

# PHASE

RETURN TO THE PRECEDING STEP IF SYMPTOMS REAPPEAR.

## STEP 1 Light training exercises

- NO CONTACT (checking, jumping or spinning)
- Begin with 5 to 10 minutes of warm-up exercises
- Continue with 15 to 20 minutes of exercises consisting of rapid walking, light running, light swimming (without jumping or diving), stationary bike, treadmill, rowing

## STEP 2 Training specific to the physical activity or sport practiced individually

- NO CONTACT (checking, jumping or spinning)
- Begin with 5 to 10 minutes of warm-up exercises
- Increase the intensity and duration of training (20 to 30 minutes)
- Begin exercises specific to the practiced sport, but without spinning or jumping

## STEP 3 Training specific to the physical activity or sport practiced individually or with a teammate

- NO CONTACT of the checking type
- Increase the duration of the training sessions to 60 minutes
- Begin resistance training
- Continue to engage in sport-specific exercises individually
- Begin throwing, kicking and passing exercises with a teammate
- Begin spinning and jumping at beginner-level

## STEP 4 Training specific to the physical activity or sport practiced as a team

- NO CONTACT of the checking type, NO SCRUMS
- Resume usual training practices and durations
- Increase resistance training and the intensity of sport-specific exercises
- Gradually increase spinning and jumping levels

## STEP 5 Full practice with physical contact (this step should not be initiated before complete resumption of intellectual activities)

- CONTACT, SCRUMS
- Resume full training

Children or teens who complete their training without any symptoms are ready to return to competition according to their usual level of performance. If they are followed by a trainer, their return to competition must be discussed with him or her. The trainer must ensure that they have regained a sufficient level of confidence and have returned to their usual playing level before they can resume competition.

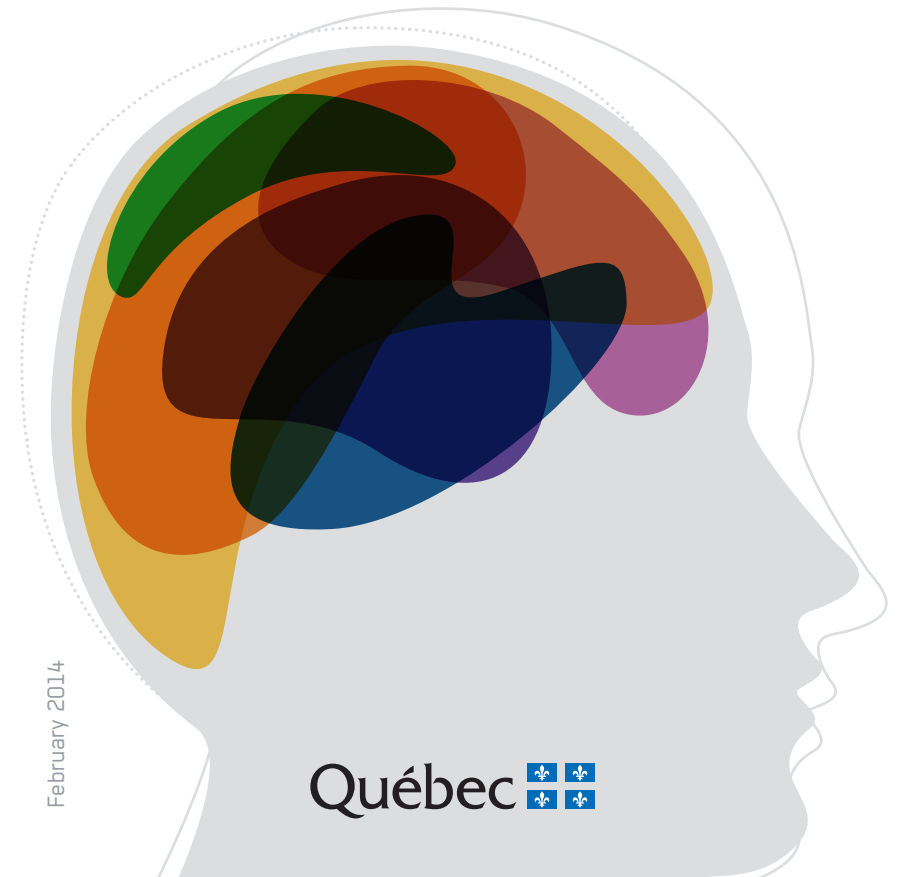
## STEP 6 Return to competition (only if all intellectual activities are symptom-free)

**Non-compliance with these guidelines may prolong or aggravate the symptoms after a MTBI or even make them persistent. It is strongly recommended not to take such a risk.**

# ADVICE

## CHILDREN UNDER 16 YEARS OF AGE FOLLOWING A MILD TRAUMATIC BRAIN INJURY (MTBI)

For the gradual resumption of intellectual activities and physical or sports training



February 2014

A direct or indirect shock to the head can cause a brain injury. A mild traumatic brain injury, commonly called a concussion, frequently causes various symptoms that can affect a person's functioning in his or her normal daily activities.

