## Mild head injury and concussion

### Patient and family education

#### Return-to-learn guidelines

<table>
<thead>
<tr>
<th>Stage of healing</th>
<th>Home activity</th>
<th>School activity</th>
<th>Physical activity</th>
</tr>
</thead>
</table>
| **Stage 1**—Your child still has many symptoms and problems. | • Complete rest in a quiet room  
• Allow as much sleep as possible  
• Limit things that require your child to think, focus, reason or remember  
• Remove any electronics and computers from your child’s room  
• Remove any activity planners and to-do lists from your child’s room  
• Give your child plenty of fluids to drink  
• Feed small, frequent meals during the day and at bedtime  
• Give your child plenty of carbohydrates to eat, such as whole grain breads and cereals, pasta and rice | • Your child may not go to school. It is typical to rest for 24 to 48 hours and monitor if symptoms improve | See Stage 1 in next chart |
| **Stage 2**—Your child still has some symptoms and problems. | • Stay in quiet rooms  
• Allow for enough sleep—at least eight hours  
• Allow your child to use TV, video games, texting, tweeting and email for a short time—less than two hours a day; for example, he might have 20 minutes of brain work followed by a one-hour brain break  
• Help your child not to stress over missed schoolwork  
• Continue with fluids, small frequent meals and carbohydrates, as in Stage 1  
• As your child has less symptoms, begin adding homework in short sittings to avoid falling behind | • Return to school for half days  
• Attend core classes only or have shortened class time  
• Rest in the nurse’s office between classes, as needed  
• Your child may not take tests or quizzes  
• Use pre-printed class notes  
• Complete short homework assignments—work 20 minutes at a time with rest breaks in between  
• Talk with the school nurse or teacher about academic accommodations from your doctor and create a plan  
• Avoid very loud noises like music and noise in cafeterias, at PE and recess | See Stages 2-3 in next chart |
| **Stage 3**—Your child’s symptoms and problems have gone away. | • Slowly return to watching TV, playing video games and texting  
• Allow family interactions again  
• Continue with fluids, small frequent meals and carbohydrates, as in Stage 1 | • Your child may gradually return to a full day of classes  
• He may need to schedule make-up work, tests and quizzes  
• He may take one test or quiz a day with extra time, as needed, to complete  
• Tell the school nurse or teacher if any symptoms or problems return | See Stages 2-4 in next chart |
| **Stage 4**—Your child seems back to normal. | • Your child may have near-normal home and social interactions | • Your child may begin to complete past assignments and become caught up | See Stages 5 and 6 in next chart |
| **Stage 5**—Your child may return to full activities. | • Your child may return to normal home and school interactions with five days of no symptoms | • Your child may return to normal school function without the need for extra accommodations or restrictions | See Stage 7 in next chart |
## Mild head injury and concussion

### Patient and family education

### Return-to-play and sports guidelines

<table>
<thead>
<tr>
<th>Stage of healing</th>
<th>Activity allowed</th>
<th>Examples of sports</th>
<th>Examples of other activities</th>
<th>Goal</th>
</tr>
</thead>
</table>
| 1                | • No activity                     | • Complete physical rest               | • Quiet time with rest
• Avoid groups, videos, reading, computers, video games, cellphones, noisy places            | • Brain rest and healing
• BE FREE OF SYMPTOMS                                                  |
| 2                | • Light aerobic activity          | • 10 to 15 minutes of walking or stationary bike
• Light sweat on the brow
• Slight increase in breathing rate                                  | • Walk in park or neighborhood
• Avoid group activities                                              | • Increase heart rate to 30 to 40 percent at most |
| 3                | • Moderate aerobic activity       | • 20 to 30 minutes of jogging or stationary bike
• Arm curls, shoulder raises, or leg lifts with weights that can be comfortably lifted
• One set of 10 repetitions for each activity                         | • Supervised play
• Low risk activities such as dribbling a ball, playing catch, changing directions, jumping, side-to-side slides, chasing a ball or catching a ball on the run
• Increase heart rate to 60 to 80 percent at most                     | • Increase heart rate to 40 to 60 percent at most
• Add resistance
• Use eyes to track objects                                           |
| 4                | • Intense aerobic activity        | • 40 to 60 minutes of running or stationary bike
• Same resistance exercises with weight for three sets of 10 reps
• Pre-competition warm-ups such as passing a soccer ball, throwing a football or doing ladder drills | • Supervised play
• Moderate risk activities such as balance and agility drills
• No head contact activities
• Can sweat and breathe heavy                                         | • Increase heart rate to 60 to 80 percent at most
• Increase resistance
• Mimic the sport                                                     |
| 5                | • Controlled-contact training drills | • 60 to 90 minutes of time on the field, court or mat for specific drills
• Take part in normal practice session
• Contact that is normally part of the sport—only use items that do not hit back, such as a sled in football
• Recheck for symptoms or problems often                             | • Free play
• Run and jump as able
• Full return to PE
• Recheck for symptoms or problems often                             | • Mimic the sport or free play without the risk of head injury |
| 6                | • Full-contact practice           | • After OK from the doctor, may take part in normal training activities | • With parent or adult supervision, may take part in normal activities | • Build confidence
• Assess skills                                                        |
| 7                | • Return to play                  | • Normal game play                      | • Normal playtime and activities                                                              | • No restrictions                                                     |