ROWAN STRINGER
In May 2013, 17 year old Rowan Stringer died as a result of a head injury she sustained while playing rugby with her high school team. In the week prior to her final game, Rowan had been hit twice, and likely sustained a concussion each time. These concussions were not recognized, and she continued to play. When she was hit again in her last game, she suffered what is known as Second Impact Syndrome – catastrophic swelling of the brain caused by a second injury that occurs before a previous injury has healed. Rowan collapsed on the field and died four days later in hospital.
A coroner’s inquest was convened in 2015 to look into the circumstances of Rowan’s death. The coroner’s jury made 49 recommendations for how the federal government, as well as Ontario’s government ministries, school boards and sports organizations, should improve the manner in which concussions are managed in this province.

CONCUSSION SAFETY LEGISLATION
Ontario is the first jurisdiction in Canada to pass concussion safety legislation, setting a precedent for sport legislation across the country. On March 7, 2018, Ontario passed Rowan’s Law (Concussion Safety), 2018 and related amendments to the Education Act. This new legislation, which received all-party support, is intended to protect amateur athletes by improving concussion safety on the field and at school.
Rowan’s Law Day was proclaimed and the first one held on September 26, 2018. The remaining sections of the legislation will be proclaimed once the regulations have been developed.
Rowan’s Law (Concussion Safety), 2018, makes Ontario a national leader in concussion management and prevention by establishing mandatory requirements that call for:
- Annual review of concussion awareness resources that help prevent, identify and manage concussions, which athletes, coaches, educators and parents would be required to review before registering in a sport
- Removal-from-sport and return-to-sport protocols, to ensure that an athlete is immediately removed from sport if they are suspected of having sustained a concussion and giving them the time required to heal properly
- A concussion code of conduct that would set out rules of behaviour to minimize concussions while playing sport.

ROWAN’S LAW DAY – The Last Wednesday in September
In honour of the memory of Rowan Stringer, “Rowan’s Law Day” is commemorated on the last Wednesday in September to raise awareness about concussions in sport. The first Rowan’s Law Day was September 26, 2018.

KEEPING KIDS SAFE
Reducing the risk of concussions is always the goal. But concussions happen and knowing what to do – whether you’re an athlete, a parent, a coach or a teacher – saves lives.

OWHA
The OWHA is the Provincial Sports Organization (PSO) for Female Hockey in the Province of Ontario. The OWHA, its members, participants and others, as referenced in the Act, and as a condition of membership/participation within the OWHA, are bound by the requirements of the Act and of the OWHA.
The OWHA is proud to keep the honour the memory of Rowan Stringer and express sincere thanks to the Stringer family and all those committed to working together to support concussion surveillance, prevention, detection, management and awareness.
OWHA MANDATORY REQUIREMENTS
OWHA CONCUSSION CODE OF CONDUCT

CONCUSSIONS in SPORT
A concussion is a common form of head or brain injury that causes changes in how the brain functions, leading to symptoms that can be physical, cognitive or emotional/behavioural. A concussion can occur from a direct or indirect blow to the head or body that causes the brain to move rapidly back and forth within the skull.
Though concussions are common sport injuries, particularly among children and youth, there are sometimes subtle symptoms that may go unnoticed. Without identification and proper management, a concussion has the potential to result in permanent or severe brain damage.
Ontario takes the health and well-being of athletes seriously. Ontarians want to know that amateur athletes are protected by a safe sport system where everyone understands concussions, actively minimizes the risk of concussions, and knows what to do immediately if someone is concussed.
The government is improving concussion safety to create a world class amateur sport system where athletes can participate safely.
The OWHA supports the government in improving concussion safety to create a world class amateur sport system where athletes can participate safely.

CONCUSSION CODE OF CONDUCT
OWHA participants, parents and guardians of athletes who are under 18 years of age, coaches, trainers, officials, bench staff and all named-insured individuals are required to make an annual written commitment and acknowledgement at the time of registration with the OWHA that:

1) They have read the age appropriate OWHA Concussion Awareness Resource within the past 3 (three) months and that they:
   a. Make a commitment to fair play and respect for all;
   b. Make a commitment to concussion recognition and reporting, including self-reporting of possible concussion and reporting to a designated person when an individual suspects that another individual may have sustained a concussion;
   c. Make a commitment to following and supporting the Hockey Canada return-to-sport process;
   d. Make a commitment to sharing any pertinent information regarding incidents of a removal from sport with the athlete’s school and any other sport organization with which the athlete has registered;
   e. Coaches and trainers are required to make a commitment to providing opportunities before and after each training, practice and competition to enable athletes to discuss potential issues related to concussions;
   f. Make a commitment to zero-tolerance for prohibited play that is considered high-risk for causing concussions;
   g. Acknowledgement of mandatory expulsion from competition for violating zero-tolerance for prohibited play that is considered high-risk for causing concussions;
   h. Acknowledgement of escalating consequences for those who repeatedly violate the concussion code of conduct.
   i. The OWHA/Hockey Canada Injury Report form and the Concussion Follow Up and Communication Form must be completed in a timely manner and submitted to the OWHA within the required time frame.

