SANFORD CONCUSSION PLAYBOOK

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SPORTS MEDICINE

CONCUSSION PLAYBOOK
Sanford Health

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Dear Colleague,

Over the past decade, concussion management has continued to advance, and we have seen some legislation changes addressing sports-related concussions in our region. We have formed a multidisciplinary committee to update current resources to assist all providers with implementing an appropriate and recognized standard of care for individuals with a sports- related concussion. What follows is a convenient, concise collection of evaluation and return-to-play guidelines and materials based on the latest research and consensus statements. This updated Sanford Concussion Playbook includes specific guidelines, evaluation tools, patient instructions and handouts, as well as summaries of the law pertaining to sports concussion management in your state. We hope these materials will assist you in determining and implementing the best, individualized sports concussion management plan, including the more progressive return-to-activity guidelines.

The key elements of the updated concussion management and return-to-play guidelines are:

- Symptom-driven – rather than time-bound – return-to-activity after evaluation by a licensed health care provider trained and experienced in the evaluation and management of concussion
- Moderated, non-contact physical activity may be reintroduced after 24-48 hours post injury
- Informing and educating coaches, athletes and athletes' parents or guardians on the signs and risks of concussions, including the need for immediate removal from play after an injury
- Legislation information

Please take the time to carefully review all of the enclosed materials, and feel free to make copies for your use as needed. All materials are also available on our concussion services webpage at sanfordhealth.org. We look forward to collaborating with you and answering any questions you may have in the evaluation and care of your sports concussion patients.

Kind regards,


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SPORTS CONCUSSION ALGORITHM

Health care provider information

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Patient presents with signs, symptoms and/or a mechanism of injury consistent with a head injury

Assess for Red Flags

- Increasingly severe headache
- Prolonged loss of consciousness
- Seizure/convulsions
- Fluctuating states of consciousness
- Slurred speech
- Increasing confusion
- Repeated vomiting
- Uncharacteristic behavior changes
- Pupils unequal or unreactive
- Weakness/numbness in extremities
- Severe cervical pain
- Signs and symptoms of a skull fracture

Does the patient exhibit any of these Red Flags?

YES → **EMS/ED Referral**

NO → Complete concussion evaluation

Has patient sustained a concussion?

YES →

1. Recommend academic and physical activity modifications
   - *Physical rest* for 24-48 hours, followed by **Light Activity**[$]
   - *Cognitive rest* - e.g., extra time on assignments, decreased screen time, breaks if symptoms worsen
2. Provide concussion education and continue to monitor signs and symptoms

NO → **Monitor and treat as clinically indicated**

Perform follow-up evaluation
- Monitor signs and symptoms as patient increases physical and cognitive activities. Progress to **Moderate Activity** followed by **Sport Specific** exercise as tolerated.[$]

[$] See Return-to-Activity Guidelines

Is the patient asymptomatic? Is the concussion assessment normal?

YES → Begin **Non-Contact Practice** followed by **Unrestricted Training**[$]

NO → Continue to monitor and evaluate. Failure to resolve after 3-4 weeks or presence of **Modifying Factors*** should warrant consideration of referral to specialty care clinic.

Has patient successfully completed all stages of Return-to-Activity Guidelines?[$]

NO → Continue to monitor and evaluate. Failure to resolve after 3-4 weeks or presence of **Modifying Factors*** should warrant consideration of referral to specialty care clinic.

YES → **RETURN TO FULL ACTIVITY**

* Modifying Factors

- Number of symptoms
- Severity of symptoms
- Duration of symptoms
- Prolonged LOC
- Amnesia
- Concussive seizure/convulsion
- Medications
- Age/Gender
- High risk activities/playing style
- Concussions occurring with less force
- Previous history of concussions
  - Number
  - Severity
  - Duration of symptoms
- Personal history of
  - Migraines
  - Mental health disorders
  - Learning disabilities
  - Seizures
  - ADD/ADHD

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SANFORD SPORTS CONCUSSION PROGRAM POCKET CARD:

Front

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Sanford Sports Concussion Program

Sideline Pocket Card for Health Care Providers

Concussion Symptom Inventory

Have the athlete rate each symptom from 0-6

	none	mild		moderate		severity	
Severity	0	1	2	3	4	5	6
Headache							
Nausea							
Balance problems/ dizziness							
Fatigue							
Drowsiness							
Feeling like “in a fog”							
Difficulty concentrating							
Difficulty remembering							
Sensitivity to light							
Sensitivity to noise							
Blurred vision							
Feeling slowed down							
Other symptoms evident since injury?							

Modified Maddocks Questions

Ask the athlete the following:

- Where are we playing today?
- Which half/period is it now?
- Who scored last in this game/match?
- What team did we play last week/game?
- Did we win the last game/match?

SANFORD SPORTS CONCUSSION PROGRAM POCKET CARD:

Back

Retrograde Memory

Ask the athlete the following:

- What were you doing just prior to getting hit/injured?
- Do you remember how you got hit/injured?
- Do you recall how you got to the sideline?

Immediate Memory

Ask the athlete to repeat 5 words:

- Elbow – Apple – Carpet – Saddle – Bubble
  or
- Candle – Paper – Sugar – Sandwich – Wagon

Concentration

Ask the athlete to repeat these numbers backwards:

- 4-9-3 (394 is correct), 3-8-1-4 (4183), 6-2-9-7-1 (17926)

Balance

Have the athlete stand heel-to-toe with eyes closed, and hands on hips, for 20 seconds while trying to maintain stability (non-dominant foot in back).

Vestibular-Ocular Motor Screening (VOMS)

Smooth Pursuits, Saccades – Horizontal, Saccades – Vertical, Convergence (cm), VOR – Horizontal, VOR – Vertical, VMS

Delayed Recall

Ask the athlete to repeat the 5 words:

- Elbow – Apple – Carpet – Saddle – Bubble
  or
- Candle – Paper – Sugar – Sandwich – Wagon

RED FLAGS – If any of the following are present, activate EMS.

