Valley Christian High School
Sports Medicine
Policies and Procedures Manual

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This document has been reviewed and is agreed upon by the following parties:

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Purpose of the Sports Medicine Treatment Room:

The sports medicine treatment room is an area where student-athletes receive injury evaluation, treatment, preventative care, as well as rehabilitation. The sports medicine healthcare team is responsible for providing services in an attempt to maintain the student-athletes' highest level of competition safely. The sports medicine healthcare team aims to support student-athletes' physical, mental, emotional, and spiritual growth in conjunction with the ministry of Valley Christian Schools and the Valley Christian athletics department.

This area is not to be used as a "lounge" or meeting room for any sport or student-athlete. Food and drinks are not permitted in the treatment area. The treatment room is NOT a "health club" type facility. Student-athletes are not to self-treat or use any aspect of the sports medicine treatment area without supervision by a member of the sports medicine healthcare team.

Sports Medicine Health Care Team Operations

1. Attire
    a. The sports medicine healthcare team will wear Valley Christian High School polo, t-shirt, or active wear during athletic events and when representing the athletics program.
    b. Closed toe shoes are required. Sandals are not permitted.
2. Documentation and Reporting
    a. The sports medicine healthcare team will document encounters with student-athletes regarding sport related injury or illness that may result in the following. outcomes:
        i. referral to physician,
        ii. modified or limited activities in school or sport activity
        iii. subsequent treatment
    b. Documentation of injury or illness evaluations, treatment, and activity modifications will be made in a timely manner.
    c. When applicable, the sports medicine healthcare team will communicate student-athlete modifications and limitations with appropriate coaching staffs, school administration, and parents.
3. Facility Maintenance
    a. Treatment tables, taping tables, stools, and rehabilitation equipment will be cleaned daily or following possible contamination with appropriate cleaner.

b. Treatment towels will be used by a single patient and then placed in the laundry bin. Towels will be laundered as needed.
c. Hydration equipment will be cleaned after use with a diluted bleach solution (1:10) or appropriate cleaning solution.

Relationships and Responsibilities:

1. Sports medicine healthcare team and student-athletes:
   a. The primary concern of the sports medicine healthcare team should be the health and safety of the student-athlete;
   b. The student-athlete is to report any and all health concerns, including injury, to the sports medicine healthcare team as soon as possible;
   c. Only important and medically necessary information regarding the injury will be shared with the coach;
   d. Parents of the injured student-athlete will be notified as soon as possible after the injury has occurred;
   e. The student-athlete is responsible for follow-up treatment of his/her injury;
   f. The student-athlete may be medically disqualified from play if treatment requirements and/or full clearance from a physician is not met.

2. Sports medicine healthcare team and physician:
   a. The sports medicine healthcare team works under and in conjunction with the team physician as well as community physicians;
   b. The sports medicine healthcare team and physician should develop the treatment program necessary for the student-athlete's safe return to activity;
   c. When a team and/or community physician is present at an athletic event, the final decision regarding the status of the student-athlete rests with the physician if the physician is ready and willing to take responsibility of the student-athlete;
   d. The sports medicine healthcare team, coaches, student-athletes, and parents work cooperatively with physicians to ensure quality athletic health care;

3. Sports medicine healthcare team and coaches:
   a. As previously stated all medical decisions will go through the sports medicine healthcare team;
   b. The sports medicine healthcare team communicates with the coaches about

injured athletes;
   c. If a coach has questions regarding treatments rendered, they can come at any time to the sports medicine office and speak with a member of the sports medicine healthcare team.

4. Sports medicine healthcare team, coaches and visiting teams:
   a. Visiting teams should be made aware of the available sports medicine aids, supplies, equipment, facilities, and supportive services.
   b. The sports medicine healthcare team will relay any relevant injury information to the visiting team's sports medicine staff.
   c. Visiting team pamphlet will be let with water set up, when applicable, and will be available online. Refer to appendix for copy to the visiting team pamphlet.

5. Sports medicine healthcare team and Parent:
   a. It is the responsibility of the sports medicine healthcare team to contact the parent's/guardian after the student-athlete is injured;
   b. The sports medicine healthcare team will inform the parent/guardian about the injury and recommend care;
   c. The parent/guardian and sports medicine healthcare team will work in conjunction to address all concerns.
   d. Ultimately, parents/guardians have the final say on treatment regarding the health of the son/daughter, but the sports medicine healthcare team can medically disqualify a student-athlete until they are seen by a physician;
   e. The sports medicine healthcare team and parents/guardians should work together to allow for a safe return to play for the student-athlete.

6. Coach and Athletic Training Students (ATS):
   a. The ATS works under the direct supervision of the sports medicine healthcare team.
   b. Under NO circumstances is the ATS to communicate athlete information to anyone other than to a member of the sports medicine healthcare team;
   c. The ATS must NEVER be allowed to make medical decisions, analyze or diagnose injuries, or assist in the treatment of athletic injuries except under the direct supervision of a member of the sports medicine healthcare team.

7. Sports medicine healthcare team and sports medicine volunteers:
   a. Student volunteers are under the direct supervision of the Sports medicine

healthcare team;

b. Under this supervision ONLY may a student volunteer assist the sports medicine healthcare team on taping, handling and care of supplies, and treatment of student athletes;

Daily Reporting of Injuries

In the event of an injury:

1) Student-athletes are encouraged to report to the sports medicine treatment area and contact a member of the sports medicine healthcare team regarding the injury. If the injury is severe and student athlete cannot be moved, the coach should contact the sports medicine healthcare team via personal cell phone or via landline at extension 2453 to meet the student athlete at the injury location.

2) The sports medicine healthcare team will evaluate the injury and make efforts to communicate findings to the student-athlete, coach and parent.

3) In the event the parents, legal guardian, or emergency contacts cannot be reached call EMS, if needed.

   a) When EMS is called there are hospital/ER from which parents can choose.

   b) If parents or legal guardians cannot be reached, EMS and the sports medicine healthcare team will collaborate on where to bring the injured student-athlete.

Reporting for Treatment

All student-athletes should report to the sports medicine treatment area for injury evaluation and treatment during the hours of operation. The sports medicine treatment area will administer care to the student athletes.

1) Dress:
   a) Student-athletes should be dressed appropriately when coming to the sports medicine area for any type of evaluation and/or treatment;
      i) Dress must include a shirt, shorts/pants or school approved VCHS athletic wear;

   ii) Student-athletes reporting in clothing that may hinder evaluation may be asked to change so that a proper evaluation can be conducted;
   b) Student athletes must present for evaluation and follow-up treatment in clean clothing. Those dressed in soiled or dirty clothing may be asked to change;
   c) All athletic equipment is to be left outside of the treatment area.
   d) All student-athletes must have appropriate footwear when in the sports medicine area.
2) Conduct:
   a) All VCHS rules of student conduct apply in the sports medicine treatment area;
   b) All student-athletes and non-athletes not needing evaluation or treatment of an injury may be asked to leave;
   c) All student-athletes should check in with his/her coach, if the sport is in season, before and after coming to the treatment area for care;
   d) Student-athletes must sign in before receiving care unless it is an emergency.

Practice & Game Procedures for Injured/Ill Student-Athlete

Decisions regarding the availability of the student-athlete for practice or game competition require the cooperative efforts of the student-athlete, coach, sports medicine healthcare team, physician, and parents. These decisions will be based on sound medical judgment and with the best interest of the athlete in mind. The sports medicine healthcare team will provide quality athletic health care for the student-athlete under the following guidelines:

1) If a student-athlete is under the care of a physician, or a physician is present, the physician determines the ability of the student athlete to practice or compete in a practice or game.
2) If the student-athlete is NOT under a physician's care and a physician is not present, the sports medicine healthcare team will assume the responsibility of providing the primary athletic health care and will determine the ability of the student-athlete to practice or compete.
   a) The sports medicine healthcare team will convey a "no-play" decision to the appropriate coach as soon as possible.
   b) Under no circumstances should the coach allow the student-athlete to practice or compete until either they are cleared directly by the sports medicine healthcare team or there is written documentation by a physician that the student athlete is able to return to play.
      i) Verbal communication from the physician will be accepted on a

24-hour basis. Written documentation is required for full clearance to return to play.

ii) A representation of physician clearance by the student-athlete to the sports medicine healthcare team and/or coach will NOT meet the requirements for the student athletes to return to play.

iii) A "no-play" decision by the physician will always be followed.

3) Under NO circumstances shall a coach allow a student-athlete to practice/compete when a "no-play" decision of the sports medicine healthcare team or physician is in effect.
   a) Should a coach or student-athlete desire to disregard the "no-play" order action will be taken to safeguard the student-athletes' health.
      i) The sports medicine healthcare team will immediately notify the VP of Athletics of the student-athlete's and coach's actions.
      ii) The sports medicine healthcare team will also notify the student-athlete's parents/guardian.
   b) THE NUMBER ONE PRIORITY OF THE SPORTS MEDICINE HEALTHCARE TEAM IS THE WELL BEING OF THE ATHLETE. IF IT IS UNSAFE FOR THE ATHLETE TO PARTICIPATE OR IT IS DEEMED FURTHER PLAY WILL RESULT IN FURTHER INJURY, THEY SHOULD NOT BE PARTICIPATING.
4) If a "no-play" decision is in place the student-athlete may be able to perform rehabilitation of the injury and the student-athlete is expected to report to the sports medicine treatment room daily for treatments.
5) Medical Referral and Continued Care:
   a) At the time of the examination of the injury, the sports medicine healthcare team will present his/her opinion to the student-athlete regarding the need for a medical referral.
   b) Parents/guardian will be notified if there is a need for a medical referral.
      i) Sports medicine healthcare team will give advice about the type of physician that would best help the student athlete.
   c) The final decision rests with the parent/guardian, if the parent/guardian disregards the referral the student athlete will be medically disqualified until they are seen by a physician.
   d) If the student athlete receives care from a physician a completed form or Rx prescription will indicate the diagnosis and suggestions for the continued care of the student athlete, this note is required after seeing a physician.
   e) In the event an injured student athlete sees a physician without prior notification to the sports medicine healthcare team that an injury occurred, the athlete must bring a written report of the physician's finding for the release to play. If this is not provided the student athlete will not be

permitted to practice/compete until this note is filed with the sports medicine healthcare team.

f) Continued care of the student athlete is carried out in the form of daily reevaluation of the student athletes' progress, daily treatments, and rehabilitation

g) Where needed and available, such care is performed with periodic consultation of the attending physician.

6) The sports medicine staff reserves the right to withhold an athlete from returning to play, even with a doctor's clearance, if they believe it is in the best interest of the athlete.

General Return to Play Protocol

All student-athletes who have sustained an injury must be cleared by a member of the VCHS sports medicine team and/or a treating physician in order to return to play.

Regardless of clearance from a physician a student-athlete wishing to return to play must also adhere to this protocol in order to return to play.

The following is a standard protocol for releasing a student athlete to return to play:

1) Student athlete must maintain full range of motion bilaterally in order to be eligible to return to play;
2) Student-athlete must maintain full strength bilaterally in order to be eligible to return to play;
3) Student-athlete must be pain free while performing functional aspects of their sports;
4) Any student athlete needing extra support or padding must report to the sports medicine treatment area daily in order to maintain that equipment given to the athlete;
5) Any athlete needing tape support must report to the sports medicine treatment area, during their hours of operation, to have tape applied.
    a) Supplies for taping are not endless, and no student athlete shall be taped every day for an entire season for their injury;
    b) Taping of an injury will only occur for 2 weeks after being cleared by a member of the sports medicine healthcare team to return to play;
    c) Any additional support the student-athlete may need after 2 weeks must come in the form of a brace, which the sports medicine healthcare team will aid in supplying;
6) Student-athlete must have little to no swelling within the injury site in order to be eligible to return to play;
7) Student-athlete must understand the risks involved in returning to play after the injury and must be ready to adapt to the physical demands of their sport in relation to their injury;
8) If the sports medicine healthcare team feels that continued play with injury is detrimental to the student-athlete, regardless of physician clearance, the student-athlete will remain under no play/practice status until the sports medicine healthcare team can contact the treating physician and get clarification on exact findings of the evaluation.

Sports Medicine Coverage

The Associate Athletic Director and the Vice-President of Athletics will determine the sports medicine coverage for all practices and games. Each individual situation is treated differently; however, in general, the event under direct coverage of the sports medicine healthcare team is the event which holds the highest probability of needing immediate medical assistance.

1) Hours of Operation:
   a) The sports medicine treatment area is generally open for treatment and care during the established practice windows:
      i) School Week:
         - Monday thru Friday: 12:30-6:30pm
      ii) Holiday and Breaks for School: TBD based upon previously scheduled games/practice schedules
2) Sports medicine team is present – In the event an injury occurs while the sports medicine healthcare team is present (at either a home or away event), the following protocol exists:
   a) The sports medicine healthcare team performs an immediate evaluation of the injury and determines the severity;
   b) An evaluation or an impression is made which forms the basis of the immediate first-aid and continued participation status;
   c) The determination of a student-athlete's ability to continue is made solely by the sports medicine healthcare team in the absence of a physician;
   d) Should the injury warrant immediate medical attention, the sports medicine healthcare team will decide on the best means of transportation;
   e) A student-athlete sustaining an injury, but continuing to participate, will undergo an examination at the earliest possible moment, immediately following the practice or game in which the injury occurred;
   f) The purpose of this exam is to completely evaluate and document the injury and to determine further treatment and the need for medical referral.
3) Sports medicine healthcare team NOT present – Home Event – In the event of an injury at a home event, when the sports medicine healthcare team is not present, the following procedure exists:
   a) If the sports medicine healthcare team is on campus, but not immediately present, the coach or designee should contact the sports medicine healthcare team by the quickest available means, and the injury should be managed as discussed in the previous section;
   b) The coach makes an immediate general determination of the severity of the

injury and provides any indicated first-aid (If practicing outside the coverage times of the sports medicine healthcare team, please refer to the Appendix for instruction.)

c) If there is any doubt as to the severity of the injury, a medical referral is advised and, if deemed necessary, paramedics should be summoned by the coach or designee;

4) Sports medicine healthcare team not present – Away Event – In the event of an injury at an away event, when the sports medicine healthcare team is not present the following procedure should be followed:

The coach must adhere to the recommendations of the host sports medicine healthcare team or licensed medical personnel;

a) Immediate first-aid is the responsibility of the coach until such assistance can be obtained. The coach should work with the host schools' medical personnel to ensure any necessary immediate medical attention is summoned;
b) The injured athlete should be directed to see the sports medicine healthcare team as soon as possible before the next practice or contest.

5) Physical Education (PE) Injuries
   a) All injuries sustained while participating in PE classes are reported to and managed by the VCHS front office staff.
   b) If needed, assistance from the sports medicine healthcare team is available when they are on campus.

