

RETURN TO LEARN:

BRIDGING THE GAP

From

CONCUSSION

To the

CLASSROOM

*October
2014*



NEBRASKA DEPARTMENT OF EDUCATION

BRIDGING THE GAP
From CONCUSSION To The CLASSROOM

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RETURN TO LEARN: BRIDGING THE GAP FROM CONCUSSION TO THE CLASSROOM



On April 8, 2011, the Nebraska Legislature passed the Concussion Awareness Act on a vote of 43- 0. The Concussion Awareness Act became effective in Nebraska on July 1, 2012. The goal of the Act is to provide a consistent means to identify and manage concussions and help ensure the safety of those involved in youth sports.

The Concussion Awareness Act contains the three tenets of model legislation as described by the Brain Injury Association and the National Football League.

1. Education: Coaches, Parents and Student Athletes
2. Removal from Play – If a concussion is reasonably suspected
3. Clearance by a Licensed Health Care Professional.

Equally important in the academic setting is a Return to Learn policy. “Return to Learn: Bridging the Gap from Concussion to the Classroom” was developed to provide guidance to assist Nebraska school districts in developing a concussion management protocol, including the provision of appropriate classroom adjustments for concussed students facing learning challenges. The Concussion Awareness Act was amended by the Nebraska Legislature in 2014 and requires schools to have a Return to Learn protocol in place for students who have sustained a concussion and returned to school.

Just as effective concussion management requires communication and collaboration, this document has been developed, reviewed and edited collaboratively by a Concussion Task Force comprised of Nebraska Brain injury School Support Teams (BIRSST) and the following individuals representing several disciplines:

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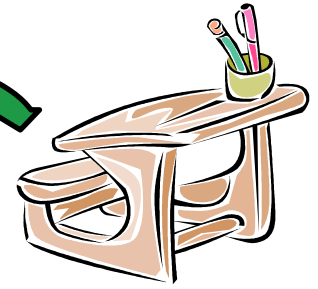
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RETURN TO LEARN: BRIDGING THE GAP FROM CONCUSSION TO THE CLASSROOM



What is a Brain Injury?

Acquired Brain Injury (ABI)

- An acquired brain injury is an injury to the brain, which is not hereditary, congenital or degenerative that has occurred after birth. (Includes anoxia, aneurysms, infections to the brain and stroke.)

Traumatic Brain Injury (TBI)

- A TBI is caused by a bump, blow or jolt to the head or a penetrating head injury that disrupts the normal function of the brain. Not all blows or jolts to the head result in a TBI. The severity of a TBI may range from "mild," i.e., a brief change in mental status or consciousness to "severe," i.e., an extended period of unconsciousness or amnesia after the injury. The majority of TBIs that occur each year are concussions or other forms of mild TBI.

Concussions

- A concussion is a type of **traumatic brain injury**, or TBI, caused by a bump, blow, or jolt to the head. A concussion is **any head trauma that causes an altered mental state that may or may not involve a loss of consciousness. Only 10 percent of concussions involve a loss of consciousness!**
- Concussions can also occur following a fall or a blow to the body that causes the head and brain to move back and forth quickly.
- This sudden movement can cause the brain to bounce around in the skull, stretching and damaging the brain cells and creating chemical changes in the brain.
- Health care professionals may describe a concussion as a "mild" brain injury because concussions are usually not life-threatening. Even so, their effects can be serious. (Centers for Disease Control & Prevention)



**A CONCUSSION
IS
A BRAIN INJURY!**

Incidence of Youth Concussions in Nebraska

Figure 1. Concussion rates among persons aged 5-19 years, by month – Nebraska 2008-2012

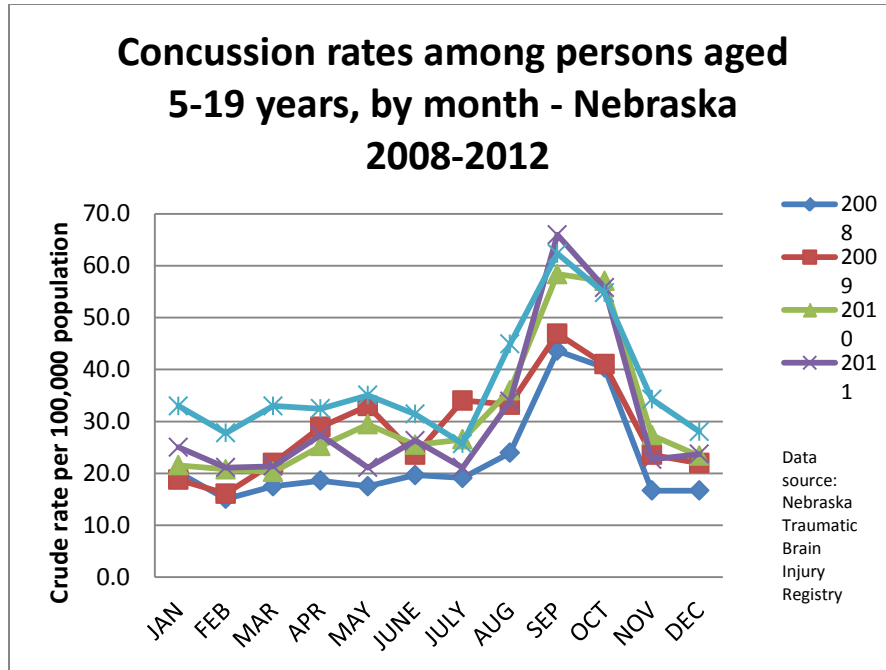
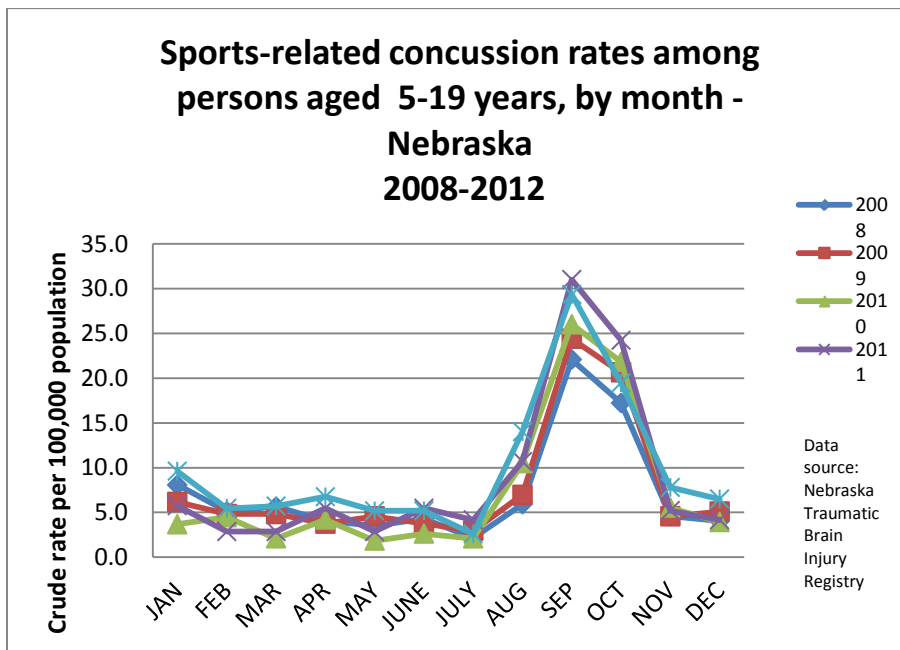
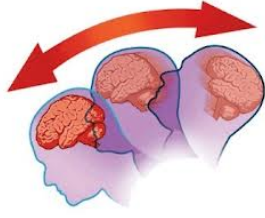


