

Workplace concussion recovery is everyone's responsibility

Primary care providers have an important role in supporting patients in the early diagnosis and management of concussion-related symptoms, as well as their return to activity and function. According to WorkSafeBC data, there were 2754 work-related concussion claims that required ongoing benefits in 2023.¹

An early and evidence-based approach by primary care to concussion, or mild traumatic brain injury (mTBI), can go a long way toward supporting injured workers in their return to function and work. One study found that up to 20% of those diagnosed with concussion experience persisting symptoms and related disability, impacting their quality of life and potentially delaying their return to work.² And it is estimated that one in six adults with concussion have symptoms that persist beyond 4 weeks.³

The importance of early intervention was highlighted in a recent pilot by WorkSafeBC. In 2021–2022, WorkSafeBC began an early referral pilot, in which injured workers with concussion were referred to the Early Concussion Assessment and Treatment program approximately 10 days earlier than when the program first began in 2020. Findings indicated that when workers received this early intervention even earlier, they were 3.1 times more likely to return to work within 12 weeks and 1.4 times more likely to return to work within 26 weeks. The data showed that this earlier intervention also decreased long-term sequelae, with 13% fewer referrals to long-term disability.

New clinical practice guideline for concussion

A new British Columbia clinical practice guideline, published in 2024, provides recommendations for the assessment, diagnosis, and management of concussion/mTBI that can be applied to all patients with concussion, including those with work-related concussion.⁴

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The guideline provides resources on the diagnostic approach to concussion, the role of and approach to investigations, things to look for during follow-up screening and assessment, indications for referral, resources for symptom management and a gradual return to activity, and special considerations. Some key recommendations from the guideline are:

- Assess anyone with a suspected concussion as soon as possible, ideally within 72 hours, and before potential re-exposure to head trauma.
- Rule out serious injury (see Table 1, “Head injury red flags,” in the guideline).
- Confirm a diagnosis.
- Provide patient education and direct early management.
- Screen patients to identify those at risk of persisting symptoms.
- Evaluate patients for other conditions and manage these while also treating/managing concussion.

The guideline also recommends counseling patients about relative rest for the first 24 to 48 hours. It highlights the benefit of

early activation and advising patients they can gradually return to activities even in the presence of mild symptoms, while avoiding activities that risk reoccurrence of head trauma. Providing written and verbal recommendations is also suggested. The Concussion Awareness Training Tool (CATT) has handouts for physicians that can help support your communication with patients. These and other resources are available at <https://cattonline.com>.

New legislation for BC employers and workers

Recent amendments to the Workers Compensation Act in BC include the legal duty that employers and workers have in working together to ensure a worker's safe and timely return to work after any workplace injury, including concussion or mTBI. Employers with 20 or more workers also have a legal obligation to maintain employment of injured workers who have been employed for at least 12 months.⁵ This means that employers must provide alternate or modified duties that allow injured workers to use current levels of functional abilities in the workplace.

Employers and workers are encouraged to collaborate in creating a safe and suitable return-to-work plan that includes a gradual, step-by-step process to return to pre-injury activity levels. This plan would begin based on the worker's current abilities and include a modified schedule to allow for gradual reintegration and adaptation of more challenging tasks, as well as time to engage in symptom-management activities.

Supporting your patient's return to work

In the clinic, supporting your patient's return to work includes making an accurate assessment and diagnosis at the initial

visit, regularly evaluating recovery progress and the patient’s tolerance of activities, encouraging them to follow safe increases in activity levels, and providing educational resources. As detailed in the BC Guideline on concussion/mTBI, a patient’s sleep and mood should also be considered and addressed. The guideline also refers to the association between high initial symptom severity and persisting symptoms. In addition, it is recommended that all patients have a primary care follow-up within 2 weeks of their diagnosis to screen for persisting symptoms and determine whether referrals to secondary care providers are needed. CATT and the BC Injury Research and Prevention Unit have developed a helpful

resource that offers guidance for managing an individual’s return to work following concussion.⁶ The four steps of the process help support a worker’s progress through a graduated return-to-work strategy [Figure].

More resources to help you support patients with work-related concussion

WorkSafeBC has two programs for workers who have accepted claims for work-related concussion.

The Early Concussion Assessment and Treatment program is delivered by a core team of a physical therapist and an occupational therapist, with additional support

from a kinesiologist and a clinical counselor, as indicated. The primary focus of the program is early assessment, education, and focused intervention to facilitate an early and safe return to work and pre-injury function (www.worksafebc.com/en/health-care-providers/rehabilitation/early-concussion-assessment-treatment).