Equipment

1. First Aid Kit
   a. The coach's first aid kit contains supplies used most by a coach during practices, home events, and when traveling to another site;
   b. Kits can be checked out in the sports medicine treatment area and must be returned after the conclusion of the season;
   c. The kit provides necessary first-aid supplies as well as the most generally used supplies used in the sports medicine treatment area;
   d. The coach is responsible for the care and maintenance of the supplies within the kit;
   e. The coach is responsible for bringing the kit to all events, home or away, where the sports medicine team will not be directly supervising the event;
   f. If more specialized equipment is needed coaches can request the extra

supplies from the sports medicine team;

g. Any non-consumable items lent to a team or team member must be returned to the sports medicine team at either the conclusion of the season or when it is no longer needed.

2. Supplies
   a. If specialized equipment is needed for teams it is the coach's responsibility to notify the sports medicine healthcare team of those needs as soon as possible.
3. Rehabilitation Equipment
   a. Sports medicine rehabilitation equipment is available to the student-athletes in the sports medicine treatment room;
   b. Safety rules are posted in each area and will be enforced by the sports medicine healthcare team.
4. Emergency Equipment
   a. Major emergency equipment (AED, stretchers, splints, crutches, etc.) will generally be kept in the sports medicine treatment area.
   b. The sports medicine healthcare team will review the location and use of each piece of equipment with the coach at the beginning of each sports season if requested.
5. Equipment and Supplies for Individual Use
   a. When equipment is taken from the sports medicine treatment area, the sports medicine healthcare team will record the student athlete's name and equipment issued;
   b. The student-athlete is responsible for returning all equipment handed out.
6. Protective Equipment
   a. Issuing on-hand protective athletic equipment shall be based on the recommendation or advice of the sports medicine healthcare team and/or the team physician.
   b. Taping Policy
      i. If tape support is needed it will be on an individual basis and applied to support the athlete from further injury while allowing them to continue play;
      ii. In general, tape support will be supplied for the student-athlete for two weeks ONLY, if needed a brace should be used thereafter.
      iii. Valley Christian High School reserves the right to deny tape that is not deemed medically necessary.
7. Golf Cart
   a. The golf carts are to be used to transport a member of the sports medicine healthcare team to the location of an injured athlete and for the transportation of injured athletes, equipment, and supplies at the

discretion of the sports medicine healthcare team.

Standard Operational Procedures for Specific Injuries or Illnesses

General Emergency Procedures

If an injury occurs, please take the following actions:

1) Immediate actions to be taken;
   a) Check the scene for safety before entering. DO NOT enter the scene if it is unsafe to do so. If the scene is unsafe, call 911 immediately
   b) Call a member of the Sports Medicine Healthcare Team by phone: 408-513-2452. or by radio. Please use the following procedures when calling for the sports medicine healthcare team on the phone or radio;
      i) Radio Channels;
         (1) Channel_2_– Security
      ii) Calmly and clearly go to Channel 2 and ask for assistance from the sports medicine healthcare team.
         (1) Press the side bar to talk and wait two seconds before talking;
         (2) Release the side bar and wait for an answer, follow up questions, and/or instructions;
         (3) Please state the location and nature of the injury as well as the urgency;
         (4) Please make sure to tell the sports medicine healthcare team about any life threatening conditions exhibited by the student-athlete (breathing difficulties, sever bleeding, consciousness, loss of pulse, etc.)
   c) Administer first-aid as needed
      i) Check for breathing and pulse (fast, slow, weak, strong, shallow, deep, regular, or irregular)
      ii) Check for severe bleeding
      iii) Check for deformities and dislocation and/or any other areas of pain
   d) Check for signs of life, if there are no signs of life or any of the following are present call 911
      i) Unconscious or unresponsive
      ii) Unable to speak
      iii) Difficulty breathing
      iv) Chest pain
      v) Severe bleeding that cannot be controlled by direct pressure
      vi) If a foreign object is imbedded, DO NOT REMOVE
   e) Call 911 as soon as possible if necessary
      i) When calling the paramedics on the phone, 911 operator will want to know the following:
         (1) Your name and position (i.e. coach);
         (2) Describe nature of injury;
         (3) Give location of injured student athlete, may need to state which

outside field or which building;
(4) State gender and age of student-athlete;
(5) Give the phone number of the phone you are using to call 911.
ii) Use radio to call security so they can direct EMS to the injured student-athlete,
iii) Have emergency information on the student ready for EMS;
iv) Contact parent/guardian as soon as possible.

2) Sports medicine healthcare team will evaluate and determine the extent of the injury;
3) General care of an injury (PRICE);
   a) Protect – protect student-athlete and injury site from further injury;
   b) Rest – resting the injury is the fastest way to jump start the healing process;
   c) Ice – place ice on the injury site to decrease swelling and pain. This will also help jump start the healing process;
   d) Compression – use an ace wrap to help reduce the amount of swelling that is allowed to pool at the injury site. Generally, you should start wrapping below the injury, start tighter (DO NOT cut off circulation) and get more loose as you work your way up to and over the injury site;
   e) Elevate – elevate the injury site above the heart to help reduce the amount of swelling.

DO NOT DO FURTHER HARM!

Avoid moving a student athlete, even if the injury is thought to be not serious. Call for sports medicine healthcare team support and they will make the decision regarding the severity of the injury. One of the most serious threats to a seriously injured victim is unnecessary movement.

Abdominal and Other Related Injuries:

1) **Abdominal Contusion**
   a) MOI: usually a direct blow to the abdominal area
   b) Signs and Symptoms
      i) Cramping
      ii) Swelling and/or bruising
      iii) Pain with movement
   c) Treatment
      i) Discontinue play and rest
      ii) Refer to physician if:
         (1) Blood in urine
         (2) Vomiting due to contusion

(3) Severe cramping or is in the fetal position call 911

2) **Kidney Contusion**
   a) MOI: usually a direct blow to the lower back
   b) Signs and Symptoms
      i) Shock
      ii) Nausea
      iii) Vomiting
      iv) Rigidity of the back muscles
      v) Blood in urine
   c) Treatment
      i) Discontinue play and rest
      ii) If there is blood in urine, pain, or vomiting that persist and do not improve, or there are signs of shock, then an ER visit is necessary.
3) **Appendicitis**
   a) MOI: caused by inflammation of the appendix
   b) Signs and Symptoms
      i) Student athlete complains of moderate to severe pain over the appendix – Right lower abdomen.
      ii) Nausea, which may progress to vomiting
      iii) Low grade fever (99 to 100 F)
      iv) Abdominal cramping
      v) Pain, tenderness, and rigidity of the abdomen.
   c) Management
      i) Surgical removal of the appendix

Allergies

All student athletes with allergies should inform the sports medicine healthcare team of the allergy and the severity.

1) Any student-athlete suffering from severe allergies should be carrying an Epinephrine pen (Epi-pen) with them at all times;
2) If any student-athlete comes in contact with an allergen, steps should be taken to reduce the allergic reaction;
   a) If the student-athlete is not severely allergic, remove from the environment where contact with the allergen occurred and wash effected area well with soap and water;
   b) If the student-athlete is severely allergic, locate Epi-pen and administer as soon as possible.
      i) If Epi-pen is administered, you MUST call 911 and treat for shock.

Back Injuries

Back problems are usually either caused by congenital abnormalities or idiopathic conditions.

1) **Congenital Back Abnormalities**
   a) Spinal bifida occulta
   b) Scoliosis
2) **Lumbar Vertebrae Fracture**
   a) Greatest concern is compression fractures of the lumbar spine
   b) MOI: can be either with sudden forced hyperextension of the spine or falling directly on the buttocks
   c) Signs and Symptoms
      i) Point tenderness at the vertebrae
      ii) Definitive diagnosis must come from X-rays
   d) Treatment
      i) Call 911, do not compromise the spinal cord
      ii) May be put in an abdominal brace to support the spine
3) **Low Back Strains and Sprains**
   a) MOI: can be caused by sudden extension of the spine or a direct blow to the low back
   b) Signs and Symptoms
      i) Pain in low back
      ii) May see visible spasm of the extensor muscles
      iii) Pain on palpation over extensor muscles
      iv) No evidence of radiating pain to buttocks or legs
      v) Weakness in back extension due to pain
   c) Treatment
      i) PRICE
      ii) Ice massage
      iii) Slow return to play with emphasis on increasing ROM and strength
4) **Back Contusion**
   a) MOI: direct blow to the back
   b) Signs and Symptoms
      i) May have visible bruise
      ii) May have muscle spasms
   c) Treatment
      i) PRICE
      ii) Ice massage
      iii) Gradual return to play with emphasis on increasing ROM

5) **Sciatica**
   a) MOI: Overuse causing inflammatory reaction of the Sciatic nerve or direct compression of the nerve by bulging disc.
   b) Signs and Symptoms
      i) Sharp shooting pain starting around the buttock and radiating down the buttocks, thigh, and leg
      ii) Type of pain is usually described as pins and needles, numbness and tingling, or burning along the nerve path
   c) Treatment
      i) Evaluation by physician
      ii) PRICE
      iii) Gradual return to play with emphasis on increasing core strength and stability and improving flexibility.
      iv) May take NSAIDs
6) **Herniated Disk**
   a) MOI: sudden and/or forced flexion, extension, or torsion of the lumbar spine. Can also occur through chronic wear and tear.
   b) Signs and Symptoms
      i) Sharp pain in lower back
      ii) Pain radiating down leg (sciatica)
      iii) Weakness
      iv) Symptoms worsen with axial loading of the spine
      v) Positive Valsalva maneuver
   c) Management
      i) Evaluation by physician
      ii) PRICE
      iii) Manual traction
      iv) Appropriate mechanics and posture
7) **Spondylitis, Spondylosis, Spondylolysis and Spondylolisthesis**
   a) Spondylitis – Inflammation of the vertebral joint
   b) Spondylosis – degenerative disorder of the vertebral joint
   c) Spondylolysis – Stress fracture of the pars interarticularis of the vertebrae
   d) Spondylolisthesis – A full fracture of the pars interarticularis causing the vertebrae to slip forward in relation to an adjacent vertebrae
   e) MOI: Can be congenital or caused by repetitive hyperextension of the lumbar spine
   f) Signs and Symptoms
      i) Persistent mild to moderate achy pain in the lower back or buttocks
      ii) Limited ROM
      iii) May feel weak
   g) Management

   i) Evaluation by physician
   ii) PRICE
   iii) Bracing of the low back
   iv) Rehabilitation should focus on trunk strength and core stability

8) **Sacroiliac (SI) Joint Sprain**
   a) MOI: can occur when an athlete twists with stationary legs, falls backwards, and stumbles forward
   b) Signs and Symptoms
      i) Pain on palpation over SI joint
      ii) Can have radiating pain
      iii) Pain increases with single leg stance
   c) Management
      i) PRICE
      ii) May indicate use of back brace
      iii) Rehabilitation focusing on improving flexibility and core strength and stability.

Chest, Thoracic and Lung Injuries

1) **Rib Fracture**
   a) MOI: Direct blow to the rib cage or repeated forceful coughing
   b) Signs and Symptoms
      i) Severe pain at injury site
      ii) Positive compression test of the ribs
      iii) May have pain with breathing
      iv) Positive Valsalva maneuver
   c) Management
      i) Needs X-rays to confirm fracture
      ii) PRICE
      iii) May use rib brace for compression
2) **Costochondral Separation and Dislocation**
   a) MOI: May be caused by a direct blow, sudden twist or fall on the thorax
   b) Signs and Symptoms
      i) Sharp pain at injury site
      ii) Difficulty breathing due to pain
      iii) Pain on palpation over injury site
   c) Management
      i) PRICE
      ii) NSAIDs
3) **Injuries to the Lungs**

a) Pneumothorax – the pleural cavity fills with air and the lung on that side collapses
b) Tension Pneumothorax – the pleural cavity fills with air and displaces the lung and heart toward the opposite side, which compresses the opposite lung
c) Hemothorax – blood fills the pleural cavity and compresses the lung on the same side
d) Management
    i) Call 911
    ii) Administer Cardiopulmonary Resuscitation (CPR) if applicable, acquire Automated External Defibrillator (AED) and apply if needed

4) Hyperventilation

a) MOI: Can be caused by anxiety and is the excessive rapid breathing
b) Signs and Symptoms
    i) Appears to have a difficulty breathing, or may be breathing rapidly;
    ii) Is NOT wheezing;
    iii) May have redness of the skin;
    iv) Struggling to breathe;
    v) May get numbness and tingling in arms, hands, legs and feet;
    vi) Light-headedness;
    vii) May faint or pass out due to lack of oxygen.
c) Management
    i) Decrease rate of breathing;
    ii) Breath into cupped hands or paper bag.

5) Asthma Attack

a) MOI: Caused by acute constriction of the bronchioles due to either acute or chronic inflammation.
b) Signs and Symptoms
    i) Difficulty breathing, gasping for breath;
    ii) Wheezing;
    iii) Shortness of breath;
    iv) Athlete will state it feels like they cannot catch their breath.
c) Management
    i) Inhaler (albuterol) should be given to the athlete as soon as possible. The athlete should carry his/her inhaler with them at all times;
    ii) If inhaler is not readily available student-athlete should be instructed to concentrate on taking good long breaths by using their stomach to breath and not the chest muscles;
        (1) Student-athlete should be instructed to stick stomach out when breathing in
        (2) Then should be instructed to bring stomach in when breathing out;

(3) This will help the student athlete breath with the diaphragm and will help control breathing until inhaler can be reached.

iii) If condition does not improve with relaxed breathing and administration of inhaler, call 911 for paramedics

6) **Choking**

a) MOI: Student athlete sucked object into wind pipe

b) Signs and Symptoms

i) May display universal choking sign – hands to throat

ii) Will be unable to speak

iii) May or may not be coughing

iv) May or may not lose consciousness

c) Management

i) DO NOT interfere with student athlete if they are actively coughing and/or trying to dislodge object themselves, stand-by

ii) If student athlete CANNOT breathe, cough or speak, call 911

iii) If conscious, perform abdominal thrusts (Heimlich maneuver)

(1) Place thumb side of fist against middle of abdomen just above the navel;

(2) Grasp fist with other hand;

(3) Give 5 quick upward abdominal thrusts;

(4) Check to see if athlete can breathe;

(5) Repeat until object is dislodged.

iv) If unconscious, a trained professional should administer rescue breathing.

7) **Heart Contusion**

a) MOI: Caused by the compression of the heart between the sternum and spine

b) Signs and Symptoms

i) Shock

ii) Chest pain

iii) May have heart arrhythmias that can decrease heart output

c) Management

i) Call 911

ii) Administer (CPR), acquire (AED) and apply to student athlete

iii) Treat for Shock

8) **Heart Attack and Sudden Death Syndrome**

a) MOI: Can be caused by congenital defects and the heart just stops due to increases in activity

b) Signs and Symptoms

i) Chest pain

ii) Heart palpitations or flutters

iii) Syncope

iv) Nausea

v) Profuse sweating

vi) Heart murmurs

c) Management
   i) Call 911
   ii) Administer (CPR), acquire (AED) and apply to student athlete
   iii) Treat for shock

d) Prevention
   i) If the student athlete has a heart condition they should be cleared by a cardiologist who understands the demands of the sport they are planning on participating in.
   ii) If there are any indications of a heart condition they should not be ignored

9) **Commotio Cordis**

a) MOI: caused by a badly timed direct blow to the chest, that caused cardiac arrest

b) Signs and Symptoms
   i) Collapse and loss of consciousness (LOC) – typically due to Ventricular fibrillation

c) Management
   i) Call 911
   ii) Administer CPR, get AED and apply to the student-athlete.

