

ORGANIZATION NEWS

Information/Education Page

Returning to Activity After a Concussion



Concussion is a common injury in children and adults. It is caused by a blow or jolt to the head. Concussion can result in symptoms that make it difficult for you to do your usual day-to-day activities. Traditionally, people with a concussion were instructed to rest until they no longer had any symptoms at all. Experts now agree that after a brief period of rest, most people with a concussion should start trying light physical and cognitive activity. Different activities can be slowly added, as long as your symptoms are stable or improving.¹

This education resource is designed to guide individuals with a concussion (or those caring for someone with a concussion) on how to safely reintroduce activity so that you can do the things you need, want, and love to do.

Possible symptoms after concussion

Concussion can affect:

- How you feel physically. For example, headaches, balance problems, dizziness, and sensitivity to light and noise are common.
- Your ability to think clearly and quickly.
- Your emotional health. You might feel more emotional, irritable, sad, or nervous.
- Your sleep, including trouble falling asleep or sleeping more than usual.

Concussions affect each person differently. Some people have 1 or 2 of these symptoms, and some people have many of these symptoms.

Note: Only a qualified health professional who personally examines you can diagnose a

concussion. Many of the symptoms listed above are hard for people to recognize and having these symptoms does not necessarily mean that you had a concussion.

General recommendations for returning to activity

Here are a few general points you should keep in mind when returning to your usual activities after concussion.

- Isolating yourself and stopping all of your activities for a long period of time is usually not necessary or helpful.
- Each person will progress at his or her own pace.
- Be patient. Taking small steps is most likely to help you return to activity comfortably and safely. Doing too much too soon may make you feel worse.
- Once you can do an activity a few times without worsening your symptoms, try gradually increasing your activity level.
- You can increase the frequency (how often or how many times you do something), duration (how long you do it for), or intensity (how much effort it takes) of an activity. It may be best to increase only 1 of these at a time.
- If your symptoms worsen each time you try to do more, consider slowing the pace of your return to activity.

Importantly: While you are recovering, avoid activities that put you at risk for another concussion.

Stages of Returning to Activity After Concussion

If you have been diagnosed with a concussion, following the stages can help you gradually return to your usual activities.

Stage 1: Initial Rest (first 24-48 hours after a concussion)

- Spend most of your time in a quiet environment with limited distractions.
- Avoid intense physical activities that leave you out of breath, like exercise or heavy lifting.
- Limit demands on your brain like screen time (computer, smartphone, television), work or school activities.
- Sleep as much as your body needs, preferably at night. Try to keep your regular night sleeping routine.
- Complete rest for more than 48 hours after a concussion is generally not recommended.^{1,2} However, if after 48 hours you have severe symptoms while doing basic tasks around the house, ask your medical doctor if you are ready to increase your activity level or need more rest.

Stage 2: Gradually Increasing Your Activity

- Try tasks that are simple and familiar, like reading or visiting with a friend. You could also try light physical activity like walking or riding a stationary bike.
- At first, keep these activities brief (less than 10 minutes to start).
- Once you can tolerate simple and familiar tasks in your home environment, you can progress to more demanding activities and gradually return to environments outside of your home like school and work.
 - Students and workers—You may need temporary accommodations and supports such as reduced hours, reduced workload, access to quiet and distraction-free environments to complete tasks, or rest breaks. It is important to communicate with your school or workplace about your symptoms and needs.
 - Athletes—You should gradually increase your participation in sport by the detailed steps that are outlined in the resources at the end of this document.
- Some people's symptoms get a little worse when they increase their activity. Usually, these symptom changes go away within a day. If your symptoms get a lot worse with activity, you may be returning to your usual activities too quickly.

Stage 3: Full Return to Activity

- Gradually cut down and stop taking extra rest breaks and using accommodations and other supports at school or work.
- Do not return to sport competition until you have fully returned to school or work activities and your medical doctor agrees that you are ready.
- Do not return to risky activities where another concussion could occur, such as contact sports or dangerous job tasks, until your medical doctor tells you that you are ready.