The Post-Concussion Management Program is an interdisciplinary outpatient program where workers receive individualized treatment plans that are implemented in a group environment. The plans are developed by a clinical team including a physician, a psychologist, a clinical counselor, a physical therapist, an occupational therapist,

Return to Work

This tool is a guideline for managing an individual's return to work following a concussion and does not replace medical advice. Every concussion is unique, and recovery is very different for each individual. Timelines and activities may vary based on direction from a doctor, nurse practitioner, or healthcare professional with relevant training. It is important to get medical clearance before returning to high-risk activities.

STEP 1:	STEP 2:	STEP 3:	STEP 4:
<p>Activities of daily living and relative rest*</p> <ul style="list-style-type: none">Maximum of 24-48 hoursActivities at home such as social interactions and light walking that do not result in more than mild and brief** exacerbation (worsening) of concussion symptoms.Examples:<ul style="list-style-type: none">Preparing mealsHouseworkLight walkingMinimize screen time for first 24-48 hours following concussion.Avoid driving during the first 24-48 hours after a concussion. <p>Contact workplace to discuss a tailored Return to Work plan.</p>	<p>Work activities (at work, as tolerated)</p> <ul style="list-style-type: none">Medically unnecessary delays in Return to Work should be avoided.Individuals are encouraged to remain at, or promptly return, to some form of productive work, provided it does not pose risk of re-injury.Reading or other cognitive activities.Take breaks and adapt activities if concussion symptom exacerbation (worsening) is more than mild and brief.**Use of devices with screens may be gradually resumed, as tolerated.	<p>Part-time or full-time days at work with accommodations (if needed)</p> <ul style="list-style-type: none">Gradually reintroduce work activities, according to your graduated return to work plan.May require accommodations, such as:<ul style="list-style-type: none">Partial work days with access to breaks throughout the dayExtra time for tasksAccess to a quiet, distraction-free work environmentGradually reduce accommodations and increase workload until full days without concussion-related accommodations are tolerated.Accommodations can be phased out in "trial" periods, to ensure that they are no longer needed.	<p>Return to work full-time</p> <p>Return to full days at work without requiring accommodations (related to the concussion).</p> <p>Note: Only return to job duties that may have safety implications for you or others (e.g., operating heavy equipment, working from heights) when cleared by a doctor, nurse practitioner, or licensed healthcare professional.</p>
<p>Activities of daily living, as tolerated</p> <p>After a maximum of 24-48 hours after injury, BEGIN STEP 2</p>	<p>Increase tolerance to work-related activities and connect socially with peers/colleagues.</p> <p>If able to tolerate work with accommodations, BEGIN STEP 3</p>	<p>Gradually reduce accommodations and increase workload</p> <p>If can tolerate full days without concussion related accommodations, BEGIN STEP 4</p>	<p>Full workload (no accommodations related to the concussion)</p> <p>Return to Work completed</p>

Returning to work is an individual process, in some instances workers may return to regular duties, while others may need accommodations or placement in a completely different job function. Progression through the strategy may be slowed when there is more than a mild and brief symptom exacerbation**. Therefore, each program should be individually prescribed and should support the reintegration and rehabilitation of the person with the injury or disability back into the workplace. Written determination of medical clearance should be provided before full Return to Work, as required by workplaces or occupational health and safety organizations. Driving should resume after consultation with a doctor, nurse practitioner, or healthcare professional. Progression through the strategy may be slowed when there is more than a mild and brief symptom exacerbation.**

*Relative rest: activities of daily living including walking and other light physical and cognitive activities are permitted as tolerated.

Mild exacerbation (worsening) of symptoms: No more than a 2-point increase when compared with the pre-activity value on a 0-10-point symptom severity scale.*"Brief" exacerbation of symptoms: Worsening of symptoms for up to 1 hour.

***0-10 point symptom severity scale: Please see the [Visual Analog Scale](#) for an example of a 0-10 symptom severity scale.

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Adapted from: Zemek, R., Reed, N., Dawson, J., et al. "Living Guideline for Pediatric Concussion Care." www.pedsconcussion.com

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FIGURE. Tool for managing a patient’s return to work following concussion.

Source: <https://resources.cattonline.com/files/return-to-work-strategy>.

and a kinesiologist (www.worksafebc.com/en/health-care-providers/rehabilitation/post-concussion-management-program).

CATT also has additional resources for you and your patients, including the following e-learning courses:

- Concussion Awareness Training Tool for Medical Professionals (free and eligible for Mainpro+ and Maintenance of Certification credits): <https://cattonline.com/course/concussion-awareness-training-tool-for-medical-professionals>
- Concussion Awareness Training Tool for Workers and Workplaces: <https://cattonline.com/course/concussion-awareness-training-tool-for-workers-and-workplaces>

WorkSafeBC is here to support you. If you have questions or concerns about a patient with work-related concussion,

speak with a WorkSafeBC medical advisor via the RACE app: www.raceconnect.ca/get-raceapp. ■

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Competing interests

None declared.

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