- Headache that worsens
- Seizure
- Looks very drowsy or can't be awakened
- Repeated vomiting
- Slurred speech
- Can't recognize people or places
- Increasing confusion or irritability
- Weakness or numbness in arms or legs
- Behavioral changes
- Any loss of consciousness greater than 30 seconds

ANY ATHLETE WITH A SUSPECTED CONCUSSION CANNOT RETURN TO PLAY ON THE SAME DAY!

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CONCUSSION EVALUATION
Health Care Provider

SANFORD ORTHOPEDICS SPORTS MEDICINE

Demographic Information:

Name: _____ DOB: _____ DOI: _____ Today's Date: _____

School/Employer: _____ Highest Grade/Degree: _____ Activity: _____

Previous Provider: _____ Imaging: CT MRI Other:_____ Results: _____

Injury Information:

Mechanism of Injury: ☐ Head-to-Head ☐ Head-to-Body Part ☐ Head to Ground ☐ Other _____

Location of Contact: ☐ Frontal/Face ☐ R / L Temporal ☐ R / L Parietal ☐ R / L Occipital ☐ Other _____

Returned to Play: Y / N Duration: _____ **Loss of Consciousness:** Y / N Witnessed: Y / N Duration: _____

Retrograde/Anterograde Amnesia: Y / N **Disorientated:** Y / N **Tinnitus:** Y / N

Neck Pain: Y / N If positive for neck pain, neck evaluation assessment: _____

Injury Description: _____

_____

_____

_____

Modifying Factors for Protracted Recovery: (Check all that apply)

Number of Diagnosed Concussions: _____ Potential (Undiagnosed): _____ Longest Duration of Symptoms: _____

Description of Previous Concussions: _____

_____

Migraines/Headaches: Y / N If yes, frequency, duration: _____ **Seizures:** Y / N **Sleep Disorder**: Y / N

Learning Disability: Y / N **Developmental Disorder:** Y / N **Academic accommodations (e.g. IEP, 504):** Y / N _____

ADD/ADHD: Y / N If yes, is medication currently being taken? Y / N _____ **HX of Motion sensitivity** Y/N _____

Anxiety/Depression: Y / N _____ **Other Mental Health Disorders:** Y / N _____

HX of ocular dysfunction Y/N _____ **Other Medical History**: _____

Current Medications: _____

Symptom Checklist: Initial (day of injury) and current (at time of evaluation) – Rate severity on scale of 0-6 (0 = None; 6 = severe)

Symptom	Initial	Current	Symptom	Initial	Current
Physical			**Emotional**		
Headache			Irritability		
Nausea			Sadness		
Vomiting			More Emotional		
Balance Problems			Nervousness		
Dizziness			**Sleep**		
Visual Problems			Drowsiness		
Fatigue			Sleeping Less Than Normal		
Sensitivity to Light			Sleeping More Than Normal		
Sensitivity to Noise			Trouble Falling Asleep		
Numbness/Tingling			**Comments:**		
Cognitive					
Mentally Foggy					
Feeling Slowed Down					
Difficulty Concentrating			**Total # of Symptoms**		
Difficulty Remembering			**Total Symptom Score**		

Orientation:
(Check yes for correct answers)

Date: Y / N
Month: Y / N
Year: Y / N
Day: Y / N
Place: Y / N
Time (within 1 hour): Y / N

Exacerbating/Aggravating Factors
Does the athlete report any factors that worsen/aggravate their symptoms?

_____

_____

King-Devick (if available):

Patient's Time:
Card #1 Time: _____ Card #2 Time: _____ Card #3 Time: _____
Total Time: _____ Total Errors: _____
Did the athlete become symptomatic/did athlete's symptoms increase? Y/N _____

CONCUSSION EVALUATION
Health Care Provider

SANFORD ORTHOPEDICS SPORTS MEDICINE

Immediate Memory: Instruct patient to remember the word list and repeat back in any order. Complete all three trials before moving on.

List:	Trial 1	Trial 2	Trial 3	Alternate word lists		
Elbow	Y / N	Y / N	Y / N	Candle	Baby	Finger
Apple	Y / N	Y / N	Y / N	Paper	Monkey	Penny
Carpet	Y / N	Y / N	Y / N	Sugar	Perfume	Blanket
Saddle	Y / N	Y / N	Y / N	Sandwich	Sunset	Lemon
Bubble	Y / N	Y / N	Y / N	Wagon	Iron	Insect
Total Score Correct:						

Vestibular/Ocular Motor Screening: (0=not experiencing the symptom; 10=severe)

	Not Tested	Headache (0-10)	Dizziness (0-10)	Nausea (0-10)	Fogginess (0-10)	Comments
Baseline Symptoms	N/A					
Smooth Pursuits						
Convergence						Distance:
Saccades – Horizontal						
Saccades – Vertical						
VOR – Horizontal						
VOR – Vertical						
VMS						

Concentration: Read the patient the numbers in order listed and ask them to repeat the numbers back in reverse order (ie: 3-2-1, they say 1-2-3)

List	Trial	Alternative Lists		
3-7	Y / N	7-9	5-8	1-4
4-9-3	Y / N	5-2-6	6-2-9	4-1-5
3-8-1-4	Y / N	3-2-7-9	1-7-9-5	4-9-6-8
6-2-9-7-1	Y / N	1-5-2-8-6	3-8-5-2-7	6-1-8-4-1
7-1-8-4-6-2	Y / N	8-3-1-9-6-4	5-3-9-1-4-8	7-2-4-8-5-6

Neurological Screening:

Cranial Nerves: Normal / Abnormal _____
UE Myotomes: Normal / Abnormal _____
UE Dermatomes: Normal / Abnormal _____
LE Myotomes: Normal / Abnormal _____
LE Dermatomes: Normal / Abnormal _____

