SOUTH KITSAP HIGH SCHOOL
SPORT CONCUSSION MANAGEMENT POLICY

South Kitsap High School's Sports Concussion Management Protocol has been developed over the last several years, and is derived from the most recent literature on sport-related concussions. South Kitsap has worked closely with the guidelines established by the Consensus Statement on Concussion in Sport, 4th International Conference on Concussion in Sport, Zurich, 2012, Centers for Disease Control, Lystedt Law, and the Washington Interscholastic Activities Association.

Clinical research has shown that an athlete's balance and/or cognitive functioning are often depressed following a concussion – even in the absence of self-reported symptoms. It has been demonstrated that it typically takes anywhere from 3 – 10 days for an athlete to return to his or her normal state following a concussion. However, in some cases (<10%), athletes can experience post-concussion symptoms in which the symptoms last beyond three (3) weeks.

South Kitsap High School Athletic Medicine staff utilizes a three-fold approach when determining an athlete's readiness to return to play following a concussion. In the event of a suspected concussion, the Sport Concussion Management Protocol requires the evaluation of the athlete's symptoms, neurocognitive function, and balance which provide the Athletic Medicine staff with the objective information necessary to return the athlete to play safely. The findings of these post-injury assessments are then compared to pre-season baseline assessment (ImPACT), conducted on all student-athletes in contact sports, every other year, or annually if a concussion episode did occur.

The following Sport Concussion Management Protocol has been adopted by South Kitsap High School's Athletic Department and is followed by all teams when managing athletes suspected of sustaining a head injury.

Concussion/Head Injury Program

Concussions and other head injuries in sports can be serious and potentially life-threatening. Research indicates that these injuries can also have serious consequences later in life if not managed properly. In an effort to combat this, the following will be used for South Kitsap High School student-athletes suspected of sustaining a concussion.

A concussion occurs when there is a direct or indirect injury to the brain. As a result, transient impairment of mental functions such as memory, balance/equilibrium, and vision may occur. It is important to recognize that many sport-related concussions do not result in loss of consciousness and, therefore, all suspected head injuries should be taken seriously. Coaches and fellow teammates can be helpful in identifying those who may potentially have a concussion, because a concussed athlete may not be aware of his or her condition or try to hid the injury to stay in the game or practice.

1) Concussion management begins with pre-season baseline testing. Every incoming freshman and 11th graders participating in any of the following sports/activities will have a baseline test performed: football, wrestling, basketball, volleyball, pole vaulting, baseball, fast pitch, diving, cheerleading, lacrosse, and soccer.

2) An athlete suspected of sustaining a concussion/head injury will be evaluated by the Athletic Medicine staff using the Standardized Assessment of Concussion (SCAT3), Balance Error Scoring System (BESS), and Graded Symptom Checklist. Ideally, an assessment of symptoms will be performed at the time of the injury and then periodically thereafter (i.e., 2-3 hours, 24 hours, 48 hours post-injury, etc.) The presence or absence of symptoms will dictate in the inclusion of additional neurocognitive and balance testing.

3) Any student-athlete assessed with a concussion/head injury by a health care provider **shall not return to activity** for the remainder of that day. Medical clearance will be determined by the licensed athletic trainers involved with management of the concussion.

4) If requested by the athletic medicine staff, Athletic Director, coach, parent, or administrative personnel, testing may be conducted while the athlete is still symptomatic.

5) In the event the athlete does not have a baseline score on file and a concussion is suspected, age-matched normative percentile scores will be used for comparison to post-injury scores.

Concussion/Head Injury Management Protocol

In the event an athlete is suspected of suffering a head injury/concussion, the following steps will be taken to ensure the highest level of care possible:

1. The athlete will be removed from the game/practice (***in accordance with Washington RCW 28A.600.190 – Zackery Lystedt Law***).
    a. AN ATHLETE SUSPECTED OF HAVING A CONCUSSION IS NOT PERMITTED TO RETURN TO PLAY THE SAME DAY, AND NO ATHLETE IS PERMITTED TO RETURN TO PLAY WHILE SYMPTOMATIC FOLLOWING A CONCUSSION.

2. The licensed athletic trainer will complete an initial assessment, including administration of the SCAT3 test.
    a. If the licensed athletic trainer is not present (i.e. away game, off-season practice, etc.) the coach will communicate the injury to the athletic trainer and parents via phone call and/or e-mail.

3. The parent/guardian will be notified via phone call, and the athlete and/or parent will be sent home with a *Concussion / Head Injury Information form* if available*.*

4. **Athletes assessed with a head injury/concussion by a licensed athletic trainer or assumed to have a head injury/concussion by a coach will need to be seen by a physician.**
    a. An athlete assessed to have a concussion by a licensed athletic trainer and returns the next day with a clearance from a physician will be required to take an ImPACT test and go through the **BRAIN** program.

5. The licensed athletic trainer will notify the counselors, Vice Principal, and Registered Nurse via e-mail to alert teachers of the potential setbacks the athlete may incur.
    a. At this time, athletes will be restricted from participation in practices, scrimmages, games, physical education, swimming, dances, plays, band/choir (including marching band) or any other activities that are strenuous or increase blood pressure until the student-athlete completes the Return to Play Protocol (**REBRAIN Program)**.

6. Athletes suffering a concussion outside of high school activity will have to follow the SKHS concussion policy to return to play to SKHS athletics.

RCW 28A.600.190 CONCUSSION PROTOCOL

"A youth athlete who is suspected of sustaining a concussion or head injury in a practice or game shall be removed from competition at that time. A youth athlete who has been removed from play may not return to play until the athlete is evaluated by a licensed health care provider trained in the evaluation and management of concussion and receives written clearance to return to play from that health care provider. The health care provider may be a volunteer. A volunteer who authorizes a youth athlete to return to play is not liable for civil damages resulting from any act or omission in the rendering of such care, other than acts or omissions constituting gross negligence or willful or wanton misconduct."

