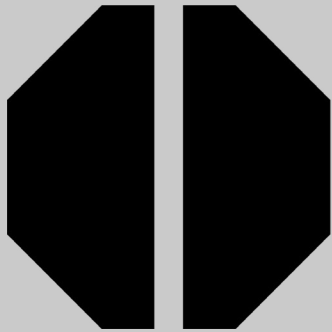


GOVERNMENT OF ONTARIO

CONCUSSION AWARENESS RESOURCE

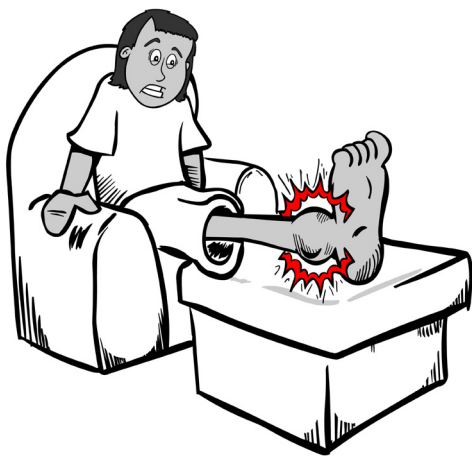
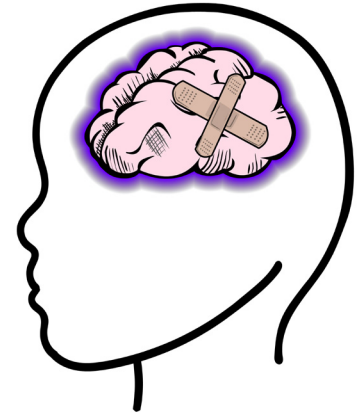


**ROWAN'S
LAW**

E-BOOKLET: AGES 10 AND UNDER

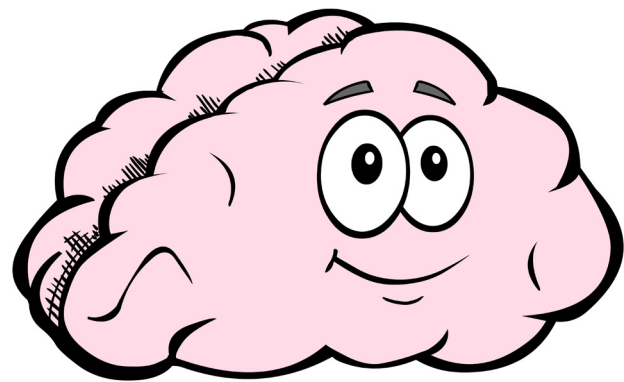
Ontario 

Participating in sports and other activities is fun and healthy. But sometimes when you play you can hurt yourself. Did you know you can even hurt your brain?



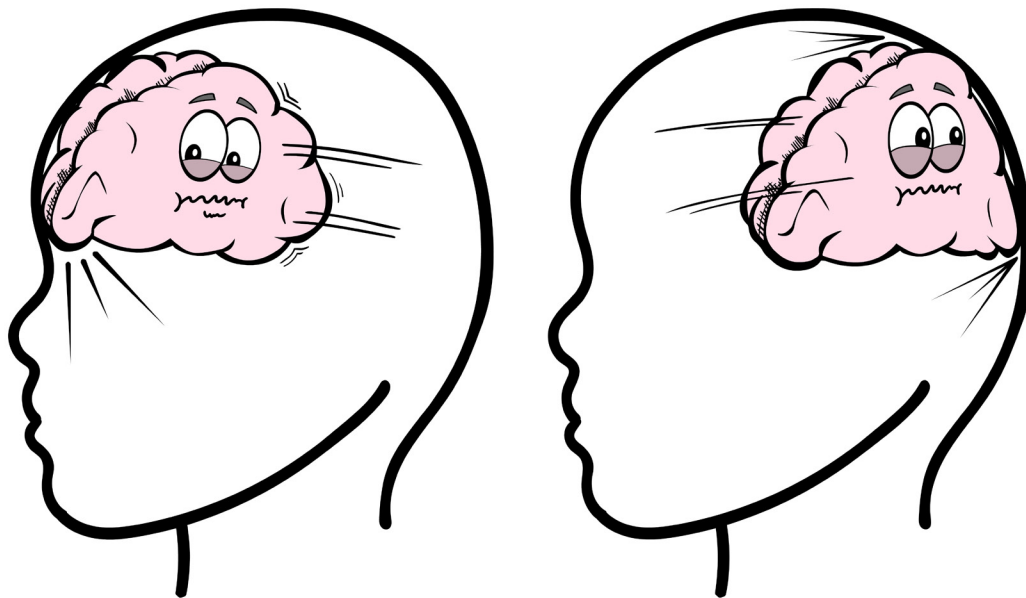
Hurting your brain is different from other injuries. If you sprain your ankle, you can see it get all red and puffy. But when you hurt your brain, it doesn't show on the outside because it's inside your head!

One kind of brain injury is called a concussion. Keep reading to learn about concussions and what to do if you think you might have one. Your brain is very important, so you want to keep it safe!



WHAT IS A CONCUSSION?

A concussion happens when your brain moves around inside your head. A hard bump to your head, neck or body can cause a concussion. For example, you can get a concussion if you are hit in the head with a ball or if you fall down hard onto the floor.



A concussion is a serious injury. Most people get better quickly but some people have long-term problems with their memory or how they feel.

KEEP YOUR BRAIN SAFE: PREVENT CONCUSSIONS!

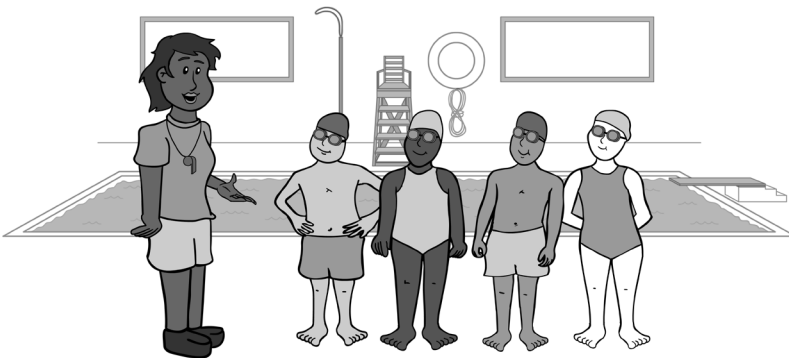
Learn about concussions to help stay safe.