Fine movement of hands: Normal /Abnormal _____
Finger to Nose: Normal / Abnormal _____
Tandem Gait: Normal / Abnormal _____
Romberg Balance: (>6 sec = normal)
Eyes Open Reg : _____ (seconds)
Eyes Closed Reg:_____(seconds)
Eyes Open Tandem: _____(seconds)
Eyes Closed Tandem: _____ (seconds

Delayed Recall: Without repeating the word list, ask patient to recall the 5 words given at the beginning of examination

Total Correct: ____ / 5

Follow-Up Plan:

____ No follow-up needed unless signs or symptoms occur
____ Follow-up in ____ days(s)/week(s)
____ Follow-up with PCP
____ Referral to Concussion Clinic
____ Emergency Department
____ Neuropsychology
____ Neurology
____ Occupational Therapy
____ Physical Therapy
____ Speech Therapy

Evaluation completed by: _____ Date: _____

716-962-744 8/21

CONCUSSION INSTRUCTIONS
from your Health Care Provider

SANFORD ORTHOPEDICS SPORTS MEDICINE

Patient name: _____

DOB: _____ Date of evaluation: _____ Date of injury:_____

You've been diagnosed with a concussion, also known as a mild traumatic brain injury. This personal plan is based on your symptoms and is designed to help speed your recovery. Your careful attention to these instructions can also prevent a further injury or your condition from worsening.

Common Signs and Symptoms

It's common for a concussed patient to have one or several signs and symptoms of a concussion. The signs and symptoms present at the time of this evaluation are checked below. Please be advised, some signs and symptoms may develop over time, especially early in the injury process.

Physical				Thinking		Emotional		Sleep	
☐	Headache	☐	Light sensitivity	☐	Feeling mentally foggy	☐	Irritability	☐	Drowsiness
☐	Nausea	☐	Noise sensitivity	☐	Difficulty concentrating	☐	Sadness	☐	Sleeping more
☐	Fatigue	☐	Numbness/tingling	☐	Memory problems	☐	Feeling more emotional	☐	Sleeping less
☐	Visual problems	☐	Vomiting	☐	Feeling slowed down	☐	Nervousness	☐	Trouble falling asleep
☐	Balance problems	☐	Dizziness	☐	Easily distracted	☐	Anxious	☐	Trouble staying asleep

Red Flags

Seek care immediately if symptoms significantly worsen or if there are behavioral changes. Watch for any of the following serious signs and symptoms, which may not appear immediately after the injury. Go to the nearest emergency department if you experience any of the following signs and symptoms.

Increasingly severe headache	Seizure or convulsions	Slurred speech	Repeated vomiting
Pupils unequal or unreactive	Severe neck pain	Loss of consciousness	Increasing confusion
Uncharacteristic behavior changes	Weakness or numbness in arms or legs	Fluctuating consciousness	

It is okay to:	**There is no need to:**	**Do not:**
Use acetaminophen (Tylenol)	Check your eyes with a flashlight	Drink alcohol
Use an ice pack on your head and neck	Take away all electronics	Take sleeping pills or sleeping aids (exceptions: melatonin)
Eat a normal diet	Test reflexes	Take products that contain ibuprofen (Advil or Motrin)
Go to sleep	Stay in bed	Take products that contain aspirin or naproxen (Aleve)
Rest	Wake every hour	Drive until medically cleared

The best way to recover is to follow these recommendations:

- **Sleep.** Follow a regular sleep schedule by going to sleep and waking at the same time every day. Avoid napping. Sleeping should be done in a clean, dark and cool room with no distractions. White noise could be helpful. Cell phones and other electronic devices should not be in the room during sleeping hours.
- **Diet.** Follow a routine eating schedule and eat nutritious meals at the same time every day. Avoid skipping meals.
- **Hydration.** Drink plenty of water or fluids with electrolytes (low-sugar sports drinks, coconut water, etc.). You should drink 70 to 90 ounces of water or fluids per day.
- **Physical activity.** Perform 20 to 30 minutes of low-risk activity every day. Low-risk activities include walking, stationary biking and more. Take breaks if symptoms increase more than two points on a 10 point scale.
- **Stress.** Be aware of situational and environmental stressors that can increase symptoms. Remove yourself from stressful situations if symptoms increase.

WHAT DO YOU DO NOW?

- Follow recommendations and continue to monitor your signs and symptoms. You may be given academic accommodations if appropriate.
- Follow-up with a qualified health care provider who is trained in concussion management and has experience in developing return-to-activity guidelines.
- Don't return to sports or vigorous activity until all of your symptoms have completely cleared for at least 24 hours, you have completed the return-to-activity guidelines and are cleared by a qualified medical professional.

RECOMMENDATIONS

Academic accommodations: _____

_____

_____

Activity restrictions: _____

_____

_____

Recommendations provided to:_____

Relationship to patient: _____

Date of recommendations:_____

Recommendations expire (please see qualified health care provider for extended recommendations): _____

_____

Health care provider: _____

Please feel free to contact me if you have any questions. I can be reached at: _____

Comments: _____

_____

_____

_____

_____

_____

_____

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ACCOMMODATIONS FOR STUDENTS

Instructions from your health care provider

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Patient name: _____

DOB: _____Date of evaluation: _____

Restrictions should be applied from ___/___/___ until ___/___/___.

The patient has been diagnosed with a concussion and is currently under a healthcare provider's care. The following accommodations are intended to help the student recover from the injury while not falling behind academically.