Question: What licensed health care providers are trained in the evaluation and treatment of concussions/brain injuries and authorized to allow the athlete to return to play?
Answer: Medical Doctors (MD); Doctor of Osteopathy (DO); Advanced Registered Nurse Practitioner (ARNP); Physician's Assistant (PA); Licensed Certified Athletic Trainers (LAT, ATC)

Return to Play Protocol

1. The athlete will complete the **Head Injury Scale – Resolution (HIS-R)** on a daily basis in the athletic training room and talk with the licensed athletic trainer once the athlete has returned to school.

2. 24-72 hours after the head injury/concussion, the athlete will take an ImPACT post-injury assessment test.

3. Once the athlete is asymptomatic (displays no more symptoms), a licensed athletic trainer will conduct the following:
    a. Determine where athlete is relative to baseline on the following measures:
        - Symptoms Assessment (Graded Symptom Checklist); Head Injury Scale
        - Mental Status Assessment (SCAT3)
        - ImPACT assessment to ensure all neurocognitive (i.e. memory, concentration, verbal/motor response, etc.) are functioning properly.

    b. If the measures listed above are at least 95% of baseline scores the athlete will be allowed to begin the BRAIN return to play (RTP) protocol to help assess increasing signs and symptoms. The athlete should be re-assessed immediately following exertional activities

    c. If the athlete remains asymptomatic on the following the first step(s) of the REBRAIN RTP protocol, the athlete will be reassessed using the measures above, and continue with the next step(s) on the REBRAIN RTP.

    d. All scores on the aforementioned assessments or exertional activities below will be recorded in the athlete's medical record by a licensed athletic trainer

    e. IF AT ANY POINT DURING THIS PROCESS, THE ATHLETE BECOMES SYMPTOMATIC, THE ATHLETE SHOULD BE RE-ASSESSED DAILY UNTIL ASYMPTOMATIC. ONCE ASYMPTOMATIC, THE ATHLETE WILL THEN FOLLOW STEPS a–d above.

4. After being asymptomatic and passing ImPACT testing, the athlete will begin the **BRAIN Program**.
    a. Athletes must complete all five stages of the **BRAIN Program**, with 24-hours in between each stage, prior to returning to full participations in scrimmages or games. Athletes must present symptom-free each day before beginning the next stage of the **BRAIN Program**.

5. Successful completion of the **BRAIN Program**, in combination with clearance from licensed athletic trainer will clear the athlete for full participation.

THE CERTIFIED ATHLETIC TRAINER RESERVES THE RIGHT TO HAVE THE FINAL SAY IN ALL RETURN TO PLAY DECISIONS. IN THE EVENT THE CERTIFIED ATHLETIC TRAINER IS ABSENT, THE LICENSED HEALTHCARE PROVIDER'S NOTE WILL STAND AS IS.

AT NO TIME WILL A COACH MAKE A RETURN TO PLAY DECISION.

THIS CONCUSSION MANAGEMENT POLICY IS NOT ALL-INCLUSIVE, AND THE LICENSED ATHLETIC TRAINER RESERVES THE RIGHT TO ALTER THE POLICY AT ANY TIME AS HE/SHE BEST SEES FIT TO PROTECT THE ATHLETE.

Concussion/Head Injury Management: Return to Play Protocol
"RE-BRAIN" Program

STUDENT-ATHLETE REFERRED TO PHYSICIAN AND MEDICAL NOTE BROUGHT IN TO THE LICENSED ATHLETIC TRAINER AND/OR SCHOOL NURSE.

		EXAMPLE	REASON WHY
R	REST	• Minimum 24 hours of complete rest post-injury • Recommended exclusion from school day following injury if still displaying symptoms	• Recovery and elimination of symptoms
E	EDUCATE	• Completion of one regular school day without displaying symptoms (asymptomatic)	
B	BIKE	• 20-30 minutes Stationary Bike @ 10-14 MPH; <75% MHR	• Increase heart rate to 50-75% max exertion (e.g. <100 beats per min). • Monitor for symptom return
R	RUN	• 20-minute jogging @ 10 min/mile or 2 miles total • Intervals of 30 second spring / 30 second recovery x 10 • Body Weight Circuit (3 circuits) Squats/planks/push-ups/sit-ups x20 sec each	• Increase heart rate to >75% max exertion • Monitor for symptom return

A	AGILITY	• Non-contact drills, sport-specific activities (cutting, jumping, sprinting)
		• No contact with people, padding or the floor/mat
		  • 60-yard Shuttle Run x 10 (45 second rest)
		  • Plyometric Workout (3 circuits):
		  10 Squat Jumps
		  10 Medicine Ball Throws
		  10 Sit-ups
		• Can start weight training
			• Add total body movement
			• Monitor for symptom return

I	IN-RED	• Controlled contact drills • On air, bags, or blocking shields	• Increase acceleration, deceleration, and rotational forces • Restore confidence, assess readiness for return to play • Monitor for symptom return
N	NO LIMITATIONS	• Return to normal training, with contact • Return to normal unrestricted training	• Increase acceleration, deceleration, and rotational forces • Restore confidence, assess readiness for return to play • Monitor for symptom return

Student Athlete must complete at least ONE contact practice, or if non-contact, ONE unrestricted practice before returning to competition

Athlete will progress through each step before returning to full participation in practice. Only one (1) step will be completed each day. Athletes must report symptom free the following day to progress to the next step.