You should also:

- Make sure your sports equipment is in good condition, that it fits and that you are wearing it properly.
- Follow the rules of your sport or activity. This also means listening to your coach or teacher when they give you instructions, like putting equipment away so no one trips on it.



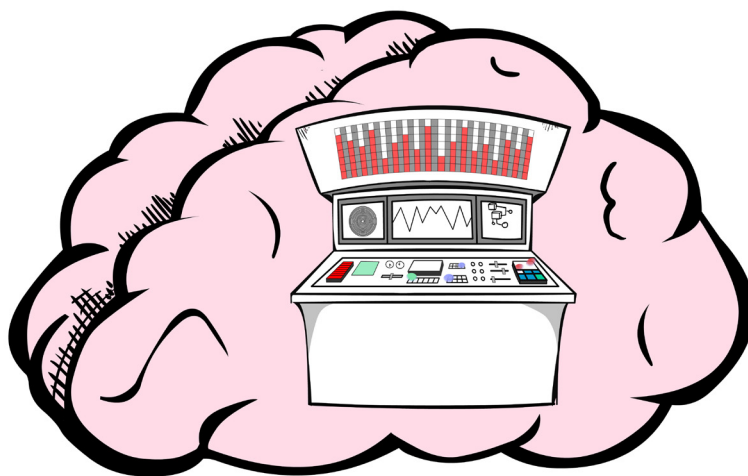
- Read and talk about how to follow the Concussion Code of Conduct for your sport.
- If you get hurt and don't feel right, make sure to tell a parent, coach, teacher or other adult you trust so they can help.



KEEP YOUR BRAIN SAFE: KNOW THE SIGNS AND SYMPTOMS OF A CONCUSSION!

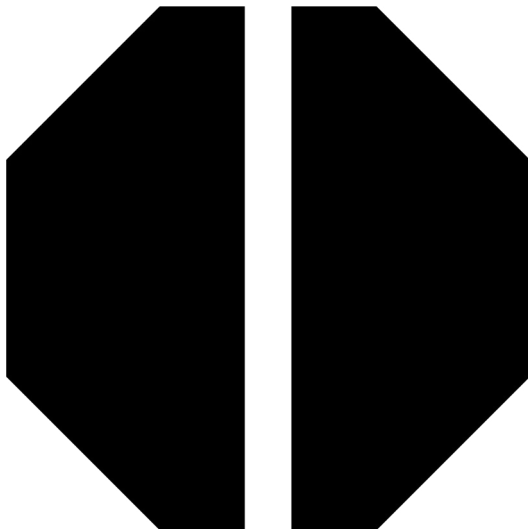
▶ HIT. STOP. SIT.

Your brain controls how you think, feel and move. So, hurting your brain can affect you in lots of ways. The chart below shows some common signs and symptoms of a concussion.



HOW YOU MIGHT FEEL:

- Headache
- Dizziness
- Throwing up or feeling like throwing up
- Blurred vision
- Lights or sounds bother you
- Ringing in your ears
- Balance problems
- Tired
- "Don't feel right"



EMOTIONAL:

- Upset or grumpy
- More sad than usual
- Nervous or anxious

THINKING PROBLEMS:

- Feeling confused
- Problems concentrating
- Problems remembering, like what happened before you got hurt

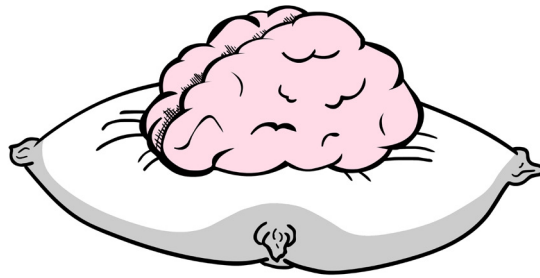
SLEEP PROBLEMS:

- Sleeping more than usual
- Sleeping less than usual
- Having a hard time falling asleep

If you think you, a friend, teammate or classmate has one or more of these symptoms, tell an adult you trust. You should not be left alone if you think you have a concussion.



KEEP YOUR BRAIN SAFE: WHAT TO DO IF YOU THINK YOU HAVE A CONCUSSION.



If you have one or more of these symptoms you should:

- 1.** Stop playing.
- 2.** Tell an adult, like a parent, teacher or coach.
- 3.** Get checked by a medical doctor or nurse practitioner.
- 4.** Rest and recover.

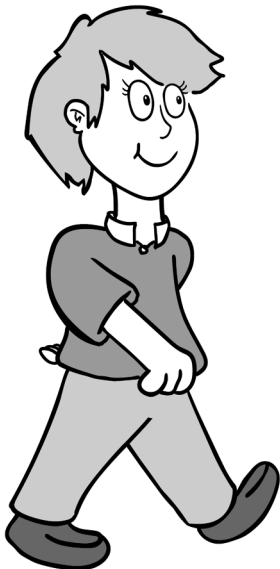


GETTING BETTER

When you have a concussion, rest is the first step for getting better.

You will have to stop doing things for a bit if they make you feel worse, such as playing video

games, school work, using a phone or tablet, playing sports or taking part in physical education class. You need to get proper sleep.