Figure 2. Sports-related concussion rates among persons aged 5-19 years, by month – Nebraska 2008-2012



Nebraska Department of Health and Human Services, 2013

Both figures above show a peak in concussion rates among school-aged Nebraskans in September and October. This trend has been consistent over the past 5 years. Figure 1 also shows that higher rates of concussions were diagnosed in 2012. These graphs represent persons treated in the office of a physician or psychologist or admitted to or treated at a hospital or a rehabilitation center located within a hospital in Nebraska.



Why are Concussions Such a Big Deal?

A CONCUSSION IS A BRAIN INJURY!

A concussion can occur from an impact to the body or the head. The most common cause of a concussion is a whiplash type injury, a rapid acceleration of the head.

Most concussions (90%) occur without loss of consciousness!

Concussions can occur in any sport or off the athletic field.

A “ding,” “getting your bell rung,” or what seems to be a mild bump, blow or jolt to the head can be serious and can change the way the brain normally works! (Center for Disease Control 2013).

Because of changes in the neurophysiology of the brain, symptoms may continue to develop over the next few hours/days following an injury.

After a concussion, among other effects, connections within the brain become stressed, resulting in the breaking of some connections between different brain areas and limiting the ability of the brain to process information efficiently and quickly. (Molfese 2013)

These changes can lead to a set of **symptoms affecting the student’s cognitive, physical, emotional and sleep functions**, which may result in reduced ability to do tasks at home, at school, or work. Concussions can have an impact on the student’s ability to learn in the classroom. Tracking symptoms tells the story of recovery.

During this time, returning to play or full-time academics before symptoms have cleared can result in **prolonged recovery time or risk of further injury**.

Ignoring the symptoms and trying to “tough it out” often makes symptoms worse!

“**Second Impact Syndrome**” may occur when a brain already injured takes another blow or hit before the brain recovers from the first –usually within a short period of time (hours, days, or weeks). A repeat concussion can slow recovery or increase the likelihood of having long-term problems. In rare cases, repeat concussions can result in edema (brain swelling), permanent brain damage and even death. (Center for Disease Control 2013)

As the chemistry of the brain returns to normal, the symptoms begin to subside and for most people, they resolve within 1 to 6 weeks. During the recovery period, monitor students for full resolution of symptoms and refer for further evaluation or treatment if needed.



2. movie.mov

Symptoms of Concussion

School professionals can best support a student's return to school by understanding the effects of concussion and providing the needed academic adjustments and supports. Knowledge of concussion symptoms can help the student and the school team identify the specific needs of the student, monitor changes and provide appropriate accommodations to facilitate the student's recovery and minimize the pressure to return to activities too soon. (Center for Disease Control 2013)

Symptoms of TBI/Concussion that may affect school performance fall into four categories:

- Thinking/Cognitive/Remembering
- Sleep
- Physical Symptoms
- Emotional/Mood Symptoms



Thinking/Cognitive Red Flags

Look for increased difficulty with:

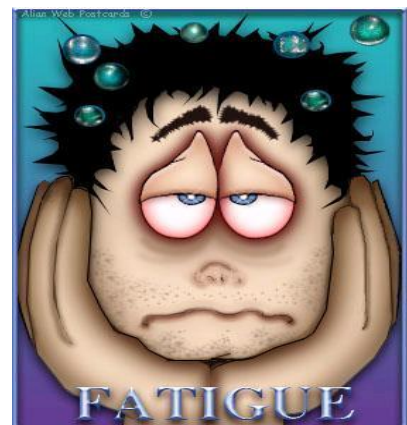
- Thinking clearly
- Concentrating, Staying on task
- Remembering new information
- Slowed response or processing of information (Feeling slowed down)
- Reduced academic performance



Sleep Red Flags

Sleep symptoms tend to last longer than other symptoms. Look for increased:

- Drowsiness
- Sleeps more than usual
- Sleeps less than usual
- Difficulty falling asleep
- Fatigue – tired, having no energy



Symptoms of Concussion



Physical Red Flags

Look for increased difficulty with:

- Headaches
- Fuzzy or Blurred Vision (visual problems)
- Balance problems
- Dizziness
- Nausea, vomiting
- Sensitivity to light
- Sensitivity to noise
- Disorientation



Social Emotional Red Flags

Look for increased difficulty with:

- Irritability
- Sadness
- More emotional
- Changes in mood
- Nervousness
- Anxiety



