

CONCUSSION RETURN TO PLAY PROTOCOL

Background

In recent years, there has been an increasing amount of literature to support the use of a graduated return-to-play progression when managing concussions. This progression aims to use objective and methodical guidelines to help an athlete return to their respective sport safely. PT Northwest, LLC wishes to follow the recommendations laid out by organizations like National Athletic Trainer's Association (NATA), "Summary and Agreement Statements of International Conferences on Concussion in Sport", and the Oregon School Activities Association (OSAA) Medical Aspects in Sports Committee. Athletic trainers are oftentimes the first responders to these traumatic brain injuries and typically have daily communication with the athletes. Therefore, the purpose of this document is to provide the PT Northwest athletic trainer with a standardized return-to-play protocol based on a summary consensus of the literature.

Graduated Return-to-Participation Progression

- 1. **No activity:** Complete rest, both physical and cognitive. This may include staying home from school or limiting certain academic activities. Should be symptom-free for 24 hours before completing ImPact testing* and progressing with protocol.
- 2. Light aerobic exercise: <70% age-predicted max heart rate; no resistance training

Athlete must be healthy enough to return to school full time before progressing past this stage

- 3. **Sport-specific activities:** sprinting, dribbling basketball or soccer ball, no equipment, no threat of contact. Signed OSAA concussion form before progressing past this point.
- 4. Non-Contact training: resistance training may begin, more complex drills in equipment
- 5. **Full Contact practice:** participate in unrestricted activity
- 6. Return to play/competition

Each stage should be separated by a minimum of 24 hours. If symptoms occur during a specific stage, the athlete must stop activity immediately and report symptoms to an athletic trainer. Once the athlete is symptom-free for another 24 hours they may restart that stage or activity. Management of any concussion should be done in coordination with a physician.

*If ImPact testing is available, the athlete should reach scores that are statistically similar to baseline scores before progressing to non-contact practice. If possible, ImPact scores should be shared with the supervising physician during follow-up appointments. When ImPact is not available to the athletic trainer, SCAT-3 can be used as an objective measurement for cognitive function.

Broglio S et al. National athletic trainers' association position statement: management of sport concussion. *J Athl Train*. 2014;49(2):245:265.