- ❑ **Stage 1.** No school/complete cognitive rest – No extracurricular participation
- ❑ **Stage 2.** Part-time school attendance with accommodations – No extracurricular participation
- ❑ **Stage 3.** Full-day attendance with accommodations
- ❑ **Stage 4.** Full-day attendance without accommodations
- ❑ **Stage 5.** Full school and extracurricular participation

The student and parents/guardians are encouraged to discuss and establish the specifics of the accommodations with the school on a class-by-class basis. The follow academic accommodations are recommended as part of medical care and treatment at this time:

CHECK ALL THAT APPLY:

Attendance
- ❑ Excuse past school absences
- ❑ Partial days
- ❑ Allow to leave early if symptomatic
- ❑ Full days with breaks as needed
- ❑ Full attendance, no restrictions

Testing
- ❑ No testing until _____
- ❑ Allow extra time on tests or quizzes
- ❑ Allow open book or notes
- ❑ Limit to one exam or quiz per day
- ❑ Multiple-choice testing only
- ❑ Oral testing only

Classroom and environment
- ❑ Pre-print notes or outlines
- ❑ Enlarge font when possible
- ❑ Breaks as needed in a quiet space
- ❑ Allow snacks and drinks
- ❑ Preferential seating to avoid distractions
- ❑ Breaks from screens, smart boards, etc., as needed
- ❑ Leave class five minutes early to avoid busy hallways

Homework and assignments
- ❑ No homework
- ❑ Prorate and reduce workload when possible
- ❑ Allow extra time to complete assignments
- ❑ Provide audiobooks when available
- ❑ Create a plan to make up missed work

Physical education and exertion
- ❑ No PE class, athletics or physical exertion
- ❑ Allow study hall in place of PE class
- ❑ No group or ball sports or activities
- ❑ Light activity (see return-to-activity guidelines)
- ❑ Moderate activity (see return-to-activity guidelines)
- ❑ Sport-specific activity (see return-to-activity guidelines)

Fine arts
- ❑ Allow study hall in place of band or choir
- ❑ Limit band or choir to _____ minutes per day
- ❑ No marching or dancing while performing

Work restrictions
- ❑ No work at this time
- ❑ Limit work to _____ hours per day
- ❑ Breaks as needed

Additional Instructions: _____

_____

_____

_____

Provider Signature:_____Date: _____

892-279-407 8/21

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Sports Concussion Graduated Return-to-Activity Guidelines

The Return-to-Activity Guideline is designed to return the individual to his/her activities as quickly and safely as possible following a concussion. Each phase should last a **minimum of 24 hours** and be completed in a consecutive order, but in some cases a phase may take days or weeks to complete. This guideline is not a substitute for a health care professional's clinical judgement and the patient's concussion modifying factors should be taken into consideration.

Complete Rest

The patient should avoid strenuous physical and cognitive exertion for the first 24-48 hours immediately following the injury. Patient can complete symptom-limited activities of daily living. Cease activity if patient experiences a 2-point or greater increase on a 0-10 symptom scale.

Light Exercise

24-48 hours after the injury, symptomatic and asymptomatic patients should resume low-risk activities such as walking or stationary biking for a duration of 20-40 minutes (30-40% of perceived maximum exertion). When patient can complete low-risk, light activity without an increase in symptoms, patient may progress to moderate aerobic exercise. Cease activity if patient experiences a 2-point or greater increase on a 0-10 symptom scale.

Moderate Exercise

Begin 30-60 minutes of moderate aerobic exercise such as jogging/running, carioca, swimming, skating, burpees, jumping jacks, etc. (40-60% of perceived maximum exertion). Cease activity if patient experiences a 2-point or greater increase on a 0-10 symptom scale. When able to tolerate moderate aerobic activity without an increase in symptoms, progress to Sport-Specific Exercise.

Sport-Specific Exercise

Begin to incorporate sport-specific activities in a controlled environment, in addition to moderate aerobic exercises for 40-60 minutes (60-80% of perceived maximum exertion). Examples of sport-specific activities include shooting baskets and ball handling drills, shooting and puck/stick handling drills, running routes and throwing passes. Patient may wear helmet/shoulder pads if applicable but avoid full gear. Begin sub-maximal weight training in a controlled environment. Patient should be **asymptomatic for a minimum of 24 hours** and be approved by a healthcare provider following concussion testing/evaluation prior to progressing to non-contact practice participation.

Non-Contact Practice

Begin non-contact drills during team practices (80-100% of perceived maximum exertion). Patient may wear full gear. Patient may resume full weight lifting activities. Patient should cease activities and return to sport-specific exercise if symptoms return. It is also recommended that patient perform and pass exertional testing during this stage.

Unrestricted Training

Patient can resume full-contact training practices and activities. Patient should cease activities and return to sport-specific exercise if symptoms return.

RETURN TO FULL ACTIVITY

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CONCUSSION SYMPTOM TRACKER

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Date:	Stage*:	Duration:	Activity Description:			
	Headache	Nausea	Dizziness	Fogginess	Visual/Audio Sensitivity	Other:
Pre-Activity	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10
Post-Activity	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10
Comments:						

Date:	Stage*:	Duration:	Activity Description:			
	Headache	Nausea	Dizziness	Fogginess	Visual/Audio Sensitivity	Other:
Pre-Activity	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10
Post-Activity	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10
Comments:						

Date:	Stage*:	Duration:	Activity Description:			
	Headache	Nausea	Dizziness	Fogginess	Visual/Audio Sensitivity	Other:
Pre-Activity	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10
Post-Activity	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10
Comments:						

Date:	Stage*:	Duration:	Activity Description:			
	Headache	Nausea	Dizziness	Fogginess	Visual/Audio Sensitivity	Other:
Pre-Activity	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10
Post-Activity	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10
Comments:						

Date:	Stage*:	Duration:	Activity Description:			
	Headache	Nausea	Dizziness	Fogginess	Visual/Audio Sensitivity	Other:
Pre-Activity	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10
Post-Activity	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10
Comments:						

Date:	Stage*:	Duration:	Activity Description:			
	Headache	Nausea	Dizziness	Fogginess	Visual/Audio Sensitivity	Other:
Pre-Activity	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10
Post-Activity	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10
Comments:						

Date:	Stage*:	Duration:	Activity Description:			
	Headache	Nausea	Dizziness	Fogginess	Visual/Audio Sensitivity	Other:
Pre-Activity	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10
Post-Activity	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10
Comments:						

