

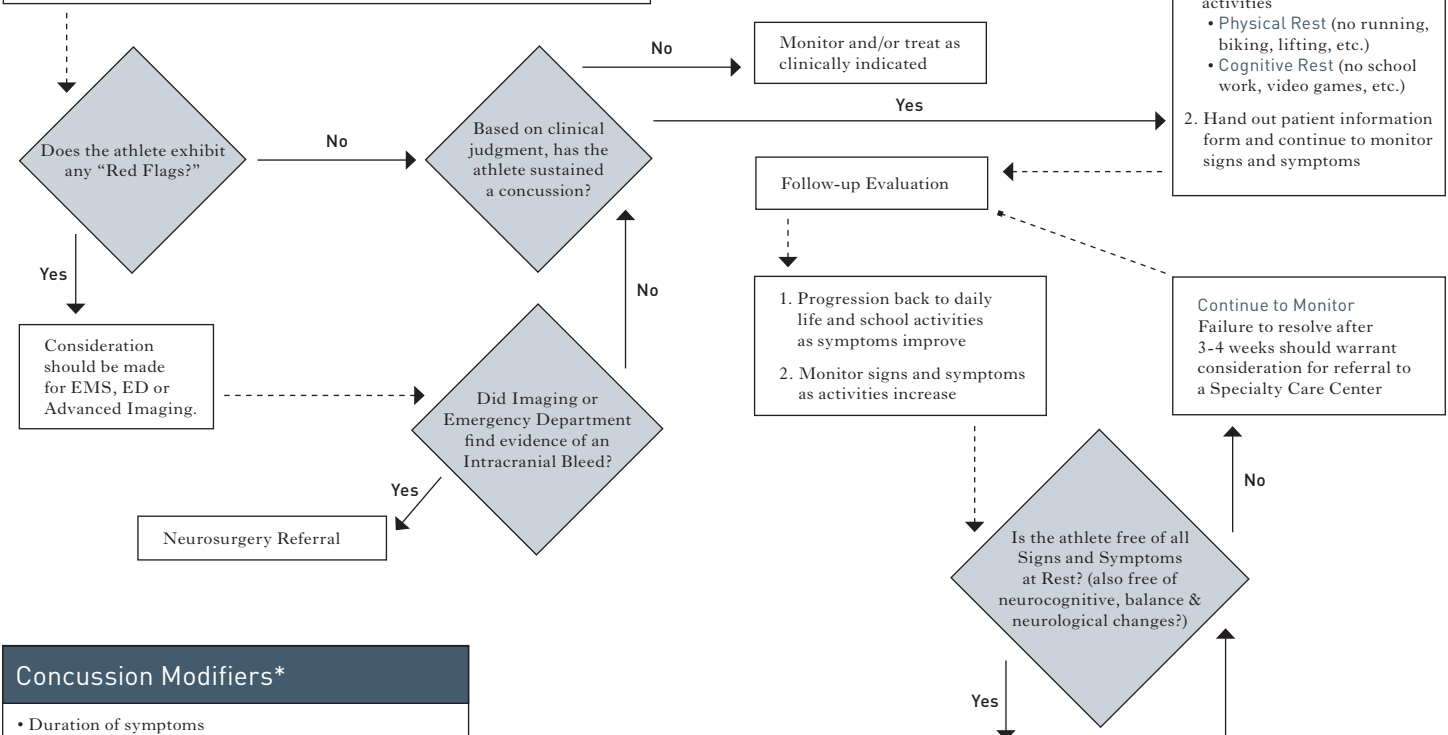
Sports Concussion Algorithm

(Health Care Provider Information)

Athlete presents with signs, symptoms or behaviors of a concussion.

Perform Concussion Evaluation

- Evaluation should include assessment for these **RED FLAGS**
- Headache that worsens
 - Seizure
 - Looks very drowsy or can't be awakened
 - Repeated vomiting
 - Slurred speech
 - Can't recognize people or places
 - Increasing confusion or irritability
 - Weakness or numbness in arms or legs
 - Unusual behavioral change
 - Loss of consciousness > 30 seconds



Concussion Modifiers*

- Duration of symptoms
- Number of symptoms
- Severity of symptoms
- Prolonged LOC (>30 seconds)
- Presence of amnesia
- History of convulsive convulsion
- Number of concussions
- Recent concussion
- History of two concussions in a short period of time
- Concussion caused by a lower threshold force
- Age (younger athlete takes longer to recover)
- History of migraine (personal or family)
- History of depression or other mental health disorder
- History of ADD/ADHD
- History of a learning disability
- History of a sleep disorder
- Psychoactive medication
- Dangerous style of play
- High-risk activity

*McCrory P., et al. *Br J Sports Med* 2009

Begin Graduated "Return-to-Play" Protocol*
(There should be a minimum of 24 hours between stages; however the speed of progression should be based on clinical judgment with consideration of the presence of any of the Concussion Modifiers)

If return of signs or symptoms during the protocol, then re-evaluation is warranted and athlete must wait 24 hours and be free of "Signs and Symptoms at Rest" before returning to Stage 1 of protocol.

Stage 1—Light Aerobic Exercise
(Exertion Level: HR range 100-140 / RPE range 3-4)

Stage 2—Sport-Specific Exercise
(Exertion Level: HR range 120-160 / RPE range 4-6)

Stage 3—Non-Contact Training Drills
(Exertion Level: HR range 140-180 / RPE range 6-8)

Stage 4—Full Contact Practice
(Exertion Level: HR range 160-200 / RPE range 8-10)

*McCrory P., et al. *Br J Sports Med* 2009

RETURN TO PLAY