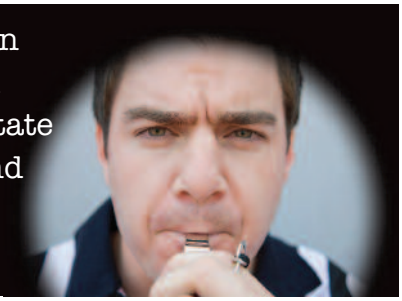
When a concussion occurs:

"Any school athlete who has been removed from a sport competition or practice session shall not return to competition or practice until the athlete is evaluated by a health care provider licensed by the state board of healing arts to practice medicine and surgery (MD/DO) and the health care provider provides such athlete a written clearance to return to play or practice." – [Kansas House Bill 2182 - 2011]



Check list for getting athlete back into the game.

Once an athlete has experienced any type of potential head injury:

1. ☐ Remove athlete from all activity.

2. ☐ Activate SCAT5 on-field concussion protocol assessment.

☐ Contact parent/guardian.

☐ Give Education Guides to parent/guardian and student athlete to review.

☐ Distribute Education Guides to appropriate personnel (coach, athletic trainer, school, physician).

3. ☐ Start tracking daily symptoms and transfer SCAT5 scores to **SCORE Card** ❶.

☐ Activate School Concussion Team to coordinate **Return to Learn Classroom Rx Form** ❷.

☐ Refer athlete for evaluation by a MD/DO. Send **SCORE Card** ❶ directly to athlete's physician or through parent/guardian.

4. ☐ MD/DO authorizes athlete to start **Warm-up to Play Form** ❸. **It's the Law!**

☐ Start **Warm-up to Play Form** ❸ progression.

☐ Return athlete to sport after Warm-up to Play is completed symptom free and a full return to the classroom is complete.

Red Flags

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

Athlete: _____

☐ Parent/Guardian Contacted: Name _____ Date _____

Notes: _____

_____

_____

_____

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Concussion Packet

A game plan for the education, recognition and management of sports related head injuries.

Download additional packets and link to educational resources at:

www.KansasConcussion.org

Name _____ ☐ M ☐ F Birthdate _____

Sport/Team/School _____

Examiner _____ Exam Date _____

Primary Care Physician _____ Phone _____

Prior Concussions: How many? _____ Most Recent: Date _____ Length of Recovery _____

Baseline Exam

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1 Symptom Evaluation

Have athlete read symptoms out loud and score how they feel now.

none 0 | mild 1 2 | moderate 3 4 | severe 5 6

	Score
1. Headache	
2. "Pressure in head"	
3. Neck Pain	
4. Nausea or vomiting	
5. Dizziness	
6. Blurred vision	
7. Balance problems	
8. Sensitivity to light	
9. Sensitivity to noise	
10. Feeling slowed down	
11. Feeling like "in a fog"	
12. "Don't feel right"	
13. Difficulty concentrating	
14. Difficulty remembering	
15. Fatigue or low energy	
16. Confusion	
17. Drowsiness	
18. More emotional	
19. Irritability	
20. Sadness	
21. Nervous or anxious	
22. Trouble falling asleep	
Do symptoms get worse with physical activity?	Ⓨ Ⓝ
Do symptoms get worse with mental activity?	Ⓨ Ⓝ
Do you feel 100% and perfectly normal?	Ⓨ Ⓝ

Baseline Exam Score Totals

Total # of Symptoms		/22
Symptom Severity Score		/132
Orientation		/5
Immediate Memory	5-word Option	/15
	10-word Option	/30
Concentration		/5
Total # of Balance Errors		/30
Neuro Exam	"Y" = normal "N" = not normal	Ⓨ Ⓝ
Delayed Recall	5-word Option	/5
	10-word Option	/10

2 Cognition/Balance Assessment

ORIENTATION Read these questions and check box if answered correctly. *Score 1 point for each correct response.*

☐ What month is it? ☐ What is today's date? ☐ What time is it now (within 1 hour)*?*

☐ What day of the week is it? ☐ What year is it?

