

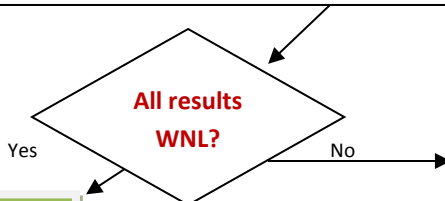


Iowa State University Athletic Health Care
 Concussion Management Plan Overview (Updated April 2015)

Baseline Testing Complete and Available at Athletic Site
 (C3 Logix, ImPACT Test, King-Devick Test) - (C3 Logix includes SAC, Balance, Vest/Occ, Reaction Time, Motor Coord)

Concussion Symptoms Reported or Suspected

- Remove from participation
- Move to a controlled location if possible, evaluated by licensed athletic trainer or licensed physician
- Neurocognitive and Balance Testing (SAC, King-Devick, C3 Logix, BESS or combination for baseline/norms comparison)
- Symptom Scoring Scale
- Pupils equal and reactive to light? Visual tracking problems?



No Concussion Diagnosed
 Return to play, but monitor

Concussion Diagnosed

- No activity for remainder of day
- Continue to monitor for symptom deterioration, transport to medical facility if symptoms deteriorate.
- Home care/monitoring instruction card sent home with responsible party, confirm follow-up appointment
- Initiate follow-up management plan

Minimum 24-48 hours post-injury

Post-Concussion Assessment

- Minimum of 24 hours post-injury
- Symptom Scoring Scale
- ImPACT Neurocognitive Testing
- C3 Logix Full Test
- (Any abnormalities, athlete considered to have ongoing concussion problems. No activity, educate on proper rest. Symptom scores monitored daily, retest ImPACT & C3 Logix at 72 hours and 1 week if necessary) Rehabilitation stage 1 only.
- C3 Logix scores may indicate specific areas of deficiency and focused recovery methods
- Once symptoms are resolving, move on to step-wise graduated Return-to-Play and Return-to-Learn programs

Return-to-Learn Stages		
Stage	Stage Description	Stage Objective
1	Cannot tolerate cognitive activity, symptoms present at rest	<ul style="list-style-type: none"> Remain at home, avoid classroom work for at least one day, avoid school work, video games, reading, texting, and watching television, no team meetings. As symptoms resolve, move into Stage 2. Letter to academic services notifying related parties of concussion and accommodation considerations. If symptoms exceed two weeks initiate meeting with academic services and campus officials for potential formal accommodations.
2	Ability to perform cognitive activities for up to an hour with no increase in symptoms. Allow for cognitive rest periods.	<ul style="list-style-type: none"> Monitor symptoms and make appropriate adjustments to exposure to cognitive activities. May return to team meetings as part of cognitive activities as tolerated. Likely will start return to play progression once cognitive activities are tolerated for multiple hour time periods.
3	Return to all activities	<ul style="list-style-type: none"> Return to all cognitive activities including classes and team meeting activities.

Return-to-Play Criteria		
Rehabilitation Stage	Functional Exercise at Each Stage of Rehabilitation	Stage Objective
1. No Activity	Complete physical and cognitive rest	Recovery
2. Light Aerobic Exercise	Walking, swimming or stationary cycling keeping intensity <70% HR max, no strength training	Increase Heart Rate
3. Sport-Specific Exercise	Sport related individual skill type drills with NO risk of head impact activities	Add movement
4. Non-Contact Training Drills	Progression to more complex training drills with no contact. May return to low load, high repetition strength training activities	Exercise, coordination, and cognitive load
5. Full Contact Practice	Following medical clearance, participate in normal training/practice activities	Restore confidence and assess functional skills with coaching staff
6. Return to Play	Normal game play	