

# Concussion or Mild Traumatic Brain Injury

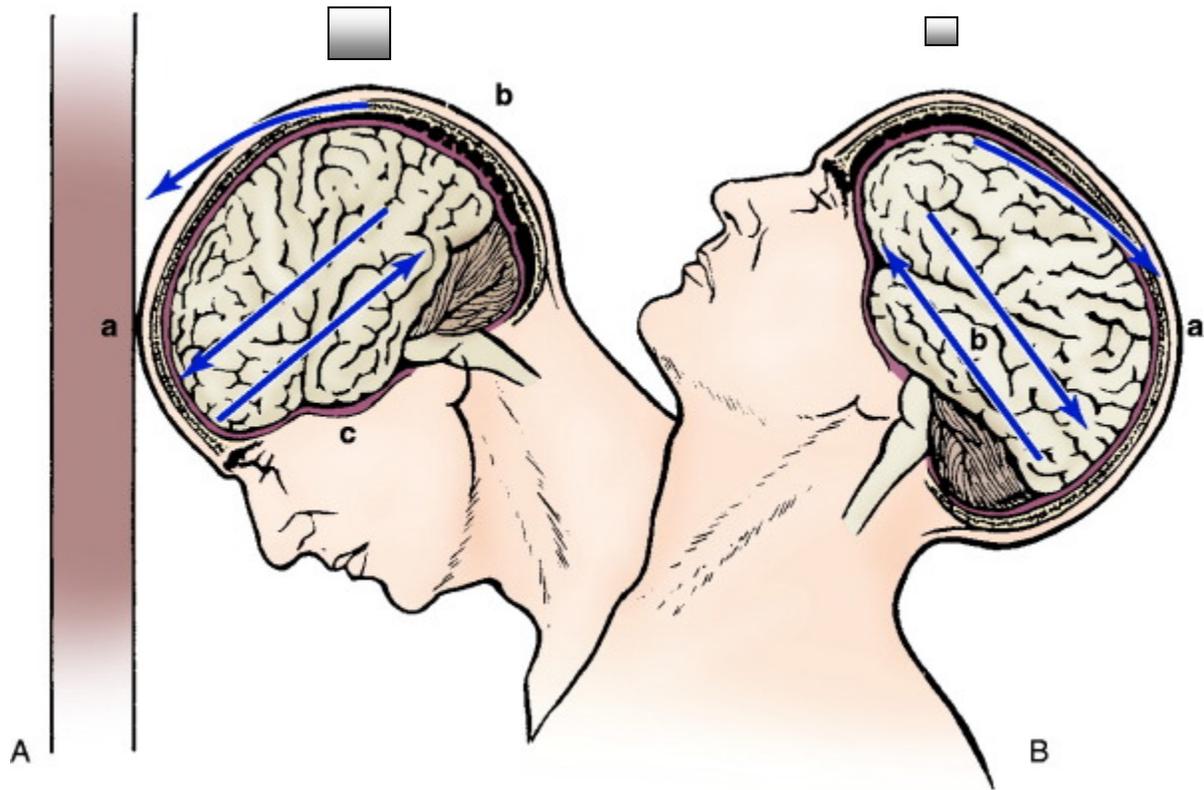
## Table of Contents

Concussion.....	2
Causes .....	3
Symptoms .....	3-4
Treatment .....	4-5
Recovery .....	5
Daily activities .....	5
Work .....	5
Sports .....	6
Managing your concussion .....	7-9
Headache.....	7
Dizziness.....	8
Sleep and fatigue.....	8
Emotions .....	8
Depression.....	9
Memory.....	9
Symptoms not getting better .....	9
Rehabilitation.....	10
Resources .....	11
Symptom tracking sheet.....	12
Notes .....	13

## Concussion

A concussion is caused by a blow to the head that causes the brain to hit up against the bony ridges on the inside of the skull. The nerves can be stretched or torn. Sometimes the brain is bruised.

- You do **not** have to lose consciousness (pass out) to have a concussion.
- Concussion is also called “minor” or “mild” traumatic brain injury.



(Picture: Mosby's Nursing Consult)

A: The head stops suddenly forcing the brain up against the bony ridges inside the skull

B: The head bounces backward forcing the brain against the back of the skull

Together this movement can cause the brain cells to become damaged.

## **What can cause a concussion?**

**A concussion can be caused by:**

- falls
- car or motorcycle accidents
- blows to the head
- sports injuries
- activities that cause the brain to move quickly in the skull
- whiplash

## **What do I do if I have a concussion?**

If you have a concussion or you are not sure if you have one, see a doctor. The doctor will examine you and decide if you need tests. You may need computerized tomography (CT) or magnetic resonance imaging (MRI) to see if there is damage to your brain. Not all people with a concussion need these tests. The doctor may suggest follow up care.