/5

IMMEDIATE MEMORY

5-word option: Read first column of 5 words and have athlete repeat back as many words as can be remembered, in any order. Repeat same list again for the second and third trials. Have athlete repeat back as many words as can be remembered in any order, even if they said the word before. Complete all 3 trials regardless of score on trials 1 & 2. Read words at a rate of one per second.

10-word option: Read both columns and have athlete repeat back as many words as can be remembered, in any order. Repeat same list again for the second and third trials. Have athlete repeat back as many words as can be remembered in any order, even if they said the word before. Complete all 3 trials regardless of score on trials 1 & 2. Read words at a rate of one per second.

Score 1 point for each correct response. 5 points possible for each trial using 5-word option. 10 points using 10-word option. Total equals sum of all 3 trials.

Elbow	Candle
Apple	Paper
Carpet	Sugar
Saddle	Sandwich
Bubble	Wagon

5-word Option:	Trial I	/5
	Trial II	/5
	Trial III	/5
	Total	/15
10-word Option:	Trial I	/10
	Trial II	/10
	Trial III	/10
	Total	/30

CONCENTRATION

A. Read a string of digits at a rate of one per second. Have athlete repeat back the list of numbers in REVERSE order. Then go across and read the next string with the same number of digits. If both repeated correctly, score one point and go down to the next trial with one additional digit in the string. Complete all four of the 2-string trials.

Score 1 pt. for each trial repeated correctly. (4 pts. possible)

B. Have athlete recite months of year in reverse order:
Dec-Nov-Oct-Sept-Aug-Jul-Jun-May-April-Mar-Feb-Jan

Score 1 pt. if entire sequence is correct. (1 pt. possible)

4-9-3	6-2-9	3 digit trial /1
3-8-1-4	3-2-7-9	4 digit trial /1
6-2-9-7-1	1-5-2-8-6	5 digit trial /1
7-1-8-4-6-2	5-3-9-1-4-8	6 digit trial /1

A. Digits Backward Total /4

B. Months in Reverse Order /1

Total Concentration Score /5

BALANCE ERRORS Remove shoes, roll up your pant legs above the ankle (removing ankle taping). Tests consist of three, 20-second timed tests from different stances.

I. Double Leg Stance: Stand feet together, with hands on hips and eyes closed. Maintain stability for 20 seconds. Count number of times that person moves out of that position.

II. Single Leg Stance: Stand holding dominant leg off the floor a few inches and maintain stability for 20 seconds with hands on hips and eyes closed. Count number of times athlete moves out of that position. If they stumble, have them open eyes and return to the start position and continue balancing. Start timing when they are set and have their eyes closed.

III. Tandem Stance: Stand heel-to-toe with non-dominant foot in back. Weight is evenly distributed across both feet. Maintain stability for 20 seconds with hands on hip and eyes closed. Count number of times athlete moves out of that position. If they stumble out of this position, have them open eyes and return to the start position and continue balancing. Start time when they are set and eyes are closed.

Begin counting errors only after the athlete has assumed the proper start position. Score each stance test individually by counting the number of accumulated errors with a maximum of 10 errors per stance. If athlete commits multiple errors simultaneously, only one error is recorded but they must quickly return to the testing position, and counting resumes once they are set. If unable to maintain the stance for a minimum of 5 seconds, assign 10 errors.

Dominant Foot: ☐ Left ☐ Right

Testing Surface: _____

Types of Balance Errors:
- Hands lifted off iliac crest
- Opening eyes
- Step, stumble, or fall
- Moving hip into > 30° abduction
- Lifting forefoot or heel
- Remaining out of test position longer than 5 seconds

Stance I: # of Errors (10 max.)

Stance II: # of Errors (10 max.)

Stance III: # of Errors (10 max.)

