

Recovering from Concussion

A Guide for Patients and Families





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Getting Answers to Commonly Asked Questions

This book provides a few answers to questions commonly asked by people after a concussion. It describes some of the common symptoms people have and offers tips for coping.

It helps to know what to expect

Many people worry about symptoms after a concussion, also known as a mild brain injury. Studies have shown that patients who learn about what to expect often have better and faster recovery than those who do not get education after a concussion. We hope that you find this information helpful.

Taking it slow

People sometimes find it hard to do things at first — their daily activities, their job, to get along with everyone, or relax. The best way to deal with this is to go back to your normal activities and responsibilities a little at a time. The time you spend at work, getting together socially, with your family, or exercising should be done according to how you feel. Pace yourself and slowly return to activities. It is easier to start slow and add more activities, than to rush and have to stop all of a sudden.

Talking to your doctor or health care team about your symptoms is important. Your doctor can prescribe treatment or medicine that can help.

As you read this book, keep in mind that everyone recovers differently. But everyone does improve and most people recover fully in time.

This book was adapted with permission from Recovering from Mild Traumatic Brain Injury/ Concussion: A Guide for Patients and Their Families. Michigan TBI Services and Prevention Council, April 2008.



What Is Concussion?

"I don't understand what has happened to me."

A blow to the head can occur in many ways, such as a motor vehicle or bike crash, sports injury, or fall.

In most cases, there are no lasting effects from a concussion, also known as a mild injury to the brain. This is because the brain is surrounded by liquid to absorb the shock and is covered by the skull. Usually these are enough to protect the brain from any damage.



Bruising

Sometimes the force of impact is more severe. This can cause the skull to break or fracture. When the skull fractures, it absorbs some of the force of the blow and protects the brain. This is the same way that a crash helmet works. When the head is hit, the brain may be shaken around inside the skull. This can sometimes cause the brain to get bruised if it hits the inside of the skull hard enough.

Blood vessel injury

Like any other part of the body, the brain has blood vessels in it. If a head injury is very serious, some of these blood vessels can tear and bleed. This happens soon after the injury. The bleeding often stops on its own and the blood vessels heal like any cut does.

If there is bleeding deep inside the brain, this is a sign of an injury that is more severe than a concussion. Bruising, swelling, snapped nerves, and broken blood vessels are the causes of symptoms after a brain injury.

Your health care team will check you for signs of injury to your brain and plan any needed treatment.

Recovery time

Most people who suffer a concussion recover completely in about 4 weeks because the physical damage to the brain tissue is relatively minor.

Most doctors who treat people with brain injuries agree that recovery is faster after a concussion if you get 2 to 3 days of rest, slowly returning to normal activities as you are able.

Work with your health care team about what pace is best for you.



Common causes of symptoms

- **Bruises** When the head is hit, the brain can be shaken around inside the skull. If the shaking was hard enough, the brain can get bruised as it hits the skull. Just like bruises you might get on your arms or legs, these go away in time.
- **Swelling** If there are lots of bruises, there may also be swelling. Swelling takes longer than bruising to return to normal.
- Snapped Nerve Fibers The brain is made of millions of cells called neurons that are connected to each other by long, thin fibers called axons. Some of these axons can snap or break during a concussion. When this happens, different cells in your brain cannot send signals to each other. Even though we can only see axons under a microscope, we know that they can heal because in time many people recover completely.
- **Broken blood vessels** Like any other part of the body, the brain has blood vessels in it. If a concussion is very serious, some of these blood vessels can tear and bleed soon after the injury. Usually, the bleeding stops on its own and the blood vessels heal like any other cut.

Don't be too hard on yourself

Having a concussion can be alarming and stressful. The events causing the concussion may also have caused other injuries or disrupted your life in many ways. With these changes to your normal routine, people may feel out of place, tired or fatigued, less focused, or more stressed than usual.

