### Nebraska Sports Concussion Network



www.NebSportsConcussion.org

# Return to Play Progression Following Sports-Related Concussion

Return to Play protocol following a concussion should follow a stepwise process. Step 1 represents the timeframe until post-concussion symptoms resolve completely (see Concussion Symptom Inventory Form/Sideline Assessment Tool). This phase will vary considerably among individuals, and is affected by age, prior history of head injury, injury severity, number of symptoms, and possibly gender among other clinical considerations. During Step 1, one should follow the Return to Learn Guidelines where complete resolution of symptoms generally occur within 7-10 days on average, but may extend longer for others. *Progression to Step 2 can not occur until all post-concussion symptoms have* 

resolved at rest and during cognition (classroom work). Progression to the next step and each step thereafter requires the athlete to remain symptom-free (asymptomatic). Generally, a minimum span of 24-48 hours should transpire between steps (after completing Step 2), with each exercise bout being at least 30 minutes or more in duration unless noted otherwise. The athlete should be continually monitored for the return of any symptoms during exercise and afterwards. If at any time, an athlete experiences any post-concussion symptoms, they are to stop and rest until symptom-free once again for 24-48 hours before resuming the progression at the previous level when symptoms returned.

## Step 1 Rest - No Exertional Activities, complete rest until symptom-free; Follow Return to Learn Guidelines

- The athlete must remain at rest until symptom free including rest from both physical activity and cognitive/mentally taxing activity (refer to bottom of page).
- If neurocognitive testing is not available, begin counting the number of days once being symptom-free at rest.

#### Step 2 Light, Aerobic Activity, 10-20 minutes (<70% max. heart rate)

- This can include walking, swimming, or riding a stationary bike.
- No resistance training or weight lifting.

#### Step 3 Sport/Position/Event Specific Exercises, Conditioning Drills

Restricted, individual workout: light-moderate conditioning drills; running drills/routes, agility
drills; shooting, throwing, catching, kicking, ball control, passing drills; half-court drills; lightmoderate intensity weight-lifting; shadow mat drills (no stand-ups, take-downs, partners).

#### **Step 4** Non-Contact Practice

- Athlete must have written authorization from an appropriate licensed healthcare provider (i.e. MD/DO, neuropsychologist, athletic trainer), and have written permission from a parent before resuming participation.
- Athlete is able to participate in non-contact practice once neurocognitive post-test composite scores are near or return to baseline, or where testing is otherwise considered acceptable; or
- If neurocognitive testing is not available, the athlete may resume non-contact practices in 7-10 days <u>after being symptom-free</u> only as directed by an approved licensed healthcare provider.
- No live, full-speed, scrimmaging, or full-court activity; no activity that involves using the head.

#### **Step 5 Full-Contact Practice**

- The athlete is able to fully participate in practice without restrictions.
- Assess readiness to play and compete. Monitor for return of post-concussion symptoms.

#### **Step 6 Resume Competition**

• The athlete is able to compete without restrictions. Monitor for symptom reoccurrence.

\*Cognitive Rest includes restricting: mathematical/analytical problem solving, focused/prolonged reading, texting, video gaming, or prolonged TV watching. These activities have been shown to prolong recovery from a concussion.

Completion Date/Initials Step 1

Step 2

Step 3

Step 4

Step 5

Started Step 6