Bites

1) **Animal Bites**

a) MOI: bites from an animal

b) Signs and Symptoms
   i) Can be puncture wounds and or scrapes;
   ii) Bleeding can be mild, moderate or severe.

c) Management
   i) If needed, call 911 and administer any and all first-aid needed;
   ii) Wash thoroughly with soap and water;
   iii) Apply antiseptic and sterile dressing;
   iv) Notify the parent/guardian and police of the incident;
   v) Should also be referred to physician for necessary antibiotics and any booster shots needed.

2) **Human Bites**

a) MOI: bites from a human

b) Signs and Symptoms
   i) Can be puncture wounds as well as scrapes;
   ii) Bleeding can be mild, moderate or severe.

c) Management

i) Wash thoroughly with soap and water;
ii) Apply antiseptic and sterile dressing;
iii) Notify parents/guardian and police if needed;
iv) Should also be referred to a physician for necessary antibiotics, booster shots and blood borne pathogen contamination check.

3) **Insect Bites**
   a) MOI: bites from insects like mosquitoes, bees, flies and any other biting insect
   b) Signs and Symptoms
      i) Allergic student-athlete may have severe itching and may even go into anaphylactic shock;
      Locate Epi-pen and use if needed;
      ii) Swelling of the area where bitten that may be itchy.
   c) Management
      i) If student athlete is allergic
         (1) Locate Epinephrine pen (Epi-pen) and administer to student athlete
         (2) Call 911
      ii) If student is not allergic
         (1) Apply ice to bite;
         (2) Remove stinger if present;
         (3) May use "StingKill" swabs/wipes.

Bleeding and Other Wound Care

1) **External**
   a) Minor
      i) Wash wound with soap and water thoroughly, or use saline irrigation
      ii) Apply triple antibiotic ointment to wound
      iii) Apply sterile dressing and bandage
      iv) Keep wound clean and covered until healed
   b) Major
      i) Apply pressure directly to wound with sterile gauze pad
      ii) If severe bleeding persists DO NOT remove the primary gauze pad from wound
      iii) Apply pressure to main artery supplying blood to affected area
      iv) Call 911 and treat for shock
2) **Internal**
   a) If any internal bleeding is suspected call 911 and treat for shock
3) **Abrasions**
   a) Clean wound with soap and water, or saline irrigation
   b) Cover with triple antibiotic ointment

c) Apply sterile dressing and bandage
d) Keep wound clean and covered until would is healed

4) **Blisters**
   a) Clean affected area with soap and water or saline irrigation
   b) If blister is in an area where it is unlikely to pop/break spontaneously, do NOT pop or aspirate the blister.
   c) If blister is in an area where there will be continued compression, use a sterile needle to aspirate the blister;
   d) After aspiration, clean wound again;
   e) Apply triple antibiotic to blister;
   f) Apply padding to the blister using 2nd Skin®;
   g) Cover with sterile dressing and bandage.
5) **Burns**
   a) First, remove the cause of the burn;
   b) Cool and flush the burned area with large amounts of cool water;
   c) Cover the burn with dry, sterile dressing loosely bandage;
   d) DO NOT apply ointment to affected area;
   e) DO NOT ice;
   f) DO NOT break blister;
   g) Large deep burns must be referred to a physician.
6) **Incisions and Lacerations**
   a) Wash wound with saline irrigation;
   b) If wound is deep may need to apply Steri-Strips®;
      i) Begin by applying tape adhesive to cotton tipped applicator and apply to either side of the wound
      ii) Using Steri-Strips® start by applying the first one to the middle of the wound and lifting to close the wound
      iii) Apply other strips to either side using an alternating side method
      iv) Apply sterile dressing and bandage to wound
      v) It may be advised for student athlete to receive stitches as Ster-Strips® are only a temporary dressing (wound must be sutured within 10 hours of injury) so athlete should be evaluated by a physician.
7) **Splinters**
   a) If superficial, remove with sterile tweezers or forceps
   b) If deep, and/or unable to be removed easily refer to a physician
   c) Clean with soap and water or saline irrigation
   d) Apply triple antibiotic ointment
   e) Cover with sterile dressing and bandage
   f) May advise parent/guardian to check last Tetanus booster date

Dermatological Problems and Infectious Diseases

1) **Bacterial Skin Infections**
   a) Folliculitis – Infection of the hair follicle caused by staphylococcus or other skin bacteria.
      i) MOI: occurs where there is short course hair and can develop where there is friction from either protective padding or shaving
      ii) Signs and symptoms
         (1) Redness around hair follicle
         (2) Followed by a pustule around hair follicle opening
         (3) A crust will follow that will eventually slough off with the hair
      iii) Management
         (1) Moist heat can be applied intermittently to increase circulation
         (2) Triple antibiotic ointment can also be applied to combat further infection
   b) Furuncles and Carbuncles – complications from folliculitis
      i) MOI: Results from friction or blunt trauma
      ii) Signs and Symptoms
         (1) Pustule from folliculitis becomes enlarged, deep, red and hard due to internal pressure
         (2) If condition persists extreme pain and tenderness can occur
      iii) Management
         (1) Referral to a physician is needed
         (2) DO NOT try to squeeze pustule as this may cause infection to spread to other areas of the skin
   c) Impetigo – A common skin condition that causes blisters and pustules
      i) MOI: Bacteria enters the skin through opening in the skin
      ii) Signs and Symptoms
         (1) Mild itching, soreness, and/or burning
         (2) Small pustules or vesicles leaving a honey colored crust
      iii) Management
         (1) May clear on its own if washed thoroughly and kept clean and covered
         (2) Topical antibiotic should be applied
         (3) Impetigo is a contagious condition and caution should be taken so the student athlete does not infect others
   d) MRSA (Methicillin Resistant Staphylococcus Aureus)
      i) MOI: Direct contact with infected person, can also come from sharing personal hygiene products, and contact with infected clothing or protected equipment
      ii) Signs and Symptoms

(1) Small red bumps
(2) May look like pimples, boils or spider bites

iii) Management
(1) Must be seen by a physician and put on antibiotics
(2) May require surgical draining of the lesion
(3) Prevention is key, DO NOT share personal hygiene products, take showers right after each practice, and clean athletic equipment daily

2) Fungal Infections

a) Tinea (Ringworm) Infections
Tinea Capitis – Ringworm of the Scalp
Tinea Corporis – Ringworm of the Body
Tinea Cruris – Ringworm of the Groin (Jock Itch)
Tinea Pedis – Athlete's Foot

i) MOI: Coming in contact with others who have the infection
ii) Signs and Symptoms
(1) Red, raised ring on the skin
(2) Itchiness
(3) Scaly looking skin that itches

iii) Management
(1) Topical antifungals
(2) Keep skin clean and dry
(3) DO NOT itch affected area
(4) Prevention is key
(a) DO NOT share towels or personal hygiene products
(b) Always wear shoes, NEVER walk bar foot in common shower and pool areas
(c) Keep out of contact of those you know are infected

b) Candidiasis (Yeast Infection)

i) MOI: This fungus normally resides on the skin, but when it overpopulates it can cause infection, most commonly in moist warm areas of the body
ii) Signs and symptoms
(1) Deep, beefy – red color that is bordered by small red pustules
(2) Deep, painful fissures may occur
(3) Can lead to life threatening systemic disease

iii) Management
(1) Usually can be treated with over the counter and/or prescription medication

3) Viral Infections

a) Herpes Gladiatorium

i) MOI: Personal direct skin-to-skin contact

ii) Signs and Symptoms
(1) Cluster of blisters
(2) Fever
(3) Sore throat
(4) Burning or itching may be present
iii) Management
(a) Referral to a physician is needed
(b) May be put on antiviral
(c) Removal from play until cleared by sports medicine team.

b) Herpes Simplex (Cold Sore)
i) MOI: Initial contraction come from direct contact with the lesion or mucus of the lesion
ii) Signs and Symptoms
(1) Tingling and hypersensitivity 24 hours before outbreak
(2) Local swelling
(3) May have headache, sore throat, and pain in the area of the lesion
iii) Management
(1) Herpes simplex usually clears on its own in 10 to 14 days
(2) May use over the counter medication to aid in symptoms or can be treated by a physician with prescription medication.

Heat and Cold Injuries

1) Heat Illnesses

a) Heat Cramps (Painful involuntary muscle spasm)
i) MOI: Excessive water and/or electrolyte loss during exercise
ii) Signs and symptoms
(1) Normal pulse and respirations;
(2) Profuse sweating;
(3) Dizziness.
iii) Treatment
(1) Rest in cool place;
(2) Increase water intake;
(3) Increase electrolytes by drinking a diluted electrolyte drink

b) Heat Syncope
i) MOI: Being in high temperatures causing the person to feel faint or to faint
ii) Signs and Symptoms
(1) Elevated skin and temp;
(2) Fainting or feeling faint;

(3) Weakness;
(4) Fatigue;
(5) Hypotension;
(6) Blurred vision;

iii) Management
(1) Get to shaded cool place;
(2) Increase water intake;
(3) Elevate legs;
(4) Record blood pressure and temp;

c) Heat Exhaustion
i) MOI: Being in high temps, not acclimatized and doing increased exercise
ii) Signs and Symptoms
(1) Thirst;
(2) Profuse sweating;
(3) Fatigue or weakness;
(4) Confusion;
(5) Skin is wet, cool and clammy, may appear ashen;
(6) Respiration is rapid and shallow;
(7) Pulse is weak.
(8) Increased core body temp – under 104°
iii) Management
(1) Get student athlete to cool dry place;
(2) Remove any unneeded equipment;
(3) Execute rapid cooling of the body
(a) Ice bath;
(b) Cold wet towels or ice bags to the back of neck, under arms, and groin.

d) Heat Stroke
i) MOI: Progression from untreated heat exhaustion
ii) Signs and Symptoms
(1) Disoriented;
(2) May be unconscious;
(3) Initial profuse sweating, progressing to no sweating;
(4) Shallow breathing;
(5) Hot, dry, reddish skin;
(6) Increased core body temp – over 104°;
(7) Rapid strong pulse.
iii) Management
(1) Call 911;
(2) Get student-athlete to cool dry place;

(3) Initiate rapid cooling of the body by placing in the ice bath, or placing ice bags on back of neck, in under arms and in groin area if ice bath is not available.

Per CIF protocol, any athlete suspected of heat exhaustion or heat stroke must be released back to sport my physician.

2) Cold Injuries

a) Frostbite (the freezing of soft tissue)
   i) MOI: Prolonged exposure to cold temps
      (1) 1st degree - Involves skin and some underlying tissues but the deeper tissues are soft and pliable;
      (2) 2nd degree – Involves subcutaneous tissue;
      (3) 3rd degree – Involves tissue layers deeper than subcutaneous and may lead to complete destruction of the affected area.
   ii) Signs and Symptoms
      (1) Shivering, numbness, lack of coordination;
      (2) 1st degree – skin is soft and appears red, then white;
      (3) 2nd degree – skin is firm to the touch, but underlying tissue is pliable, diffuse numbness, skin may appear waxy and white later;
      (4) 3rd degree - Skin is hard to the touch, totally numb and can begin to appear white, yellow-gray, skin may also start to blister and in advanced cases can turn black.
   iii) Management
      (1) Move to warm area indoors as soon as possible
      (2) Warm with moderately warm water (104-108° F) for 30 – 45 minutes
      (3) Should be referred to hospital.

b) Hypothermia (decrease in body temp)
   i) MOI: prolonged time in cold, temp only has to be cold enough to lower body temp, and most hypothermia happens in temps that range from 30° to 50° F.
   ii) Signs and Symptoms
      (1) Involuntary shivering
      (2) Difficulty speaking and with coordination
      (3) Shivering may cease and is replaced by muscle rigidity, apathy, irrational thinking, loss of awareness
      (4) In severe cases may lose consciousness
      (5) Body temp below 78° F will result in cardiac and respiratory failure, and death
   iii) Management
      (1) If student athlete is suspected to have hypothermia they should be

taken to place indoors to warm
(2) Warm body by wrapping in warm blankets and if needed putting on dry clothing
(3) If body temp is lower than 96° F EMS should be activated

iv) Prevention
(1) DO NOT allow student athletes to just stand on the sideline when not playing;
(2) Keep student athletes moving to promote circulation and heat through the muscles;
(3) Encourage student athletes to dress for the weather and layering is key.

Diabetes

Diabetes is characterized by the increase of blood glucose over (fasting) 140 mg/dL. There are two types of diabetes, type one and type two.

1) Type 1
   a) Pancreas either cannot produce adequate amounts of insulin or does not produce insulin at all to clear the blood of high glucose levels;
   b) Student-athlete may have insulin pump;
   c) Onset is usually before the age of 30 and is quick happening within days or weeks.
2) Type 2
   a) Pancreas cannot produce adequate amounts on insulin or the body becomes resistant to it secondary to weight gain;
   b) Onset is usually slow and may not be diagnosed until person is older than 30-40.

The main difference between the types is the onset, and whether or not the student-athlete is dependent on insulin.

1) Signs and Symptoms of Diabetes
   a) Frequent urination
   b) Constant thirst
   c) Unexplained weight loss
   d) Constant hunger
   e) Tiredness and weakness
   f) Itchy dry skin
   g) Blurred vision
   h) Elevated glucose levels (fasting >140 mg/dL; random venous >200mg/dL)

2) Management
   a) Diet control
   b) May need meds that include insulin.

