



A “Heads Up” on Managing Return to Play

Information for Health Care Professionals

For many of health care professionals, the first chance to assess a young athlete with a suspected concussion will not be on the sidelines, but an office or emergency department. This examination will likely include a physical examination, covering cognition, neurology, balance, and most importantly, any signs of deteriorating neurological function (http://www.cdc.gov/concussion/signs_symptoms.html#3).

When managing an athlete with concussion, a health care professional’s management plan should cover both returning to school and to play, and should:

- monitor both physical and cognitive activities
- consider concussion history
- and be individualized to the athlete.

Outside of the emergency department, in most cases, it will be possible to monitor the athlete where you work--especially if the number and severity of symptoms (http://www.cdc.gov/concussion/signs_symptoms.html) are steadily decreasing and gone within 7 to 14 days.



(<http://www.medscape.com/viewarticle/753417>)

(<http://www.cdc.gov/Other/disclaimer.html>)

View the video

(<http://www.medscape.com/viewarticle/753417>)

(<http://www.cdc.gov/Other/disclaimer.html>)

(Free login required through Medscape)

For health care professionals working in an emergency department, an athlete should be referred for follow up care from a health care professional who can help him or her gradually return to school and to play when fully recovered. An athlete should not leave an emergency department and return to practice or play the same day nor should a future return to practice or play date be given at the time of an emergency department visit.

There are five gradual steps to help safely return an athlete to play, adapted from the International Concussion Consensus Guidelines 

(http://bjsm.bmj.com/content/43/Suppl_1/i76.full.pdf)  (<http://www.cdc.gov/Other/disclaimer.html>):

Return to Play Progression

Baseline (Step 0): As the baseline step of the Return to Play Progression, the athlete needs to have completed physical and cognitive rest and not be experiencing concussion symptoms for a minimum of 24 hours. *Keep in mind, the younger the athlete, the more conservative the treatment.*

Step 1: Light Aerobic Exercise

The Goal: only to increase an athlete's heart rate.

The Time: 5 to 10 minutes.

The Activities: exercise bike, walking, or light jogging.

Absolutely no weight lifting, jumping or hard running.

Step 2: Moderate Exercise

The Goal: limited body and head movement.

The Time: Reduced from typical routine

The Activities: moderate jogging, brief running, moderate-intensity stationary biking, and moderate-intensity weightlifting

Step 3: Non-contact Exercise

The Goal: more intense but non-contact

The Time: Close to Typical Routine

The Activities: running, high-intensity stationary biking, the player's regular weightlifting routine, and non-contact sport-specific drills. This stage may add some cognitive component to practice in addition to the aerobic and movement components introduced in Steps 1 and 2.

Step 4: Practice

The Goal: Reintegrate in full contact practice.

Step 5: Play

The Goal: Return to competition

It is important to monitor symptoms and cognitive function carefully during each increase of exertion. Athletes should only progress to the next level of exertion if they are not experiencing symptoms at the current level. If symptoms return at any step, an athlete should stop these activities as this may be a sign the athlete is pushing too hard. Only after additional rest, when the athlete is once again not experiencing symptoms for a minimum of 24 hours, should he or she start again at the previous step during which symptoms were experienced.

The Return to Play Progression process is best conducted through a team approach and by a health professional who knows the athlete's physical abilities and endurance. By gauging the athlete's performance on each individual step, a health care professional will be able to determine how far to progress the athlete on a given day. In some cases, the athlete may be able to work through one step in a single day, while in other cases it may take several days to work through an individual step. It may take several weeks to months to work through the entire 5-step progression.

Before the start of the season, health care professionals should learn about state, league, or sports governing body's laws or policies on concussion (<http://www.nflhealthandsafety.com>) (<http://www.cdc.gov/Other/disclaimer.html>). Some policies may require health care professionals to take a training program or provide written clearance as part of the return to play process for young athletes.

Remember, while most athletes will recover quickly and fully following a concussion, some will have symptoms for weeks or longer. Health care professionals should consider referral to a concussion specialist if:

1. the symptoms worsen at any time,
2. symptoms have not gone away after 10-14 days, or
3. the patient has a history of multiple concussions or risk factors for prolonged recovery. This may include a history of migranes, depression, mood disorders, or anxiety, as well as developmental disorders such as learning disabilities and ADHD.

[Take the Online Training for Health Care Professionals >>](http://www.cdc.gov/concussion/headsup/clinicians/)

[\(http://www.cdc.gov/concussion/headsup/clinicians/\)](http://www.cdc.gov/concussion/headsup/clinicians/)

More details on diagnosing and managing concussion among young athletes, including returning to school planning, are included in CDC's online course for health care professionals, "[Heads Up to Clinicians](http://www.cdc.gov/concussion/headsup/clinicians/) (<http://www.cdc.gov/concussion/headsup/clinicians/>)."

Related Links

- **[Heads Up to Clinicians: Concussion Training](http://www.cdc.gov/concussion/headsup/clinicians/)**
[\(http://www.cdc.gov/concussion/headsup/clinicians/\)](http://www.cdc.gov/concussion/headsup/clinicians/)
Addressing concussion in sports among kids and teens. Free online training for health care professionals.
- **[NFL Health and Safety](http://www.nflhealthandsafety.com/)** (<http://www.nflhealthandsafety.com/>) 
<http://www.cdc.gov/Other/disclaimer.html>
Before the start of the season, health care professionals should learn about state, league, or sports governing body's laws or policies on concussion
- **[International Concussion Consensus Guidelines](http://bjsm.bmj.com/content/43/Suppl_1/i76.full.pdf)** 
http://bjsm.bmj.com/content/43/Suppl_1/i76.full.pdf 
<http://www.cdc.gov/Other/disclaimer.html>
Consensus Statement on Concussion in Sport: the 3rd International Conference on Concussion in Sport held in Zurich, November 2008
- **[Clinical diagnosis and management of mild TBI](http://www.cdc.gov/concussion/clinician.html)** (<http://www.cdc.gov/concussion/clinician.html>)
- **[Resources for patients](http://www.cdc.gov/concussion/clinician.html)** (<http://www.cdc.gov/concussion/clinician.html>)

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Centers for Disease Control and Prevention 1600 Clifton Road Atlanta, GA 30329-4027, USA
800-CDC-INFO (800-232-4636) TTY: (888) 232-6348 - [Contact CDC-INFO](#)

