

## **Concussion Information Sheet for Parent/Family**

Your son/daughter sustained a concussion and to optimize their recovery we will need your help. The following important recommendations will guide their recovery whether they are at home, when they return to school, as well as help ensure a safe return to play.

What is a concussion? A concussion is a brain injury. Concussions are caused by a bump, blow or jolt to the head or body but may also occur with whiplash or when the head strikes the ground. This trauma causes the brain to not function normally for a period of time. It is important to note that only 5-10% of people with concussions are knocked unconscious. The past decade has seen a revolution in the management of sports-related concussions. What was once considered a relatively benign condition is now recognized as an injury with the potential for permanent complications. Having one's "bell rung" or being "dinged" has far more serious consequences than were previously suspected.

In 2009, Oregon Passed "Max's Law" (OAR 581-022-0421) named for Max Conradt a high school football player who took blows to the head in back to back games and suffered permanent brain injury. The law requires coaches take annual training in concussions and specifies that athletes must be symptom free and be cleared by a healthcare professional prior to returning to play.

Athletes with the signs and symptoms of a concussion should be removed from play immediately. Continuing to play with the signs and symptoms of a concussion leaves athletes especially vulnerable to greater injury. When an athlete suffers another blow to the head before completely recovering, it can lead to not only a prolonged recovery, but also severe brain swelling or second impact syndrome. These secondary injuries can have devastating and even fatal consequences. Therefore, it is especially prudent to monitor concussed athlete for a deteriorating condition.



RED FLAGS: Go to the emergency department immediately if they appear to be getting worse than when they were evaluated or experience any of the following:

Headaches that worsen Repeated vomiting Look very drowsy Can't be awakened Increased confusion Seizures/ Convulsions Garbled/Slurred speech Loss of consciousness

Can't recognize people/places Unusual behavior changes Weakness/numbness Trouble using arm/legs

Each concussion is unique and may cause multiple symptoms. Some symptoms will appear immediately, while others may develop over the following days or weeks. Symptoms may be subtle and are often difficult to fully recognize. **Attached you will see a symptom scale.** 

Keep in mind athletes may complain of any or all of the symptoms listed. Please use this sheet to help gauge whether they are feeling better or worse. Initially you might need to monitor them more frequently as their symptoms might be unstable. As a general rule, initially the less the athlete does the better they will feel. Remember the only time the brain is truly resting is when it is asleep.

Research has identified that in some cases sub symptom threshold aerobic exercise can also make athletes feel more like themselves. This activity is both initiated and supervised by the athletic trainer or physician ONLY and does NOT begin the graduated return to play process.

Last updated: 04/2/2018

## **Sports Medicine**

It is OK to:

Use acetaminophen (Tylenol) for headaches

Use ice pack on head and neck as needed for comfort

Eat a light balanced diet and drink plenty of water Rest and go to sleep.

Return to school (when tolerate 30 min. of mental exertion)

Gradually return to normal daily activities as they begin to feel better.

There is NO need to:

Check eyes with flashlight Wake up every hour

Test reflexes Stay in bed

Do NOT:

Participate in activities that increase symptoms such as: TV, computer screens, video games, text messaging, reading, loud music, and homework. Everyone is different but if it increases symptoms it should be avoided.

Leave athlete alone without a responsible adult present

Take other medications especially aspirin, Advil, Aleve, Motrin or other anti-inflammatories

Consume large amounts of sugar

Drink caffeine or other stimulants

Drive until medically cleared Drink Alcohol

**Do I need to see a doctor?** Prior to returning to play your athlete will need a medical release. Athletes that are steadily recovering within the normal 2-3 week time frame usually do not need to see their doctor until they are symptom free and ready to be cleared. Athletes that do not return in a linear fashion or experience symptoms past the three week time frame can be referred to a practitioner skilled in concussion management.

**Do I need a CT or an MRI?** A concussion is not a structural problem in the brain that can be visualized by most diagnostic imaging. It is best described as a functional problem where the brain is simply not working correctly. If it is determined that it is safe for you to return home after the injury these types of tests are not necessary. If your athlete receives a normal CT or MRI exam, it is good news that they did not see a bleed or any swelling but this does not mean that they do not have a concussion.

Please remind your son/daughter to report to the athletic training room the next day that they are at school or practice for a follow-up evaluation and continued care. According to the district concussion management guidelines no athlete will return to play until they are asymptomatic, scoring within a normal range on neuropsychological exam, all temporary academic accommodations are dropped, they are cleared by a healthcare professional, and have completed a graduated return to play.