PRE-SEASON MEETING
It is the strong recommendation of the OWHA that all OWHA teams hold a pre-season meeting with players, parents and staff in attendance. An important item on the agenda is concussion education to re-enforce the OWHA Concussion Awareness Guide and to discuss responsibilities and communication channels within the team.
PERSONAL INFORMATION
The following rules apply with respect to personal information collected in the course of the OWHA and its members carrying out the OWHA’s removal-from-sport and return-to-sport protocols:
A team/association must limit the collection, use and disclosure of personal information to that which is reasonably necessary for the purpose of carrying out the removal-from-sport and return-to-sport protocols.
A team/association shall limit access to such personal information to only those individuals who require it for the purpose of fulfilling their duties or obligations under the Act.
A team/association shall retain, disclose and dispose of such personal information in a secure manner.

The team/association shall ensure an OWHA injury report form is completed and sent to the OWHA office each time a participant has suffered a suspected concussion. The team/association shall ensure that its documents are managed in accordance with its retention policy for personal information.
“personal information” has the same meaning as in section 2 of the Freedom of Information and Protection of Privacy Act.

REMOVAL FROM PLAY PROTOCOL
The OWHA believes that the safety and health of hockey players is of paramount importance.
When an individual has suffered a suspected concussion, regardless of whether or not the concussion was sustained or is suspected of having been sustained during a sport activity associated with the OWHA, the following steps must be taken:
• Any hockey player who suffers a suspected concussion must stop participation in the hockey activity immediately. If there is doubt as to whether a concussion has occurred, it is to be assumed that it has.
• If an athlete is suspected of having a sustained a concussion, the protocol must require a designated person to call 9-1-1 if, in the designated person’s opinion, doing so is necessary.
• The OWHA team/association must require make and keep records of all incidences where an athlete is removed from further training, practice or competition because they are suspected of having sustained a concussion. These must be reported to the OWHA on the OWHA/Hockey Canada injury form.
• When a designated person informs an athlete or, if the athlete is under 18 years of age, the athlete’s parent or guardian that the athlete has been removed from further training, practice or competition, the protocol must require a designated person to advise the athlete or the parent or guardian that the athlete is required to undergo a medical assessment by a physician or a nurse practitioner before the athlete will be permitted to return to training, practice or competition in accordance with the sport organization’s return-to-sport protocol.
• The designated person must give the athlete or, if the athlete is under 18 years of age, the athlete’s parent or guardian a copy of the sport organization’s removal-from-sport and return-to-sport protocol when the athlete is removed from further practice, training or competition.
• The designated person must inform an athlete who has been diagnosed as having a concussion or, if the athlete is under 18 years of age, the athlete’s parent or guardian of the importance of disclosing the diagnosis to any other sport organization with which the athlete is registered or school that the athlete attends.
• The team/association must make a record of the athlete’s progression through the graduated return-to-sport steps up until the time the athlete is fully cleared to return to play.
• A designated person may rely on the information received from an athlete or, if the athlete is under 18 years of age, from the athlete’s parent or guardian in carrying out the designated person’s responsibilities under a sport organization’s return-to-sport protocol if it was not conducted under the supervision of the hockey team/association.
• When a player is diagnosed by a medical doctor as having a concussion, the individual must stop participation in all hockey activities immediately.
• The participant is not permitted to return to any hockey activity until written permission is given by a medical doctor or nurse practitioner.
• Return to full participation shall follow the adopted Hockey Canada Safety Program return to play guidelines.
Hockey Canada Concussion Card and Return to Play:

**Hockey Canada Concussion Card**

**CONCUSSION EDUCATION AND AWARENESS PROGRAM**

**Concussion in Sport**
All players who are suspected of having a concussion must be seen by a physician as soon as possible. A concussion is a brain injury.
A concussion most often occurs without loss of consciousness. However, a concussion may involve loss of consciousness.

**How Concussions Happen**
Any impact to the head, face or neck or a blow to the body which causes a sudden jolting of the head and results in the brain moving inside the skull may cause a concussion.