Some of the symptoms you notice may not be directly caused by your concussion or injury. You may believe that you are making more mistakes than usual or having a harder time remembering things than you did before. You may become stressed and frustrated and blame your concussion for your mistakes, but you are probably being too hard on yourself to begin with.

| Things People Normally Forget | | |
|--|-------------|--|
| Symptom | % of People | |
| Forget phone numbers | 58% | |
| Forget people's names | 48% | |
| Forget where car was parked | 32% | |
| Lose car keys | 31% | |
| Forget groceries | 28% | |
| Forget why they entered a room | 27% | |
| Forget directions | 24% | |
| Forget appointment dates | 20% | |
| Forget store location in shopping center | 20% | |
| Lose items around the house | 17% | |
| Lose wallet or pocketbook | 17% | |
| Forget content of daily conversations | 17% | |

There are many things that we normally forget, whether or not we have a concussion. This table lists the percent of time people normally forget things, without a concussion.



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What Symptoms Can I Expect?

"I just don't feel like myself."

Symptoms are a normal part of recovery

Most people with a concussion show some symptoms during the first week to a month after the accident (8 out of 10, or 80%). Having symptoms is part of the normal recovery process, and not signs of permanent damage or medical complications. Like the itch of healing stitches, these symptoms are common and should not cause you to worry. If your health care providers have found that you do not have signs of a more severe injury, these symptoms should go away as you heal.

The symptoms of a concussion are pretty much the same as you can feel with everyday stress. If these feelings become overwhelming or get in the way of your activities or relationships, talk to your health care provider. There are treatment options that can help.

It is important to remember that everyone may have these symptoms now and then, even without a concussion. The list of the symptoms below shows the percent of people who have had each symptom at some point in their recovery. This is compared to the percent of people who have felt the same symptoms with everyday stress, but who have not had a concussion.

Common Concussion Symptoms Compared to Symptoms of Everyday Stress

| Symptom | Concussion % of people | Everyday Stress % of people |
|-----------------------------|---------------------------|--------------------------------|
| Poor concentration | 71 % | 14% |
| Irritability | 66% | 16% |
| Tired a lot more | 64% | 13% |
| Depression | 63% | 20% |
| Memory problems | 59 % | 20% |
| Headaches | 59% | 13% |
| Anxiety | 58% | 24% |
| Trouble thinking | 57 % | 6% |
| Dizziness | 52 % | 7 % |
| Blurry or double vision | 45% | 8% |
| Sensitivity to bright light | 40% | 14% |



Common symptoms and how to help manage them

Poor Concentration

Poor concentration is the most common symptom of a concussion. The main cause is tiredness or fatigue, but it can get worse due to stress, medicine, pain, or changes to your routine.

- Taking breaks may help you to concentrate better. When it becomes hard to concentrate on what you are doing, take a break and relax for 15 to 30 minutes.
- If you are still having problems, shorten your work day, class schedule, or daily routine for a while. Trying to do everything that you did before your concussion can make things worse. Reduce your work load and slowly add tasks back into your routine.

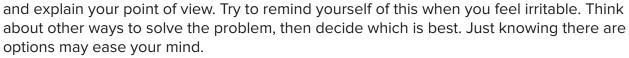


- Reducing distractions can help. Try a calm, quiet environment or having less people around.
- Focus on 1 task at a time, 1 step at a time. Taking notes as you listen to someone talk are examples of doing 2 things at the same time. It may be harder to concentrate on more than 1 thing at first.

Feeling Irritable

One of the most common causes of being irritable is fatigue. People lose their tempers more easily when they are tired.

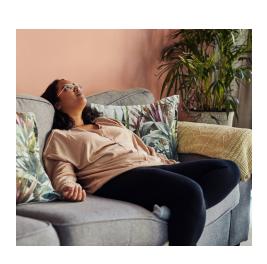
- Adjust your schedule to take more breaks when you notice yourself becoming irritable. This may be your body's way of telling you it's time for a break.
- If you find the irritability getting in the way of your daily life, think about what caused the problem in the first place. Problems are usually solved better if you try to stay calm





It is normal to be more tired after a concussion. The best treatment is to get quality sleep at night and take more breaks throughout the day.

- Start small and slowly increase your activity level. Most people have more energy in the morning.
- Take a mid-day nap (no more than 30 minutes). If your symptoms get worse, this may mean that you need to pace yourself and take more breaks.
- Try setting an alarm for 20 or 30 minutes of activity, then taking a 5 to 10 minute break. Repeat this pattern.



