violence in American Families: Risk Factors and Adaptations to Violence in 8,145 Families*. New Brunswick, NY: Transaction Publishers.

Tanielian T, Jaycox L, Eds. (2008). *Invisible Wounds of War: Psychological and Cognitive Injuries, Their Consequences and Services to Assist Recovery*. Santa Monica CA: RAND Corporation.

Taylor C, Bell J, Breiding M, Xu L. (2017). Traumatic Brain Injury–Related Emergency Department Visits, Hospitalizations, and Deaths — United States, 2007 and 2013. *MMWR Surveillance Summary* 2017;66(No. SS-9):1–16. DOI: <http://dx.doi.org/10.15585/mmwr.ss6609a1>.

U.S. Department of Veterans Affairs (US DVA), National Center for PTSD. (2016). *Epidemiology of PTSD*. Retrieved July 10, 2017 from <https://www.ptsd.va.gov/professional/PTSD-overview/epidemiological-facts-ptsd.asp>.

U.S. Department of Veterans Affairs (US DVA), National Center for PTSD. (2015). *Issues with Women*. Retrieved July 20, 2017 from <http://www.ptsd.va.gov/public/PTSD-overview/women/women-trauma-and-ptsd.asp>.

Van Der Kolk BA. (2014). *The Body Keeps the Score: Brain, Mind, and Body in the Healing of Trauma*. New York: Penguin Books.

Wolfinger LQ. (2016). "Soldier's Heart": Exploring PTSD During the Civil War. Blog post. Retrieved July 10, 2017 from <http://www.pbs.org/mercy-street/blogs/mercy-street-revealed/soldiers-heart-exploring-ptsd-during-the-civil-war/>.

Wong G. (2017). PTSD in black women needs attention, study of South Side group says. *Chicago Tribune*, March 23, 2017. Retrieved July 11, 2017 from <http://www.chicagotribune.com/news/local/breaking/ct-ptsd-black-women-met-20170322-story.html>.

World Health Organization (WHO). (2013). Gender and women's mental health: Gender disparities and mental health: The Facts. Retrieved July 10, 2017 from [http://www.who.int/mental\\_health/prevention/genderwomen/](http://www.who.int/mental_health/prevention/genderwomen/).

Yu A. (2016). Nurses say stress interferes with caring for their patients. National Public Radio Health News. April 2016. Retrieved July 10, 2017 from <http://www.npr.org/sections/health-shots/2016/04/15/474200707/nurses-say-stress-interferes-with-caring-for-their-patients>.

# Post Test

Use the answer sheet following the test to record your answers.

1. PTSD is a relatively new name for a mental health disorder that has been around for centuries and has been associated with military service. Which one of the following is NOT an earlier designation for PTSD:
  - a. Battle fatigue.
  - b. Soldiers' complaint.
  - c. Shell Shock.
  - d. Soldiers' heart.
2. PTSD can only be diagnosed if symptoms persist for over:
  - a. One week.
  - b. One month.
  - c. Six weeks.
  - d. Three months.
3. Which of the following patients could be diagnosed with PTSD:
  - a. A military Veteran who meets with his colleagues to relive his military days.
  - b. A college woman who can't focus on school work after being the victim of a date rape 6 weeks ago.
  - c. A young man who attends counseling after being the only survivor of a motor vehicle accident with his friends.
  - d. A teenager who has hyperactivity disorder for 2 years and can't sit still during class.
4. The current source on PTSD that provides the most complete and useful information for healthcare providers is:
  - a. The DSM-5.
  - b. The PDR.
  - c. PubMed.
  - d. USDA.
5. Which of the following is NOT a clinical presentation of PTSD:



- a. Difficulty sleeping and eating.
- b. Frequent infections and fatigue.
- c. Nightmares and flashbacks.
- d. Negative or flat affect and depression.

6. Of the half of all Veterans with PTSD who seek treatment, nearly 20% had experienced a TBI:

- a. True
- b. False

7. Over the past 75 years, studies in search of PTSD have been conducted among all American Veterans and with that knowledge PTSD is being treated effectively in all those populations:

- a. True
- b. False

8. PTSD is what was once known as battle fatigue, and today we still identify it exclusively with Veterans:

- a. True
- b. False

9. Which of the following can diagnose PTSD:

- a. The patient declares that he suffers from PTSD because of a trauma experienced.
- b. A trained clinician diagnoses the disorder after clinical interviews and screening tools are completed.
- c. A nurse diagnoses a patient as having PTSD based on clinical manifestations.
- d. Family members can complete online screening tools and determine if their loved one has PTSD.