3) Insulin Reaction/Hypoglycemia – rapid onset – excessively low blood glucose
   a) MOI: Caused by the decrease on ingestion of sugar or increased activity levels without eating a proper meal
   b) Signs and Symptoms
      - Hunger
      - Paleness
      - Profuse Sweating
      - Moist clammy skin
      - Trembling
      - Increased heart rate, "pounding heart"
      - Headache
      - Confusion
      - Difficulty concentrating
      - Tremors, seizures
      - Unconsciousness
   c) Management
      - Get student athlete to eat sugar or a high sugar food
      - Drink a high sugar drink, orange juice
      - If student athlete is unconscious activate EMS by calling 911, may rub honey cake frosting or syrup on inside on mouth, this will melt and will be swallowed by student athlete
      - Prevention is key, student athlete should be checking blood glucose levels during practice and should carry snacks and juices with them at all times
4) Diabetic Coma – slow onset
   a) MOI: either very high or very low blood glucose levels
   b) Signs and Symptoms
      - High Blood Glucose
        - Increased thirst
        - Frequent urination
        - Dry mouth
        - Nausea
        - Vomiting
        - Shortness of breath
      - Low Blood Glucose
        - Shaky or nervous
        - Tired

- Sweaty
- Hungry
- Irritable
- Confused

c) Management
- If student athlete is suspected of being in a diabetic coma activate EMS by calling 911
- Prevention is key, student athletes should be checking blood glucose levels during practice and carry snacks and juices with them at all times

Drug Ingestion/Overdose

Drug and alcohol use at Valley Christian High School is prohibited. If a student athlete is suspected of having ingested drugs or alcohol the following process should be followed:

1) **Alcohol**
   a) MOI: the consumption of any alcoholic beverage
   b) Signs and Symptoms
      i) Inability to hold conversation
      ii) Slurred speech
      iii) No withdrawal from painful stimuli
      iv) Blue-tinted or pale skin
      v) Vomiting, including uncontrolled vomiting
      vi) Poor or absent reflexes
      vii) Difficulty keeping person awake
      viii) Problems with coordination and balance
      ix) Confusion
      x) Slow, shallow or irregular breathing
      xi) Unconsciousness
   c) Management
      i) If any student athlete is suspected of having an alcohol overdose call 911 right away
      ii) Contact parent/guardian
      iii) Contact school administers
2) **Drugs** (This is an over view on drug overdose, and does not include each drug separately.) Drugs that are most commonly used are stimulants, sedatives, prescribed drugs, hallucinogens and inhalants
   a) MOI: the consumption of any illegal controlled substance

b) Signs and Symptoms
   i) Problems with vital signs
      (1) Temperature
      (2) Pulse rate
      (3) Respiratory rate
      (4) Blood pressure
   ii) Sleepiness, confusion and coma
   iii) Appears disoriented or exhibits erratic behavior
   iv) Skin changes
      (1) Cool and sweaty
      (2) Hot and dry
   v) Chest pain
   vi) Abdominal pain, nausea, vomiting and diarrhea
c) Management
   i) If any student is suspected of having a drug overdose call 911 right away
   ii) Contact parent/guardian
   iii) Contact school administrator

Eye Problems

1) **Periorbital Ecchymosis (Black Eye)**
   a) MOI: direct blow to eye
   b) Signs and Symptoms
      i) Swelling over orbit of eye
      ii) Ecchymosis around orbit of eye
   c) Management
      i) Physician evaluation to rule out orbital fracture, and abrasions/lacerations of the cornea
      ii) Ice affected area
2) **Foreign Bodies**
   a) MOI: Foreign body enters the eye and causes irritation
   b) Signs and Symptoms
      i) Intense pain
      ii) Tearing of the eye
      iii) Student athlete may have difficulty opening eye
   c) Management
      i) If not embedded in cornea, foreign body should be removed;
      ii) Inspect the eye by asking student-athlete to look up while examiner pull down on the bottom eyelid, then instruct the athlete to look down as the

examiner pulls up in the upper eyelid;
   iii) Use saline to wash out the eye;
   iv) If unable to remove in this method, cover the affected eye(s) and contact parent/guardian and advise them to consult with a physician. If necessary activate EMS.
   v) DO NOT allow athlete to rub eye as this could cause abrasion to the eye.

3) **Sty**
   a) MOI: blocked oil gland
   b) Signs and Symptoms
      i) Starts as red nodule
      ii) Progresses to painful pustule
   c) Management
      i) Hot, moist compress
      ii) Physician referral is need if not resolving in 2-3 days

4) **Conjunctivitis (Pinkeye)**
   a) MOI: Inflammation of the conjunctiva by either bacteria, viruses, allergies or irritant to the eye
   b) Signs and Symptoms
      i) Redness
      ii) Itchiness
      iii) Gritty feeling
      iv) Mucus discharge from eye
      v) Tearing
   c) Management
      i) DO NOT allow student athlete to rub eye
      ii) Referral to a physician is necessary
      iii) Student athlete should refrain from activity until on medication for 24 hours

5) **Corneal Abrasion**
   a) MOI: Direct blow to the eye or Foreign body in eye
   b) Signs and Symptoms
      i) Pain
      ii) Tearing
      iii) Photophobia
   c) Management
      i) DO NOT allow the student athlete to rub eye
      ii) Cover both eyes
      iii) Referral to physician or optometrist is needed

6) **Corneal Laceration**
   a) MOI: Sharp objects in the eye
   b) Signs and Symptoms

i) Severe pain
ii) Discomfort
iii) Decreased visual acuity
iv) Distortion or displacement of the pupil

c) Management
i) DO NOT allow student athlete to rub eye
ii) Pupil should be inspected for symmetry
iii) Eye should be covered, intense pressure should be avoided as this may cause intraocular contents to extrude
iv) Student athlete should be placed supine or seated upright
v) Activate EMS and ask for the eye specialist on duty

7) Subconjuntival Hemorrhage

a) MOI: direct trauma to the eye
b) Signs and Symptoms
i) White sclera of the eye appears red (this is caused by the capillaries in the eye rupturing)
ii) Eye may appear blotchy
iii) May have inflammation
c) Management
i) Requires no treatment
ii) Condition will clear itself in 1 to 3 weeks
iii) If there is blurred vision, pain, or blood in the anterior chamber of the eye, EMS should be activated

8) Hyphema

a) MOI: direct trauma to the eye (hemorrhage into the anterior chamber of the eye)
b) Signs and Symptoms
i) Red tinge in the anterior chamber of eye
ii) Settling blood in the anterior chamber of the eye (if blood is seen in the pupil or iris of the eye this is usually blood collecting in the anterior chamber)
iii) Visual acuity may or may not be affected
c) Management
i) Activate EMS, also ask for the eye specialist on call;
ii) Both eyes should be protected;
iii) Student-athlete should remain seated or in a semi reclined position.

9) Detached Retina

a) MOI: retina becomes detached when fluid gets between the neurosensory retina and the epithelium and detaches it, can occur with or without trauma
b) Signs and Symptoms

i) Student athlete states “a curtain fell over my eye”
ii) Student athlete states “I keep seeing flashes of light going on and off”

c) Management
i) Cover both eyes;
ii) Referral to ophthalmologist is needed.

10) Orbital Blowout Fracture

a) MOI: direct trauma by a blunt object, usually bigger than the orbit of the eye, to the eye
b) Signs and Symptoms
i) Double Vision
ii) Absent eye movement
iii) Numbness of the affected side
iv) Downward displacement of the eye
c) Management
i) Apply ice to area carefully
ii) Protect both eyes
iii) Activate EMS and ask for the ophthalmologist on duty
iv) Student athletes should be transported is a seated position

General Illnesses

1) Fever

a) MOI: usually caused by the body fighting off infection, the body will raise its temp to help kill the infection
b) Signs and Symptoms
i) If no thermometer is available one can feel with the back of hand to forehead to see if warm
ii) Thermometer reading is over 98.6° F
iii) Student athlete may say they don’t feel good or that they are sick
iv) Sluggish
c) Management
i) Discontinue activity. Disqualified from practice or game play until resolved.
ii) Notify parent/guardian of presents of fever
iii) Refer to physician if needed

2) Sore Throat

a) MOI: infection
b) Signs and Symptoms
i) Throat is sore
ii) May or may not have trouble swallowing

iii) May or may not see redness at back of throat
iv) May or may not have fever

c) Management
i) Discontinue activity if needed
ii) Notify parents/guardian if fever or redness at back of throat is noticed
iii) Refer to a physician if needed

3) Headache

a) MOI: can be caused by a direct blow to head, dehydration, migraines, or illness (If caused by direct blow or coach is unsure of origin refer to sports medicine healthcare team immediately and discontinue play until seen by sports medicine healthcare team)

b) Signs and Symptoms
i) Student athlete will state head hurts
ii) May be sensitive to light and sound if a migraine
iii) If any other symptoms arise notify sports medicine healthcare team and discontinue play immediately

c) Management
i) If migraine student athlete may need to discontinue play
ii) Notify parent/guardian if needed
iii) If unsure about what to do notify sports medicine healthcare team

4) Fainting

a) MOI: can be cause by a number of things including head injury

b) Signs and Symptoms
i) Extreme paleness
ii) Sweating
iii) Numbness and tingling in hands and feet
iv) Cold clammy skin
v) Dizziness
vi) Nausea
vii) Possible vision problems

c) Management
i) Activate EMS if any student athlete loses consciousness at any time
ii) If a pulse cannot be detected, apply AED
iii) Notify parent/guardian of episode
iv) Keep student athlete lying down and support head and neck
v) Loosen tight clothing
vi) If vomiting turn or roll student athlete to side and clear all liquid from mouth (use universal precautions)

Head Injuries

Any and all suspected head injuries MUST be referred to the sports medicine healthcare team immediately. At no time may a coach make a decision about a student athlete's playing ability after a head injury.

1) **Brain Injuries**
   a) Epidural Hematoma: accumulating blood between the skull and the dura mater
      i) MOI: usually caused by a direct blow to the head and is usually associated with fractures of the skull
      ii) Signs and Symptoms
         (1) Loss of consciousness (LOC)
         (2) Will awaken with intervals of feeling normal
         (3) Within about 20 minutes there will be a rapid decline in mental status
         (4) Increased headache
         (5) Drowsiness
         (6) Nausea/vomiting
         (7) Dilated pupil on side of the hematoma
         (8) Contralateral weakness
         (9) Decerebrate Posture
      iii) Management
         (1) Activate EMS
         (2) Assess vital signs
         (3) Contact parent/guardian
         (4) Contact ADs
   b) Subdural Hematoma: accumulating blood between the dura mater and the brain
      i) MOI: usually caused by the acceleration forces to the head or from a direct blow to the head.
      ii) Signs and Symptoms
         (1) Bleeding can be rapid and lead to rapid LOC
         (2) Bleeding can be slow in which there may be no symptoms for days or weeks after the injury
         (3) Can have altered states of consciousness
         (4) May not be able to wake up student athlete after they have fallen asleep
      iii) Management
         (1) Activate EMS
         (2) Contact parent/guardian
         (3) Early detection is key for good prognosis
         (4) Contact ADs
   c) Cerebral Contusion: micro hemorrhaging of the brain
      i) MOI: most common is a direct blow to the occiput or frontal lobe

ii) Signs and Symptoms
   (1) LOC
   (2) After LOC, they are alert followed by coma
   (3) A dangerous red flag is when the student athlete has normal neurological signs but still has a persistent headache, dizziness or nausea
iii) Management
   (1) Activate EMS
   (2) Contact parent/guardian
   (3) Contact ADs

d) **Concussion:** "…characterized by immediate and transient impairment of neural function, such as alteration of consciousness, disturbance of vision, equilibrium, etc., due to mechanical forces." (Anderson)
   i) MOI: can be from a direct blow to the head or from shaking or jarring of the brain in the skull due to a direct blow to any other part of the body.
   ii) Signs and Symptoms
      (a) May or may not have LOC
      (b) Headache
      (c) Confusion
      (d) Poor concentration
      (e) Retro/anterograde amnesia
      (f) Dizziness
      (g) Ringing in the ear
      (h) Poor balance and coordination
      (i) Sensitivity to light and/or noise
      (j) Delayed reaction time
      (k) Feeling of being slowed down
      (l) May state "I got my bell rung"
      (m) May be associated with neck injury
   iii) Management
      (a) Notify parent/guardian
      (b) Student athlete must be removed from play and examined
      (c) Concussion evaluation should be taken every 15 minutes to evaluate the status of the concussion
      (d) Student athlete is not permitted to return to play and must pass the return to play protocol as set by the CIF.
      (e) Evaluation by a physician is required for clearance to return to play
      (f) If LOC is present and no physician is on site, activate EMS.
   iv) The sports medicine healthcare team will do its best to baseline athletes on sports teams with a higher likelihood of concussion, as determined by the healthcare team using the latest research available.

e) **Posttraumatic Headaches**:
   i) MOI: vasospasm of the blood vessels of the brain
   ii) Signs and Symptoms
      (1) May have localized blindness which is followed by the flashing of bright colored shimmering lights
      (2) Is not associated with a blow to the head but may have some of the same symptoms
   iii) Management
      (1) Student athlete should discontinue play and rest
      (2) Evaluation by physician is needed
      (3) Notify parent/guardian
      (4) If necessary monitor vital signs

f) Postconcussion Syndrome
   i) MOI: develops after a concussion, prolonged symptoms following a concussion
   ii) Signs and Symptoms
      (1) Headache
      (2) Dizziness
      (3) Vertigo
      (4) Memory loss
      (5) Irritability
      (6) Difficulty concentrating
   iii) Management
      (1) Should be evaluated by physician
      (2) May have to have CT or MRI to clear student athlete of any bleeding of the brain

g) Second Impact Syndrome
   i) MOI: a second concussion is sustained after the first concussion is not completely resolved
   ii) Signs and Symptoms
      (1) Student athlete appears stunned but may or may not walk of the field of play
      (2) Student athlete will collapse and lose consciousness
      (3) Dilated pupils
      (4) Loss of eye movement
      (5) Coma
      (6) Respiratory failure
   iii) Management
      (1) "The usual interval from second impact to brain stem failure is short, usually 2 to 5 minutes" (Anderson)
      (2) Activate EMS

(3) Notify parent/guardian
(4) Notify AD
(5) Biggest key is prevention: If a student athlete is complaining of any concussion symptoms no matter what the cause they should be removed from play and see the sports medicine healthcare team before being allowed to return to play

Cervical Spine and Nerve Injuries

1) **Muscle Strains**
   a) MOI: can be result of forced hypermobility of the joint or from overuse
   b) Signs and Symptoms
      i) Pain on palpation over specific muscle group
      ii) Limited range of motion (ROM)
      iii) Decreased strength in the muscle group
      iv) May have visible spasm of the muscle
   c) Management
      i) PRICE
      ii) Stretch and strengthen the muscle
      iii) May need training of the synergistic muscle groups to aid in proper mechanics
2) **Stinger or Burner (Injury to the Brachial Plexus**)
   a) MOI: can be caused by stretching when the head is forced laterally, when the shoulder is abducted and head is forced laterally, or when the clavicle depresses into the superior medial boarder of the scapula
   b) Signs and Symptoms
      (1) Temporary loss of sensation and/or motor function
      (2) Numbness and tingling down affected arm
      (3) Student athlete may try to shake arm out
   c) Management
      i) Discontinue play
      ii) PRICE
      iii) Notify parent/guardian
      iv) May need physician referral if symptoms do not resolve within 30 min of injury
3) **Fractures**
   a) MOI: can be from a direct blow, overuse (stress fractures), forced hypermobility of the joint, or excessive compressive force
   b) Signs and Symptoms
      i) Pain on palpation over vertebra of the cervical spine

ii) Limited ROM due to pain
iii) May have numbness and tingling in arm, legs, hands, and/or feet
iv) Always suspect spinal cord disruption with fractures of the cervical spine

c) Management
i) Support head and neck
ii) Check ABC's if student athlete is unconscious, and start CPR if necessary, also locate and use AED
iii) Activate EMS by calling 911
iv) Do NOT allow athlete to move if it is not necessary, if necessary use log roll technique with enough trained individuals
v) Notify parent/guardian
vi) Notify AD