Stress Response

Stress is a normal response to an injury or accident. Some people may notice feeing more depressed, anxious, or overwhelmed than usual.

- One way to improve your mood is to make good things happen. Plan something you enjoy every day. Make your plan specific and then stick to it. This gives you something to look forward to it, as well as enjoy while it is happening.
- Consider doing 1 good deed for someone each day.
- Some thoughts can help make us feel more stress, such as thinking that there is no end in sight. Thinking this way can become a habit if you do it enough. See if what you are telling yourself is really true. Think instead of what you are thankful for.

If these feelings become overwhelming or get in the way of your activities or relationships, please contact your health care team. There are many ways to treat these overwhelming feelings.



Memory Problems

Problems with memory have many causes. Some can be caused by the actual injury, which is why you may not remember what happened too well. Like a bruise on your arm or leg that heals with time, your memory will most likely improve with time as well.

Most of the memory problems that people notice after a concussion are not caused by the injury. For you to remember something, you have to pay attention to it first. If you can't concentrate, the information is never stored in your memory. Since concentration issues are the most common symptom in concussion, this helps explain its impact on memory.

Memory problems can be a sign that you are pushing yourself too hard. Slow down and take breaks.

- Write things down or record notes on your phone. This can help with short-term memory problems until your memory improves.
- Some of the memory loss you notice may be normal to have with or without an injury. Everyday stress and not sleeping well both get in the way of good concentration.
- If you are concerned about your memory, talk to your health care team. They can order tests if you need them and may refer you to other specialists.



How long will my symptoms last?

"I feel like I'll never be the same again."

- The most rapid recovery takes place in the first few days to weeks.
- Most people will return to their normal activities within the first several weeks and have a full recovery.
- Some people may take a bit longer if they have other medical conditions. It is important to take special care of those conditions as part of your recovery.
- Remember, everyone recovers differently.

What Can I Do About My Symptoms?

"I am ready to start."

Give yourself time

- Be kind to yourself and remember you are healing. If your symptoms get worse, or if you notice new symptoms, it may be a sign that you are pushing yourself too hard. Slow down and let your brain heal.
- Ignoring your symptoms and trying to "tough it out" often makes the symptoms worse.
- Return to your routine slowly. Symptoms are your body's way of giving you information.
- Too much rest and avoiding responsibilities for too long after the injury can make concussion symptoms last longer.
- Concentrating on your symptoms will make them more noticeable to you. Remember that the symptoms are a normal part of recovery and will most likely go away on their own.

After a concussion, it can be easy to forget that we were sometimes irritable, tired, had headaches, could not concentrate, or forgot things even before the accident. Try to deal with these things the same way you did before.

Just like a pulled muscle or a bruised leg, your brain takes some time to recover. You may have some trouble with work or school at first, and this is also stressful, even though it is normal. Trying to do your regular work right after a concussion is something like trying to play baseball or swim with a pulled muscle. It will take some time to get better.

Ideas to cope

- Rest is the best treatment.
- Reduce screen time.
- Limit being around bright light and loud sounds.
- Stay hydrated by drinking enough fluids.
- Soak in a warm bath.
- Listen to soothing music.
- Get a massage.
- · Have a warm drink without caffeine.
- Get enough sleep. Aim for 7 to 8 hours each night.
- Try aromatherapy with lavender oils, which may help with stress, sleep, and anxiety.
- Eat a diet that includes whole grains, dairy, fruits and vegetables, and protein.
- Avoid alcohol and illegal drugs.
- Talk to your doctor about counseling.





Where can I go for support?

Most people find it helpful to seek support from their friends and family in the weeks and months after a concussion. They also look to medical professionals like doctors, nurses, and case managers to provide advice and support through their recovery. Unfortunately, this is not always enough.

If your symptoms last longer than 4 weeks after your injury, follow up with your health care team. They can recommend therapy services to help you manage your symptoms.

Support resources

Brain Injury Association of Ohio www.biaoh.org

Brain Injury Association of America www.biausa.org

Ohio Domestic Violence Network www.odvn.org/brain-injury

Crisis Hotline 1-800-273-8255



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