Total # Balance Errors (30 max.)

NEUROLOGICAL SCREEN

FOLLOWING INSTRUCTIONS: Can athlete read aloud and follow instructions without difficulty? ..... Ⓨ Ⓝ
(Use Score Card 1 symptoms check list as test.)

SPINE MOVEMENT: Does the athlete have a full range of pain-free PASSIVE cervical spine movement? ..... Ⓨ Ⓝ

DOUBLE VISION: Without moving the head or neck, can athlete look side-to-side and up-and-down without double vision? ..... Ⓨ Ⓝ

FINGER NOSE COORDINATION: With athlete seated and either arm outstretched and index finger pointed out, have athlete touch finger to tip of nose and return to starting position. Perform five successive repetitions as quickly and accurately as possible. ..... Ⓨ Ⓝ

TANDEM GAIT: Have athlete walk along a 10' line as quickly as possible, alternating foot-to-toe. Then turn 180 degrees and return on the line. Athlete fails the test if they step off the line, have separation between foot and toe or lose their balance..... Ⓨ Ⓝ

DELAYED RECALL Have athlete repeat back as many words as can be remembered from either 5-word option (first column) or 10-word option (both columns) from the Immediate Memory question above. *Score 1 pt. for each word remembered.* /5 /10

Adapted from SCAT5, Davis GA, et al. Br J Sports Med 2017;0:1–8. doi:10.1136/bjsports-2017-097506SCAT5

10/2017

Name _____ ☐ M ☐ F Birthdate _____ Date of Injury _____

Sport/Team/School _____ Phone _____

☐ Parent/Guardian Contacted _____ Phone _____

Initial Examiner _____ Phone _____

Primary Care Physician _____ Phone _____

Concussion Management Team Leader _____ Phone _____

Athlete's Symptoms SCORE Card 1

KSCP Kansas Sports Concussion Partnership

www.KansasConcussion.org

A project sponsored by Kansas Medical Society

Hand form to athlete. Have them read symptoms out loud and score how they feel now.

Symptom Evaluation none 0 mild 1 2 moderate 3 4 severe 5 6	Exam Date: / By:	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Headache															
2. "Pressure in head"															
3. Neck Pain															
4. Nausea or vomiting															
5. Dizziness															
6. Blurred vision															
7. Balance problems															
8. Sensitivity to light															
9. Sensitivity to noise															
10. Feeling slowed down															
11. Feeling like "in a fog"															
12. "Don't feel right"															
13. Difficulty concentrating															
14. Difficulty remembering															
15. Fatigue or low energy															
16. Confusion															
17. Drowsiness															
18. More emotional															
19. Irritability															
20. Sadness															
21. Nervous or anxious															
22. Trouble falling asleep															
Do symptoms get worse with physical activity?		Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
Do symptoms get worse with mental activity?		Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
Do you feel 100% and perfectly normal?		Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
Total # of Symptoms (22 max.)															
Symptom Severity Score (132 max.)															

MEDICAL EXAM

Every concussion evaluation should include a full neurologic examination. An examiner should consider these specific systems:

- Check Head/Skull/Eyes/Ears for trauma
- Cervical spine
- Vestibular-ocular dysfunction
- Balance

A complete history should be taken when examining athlete. Consider assessing these specific areas:

- Detailed history of previous concussions including recovery time
- Sleep disturbance
- Depression/anxiety
- Difficulties with school/work
- History of migraine headaches
- Triggers that worsen symptoms

Concussion Red Flags:

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

If accommodations in school are necessary, go to **Classroom R_X Form** 2 to direct their **Return to Learn** progression. When the student athlete is symptom-free, with normal exams, and attending school without difficulty, consider clearing the athlete to start the **Warm-up to Play Form** 3.

