

# Patient Information: Concussions



## What is a concussion?

- A mild traumatic brain injury occurring when impact causes the brain to move suddenly within the skull
- There may be no “obvious hit” to the head
- Typically does not involve brain damage/bleeding
- Temporarily impacts brain function

## What are the symptoms of a concussion?

- Symptoms can vary between people, but may include some combination of: Headache, dizziness, poor balance, nausea/vomiting, memory loss, irritability, mood swings, or sleep changes
- Concussions may include a loss of consciousness, but someone who is conscious after a head injury can still have a concussion
- Symptoms may begin immediately after a head injury, or may not appear for several days



## How are concussions diagnosed?

- The severity of a concussion is determined by the severity of the symptoms
- Have a family member or friend help you keep track of what your symptoms are and when they appeared- writing them in a journal may be helpful
- Your physician will review this journal of symptoms, along with performing a neurological exam (for vision, hearing, reflexes, balance, and coordination) and a neuropsychological exam (for memory, attention, critical thinking, communication, and emotional lability)
- If you have an ImPACT test (concussion screening) baseline score, you will take the test again to compare your scores
- In severe head injury cases, or cases that do not improve over time, a head MRI or CT may be ordered



STEWARD ST. ELIZABETH'S  
BONE & JOINT CENTER  
Jennifer Luz, MD  
Team Physician Boston Cannons  
Sports Medicine  
Department of Orthopedics

## How are concussions treated?

- Your physician will work with your athletic trainer, teachers, and employers to manage recovery
  - MA state law requires a physician certified in concussion management to clear youth athletes for return to play
- Physical rest: Stopping all exercise activities
- Mental rest: Limiting “screen time”, reading, work
- A multi-disciplinary approach is used: Medications, neuropsychology, cognitive rehabilitation, vestibular therapy, neurology, otolaryngology, speech therapy
- When you are symptom free, you may begin a slow progression back to regular activities
- Recovery is critical before returning to impact situations: Long-term problems are much more likely if another concussion occurs before you heal
- First time concussion: Typical recovery is 7-10 days
- For subsequent concussions, or particularly severe concussions: Recovery may take weeks to months

## How can I prevent a concussion or decrease the severity?

- Prevention is very important, as one concussion puts you at greater risk to sustain additional concussions
  - Recurrent concussions can have negative long-term consequences for brain health
- Incorporate neck strengthening into exercise routines- this is the only evidence-based method of reducing risk of subsequent concussion- see below
- Use appropriate athletic equipment such as properly fitted helmets and mouthguards
- “Play smart” during tackling and impact plays
- To help prevent long-term damage, seek prompt medical help if having symptoms of a concussion

## Where can I learn more about concussions?

- Education- OrthoInfo:  
<https://orthoinfo.aaos.org/en/diseases--conditions/sports-concussion/>
- STACK Concussion Prevention Neck Strengthening:  
<http://files.leagueathletics.com/Text/Documents/8839/59417.pdf>
- imPACT test information:  
<https://www.impacttest.com/>

To schedule an appointment, visit the Steward St. Elizabeth's Sports Medicine website at: [semc.org/services-directory/orthopedics/sportsmedicine](http://semc.org/services-directory/orthopedics/sportsmedicine)  
STEWARD MEDICAL GROUP Bone & Joint Center 736 Cambridge St, CCP9, Brighton, MA 02135 Phone 617-779-6500 Fax 617-779-6555