Your guide to recovery
Treating concussions
About concussions

A concussion is a condition, usually caused when a blow to the head or body causes the brain to move rapidly within the skull, that can temporarily change how the brain cells work. In sports injuries, a concussion can occur even if a helmet is worn. Even if a person does not lose consciousness after a concussion, a medical evaluation is important.

Concussions are diagnosed and managed based on the history given and the symptoms experienced after the injury. Most do not cause serious problems and get better over several days. CT scans and MRIs of the head are usually normal after a concussion, so your doctor may not order them.

Common signs and symptoms
It is important to understand that some symptoms associated with concussions can also be experienced by people who have not had a concussion. These include:

– Headache or head “pressure”
– Nausea, with or without vomiting
– Dizziness
– Feeling off balance
– Double or blurry vision
– Sensitivity to light or noise
– Feeling foggy, slow or tired
– Difficulty with attention or concentration
– Forgetfulness
– Changes in personality or mood

When to seek immediate attention
If you have any of these symptoms, call your doctor or go to the emergency room immediately:

– Repeated vomiting
– Feeling too sleepy or having trouble waking up
– Increased confusion
– Enlarging of the pupil in one eye
– Double vision, blurred vision or trouble seeing
– Worsening headache
– Falling or problems with balance or walking
– Weakness or numbness in arms and/or legs
– Seizure (arms and/or legs shaking or body going stiff)
– Stiff neck or fever
– Not acting right or change in behavior
– Problems talking (slurred speech or words that don’t make sense)
Symptom management
The following are common symptoms experienced with a concussion. As mentioned above, it is important to understand that some of these symptoms can also occur in normal day-to-day activities. **Always speak to your doctor about how to manage your specific symptoms.**

Headaches
Headache is the most common symptom after a concussion. However, some people are more likely to suffer from headaches than others. For instance, women and people with personal or family history of headaches more frequently report headaches after a concussion.

Initially, depending on how severe your pain is, your doctor may recommend over-the-counter medications such as acetaminophen (Tylenol) or ibuprofen (Advil). Warm compresses or ice applied to sore areas can help with pain. Sometimes, prescription medications may be needed. It is also important to maintain a healthy lifestyle, including having timely and nutritious meals, adequately hydrating, limiting caffeine intake, reducing stress and sleeping well.

Neck pain
After a traumatic injury, some people may experience neck pain related to the force sustained. Your doctor will help determine the cause of your neck pain. Commonly, the pain is muscular in nature and sometimes referred to as “whiplash.”

Dependent upon your examination, your doctor may prescribe medications or physical therapy, or make other recommendations to decrease your pain. One important aspect of healing from a neck injury is to maintain good posture throughout the day, whether in school or work activities. If you tend to work at a desk for prolonged periods, it is important to get up and move frequently.

It is important to note that headaches can present differently in different people and may require different treatments. Discussing details about your headaches will help determine what treatments may be helpful. For instance, some headaches are associated with neck pain, while others are associated with light or noise sensitivity and/or nausea.
Sleep difficulties

Sleep difficulties are a common symptom of concussions. **Here are some ways to help you start sleeping better:**

– Stick with a sleep schedule. Go to bed and wake up at the same time every day.

– If you don’t fall asleep within 30 minutes, get out of bed and do something relaxing until you feel sleepy.

– Avoid napping during the day. If you have to take a nap, try not to sleep more than an hour.

– Make sure your bedroom is free from distractions, extreme temperatures, noise and light.

– Do not eat, read or watch TV while in bed.

– Do not use your cell phone before you go to bed and set a blue light filter on the phone.

– Avoid eating or excessive drinking prior to sleep.

– Exercise regularly, but avoid late evening workouts.

Things to avoid include:

– Most over-the-counter sleep aid medications. They typically contain an antihistamine (commonly diphenhydramine) that can cause disturbances in memory and new learning.

– Nicotine from tobacco

– Alcohol

– Caffeinated beverages after lunch

**If you continue having sleep difficulties, speak with your physician.** There can be other underlying medical conditions that can contribute to sleep problems, and your doctor may recommend medications or other interventions to maximize your rest and improve function.
Dizziness
Dizziness is a common symptom that can occur after a concussion and can be described as feeling “lightheaded” or as having a “spinning” sensation. Your doctor will discuss your symptoms in detail and perform a physical examination. Depending on the cause of your dizziness, your physician may recommend vestibular therapy to treat the dizziness and/or perform further testing. It is important to take a break from an activity if you start to feel lightheaded or dizzy and gradually increase your tolerance.

Cognitive symptoms
Many people experience examples of cognitive inefficiency to some degree in their daily lives. For example, you may seem distracted or forget to do something. After a concussion, it is not uncommon for individuals to report more examples of these types of inefficiencies in their day-to-day lives. They may notice changes in concentration, memory and possibly some other thinking skills. Though this can understandably lead people to feel concerned, most individuals report that thinking difficulties get better on their own within days to a couple of weeks after a concussion. If this is not the case, the concussion care team tries to identify reasons or alternate explanations as to why you may still be experiencing changes in your thinking skills. For example, physical symptoms like difficulty sleeping and physical pain can contribute to thinking troubles, such as making it harder to concentrate.