Date:	Stage*:	Duration:	Activity Description:			
	Headache	Nausea	Dizziness	Fogginess	Visual/Audio Sensitivity	Other:
Pre-Activity	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10
Post-Activity	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10
Comments:						

Date:	Stage*:	Duration:	Activity Description:			
	Headache	Nausea	Dizziness	Fogginess	Visual/Audio Sensitivity	Other:
Pre-Activity	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10
Post-Activity	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10	0 1 2 3 4 5 6 7 8 9 10
Comments:						

*Stage Key: (L) Light Activity; (M) Moderate Activity; (SS) Sport Specific Activity; (NC) Non-Contact Activity; (C) Contact Activity

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Concussions

FACT SHEET FOR ATHLETE/PARENT

SANFORD ORTHOPEDICS SPORTS MEDICINE



WHAT IS A CONCUSSION?

A concussion is a type of traumatic brain injury caused by a blow to the head or body. A sudden rapid movement of the head can cause the brain to bounce or twist inside the skull. This damage changes the way your brain normally works. Even a mild bump or blow can result in a concussion. The effects of a concussion can be serious. If your child/athlete reports any symptoms of concussion, or if you notice the signs yourself, seek medical attention right away. Please be advised, some signs and symptoms may develop over time, especially early in the injury process.



COMMON SIGNS AND SYMPTOMS ARE:

Observed:

- Confusion
- Uncoordinated movements
- Loss of consciousness
- Behavioral/personality changes
- Difficulty answering questions
- Inability to recall events
- Vomiting
- Drowsiness

Reported:

- Headache
- Light sensitivity
- Noise sensitivity
- Nausea/vomiting
- Fatigue
- Dizziness
- Vision changes
- Confusion
- Difficulty focusing
- Feeling slowed down or in a fog
- Balance or coordination difficulties





WHAT SHOULD I DO IF I THINK I HAVE A CONCUSSION?

1. Immediately stop playing or practicing your sport for that day, and tell your coach and parents.
2. Look for signs and symptoms of concussion.

   Note: Seek care quickly if symptoms significantly worsen or if there are behavioral changes. Watch for any of the following serious signs/symptoms, which may not appear immediately after the injury. Go to the nearest emergency department if you experience any of the following signs and symptoms:

   - Increasing of severe headache
   - Slurred speech
   - Pupils unequal or unreactive
   - Loss of consciousness
   - Uncharacteristic behavior changes
   - Fluctuating consciousness
   - Seizure/convulsions
   - Repeated vomiting
   - Severe cervical pain
   - Increasing confusion
   - Weakness/numbness in arms or legs



3. Rest your brain and body for 24-48 hours after the concussion.
4. Visit your healthcare provider.



REDUCING THE RISK

Every sport is different; but there are steps athletes can take to protect themselves.

- Always practice good sportsmanship.
  - Follow all safety regulations and rules of the game.
- Avoid using one's head/helmet as a weapon.
- Use appropriate protective equipment (e.g., helmets, padding, shin guards, eye protectors, and mouth guards).
  - Protective equipment should fit properly, be well maintained, and be worn consistently and correctly.
- Understand the risks and dangers of a concussion.
- A repeat concussion that occurs before the brain recovers from the first – usually within as short period (hours, days, or weeks) – can slow recovery and increase the likelihood of having long-term or permanent problems.

Athletes with a known or suspected concussion should be removed from play, practice, or training until they have been evaluated and given permission to return to play by a healthcare professional with experience in evaluating and managing concussions.

Most athletes who experience an initial concussion will recover completely, as long as return to learn and return to activity guidelines are followed.

Our Sanford programs provide parents, coaches, physicians, and school administrators the most cutting edge return-to-learn and -activity decisions.

THE FACTS

- A concussion is a brain injury.
- All concussions are serious.
- Concussions can occur without loss of consciousness.
- Concussions can occur in any sport.
- An athlete can still get a concussion even when wearing a helmet.
- Affected athletes may not report their symptoms for fear of losing playing time or their positions.
- Rapid recognition and proper management of concussions can prevent further injury and speed recovery



IF YOU SUSTAINED A CONCUSSION:

The best way to promote recovery is to follow a routine schedule for sleep, diet, hydration and modified, non-contact physical activity.

It is okay to:

- Use acetaminophen (Tylenol)
- Use ice pack on head and neck
- Eat a normal diet
- Stay hydrated
- Go to sleep
- Rest

There is no need to:

- Check eyes with flashlight
- Take away all electronics
- Test reflexes
- Stay in bed
- Wake every hour

Please do not:

- Drink alcohol
- Take sleeping pills or sleeping aides
- Take products that contain ibuprofen (Advil,Motrin)
- Take products that contain aspirin or naproxen (Aleve)
- Drive until medically cleared

FOR MORE INFORMATION

Regarding the Sports Concussion Program at Sanford Orthopedics & Sports Medicine or schedule an appointment call:

Aberdeen	(605) 226-5500
Bemidji	(218) 751-9746
Bismarck	(701) 323-8920
Fargo	(701) 417-6000
Sioux Falls	(605) 328-2663

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Concussions

FACT SHEET FOR COACHES

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IF YOUR PLAYER HAS EXPERIENCED A BUMP OR BLOW TO THE HEAD DURING A GAME OR PRACTICE, LOOK FOR ANY OF THE FOLLOWING SIGNS/ SYMPTOMS OF A CONCUSSION:



Signs observed by coaching staff

- Appears dazed or stunned
- Is confused about assignment or position
- Forgets an instruction
- Is unsure of game, score or opponent
- Moves clumsily
- Answers questions slowly or with difficulty
- Loses consciousness (even briefly)
- Shows behavior or personality changes
- Can't recall events prior to hit or fall
- Can't recall events after hit or fall

Symptoms reported by athlete

- Headache or "pressure" in head
- Nausea or vomiting
- Balance problems or dizziness
- Double or blurry vision
- Sensitivity to light
- Sensitivity to noise
- Feeling sluggish, hazy, foggy or groggy
- Concentration or memory problems
- Confusion
- Does not "feel right"





Recognizing a possible concussion

To help recognize a concussion, you should watch for the following two things among your athletes:

A Forceful Blow to the head or body Results in rapid movement or deceleration of the head.

and

Any Change In the athlete's behavior, Thinking or physical functioning. (See the signs and symptoms of concussion listed on the next page)



PREVENTION AND PREPARATION

As a coach, you play a key role in reducing the risk for concussions and responding properly when they occur. Here are some steps you can take to ensure the best outcome for your athletes and the team.