## **What symptoms will I have after a concussion?**

**You might have:**

- physical symptoms such as:
  - headache
  - dizziness
  - fatigue or feeling of being very tired
  - problems seeing
  - problems hearing
  - problems sleeping
  - problems keeping your balance
- emotional symptoms such as:
  - depression
  - sadness
  - irritability
  - tendency to cry
  - anger

- behavior changes
- mood changes
- be easily upset
- cognitive symptoms such as:
  - problems remembering things
  - problems concentrating
  - slow thinking
  - problems doing more than one thing at a time
  - problems learning
  - problems paying attention

### **When should I get treatment after concussion?**

Call your doctor or go to the emergency department if you *suddenly* have any of the following:

- headache that gets worse
- seizure
- neck pain
- very drowsy, can't be awakened
- repeated vomiting
- slurred speech
- can't recognize people or places
- increasing confusion
- weakness or numbness in arms or legs
- unusual behavior
- increased irritability
- loss of consciousness

## **When will I recover from a concussion?**

Most people recover from concussion within days to weeks after their injury. Symptoms go away over time and are usually gone by three months.

## **When can I return to my normal daily activities?**

As your symptoms get better, you may slowly go back to your normal routine. If symptoms get worse or come back, slow down until they go away. When symptoms are gone again, slowly go back to your activities.

- It is normal to feel upset and sad when you do not feel right and you cannot be as active as usual. Keep track of your symptoms so you can see what makes them better or worse.
- Get lots of rest. Be sure to get enough sleep at night. Go to bed at the same time every night. Take naps or rest breaks when you feel tired.
- Limit your physical activity and things that need a lot of thinking or concentration. These activities can make your symptoms worse.
  - physical activity includes PE (physical education classes), sports practices, weight-training, running, exercising, heavy lifting.
  - homework or work related activity that requires thinking and concentrating
  - video games, computer use, reading etc.

Drink lots of fluids and eat well balanced meals to keep your blood sugar normal. Do not drink alcohol.

**Use your symptoms as your guide to know how active you can be. If you go about your day and your symptoms get worse, that means you need to slow down. Rest more, and try again in a few days. Balance activities with rest until you are symptom free.**

## **When can I return to work?**

- Return to work should be based on your symptoms. A doctor can help you decide when you are safe to return to work.
- Limiting the amount of work you do soon after your injury may help you get better. It is very important to get a lot of rest. You should limit your physical activity as well as activities that require a lot of thinking.

### **Work schedule and safety considerations:**

- shorten your work week to \_\_\_days or \_\_\_\_\_hours each day
- do not drive
- take breaks when your symptoms get worse
- no heavy lifting or working with machinery
- limit the number of tasks or responsibilities at work
- no heights due to dizziness or balance problems

### **When can I return to sports?**

- You should never return to play if you have any symptoms.
  - You must be symptom free at rest.
  - You must be symptom free with physical activity.
  - You must be symptom free with things that require a lot of thinking.
- Tell your PE teacher, coach, and athletic trainer about your injury and your symptoms.
- Wear appropriate head protection.
- It is normal to feel upset, sad, and even angry because you cannot return to sports right away. It is important to fully get better before you play again. This will reduce your chances of getting hurt again.
- Your doctor may suggest gradual return to play. This means increasing your activity over time. When you are symptom free you can move to the next level, starting with:
  - No participation in physical activity until symptoms are gone. If your symptoms do not come back you can move to:
    - low levels of physical activity**
      - This includes walking, light jogging, light stationary biking, and light weightlifting (lower weight, higher reps, no bench, and no squat). If your symptoms do not come back during or after the activity you can move to:
        - moderate levels of physical activity with body and head movement**
          - This includes moderate jogging, brief running, moderate-intensity stationary biking; moderate-intensity weightlifting (reduced time or

reduced weight from your normal routine). If your symptoms do not come back during or after the activity you can move to:

**heavy non-contact physical activity**

- This includes sprinting, running, high-intensity stationary biking, and regular weightlifting routine, non-contact sport-specific drills. If your symptoms do not come back during or after the activity you can move to:

**full contact in controlled practice**

- If your symptoms do not come back during or after the activity you can move to:

**full contact in game play**



[Cdc.gov/heads up on concussion](http://Cdc.gov/heads up on concussion)

## **How can I manage my symptoms?**

### **Headache**

Headaches are common after concussion. They should get better with time. Pay attention to when your headaches occur most. See if there are any triggers that make the headache happen.

