

Medical City Dallas Office: 7777 Forest Ln. Suite B-445 Dallas, TX 75230 (972) 284-7770 Presby Plano Office: 6300 W. Parker Rd. Suite 2-126, Plano, TX 75093 (972) 526-0700

Concussion Return to Learn / Play Protocol

Like any injury, rest is a key component of healing. Unfortunately, a child's brain recovers more slowly than adults and on average it will take a middle school student 4+ weeks and a high school student 2-3 weeks to fully recover. To help your child's brain recover as quickly as possible, follow the protocol below. Each stage of the protocol should take a minimum of 24 hours to complete. If symptoms worsen on one stage of the protocol, the child should immediately rest until all symptoms have resolved and then resume the protocol at the stage prior to the one in which symptoms developed.

Return to Learn

| Stage | Activity | Objective | |
|--|--|---|--|
| 1. Home – Total Rest | Complete cognitive rest No mental exertion – no computer, texting, video games or homework. Stay at home No driving | Recovery | |
| 2. Home – Light Mental Activity | Slowly reintroduce cognitive activities | Gradual controlled increase in cognitive activities | |
| 3. Home – Increased Mental Activity | Homework in longer increments Initially 20-30 minutesProvide quiet place for scheduled mental rest | Increase cognitive stamina by repetition of short periods of cognitive activity | |
| Progress to the next level when able to handle 30-40 minutes of mental exertion without worsening of symptoms and able to tolerate 1-2 cumulative hours of homework at home. | | | |
| 4. School – Part Time | Half day of school with accommodations No standardized testing Modified classroom testing Provide extra time, extra help, and modification of assignments | Re-entry into school with accommodations to allow for increased cognitive load | |

| 5. School – Full Time | Full time school with minimal accommodations No standardized testing, routine tests ok Continue decrease of extra time, help, and modification of assignments May require more supports in academically challenging subjects | Accommodations decrease as cognitive stamina improves | | |
|--|---|---|--|--|
| Progress to the next level when able to handle 60 minutes of mental exertion | | | | |
| without worsening of symptoms If student is an athlete, he/she may begin the Return to Play Protocol at step 2 | | | | |
| 6. School – Full Time | Attends all classesFull homeworkNo accommodations | | | |
| If symptoms continue beyond 3-4 weeks, prolonged in-school support is required and the parent should request a 504 plan meeting. | | | | |

Return to Play

| Stage | Activity | Objective |
|-----------------------------------|---|--|
| 1. No activity | Complete cognitive (e.g. mental) rest | Recovery |
| 2. Light aerobic exercise | Walking, swimming or stationary bicycle keeping intensity less than 70% of maximum predicted heart rate | Increase heart rate |
| 3. Sport- specific exercise | Skating drills in ice hockey, running drills in soccer. No head impact activities | Add movement |
| 4. Noncontact training drills | Progression to more complex training drills, e.g. passing drills in football and ice hockey | Exercise, coordination and use of brain |
| 5. Full contact practice | Following medical clearance, participate in normal training activities | Restore confidence and allow coaching staff to assess functional skills |
| 6. Return to play | Normal game play | |

What is a concussion?

A concussion is a disturbance in brain function caused by a direct or indirect force to the head. It results in a variety of nonspecific symptoms (like those listed below) and often does not involve loss of consciousness. Concussion should be suspected in the presence of any one or more of the following:

- Symptoms (such as headache), or
- Physical signs (such as unsteadiness), or
- Impaired brain function (e.g. confusion) or
- Abnormal behavior.

Concussion Symptoms

The following are symptoms of concussion. When the answers to these questions reflect the baseline score (score the student would have achieved prior to the concussion – should be zero), then the student can progress to the next level of the return to play guidelines above. For each question the student should choose the score that reflects how he is feeling at that time. A score of 0 reflects absence of the symptoms while a score of 6 indicates the symptoms are severe. The total of the points accumulated can help the student and parent monitor for resolution of symptoms.

How do you feel?

| Headache | 0123456 |
|--------------------------|---------|
| "Pressure in head" | 0123456 |
| Neck Pain | 0123456 |
| Nausea or vomiting | 0123456 |
| Dizziness | 0123456 |
| Blurred vision | 0123456 |
| Balance problems | 0123456 |
| Sensitivity to light | 0123456 |
| Sensitivity to noise | 0123456 |
| Feeling slowed down | 0123456 |
| Feeling like "in a fog" | 0123456 |
| "Don't feel right" | 0123456 |
| Difficulty concentrating | 0123456 |
| Difficulty remembering | 0123456 |
| Fatigue or low energy | 0123456 |
| Confusion | 0123456 |
| Drowsiness | 0123456 |
| Trouble falling asleep | 0123456 |
| More emotional | 0123456 |
| Irritability | 0123456 |
| Sadness | 0123456 |
| Nervous or Anxious | 0123456 |
| T-4-1. | |

Total: