



Concussion Care

- » Providing education to develop awareness of the seriousness of concussions and how to identify and manage them
- » Partnering to assess concussions and guide customized active recovery programs
- » Using best practices and a multi-disciplinary approach for optimal concussion management



Concussion Happens! We can help.

Our National Concussion Working Group

At LifeMark Centric Health we are committed to best practises and the application of scientific research in the development of new services. Our multi-disciplinary National Concussion Working Group has been meeting regularly since 2012 to discuss all aspects of concussion management and to inform clinical practises throughout the company. We would like to acknowledge the contribution of our professionals who have dedicated many hours to this project.

Atlantic Canada

» Marybeth Fleming, Occupational Therapist

» Beth Gilles, Vestibular Physiotherapist

Ontario

» Dr. John Bowman, Sports Medicine

» Mark Eagleson, Physiotherapist

» Lynne Rutledge, Occupational Therapist

» Elke McMellan, Occupational Therapist

» Judy Boivin, PT, Director of Program Development, Committee Chair 2013 - current

Alberta/Prairies

» Sheelah Woodhouse, PT, National Director of Vestibular Rehabilitation

» Bob Sydenham, Orthopaedic Manipulative Physiotherapist

» Gaye Sydenham, VP Quality Improvement and Innovation

» Kathryn Schneider, PhD, Concussion Researcher, Committee Chair 2012-13

» Robynne Smith, Vestibular Physiotherapist

British Columbia

» Dr. Brad Monteleone, Sports Medicine

» Karina Steinberg, Vestibular Physiotherapist

» Melina Kurtatakis, Physiotherapist



LifeMark Centric Health provides best in class medical and rehabilitation services. Our patient-centered approach to care makes our patients our priority.

LifeMark has helped patients in wellness and recovery since 1998. With over 2,000 dedicated employees and consultants across our network of clinics, we provide care to a growing number of patients coast to coast, from all walks of life. Our team of professionals are commended for their breadth of experience, clinical expertise, friendly and professional manner and dedication to providing the highest quality service.

In 2011, **Centric Health acquired LifeMark Health** on a mission to expand the healthcare horizon in Canada with shared values, a vision and renewed approach to offering coordinated healthcare options for patients – **the right care, at the right place and time.**

Today, **Centric Health** is the largest integrated healthcare provider offering healthcare solutions in clinical assessments, rehabilitation, surgical and diagnostics, employer services and specialty pharmacy.

Concussions – Our Philosophy & Goals

Concussions can impact all aspects of an individual’s life. The symptoms of concussion are real and the effects may be serious or even fatal. Our goals are to raise awareness, make our treatment and services easily accessible for everyone, and actively approach recovery when symptoms persist.



As a result of our commitment to quality excellence, we achieved accreditation by CARF International in a number of programs. We focus on the unique needs of each person we serve and monitor the results of all our services.

www.LifeMark.ca | concussions@LifeMark.ca
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Our Concussion Care Approach



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What is a concussion?

A concussion is caused from a direct or indirect hit to the head or body, making the brain rock back and forth inside the skull. The signs and symptoms of concussion may be subtle and may not be immediate. Concussion may or may not involve loss of consciousness.

Concussions have traditionally been under-reported or have gone unrecognized. Ignoring a concussion can lead to serious consequences. It is essential for the injured person to receive prompt assessment and treatment.

ALL concussions must be taken seriously.

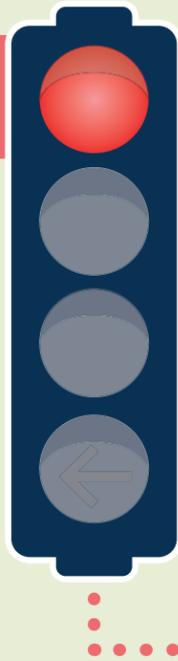
- » Most concussions resolve without complications in 7-10 days.
- » Danger occurs when the injury is not recognized and an individual returns to activity too early. Returning to activities too early can put the injured person at increased risk for further injury and in rare instances death.
- » After experiencing a concussion, the individual is more at risk for another concussion.
- » Adolescents and children are more at risk to get a concussion and they also take longer to recover from a concussion than adults do.

Be Prepared. Contact LifeMark Centric Health for Concussion Education and Baseline Testing.

LifeMark Centric Health Concussion Care

We provide you tools to help assess concussion and actively guide your recovery.





REPORT symptoms as soon as an injury occurs to minimize the risk of making it worse.

RED FLAG Signs & Symptoms

Call 911 immediately if an individual shows any of the following symptoms:

- » Neck Pain
- » Increased Confusion or Irritability
- » Repeated Vomiting
- » Seizure or Convulsion
- » Weakness in Arms/Legs
- » Tingling or Burning in Arms/Legs
- » Deteriorating Consciousness
- » Loss of Consciousness
- » Severe or Increasing Headache
- » Unusual Behaviour
- » Unusual Behaviour Change
- » Double Vision

If someone has a concussion, what do I do?

- » Never leave them alone
- » Do not give any medication
- » Do not let them drive
- » Do not remove helmet
- » Monitor for changes in symptoms

Know the Signs & Symptoms of Concussion.

Physical

- » Headache
- » Nausea
- » Blurred Vision
- » Dizziness
- » Light Sensitivity
- » Noise Sensitivity

Behavioural

- » Drowsiness
- » Fatigue
- » Irritability
- » Depression
- » Anxiety
- » Sleep Disturbed

Cognitive

- » Slowed Thought
- » Fogginess
- » Poor Concentration
- » Memory Loss

*Message to coaches:
“If in doubt, sit them out.”*

Did you know?

- » You may only experience one of these symptoms and still have a concussion
- » You cannot diagnose a concussion on x-ray or CT scan as there is no obvious structural damage
- » You can still sustain a concussion while wearing a helmet or mouth guard

Concussions can happen to anyone in almost any situation. Recognizing the signs and symptoms of concussion is an important first step. We encourage you to **REPORT any concussion symptoms and remove yourself from further risk of injury.**



Our LifeMark Centric Health clinics provide concussion assessments.

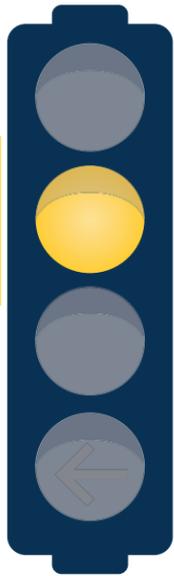
We assess:

- » Symptoms
- » Vestibular or balance issues
- » Vision deficits
- » Central nervous system problems
- » Neck mobility
- » Autonomic function
- » Exercise capacity
- » Neurocognitive function

If rehabilitation is required, a treatment plan and goals are established. If referral to another specialist is required, LifeMark Centric Health will provide an assessment report.

Contact us for a post-injury concussion assessment and get on the road to recovery.



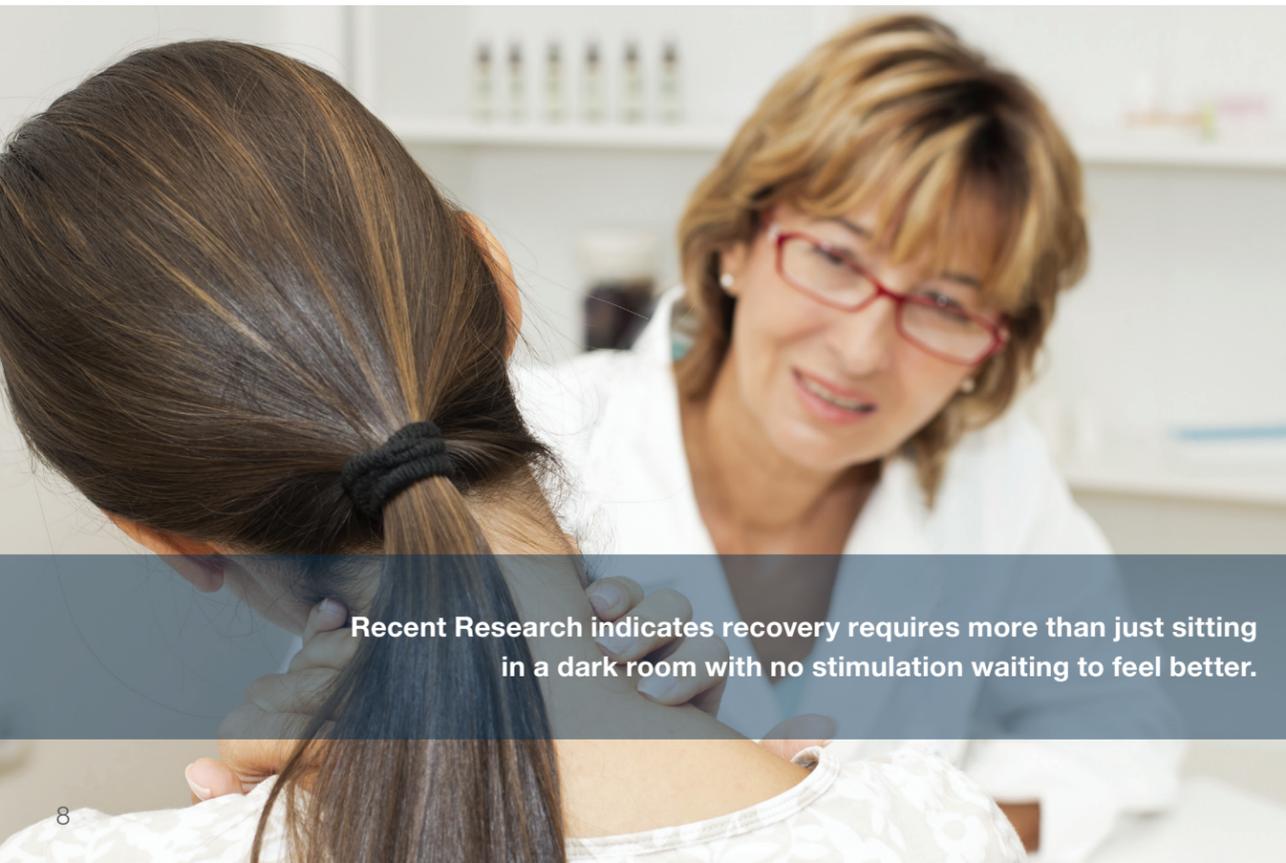


Our Active Concussion **RECOVERY** Approach is recommended to manage concussions if symptoms persist. **REST** is required (cognitive and physical) in the early stages to reduce prolonged recovery.

Process For Progress:

Gradually increase activity tolerance without increasing symptoms or crossing the symptom threshold. Planning and pacing activities is very important.

Doing nothing at all does not promote recovery, but doing too much each day may cause prolonged symptoms.



Recent Research indicates recovery requires more than just sitting in a dark room with no stimulation waiting to feel better.

Research shows that having **physiotherapy treatment from a concussion trained therapist increases your chance of returning to activity earlier.**

Study: 30 athletes with post-concussion symptoms (<10 days with dizziness, neck pain, or headaches) in treatment group with cervical & vestibular treatment vs control group with rest followed by a protocol of graduated exertion

Results: 73% of treatment group were cleared medically at 8 weeks to RTP compared to only 7% in the control group. They had 1 treatment per week.

Participants in the treatment group were almost 4 times more likely to be medically cleared to return to sport by 8 weeks.

Kathryn Schneider et al. BJSM June 2014

EDUCATION is critical through the healing process.

- » Understanding why you need mental and physical rest
- » Learning to monitor your symptoms accurately
- » Helping everyone (parents, teachers, coaches) to recognize their role & be consistent in the guidance provided

LifeMark Centric Health treatment team consist of rehab professionals, with additional training in concussion management.

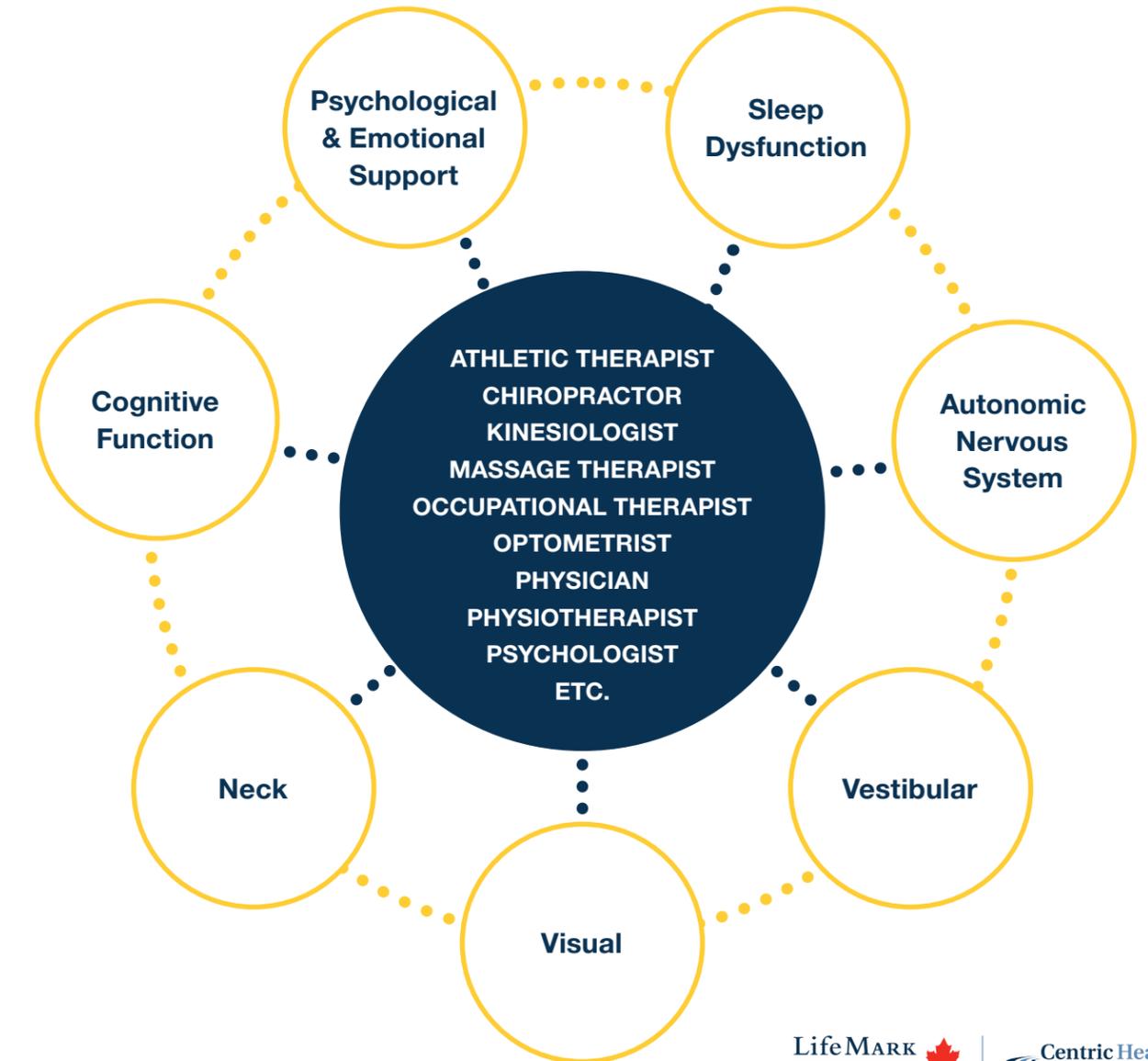
Rehabilitation provided may include:

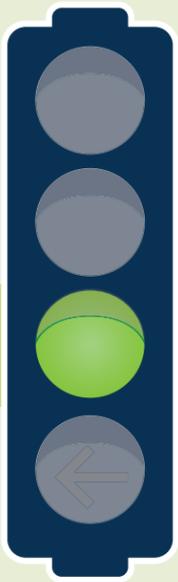
- » Vestibular therapy
- » Vision exercises
- » Progressive Exercise & Sport-Specific Training
- » Manual therapy
- » Cognitive techniques

Our evidence based active recovery model includes a thorough assessment by a healthcare professional and an individualized treatment plan.

Multidisciplinary Concussion Care

In addition to rest, early implementation of an individualized rehabilitation program to address concussion symptoms and deficits has resulted in better patient outcomes. This approach to recovery has many components that may be delivered by a variety of healthcare practitioners.



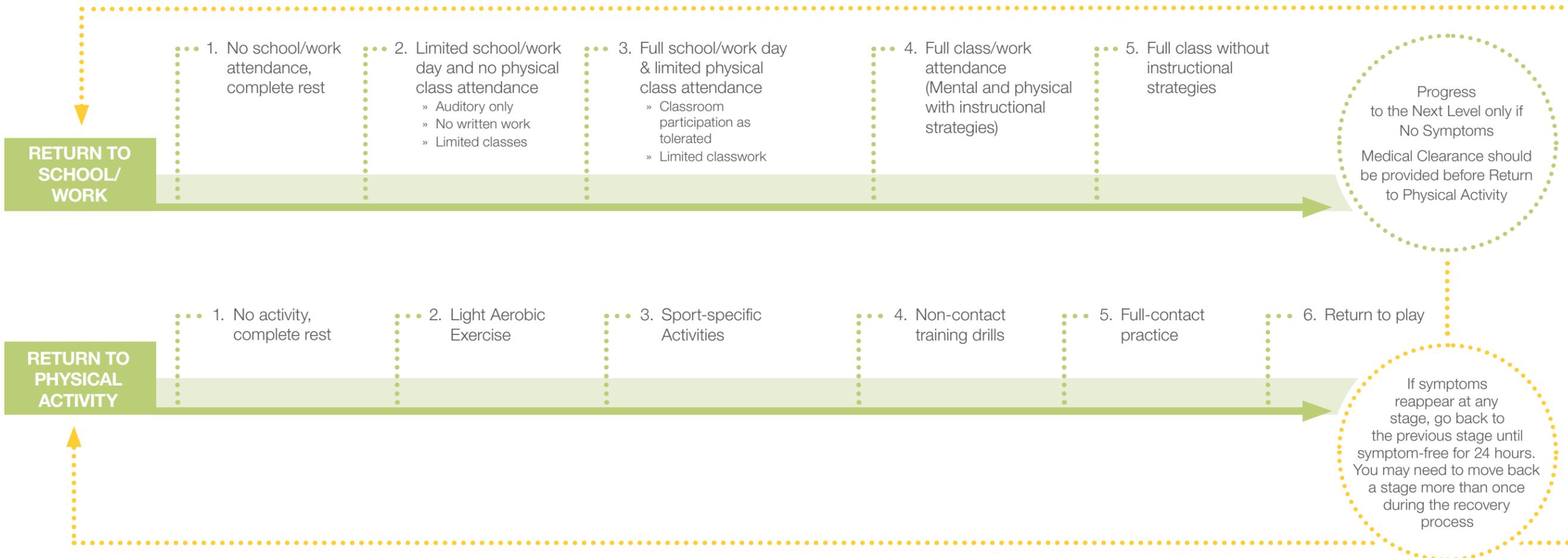


We can guide you through a staged approach to **RETURN** to school/work and physical activities.

Gradual Return to Activities

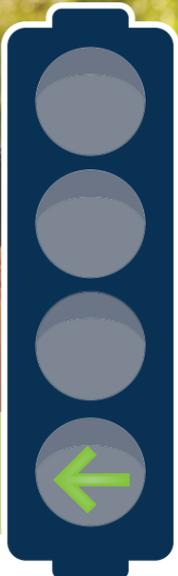
At LifeMark Centric Health we feel that getting back in the classroom or work following a concussion should take priority over getting back to your sports. A focus on the return to school/work first has been shown to lead to a quicker return to physical activities.

Readiness to return to school/work routine is based on the number, type and severity of symptoms experienced from the concussion. Symptoms should be monitored as they may reappear or worsen.



SIGNS & SYMPTOMS TO LOOK FOR

- » Increased problems paying attention or concentrating
- » Difficulty organizing or shifting between tasks
- » Greater irritability
- » Less ability to cope with stress
- » More emotional than usual
- » Fatigue
- » Difficulty handling stimulating environment (light, noise, etc.)
- » Physical symptoms (headache, nausea, dizziness)



The best way to manage a concussion is to **BE PREPARED** before it happens

Be proactive. Make baseline testing part of your concussion management planning.

Contact us to arrange for baseline testing options for individuals or groups:

www.LifeMark.ca | concussions@LifeMark.ca

ImPACT® neurocognitive screening measures and records:

- » Learning and memory skills
- » Ability to pay attention or concentrate
- » Reaction time in problem solving
- » Balance reactions
- » Visual input and abilities
- » Presence of concussion symptoms

If a concussion occurs or is suspected, results can be used as a comparison to your normal brain processes.

Benefits of baseline testing:

- » Helps to guide the recovery process
- » Helps protect individuals from premature return to activity
- » Helps to reduce the risk of subsequent concussion



LifeMark Centric Health uses ImPACT® Concussion Baseline testing because it's the gold standard in neurocognitive testing for concussion management.

- » Used by leagues such as the NFL, MLB, NHL, and MLS
- » Test results are confidentially stored and can be accessed anywhere in Canada with your permission

Educate yourself about LifeMark Centric Health's Concussion Care Approach

REPORT

RECOVER

RETURN



LifeMark Centric Health provides concussion management plans for return to school/work and play. We're here to help prepare and educate you on how to effectively manage concussions when they occur. We provide webinars, educational resources and health professionals for speaking opportunities.

We educate groups for FREE including:

- ✓ Sport Organizations
- ✓ Associations
- ✓ Councils
- ✓ Schools
- ✓ School Boards





Helping you achieve your potential at over 120 clinics across Canada.

- | | |
|--------------------------------|-----------------------------------|
| Acupuncture | Manual and Manipulative Therapy |
| Athletic Therapy | Massage Therapy |
| Bracing | Men's Wellness Pelvic Health |
| Cancer Rehabilitation | Occupational Therapy |
| Chiropractic Services | Orthotics |
| Concussion Rehabilitation | Pedorthics |
| Core Stabilization | Physical Demands Analysis (PDA) |
| Dietitian Services | Physiotherapy |
| Dizziness & Balance/Vestibular | Pilates |
| Ergonomic Assessment | Seniors Wellness |
| Exercise Prescription | Sports Medicine & Sports Physio |
| Functional Capacity Evaluation | Temporomandibular Joint Therapy |
| Hand Therapy | Vocational Rehabilitation Therapy |
| Intramuscular Stimulation | Women's Pelvic Health |

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