Return to Learn + Return to Play = Return to Activity

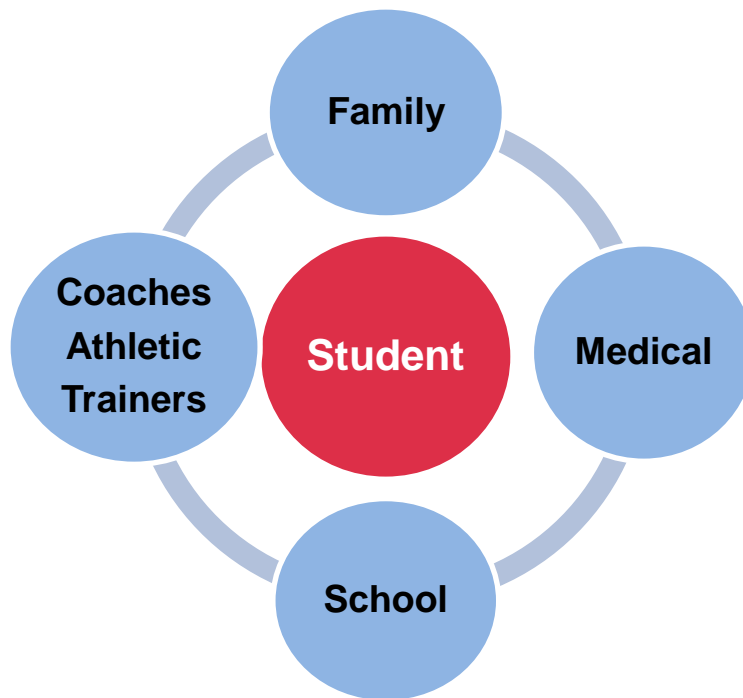


- The Center for Disease Control (CDC) estimates that 1.7 million traumatic brain injuries occur annually and that 75% of those injuries are mild TBIs (concussions). **Concussions occur from sports, falls, playground and bicycle accidents as well as motor vehicle accidents.**
- Attention has been given to sports-related concussions because concussion laws have been passed in nearly every state and procedures for Return to Play are familiar to parents, schools and medical personnel.
- **Equally important is Returning to Learn in the classroom!**
- After a concussion, the child or adolescent does not appear to be ill or physically injured. In fact, they may “look” just fine. **A concussion is an invisible injury.**
- Nonetheless, a concussion can have direct effects on learning and evidence suggests that using a concussed brain to learn may worsen concussion symptoms and may prolong recovery. (Halstead, McAvoy, et al 2013)
- **As the brain is recovering, reducing demands on the brain and avoiding overexertion of the brain at home and at school through a reduction in physical and cognitive activity is beneficial to the recovery of the student**
- **Every student and every concussion is different! No two concussions are the same! The amount of time needed between the injury and the commencement of return to learn activities will vary between students.**
- A Return to Activity plan is composed of two parts:
 - **Return to Academics** – a gradual return to school and academic requirements implemented by the teaching staff followed by
 - **Return to Play** – a gradual return to sports implemented by the athletic staff.
- Both the return to academics, and when appropriate, the return to play progression should be allowed to progress over time and as symptoms subside.
- **Please refer to the Return to Academics Progression and Return to Play Progression guidance in the Appendices at the end of this document.**

Concussion Management: Recommended Best Practice for Nebraska Schools

Once a concussion has been diagnosed by a healthcare professional, managing the concussion is best accomplished by creating a support system for the student/athlete. **Communication and collaboration** among parents, school personnel, coaches and athletic trainers, and healthcare providers in overseeing both the return to academics and return to play progressions is essential for the recovery process. Teamwork is required to adjust the treatment and management of the concussion. **Best practice indicates that the student should return to school with a RELEASE OF INFORMATION SIGNED BY THE PARENTS** that allows for two-way communication between school personnel and the healthcare provider. (McAvoy, 2012)

A collaborative approach with the student as the CENTER OF FOCUS!



- Each school district creates a **Concussion Management policy** that incorporates:
 - **Knowledge** about concussion as a mild traumatic brain injury
 - **Training** for all coaches, athletes, parents, and school staff about concussion management
 - **A Concussion Management Team** with a **designated contact person**.

The Concussion Management Team



Members may include:

Health Care Professional*
Parent(s)*
School Administrator or designee*
Athletic Director
Athletic Trainer
Coach
School Nurse
Teacher(s)


Speech Language Pathologist
School Psychologist
School Counselor
Occupational Therapist
Physical Therapist
Student Athlete

Essential members*

Concussion Management Team (CMT) Sample Return to Learn Protocol

The CMT ensures that every student who suffers a concussion is monitored for a safe return to activity.



<p>1. Concussion occurs! </p> <ul style="list-style-type: none">• If at school sporting event or other school activity, family is notified of possible concussion
<p>2. Encourage parent to obtain medical confirmation of concussion from a licensed health care provider.</p>
<p>3. Parent signs Release of Information form allowing the school to be notified of concussion by the health care provider and for information sharing.</p>
<p>4. CMT Contact person notified of concussion by parent, coach, athletic trainer or health care provider.</p>
<p>5. CMT Contact person informs appropriate school personnel (teachers, school nurse, athletic trainer, coaches, etc.) of concussed student and specifies general accommodations from health care provider, if available.</p>
<p>6. CMT implements a gradual Return to Learn Protocol based on the individual needs of the student. (Refer to Return to Academics Progression form.)</p>
<p>7. CMT documents physical, cognitive, behavioral and emotional symptoms of concussed student and assesses the student's needs based on symptoms. (Refer to Post-Concussion Symptom Checklist).</p>

8. CMT designs individual academic adjustment/accommodation plan with appropriate school staff and works with SAT process to coordinate academic adjustments/accommodations during recovery (about 2-3 weeks) and reviews with student and family.
9. CMT -Teachers monitor the effectiveness of adjustments, accommodations and symptoms of concussion and report progress/recovery data and results regularly to CMT contact person.
 - Data on progress/recovery shared with family and student.
 - Family tracks and regularly reports progress on physical, cognitive sleep and emotional symptoms to CMT.
10. CMT makes adjustments and readjustments to individual plan until student no longer has special needs in the classroom resulting from the concussion.
 - Student progress and updates are communicated to appropriate school staff, family and student.
11. CMT and family agree student is symptom free and function is “back to baseline” in the classroom.
12. **Student returns to classroom full-time with no adjustments or accommodations!**
13. Parents/guardians deliver medical clearance from the healthcare provider to the CMT and parent provides written permission for the Return to Play Progression to begin.
14. Student begins Return to Play Progression after a successful Return to Learn.
15. CMT ensures that the concussion date and adjustments for Return to Learn are documented in the student’s file.