4) Suspected Spinal Cord Disruption

a) MOI: can be from a direct blow or from forced hypermobility of the joint
b) Signs and Symptoms
i) Numbness and/or tingling below the fracture site
ii) Severe pain with movement of joints below fracture site
iii) Student athlete may be unconscious
iv) Inability to move joints below the fracture site
c) Management
i) Call 911 and activate EMS
ii) Stabilize head and neck and do not allow student athlete to move
iii) If student athlete is prone, log roll the them as a unit only if there are enough trained individuals present to aid in this maneuver
iv) If unconscious check ABC's and start CPR if needed, also locate and use AED

Oral and Dental Conditions

1) Oral Conditions

a) Toothache
i) MOI: can be from decay or unknown reason
ii) Signs and Symptoms
(1) Pain in one or more teeth
(2) May have associated headache or sinus pain
iii) Management
(1) Apply ice is there is localized swelling
(2) If abscess is suspected take temperature
(3) Notify parent/guardian and refer to dentist
b) Loose Tooth

i) MOI: can be from normal aging (kids) or from a direct blow to mouth (can be displaced, intruded, or extruded)
ii) Signs and Symptoms
    (1) Tooth will be loose in the socket
    (2) Pain in the tooth that is loose
iii) Management
    (1) If tooth is twisted, displaced, or extruded sports medicine healthcare team should try to place tooth back in the normal position without forcing it
    (2) If the tooth in intruded the sports medicine healthcare team should not try to relocate the tooth
    (3) Notify parent/guardian
    (4) Refer to a dentist right away

c) Chipped or Fractured Tooth
i) MOI: direct blow to mouth or tooth itself (can involve the enamel, dentin, pulp, or root of the tooth)
ii) Signs and Symptoms
    (1) Chips involving just the enamel usually do not cause pain
    (2) Fractured involving the dentin cause pain and sensitivity to heat and cold
    (3) Fractures involving the pulp and root cause severe pain and heightened sensitivity
iii) Management
    (1) If just the enamel is affected tooth can be "patched" with dental wax and referred to a dentist
    (2) If a fracture has occurred that causes pain student athlete should be referred to a dentist right away
    (3) Notify parent/guardian

d) Dislocated or Traumatically Extracted Tooth
i) MOI: usually a direct blow to the tooth
ii) Signs and Symptoms
    (1) Tooth is out of socket
    (2) Bleeding
    (3) Pain
iii) Management
    (1) Locate dislocated tooth
    (2) DO NOT touch the root of the tooth
    (3) Place tooth in Save-A-Tooth® if available, if not, place tooth in milk or saline
    (4) Bite down on gauze to stop bleeding
    (5) DO NOT allow student athlete to take anything by mouth

(6) Re-implantation of tooth within 30 minutes is ideal, re-implantation after 2 hours has a 95% failure rate
(7) Notify parent/guardian and refer to dentist right away
(8) If after hours and cannot get into dentist, go to ER and ask for the dentist on call to meet you there

e) Orthodontic Problems
   i) MOI: improperly fitted braces or retainer, or direct blow to mouth causing appliances to cut mouth
   ii) Signs and Symptoms
      (1) Pain with long wires or bracket
      (2) Pain with improperly fitted retainer
   iii) Management
      (1) If wire is too long or bracket is cutting mouth cover with dental wax and if needed have parent/guardian call orthodontist
      (2) DO NOT attempt to remove a wire that is imbedded in the cheek, tongue or gum, notify parent/guardian and refer to dentist right away
      (3) If appliance breaks, place in envelope, notify parent/guardian and refer to orthodontist

2) Facial Fractures

a) MOI: direct blow to the face
b) Signs and Symptoms
   i) Depending on the location of the fracture is there may or may not be visual deformity
   ii) Pain at injury site
   iii) May have inability to move effected area of face
   iv) If of the mandible or maxilla may have trouble breathing
h) Management
   i) If of the mandible or maxilla maintain airway, and activate EMS
   ii) Athlete must be referred for x-rays of any suspected fractures
   iii) If able and necessary splint suspected fracture
   iv) Notify parent/guardian

Nasal and Ear Conditions

1) Nasal Conditions

i) Epistaxis (nosebleed)
   i) MOI: can be caused by a direct blow to the nose or by dry nasal/sinus cavities
   ii) Signs and Symptoms

(1) Bleeding from the nose
(2) May be profuse if there is also a fracture of the nasal bone

iii) Management
(1) Apply even pressure to both nostrils by pinching the nose
(2) Position student athlete with head in a neutral position, avoid having the student athlete tilt his/her head back
(3) If fracture is suspected avoid movement of the nasal bone and apply ice to the nose
(4) If bleeding is more severe without suspected fracture, ice can be applied to the nose

j) Nasal Fractures
i) MOI: direct blow to nose
ii) Signs and Symptoms
(1) Bleeding is usually present
(2) Nose may appear flattened or "pushed" over to one side of the face
(3) Student athlete may appear to have black eyes

iii) Management
(1) Control any bleeding without disrupting the fracture
(2) Apply ice to the nose if not too painful
(3) Refer student athlete to a physician for x-rays and further treatment
(4) Notify parent/guardian

2) Ear Conditions

a) Auricular hematoma (Cauliflower ear)
i) MOI: caused by repeated blunt trauma to the ear
ii) Signs and Symptoms
(1) Hematoma of the outer ear
(2) The hematoma may form fibrosis if left untreated
(3) May or may not have pain

iii) Management
(1) Ice can be applied to reduce the amount of swelling
(2) If swelling is still present after icing the hematoma may need to be aspirated by a physician
(3) Notify parent/guardian and refer to physician

b) Earache
i) MOI: can be caused by sickness or trauma to the ear
ii) Signs and Symptoms
(1) Pain in the inner ear
(2) May have associated pain in the head or sinus area

iii) Management
(1) Take student athlete's temp
(2) Notify parent/guardian and refer to a physician

c) Swimmer's Ear
   i) MOI: failure to dry inner ear after being in water and changing the pH of the ear canal
   ii) Signs and Symptoms
      (1) Pain in inner ear
      (2) Itching
      (3) May or may not be a discharge of pus
      (4) Pulling of the external ear will often cause pain
      (5) If left untreated infection can spread to middle ear and cause balance problems
   iii) Management
      (1) Custom ear plugs must be made and worn while in the water
      (2) Use drops to dry the ear canal
      (3) Notify parent/guardian and refer to a physician

Orthopedic Problems

This section is intended to give a general outline of managing general orthopedic conditions faced by student athletes. Each case is different and each student athlete will be evaluated for the extent of their injury and treated accordingly.

This section does not go through every joint individually. While there are some different conditions associated with specific joints and parts of the body, this section is a general overview and will only address common conditions suffered all over the body.

1) **Contusions (bruise)**
   a) MOI: direct blow to body
   b) Signs and Symptoms
      i) Pain at injury site
      ii) Swelling and ecchymosis at injury site
      iii) May have painful ROM
   c) Management
      i) PRICE
      ii)
      iii) If able, student athlete may resume play
      iv) If unable to perform sport discontinue play
2) **Sprains (ligament injury)**
   a) MOI: usually cause by tensile forces applied to the ligament
   b) Signs and Symptoms

i) Pain on palpation over ligament
ii) May have limited ROM and strength
iii) Swelling and Ecchymosis
iv) Positive ligament stress tests

c) Management
i) PRICE
ii) Decrease pain
iii) Notify parent/guardian and refer to physician if needed
iv) Rehabilitation program entails increasing ROM and strength

3) **Strains (muscle injury)**

a) MOI: overuse, increasing training program when not conditioned, or acute injury due to excessive stress or force applied to muscle.

b) Signs and Symptoms
i) Pain over affected muscle
ii) Limited and/or painful ROM
iii) Decrease strength
iv) May or may not have swelling
v) If severe, may have ecchymosis along with swelling

c) Management
i) PRICE
ii) Decrease pain
iii) Notify parent/guardian and refer to a physician if needed
iv) Increase ROM and strength through rehabilitation program

4) Subluxation/Dislocation

a) MOI: is largely dependent on the joint but occurs when the joint is put into a position where the forces exerted upon the soft tissue structures that provide support to the joint (capsule) are stretched to the point where they can no longer maintain stability and alignment of the joint and the bone will either sublux (pop out and pop back in) or dislocate (pop out and not pop back in)

b) Signs and Symptoms
i) Subluxation
(1) Pain at joint
(2) May have limited ROM and strength
(3) Positive apprehension tests applied to the joint
(4) Swelling and Ecchymosis may be present

ii) Dislocation
(1) Pain in the joint or the limb in general
(2) Inability to move joint
(3) Deformity of the joint
(4) May have numbness and tingling distal to the joint

(5) May have diminished pulse distal to the joint

c) Management

i) If any numbness, tingling, diminished pulse, or loss of pulse, activate EMS by calling 911

ii) Subluxation

(1) Splint joint if needed

(2) Notify parent/guardian and refer to physician

(3) Must have physician clearance to return to play

iii) Dislocation

(1) Splint joint and refer to a physician for relocation

(2) Notify parent/guardian and refer to physician

(3) Must have physician clearance to return to play

5) Fracture

a) MOI: can be from a direct blow to the body or tensile forces applied to the bone

b) Signs and Symptoms

i) Pain on palpation over fracture site

ii) Positive fracture tests

iii) Inability to move affected area

iv) May have numbness and tingling distal to fracture site

v) May have diminished pulse distal to fracture site

vi) May be open fracture and may be bleeding

c) Management

i) Splint fracture as it presents

ii) Check for movement and capillary refill or pulses distal to the fracture site before and after splinting fracture

iii) Treat student athlete for shock – if student athlete is going into shock activate EMS

iv) Check for numbness, tingling and pulse, if any numbness, tingling or diminished pulse activate EMS

v) If open fracture, DO NOT touch bone, and activate EMS

vi) Take universal precautions when dealing with open fracture

vii) If closed fracture may apply ice after splint applied

viii) Notify parent/guardian and refer for X-rays

Poisoning

US Poison Control **1-800-222-1222**
CA Poison Control Centers **1-415-502-6000**

Always attempt to identify the substance that caused the poisoning

If possible keep the object that was containing the poisonous substance, and pass along to responding personnel

Always call poison control as well as 911 for assistance in poisonings

Always protect yourself, if it unsafe to enter the scene, DO NOT put yourself in harms way

Poisoning can be done voluntarily or involuntarily, and the signs and symptoms can mimic other illnesses. It is important to note that a good history should be taken from the student athlete as well as others with the student athlete at the time of the onset of symptoms. In this section will be general MOIs as well as general management strategies. This section will not discuss specific signs and symptoms for each, as the signs and symptoms vary depending on what the poison was. General signs and symptoms will be listed first.

1) General Signs and Symptoms
    a) Sudden onset of symptoms with no predisposing injury or illness
    b) Sudden changes in normal behavior with no predisposing injury or illness
    c) Choking
    d) Vomiting continuously
    e) Unable to awaken with no predisposing injury or illness
    f) Irregular heart and/or respiratory rate with no predisposing injury or illness
2) MOI:
    a) Absorption
    b) Ingestion
    c) Inhalation
3) Management
    a) Absorption
        i) Flush with large amount of water
        ii) Remove any contaminated clothing
        iii) If sodium or lime DO NOT flush with water
        iv) Call 911 and poison control

v) Notify parent/guardian
vi) Notify Administration

b) Ingestion
   i) It usually not a good idea to encourage student athlete to vomit as the poison could cause more damage on the way back up
   ii) Many times drinking milk will help coat the stomach and delay the absorption of the poison into the system
   iii) DO NOT attempt to give the student athlete anything until you contact poison control and are instructed to do so by the operator
   iv) Activate EMS
   v) Notify patent/guardian
   vi) Notify Administration

c) Inhalation
   i) Move student athlete to clean air if able – DO NOT put yourself in harms way
   ii) Assess student athlete breathing and pulse
   iii) If needed give rescue breaths
   iv) Call poison control and 911
   v) Notify parent/guardian
   vi) Notify Administration

Seizures

1) MOI: can be from a specific stimulus, but can also be spontaneous
2) Signs and Symptoms
   a) Conscious Student Athletes
      i) Bodily sensations
      ii) Involuntary movements of the face, head, limbs, and may involve the inability to speak
      iii) Localized weakness or paralysis
      iv) Experience of powerful emotions
      v) Time distortions, out of body experiences
      vi) Nausea or stomach pain may occur
   b) Impaired Conscious Student Athlete
      i) May appear in a trance like state
      ii) Student athlete will start or continue a purposeful activity with no recollection of activity
      iii) Movements are usually disorganized, confused and unfocused
   c) Unconscious Student Athlete
      i) Student athlete will be unconscious and have either sustained

contractions of the skeletal muscles or spasms of the skeletal muscles
   ii) Student athlete may report tasting or hearing something specific just prior to the onset of the seizure
3) General Management for Coaches
   a) When possible, if athlete collapses or suddenly loses consciousness cushion fall and protect student athlete from injury from surrounding objects in area.
   b) Remain calm
   c) Allow student athlete to continue seizure, and DO NOT try to control or restrain
   d) DO NOT put anything in the student athlete's mouth
   e) Allow student athlete to awaken normally after the seizure
   f) Activate EMS by calling 911, if sports medicine healthcare team is not present
   g) Notify sports medicine healthcare team and parent/guardian
4) General Management for SPORTS MEDICINE HEALTHCARE TEAM
   a) Be in constant contact with parent/guardian regarding the condition and severity of the known seizure disorder, and notify coaches of findings of each student athlete with a seizure disorder
   b) Allow student athlete to continue seizure
   c) DO NOT place anything in the mouth
   d) Allow student athlete to awaken normally, if does not awaken right away roll student athlete on side to allow saliva to drain from mouth
   e) Notify parent/guardian and discuss immediate care of student athlete
   f) If severity or duration of seizure exceeds norm for that student athlete, activate EMS

Shock

1) MOI: usually result of trauma
2) Signs and Symptoms
   a) Pale, cold, clammy, moist skin
   b) Weak rapid pulse
   c) Shallow, rapid, irregular breathing
   d) May have nausea and vomiting
   e) Restlessness
   f) Fatigue/weakness
   g) May lose consciousness
3) Management
   a) Place student athlete in the prone position and elevate feet
   b) Activate EMS by calling 911

c) Control any bleeding if present
d) Monitor vital signs
e) Contact parent/guardian
f) Keep student athlete calm

Water Safety

Unless the sports medicine healthcare team is certified as a life guard, under no circumstances should the sports medicine healthcare team enter the water to rescue a drowning victim. Below are the policies and procedures to follow if the sports medicine healthcare team is NOT a certified life guard, and the victim is drowning

Drowing/Near Drowning

1) MOI: inhaling water into the lungs
2) Signs and Symptoms
   a) Student will be struggling in the water
   b) May or may not be able to ask for help
   c) Will be gasping for breath between breaks of going under the water
   d) Will be in a state of panic
3) Management for the sports medicine healthcare team
   a) Call for a life guard
   b) Take any and all directions from the life guard and only assist if asked to by the life guard
   c) If asked to assist the life guard do just that, ASSIST
   d) Activate EMS, if not already done by the life guard
   e) Notify parent/guardian
   f) Notify Administration

All other injuries that happen in the pool area are able to be treated by the sports medicine healthcare team. If the student-athlete is able to get out of the water on their own, the injury may be treated by the sports medicine healthcare team and the policies and procedures for that injury should be followed.