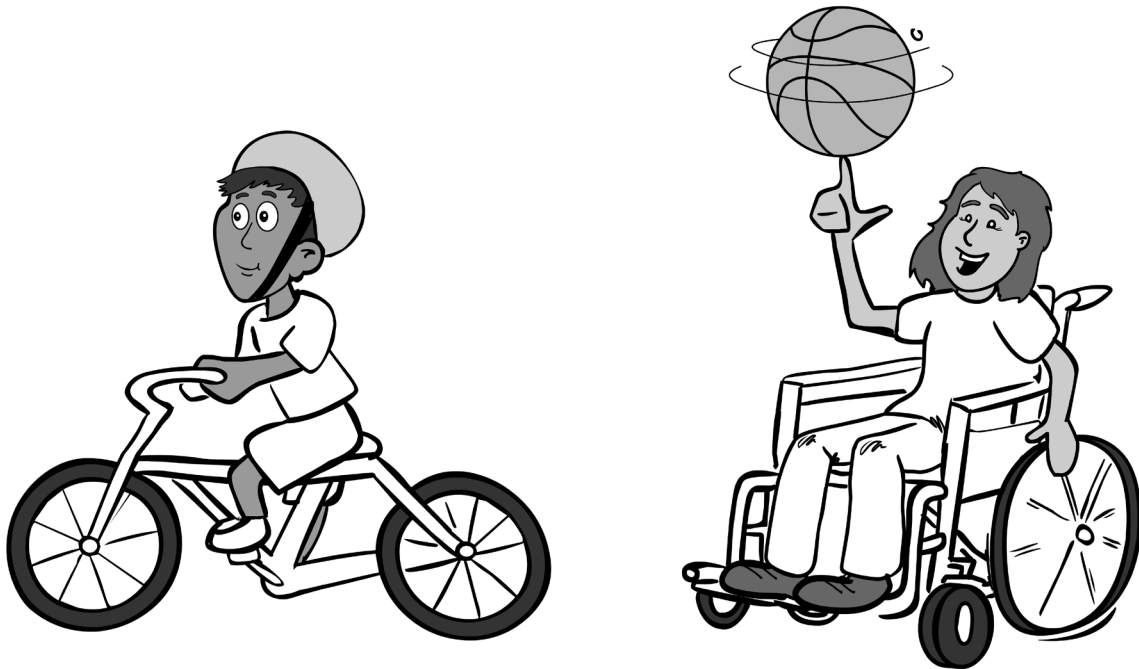


As your brain heals, you will slowly get back to your usual activities at school, at play and in sport. Getting back to your full routine at school is an important step in getting better. First, you will do simple things such as reading and going for short walks.



Once you can do things like this without feeling worse, you can move to the next step. As long as you feel OK, your parents, coaches and teachers will help you add more activities, such as running, playing with friends, attending school and practicing your sport. The last step will be taking part in games or competitions.

Your medical doctor or nurse practitioner will tell you when it's OK to go back to your activities.



REMINDER

Playing safe will help prevent you from getting injured so that you can keep doing things you love! If you think you might have a concussion, remember:

- 1. Stop playing.**
- 2. Tell an adult.**
- 3. Get checked by a medical doctor or a nurse practitioner.**
- 4. Rest and recover.**





Rowan Stringer

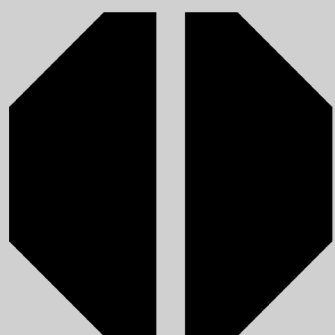
ROWAN'S LAW

This e-booklet is part of a series of Rowan's Law concussion awareness resources. Rowan's Law was named for Rowan Stringer, who was a high school rugby player from Ottawa. One day, while playing rugby with her team, Rowan got a concussion. Most people with a concussion get better after they rest and heal. But Rowan didn't know her brain was hurt and needed time to heal. Her parents, teachers and coaches didn't know, either. So, Rowan kept playing rugby. She got hurt two more times. Rowan's brain was so badly hurt that she couldn't get better.

This resource is not meant to replace medical advice about your health care. For more information about concussions please speak with a physician or nurse practitioner.

GOVERNMENT OF ONTARIO

CONCUSSION AWARENESS RESOURCE



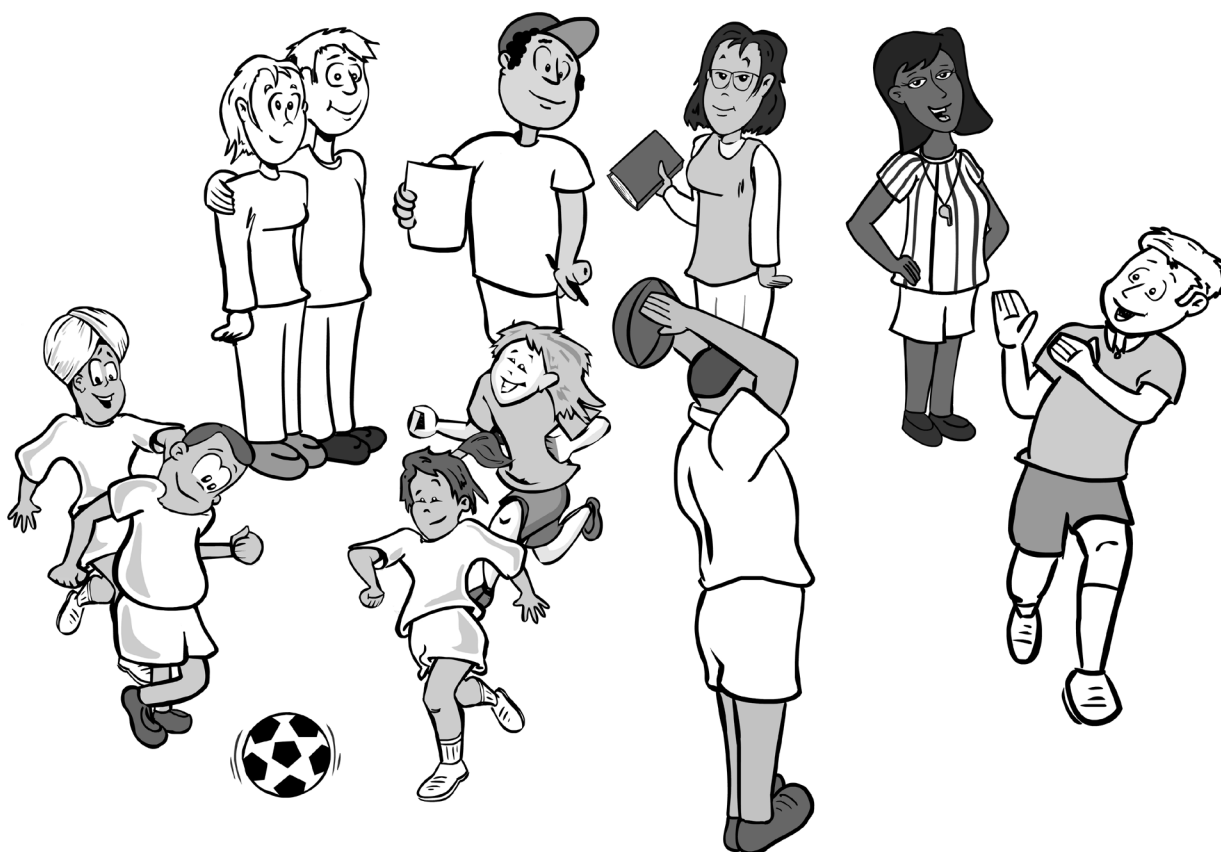
**ROWAN'S
LAW**

E-BOOKLET: AGES 11-14

Ontario 

Preventing injuries will help you stay active throughout your life. Some injuries are easy to see and treat, but what about an injury inside your head? Brain injuries, such as concussions, don't show on the outside and are not always obvious. Even though others can't see your concussion, you will feel the effects and need the proper care to get better.