- Talk with athletes and their parents about the dangers of concussions.
- Explain your concerns about concussion and your expectations of safe play to athletes, parents, and assistant coaches. Pass out the concussion fact sheet at the beginning of the season and again when a concussion occurs. Insist that safety comes first.
- Teach athletes safe playing techniques and encourage them to follow the rules of play.
- Encourage athletes to practice good sportsmanship at all times.
- Make sure athletes wear the right protective equipment for their activity. Protective equipment should fit properly, be well maintained, and be worn consistently and correctly.
- Discourage others from pressuring injured athletes to play. Don't let athletes persuade you that they're "just fine" after they have sustained any bump or blow to the head.
- Check with your youth sports league or administrator about concussion policies.
- Concussion policy statements can be developed to include the league's commitment to safety, a brief description of concussion and information on when athletes can return safely.
- A repeat concussion that occurs before the brain recovers from the first—usually within a short period of time (hours, days, or weeks)—can slow recovery and increase the likelihood of having long-term or permanent problems.





WHAT SHOULD A COACH DO WHEN A CONCUSSION IS SUSPECTED?

1. Remove the athlete from play. Athletes who experience signs or symptoms of concussion should be immediately removed and not be allowed to return to play. When in doubt, keep the athlete out of play. Ensure the athlete is evaluated by an appropriate health care professional. Do not try to judge the severity of the injury yourself.

   Recording the following information can help health care professionals in assessing the athlete after the injury:

   - Cause of the injury and force of the hit or blow to the head/body
   - Any loss of consciousness (passed out/ knocked out) and, if so, for how long
   - Any memory loss immediately following the injury
   - Any seizures immediately following the injury

2. Inform the athlete's parents or guardians about the possible concussion and give the fact sheet on concussion.
3. Allow the athlete to return to play only with written permission from a health care professional.

Most athletes who experience an initial concussion will recover completely, as long as return to learn and return to activity guidelines are followed.

Our Sanford programs provide parents, coaches, physicians, and school administrators the most cutting edge return-to-learn and -activity decisions.

RETURN TO PLAY GUIDANCE & SUPPORT

- It is recommended that an injured athlete complete the graduated return to activity/play guideline*.
- Complete Rest
- Light Exercise
- Moderate Exercise
- Sport-Specific Exercise
- Non-Contact Practice
- Unrestricted Training
- Full Activity

*For more information on the Return-to-Activity Guidelines contact your Sports Concussion Program at Sanford Orthopedics & Sports Medicine or health care provider

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CONCUSSION LEGISLATION IN SANFORD REGIONS

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BACKGROUND

- Athletes not fully recovered from an initial concussion are significantly more vulnerable to recurrent, cumulative, and potentially catastrophic consequences of a second concussive injury.
- Modifying physical and cognitive exertion are critical in the acute management of a sport-related concussion. No athlete should return to competition until asymptomatic at rest and with exertion.
- Concussions can occur in all athletes regardless of age and in any sport. Children and teens are more likely to get a concussion and take longer to recover than adults.
- Since 2009, all states in the U.S. have enacted concussion legislation.
- Data suggest that the laws are having an immediate and positive impact while helping to achieve the critical goals of preventing subsequent risk associated with brain injuries and making sports safer for youth.

GENERAL FEATURES OF CONCUSSION LEGISLATION

- The primary goal of state concussion laws is to remove youth athletes from organized athletic activity after sustaining a concussion and allow them to recover before returning to sport. This significantly minimizes the risk for prolonged concussion symptoms and further injury, including death.
- Most concussion laws include the following principles:
    - A student-athlete must be removed from athletic activity after sustaining a concussion and cannot return to play until he/she no longer exhibits signs, symptoms, or behaviors consistent with a concussion and receives written clearance from a licensed health care provider trained in the evaluation and management of concussions.
    - Student-athletes and their parents must receive information regarding the nature and risk of concussions associated with athletic activity; how to recognize the signs, symptoms, and behaviors consistent with a concussion; and how to appropriately respond and seek proper care.
    - Coaches are required to complete training programs to educate them on the nature and risk of concussion associated with athletic activity and how to recognize the signs, symptoms, and behaviors consistent with a concussion.
- Other important features of the laws include:
    - The healthcare provider can be a volunteer.
    - There is no liability attached to the legislation. It does not mandate any civil or criminal penalties, nor does it create greater liability for individuals and/or organizations. Education and awareness efforts, coupled with the requirement of medical clearance before return to play, have decreased variability of care and overall liability.

RESOURCES

- Information regarding clinical services, concussion facts, and available resources can be viewed at sanfordhealth.org, enter keyword: concussion.
- The Centers for Disease Control and Prevention (CDC) concussion education resource “HEADS UP to Health Care Providers” can be accessed at https://www.cdc.gov/headsup/providers/index.html and includes free online training

1. Center for Injury Research and Policy at Nationwide Children’s Hospital, Columbus, Ohio.
2. Harmon KG, et al. American Medical Society for Sports Medicine position statement on concussion in sport. *Br J Sports Med*. 2019;53:213-225.
3. McCrory P, et al. Consensus statement on concussion in sport- the 5th international conference on concussion in sport held in Berlin, October 2016. *Br J Sports Med*. 2018;51:838-847.