Adapted from SCAT5, Davis GA, et al. Br J Sports Med 2017;0:1–8. doi:10.1136/bjsports-2017-097506SCAT5

Name _____ ☐ M ☐ F Birthdate _____ Date of Injury _____

Sport/Team/School _____ Phone _____

Primary Care Physician _____ Phone _____

Concussion Management Team Leader _____ Phone _____

Return to Learn
Classroom Rx 2

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When can the student-athlete return to school? It will depend on the individual. Every student's injury and recovery are unique and require careful observation from parents and doctors. Promote recovery and prevent ongoing symptoms by following a Return to Learn plan like the one below. *The physician will customize a plan to allow recovery at student's own pace.*

Schools should identify a team leader to work with each student-athlete who sustained a concussion to facilitate a safe return to learn. This identified team leader should establish a communication system between the physician, athletic trainer, school administrators, teachers, coaches, school nurse, school counselor, parent/guardian and any other members.

☐ **STUDENT MAY NOT ATTEND SCHOOL.** Student may participate in daily activities at home as long as they do not increase symptoms (e.g., reading, texting screen time). Start with 5 to 15 minutes at a time and gradually build up. *Goal: Gradually return to typical activities.*

☐ **SCHOOL ACTIVITIES AT HOME.** Start homework, reading or other cognitive activities outside of the classroom. Continue to limit at-home activities that can worsen symptoms, such as loud music, television, computer screen time, texting, etc. *Goal: Increase tolerance to cognitive work.*

☐ **RETURN TO SCHOOL PART-TIME.** Gradual introduction of schoolwork, but will require accommodations depending on their current symptoms. Continue to work with the student to identify any specific classroom subjects (e.g. math, science, foreign languages) and activities and that could be worsening symptoms. *Goal: Increase academic activities.*

☐ **RETURN TO SCHOOL FULL-TIME.** Gradually progress school activities until a full day can be tolerated. Work with the student to ensure a classroom "catch-up" plan is in place. Student may fully participate in normal classroom activities — except with restrictions as noted below. *Goal: Return to full academic activities.*

☐ **NORMAL CLASSROOM.** Student may fully participate in normal classroom activities without accommodations.

Do NOT participate in:

- ☐ PE class
- ☐ Weightlifting
- ☐ Band or Music
- ☐ Wood or Metal shop
- ☐ Debate/Forensics
- ☐ Other Subjects:_____
  _____
- ☐ Homework
- ☐ Exams or Quizzes
- ☐ Research Papers
- ☐ Computer/Tablet Use
- ☐ Video Games or Movies
- ☐ Drive/operate heavy equipment
- ☐ Activities involving heights
- ☐ Other: _____
  _____

Classroom Accommodations:

Breaks:
- ☐ Allow student to go to nurse's office if symptoms increase.
- ☐ Allow student to go home if symptoms do not subside.
- ☐ Allow other breaks during school day as necessary and appropriate.

Visual Stimulus:
- ☐ Allow student to wear sunglasses/hat in school.
- ☐ Limit bright screen use of computer or television.
- ☐ Provide note taker.
- ☐ Reduce monitor brightness.
- ☐ Change classroom seating.

Audible Stimulus:
- ☐ Lunch in a quiet place with a friend.
- ☐ Avoid music, band or wood/metal shop class.
- ☐ Allow to wear earplugs as needed.
- ☐ Allow class transitions before bell.

Workload/Multi-Tasking:
- ☐ Reduce overall amount of homework, make-up work and class work.
- ☐ Prorate workload when possible.
- ☐ Reduce amount of homework.
- ☐ Allow for scribe, oral responses, and oral questions.

Physical Exertion:
- ☐ Walking in gym class only.
- ☐ Other: _____

Testing:
- ☐ Additional time to complete tests.
- ☐ No more than one test a day.
- ☐ No standardized testing until: _____ (date).

Specialized Instruction:
- ☐ Request extended learning plan be developed (could include IEP, 504, etc.)

Other Accommodations:

_____
_____
_____
_____
_____
_____

The student-athlete should not go back to sports until they are able to fully participate in normal classroom activities without accommodations. To start the process for returning athlete to their sport, use the **Warm-up to Play Release Form 3**.