This resource will help you learn more about concussions, so you can stay active and safe.



WHAT IS A CONCUSSION?



A concussion is a brain injury. It can't be seen on X-rays or through other medical procedures such as CT scans or MRIs. Having a concussion may affect the way you think, feel and act.

Any blow to your head, face or neck may cause a concussion. A concussion may also be caused by a blow to your body if the force of the blow causes your brain to move around inside your skull. Examples include being hit in the head with a ball or falling hard onto the floor.

A concussion is a serious injury. While the effects are typically short-term, a concussion can lead to long-lasting symptoms and even long-term effects, such as memory problems or depression.

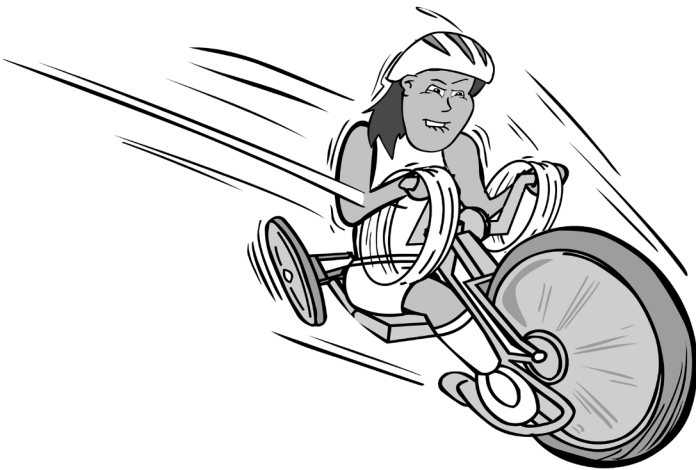


PREVENTING A CONCUSSION

First, educate yourself about concussions.

You should also:

- Make sure your sports equipment is in good condition;
- Make sure your equipment fits properly;
- Respect the rules of your sport;

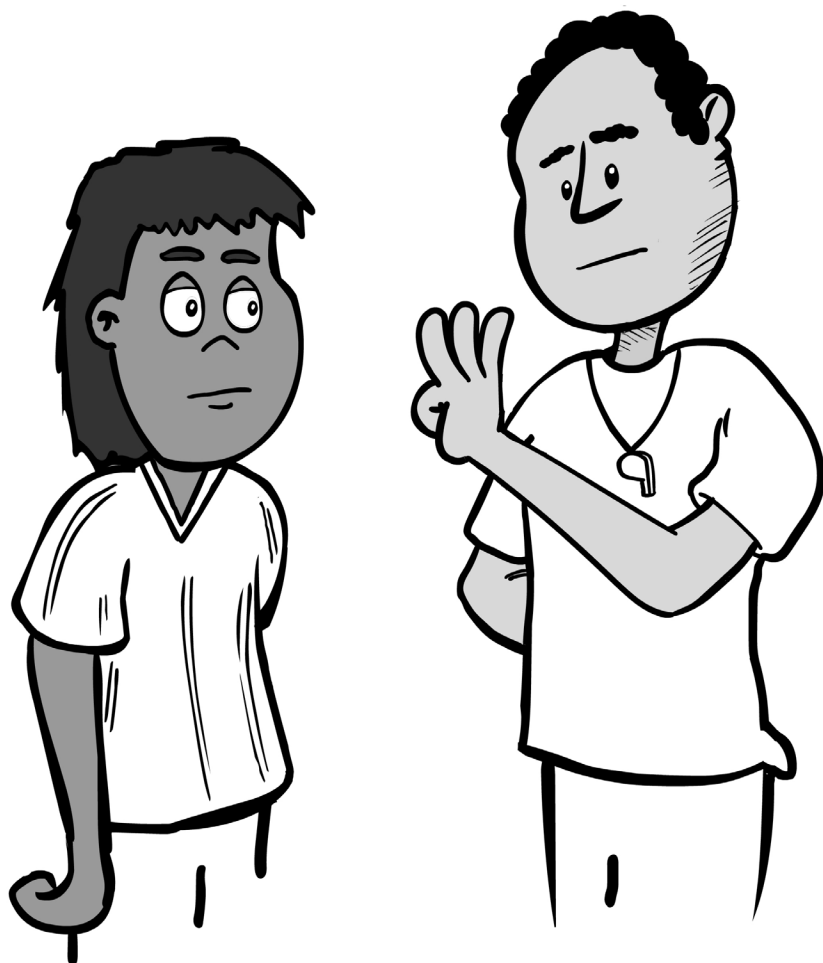


- Follow your sport club/school's Concussion Code of Conduct; and
- Report injuries to an adult you trust, such as a parent, coach or teacher. Understand the importance of speaking up to avoid risks of further injury.

RECOGNIZING A CONCUSSION

▶ HIT. STOP. SIT.

If you have a concussion you might have one or more of the signs or symptoms listed below. They might show up right away or hours, even days, later. Just one sign or symptom is enough to suspect a concussion. Most people with a concussion **do not** lose consciousness.