STATE-SPECIFIC CONCUSSION LEGISLATION

There are minor differences in concussion legislation among states in our region. These include the following:

- In Minnesota and Nebraska, concussion legislation applies to youth sports as well as private and non-private schools participating in interscholastic competitions.
- Nebraska requires the state to establish a return-to-learn protocol and mandates reporting of concussions to a student’s parents or guardians.
- The Iowa State Department of Public Health is responsible for developing return-to-play protocols for each school district and nonpublic school. Iowa school districts or nonpublic schools are required to develop return-to-learn plans in cooperation with concussed students, the student’s parents or guardians and the student’s licensed health care providers.

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SOUTH DAKOTA CONCUSSION LEGISLATION (2011 CHAPTER 97, SB 149)

To whom does the law apply?

Every coach, youth athlete and their parents or guardians who seek to compete in activities sanctioned by the South Dakota High School Activities Association (SDHSAA).

Educational and training opportunities

Legal requirements	SDHSAA sports	Youth sports
SDHSAA and the South Dakota Department of Education shall develop and distribute guidelines and information including protocols and content consistent with current medical knowledge to member schools, coaches, athletes and the athlete's parents or guardians regarding the nature and risks of concussions; the signs, symptoms and behaviors consistent with concussions; the need to alert appropriate medical professionals for diagnosis and treatment; and the need to follow proper medical direction and protocols for treatment and return-to-play after an athlete sustains a concussion.	X	
Each coach participating in athletic activities sanctioned by the SDHSAA shall complete a training program each academic year developed by the SDHSAA and SD Department of Education.	X	
The parents or guardians of a youth athlete shall sign a consent form each academic year allowing the youth athlete to participate in an athletic activity. The form must include information about the nature and risks of concussions.	X	

Removal guidelines
An athlete shall be removed from participation in any athletic activity sanctioned by the SDHSAA at the time the athlete (a) exhibits signs, symptoms or behaviors consistent with a concussion or (b) is suspected of sustaining a concussion.

Return-to-play
Once removed from participation in an athletic activity, the youth athlete may not return to athletic activities until (a) the athlete no longer exhibits signs, symptoms or behavior consistent with a concussion and (b) receives an evaluation by a licensed health care provider trained in the evaluation and management of concussions and receives written clearance to return-to-play from such health care provider.

Scope of legal coverage
A licensed health care provider means a person who is registered, certified, licensed or otherwise recognized in the law by the state of South Dakota to provide medical treatment and is trained and experienced in the evaluation, management and care of concussions.

For a complete list of SD legislative details, please visit:
https://sdlegislature.gov/statutes/Session_Laws/DisplayChapter.aspx?Session=2011&Chapter=97.

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NORTH DAKOTA CONCUSSION LEGISLATION (2011 CHAPTER 139, SB 2281)

To whom does the law apply?

Every school district and nonpublic school that sponsors or sanctions any athletic activity in North Dakota and requires a participating student to regularly practice, train or compete is subject to the terms of a concussion management program.

Educational and training opportunities

Legal requirements	Each school district and nonpublic school	Youth sports
The concussion management program must require that each official, coach and athletic trainer receive biennial training regarding the nature and risk of concussions.	X	
The concussion management program must outline in clear and readily comprehensible language the signs and symptoms of concussions.	X	
The student and the student's parents or guardians shall document that they have viewed information regarding concussions incurred by students participating in athletic activities. The required information must be provided by the student's school district or nonpublic school and must be made available in a printed or verifiable electronic form.	X	

Removal guidelines

An official, coach or athletic trainer must remove a student from the competition, practice or training if (a) the student reports any signs or symptoms of a concussion, (b) an official, coach or athletic trainer determines that the student exhibits any signs or symptoms of a concussion or (c) an official, coach or athletic trainer is notified that the student has reported or exhibited any signs or symptoms of a concussion by a licensed, registered or certified health care provider whose scope of practice includes the diagnosis and treatment of concussions.

Return-to-play

Any student who is removed from play must be examined as soon as it is practicable by a licensed, registered or certified health care provider whose scope of practice includes the diagnosis and treatment of concussion. A student who is removed from play may not be allowed to return to practice, training or competition until the student or the student's parents or guardians obtain written authorization from a licensed, registered or certified health care provider whose scope of practice includes the diagnosis and treatment of concussions and provides that authorization to the student's coach or athletic trainer.

Scope of legal coverage

Official refers to an umpire, referee, judge or any other individual formally officiating at an athletic event.

For a complete list of North Dakota legislative details, please visit:
https://www.legis.nd.gov/assembly/62-2011/session-laws/documents/ELEMN.pdf#CHAPTER139.

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MINNESOTA CONCUSSION LEGISLATION (2011 CHAPTER 90, SF 612)

To whom does the law apply?

Coaches, officials, youth athletes and their parents or guardians involved in (a) a youth athletic activity that is organized by a city, business or nonprofit organization and for which a fee is charged or (b) an extracurricular activity sponsored by a public or nonpublic school, including charter schools.

Educational and training opportunities

Legal requirements	School sports	Organized youth sports
Information must be accessible to all participating coaches, officials, youth athletes and their parents or guardians about the nature and risks of concussions; the signs and symptoms consistent with a concussion; the need to alert medical professionals for urgent diagnosis and treatment upon suspicion of a concussion; and the need for a concussed athlete to follow proper medical direction and treatment before returning to play.	X	X
All participating coaches and officials are required to receive initial online training and online training at least once every three calendar years thereafter, consistent with the concussion in youth sports online training program available on the Centers for Disease Control and Prevention's (CDC) website.	X	X
If the parent of a youth athlete must sign a consent form to allow the youth athlete to participate in an athletic activity, the form must include information about the nature and risks of concussions.	X	

Removal guidelines
A coach or official shall remove a youth athlete from participating in any youth athletic activity when the youth athlete (a) exhibits signs, symptoms or behaviors consistent with a concussion or (b) is suspected of sustaining a concussion.