- If symptoms last more than 2-3 weeks, follow up assessment and academic adjustments may need to be strengthened or remain in place longer.
- Student may need to visit physician for further evaluation.
- If problems persist, student supports may be provided through an MTSS/Rtl Plan, a Health Plan or a 504 Plan. A small percentage of students may require a referral for special education.
- CMT offers resources on concussion to educators and parents throughout the Return to Learn progression.
- **Contact BIRSST team members for information or resources on concussion for educators and parents!**



Return to Learn BEFORE Return to Play!

If a student athlete continues to receive academic adjustments due to the presence of any symptoms, they should be considered symptomatic and not be allowed to resume physical activity. McAvoy, Returning to Learn: Going Back to School Following a Concussion. Communique on line, April 2011.

Brain Injury Regional School Support Teams (BIRSST)

- Nebraska has five regional BIRSST teams
 - Refer to attached **map** for **BIRSST team locations and contacts**
- BIRSST teams can assist school districts in:
 - Identifying strategies to support student success
 - Providing information on brain injury and resources
 - Providing training and consultation for Concussion Management Team



Tips for Teachers

Symptoms of concussion often create learning difficulties for students. Immediately after diagnosis of a concussion, an individualized plan for learning adjustments should be initiated with a gradual, monitored return to full academics as symptoms clear. Typical classroom adjustments and accommodations include:

- **Reduce course workload**
- **Decrease homework**
- **Allow breaks during the day, i.e. rest in quiet area**
- **Allow additional time to complete assignments**
- **Provide instructor's notes, outline or study guide for student**
- **Avoid over-stimulation (noise and light)**
- **Avoid testing or completion of major projects during recovery time when possible**



Refer to **Tips for Teachers** in the Appendices section of this document for additional adjustments or accommodations in the classroom.

Tips for Parents

- Parents play a key role in maximizing the child's recovery from a concussion.
- Parents take student to ER or contact the child's healthcare provider immediately after the concussion.
- After the diagnosis of a concussion by the healthcare professional, parents monitor symptoms and activities at home. Rest and restriction of activities is individualized for each student based on the symptoms displayed.
- Parents enforce rest, both physical and cognitive, and ensure that the child receives sufficient sleep and engages in activities that do not cause jerking of the head immediately after a concussion.
- For the first few days, the student/athlete may have symptoms that interfere with concentration and may need to stay home from school to rest for a day or two and refrain from:

- Watching TV
- Playing video games
- Texting
- Working/playing on computer
- Driving
- Use of Cell phone
- Blowing on a musical instrument
- Piano lessons
- Participating in PE activities



- Light mental activities can resume as long as symptoms do not worsen. When the student/athlete can tolerate 30-45 minutes of light mental activity, a gradual return to school/academics can commence.
- Parents monitor and track symptoms at home and communicate regularly with the school Concussion Management Team (CMT) contact person.
- Parents sign Permission for two-way Release Information between the medical provider and the school district.
- Parents may request information on concussions from the school CMT.
- Parents are aware of academic adjustments in the school setting.
- When the CMT and family agree that the student is symptom free and attending school full-time with no academic adjustments or accommodations, the parent delivers medical clearance from the healthcare provider to the CMT and the parent provides written permission for the Return to Play Progression to begin.

References

1. Centers for Disease Control and Prevention - *Returning to School After a Concussion: A Fact Sheet for School Professionals*.
http://www.cdc.gov/concussion/pdf/TBI_Returning_to_School-a.pdf
2. Giza C., Kutcher J., *et al.* Summary of evidence-based guideline update: Evaluation and management of concussion in sports. *Neurology*, 2013: 10.1212/WNL.0b013e31828d57dd.
3. Halstead, M., McAvoy, K., *et al.* *Returning to Learning Following a Concussion*. *Pediatrics*: originally published online October 27, 2013.
<http://pediatrics.aappublications.org/content/early/2013/10/23/peds.2013-2867>
4. McGrath, N. (2010). Supporting the Student-Athlete's Return to the Classroom after a Sport Related Concussion. *Journal of Athletic Training*, 45(5), 492-498.
5. McAvoy, K. (2013). *REAP the benefits of good concussion management*. Centennial, CO: Rocky Mountain Sports Medicine Institute Center.
6. McAvoy, K. (2012). Return to Learning: Going Back to School Following a Concussion. *NASP Communique* online. March/April.
7. McCrory P., Meeuwisse W., Aubry M., *et al.* Consensus Statement on Concussion in Sport: the 4th International Conference on Concussion in Sport. *Br J Sports Med*. 2013; 47: 250-258
8. Orcas (2011). *Brain Injury 101: Concussion Management. Policy and Resource Handbook*. Retrieved from <http://brain101orcasinc.com>
9. The Center on Brain Injury Research and Training. *Max's Law: Concussion Management Implementation Guide*. Retrieved from <http://www.cbirt.org>

WHAT **YOU** CAN DO TO CHANGE THE CULTURE OF CONCUSSION IN NEBRASKA!

- ✓ Educate
- ✓ Communicate
- ✓ Collaborate



- Parents
- Students
- Schools
- Physicians

ALWAYS Wear your helmet!