**Common Symptoms and Signs of a Concussion**
Symptoms and signs may have a delayed onset (may be worse later that day or even the next morning), so players should continue to be observed even after the initial symptoms and signs have returned to normal.

*A player may show any one or more of these symptoms or signs.*

**Symptoms**
- Headache
- Dizziness
- Feeling dazed
- Seeing stars
- Sensitivity to light
- Ringing in ears
- Tiredness
- Nausea, vomiting
- Irritability
- Confusion, disorientation

**Signs**
- Poor balance or coordination
- Slow or slurred speech
- Poor concentration
- Delayed responses to questions
- Vacant stare
- Decreased playing ability
- Unusual emotions, personality change, and inappropriate behaviour
- Sleep disturbance

For a complete list of symptoms and signs, visit www.parachutecanada.org

**RED FLAGS** — If any of the following are observed or complaints reported following an injury, the player should be removed from play safely and immediately and your Emergency Action Plan initiated. Immediate assessment by a physician is required.

- Neck pain or tenderness
- Severe or increasing headache
- Deteriorating conscious state
- Double vision
- Seizure or convulsion
- Vomiting
- Loss of consciousness
- Increasingly restless, agitated or combative
- Weakness or tingling/burning in arms or legs

**Concussion – Key Steps**
- Recognize and remove the player from the current game or practice.
- Do not leave the player alone, monitor symptoms and signs.
- Do not administer medication.
- Inform the coach, parent or guardian about the injury.
- The player should be evaluated by a medical doctor as soon as possible.
- The player must not return to play in that game or practice, and must follow the 6-step return to play strategy and receive medical clearance by a physician.
6-Step Return to Play

The return to play strategy is gradual, and begins after a doctor has given the player clearance to return to activity. If any symptoms/signs return during this process, the player must be re-evaluated by a physician. No return to play if any symptoms or signs persist. Remember, symptoms may return later that day or the next, not necessarily when exercising!

IMPORTANT – CONSULT WITH THE TREATING PHYSICIAN ON RETURN TO LEARN PROTOCOLS. PLAYERS SHOULD HAVE THE ABILITY TO RETURN TO SCHOOL FULL TIME PRIOR TO PROCEEDING THROUGH STEPS 5 AND 6 OF THE RETURN TO PLAY STRATEGY.

IMPORTANT – FOLLOWING A CONCUSSION AND PRIOR TO STEP 1 A BRIEF PERIOD OF PHYSICAL AND MENTAL REST IS RECOMMENDED.

STEP 1 Light activities of daily living which do not aggravate symptoms or make symptoms worse. Once tolerating step 1 without symptoms and signs, proceed to step 2 as directed by your physician.

STEP 2 Light aerobic exercise, such as walking or stationary cycling. Monitor for symptoms and signs. No resistance training or weight lifting.

STEP 3 Sport specific activities and training (e.g. skating).

STEP 4 Drills without body contact. May add light resistance training and progress to heavier weights.

The time needed to progress from non-contact to contact exercise will vary with the severity of the concussion and the player. Go to step 5 after medical clearance (reassessment and written note).

STEP 5 Begin drills with body contact.

STEP 6 Game play. (The earliest a concussed athlete should return to play is one week.)

Note: Players should proceed through the return to play steps only when they do not experience symptoms or signs and the physician has given clearance. Each step should be a minimum of one day (but could last longer depending on the player and the situation). If symptoms or signs return, the player should return to step 2 and be re-evaluated by a physician.

IMPORTANT – Young players will require a more conservative treatment. Return to play guidelines should be guided by the treating physician.

Prevention Tips

Players
- Make sure your helmet fits snugly and that the strap is fastened
- Get a custom fitted mouthguard
- Respect other players
- No hits to the head
- No hits from behind
- Strong skill development

Coach/Trainer/Safety Person/Referee
- Eliminate all checks to the head
- Eliminate all hits from behind
- Recognize symptoms and signs of concussion
- Inform and educate players about the risks of concussion

IMPORTANT NOTE

It is mandatory to read, on an annual basis, this OWHA Concussion Awareness Resource, including the age appropriate appendix.