The Four Ps can help you gradually increase your activity after a concussion.³

- | | |
|------------|--|
| Prioritize | <ul style="list-style-type: none"> • Decide what activities are most important to you and what you are able to do, based on how you feel. • Make these activities a priority. |
| Plan | <ul style="list-style-type: none"> • Plan what activities you will do, when you will do them, how you will do them, and where you will do them. • Do activities that require more energy at times in the day when you feel best. • Plan rest breaks into your day as you progress toward full return to activity. |
| Pace | <ul style="list-style-type: none"> • It may take you longer to complete activities after a concussion. • Break up long or difficult tasks so that you are not doing too much at once. |
| Position | <ul style="list-style-type: none"> • Environments that are noisy, are busy, or require a lot of physical effort, like too much standing, will use more energy. • Be thoughtful about <i>where</i> you do an activity. Start with quiet places that have few distractions. |

How long will it take to return to activity after a concussion?

Many adults with a concussion can return to full activity within the first 2 weeks. Children usually return to full activity within 1 month. However, each person will progress through the stages of returning to activity at a different pace. If you are struggling to return to full activity, consider asking your medical doctor for a referral to a specialist or multidisciplinary clinic.

More advice on return-to-school and return-to-sport

For detailed guidance on returning to sport or school, some additional resources are listed below.

- Infographic: Consensus statement on concussion in sport. Available from: <http://bjsm.bmj.com/content/51/21/1557>
- Canadian Guideline on Concussion in Sport (page 18 and 19). Available from: http://www.parachutecanada.org/downloads/injurytopics/Canadian_Guideline_on_Concussion_in_Sport-Parachute.pdf
- Concussion Awareness Training Tool — Return to Sport Protocol. Available from: <http://ppc.cattonline.com/resources/files/return-to-sport.pdf>
- Concussion Awareness Training Tool — Return to School Protocol. Available from: <http://ppc.cattonline.com/resources/files/return-to-school.pdf>
- Military services members can obtain more guidance on return to duty from the Defense and Veterans Brain Injury Center Patient Activity Guidance after Concussion. Available from: <https://dvbic.dcoe.mil/material/patient-activity-guidance-after-concussion-patient-education-tool>

Authorship

This page was developed by the American Congress of Rehabilitation Medicine Mild TBI Task Force of the Brain Injury Interdisciplinary Special Interest Group. Mild TBI Task Force members: Nick Reed, PhD, Noah D. Silverberg, PhD (*e-mail address*: noah.silverberg@vch.ca), Mary Alexis Iaccarino, MD, Michael McCrea, PhD, Karen L. McCulloch, PhD, William Panenka, MD, Emma Gregory, PhD, Kristen Dams-O'Connor, PhD, Grant L. Iverson, PhD, Chris Weyer Jamora, PhD, Heather Belanger, PhD, Gary McKinney, MS, and Alison M. Cogan, PhD. Other contributors: Christine Provvidenza, MSc, and patient partners.

Disclaimer

This information is not meant to replace the advice of a qualified health professional and should not be interpreted as a clinical practice guideline. This Information/Education Page may be reproduced for noncommercial use for health care professionals and other service providers to share with their patients or clients. Any other reproduction is subject to approval by the publisher.

References

1. McCrory P, Meeuwisse W, Dvořák J, et al. Consensus statement on concussion in sport—the 5th international conference on concussion in sport held in Berlin, October 2016. *Br J Sports Med* 2017;51:838-47.
2. Ontario Neurotrauma Foundation. Guidelines for concussion/mild traumatic brain injury & persistent symptoms. Available from: <https://braininjuryguidelines.org/concussion/>. Accessed June 15, 2018.
3. Holland Bloorview Kids Rehabilitation Hospital. Concussion & you: a handbook for parents and kids. Available from: www.hollandbloorview.ca/concussionhandbook. Accessed June 15, 2018.