BRIDGING THE GAP
From CONCUSSION To The CLASSROOM

APPENDICES

Nebraska Concussion Awareness Act – Quick Facts

Concussion Law 2014

Concussion Resources

Return to Learn Protocol CMT

Return to Academics Progression

Return to Play Progression

Post-Concussion Symptom Checklist

Tips for Teachers

Information from Teachers for CMT

Release of Information

BIRSST Team Map and Team Contacts

Nebraska Concussion Awareness Act – Quick Facts

Amended 2014

- **Concussion Awareness Act applies to:**
 - ✓ Approved or accredited public, private, denominational or parochial schools (does not include higher education/college and university) Section 4.
 - ✓ Athletes 19 years of age or younger that participate in organized sports (“any city, village, business or nonprofit that organizes sports, charges a fee or is sponsored by a business or nonprofit organization.”) Section 5
- **Education provided for:**
 - ✓ Coaches. Training approved by the Chief Medical officer must be made available to all coaches.
 - ✓ Parents and student athletes. Concussion and brain injury information must be provided:
 - On an annual basis and
 - Prior to the start of practice or competition.
- **Removal from Play**
 - ✓ Any student athlete or athlete shall be removed from play when they are reasonably suspected of having a concussion by a coach or licensed health care professional.
 - ✓ If an athlete is removed from activity due to reasonable suspicion of suffering a concussion:
 - Parents or Guardians must be notified of the date and approximate time of the injury and the signs and symptoms that were observed, as well as any actions taken to treat.
- **Return to Play**
 - ✓ A student-athlete or athlete may be allowed to return to play when:
 - They have been evaluated by a licensed health care professional
 - They have received written clearance from the licensed health care professional;
 - They have submitted the written and signed clearance to resume participation in athletic activities accompanied by written permission to resume participation from the student’s parent or guardian.
- **Return to Learn**
 - ✓ Establish a return to learn protocol for students that have sustained a concussion. The return to learn protocol shall recognize that students who have sustained a concussion and returned to school may need informal or formal accommodations, modifications of curriculum, and monitoring by medical or academic staff until the student is fully recovered.
- **For more information, please refer to:**
 - ✓ **Nebraska Department of Health and Human Services**
<http://www.dhhs.ne.gov/concussions>
 - ✓ **Nebraska Department of Education**
<http://www.education.ne.gov/sped/birsst.html>

NEBRASKA CONCUSSION AWARENESS ACT

Sections 71-9101 to 71-9106 shall be known and may be cited as the Concussion Awareness Act.

71-9102. Legislative findings

(1) The Legislature finds that concussions are one of the most commonly reported injuries in children and adolescents who participate in sports and recreational activities and that the risk of catastrophic injury or death is significant when a concussion or brain injury is not properly evaluated and managed.

(2) The Legislature further finds that concussions are a type of brain injury that can range from mild to severe and can disrupt the way the brain normally works. Concussions can occur in any organized or unorganized sport or recreational activity and can result from a fall or from players colliding with each other, the ground, or with obstacles. Concussions occur with or without loss of consciousness, but the vast majority occur without loss of consciousness.

(3) The Legislature further finds that continuing to play with a concussion or symptoms of brain injury leaves a young athlete especially vulnerable to greater injury and even death. The Legislature recognizes that, despite having generally recognized return-to-play standards for concussion and brain injury, some young athletes are prematurely returned to play, resulting in actual or potential physical injury or death.

71-9103. Terms, defined

For purposes of the Concussion Awareness Act:

1. Chief medical officer means the chief medical officer as designated in section 81-3115; and
2. Licensed health care professional means a physician or licensed practitioner under the direct supervision of a physician, a certified athletic trainer, a neuropsychologist, or some other qualified individual who (a) is registered, licensed, certified, or otherwise statutorily recognized by the State of Nebraska to provide health care services and (b) is trained in the evaluation and management of traumatic brain injuries among a pediatric population.

71-9104 (1) Each approved or accredited public, private, denominational, or parochial school shall:

(a) Make available training approved by the chief medical officer on how to recognize the symptoms of a concussion or brain injury and how to seek proper medical treatment for a concussion or brain injury to all coaches of school athletic teams; and

(b) Require that concussion and brain injury information be provided on an annual basis to students and the students' parents or guardians prior to such students initiating practice or competition. The information provided to students and the students' parents or guardians shall include, but need not be limited to:

- (i) The signs and symptoms of a concussion;
- (ii) The risks posed by sustaining a concussion; and
- (iii) The actions a student should take in response to sustaining a concussion, including the notification of his or her coaches; and.

(c) Establish a return to learn protocol for students that have sustained a concussion. The return to learn protocol shall recognize that students who have sustained a concussion and returned to school may need informal or formal accommodations, modifications of curriculum, and monitoring by medical or academic staff until the student is fully recovered.

(2)(a) A student who participates on a school athletic team shall be removed from a practice or game when he or she is reasonably suspected of having sustained a concussion or brain injury in such practice or game after observation by a coach or a licensed health care professional who is professionally affiliated with or contracted by the school. Such student shall not be permitted to participate in any school supervised team athletic activities involving physical exertion, including, but not limited to, practices or games, until the student (i) has been evaluated by a licensed health care professional, (ii) has received written and signed clearance to resume participation in athletic activities from the licensed health care professional, and (iii) has submitted the written and signed clearance to resume participation in athletic activities to the school accompanied by written permission to resume participation from the student's parent or guardian.

(b) If a student is reasonably suspected after observation of having sustained a concussion or brain injury and is removed from an athletic activity under subdivision (2)(a) of this section, the parent or guardian of the student shall be notified by the school of the date and approximate time of the injury suffered by the student, the signs and symptoms of a concussion or brain injury that were observed, and any actions taken to treat the student.

(c) Nothing in this subsection shall be construed to require any school to provide for the presence of a licensed health care professional at any practice or game.

(d) The signature of an individual who represents that he or she is a licensed health care professional on a written clearance to resume participation that is provided to a school shall be deemed to be conclusive and reliable evidence that the individual who signed the clearance is a licensed health care professional. The school shall not be required to determine or verify the individual's qualifications.

71-9105. City, village, business, or nonprofit organization; duties; participant in athletic activity; actions required; notice to parent or guardian; effect of signature of licensed health care professional

(1) Any city, village, business, or nonprofit organization that organizes an athletic activity in which the athletes are nineteen years of age or younger and are required to pay a fee to participate in the athletic activity or whose cost to participate in the athletic activity is sponsored by a business or nonprofit organization shall:

(a) Make available training approved by the chief medical officer on how to recognize the symptoms of a concussion or brain injury and how to seek proper medical treatment for a concussion or brain injury to all coaches; and

(b) Provide information on concussions and brain injuries to all coaches and athletes and to a parent or guardian of each athlete that shall include, but need not be limited to:

(i) The signs and symptoms of a concussion;

(ii) The risks posed by sustaining a concussion; and

(iii) The actions an athlete should take in response to sustaining a concussion, including the notification of his or her coaches.

(2)(a) An athlete who participates in an athletic activity under subsection (1) of this section shall be removed from a practice or game when he or she is reasonably suspected of having sustained a concussion or brain injury in such practice or game after observation by a coach or a licensed health care professional. Such athlete shall not be permitted to participate in any supervised athletic activities involving physical exertion, including, but not limited to, practices or games, until the athlete (i) has been evaluated by a licensed health care professional, (ii) has received written and signed clearance to resume participation in athletic activities from the licensed health care professional, and (iii) has submitted the written and signed clearance to resume participation in athletic activities to the city, village, business, or nonprofit organization that organized the athletic activity accompanied by written permission to resume participation from the athlete's parent or guardian.