Common signs and symptoms of a concussion:

PHYSICAL:

- Headache
- Pressure in the head
- Dizziness
- Nausea or vomiting
- Blurred vision
- Sensitivity to light or sound
- Ringing in the ears
- Balance problems
- Tired or low energy
- Drowsiness
- "Don't feel right"

EMOTIONAL:

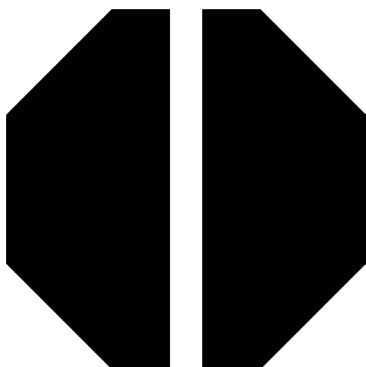
- Irritability (easily upset or angered)
- Depression
- Sadness
- Nervous or anxious

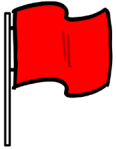
COGNITIVE (THINKING):

- Not thinking clearly
- Slower thinking
- Feeling confused
- Problems concentrating
- Problems remembering

SLEEP-RELATED:

- Sleeping more or less than usual
- Having a hard time falling asleep

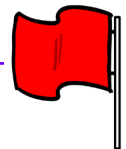




RED FLAGS:

“Red flags” may mean you have a more serious injury. Treat red flags as an emergency and call 911.

- Neck pain or tenderness
- Double vision
- Weakness or tingling in arms or legs
- Severe or increasing headache
- Seizure or convulsion
- Loss of consciousness (knocked out)
- Vomiting more than once
- Increasingly restless, agitated or aggressive
- Getting more and more confused

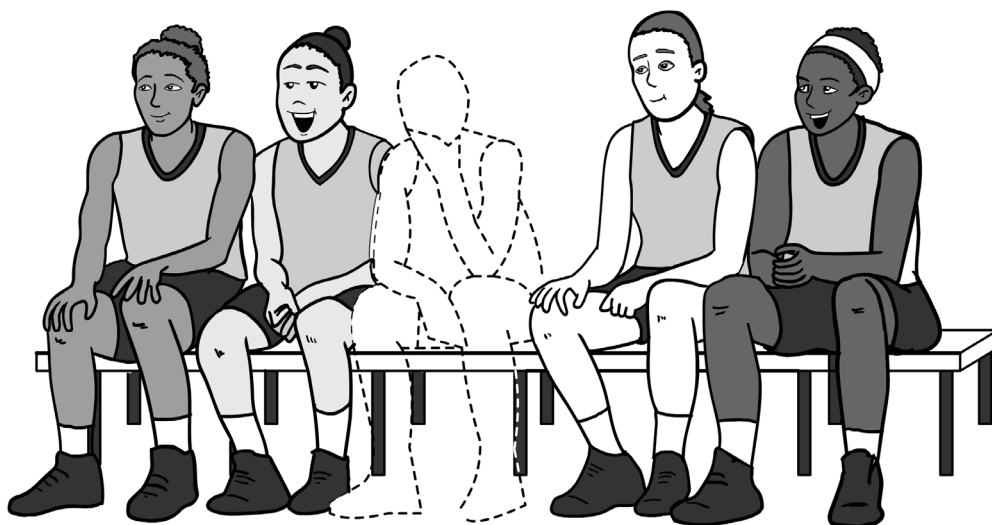


WHAT TO DO NEXT?

If you think you have a concussion, stop the activity right away. Tell a parent, coach, teacher or another trusted adult how you feel. If you're not with your parent or guardian, have someone call them to come get you. You should not be left alone.

See a physician or nurse practitioner as soon as possible. You should not return to sport until you have received medical clearance to do so even if you think you are OK.

If a friend, classmate or teammate tells you about their symptoms, or if you see signs they might have a concussion, tell an adult you trust so they can help.



GETTING BETTER

Most people with a concussion get better in one to four weeks. Some people take longer. Each concussion is unique. Don't compare your recovery to someone else's, or to another concussion you've had before.

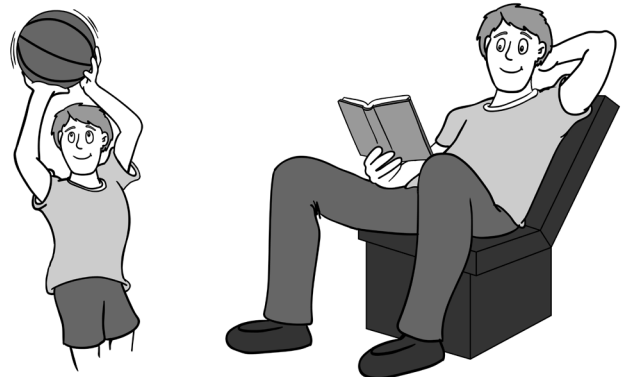
It's possible for a concussion to have long-term effects. People may experience symptoms, such as headaches, neck pain or vision problems, that last for months, or even years. Some may have lasting changes in their brain that lead to issues such as memory loss, concentration problems or depression. In rare cases, a person who suffers multiple brain injuries without healing in between may develop dangerous swelling in their brain, a condition known as second impact syndrome, that can result in severe disability or death.

While you're recovering, you shouldn't do activities that may make your symptoms worse. This may mean limiting activities such as exercising, school work, or time on your phone, computer or TV.

Healing from a concussion takes patience. It can be tough to wait but rushing back to activities can make your symptoms worse and can make recovery longer.

If you have a concussion, tell your parents, all sport teams/clubs, schools, coaches and teachers.

And remember, returning to school comes before returning to sport.

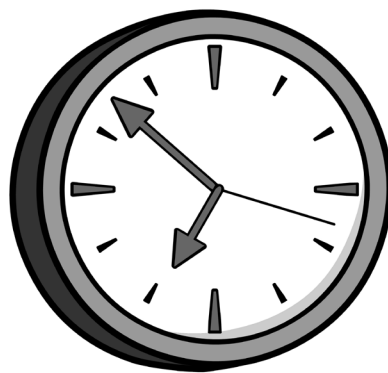


RETURNING TO SCHOOL AND SPORT

If you are diagnosed by a physician or nurse practitioner as having a concussion, you must follow your sport club's return-to-sport protocol and/or your school's return-to-school plan, where applicable. The return-to-sport protocol is a list of steps that you must follow before you can return to sport. You must not go back to participating in training, practice or competition until a physician or nurse practitioner says it's OK for you to do so.

You should work with your health care professional and sport club/school to establish a plan for you to return to sport and to school safely. Contact your school for more information.

Most return-to-sport protocols suggest that athletes should rest for 24 to 48 hours before starting any gradual return to sport.



The table below provides a list of steps and activities that are commonly found in most return-to-sport protocols and return-to-school plans.