Standard Operational Procedures for Therapeutic Modalities

General Principles of Therapeutic Modalities

Valley Christian High School realizes the need to provide quality health care for the student athlete. In order to accomplish this, the sports medicine healthcare team is authorized to utilize modalities such as heat, cold, light, sound and electrical stimulation.

The following outline is taken form Chad Starkey's book, "Therapeutic Modalities" and should be used whenever a sports medicine healthcare team wants to implement the use of a modality.

1) Recognition of the Problem
   a) Identify the type and depth of the involved tissue
   b) Identify the nature of the pathology
   c) Determine the stage of healing
   d) Recognize the indications for the use of modalities and exercise
   e) Recognize any contraindications to the use of modalities or exercises
   f) Recognize the demands a patient's activity level places upon the tissue
2) Prioritization of the problem
   a) Develop the logical treatment order based on the cause and effect relationship between the pathology and the signs and symptoms
3) Goal Setting
   a) Develop structure and sequence in the treatment plan
   b) Establish benchmarks to determine efficacy of the treatment plan
4) Treatment Planning
   a) Determine the modalities and exercises to be used and their sequence based on the patient's problems and treatment goals
5) Reevaluation
   a) Evaluation of the patient's current physical status
      i) Reassessment of previously identified problems
      ii) Evaluation of modalities or techniques that are no longer contraindicated
      iii) Identify new problems that have developed since the previous examination
   b) The findings are used to
      i) Assess the effectiveness of the current treatment protocol
      ii) Reassess the short and long term goals
      iii) Determine changed that are needed in the treatment plan

It must be noted that for some of the modalities described in this section a note from a physician will be needed. If a note is needed the student athlete will be informed of this and the physician will then need to indicate the parameters of the

treatment. At no time while the student athlete is under the care of a physician will the sports medicine healthcare team deviate from the treatment parameter set forth by the physician.

Cryotherapy

1) Description
   a) Cold therapy can be delivered through the application of ice, reusable cold packs and cold compression therapy units
   b) Can be used to treat acute and chronic injuries, pain, and muscle spasm
2) Indications
   a) Acute injury or inflammation
   b) Acute or chronic pain
   c) Postsurgical pain and edema
3) Contraindications
   a) Cardiac or respiratory involvement
   b) Uncovered open wounds
   c) Circulatory insufficiency
   d) Cold allergy and/or hypersensitivity
   e) Anesthetized skin
4) Precautions
   a) Applying too much pressure with elastic bandage
   b) Be careful using reusable cold packs as they get colder than ice and are more likely give the student athlete frostbite
   c) Application of ice to large superficial nerve can cause neuropathy, check the student athlete regularly if applying over superficial nerves
   d) The contents of instant cold packs can burn the skin. Therefore, if there is a break in the packaging DO NOT use.
5) Treatment Techniques
   a) Ice bags
      i) Fill bag with just enough ice to cover area being treated
      ii) Remove excess air from back to insure close contact between the ice and skin
      iii) Apply ice directly to the skin, if hypersensitivity occurs there may be a wet towel placed in-between the ice and skin
      iv) If warranted wrap an elastic bandage around the ice to apply compression to the injury
      v) Treatment should last about 20 minutes but can be extended to 30 minutes if there is a wet towel or clothing between the ice and skin

vi) Treatment should be repeated in an interval of 20 minutes on and 1 hour off

b) Reusable ice packs
   i) Student athlete should be checked regularly for signs of frostbite;
   ii) Duration can be extended to 30 minutes;
   iii) Treatment can be repeated at an interval of 30 minutes on and 1 hour off.

c) Cold compression Therapy units
   i) Fill the cooling unit with ice and water to the FILL mark. Allow water to chill for about 10 minutes;
   ii) Apply appropriate appliance to the body part being treated;
   iii) Hook the tube from the cooling unit to the appliance;
   iv) Elevate the cooling unit above the body part to be treated so the water drains into the appliance;
   v) Disconnect the hose;
   vi) Treatment time is approximately 20 minutes;
   vii) After treatment is finished reattach the hose to the appliance and place cooling unit below the body part being treated;
   viii) Water will drain from the appliance to the cooling unit and the appliance can be taken off student athlete and fully drained;
   ix) Disconnect the hose and discard the water in the cooling unit.

d) Instant cold packs
   i) Shake bag as to make sure all contents are evenly distributed throughout the bag;
   ii) Squeeze the bag to break the inner pouch;
   iii) Shake bag to mix the contents of the bag;
   iv) Place bag on injury;
   v) Be sure to monitor the student athlete for indications the bag has broken. If this happens, immediately remove bag and rinse with saline, and check for chemical burns.

Ice Massage

1) Description
   a) Water is frozen in a paper cup then massaged into a small treatment area of the skin;
   b) Helps relieve muscle spasm, trigger points;
   c) Is used prior to ROM exercises.
2) Indications
   a) Subacute injury or inflammation;
   b) Muscle Strains;
   c) Contusions;

   d) Acute or chronic pain.
3) Contraindications
   a) Cases were pressure in contraindicated;
   b) Suspected fractures;
   c) Uncovered open wounds;
   d) Circulatory insufficiency;
   e) Cold allergy and/or hypersensitivity;
   f) Anesthetized skin.
4) Treatment Techniques
   a) Paper cups should be filled to ¾ full and frozen;
   b) Treatment area should be no bigger than 2 or 3 times the size of the cup;
   c) Surround treatment area with a towel to collect water runoff;
   d) Slowly massage the treatment area with ice cup;
   e) Increasing pressure of massage will decrease time needed to cool treatment area;
   f) When using paper cup, as the ice melts, tear away the paper to reveal more ice;
   g) Treatment duration is between 5 and 15 minutes or until ice runs out.

Ice Immersion

1) Description
   a) A bucket or tub is filled with ice and water;
   b) The body part is submerged in the ice and water for the treatment duration.
2) Indications
   a) Acute injury or inflammation;
   b) Acute, chronic, or postsurgical pain;
   c) Prior to ROM.
3) Contraindications
   a) Cardiac or respiratory involvement.
   b) Uncovered open wounds.
   c) Cold allergy and/or hypersensitivity;
   d) Anesthetized skin;
   e) Absolute inability to tolerate the cold temperature.
4) Precautions
   a) If needed, student-athletes can wear neoprene caps to decrease discomfort;
   b) Avoid continuous immersion and withdraw from water;
5) Treatment Techniques
   a) Fill a VCHS portable plastic ice tub or sports medicine ice room metal tub with water and ice. Temp range should be between 55° and 60° F;

b) The tub must be filled and the temperature of the water checked by a VCHS staff member;
c) The staff member who fills the tub must also supervise the student-athlete while they are in the tub. At the conclusion of the treatment, the same staff member is then responsible for emptying the tub;
d) Athletes must be in VCHS approved athletic wear/full practice clothing at all times when using an ice bath;
e) Athletes of the opposite gender should never be using the same ice tub at the same time;
f) Have student-athlete immerse the body part being treated into the water;
g) Note: do not let the student athlete continuously "dunk" the treatment area in and out of the water, this is an ineffective treatment;
h) Treatment duration should be between 10 and 15 minutes – treatment time should increase as the amount of adipose tissue increases.

Cryokinetics

Cryokinetics is a form of Cryotherapy that utilizes ice to numb the treatment area and then allows the sports medicine health care team to take the patient through full passive range of motion.

All indications and contraindications for cold still apply as well as the treatment duration for each technique. The only difference here is that instead of the ice treatment being last in the order of the rehabilitation program it is first and it is followed by the rest of the treatment for that day.

The Cryotherapy and rehabilitation cycle can be repeated within one session if needed

Hot and Cold Whirlpools

1) Description
   a) A tub filled with warm or cold water that the student athlete submerges the injury in;
   b) Has attached turbine to circulate the water.
2) Indications
   a) Decreased ROM
   b) Subacute or chronic inflammatory conditions

   c) Peripheral vascular disease
   d) Peripheral nerve injuries
3) Contraindications
   a) Acute conditions in which the water turbulence will further aggravate injury
   b) Fever (in hot water)
   c) Student athletes requiring postural support
   d) Infectious skin conditions
   e) General contraindications for hot and cold therapies
4) Precautions
   a) Whirlpool MUST be connected to a ground fault interrupter;
   b) Student athlete is not to touch the turbine motor;
   c) Student athletes receiving treatment should never do so alone, must always have supervision of the sports medicine healthcare team;
   d) Keep in mind that the body is placed in a gravity dependent position which could cause an increase in swelling;
   e) DO NOT run turbine dry;
   f) Student athletes with seizure conditions should not use this form of therapy.
5) Treatment Techniques
   a) Select the appropriate size tub if available;
   b) Instruct student-athlete not to touch the turbine at any time during the treatment;
   c) Fill whirlpool to appropriate depth, enough to fully cover treatment area;
   d) Adjust temp for correct treatment;
   e) Turn turbine on before the student athlete enters the whirlpool
   f) Place student athlete in a comfortable position to treat affected area
   g) If injury on the foot or ankle in a cold whirlpool student athlete may use toe caps to keep toes warm
   h) Make sure the student athlete is out of the whirlpool before turning off the turbine

Moist Heat Packs (Hydrocollator)

1) Description
   a) Silica filled packs are stored in hot water to be used as heating agents
2) Indications
   a) Subacute or chronic inflammatory conditions
   b) Reduction of sub-acute or chronic pain
   c) Subacute or chronic muscle spasm
   d) Decrease ROM

e) Hematoma resolution
f) Reduction of joint contractures
g) Infection

3) Contraindications
   a) Acute conditions
   b) Peripheral vascular disease
   c) Impaired circulation
   d) Poor thermal regulation
4) Precautions
   a) Do not allow moist heat pack to come in contact with the treatment area
   b) Do not allow student athlete to lay or sit on moist heat packs
5) Treatment Techniques
   a) Cover moist heat pack with either commercial covering or 4 layers of terry cloth towel
   b) Place pack on treatment area
   c) Check student athlete after 5 minutes to insure there is no burning of the skin
   d) After treatment, return the moist heat pack to the Hydrocollator for rewarming
   e) Treatment duration can last anywhere from 20 to 30 minutes

Paraffin Bath

1) Description
   a) A mixture of wax is melted and applied to the treatment area to deliver heat to the treatment area
2) Indications
   a) Subacute and chronic inflammatory conditions
   b) Limitation of motion immobilization
3) Contraindications
   a) Open wounds
   b) Skin infections
   c) Sensory loss
   d) Peripheral vascular disease
4) Precautions
   a) DO NOT allow student athlete to touch the bottom or sides, this may cause burns
   b) Avoid using on student athletes who need to catch and throw, as the wax has a mineral oil in it and will leave the hand slippery
5) Treatment Techniques
   a) Always have student athlete wash hands thoroughly before starting any

treatment

b) Immersion Bath
   i) Have student athlete dip his/her hand into the paraffin wax and remove
   ii) Allow a few seconds to let the wax dry
   iii) Dip the hand into the wax 6 to 12 more times making sure never to dip farther than the last
   iv) Then place the hand back into the paraffin bath, making sure the student athlete does not touch the bottom or sides
   v) Treatment duration is 15 to 20 minutes
   vi) After treatment scrap off the wax and return it to the bath
c) Pack (Glove) Method
   i) Have student athlete dip his/her hand into the paraffin wax and remove
   ii) Allow a few seconds to let the wax dry
   iii) Dip hand into the wax 7 to 12 more time making sure never to dip farther than the last
   iv) After final withdraw cover with plastic bag and wrap in a terry cloth
   v) Treatment duration is 15 to 20 minutes
   vi) After treatment wax can be returned to the paraffin bath

Contrast Therapy

1) Description
   a) Consists of alternating between hot and cold treatments
   b) Can be uses with two whirlpools or with reusable hot and cold packs
2) Indications
   a) Ecchymosis reduction
   b) Edema reduction
   c) Subacute or chronic inflammatory conditions
   d) Impaired circulation
   e) Pain reduction
   f) Increase ROM
3) Contraindications
   a) Acute injuries
   b) Hypersensitivity to cold
   c) Relative contraindications of cold application
   d) Relative contraindications of heat application
   e) Relative contraindications to whirlpool use
4) Treatment Techniques
   a) Immersion
      i) Make sure there are two tubs available for use and then you can position

them close together
   ii) Fill one bath with water temp at 50° to 60° F and the other with a temp range of 105° to 110° F
   iii) Instruct student athlete to start with either hot or cold application with timed intervals of 1-2 minutes in cold and 3-4 minutes in hot
   iv) Total treatment duration is 20 to 30 minutes
b) Hot/Cold Packs
   i) Make sure packs are within reach of the student athlete and will be able to remain hot and cold throughout the treatment
   ii) Instruct the student athlete to start with either hot or cold application with timed intervals of 1-2 minutes for cold and 3-4 minutes for hot

Therapeutic Ultrasound

1) Description
   a) A deep heating using high frequency sound waves to generate thermal and non-thermal affects to the injured area
2) Indications
   a) Joint contractures
   b) Muscle spasm
   c) Neuroma
   d) Scar tissue
   e) Sympathetic nervous system disorders
   f) Trigger points
   g) Spasticity
   h) Post acute reduction of myositis ossificans
   i) Acute inflammatory conditions (pulse output)
   j) Chronic inflammatory conditions (continuous output)
3) Contraindications
   a) Acute conditions with a continuous output
   b) Ischemic areas
   c) Over area of deep vein thrombosis
   d) Anesthetic areas
   e) Over cancerous tumors
   f) Over sites of active infections or sepsis
   g) Over spinal cord or areas of large nerve plexus in high doses
   h) Exposed metal that penetrates the skin
   i) Areas around the eyes, heart, skull, or genitals
   j) Over the thorax in the presence of a pacemaker

k) Pregnancy when used over the abdominal region of a women
l) Over the pelvic or lumbar region of a menstruating women
m) Stress fracture sites and sites over osteoporosis