(b) If an athlete is reasonably suspected after observation of having sustained a concussion or brain injury and is removed from an athletic activity under subdivision (2)(a) of this section, the parent or guardian of the athlete shall be notified by the coach or a representative of the city, village, business, or nonprofit organization that organized the athletic activity of the date and approximate time of the injury suffered by the athlete, the signs and symptoms of a concussion or brain injury that were observed, and any actions taken to treat the athlete.

(c) Nothing in this subsection shall be construed to require any city, village, business, or nonprofit organization to provide for the presence of a licensed health care professional at any practice or game.

(d) The signature of an individual who represents that he or she is a licensed health care professional on a written clearance to resume participation that is provided to a city, village, business, or nonprofit organization shall be deemed to be conclusive and reliable evidence that the individual who signed the clearance is a licensed health care professional. The city, village, business, or nonprofit organization shall not be required to determine or verify the individual's qualifications.

71-9106. Act; how construed

Nothing in the Concussion Awareness Act shall be construed to create liability for or modify the liability or immunity of a school, school district, city, village, business, or nonprofit organization or the officers, employees, or volunteers of any such school, school district, city, village, business, or nonprofit organization.

CONCUSSION RESOURCES

1. **Nebraska Department of Education**

<http://www.education.ne.gov/sped/birsst.html>

- Bridging the Gap from Concussion to Classroom: Return to Learn

2. **Nebraska Department of Health and Human Services**

<http://dhhs.ne.gov/publichealth/concussion/Pages/Home.aspx>

- Concussion Awareness Act – Training for Coaches, Parents, Students

3. **Concussion ABCs posted by the Centers for Disease Control and Prevention**

<http://www.cdc.gov/concussion/HeadsUp/schools.html>

- Heads Up to Schools, Know Your Concussion ABC's
- A Fact Sheet for Teachers, Counselors, and School Professionals
- A Fact Sheet for School Nurses
- Parent/Athlete Concussion Information Sheet
- Returning to School After a Concussion: A Fact Sheet for School Professionals

4. **The Center on Brain Injury Research and Training, University of Oregon**

<http://www.cbirt.org>

- **The Center on Brain Injury Research and Training. *Max's Law: Concussion Management Implementation Guide.*** Retrieved from <http://www.cbirt.org>
- <http://cbirt.org/tbi-education/school-reentry/returning-school-after-tbi/>
- <http://cbirt.org/tbi-education/school-reentry/supports-consider-during-school-reentry/>
- <http://cbirt.org/news/concussion-frequently-asked-questions-parents/>

5. **School-wide Concussion Management cartoon video: "What's a Concussion, Anyway? (15 minute cartoon video)** <http://brain101.orcasinc.com/>

- Concussion Management Program and information for coaches, schools, parents and students
- Return to Academics Progression, Return to Play Progression and Sample Return to Activity Documentation

6. REAP Guidelines

<http://www.rockymountainhospitalforchildren.com/sports-medicine/concussion-management/reap-guidelines.htm>

- McAvoy, K. (2013) REAP the benefits of good concussion management. Centennial, CO: Rocky Mountain Sports Medicine Institute Center for Concussion.

7. The BrainSTEPS Program – Pennsylvania www.brainsteps.net

- [Concussion Webinar](#)
- [Concussion Return to School Protocol](#)
- [Protocol Flow Chart](#)
- [Why every school should have a Concussion Management Team](#)
- [Teacher's Desk Reference: Concussion](#)

8. Colorado Department of Education

http://www.cde.state.co.us/sites/default/files/documents/cdesped/download/pdf/tbi_concussionguidelines.pdf

- [Concussion Management Guidelines 2012](#)

9. Brain Injury Association of Nebraska www.biane.org

10. Halstead, M., McAvoy, K., et al. *Returning to Learning Following a Concussion*. *Pediatrics*: originally published online October 27, 2013. <http://pediatrics.aappublications.org/content/early/2013/10/23/peds.2013-2867>

11. Nebraska Brain Injury Advisory Council www.braininjury.ne.gov

12. brainline.org - <http://www.brainline.org/content/2010/06/general-information-for-parents-educators-on-tbi.html>


13. Information for Parents

http://www.brainline.org/landing_pages/categories/concussion.html
<http://cbirt.org/news/concussion-frequently-asked-questions-parents/>

Concussion Management Team (CMT) Sample Return to Learn Protocol



The CMT ensures that every student who suffers a concussion is monitored for a safe return to activity.

<p>1. Concussion occurs! </p> <ul style="list-style-type: none">• If at school sporting event or other school activity, family is notified of possible concussion
<p>2. Encourage parent to obtain medical confirmation of concussion from a licensed health care provider.</p>
<p>3. Parent signs Release of Information form allowing the school to be notified of concussion by the health care provider and for information sharing.</p>
<p>4. CMT Contact person notified of concussion by parent, coach, athletic trainer or health care provider.</p>
<p>5. CMT Contact person informs appropriate school personnel (teachers, school nurse, athletic trainer, coaches, etc.) of concussed student and specifies general accommodations from health care provider, if available.</p>
<p>6. CMT implements a gradual Return to Learn Protocol based on the individual needs of the student. (Refer to Return to Academics Progression form.)</p>
<p>7. CMT documents physical, cognitive, behavioral and emotional symptoms of concussed student and assesses the student's needs based on symptoms. (Refer to Post-Concussion Symptom Checklist).</p>
<p>8. CMT designs individual academic adjustment/accommodation plan with appropriate school staff and works with SAT process to coordinate academic adjustments/accommodations during recovery (about 2-3 weeks) and reviews with student and family.</p>
<p>9. CMT -Teachers monitor the effectiveness of adjustments, accommodations and symptoms of concussion and report progress/recovery data and results regularly to CMT contact person.</p> <ul style="list-style-type: none">• Data on progress/recovery shared with family and student.• Family tracks and regularly reports progress on physical, cognitive sleep and emotional symptoms to CMT.
<p>10. CMT makes adjustments and readjustments to individual plan until student no longer has special needs in the classroom resulting from the concussion.</p> <ul style="list-style-type: none">• Student progress and updates are communicated to appropriate school staff, family and student.
<p>11. CMT and family agree student is symptom free and function is "back to baseline" in the classroom.</p>
<p>12. Student returns to classroom full-time with no adjustments or accommodations!</p>
<p>13. Parents/guardians deliver medical clearance from the healthcare provider to the CMT and parent provides written permission for the Return to Play Progression to begin.</p>
<p>14. Student begins Return to Play Progression <u>after</u> a successful Return to Learn.</p>
<p>15. CMT ensures that the concussion date and adjustments for Return to Learn are <u>documented</u> in the student's file.</p>