Table: Common Steps in Graduated Return-to-Sport Protocols

Step	Aim	Activities	Goal of Step
1	Symptom-limiting activities	Daily activities that don't make symptoms worse, such as moving around the home and simple chores	Gradual re-introduction of daily school and work activities
2	Light aerobic activity	Light activities that increase the heart rate just a little, such as walking or a stationary bicycle for 10 to 15 minutes	Increase heart rate
3	Sport-specific exercise	Individual physical activity such as running or skating No contact or head impact activities	Add movement
4	Non-contact training, practice, drills	Harder training drills Add resistance training (if appropriate)	Exercise, co-ordination and increased thinking
5	Unrestricted practice	Unrestricted practice - with contact where applicable	Restore confidence and assess functional skills
6	Return to sport	Unrestricted game play or competition	

Medical clearance is always required prior to the athlete's return to unrestricted practice, training or competition.

Check with your sport club and school for the specific steps that you should follow.

You are ready to move to the next step when you can do the activities at your current step without feeling worse or getting new symptoms. If at any step your symptoms get worse, you should stop and go back to the previous step. Each step should take at least 24 hours to complete. If symptoms do not improve or if they continue to get worse, you should return to the physician or nurse practitioner.



REMINDER

It's important to stay safe when you play sports. When it comes to concussions, remember:

- 1. Recognize signs and symptoms of a concussion and stop** activity immediately, even if you think you might be OK. Tell an adult.
- 2. Get checked out** by a physician or nurse practitioner.
- 3. Gradually return** to school and sport.





Rowan Stringer

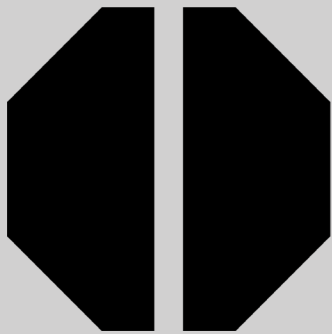
ROWAN'S LAW

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This resource is not meant to provide medical advice about your health care. For advice on health care for concussion symptoms, please consult with a physician or nurse practitioner.

GOVERNMENT OF ONTARIO

CONCUSSION AWARENESS RESOURCE



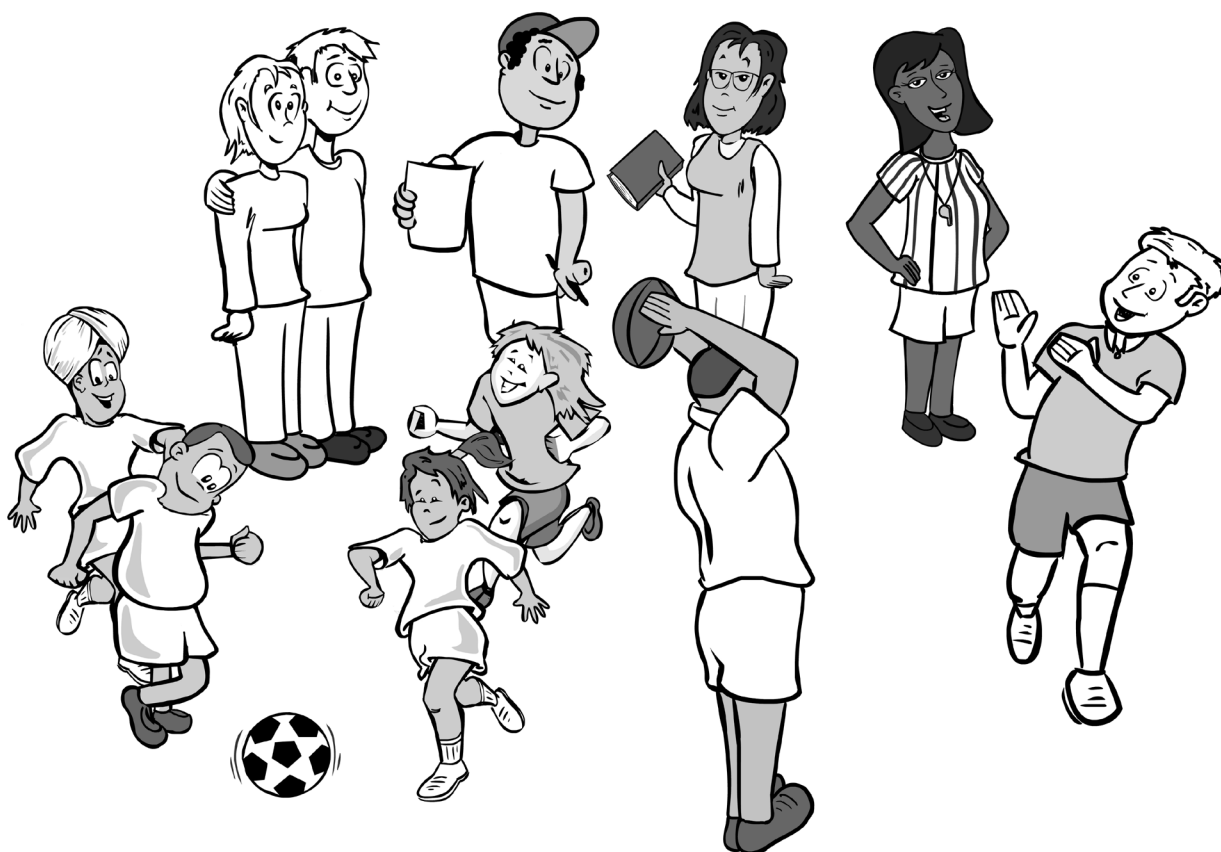
**ROWAN'S
LAW**

E-BOOKLET: AGES 15 AND UP

Ontario 

Preventing injuries is important to keeping people active throughout their lives. Some injuries are easy to see and treat but what about an injury inside the head? Brain injuries, such as concussions, don't show on the outside and are not always obvious. Even when you can't see the injury, a person with a concussion still feels the effects and needs the proper care to get better.

This resource will help you learn more about concussions so you can keep yourself and others active and safe – whether you're an athlete, student, parent, coach, official or educator.



WHAT IS A CONCUSSION?



A concussion is a brain injury. It can't be seen on X-rays, CT scans or MRIs. It may affect the way a person thinks, feels and acts.

Any blow to the head, face or neck may cause a concussion. A concussion may also be caused by a blow to the body if the force of the blow causes the brain to move around inside the skull. Examples include being hit in the head with a ball or falling hard onto the floor.

A concussion is a serious injury. While the effects are typically short-term, a concussion can lead to long-lasting symptoms and even long-term effects, such as memory problems or depression.