Concussion symptoms may develop within days after a head injury. The patient should continue to be observed for any new symptoms.

Medical Professional Signature: _____ Date _____

Additional Instructions: _____

_____

Progression adapted from SCAT5, Davis GA, et al. Br J Sports Med 2017;0:1–8. doi:10.1136/bjsports-2017-097506SCAT5

Name _____ ☐ M ☐ F Birthdate _____ Date of Injury _____

Sport/Team/School _____ Phone _____

Primary Care Physician _____ Phone _____

Concussion Management Team Leader _____ Phone _____

Warm-up to Play Release Form 3

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An athlete's return to his/her sport will be a step-by-step process under the guidance of a health care provider. Before beginning the Warm-up to Play progression, **an initial 24-48 hour period of both relative physical rest and cognitive rest is recommended if symptoms persist the next day following a concussion**. Resuming normal, noncontact activities as soon as safely tolerated can be beneficial for athlete's recovery.

Step 1. **Symptom-limited activity** – normal daily activities that do not provoke symptoms. *(gradually reintroduce work/school activities)*

☐ **Physician Release to Start Warm-up to Play. Proceed to Step 2.**

This patient has had an injury to the head. Patient may "Return to Play" after normal classroom full participation is achieved and successfully completing Steps 2 through 5 of the "Warm-up to Play" below. Symptoms of concussion may develop within days after a head injury. Patient should continue to be observed for any new symptoms.

Physician Signature _____ MD/DO Date _____ Earliest Release Date _____

For steps 2-5, **Athlete must wait 24 hours before progressing to the next step and remain completely symptom-free. STOP IMMEDIATELY if there is any return of signs/symptoms and report this right away.** Go back to rest for the day, refrain from activities including bike riding, skateboarding, playful wrestling, etc. Only if symptom free may athlete repeat that step the following day and continue progression. This will be monitored by a coach, athletic trainer or designated school official.If symptoms persist or worsen for more than a day, please notify the physician.

Step 2. **Light aerobic exercise** – walking or riding an exercise bike, no weightlifting. *(increase heart rate — 15-20 min. suggested max.)*

☐ Step 2 completed successfully. Athlete reports no return of symptoms after 24 hours. Okay to proceed to Step 3.

Coach/Athletic Trainer _____ Date _____

Notes: _____

Step 3. **Sport specific exercise** – running in gym or on the field, no helmet or equipment. *(add movement — 30 min. suggested max.)*

☐ Step 3 completed successfully. Athlete reports no return of symptoms after 24 hours. Okay to proceed to Step 4.

Coach/Athletic Trainer _____ Date _____

Notes: _____

Step 4. **Non-contact training drills** – using full equipment, light resistance training or light weight training. *(add coordination and cognitive load)*

☐ Step 4 completed successfully. Athlete reports no return of symptoms after 24 hours. Okay to proceed to Step 5.

Coach/Athletic Trainer _____ Date _____

Notes: _____

Step 5. **Full contact practice** – under the supervision of the coach/athletic trainer. *(restore confidence and assess functional skills)*

☐ Step 5 completed successfully. Athlete reports no return of symptoms after 24 hours. Okay to "Return to Sport."

Coach/Athletic Trainer _____ Date _____

Notes: _____

Step 6. **Return to Sport** – student may fully return to play if all the above steps were successfully completed without return of any symptoms. This includes full participation in live competition or practice.

Concussion symptoms may develop within days after a head injury. The patient should continue to be observed for any new symptoms.

OPTIONAL Physician Return to Sport — if school/ district requires physician signature after successful completion of Warm-up to Play.

Physician Signature _____ MD/DO Date _____

Progression adapted from SCAT5, Davis GA, et al. Br J Sports Med 2017;0:1–8. doi:10.1136/bjsports-2017-097506SCAT5