4) Precautions
   a) Symptoms may increase after the application of ultrasound due to an increase of inflammation. If symptoms do not resolve within the third or fourth application discontinue use of ultrasound
   b) Use caution when applying ultrasound to area close to the spinal cord
   c) Use caution when applying ultrasound to areas with metal plating
   d) Use of ultrasound on or around growth plates in not contraindicated but should be use with extreme caution
5) Treatment Techniques
   a) Determine the method and mode of application
   b) Clean treatment area and remove any dirt, oil or grime
   c) Determine the type of coupling method
      i) Direct coupling can be achieved by using an ultrasound gel applied directly to skin and the ultrasound head on top of that
      ii) Immersion coupling involves immersing the treatment area in a tub of water and applying the ultrasound head under the water about 1 inch away from the treatment area
      iii) Pad or bladder method involves either getting a commercially made pad or filling a plastic bag with either water or ultrasound gel that is coated with the ultrasound gel
   d) If direct coupling method, apply ultrasound gel to treatment area
   e) Make sure to explain sensations the student athlete may feel during the treatment
   f) Advise the student athlete to report any adverse sensations right away
   g) Turn on machine
   h) Make sure output is a zero
   i) Select the mode of the ultrasound (continuous or pulsed)
   j) Be sure to check that the watt meter displays the appropriate treatment output
   k) Set timer to appropriate treatment duration (Appendix #5)
   l) Begin to move the head slowly over treatment area and press start on the machine
   m) Move the head at a moderate pace (4 cm per second) using firm pressure with overlapping stroke
   n) If heating of the tissue is felt move the sound head faster if this sensation does not diminish heating sensation discontinue treatment
   o) If the sound head begins to stick to the skin due to lack of gel, press the pause button and apply more gel
6) Machine Upkeep

a) Ultrasound machine must be checked every year
b) Must be certified and calibrated by a licensed practitioner yearly to insure proper delivery of the sound waves

Phonophoresis

1) Description
   a) Whole molecules of medication are driven through the skin using the ultrasound wave
2) Indications
   a) Delivering medication to large areas
   b) Noninvasive
3) Contraindications
   a) Any contraindications to the application of ultrasound
   b) Any contraindications to the application of the medicine
4) Treatment Techniques
   a) Preheating of the skin is advised to aid in the delivery on the medications
   b) Use only the direct coupling method as the other methods have not been proven effective in the transmission of medications
   c) Make sure the skin is well moistened, avoid areas of dry skin
   d) Position extremity to encourage circulation
   e) Use continuous output
   f) Follow the same procedure as ultrasound application and add the medication to the gel before applying ultrasound treatment
   g) After treatment cover remaining medication with occlusive dressing.

Electrical Stimulation

Outlined below are all the types of electrical stimulation offered at Valley Christian High School. Any student wishing to receive electrical stimulation treatments MUST have a note form a physician stating the type of treatment and the parameters used.

1) High Voltage Pulsed Stimulation
   a) Description
      i) This type of stimulation uses a monophasic current
      ii) Can be used for muscle reeducation, nerve stimulation, edema reduction, and pain control

b) Indications
   i) Reeducation of peripheral nerves
   ii) Delay of denervation and atrophy
   iii) Edema reduction
   iv) Increase local blood flow
   v) Restoring ROM
      (1) Reduces muscle spasm
      (2) Inhibition spasticity
      (3) Reeducation of injured muscle
      (4) Facilitation of voluntary motor function
c) Precautions
   i) If there are any contraindications to the stimulation of the muscle fiber, tendon, or bony insertion
   ii) Muscle fatigue can set in if treatment intensity is to high
   iii) Improper use or storage of the electrodes can cause them damage
   iv) Intense periods of prolonged muscle contractions can lead to muscle spasm or muscle soreness
d) Treatment Techniques
   i) Electrode placement and General Setup
      (1) Neuromuscular stimulation
         (a) Bipolar: proximal and distal to the muscle being treated
         (b) Muscle contraction should be strong but not painful
      (2) Pain Control
         (a) Gate Control Mechanism
            (i) Monopolar or Bipolar: electrode should be placed directly over painful site
            (ii) Ramp up to muscle contraction then back down until you no longer see the muscle contraction (sensory-level)
         (b) Opiate Release
            (i) Monopolar or Bipolar: directly over painful site, distal to spinal nerve root origins, trigger points, or acupuncture points
            (ii) Achieve muscle contraction and ramp up to as high as student athlete can take
      (3) Sensory Level Control of Edema Formation
         (a) Monopolar: the negative electrode over the injured area
         (b) Injured area is placed in a tub of water with the negative electrode in the water
         (c) Disperser pad is placed away from the injured site
         (d) Ramp up to muscle contraction then back down until you no longer see the contraction (Sensory level)
      (4) Motor Level Edema Reduction

(a) Monopolar or Bipolar:
(i) Monopolar – Active electrode follows the course of the venous return
(ii) Bipolar – Proximal and distal to the injury site
(b) Injury site should be elevated
(c) Ice can be applied as well as a compressive wrap to encourage venous return
(d) Ramp up to a comfortable muscle contraction

ii) Treatment Techniques for all
(1) Turn the unit on
(2) Press the reset button and start over every time there is a treatment
(3) Select the output parameters
(4) Set treatment duration
(5) Place electrodes on student athlete (this can also be done right after turning the machine on)
(6) Begin treatment
(7) Increase intensity slowly
(8) Adjust electrode balance if needed

2) Transcutaneous Electrical Nerve Stimulation (TENS)
i) A type of electrical stimulation that patients can use at home
ii) Works to reduce pain and used for pain control

b) Indications
i) Control of acute or chronic pain
ii) Management of postsurgical pain
iii) Reduction of post-traumatic acute pain

c) Contraindications
i) Pain of a central origin
ii) Pain of an unknown origin

d) Precautions
i) This is a treatment that masks the pain and does not address the underlying condition that causes the pain
ii) Improper use may lead to skin irritation or electrode burns
iii) Intense or prolonged stimulation can lead to muscle spasm or soreness
iv) Intake of 200 mg or more of Ibuprofen can reduce the effectiveness of the TENS unit
v) Narcotic use decreased the effectiveness of the TENS unit

e) Electrode Placement
i) Direct – Placed directly in injury site
ii) Stimulation Point – Motor, trigger or acupuncture points are targeted
iii) Spinal Cord Level – Spinal cord nerve roots
iv) Contiguous – Used when direct placement is contraindicated, uses four

electrodes and can be placed with the current running parallel or crossed
   v) Dermatome – One electrode is placed at the corresponding nerve root and the other is placed at the distal end of the dermatome
   vi) Contralateral – Electrodes are placed on the opposite side of the injured body part about where the pain is
f) Treatment Techniques
   i) Adjust the TENS for correct output (sensory, motor or noxious)
   ii) Select and apply proper electrodes to injury site
   iii) Set output mode
   iv) Make sure the unit is off, make sure the output starts at zero
   v) Increase the output slowly on channel one to desired intensity
   vi) Increase the output slowly on channel two to desired intensity
   vii) Balance the channels
   viii) Fine-tune the output
   ix) Provide home care instructions

3) Interferential Current Stimulation (IFC)
a) Descriptions
   i) Uses one wave that is high frequency sine wave while the other produces a variable sine wave
   ii) As the two cross in the body and have a frequency of 1 to 299 Hz
b) Indications
   i) Acute pain
   ii) Chronic pain
   iii) Muscle spasm
c) Contraindications
   i) Pain of a central origin
   ii) Pain of an unknown origin
d) Precautions
   i) Improper use can result in burns or irritation of the skin from the electrodes
   ii) Intense or prolonged stimulation can result in muscle spasm or soreness
e) Electrode Placement
   i) Four electrodes are used to “surround” injury site
   ii) Channels should cross
f) Treatment Techniques
   i) Turn the unit on
   ii) Apply electrodes
   iii) Reset all parameters
   iv) Select application mode
   v) Adjust beat frequency
   vi) Adjust sweep frequency

vii) Begin treatment
viii) Increase intensity during treatment if needed
ix) Adjust balance if needed
x) May be used in conjunction with heat or ice

4) Neuromuscular Electrical stimulation (NMES)
   a) Description
      i) Used strong stimulation of the muscle contraction for reeducation and strength
   b) Indications
      i) Maintaining range of motion
      ii) Prevention of joint contractures
      iii) Increase local blood flow
      iv) Muscle reeducation
      v) Prevention of disuse Sports Medicine Treatment Atrophy
      vi) Decrease muscle spasm
   c) Contraindications
      i) Musculotendinous lesions, where the contraction of the muscle will cause further injury
      ii) If there is not a secure bony attachment of the muscle being treated
   d) Precautions
      i) Improper use may cause the electrodes to burn or irritate the skin
      ii) Intense or prolonged stimulation can cause muscle spasm
      iii) Intense contraction of the muscle can generate too much tension on the muscle
   e) Electrode Placement
      i) Proximal and distal ends of the muscle being treated
   f) Treatment Techniques
      i) Turn on the machine and make sure output is at zero
      ii) Prepare and apply electrodes
      iii) Make the interrupt switch available (this will immediately stop the machine when pushed)
      iv) Set pulse variables
      v) Set current variables
      vi) Adjust frequency
      vii) Set treatment duration
      viii) Initiate treatment
      ix) Increase intensity
      x) Adjust ramp for treatment goals
      xi) Adjust duty cycle to match treatment goals
         (1) Muscle strengthening – ON 10 seconds , OFF 50 seconds
         (2) Muscle endurance – ON and OFF should be of equal durations

5) Iontophoresis
   a) Description
      i) "is the introduction of ionized medication into the subcutaneous tissues using a low- voltage"
   b) Indications
      i) Acute pain
      ii) Chronic inflammation
      iii) Arthritis
      iv) Myositis ossificans
      v) Myofascial pain syndromes
      vi) For a local anesthetic before injection or other minor procedures
   c) Contraindications
      i) Adverse reactions or hypersensitivity to the medication
      ii) Adverse reactions of hypersensitivity to electrical stimulation
      iii) Pain or other syndromes of an unknown origin
   d) Precautions
      i) Require physicians note for the medication and treatment
      ii) The exact amount of medication that is delivered to the body is unknown
      iii) Redness of the skin under the patch is common
      iv) Doses that are too intense can cause burns beneath the electrodes
      v) DO NOT reuse electrodes
   e) Electrode Placement
      i) Delivery electrode is placed over treatment area (note you must know the polarity of the medication as the polarity of the delivery electrode must be of the opposite polarity)
      ii) Return electrode is placed 4 to 6 inches away
   f) Treatment Techniques
      i) Clean the treatment area (treatment area should be free of cuts, abrasions, and other open wounds)
      ii) Prepare the active electrode or electrodes
      iii) Wet the return electrode with appropriate buffer solution
      iv) Position electrodes
      v) Set electrode polarity
      vi) Provide patient instructions
      vii) Set treatment dose
      viii) Adjust output parameters
      ix) Administer any follow-up treatments
      x) If needed repeat the treatment with opposite polarity (only if two different medications are use with opposite polarities).

Ultrasound and Electrical Muscle Stimulation Combo

1) Description
   a) Uses the combination of electrical muscle stimulation and ultrasound to produce the effects of both on the muscle
   b) Can also be used to tire out muscles through the heating and contracting of the muscle (works to break the pain-spasm-pain cycle)
2) Indications
   a) Trigger points
   b) Muscle spasm
   c) Decrease the adherence of scar tissue
3) Contraindications
   a) Any contraindications to ultrasound
   b) Any contraindications to electrical stimulation
   c) Any contraindications to the contraction of the muscle
4) Precautions
   a) Increased contraction of the muscle may increase muscle spasm or soreness
5) Treatment Techniques
   a) Identify trigger point within the muscle
   b) Apply single electrode about 6 inches away from active trigger point, preferably within the same muscle
   c) Select current
   d) Select duration of treatment
   e) Select the mode of output for the ultrasound treatment
   f) Set watt meter to appropriate output of the ultrasound
   g) Apply ultrasound gel to the trigger point
   h) Apply the ultrasound head to treatment area
   i) Increase the intensity while moving the ultrasound head over area
   j) Look for muscle contraction and stop increasing the intensity of electrical stimulation when the patient feels maximal contraction of the muscle
   k) Start the treatment
   l) Continue moving the ultrasound head throughout the treatment
   m) Give appropriate follow-up instructions

Intermittent Compression:

1) Description
   a) "Circumferential compression applies an equal amount of pressure to all parts of the extremity simultaneously"

2) Indications
   a) Post traumatic edema
   b) Postsurgical edema
   c) Primary and secondary lymphedema
   d) Venous stasis ulcers
   e) Prevention of deep vein thrombosis
3) Contraindications
   a) Acute conditions in which there has not been a determination of a fracture
   b) Conditions in which added pressure would cause more injury
   c) Peripheral vascular disease
   d) Arteriosclerosis
   e) Edema secondary to congestive heart failure
   f) Ischemic vascular disease
   g) Gangrene
   h) Dermatitis
   i) Deep vein thrombosis
   j) Thrombophlebitis
4) Precautions
   a) Compression syndrome when treating the lower leg
   b) Watch for wrinkling of the stocking since this may cause increased pressure where wrinkled
5) Treatment Techniques
   a) Remove jewelry from treatment area
   b) Determine patient's blood pressure
   c) Make sure to measure the effectiveness of the treatment but taking girth measurements before and after the treatment
   d) Cover the treatment area with a stocking.
   e) Select appropriate appliance for treatment area
   f) Insert limb into the appliance
   g) Elevate limb
   h) Connect appliance to the unit
   i) Select ON/OFF times
   j) Select treatment duration
   k) Inform patient of treatment sensations
   l) Can have patient wiggle fingers or toes to make sure proper circulation of blood is not compromised;
   m) At termination of treatment make sure to turn OFF the unit and disconnect from the appliance.

Massage

When performing any type of massage sports medicine healthcare team MUST have permission from the student athlete and/or from the parent/guardian. The sports medicine healthcare team should always keep the treatment room door open whenever performing a massage and whenever possible, have a witness to the massage.