Return-to-play
When a coach or official removes a youth athlete from participating in a youth athletic activity because of a concussion, the youth athlete may not participate in the activity again until the youth athlete (a) no longer exhibits signs, symptoms or behaviors consistent with a concussion and (b) is evaluated by a provider trained and experienced in evaluating and managing concussions and (c) the provider gives the youth athlete written permission to again participate in the activity.

Scope of legal coverage
Provider means a health care provider who is registered, licensed, certified or otherwise statutorily authorized by the state to provide medical treatment; trained and experienced in evaluating and managing pediatric concussions; and practicing within the person's medical training and scope of practice.

Youth athlete means a young person through age 18 who actively participates in an athletic activity, including a sport. Youth athletic activity means any sports or other activity related to competition, practice or training exercise that is intended for youth athletes and at which a coach or official is present in an official capacity as a coach or official.

For a complete list of Minnesota legislative details, please visit:
https://www.revisor.mn.gov/laws/2011/0/Session+Law/Chapter/90.

IOWA CONCUSSION LEGISLATION (2017 IA H 2442)

To whom does the law apply?

Coaches, students and parents or guardians of students involved in activities organized by the Iowa High School Athletic Association (IHSAA) or the Iowa Girls High School Athletic Union (IGHSAU).

Educational and training opportunities

Legal requirements	Each school district and nonpublic school	Youth sports
The Department of Public Health, IHSAA and the IGHSAU shall work together to distribute CDC guidelines and other pertinent information to inform and educate coaches, students and the parents or guardians of students of the risks, signs, symptoms and behaviors consistent with a concussion or brain injury, including the danger of continuing to participate in extracurricular athletic activities after suffering a concussion or brain injury and their responsibility to report such signs, symptoms and behaviors if they occur.	X	
Each school district and nonpublic school shall annually provide the parents or guardians of each student a concussion and brain injury information sheet as provided by the Department of Public Health, IHSAA and the IGHSAU.	X	
The student and the student's parents or guardians shall sign and return the concussion and brain injury information sheet to the student's school prior to the student's participation in any extracurricular interscholastic activity for grades 7 through 12.	X	
The Department of Public Health, in cooperation with the IHSAA and IGHSAU, shall develop a return-to-play protocol based on peer-reviewed scientific evidence consistent with the guidelines of the CDC for a student's return to participation in any extracurricular interscholastic activity after a concussion or brain injury.	X	
School districts or accredited nonpublic schools shall develop a return-to-learn plan based on guidance developed by the Brain Injury Association of America in cooperation with a student diagnosed with a concussion, the student's parents or guardians and the student's licensed health care provider.	X	

Removal guidelines
A student shall be immediately removed if a coach or contest official observes signs, symptoms or behaviors consistent with a concussion or brain injury in an extracurricular interscholastic activity.

Return-to-play
A student who has been removed from participation shall not recommence such participation until the student has been evaluated by a licensed health care provider who's trained in the evaluation and management of concussions and other brain injuries and the student has received written clearance to return to participation from the health care provider.

Scope of legal coverage
A contest official means a referee, umpire, judge or another official in an athletic contest who is registered with the IHSAA or the IGHSAU. A health care provider means a physician, physician assistant, chiropractor, advanced registered nurse practitioner, nurse, physical therapist or athletic trainer licensed by a board. An extracurricular interscholastic activity means any dance or cheerleading activity or extracurricular interscholastic activity, contest or practice governed by the IHSAA or the IGHSAU that is a contact or limited contact activity as identified by the American Academy of Pediatrics.

For a complete list of Iowa legislative details, please visit:
http://custom.statenet.com/public/resources.cgi?id=ID:bill:IA2017000H2442&ciq=ncsl9&client_md=d048cce0f9952bfd95547c376d4a900b&mode=current_text.

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NEBRASKA CONCUSSION LEGISLATION (2011 LB 260 AND 2014 LB 293)

To whom does the law apply?

Approved or accredited public, private, denominational or parochial schools, as well as any city, village, business or nonprofit organization that organizes an athletic activity in which the athletes are 19 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.

Educational and training opportunities

Legal requirements	Approved or accredited public, private, denominational or parochial school	Youth sports
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 shall be made available to all coaches.	X	X
Concussion and brain injury information shall be provided on an annual basis to students and the student's parents or guardians prior to such students initiating practice or competition. Information provided shall include, but need not be limited to, the signs and symptoms of a concussion; the risks posed by sustaining a concussion; and the actions a student should take in response to sustaining a concussion, including the notification of their coaches.	X	X
If a student is reasonably suspected after observation of having sustained a concussion or brain injury and is removed from an athletic activity, the parents or guardians 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.	X	X
A return-to-learn protocol shall be established for students that have sustained a concussion. The protocol shall recognize that such students may need informal or formal accommodations, modifications of curriculum and monitoring by medical or academic staff until the student is fully recovered.	X	

Removal guidelines

A student who participated 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.

Return-to-play

Students 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 (a) has been evaluated by a licensed health care professional, (b) has received written and signed clearance to resume participation in athletic activities from the licensed health care professional and (c) 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 parents or guardians.

Scope of legal coverage

A licensed health care professional means a physician or licensed practitioner under the direct supervision of the physician, a certified athletic trainer, a neuropsychologist or some other qualified individual who is (a) 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 the pediatric population. The chief medical officer shall be licensed to practice medicine and surgery in the state of Nebraska, shall serve at the pleasure of the governor and shall be subjected to confirmation by a majority of the members of the legislature.

For a complete list of Nebraska legislative details, please visit:
https://nebraskalegislature.gov/FloorDocs/102/PDF/Slip/LB260.pdf and
https://nebraskalegislature.gov/FloorDocs/103/PDF/Final/LB923.pdf.

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