OTHER IMPORTANT RESOURCES *(not part of the mandatory requirements)*

ONTARIO GOVERNMENT CONCUSSION AWARENESS RESOURCES
https://www.ontario.ca/page/rowans-law-concussion-awareness-resources

ROWAN’S LAW
https://www.ontario.ca/laws/statute/S18001

ONTARIO REGULATION

Parachute Canada, Preventing Injuries Saving Lives:
http://www.parachutecanada.org/injury-topics/item/concussion

OWHA WEB SITE
http://owha.on.ca

Hockey Canada Concussion Toolbox:
https://www.hockeycanada.ca/en-ca/hockey-programs/safety/concussions/concussion-toolbox

Concussion Recognition Tool 5:

Emergency Action Plan Template:

Download the Hockey Canada Concussion App:
https://www.hockeycanada.ca/en-ca/mobile-apps
Ontario Women’s Hockey Association Rowan’s Law Acknowledgement Form

The Ontario Government has adopted the Statute “Rowan’s Law” that includes mandatory requirements for all sport, including the Ontario Women’s Hockey Association (OWHA). The OWHA’s Concussion Awareness Resource is available through the link below http://pointstreaksites.com/files/uploaded_documents/3323/ROWAN'S_LAW_Document_(FINAL_June_27).pdf and includes Code of Conduct, Removal from Play, Return to Play, age-appropriate material and links to valuable additional resources.

The OWHA Concussion Awareness Resource must be read on an annual basis before an individual registers with the OWHA or with an OWHA member. The OWHA registration form requires a signature from every member/participant as well as parent/guardian for players under the age of 18.

OWHA member teams and associations are to provide the OWHA Concussion Awareness to every participant to read PRIOR to registering with the member team/association. This form may be collected by the OWHA member team/association as proof that the participant and parent/guardian if participant is under the age of 18 has read the OWHA Concussion Awareness Resource prior to registration.

Acknowledgement of Review

I, _______________________________ (print name of athlete, Team Official or On-Ice Official) confirm that I have reviewed the OWHA Concussion Awareness Resource, including the age appropriate appendix and commit to operating within its parameters.

_________________________________  ______________________________
Signature                            Date

I, _______________________________ (print name of parent if above signatory is under 18) confirm that I have reviewed the OWHA Concussion Awareness Resource, including the age appropriate appendix and commit to operating within its parameters.

_________________________________  ______________________________
Signature                            Date

Disclaimer: In order to register/participate in the OWHA this signed form must be submitted to the Female Hockey Association or Team that you are registering with.
APPENDIX A

CONCUSSION AWARENESS RESOURCE

AGES 15 AND UP
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.
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**

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

**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.
This e-booklet is part of a series of Rowan’s Law concussion awareness resources. Rowan’s Law was named for Rowan Stringer, a high school rugby player from Ottawa, who died in the spring of 2013 from a condition known as second impact syndrome (swelling of the brain caused by a subsequent injury that occurred before a previous injury healed). Rowan is believed to have experienced three concussions over six days while playing rugby. She had a concussion but didn't know her brain needed time to heal. Neither did her parents, teachers or coaches.

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.
APPENDIX B

CONCUSSION AWARENESS RESOURCE

AGES 11 to 14
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.
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.
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.
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>
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<tr>
<td>1</td>
<td>Symptom-limiting activities</td>
<td>Daily activities that don’t make symptoms worse, such as moving around the home and simple chores</td>
<td>Gradual re-introduction of daily school and work activities</td>
</tr>
<tr>
<td>2</td>
<td>Light aerobic activity</td>
<td>Light activities that increase the heart rate just a little, such as walking or a stationary bicycle for 10 to 15 minutes</td>
<td>Increase heart rate</td>
</tr>
<tr>
<td>3</td>
<td>Sport-specific exercise</td>
<td>Individual physical activity such as running or skating</td>
<td>Add movement</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No contact or head impact activities</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Non-contact training, practice, drills</td>
<td>Harder training drills</td>
<td>Exercise, co-ordination and increased thinking</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Add resistance training (if appropriate)</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Unrestricted practice</td>
<td>Unrestricted practice - with contact where applicable</td>
<td>Restore confidence and assess functional skills</td>
</tr>
<tr>
<td>6</td>
<td>Return to sport</td>
<td>Unrestricted game play or competition</td>
<td></td>
</tr>
</tbody>
</table>

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.
This e-booklet is part of a series of Rowan’s Law concussion awareness resources. Rowan’s Law was named for Rowan Stringer, a high school rugby player from Ottawa, who died in the spring of 2013 from a condition known as second impact syndrome (swelling of the brain caused by a subsequent injury that occurred before a previous injury healed). Rowan is believed to have experienced three concussions over six days while playing rugby. She had a concussion, but didn’t know her brain needed time to heal. Neither did her parents, teachers or coaches.

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.
APPENDIX C

CONCUSSION AWARENESS RESOURCE

AGES 10 AND UNDER

ROWAN'S LAW
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.
KEEP YOUR BRAIN SAFE: 
KNOW THE 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

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.