Emotional symptoms
After a concussion, it is not uncommon for individuals to experience emotional distress and increased stress levels. For example, some individuals may notice a degree of nervousness, anxiety, frustration/irritability or sadness. The presence of even mild emotional symptoms can negatively affect daily efficiency, overall energy and sleep. Such symptoms can interfere with the rapid recovery that is typical of most concussions. If you are experiencing elevated distress and ongoing difficulty managing stress levels, make sure you speak with your concussion team so that you are adequately supported in getting back to everyday activities safely and quickly.

Sleep is a complex, yet essential, aspect of maintaining a healthy mind and body and restoring the energy you need to be active during the day. Sleep can be affected by pain, stress, mood and other factors.
Returning to activity

It is important to continue monitoring your symptoms after your visit with your concussion physician. Everyone recovers differently, but concussion symptoms typically improve with every passing day.

The brain and the body heal with movement, and ongoing physical and mental activity is recommended to maintain overall health. The goal is to ease discomfort during the acute recovery period while maximizing progress. Don’t perform strenuous activities or push through the symptoms in the first few days because symptoms can worsen. In the initial days, the general rule is to take a break from or decrease any activity that worsens your symptoms. If you feel fine during the activity and your symptoms are not exacerbated, it is generally okay to engage in that activity.

As a precaution, do not drive in the initial days after your concussion if you are experiencing intense symptoms, such as significant dizziness, headaches and attention problems, or are taking medications that could affect your ability to safely operate a motor vehicle.

After the first few days, most individuals are able to increase their activity levels. Participating in some form of non-contact physical activity is recommended.

Returning to work

If you are currently working, depending on your level of symptoms, you may want to inform your place of employment about your injury and symptoms. Depending upon your individual situation, your concussion team may recommend staying out of work for a brief period of time. Keep in mind that it is important to get back into a routine as soon as possible, and going back to work is part of getting better and back into that routine.

Depending on your particular symptoms, your concussion team may recommend temporary accommodations, which can include rest breaks and work modifications. As you recover, your team will modify accommodations geared toward achieving full reintegration into work as soon as possible.

Returning to school

Depending on the current symptoms, a student may be kept out of school for a brief period of time. It is recommended that the school be informed about the current injury so that symptoms can be monitored. If needed, your concussion team may recommend temporary accommodations, which can include rest breaks, reduced workload, tutoring, or untimed tests. The goal is to keep disruptions to a minimum and return the recovering student to the daily routine of going back to school as soon as possible.

Going back to school is part of getting better. Encouraging return to school, even if the day is shortened, is a benefit. It is possible that the cognitive and physical demands of school can temporarily increase symptoms, and that is factored into the recovery plan. Finding a balance that works for each student is important and there are various ways the concussion team can help make sure return to school is successful.
Returning to sports

Until you or your child is evaluated by a concussion physician, it is important to not participate in contact sports. However, a student should participate in some form of physical education while at school, as long as it is non-contact related. Your concussion doctor will determine when it is appropriate to give clearance to return back to sports.

Return-to-play (RTP) is a protocol designed to physically progress athletes through the recovery. RTP protocol can take about a week to complete and the concussion physician must clear the athlete prior to returning to a sport. If the RTP takes longer than planned, symptoms may be further evaluated and additional treatment recommendations may be suggested to optimize recovery time.

Long-term risks

Long-term complications from a concussion are rare and are usually related to more severe injuries to the brain. Research is helping us learn more about concussions, especially how repetitive head impacts over many years can affect people. However, at this time, there is not enough evidence to make any conclusions.

Prevention

Concussions can occur in many circumstances and cannot always be prevented, especially if someone is participating in contact sports, where collision and falling can occur. In general, here are some things that people can do to decrease the risk of injury from a trauma that can lead to a concussion:

- In sports, it is important to wear the correct equipment for the game. It should be in good condition and fit well for every game and practice. Attitude is also important, and playing with good sportsmanship while following the rules of the game is essential.

- With driving, it is important to always wear your seatbelt. Refrain from distracting activities like using your cell phone. Do not take drugs that can affect driving skills or drink and drive.

- Use a helmet when biking or riding a motorcycle. Do not use any substances that can affect your ability to safely ride.

- At work, if exposed to certain environments, use the appropriate safety equipment.

- If you are elderly or have difficulty moving about, remove clutter and rugs to decrease chances of tripping or falling. Staying active and performing regular exercise can reduce falls by improving strength and balance. Adequate light can also help prevent falls, especially at night. Medications may impair balance and such side effects should be discussed with your prescriber.
About the Northwell Health Concussion Program

The Northwell Health Concussion Program offers comprehensive concussion management services, including consultations, neuropsychology consultation and neurocognitive testing, vestibular and balance rehabilitation, physical therapy, return-to-school protocol management, return-to-play protocol management, and return to work and leisure.

To learn more about the Concussion Program at Northwell Health please call (855) 510-5110.