- If symptoms last more than 2-3 weeks, follow up assessment and academic adjustments may need to be strengthened or remain in place longer.
- Student may need to visit physician for further evaluation.
- If problems persist, student supports may be provided through an MTSS/Rtl Plan, a Health Plan or a 504 Plan. A small percentage of students may require a referral for special education.
- CMT offers resources on concussion to educators and parents throughout the Return to Learn progression.
- **Contact BIRSST team members for information or resources on concussion for educators and parents!**



RETURN TO ACADEMICS PROGRESSION

Progression is **individual**. All concussions are different. Students may start at any of these steps, depending on symptoms, and may remain at a step longer if needed. If symptoms worsen, the CMT should reassess. If symptoms quickly improve, a student may also skip a step or two. Be flexible!

Steps	Progression	Description
1	HOME – Cognitive and physical rest	<ul style="list-style-type: none"> ➤ Stay at home ➤ No driving ➤ Limited mental exertion – computer, texting, video games, homework
2	HOME – Light Mental Activity	<ul style="list-style-type: none"> ➤ Stay at home ➤ No driving ➤ Up to 30 minutes mental exertion ➤ No prolonged concentration

Progress to Step 3 when student handles up to 30 minutes of sustained mental exertion without worsening of symptoms.

3	SCHOOL – Part Time Maximum adjustments Shortened day/schedule Built-in breaks	<ul style="list-style-type: none"> ➤ Provide quiet place for scheduled mental rest ➤ Lunch in quiet environment ➤ No significant classroom or standardized testing ➤ Modify rather than postpone academics ➤ Provide extra time, help, and adjustment of assignments
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Progress to Step 4 when student handles 30-40 minutes of sustained mental exertion without worsening of symptoms.

4	SCHOOL – Part Time Maximum adjustments Shortened day/schedule	<ul style="list-style-type: none"> ➤ No standardized testing ➤ Modified classroom testing ➤ Moderate decrease of extra time, help, and modification of assignments
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Progress to Step 5 when student handles 60 minutes of mental exertion without worsening of symptoms.

5	SCHOOL – Part Time Minimal adjustments	<ul style="list-style-type: none"> ➤ No standardized testing; routine tests are OK ➤ Continued decrease of extra time, help, and adjustment of assignments ➤ May require more support in academically challenging subjects
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Progress to Step 6 when student handles all class periods in succession without worsening of symptoms AND receives medical clearance for full return to academics and athletics.

6	SCHOOL – Full Time Full academics No adjustments	<ul style="list-style-type: none"> ➤ Attends all classes ➤ Full homework and testing
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When symptoms continue beyond 3-4 weeks, prolonged in-school supports are required. Request a 504 meeting to plan and coordinate student supports.

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RETURN TO PLAY PROGRESSION

Return to play is a medical decision. The CMT will be familiar with state concussion laws and understand which healthcare providers may clear a student. **To begin the Return to Play Plan, the student must be free of all symptoms (see Signs and Symptoms of Concussion), have no academic adjustments in place, and be cleared by a healthcare provider.** The student may spend 1-2 days at each step before advancing to the next. If post-concussion symptoms occur at any step, stop activity and have the CMT reassess.

Rehabilitation Stage	Functional exercise at each stage of rehabilitation	Objective of each stage
1. No activity	Symptom limited physical and cognitive rest.	Recovery
2. Light aerobic exercise	Walking, swimming or stationary cycling keeping intensity <70% maximum permitted heart rate. No resistance training.	Increase HR
3. Sport-specific exercise	Skating drills in ice hockey, running drills in soccer. No head impact activities.	Add movement
4. Non-contact training drills	Progression to more complex training drills, e.g., passing drills in football and ice hockey. May start progressive resistance training.	Exercise, coordination and cognitive load
5. Full-contact Practice	Following medical clearance. Participate in normal training activities.	Restore confidence and assess functional skills by coaching staff
6. Return to play	Normal game play	

Recommendations from 2012 Zurich Consensus Statement on Concussion – McRory, P., Meeuwisse, WH, Aubry, M, et. al., *Br. J Sports Med* 2013; 47:250-258.

Post-Concussion Symptom Checklist

Name: _____

Date: _____

Please indicate how much each symptom has bothered you over the past 2 days.

	Symptoms	None	Mild		Moderate		Severe	
PHYSICAL	Headache	0	1	2	3	4	5	6
	Nausea	0	1	2	3	4	5	6
	Vomiting	0	1	2	3	4	5	6
	Balance Problem	0	1	2	3	4	5	6
	Dizziness	0	1	2	3	4	5	6
	Blurry or double vision	0	1	2	3	4	5	6
	Sensitivity to Light	0	1	2	3	4	5	6
	Sensitivity to Noise	0	1	2	3	4	5	6
	Balance Problems	0	1	2	3	4	5	6
	Pain other than headache	0	1	2	3	4	5	6
THINKING/ COGNITIVE	Feeling "in a fog"	0	1	2	3	4	5	6
	Feeling Slowed Down	0	1	2	3	4	5	6
	Difficulty concentrating	0	1	2	3	4	5	6
	Difficulty Remembering	0	1	2	3	4	5	6
SLEEP ISSUES	Trouble Falling Asleep	0	1	2	3	4	5	6
	Fatigue or low energy	0	1	2	3	4	5	6
	Drowsiness	0	1	2	3	4	5	6
EMOTIONAL	Feeling more Emotional	0	1	2	3	4	5	6
	Irritability	0	1	2	3	4	5	6
	Sadness	0	1	2	3	4	5	6
	Nervousness	0	1	2	3	4	5	6

Do symptoms worsen with physical activity? Yes_____ No_____ Not Applicable_____

Do symptoms worsen with thinking/cognitive activity? Yes_____ No_____ Not Applicable_____

Activity Level: Over the past two days, compared to what I would typically do, my level of activity has been _____% of what it would normally be.