PREVENTING A CONCUSSION

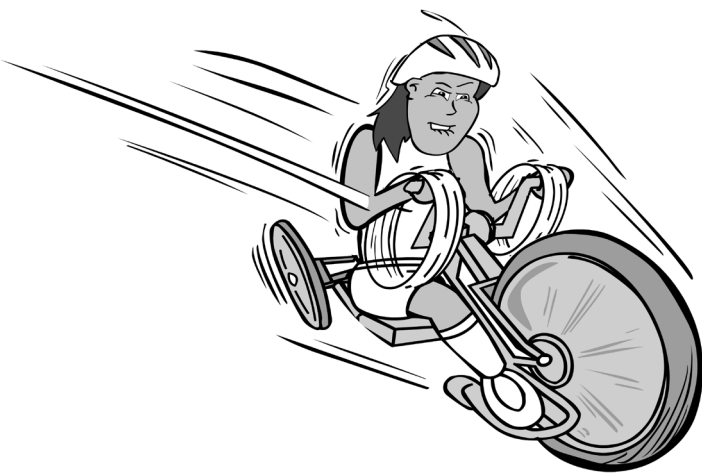
First, educate yourself about concussions.

You should also:

- Ensure you/your athletes use equipment that is in good condition;
- Ensure you/athletes you are supervising wear sports equipment that fits properly;
- Ensure you/your athletes respect the rules of the sport;



- Commit to your sport organization/school's Concussion Code of Conduct and make sure your athletes do too; and
- Promote a safe and comfortable environment for everyone to report injuries. Make sure everyone understands the risks of not speaking up.

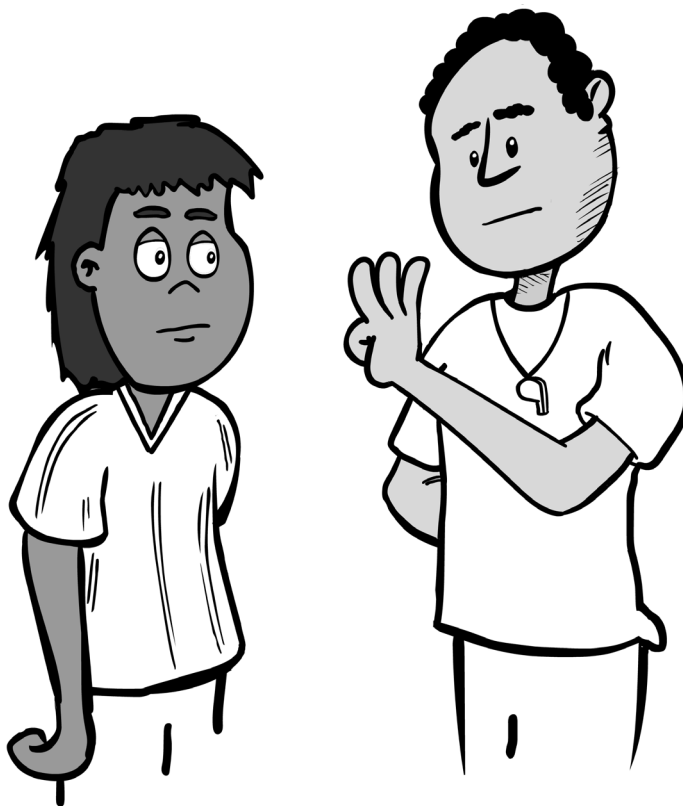


RECOGNIZING A CONCUSSION

▶ HIT. STOP. SIT.

Everyone can help recognize a possible concussion if they know what to look and listen for.

A person with a concussion might have one or more of the signs or symptoms listed below. They might show up right away or hours, even days, later. Just one sign or symptom is enough to suspect a concussion. Most people with a concussion do not lose consciousness.



Common signs and symptoms of a concussion:

PHYSICAL:

- Headache
- Pressure in the head
- Dizziness
- Nausea or vomiting
- Blurred vision
- Sensitivity to light or sound
- Ringing in the ears
- Balance problems
- Tired or low energy
- Drowsiness
- "Don't feel right"

EMOTIONAL:

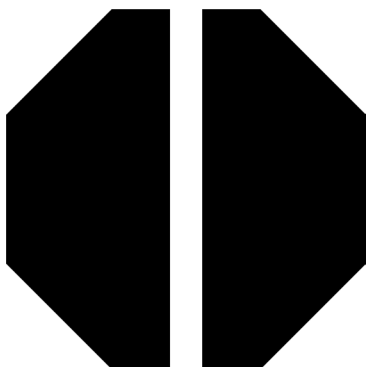
- Irritability (easily upset or angered)
- Depression
- Sadness
- Nervous or anxious

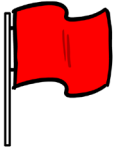
COGNITIVE (THINKING):

- Not thinking clearly
- Slower thinking
- Feeling confused
- Problems concentrating
- Problems remembering

SLEEP-RELATED:

- Sleeping more or less than usual
- Having a hard time falling asleep

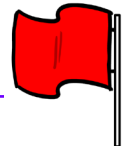




RED FLAGS:

“Red flags” may mean you have a more serious injury. Treat red flags as an emergency and call 911.

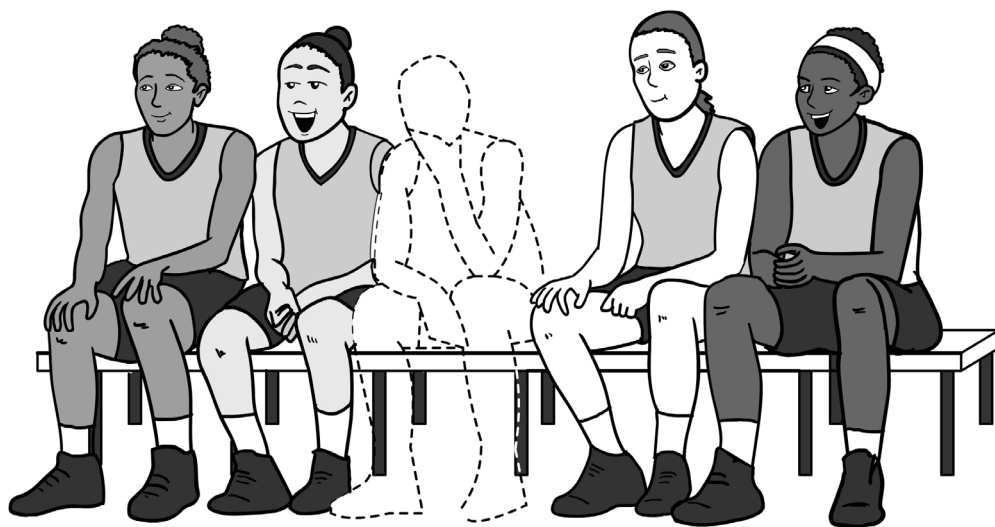
- Neck pain or tenderness
- Double vision
- Weakness or tingling in arms or legs
- Severe or increasing headache
- Seizure or convulsion
- Loss of consciousness (knocked out)
- Vomiting more than once
- Increasingly restless, agitated or aggressive
- Getting more and more confused



WHAT TO DO NEXT?