Here are some solutions you can try at home.

- Don't do things that can cause headaches. This could be stress, over doing it, not resting enough, concentrating for long periods of time.
- Close your eyes and rest.
- Apply warm or cool compresses to the head.
- Take over the counter pain medicine such as Tylenol® or Motrin® if your doctor gives the okay.

## **Dizziness**

You may sometimes get dizzy after your concussion. Here are some things that may help with dizziness.

- Get up slowly.
- Move slowly when up. Especially avoid quick movements of the head and eyes.
- Hold on to things for support.
- Avoid alcohol.
- Drink plenty of fluids to avoid dehydration.

## **Sleep and Fatigue**

You can be very easily tired after your concussion. Sleep problems are common and usually get better with time. A lack of sleep can make you feel tired and irritable.

- Here are some solutions you can try at home. Don't use alcohol and drugs to help you sleep.
- Give yourself plenty of time for sleep at night and naps during the day. Create sleep habits that work for you. Quiet, dark rooms can be helpful.

## **Coping with Emotions**

Many people with concussion are affected by emotional ups and downs. This could be sudden laughing or crying for no reason and trouble with emotions. There is no treatment for emotional ups and downs. Rest, giving yourself time to heal, and medicine (anti-depressants) may help.

### **Some things that may help you cope with emotional ups and downs:**

- Be open about it. Let people know that you cannot always control your emotions.  
Explain that the emotions you show on the outside may not be how you feel on the inside.
- Distract yourself. If you feel an outburst coming on, think of something else. Count backwards or count objects in the room.
- Think about the posture you take when you cry. If you think you are going to cry, change your posture.
- Breathe in and out slowly until you are in control.
- Relax your forehead, shoulders and other muscles that tense up when you cry.

## **Depression**

Many people go through depression after a concussion. This can be scary and can affect you as well as those around you.

### **Some things you can do to help cope with depression:**

- Stay in contact with other people.
- Continue to enjoy some of the things that make you happy.
- Stay active in spiritual activities.

You may need medical help if the depression continues. Your doctor may recommend counseling, group therapy or medicine.

## **Memory Loss**

Memory loss can be so subtle that you may not notice at first. You may have trouble concentrating, thinking clearly, remembering, or doing more than one thing at a time.

### **Some things you can do to help cope with memory problems:**

- Make lists of things you need to do.
- Keep a calendar for your appointments.
- Plan to do one thing at a time.
- Limit the time you spend concentrating to shorter periods.
- Set alarms on your mobile device as reminders.
- Tell others what you need to remember.

## **What can I do if my symptoms are not getting better?**

If your symptoms do not get better or get worse over time, there are resources available in our community to help. Your doctor may be able to help you find the best option for further testing and evaluation. One option is to see a neuropsychologist, who specializes in taking care of people with brain injury. Neuropsychological tests can give doctors valuable information to plan your treatment, such as return to play or work decisions. In addition, rehabilitation specialists can be useful if you need help in a particular aspect of your life, and these services are described below.

## **Rehabilitation for Concussion**

Your doctor can help you with finding the specialists that you need if you are having difficulty recovering from your concussion. Below are some options to consider with your physician.

Bronson offers outpatient services for concussion at:

- Bronson Rehabilitation in Vicksburg
- Bronson LakeView Rehabilitation
- Bronson Lifestyle Improvement & Research Center (LIRC) in Oshtemo.

The rehabilitation staff will work with you to create a treatment plan to meet your needs.

Bronson physical therapists, occupational therapists, speech and language pathologists and psychologists provide a team approach to help you with your recovery.

A physical therapist will work with you on mobility, walking, strength, balance, endurance and pain management. The therapist will develop a home exercise program to help you meet your goals.

An occupational therapist can help you become more independent so you can take care of yourself at home. The therapist will help you work on thinking, concentrating, problem solving and lifestyle changes to manage symptoms such as headache.

Kalamazoo has several neuropsychologists who can help with your recovery.

A neuropsychologist can help a person with concussion deal with how the concussion changes their daily life.

## Concussion-Related Resources

Centers for Disease Control (CDC):

[www.cdc.gov](http://www.cdc.gov)

American Physical Therapy Association (APTA):

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

American Occupational Therapy Association (AOTA):

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

American Speech-Language-Hearing Association (ASHA):

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

Bronson Rehabilitation:

<http://www.bronsonhealth.com/MedicalServices/Rehabilitation/page907.html>

Disability Resource Center:

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

Senior Services of Kalamazoo:

<http://seniorservices1.org/index.htm>

