



## Return to learn guidelines

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Stage of healing	Home activity	School activity	Physical activity
<b>Stage 1</b> —Your child still has many symptoms and problems	<ul style="list-style-type: none"> <li>• Complete rest in a quiet room</li> <li>• Allow as much sleep as possible</li> <li>• Limit things that require your child to think, focus, reason or remember</li> <li>• Remove any electronics and computers from your child's room</li> <li>• Remove any activity planners and "to-do" lists from your child's room</li> <li>• Give your child plenty of fluids to drink</li> <li>• Feed your child small, frequent meals during the day and at bedtime</li> <li>• Give your child plenty of carbohydrates to eat, such as whole grain breads and cereals, pasta and rice</li> </ul>	<ul style="list-style-type: none"> <li>• Your child may not go to school. It is typical to rest for 24 to 48 hours and monitor if symptoms improve</li> </ul>	See Stage 1 in next chart
<b>Stage 2</b> —Your child still has some symptoms and problems	<ul style="list-style-type: none"> <li>• Stay in quiet rooms</li> <li>• Allow for enough sleep—at least eight hours</li> <li>• Allow your child to use TV, video games, texting, social media and email for a short time—fewer than two hours a day, for example, he might have 20 minutes of brain work followed by a one-hour brain break</li> <li>• Help your child to not stress over missed school work</li> <li>• Continue with fluids, small, frequent meals and carbohydrates, as in Stage 1</li> <li>• As your child has less symptoms, begin adding homework in short sittings to avoid falling behind</li> </ul>	<ul style="list-style-type: none"> <li>• Return to school for half days</li> <li>• Attend core classes only or have shortened class time</li> <li>• Rest in the nurse's office between classes and as needed</li> <li>• Your child may not take tests or quizzes</li> <li>• Use preprinted class notes</li> <li>• Complete short homework assignments—work 20 minutes at a time with rest breaks in between</li> <li>• Talk with the school nurse or teacher about academic accommodations from your doctor, and create a plan</li> <li>• Avoid very loud noises, like music and noise in cafeterias, at PE and at recess</li> </ul>	See Stage 2 in next chart
<b>Stage 3</b> —Your child's symptoms and problems have gone away	<ul style="list-style-type: none"> <li>• Slowly return to watching TV, playing video games and texting</li> <li>• Allow family interactions again</li> <li>• Continue with fluids, small, frequent meals and carbohydrates, as in Stage 1</li> </ul>	<ul style="list-style-type: none"> <li>• Your child may gradually return to a full day of classes</li> <li>• He may need to schedule make-up work, tests and quizzes</li> <li>• He may take one test or quiz a day with extra time as needed, to complete</li> <li>• Tell the school nurse or teacher if any symptoms or problems return</li> </ul>	See Stages 2-4 in next chart
<b>Stage 4</b> —Your child seems back to normal	<ul style="list-style-type: none"> <li>• Your child may have near normal home and social interactions</li> </ul>	<ul style="list-style-type: none"> <li>• Your child may begin to complete past assignments to catch up on school work</li> </ul>	See Stages 5 and 6 in next chart
<b>Stage 5</b> —Your child may return to full activities	<ul style="list-style-type: none"> <li>• Your child may return to normal home and school interactions after five days of no symptoms</li> </ul>	<ul style="list-style-type: none"> <li>• Your child may return to normal school function without the need for extra accommodations or restrictions</li> </ul>	See stage 7 in next chart

 [choa.org/concussion](http://choa.org/concussion)

 **Concussion nurse: 404-785-KIDS (5437)**

*This is general information and is not specific medical advice. Always consult with a doctor or healthcare provider if you have any questions or concerns about the health of a child.*