10. Which statement best summarizes the treatment for PTSD:

- a. Unfortunately, there is no treatment and the patient will suffer from PTSD for the rest of their life.
- b. The best results are from medication for PTSD.
- c. The best medication class is the SSRIs.

d. The best treatment for PTSD needs to be a customized combination of pharmacotherapy and psychotherapy to help the patient regain control.

# Answer Sheet

## Post Traumatic Stress Disorder (PTSD)

Name (Please print your name): \_\_\_\_\_

Date: \_\_\_\_\_

Passing score is 80%

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_

# Course Evaluation

Please use this scale for your course evaluation. Items with asterisks \* are required.

- 5 = Strongly agree
- 4 = Agree
- 3 = Neutral
- 2 = Disagree
- 1 = Strongly disagree

\* Upon completion of the course, I was able to:

a. Define *post traumatic stress disorder* and discuss its implications for the family and community.

5  4  3  2  1

b. List 4 categories of PTSD symptoms and their diagnostic criteria.

5  4  3  2  1

c. Identify 5 populations at risk for PTSD.

5  4  3  2  1

d. Explain the CAPS-5 criteria for assessment and diagnosis of PTSD.

5  4  3  2  1

e. Compare and contrast 4 treatment modalities for PTSD.

5  4  3  2  1

f. List at least 4 resources where families and healthcare professionals can learn more about PTSD.

5  4  3  2  1

\* The author(s) are knowledgeable about the subject matter.

5  4  3  2  1

\* The author(s) cited evidence that supported the material presented.

5  4  3  2  1

\* This course contained no discriminatory or prejudicial language.

Yes  No

\* The course was free of commercial bias and product promotion.

Yes  No

\* As a result of what you have learned, do you intend to make any changes in your practice?

Yes  No

If you answered Yes above, what changes do you intend to make? If you answered No, please explain why.

\* Do you intend to return to ATrain for your ongoing CE needs?

- Yes, within the next 30 days.
- Yes, during my next renewal cycle.
- Maybe, not sure.
- No, I only needed this one course.

\* Would you recommend ATrain Education to a friend, co-worker, or colleague?

- Yes, definitely.
- Possibly.
- No, not at this time.

\* What is your overall satisfaction with this learning activity?

5  4  3  2  1

\* Navigating the ATrain Education website was:

- Easy.

- Somewhat easy.
- Not at all easy.

\* How long did it take you to complete this course, posttest, and course evaluation?

- 60 minutes (or more) per contact hour
- 50-59 minutes per contact hour
- 40-49 minutes per contact hour
- 30-39 minutes per contact hour
- Less than 30 minutes per contact hour

I heard about ATrain Education from:

- Government or Department of Health website.
- State board or professional association.
- Searching the Internet.
- A friend.
- An advertisement.
- I am a returning customer.
- My employer.
- Other
- Social Media (FB, Twitter, LinkedIn, etc)

Please let us know your age group to help us meet your professional needs.

- 18 to 30
- 31 to 45
- 46+

I completed this course on:

- My own or a friend's computer.
- A computer at work.
- A library computer.
- A tablet.
- A cellphone.
- A paper copy of the course.

Please enter your comments or suggestions here: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

# Registration Form

Please print and answer all of the following questions (\* required).

\* Name: \_\_\_\_\_

\* Email: \_\_\_\_\_

\* Address: \_\_\_\_\_

\* City: \_\_\_\_\_ \* State: \_\_\_\_\_ \* Zip: \_\_\_\_\_

\* Country: \_\_\_\_\_

\* Phone: \_\_\_\_\_

\* Professional Credentials/Designations:

\_\_\_\_\_

Your name and credentials/designations will appear on your certificate.

\* License Number and State: \_\_\_\_\_

\* Please email my certificate:

Yes  No

(If you request an email certificate we will not send a copy of the certificate by US Mail.)

## Payment Options

You may pay by credit card or by check.

Fill out this section only if you are **paying by credit card**.

2 contact hours: \$19

## Credit card information

\* Name: \_\_\_\_\_

Address (if different from above): \_\_\_\_\_

\* City: \_\_\_\_\_ \* State: \_\_\_\_\_ \* Zip: \_\_\_\_\_

\* Card type:

Visa  Master Card  American Express  Discover

\* Card number: \_\_\_\_\_



\* CVS#: \_\_\_\_\_

\* Expiration date: \_\_\_\_\_