

Mild Traumatic Brain Injury in Children and Young Adults

Traumatic brain injury (TBI) occurs to the brain after a blow to the head or a blow to the body affecting the head. Loss of consciousness is possible, but only occurs in about 20% of all head injuries. You can have a brain injury without any loss of consciousness, skull fracture, internal bleeding, or memory loss.

A “concussion” is the same thing as a mild traumatic brain injury. Don’t let the label “mild” mislead you. Mild TBI (mTBI) is often called an “Invisible Injury” because the injury cannot be seen on a CT scan or MRI. This does not mean that an injury is not there, but just that our current tests may not detect it.

What Happens to the Brain After a Mild Traumatic Brain Injury?

After a mTBI, the brain works very hard to fix itself. This is not easy and uses a lot of energy. This can make the brain feel slow.

Common Symptoms

- Headaches
- Fatigue
- Dizziness
- Changes in vision or hearing
- Hard time focusing or feeling “foggy”
- Trouble following directions
- Feeling unable to do more than one thing at a time
- Changes in emotions, feeling more irritable, sad or worried

How long will the symptoms last?

Most people (about 80%) recover from a mTBI in about 10-14 days. Some people have symptoms that last much longer.

Those with a history of learning disabilities, ADHD, depression, anxiety, migraines, or prior head injuries may recover slower. Early on, we cannot tell who will recover quicker or slower. Symptoms will often get worse about 24-48 hours after the injury before they start to get better.

Treatment for mTBI

The best way to heal is by resting. **This includes both physical and brain rest**, which means avoiding anything that will increase your heart rate or requires too much thought.

In the first few days, activities such as exercise, sports, video games, texting, emailing, social media, and reading should be avoided.

After 2 or 3 days, these activities can be restarted **slowly**. Start with 15-20 minutes, and then increase the time or the difficulty of the activity as tolerated.

An increase in symptoms means you are doing too much and may need to slow down. At first, you should slow down to let the brain heal and recover faster. **When you have symptoms in the first few weeks, your body is trying to tell you that you are doing too much.**

When to Call

If symptoms get worse or do not improve over 7 days, please call your doctor.

You will need to follow up in the Brain Care Clinic. These experts can help you with your recovery and can also work with your school if help is needed.

School

You should plan to stay home from school for a few days. If you have symptoms while resting at home, they will likely get worse if you go back to school immediately. After 3 days, it is important to try returning to school. If a full school day is too much, start with a half day. You can also do some schoolwork at home. The most important

thing is to start schoolwork slowly. If you speed through things faster than your brain can handle, the healing will be much slower.

You should not return to work, sports or other activities until you can handle a full school day and all your schoolwork. Most students are able to return to their full school days in a week or two.

Your health care team may have given you this information as part of your care. If so, please use it and call if you have any questions. If this information was not given to you as part of your care, please check with your doctor. This is not medical advice. This is not to be used for diagnosis or treatment of any medical condition. Because each person's health needs are different, you should talk with your doctor or others on your health care team when using this information. If you have an emergency, please call 911. Copyright © 7/2022 University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Department of Nursing. HF#6328

RETURN TO LEARN AND PLAY – A STEPWISE PLAN

STEP	SCHOOL	PLAY	GOAL
1	Complete brain rest.	Complete physical rest.	Focus on recovery. Avoid screens, homework, or athletics.
2	Start make-up homework for 5–15-minute sessions.	Light exercise like walking or swimming (unless not cleared by doctor).	Gradually start these activities; should not cause symptoms.
3	Homework sessions 20-30 minutes.	More heavy exercise like skating or running drills; no impact activities.	Increase endurance by repeating short periods of self-paced activities.
4	Half days at school. Make-up homework should not be required.	Add resistance training; no impact activities	Further increase endurance.
5	Full days at school. Shorter homework assignments may be needed.	Once cleared by doctor, return to impact drills.	Focus on returning to normal schedule.
6	May still need some help with school. Catch up with important missed work.	Return to game or typical physical activities.	Full return to school and physical pre-injury schedule.

At home, you can use the following log to track how bad your symptoms are before and after starting a variety of activities. This includes going to school, taking a shower, playing video games, or texting. If symptoms worsen after the activity, please reduce your activity level for a few hours until you feel better.

TBI SYMPTOM LOG

NAME:

DATE:

SYMPTOMS: Rate symptoms before and after activities on a scale of 0-10, with 10 being severe																
ACTIVITY (Add across)	Wake Up															Bed Time
Time																
Duration																
		Before	After	Before	After	Before	After	Before	After	Before	After	Before	After	Before	After	
Headache		/	/	/	/	/	/	/	/	/	/	/	/	/	/	
Fatigue		/	/	/	/	/	/	/	/	/	/	/	/	/	/	
Dizziness		/	/	/	/	/	/	/	/	/	/	/	/	/	/	
Nausea		/	/	/	/	/	/	/	/	/	/	/	/	/	/	
Sleepy		/	/	/	/	/	/	/	/	/	/	/	/	/	/	
Sensitive to light		/	/	/	/	/	/	/	/	/	/	/	/	/	/	
Sensitive to noise		/	/	/	/	/	/	/	/	/	/	/	/	/	/	
Foggy		/	/	/	/	/	/	/	/	/	/	/	/	/	/	
Distracted		/	/	/	/	/	/	/	/	/	/	/	/	/	/	
Feeling slow		/	/	/	/	/	/	/	/	/	/	/	/	/	/	
Forgetful		/	/	/	/	/	/	/	/	/	/	/	/	/	/	
Irritability		/	/	/	/	/	/	/	/	/	/	/	/	/	/	
Emotional		/	/	/	/	/	/	/	/	/	/	/	/	/	/	
Tearful		/	/	/	/	/	/	/	/	/	/	/	/	/	/	
Other:		/	/	/	/	/	/	/	/	/	/	/	/	/	/	

INSTRUCTIONS:

- Record name and date
- Rate all symptoms at time of waking up
- Add activities along the top of the graph
- Rate each symptom before and after doing an activity
- Include activities such as going for a walk, reading, watching TV, therapies (OT, PT, Speech Therapy), taking a shower, and talking with the doctors.
- Rate all symptoms before going to bed