## Return to play and sports guidelines

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Stage of healing	Activity allowed	Examples of sports	Examples of other activities	Goal
1	<ul style="list-style-type: none"> <li>No activity</li> <li>Complete cognitive and physical rest</li> </ul>	<ul style="list-style-type: none"> <li>Complete physical rest</li> </ul>	<ul style="list-style-type: none"> <li>Quiet time with rest</li> <li>Avoid groups, videos, reading, computers, video games, cell phones, noisy places</li> </ul>	<ul style="list-style-type: none"> <li>Brain rest and healing</li> <li><b>BECOME FREE OF SYMPTOMS</b></li> </ul>
2	<ul style="list-style-type: none"> <li>Light aerobic activity</li> </ul>	<ul style="list-style-type: none"> <li>10-15 minutes of walking or stationary bike</li> <li>Light sweat on the brow</li> <li>Slight increase in breathing rate</li> </ul>	<ul style="list-style-type: none"> <li>Walk in park or neighborhood</li> <li>Avoid group activities</li> </ul>	<ul style="list-style-type: none"> <li>Increase heart rate to 30 to 40 percent at most</li> </ul>
3	<ul style="list-style-type: none"> <li>Moderate aerobic activity</li> <li>Light resistance training</li> </ul>	<ul style="list-style-type: none"> <li>20-30 minutes of jogging or stationary bike</li> <li>Arm curls, shoulder raises, or leg lifts with weights that can be comfortably lifted</li> <li>One set of 10 repetitions for each activity</li> </ul>	<ul style="list-style-type: none"> <li>Supervised play</li> <li>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</li> </ul>	<ul style="list-style-type: none"> <li>Increase heart rate to 40 to 60 percent max</li> <li>Add resistance</li> <li>Use eyes to track objects</li> </ul>
4	<ul style="list-style-type: none"> <li>Intense aerobic activity</li> <li>Moderate resistance training</li> <li>Sport-specific exercise</li> </ul>	<ul style="list-style-type: none"> <li>40-60 minutes of running or stationary bike</li> <li>Same resistance exercises with weight for three sets of 10 reps</li> <li>Pre-competition warm-up such as passing a soccer ball, throwing a football or doing ladder drills</li> </ul>	<ul style="list-style-type: none"> <li>Supervised play</li> <li>Moderate-risk activities, such as balance and agility drills</li> <li>No head contact activities</li> <li>Can sweat and breathe heavy</li> </ul>	<ul style="list-style-type: none"> <li>Increase heart rate to 60 to 80 percent max</li> <li>Increase resistance</li> <li>Mimic the sport</li> </ul>
5	<ul style="list-style-type: none"> <li>Controlled-contact training drills</li> </ul>	<ul style="list-style-type: none"> <li>60-90 minutes of time on the field, court or mat for specific drills</li> <li>Take part in normal practice session</li> <li>Contact that is normally part of the sport—only use items that “do not hit back” such as a sled in football</li> <li>Recheck for symptoms or problems often</li> </ul>	<ul style="list-style-type: none"> <li>Free play</li> <li>Run and jump as able</li> <li>Full return to PE</li> <li>Recheck for symptoms or problems often</li> </ul>	<ul style="list-style-type: none"> <li>Mimic the sport or free play without the risk of head injury</li> </ul>
6	<ul style="list-style-type: none"> <li>Full-contact practice</li> </ul>	<ul style="list-style-type: none"> <li>After OK from the doctor, may take part in normal training activities</li> </ul>	<ul style="list-style-type: none"> <li>With parent or adult supervision, may take part in normal activities</li> </ul>	<ul style="list-style-type: none"> <li>Build confidence</li> <li>Assess skills</li> </ul>
7	<ul style="list-style-type: none"> <li>Return to play</li> </ul>	<ul style="list-style-type: none"> <li>Normal game play</li> </ul>	<ul style="list-style-type: none"> <li>Normal playtime and activities</li> </ul>	<ul style="list-style-type: none"> <li>No restrictions</li> </ul>

Maximum heart rate is determined by subtracting the athlete's age from 220 and multiplying by the percentage. For example:

- Your target or ideal heart rate for exercise during Stage 2 is usually 30 to 40 percent of your maximum heart rate.
- To find your maximum heart rate, subtract your age from 220.
- If you are 15 years old, subtract 15 from 220 = 205. Next, multiply that number by 30 and 40 percent. This will give you a target heart rate for exercise in Stage 2.
- 205 times 30 percent = 62 beats a minute.
- 205 times 40 percent = 82 beats a minute.
- This means that your target heart range for exercise in Stage 2 is between 62 and 82 beats a minute.

- Allow 24 hours between each activity stage in the chart.
- **This means that it will take at least seven days to return to full activity.**
- For your child to move from one stage to the next, he must be able to do an activity at 100 percent without symptoms or problems for 24 hours.
- If any symptoms return, it means his brain is not ready for the next stage and he should drop back to the previous stage.
- Once your child has no symptoms again for 24 hours, he can try the activities in that stage again.

*Concussion Program adapted from the Zurich Concussion Conference November 2008, Br J Sports Med 2009; 43:i76-i84.*

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