Adapted from Oregon Concussion Awareness and Management Program (OCAMP)

http://media.cbirt.org/uploads/files/sports_concussion_management_guide.pdf

TIPS FOR TEACHERS

Concussion Symptoms, Possible School Problems & Adjustments/Accommodations

Concussion Symptoms	Implications at school	Potential Adjustments in School Setting
PHYSICAL SYMPTOMS <ul style="list-style-type: none"> • Headache (most common symptom reported in concussions) 	<ul style="list-style-type: none"> • Poor concentration - may vary throughout day; • Can be triggered by fluorescent lighting, loud noises and focusing on tasks 	<ul style="list-style-type: none"> • Frequent breaks • Reduce exposure to aggravators, i.e., turn off fluorescent lights • Rest as needed in nurse's office or quiet area
<ul style="list-style-type: none"> • Dizziness/Lightheadedness 	<ul style="list-style-type: none"> • Standing quickly or walking in crowded environment may present a challenge • Often provoked by visual stimulus (rapid movements, videos, etc.) 	<ul style="list-style-type: none"> • Allow student to put head down if symptoms worsen • Early dismissal from class and extra time to get from class to class to avoid crowded hallways
<ul style="list-style-type: none"> • Visual Symptoms <ul style="list-style-type: none"> ○ Light sensitivity ○ Double vision ○ Blurry vision 	<ul style="list-style-type: none"> • Trouble seeing slide presentations, movies, smart boards, computers, handheld computers (tablets) • Difficulty reading & copying • Difficulty paying attention to visual tasks 	<ul style="list-style-type: none"> • Reduce brightness on the screens • Student may wear hat or sunglasses in school • Audiotapes instead of books • Seat student close to center of classroom activities (preferential seating if blurry vision) • Turn off fluorescent lights • Cover one eye with patch/ tape or one lens if glasses are worn (double vision)
<ul style="list-style-type: none"> • Noise Sensitivity 	<ul style="list-style-type: none"> • Troubles with various noises in several school settings: Lunchroom, shop classes, music classes (band, choir), physical education classes, hallways, and organized sports practice 	<ul style="list-style-type: none"> • Allow student to eat lunch in quiet area with classmate • Limit or avoid band, choir or shop classes • Avoid noisy gyms and organized sports practices and games • Consider use of earplugs • Early dismissal from class to avoid crowded, noisy hallways
THINKING/COGNITIVE SYMPTOMS <ul style="list-style-type: none"> • Difficulty concentrating or remembering 	<ul style="list-style-type: none"> • Challenges learning new tasks and comprehending new material (slowed processing speed) • Difficulty recalling and applying previously learned material • Lack of focus in the classroom • Difficulties with test taking, including standardized tests 	<ul style="list-style-type: none"> • Avoid testing or completion of major projects during recovery time when possible • Provide extra time to complete non-standardized tests in a quiet environment • Postpone standardized testing when possible • Consider one test per day during exam periods

Concussion Symptoms	Implications at school	Potential Adjustments in School Setting
THINKING/COGNITIVE SYMPTOMS (cont'd)		<ul style="list-style-type: none"> • Assess knowledge using multiple-choice instead of open-ended questions • Consider use of preprinted notes, note taker, scribe or reader for oral testing • Consider tape recorder for note taking • Reduce the cognitive load & focus on the most important concepts for student to know – quality vs. quantity • Consider decreasing homework and reducing make-up work • Provide both oral and written instructions; clarify instructions
SLEEP ISSUES	<ul style="list-style-type: none"> • Excessive fatigue can hamper memory for new or past learning or ability to attend and focus • Insufficient sleep can lead to tardiness or excessive absences • Difficulty getting to sleep or frequent waking at night may lead to sleeping in class • Excessive napping due to fatigue may lead to further disruptions of the sleep cycle 	<ul style="list-style-type: none"> • Allow for late start or shortened school day to catch up on sleep • Allow rest breaks during day if needed
EMOTIONAL/MOOD SYMPTOMS	<ul style="list-style-type: none"> • Sadness, Irritability, changes in mood, nervousness, anxiety may affect social relationships with adults and peers • Student may feel scared, angry or depressed as a result of the concussion. 	<ul style="list-style-type: none"> • Develop an emotional support plan for the student. This may include an adult with whom the student can talk if feeling overwhelmed • Mental fatigue may result in emotional meltdowns • Allow “signal” for student to remove himself/herself from classroom to de-escalate • Provide reassurance that what they are feeling is typical in the course of recovery – i.e., concern about getting behind in school work and/or grades • Share difficulties and progress with parents, CMT contact person, medical personnel, athletic coaches/ trainers as appropriate

Sources: Halstead, M., McAvoy, K., et al. *Returning to Learning Following a Concussion.*

Pediatrics: originally published online October 27, 2013.

<http://pediatrics.aappublications.org/content/early/2013/10/23/peds.2013-2867>

Oregon Concussion Awareness and Management Program (OCAMP)

http://media.cbirt.org/uploads/files/sports_concussion_management_guide.pdf

Information from Teachers for CMT

Date: _____ Student Name _____

Date of Concussion: _____

To Teachers: The above named student has been diagnosed with a concussion. Please indicate if you are seeing physical, cognitive, emotional or sleep/energy symptoms in your classroom related to this concussion, or if you have concerns about this student's progress, please state them below. Thank you for your valuable feedback.

Class: Teacher:	What academic adjustments, if any, is the student still receiving in your classroom?	Has the student reported or have you noticed any concussion symptoms in the last two days? (Headaches, dizziness, difficulty concentrating, remembering; more irritable, fatigued than usual?) If yes, please explain.	Is this student's level of performance better, the same or worse than before the concussion? Please explain.

Adapted from McAvoy, K. (2013) REAP the Benefits of Good Concussion Management. Centennial, CO: Rocky Mountain Sports Medicine Institute Center for Concussion

A fillable version of this document is available at: <http://www.education.ne.gov/sped/birsst.html>