

Traumatic Brain Injury and PTSD

National Center for PTSD

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Traumatic brain injury (TBI) occurs from a sudden blow or jolt to the head. Brain injury often occurs during some type of trauma, such as an accident, blast, or a fall. Often when people refer to TBI, they are mistakenly talking about the symptoms that occur following a TBI. Actually, a TBI is the injury, not the symptoms.

How serious is my injury?

A TBI is basically the same thing as a concussion. A TBI can be mild, moderate, or severe. These terms tell you the nature of the injury itself. They do not tell you what symptoms you may have or how severe the symptoms will be.

A TBI can occur even when there is no direct contact to the head. For example, when a person suffers whiplash, the brain may be shaken within the skull. This damage can cause bleeding between the brain and skull. Bruises can form where the brain hits the skull. Like bruises on other parts of the body, for mild injuries these will heal with time.

About 80% of all TBI's in civilians are mild (mTBI). Most people who have a mTBI will be back to normal by 3 months without any special treatment. Even patients with moderate or severe TBI can make remarkable recoveries.

The length of time that a person is unconscious (knocked out) is one way to measure how severe the injury was. If you weren't knocked out at all or if you were out for less than 30 minutes, your TBI was most likely minor or mild. If you were knocked out for more than 30 minutes but less than 6 hours, your TBI was most likely moderate.

What are the common symptoms following a TBI?

Symptoms that result from TBI are known as post-concussion syndrome (PCS). Few people will have all of the symptoms, but even one or two of the symptoms can be unpleasant. PCS makes it hard to work, get along at home, or relax. In the days, weeks, and months following a TBI the most common symptoms are:

Physical

- headache
- feeling dizzy
- being tired
- trouble sleeping
- vision problems
- feeling bothered by noise and light

Cognitive (Mental)

- memory problems
- trouble staying focused
- poor judgment and acting without thinking
- being slowed down
- trouble putting thoughts into words

Emotional (Feelings)

- depression
- anger outbursts and quick to anger
- anxiety (fear, worry, or feeling nervous)
- personality changes

These symptoms are part of the normal process of getting better. They are not signs of lasting brain damage. These symptoms are to be expected and are not a cause for concern or worry. More serious symptoms include severe forms of those listed above, decreased response to standard treatments, and seizures.

Do I have the symptoms that follow a TBI or PTSD - or both?

You may notice that many of the symptoms that follow a TBI overlap with the [common reactions to trauma](#). Because TBI is caused by trauma and there is symptom overlap, it can be hard to tell what the underlying problem is. In addition, many people who get a TBI also develop PTSD.

It is important to be assessed because:

- people with TBI should not use some medications
- no matter how mild or severe the injury itself was, the effects could be serious

Although TBI screens are used, a screen is not used to diagnose TBI. Even if your TBI screen is positive, that does not mean that you have a TBI. It means that you should be assessed further.

Diagnosing a TBI is hard because there may not be any physical signs of injury. Details of the trauma may be hard to pin down. Sometimes right after the injury the effects are so brief that they are not noticed. You may go to the doctor some time later when details of the injury are not as clear. TBI can occur in confused times of crisis, such as combat. In the heat of events the injury may be ignored. Many of the symptoms that can result from a TBI are the same as the symptoms of PTSD. For these reasons, the best way to diagnose a TBI is an interview by a skilled clinician.

Are there effective treatments?

Many people recover from TBI without any formal treatment. Problems that linger may clear up in a few weeks. You may notice some problems more as you return to your normal routine. For example, you may not realize that you get tired more quickly until you return to your regular chores, work, or school. Even so, people usually get better after a head injury, not worse. Professional treatment for the symptoms that follow TBI usually involves rehabilitation to improve functioning.

To treat TBI and PTSD, the good news is that effective treatments for PTSD also work well for those who have suffered mTBI. This includes two forms of therapy: Cognitive Processing Therapy (CPT) and Prolonged Exposure (PE). Learn more about [Types of Treatment](#) for PTSD.

What can I do to cope?

The best way to deal with symptoms following TBI is to go back slowly to your normal routine, a little at a time. How much time you spend at work, with family, with others, or exercising depends on what feels comfortable. Pace yourself, and be sure to get all the rest you need. Avoiding alcohol and not taking any unnecessary medications is a good idea, to help allow the brain to heal.

If your symptoms get worse, or if you notice new PCS symptoms, this is a sign that you are pushing yourself too hard. Ignoring your symptoms and trying to "tough it out" often make the symptoms worse. Symptoms are your body's way of giving you information. A broken bone or a torn muscle hurts so that you won't use it and it has time to heal. PCS symptoms are your brain's way of telling you that you need to rest it.

Research suggests that 1 week of relaxing at home and then a week of slowly doing more after leaving the hospital is best for most patients. Most patients who took this advice were back to normal at work or school in 3-4 weeks. Most patients who weren't told what to do took 5-12 weeks to get back to their normal routine. They also had more PCS symptoms than patients who returned slowly to their routines.

Accept and deal with the stress of the injury

Be aware that having a head injury adds more stress to your life, not just bumps and bruises to your head. The trauma itself, being in the hospital, and going back to work or school and normal routines are all things that add stress to most patients' lives. You may have some trouble with work or school at first, and even though it is normal, this may be stressful and frustrating.

Another main cause of stress after a TBI is worry about the symptoms you have. Thinking and worrying about your symptoms can make them seem worse. Doctors who treat TBI agree that the single most important factor in recovery is that you know what to expect and what to do about the symptoms. You should remember that the symptoms are a normal part of getting better. They will likely go away on their own.

Involve Family

Any level of TBI can disrupt families. Roles and responsibilities change when a family member is hurt. From the start, families need to be involved and informed about TBI. By supporting the family, patient outcomes can be improved and burnout prevented.

Return to school or work slowly

Returning to school or work is often the biggest challenge after TBI. This is because PCS symptoms can get in the way of meeting your work and school demands. For example, trouble focusing and memory problems may make it harder to learn new things in school. Or fatigue may limit your being able to handle work demands. Keep in mind when trying to return to work or school that the process will be slow. Don't expect yourself to perform right away as you did before your TBI. Instead, you should slowly resume responsibilities as you are able. Slowly increase your workload and hours. Only increase them when you feel fully ready.

TBI and Veterans

The conflicts in Afghanistan and Iraq (OEF/OIF) have resulted in increased numbers of Veterans who have TBI. The main causes of TBI in OEF/OIF Veterans are blasts, motor vehicle accidents, and gunshot wounds. The Department of Defense and the Defense and Veteran's Brain Injury Center estimate that 22% of all OEF/OIF combat wounds are brain injuries. This is compared to TBI in 12% of combat wounds that occurred in Vietnam.

Veterans seem to have symptoms for longer than civilians. Some studies show most will still have symptoms 18-24 months after the TBI. Also, many Veterans have more than one medical problem, including: PTSD, chronic pain, or substance abuse. From 60-80% of service members who are hurt in other ways by a blast may have a TBI. These other problems make it harder to get better from any single problem. Veterans should remember, though, that their TBI symptoms are likely to last only a limited time. With proper treatment and healthy behaviors, they are likely to improve.

VA is working to make sure that TBI care is easy to access. VA is using a TBI screening tool to begin the assessment process. VA has put in place the Polytrauma System of Care to treat Veterans with TBI who also have other injuries. Veterans with the most severe wounds are being treated at one of the 4 Polytrauma Rehabilitation Centers or one of the 21 Polytrauma Network Sites. Patients with less severe wounds may get treatment at local VA Medical Centers. No matter where a Veteran goes first, there is no "wrong door" for treatment.