For further information we suggest the following documents:

"Concussion in the Classroom" complete document can be downloaded at:

www.upstate.edu/pmr/healthcare/programs/concussion/classroom.php

"Cognitive Rest: The Often Neglected Aspect of Concussion Management" Athletic Therapy Today, March 2010, by John Parsons, PhD, AT/L

www.childrensnational.org/files/PDF/DepartmentsandPrograms/Neuroscience/Neuropsychology/SCORE/Cognitive -Rest.pdf

"Summary and Agreement Statements of International Conferences of Concussion is Sport", from Vienna in 2001, Prague in 2004, Zurich in 2008 & 2017. These documents summarize the most current research and treatment techniques in head injuries.

Please feel free to contact Shelly Jones, ATC Athletic Trainer Aloha HS if you have any questions. She can be reached at 503 356 2813 or via ms.shellyjones@gmail.com

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## **Sports Medicine**

## **Return to Academics**

Following concussion, students who receive academic accommodations without penalty for missed work are more successful and better able to manage school demands. For most students, accommodations can be made without formal written plans.

The stages are fluid and flexible; each represents a gradual progression of increased cognitive load. A student may start at any step in the progress, depending on their symptoms, and remain at each step as long as needed. If symptoms worsen, the student should return to the previous step.

Stage	Suggested Accommodations	Criteria for Progression
RED:	Limited mental exertion (computer, texting, video games,	30 mins of mental exertion
Rest	or homework), stay at home, no driving. without symptom exacerbat	
Limited mental activity		
ORANGE: Part-time school with accommodations	Accommodations based on symptoms (e.g., shortened day/schedule, built-in breaks, no significant classroom or standardized testing)	Full day of school with accommodations
Yellow: Full-time school with accommodations	Accommodations based on symptoms (e.g., shortened day/schedule, built-in breaks, no significant classroom or standardized testing)	Able to handle all class periods in succession without symptom increase
Green: Complete return to pre-injury status	Full pre-injury academic load	NA

**Return to Activity Progression** 

Exercise

Stage

Objective

Stage	Objective	Exercise	
Stage 1: No activity	Complete rest until symptoms are	Initially NONE	
	manageable which is usually not		
	more than 3 days. Athletes then		
	generally add back to their daily		
	activities to aid recovery. This stage	*Sub symptom threshold exercise initiated and supervised by	
T. D	could take days or weeks.	athletic trainer or physician ONLY.	
<b>To Progress to Stage 2:</b> Athlete must be symptom free at rest and exertion, attending school full time, off all academic accommodations, and participating in full homework activities.			
Stage 2: Light aerobic exercise	Increase heart rate without attention or concentration.	10-15 mins of light cardio: Walking or Stationary Bike.	
	Gentle strengthening/stretching	Quad Set/Straight Leg Raise, Ham Sets, Theraband, Cat/Cow, Prayer, Pecs, Hamstring, Hip Flexor, Adductor, Piriformis, Quad, & Calf Stretching.	
Stage 3: Sport specific exercise	Light to moderate aerobic conditioning, adding movement with increased attention and coordination.	20-30 mins of moderate cardio. Running, passing drills, dribbling in basketball/soccer, swinging a bat, etc. No head impact activities, helmet or other equipment.	
	Lightweight strengthening/active stretching	Light weight machine strength exercise ie. Nautilus, wall squats, walking lunges, step ups/downs, side to side groin stretch, & walking hamstring stretch.	
Stage 4: Non contact	Moderately aggressive aerobic exercise, progressing to training with higher cognition & coordination.	25-30 mins of moderately aggressive cardio including incline running on treadmill/intervals. Non contact training drills in full equipment, participating in all aspects of practice minus contact.	
	All forms of strength training, agility, & Plyometrics	Squat, cleans, snatch, bench press. Zig zag/fig 8 running, side shuffle/defensive slides, jumping, etc.	
Stage 5: Full contact	Restore athlete's confidence &	Full un-restricted contact practice at game intensity	
REQUIRES MEDICAL	allows assessment of functional skills		
CLEARANCE	by coaching staff.		
Stage 6: Return to competitive play with no restrictions, normal game play.			
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If symptoms recur at any stage, stop activity. Once athlete is symptom free for 24 hours they may return to previous asymptomatic stage.