If you suspect a concussion, remove yourself or the person you are supervising from the activity right away. Continuing to participate puts you or the person with a suspected concussion at risk of more severe, longer-lasting symptoms. Call the parent/guardian (for athletes under 18 years of age) or emergency contact. Don't leave anyone with a suspected concussion alone.

Anyone who has been removed from sport with a suspected concussion should see a physician or nurse practitioner as soon as possible. That person should not return to unrestricted participation in training, practice or competition until they have received medical clearance.



GETTING BETTER

Most people with a concussion get better in one to four weeks. Some people take longer. Each concussion is unique – don't compare one person's recovery to another's.

It's possible for a concussion to have long-term effects. People may experience symptoms, such as headaches, neck pain or vision problems, that last for months, or even years. Some may have lasting changes in their brain that lead to issues such as memory loss, concentration problems or depression. In rare cases, a person who suffers multiple brain injuries without healing in between may develop dangerous swelling in their brain, a condition known as second impact syndrome, that can result in severe disability or death.

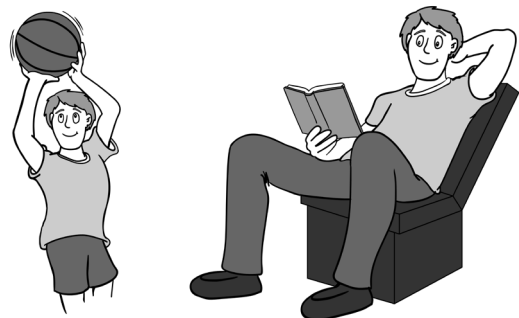
While a person is recovering from a concussion, they shouldn't

do activities that may make their symptoms worse. This may mean limiting activities such as exercising, screen time or schoolwork.

Healing from a concussion is a process that takes patience. Rushing back to activities can make symptoms worse and recovery longer.

Anyone who has a concussion should let others know. This includes parents, all sport teams/ clubs, schools, coaches and educators.

And remember, returning to school comes before returning to unrestricted sport.



RETURNING TO SCHOOL AND SPORT

Athletes and students who are diagnosed by a physician or nurse practitioner as having a concussion must proceed through their sport organization's return-to-sport protocol and/or, where applicable, their school board's return-to-school plan.

Athletes and students should work with their healthcare professional and sport organization/school to establish their individual plans to return to sport as well as return to school.

The Return-to-School Plan (Learning and Physical Activity)

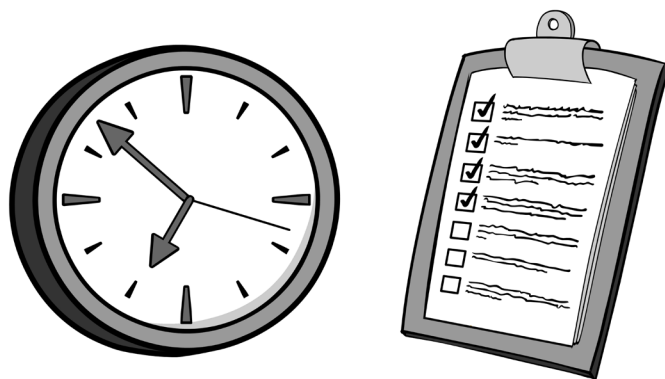
Students in elementary and secondary school will need to follow their school board's return-to-school plan, which supports a student's gradual return to learning and return to physical

activity. Contact the school for more information.

The Return-to-Sport Protocol

Most return-to-sport protocols suggest that athletes should rest for 24 to 48 hours before starting any gradual return to sport.

An athlete must not resume unrestricted participation in training, practice or competition until they have received medical clearance.



The table below provides a list of steps and activities that are commonly found in most return-to-sport protocols and return-to-school plans.

Table: Common Steps in Graduated Return-to-Sport Protocols

Step	Aim	Activities	Goal of Step
1	Symptom-limiting activities	Daily activities that don't make symptoms worse, such as moving around the home and simple chores	Gradual re-introduction of daily school and work activities
2	Light aerobic activity	Light activities that increase the heart rate just a little, such as walking or a stationary bicycle for 10 to 15 minutes	Increase heart rate
3	Sport-specific exercise	Individual physical activity such as running or skating No contact or head impact activities	Add movement
4	Non-contact training, practice, drills	Harder training drills Add resistance training (if appropriate)	Exercise, co-ordination and increased thinking
5	Unrestricted practice	Unrestricted practice - with contact where applicable	Restore confidence and assess functional skills
6	Return to sport	Unrestricted game play or competition	

Medical clearance is always required prior to the athlete's return to unrestricted practice, training or competition.

Check with your sport club and school for the specific steps that you should follow.

An athlete is typically ready to progress to the next step when they can do the activities at their current step without new or worsening symptoms. If at any step symptoms get worse, they should stop and go back to the previous step. Each step should take at least 24 hours to complete. If symptoms do not improve or if the symptoms continue to worsen, the athlete should return to the physician or nurse practitioner.



REMINDER

Remember:

- 1. Recognize signs and symptoms of a concussion and remove** yourself or the athlete from the sport/physical activity, even if you feel OK or they insist they are OK.
- 2. Get yourself/the athlete checked out** by a physician or nurse practitioner.
- 3. Support gradual return** to school and sport.





Rowan Stringer

ROWAN'S LAW

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These resources are not intended to provide medical advice relating to health care. For advice on health care for concussion symptoms, please consult with a physician or nurse practitioner.