

Post-Traumatic Stress Disorder (PTSD) After Burn Injury

May 2023

<https://msktc.org/burn/factsheets>

BURN Factsheet

This factsheet explains post-traumatic stress disorder (PTSD) after burn injury and common symptoms that may occur.

What Is PTSD?

Mental and physical reactions are common after a traumatic event, like a burn injury. Reactions that occur soon after a traumatic event are called acute stress symptoms. Symptoms of acute or post-traumatic stress are common responses to a burn injury. Think of it as a way for the brain to let the body know it needs to stay safe—these symptoms can actually protect us. Symptoms can develop after experiencing or witnessing a traumatic event (e.g., as a bystander or first responder) or by learning of a bad injury involving a loved one. If symptoms of post-traumatic stress do not go away, they can cause more problems and become Post-Traumatic Stress Disorder (PTSD). PTSD can affect adults and children.



What Are the Symptoms of PTSD?

- Nightmares related to trauma that disrupt sleep or cause restless sleep. Children may not remember the content of the nightmares but remember that the nightmares were frightening.
- Feeling like you're in a daze or detached, or that the burn is not real.
- Intrusive thoughts of the burn injury or feeling as though it's happening again (flashbacks).
- Children may engage in repetitive play in which they "act out" the traumatic event.
- Avoiding reminders of the injury, such as talking about it, watching similar events on TV, or not wanting to return to the place where the trauma occurred.
- Being very easily startled or feeling constantly on guard. New fears may develop, such as fear of the dark, crowds, or elevators. Some people will develop anxiety or a feeling of being on edge or not being safe.
- Negative changes in mood or cognition, such as being irritable or not being able to concentrate.

The Burn Model System Program is sponsored by the National Institute on Disability, Independent Living, and Rehabilitation Research, Administration for Community Living, U.S. Department of Health and Human Services. (See <https://msktc.org/burn/model-system-centers> for more information).

Who Gets PTSD?

About 90% of both adults and children with burn injuries report at least one symptom of acute stress right after the traumatic event but only about 30% of people with these symptoms develop PTSD. PTSD is more likely to occur if the burn injury is an assault or a repeated trauma (such as ongoing abuse).



Burn survivors most at risk for PTSD are those with a history of anxiety disorders (generalized anxiety, panic disorder) or depression. Burn survivors who have a history of traumatic events and past PTSD are also at risk for developing PTSD from the current burn injury. In fact, a current burn injury can trigger nightmares and flashbacks from a past traumatic event. Burn survivors with high levels of pain and anxiety while in the hospital may be more at risk of developing PTSD after discharge. Caregivers and the burn team should effectively manage pain and anxiety from a burn wound to avoid future distress. Children are more at risk of developing PTSD if their parents are experiencing such symptoms.



It is also important to know that some burn survivors may have symptoms of PTSD after the traumatic event, experience a lot of emotional struggles, and then find a new appreciation of life and strength that is even better than before the injury. This is called post-traumatic growth (PTG). People are more likely to have PTG when they use humor, gratefulness, determination, and support from other people.

What Should I Do if I Have Symptoms of PTSD?

For most people, symptoms of post-traumatic stress usually go away over time. After a burn injury, positive social support can be very important. Connecting with friends or family who can provide positive support (no criticism or trivializing your experience) has been shown to be helpful. You may find it useful to get information and details about the trauma. Only talk about the details when you feel ready to do so. Retelling the details of the trauma can actually be re-traumatizing and you can tell friends and strangers who ask that you do not wish to talk about it. However, talking about your emotions is important. Let caregivers and the burn team know if you're worried about how you're coping with the burn injury.

Most early traumatic stress reactions get better over time as you return to a normal routine and start to develop ways to cope. For some people, early reactions may get worse. After the burn injury heals, the emotional trauma may not go away. The intensity and length of PTSD symptoms are not related to the severity of the injury. Seek treatment if symptoms of PTSD last for weeks or months and/or start to interfere with your quality of life.

