# **Cloudcroft Guidelines of Return to Play**

Return to Play protocol following a concussion should follow a stepwise process. Step 1 represents the timeframe until post-concussion symptoms resolve completely. 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. Step 1 and the complete resolution of symptoms on average occur within 7-10 days, but may extend several weeks or longer for others. Progression to Step 2 cannot occur until all post-concussion symptoms have resolved.

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 at least 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.

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

## 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, caching, kicking, ball control, passing drills; half-court drills; light-moderate intensity weight-lifting; shadow mat drills (no stand-ups, take-downs, partners).

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

- -Athlete must have written authorization from an approved licensed healthcare provider (i.e. MD/DO, neuropsychologist, athletic trainer) and have a written authorization 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 approval 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.

<sup>\*</sup>Cognitive Rest includes restricting: mathematical/analytical problem solving, focused/prolonged reading, testing, playing video games or watching TV.

These activities have been shown to prolong recovery from a concussion.