#### FREQUENT SYMPTOMS FOLLOWING A MILD TRAUMATIC BRAIN INJURY

Headaches	Attention problems
Dizziness	Concentration problems
Blurred vision	Memory problems
Nausea	

For 80% to 90% of people who have sustained a MTBI, these symptoms disappear completely between seven and ten days after the injury and, in 95% of cases, within one month after the injury.

However, the recovery period may be longer for children.

This pamphlet covers three phases. It is important to follow these recommendations in order to encourage the complete disappearance of the symptoms.

# PHASE 1

## INITIAL REST

To promote a symptom-free return to normal activities, it is recommended that intellectual, physical and sports activities, as well as driving a motor vehicle, be limited for a few days.

**Do not drink alcohol or take drugs, including sleep medication, until the symptoms disappear completely.**

The recommended initial rest phase consists of short periods, of 15 to 20 minutes at a time, of light intellectual activities (reading, drawing, video games, etc.) or light physical activities (stretching exercises, slow walking – speed of 4 km/h, etc.).

**Complete bed rest is not advised.**

Activities should be resumed gradually, after symptoms have completely disappeared.

When acute symptoms have disappeared, children can gradually resume normal activities while following the steps described in phases 2 and 3.

# PHASE 2

## GRADUAL RESUMPTION OF INTELLECTUAL ACTIVITIES FOLLOWING A MTBI

Intellectual (school, artistic or recreational) activities require concentration, thought and memory (reading, school work, work on a computer, video games, drawing and painting, etc.). Exposure to loud noises or bright lights (high-intensity music, movie theatres, concerts) must also be included on that list.

During the first two weeks following a MTBI or until normal resumption of symptom-free activity, it is usually recommended **NOT TO ENGAGE** in activities that can generate anxiety (school exams, tests, quizzes, oral presentations).

**It is very important to inform the people in charge and intervening parties (the school administration, teachers, trainers) about the MTBI and associated restrictions.**

### RETURN TO THE PRECEDING STEP IF SYMPTOMS REAPPEAR.

**STEP 1** Limit intellectual activities for a few days in order to ensure proper rest. Limit to periods of 15 to 20 minutes at a time such activities as:

- reading, writing, school work;
- work on a computer, television, video games and text messaging, playing a musical instrument;
- listening to music or other high-intensity noises, exposure to bright lights.

Reduce the intensity of activity if symptoms increase.

**STEP 2** Gradually resume structured intellectual activities (school activities, music, singing, theatre).

- Engage in activities for half-days during the initial period and increase to full days when the child or teen can tolerate them.
- Reduce the intensity of the activity if symptoms increase. It may be useful to withdraw to a calm place or take breaks during the activity.

**STEP 3** Resume the school, artistic or recreational routine completely.

- Resume examinations and other projects requiring a higher level of intellectual activity, but reduce stress and anxiety.
- Begin with one examination a week and increase the number subsequently.

**The complete resumption of intellectual activities should precede any resumption of high-risk physical or sports activities (steps 5 and 6 of the resumption of physical or sports activities).**



# PHASE 3

## GRADUAL RESUMPTION OF PHYSICAL OR SPORTS TRAINING FOLLOWING A MTBI

When children are ready to resume physical or sports training, they must follow the recommended steps.

In the initial days of resumption of physical or sports training, children must avoid engaging in training in which shocks to the head or falls are probable, for example, hockey, soccer, football, basketball, freestyle skiing, skateboarding, snowboarding, mountain biking (this list is incomplete; it is provided as an indication).

At least 24 hours must elapse between each step of gradual resumption of physical or sports training.

If symptoms reappear at any of the steps, **stop the activity IMMEDIATELY and impose a period of rest** until the complete disappearance of the symptoms for at least 24 hours.