Very good treatments are available for PTSD and it can go away. The most effective treatments involve a type of counseling called cognitive behavioral therapy (this may also be called Trauma-Focused Cognitive Behavioral Therapy). This is a short-term treatment in which you learn ways to relax and manage anxiety, to gradually be exposed to aspects of the traumatic event, and to think differently about the event and how it affected you. Your doctor may prescribe medicine for a short time to help with anxiety, depression, or sleep problems. While awaiting treatment, you can do several things to treat each symptom:

- **Nightmares.** Wake up and remind yourself of where you are. Re assure yourself that you are safe and go right back to sleep. Try not to get up, turn on the TV, or get something to eat—these will keep you awake longer. Try changing the end of your nightmare by imagining a better outcome.
- **Flashbacks.** Try to stop flashbacks right away by imagining a stop sign or a red light and thinking about something more pleasant. It is important to realize that you have control over what you think about.
- **Anxiety and arousal.** Practice a relaxation technique to reduce your anxiety. Deep or rhythmic breathing, mindfulness meditation, muscle relaxation, yoga, and exercise can all be helpful.



- **Avoidance.** If reminders of the trauma are interfering with your normal routine—such as not wanting to return to work if that is where the accident occurred, or not wanting to go outside near the gas grill—then consider a *fear hierarchy*. A fear hierarchy is a list of steps that slowly expose you to the normal things. For example, consider going back to the workplace for a very short period of time for a casual visit, such as having lunch with a coworker. Then, gradually increase the time you spend in the workplace until you can be near the accident site for an entire shift. Practice relaxation techniques as you work through the fear hierarchy. You may need professional assistance to help with this.

Always talk to the burn team about PTSD symptoms that you may be having. They can help you to find a mental health provider for treatment.

Additional Resources

- National Child Traumatic Stress Network: <http://www.nctsn.org>
- National Institute of Mental Health: <http://www.nimh.nih.gov/health/topics/post-traumatic-stress-disorder-ptsd/index.shtml>

References

Hobbs, K. (2015). Which factors influence the development of post-traumatic stress disorder in patients with burn injuries? A systematic review of the literature. *Burns*, 41(3), 421–430.

Hokes, K. E., & Adams, L. M. (2022). The longitudinal development of posttraumatic growth among U.S. adult burn injury survivors. *Rehabilitation Psychology*, 67(3), 369–380.

Giannoni-Pastor, A., Eiroa-Orosa, F. J., Fidel Kinori, S. G., Arguello, J. M., & Casas, M. (2016). Prevalence and predictors of posttraumatic stress symptomatology among burn survivors: A systematic review and meta-analysis. *Journal of Burn Care & Research*, 37(1), e79–e89.

Martin, L., Rea, S., & Wood, F. (2021). A quantitative analysis of the relationship between posttraumatic growth, depression and coping styles after burn. *Burns*, 47(8), 1748–1755.

Van Loey, N., & Van Son, M. J. M. (2003). Psychopathology and psychological problems in patients with burn scars. *American Journal of Clinical Dermatology*, 4(4), 245–272.



Authorship

Post-Traumatic Stress Disorder (PTSD) After Burn Injury was developed by Shelley A. Wiechman, Ph.D., ABPP in collaboration with the Model Systems Knowledge Translation Center (MSKTC). Revision by Kimberly Roaten, Ph.D., Shelley A. Wiechman, Ph.D., ABPP and Caitlin Orton, MPH, in collaboration with the MSKTC.

Source: Our health information content is based on research evidence and/or professional consensus and has been reviewed and approved by an editorial team of experts from the Burn Injury Model Systems.

Disclaimer: This information is not meant to replace the advice of a medical professional. You should consult your health care provider regarding specific medical concerns or treatment. The contents of this factsheet were developed under a grant (number 90DP0082) from the National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR) and were updated under a NIDILRR grant (90DPKT0009). NIDILRR is a Center within the Administration for Community Living (ACL), Department of Health and Human Services (HHS). The contents of this factsheet do not necessarily represent the policy of NIDILRR, ACL, or HHS and you should not assume endorsement by the federal government.

Recommended Citation: Wiechman, S. A., & Orton, C. (2023). *Post-Traumatic Stress Disorder (PTSD) After Burn Injury*. Model Systems Knowledge Translation Center (MSKTC).
<https://msktc.org/burn/factsheets/post-traumatic-stress-disorder-ptsd>.

Copyright © 2023 Model Systems Knowledge Translation Center (MSKTC). May be reproduced and distributed freely with appropriate attribution. Prior permission must be obtained for inclusion in fee-based materials.