1) Description
   a) Uses touch to produce muscular, nervous, and cardiovascular changes;
   b) Used to break up adhesions within the muscles or myofascial adhesions.
2) Indications
   a) Relieve fibrosis;
   b) Increase venous return;
   c) Reduction of lymphatic or venous edema;
   d) Break the pain-spasm-pain cycle;
   e) Evoke systemic relaxation;
   f) Improve or stimulate local blood flow;
   g) Increase range of motion.
3) Contraindications
   a) Acute sprains or strains;
   b) Area of active inflammation;
   c) Site of nonunion fractures;
   d) Skin conditions in area of treatment;
   e) Open wounds;
   f) Infection causing lymphangitis;
   g) Phlebitis or Thrombophlebitis;
   h) Varicose veins;
   i) Arteriosclerosis;
   j) Cellulitis;
   k) Abscess or other forms of infection.
4) Precautions
   a) May increase inflammatory response;
   b) Use caution (decrease pressure) when massage is used on areas of decreased sensation;
   c) Do not use massage for swelling caused by cardiovascular insufficiency.
5) Treatment Techniques
   a) Effleurage
      i) Performed in a rhythmic manner;
      ii) Place hands parallel to the treatment area and symmetrical to the long axis of the treatment area;

iii) Apply pressure to area with pressure sufficient to gain treatment goals;
iv) Using mirrored motions, stroke the body along the long axis of the treatment area;
v) Lightly glide the hands back to starting position using the fingertips and repeat process.
vi) Can also use the same process but instead of hands being parallel they can follow each other

b) Pétrissage
   i) Using two hands gently lift the skin and muscle and roll tissue back and forth
   ii) Repeat for a few repetitions
c) Friction Massage
   i) Place patient in a position in such that the muscle is in a relaxed position
   ii) Start lightly and gradually increase pressure that is circular or perpendicular to the underlying tissue
   iii) As pressure increased depth of treatment increases
d) Tapotement
   i) Hands should bounce off the treatment area in a soft fast manner
   ii) Hacking – contact is made with the ulnar side of palm
   iii) Cupping – hands are slightly cupped, contact of the hand is with the heel of the hand and fingertips
   iv) Pincement – skin is lightly pinched between the fingertips during massage
   v) Rapping – hand is made into a loose fist and contact is made with the fingers of the closed fist
   vi) Tapping – fingers are lightly touched to the treatment area as if you were playing the piano
e) Myofascial Releases
   i) J-Strokes – One hand is placed to create tension while the other hand, using the first and middle fingers, places moderate pressure in the opposite direction of the tension in a J stroke;
   ii) Focused Stretching – place the heels of the hands-on treatment area in a crossed arm fashion, using opposite pull, push hands apart;
   iii) Skin Rolling – Begin by pinching the skin above the treatment area, then lift and roll the skin over treatment area in the same direction of the tension;
   iv) Arm/Leg Pull – Grasp the extremity with one hand, place other hand medial to the tension and stretch in a pulling manner.
f) Edema Reduction
   i) Elevate extremity;
   ii) Apply lotion to treatment area;
   iii) Start by making long slow strokes to the proximal end of the injury;

iv) Slowly move distal to the extremity always returning to the starting point;
v) After reaching the distal aspect of the injury begin working back to the starting point.

Appendices

Appendix #1: Emergency Action Plan

Football Stadium

Emergency Personnel

- First Responder, Certified Athletic Trainers, Coaches

Emergency Communication

• Valley Christian Security		(408) 639-6865
• Kalei Cerone	Head Athletic Trainer	(808) 285-1793
• Eric Scharrenberg	Vice President K-12 Athletics	(408) 513-2524
• Ryan Realini	High School Athletic Director	(408) 607-1683

Emergency Equipment

- All equipment kept in Valley Christian High School athletic training room (including splint bag, first aid kit, crutches, etc)
- AED is located on the first floor of the stadium building.
- Ambulance or EMS can access through Diamond Heights or stadium way. They can access the field from the oak tree driveway. Field access will be through the gates on the east side of the stadium.

Roles of the First Responders

1) Immediate care of injured athlete, most critical first
2) Emergency equipment retrieval (AED, splint bag, etc.)
3) Activation of EMS – student or coach
   - Call 9-1-1 (Provide name, location, phone number, number of athletes injured and severity, etc.)

· Notify emergency contact as soon as possible

4) Direct EMS to location of emergency
   - Open necessary gates
   - Clear access to injured athlete
   - "Flag down" EMS as they arrive and provide direction
   - Control the scene and the crowd (keep bystanders away and allow only emergency personal and responders near athlete)

Baseball Stadium

Emergency Personnel

- First Responder, Certified Athletic Trainers, Coaches

Emergency Communication

• Valley Christian Security		(408) 639-6865
• Kalei Cerone	Head Athletic Trainer	(808) 285-1793
• Eric Scharrenberg	Vice President K-12 Athletics	(408) 513-2524
• Ryan Realini	High School Athletic Director	(408) 607-1683

Emergency Equipment

- All equipment kept in Valley Christian High School athletic training room (including splint bag, first aid kit, crutches, etc)
- AED is located on the first floor of the gym building.
- Ambulance or EMS will access the field from skyway drive. They will enter the field through the double gates along the third base foul line.

Roles of the First Responders

1) Immediate care of injured athlete, most critical first
2) Emergency equipment retrieval (AED, splint bag, etc.)
3) Activation of EMS – student or coach
   - Call 9-1-1 (Provide name, location, phone number, number of athletes injured and severity, etc.)

· Notify emergency contact as soon as possible

4) Direct EMS to location of emergency
   - Open necessary gates
   - Clear access to injured athlete
   - "Flag down" EMS as they arrive and provide direction
   - Control the scene and the crowd (keep bystanders away and allow only emergency personal and responders near athlete)

Soccer Field

Emergency Personnel

- First Responder, Certified Athletic Trainers, Coaches

Emergency Communication

• Valley Christian Security		(408) 639-6865
• Kalei Cerone	Head Athletic Trainer	(808) 285-1793
• Eric Scharrenberg	Vice President K-12 Athletics	(408) 513-2524
• Ryan Realini	High School Athletic Director	(408) 607-1683

Emergency Equipment

- All equipment kept in Valley Christian High School athletic training room (including splint bag, first aid kit, crutches, etc)
- AED is located on the first floor of the football stadium building.
- Ambulance or EMS will access the field through double gate on the west side of the field off of Stadium way.

Roles of the First Responders

1) Immediate care of injured athlete, most critical first
2) Emergency equipment retrieval (AED, splint bag, etc.)
3) Activation of EMS – student or coach
   - Call 9-1-1 (Provide name, location, phone number, number of athletes injured and severity, etc.)

· Notify emergency contact as soon as possible

4) Direct EMS to location of emergency
   - Open necessary gates
   - Clear access to injured athlete
   - “Flag down” EMS as they arrive and provide direction
   - Control the scene and the crowd (keep bystanders away and allow only emergency personal and responders near athlete)

Softball Field

Emergency Personnel

- First Responder, Certified Athletic Trainers, Coaches

Emergency Communication

• Valley Christian Security		(408) 639-6865
• Kalei Cerone	Head Athletic Trainer	(808) 285-1793
• Eric Scharrenberg	Vice President K-12 Athletics	(408) 513-2524
• Ryan Realini	High School Athletic Director	(408) 607-1683

Emergency Equipment

- All equipment kept in Valley Christian High School athletic training room (including splint bag, first aid kit, crutches, etc)
- AED is located on the first floor of the football stadium building.
- Ambulance or EMS will access the field through the center-right outfield double gate.

Roles of the First Responders

1) Immediate care of injured athlete, most critical first
2) Emergency equipment retrieval (AED, splint bag, etc.)
3) Activation of EMS – student or coach
   - Call 9-1-1 (Provide name, location, phone number, number of athletes injured and severity, etc.)

· Notify emergency contact as soon as possible

4) Direct EMS to location of emergency
   - Open necessary gates
   - Clear access to injured athlete
   - “Flag down” EMS as they arrive and provide direction
   - Control the scene and the crowd (keep bystanders away and allow only emergency personal and responders near athlete)

Tennis Courts

Emergency Personnel

- First Responder, Certified Athletic Trainers, Coaches

Emergency Communication

• Valley Christian Security		(408) 639-6865
• Kalei Cerone	Head Athletic Trainer	(808) 285-1793
• Eric Scharrenberg	Vice President K-12 Athletics	(408) 513-2524
• Ryan Realini	High School Athletic Director	(408) 607-1683

Emergency Equipment

- All equipment kept in Valley Christian High School athletic training room (including splint bag, first aid kit, crutches, etc)
- AED is located on the first floor of the football stadium building or the lobby of the conservatory.
- Ambulance or EMS will access the tennis courts through the adjacent parking lot on Diamond Heights drive.

Roles of the First Responder

1) Immediate care of injured athlete, most critical first
2) Emergency equipment retrieval (AED, splint bag, etc.)
3) Activation of EMS – student or coach
   - Call 9-1-1 (Provide name, location, phone number, number of athletes injured and severity, etc.)

· Notify emergency contact as soon as possible

4) Direct EMS to location of emergency
   - Open necessary gates
   - Clear access to injured athlete
   - “Flag down” EMS as they arrive and provide direction
   - Control the scene and the crowd (keep bystanders away and allow only emergency personal and responders near athlete)

Gym

Emergency Personnel

- First Responder, Certified Athletic Trainers, Coaches

Emergency Communication

• Valley Christian Security		(408) 639-6865
• Kalei Cerone	Head Athletic Trainer	(808) 285-1793
• Eric Scharrenberg	Vice President K-12 Athletics	(408) 513-2524
• Ryan Realini	High School Athletic Director	(408) 607-1683

Emergency Equipment

- All equipment kept in Valley Christian High School athletic training room (including splint bag, first aid kit, crutches, etc)
- AED is located outside of the main gym entrance and outside the boy's team room.
- Ambulance or EMS will park in the loading zone and access the gym through the main entrance of the gym.

Roles of the First Responders

1) Immediate care of injured athlete, most critical first
2) Emergency equipment retrieval (AED, splint bag, etc.)
3) Activation of EMS – student or coach
   - Call 9-1-1 (Provide name, location, phone number, number of athletes injured and severity, etc.)

· Notify emergency contact as soon as possible

4) Direct EMS to location of emergency
   - Open necessary gates
   - Clear access to injured athlete
   - "Flag down" EMS as they arrive and provide direction
   - Control the scene and the crowd (keep bystanders away and allow only emergency personal and responders near athlete)

Pool

Emergency Personnel

- First Responder, Certified Athletic Trainers, Coaches

Emergency Communication

• Valley Christian Security		(408) 639-6865
• Kalei Cerone	Head Athletic Trainer	(808) 285-1793
• Eric Scharrenberg	Vice President K-12 Athletics	(408) 513-2524
• Ryan Realini	High School Athletic Director	(408) 607-1683
• Kevin Parizi	Director of Aquatic Operations	(408) 513-2450

Emergency Equipment

- All equipment kept in Valley Christian High School athletic training room (including splint bag, first aid kit, crutches, etc.)
- AED is located outside of the main gym entrance and outside the boy's team room.
- Ambulance or EMS will park in the loading zone and will access the pool through the main entrance of the gym.

Roles of the First Responders

1) Immediate care of injured athlete, most critical first
2) Emergency equipment retrieval (AED, splint bag, etc.)
3) Activation of EMS – student or coach
   - Call 9-1-1 (Provide name, location, phone number, number of athletes injured and severity, etc.)

· Notify emergency contact as soon as possible

4) Direct EMS to location of emergency
   - Open necessary gates
   - Clear access to injured athlete
   - "Flag down" EMS as they arrive and provide direction
   - Control the scene and the crowd (keep bystanders away and allow only emergency personal and responders near athlete)

Outdoor Basketball Court

Emergency Personnel

- First Responder, Certified Athletic Trainers, Coaches

Emergency Communication

• Valley Christian Security		(408) 639-6865
• Kalei Cerone	Head Athletic Trainer	(808) 285-1793
• Eric Scharrenberg	Vice President K-12 Athletics	(408) 513-2524
• Ryan Realini	High School Athletic Director	(408) 607-1683

Emergency Equipment

- All equipment kept in Valley Christian High School athletic training room (including splint bag, first aid kit, crutches, etc)
- AED is located on the first floor of the gym building.
- Ambulance or EMS will access the courts from skyway drive. They will park in the baseball emergency access lane.

Roles of the First Responders

1) Immediate care of injured athlete, most critical first
2) Emergency equipment retrieval (AED, splint bag, etc.)
3) Activation of EMS – student or coach
   - Call 9-1-1 (Provide name, location, phone number, number of athletes injured and severity, etc.)

· Notify emergency contact as soon as possible

4) Direct EMS to location of emergency
   - Open necessary gates
   - Clear access to injured athlete
   - “Flag down” EMS as they arrive and provide direction
   - Control the scene and the crowd (keep bystanders away and allow only emergency personal and responders near athlete)

Outdoor Basketball Court (Blue Lot)

Emergency Personnel

- First Responder, Certified Athletic Trainers, Coaches

Emergency Communication

• Valley Christian Security		(408) 639-6865
• Kalei Cerone	Head Athletic Trainer	(808) 285-1793
• Eric Scharrenberg	Vice President K-12 Athletics	(408) 513-2524
• Ryan Realini	High School Athletic Director	(408) 607-1683

Emergency Equipment

- All equipment kept in Valley Christian High School athletic training room (including splint bag, first aid kit, crutches, etc)
- AED is located on the first floor of the gym building.
- Ambulance or EMS will access the field from skyway drive, they will park in the Blue Lot.

Roles of the First Responders

1) Immediate care of injured athlete, most critical first
2) Emergency equipment retrieval (AED, splint bag, etc.)
3) Activation of EMS – student or coach
   - Call 9-1-1 (Provide name, location, phone number, number of athletes injured and severity, etc.)

· Notify emergency contact as soon as possible

4) Direct EMS to location of emergency
   - Open necessary gates
   - Clear access to injured athlete
   - "Flag down" EMS as they arrive and provide direction
   - Control the scene and the crowd (keep bystanders away and allow only emergency personal and responders near athlete)

Appendix #2: Blood Borne Pathogen Exposure Plan

Protection and precaution should be taken whenever dealing with blood or bodily fluids. Gloves should be worn at all times and soiled gauze, bad-aids, and other soiled material should always be disposed of in a biohazard bag. The following is procedure when dealing with bodily fluids:

1) The sports medicine healthcare team should always wear gloves to protect themselves from blood borne pathogens;
   a) After gloves are put on, the gloves hands should not come into contact with other surfaces that cannot be properly disposed of as they will contaminate the surface;
   b) To remove gloves after use, use one had to pinch the soiled end of other glove and pull off – ball up first glove in the palm of hand and use other first finger to hook under the glove of the second hand – pull second glove (with the first glove inside) completely off, turning it inside out and discard in a biohazard bag;
2) If there is exposure to blood borne pathogens the sports medicine healthcare team should immediately irrigate the affected area with soap and water. They may also wash it out with hydrogen peroxide;
   a) The affected person should immediately notify their supervisor of the situation;
   b) Supervisor will notify appropriate personnel and make accommodations for the affected person to receive all medical attention needed following the exposure;
3) Bodily fluids that are spilled on the floor or other cleanable areas should be cleaned immediately after the person is appropriately bandaged;
   a) If help is needed with clean-up, the Operations department should be called for assistance;
   b) Operations staff will supply the sports medicine treatment area with appropriate cleaning supplies for clean-up of bodily fluids;
   c) All soiled gauze pads, paper towels, towels, etc. should be disposed of in a biohazard container kept in the sports medicine treatment room.

Appendix #3: Visiting Team Pamphlet

VALLEY CHRISTIAN SCHOOLS™
ATHLETICS
"Do it heartily as to the Lord." Col. 3:23

Valley Christian Athletics would like to welcome your team and supporters to our facilities for your upcoming athletic event. Our athletic staff has provided the following information that may be helpful during your visit to our campus. Please feel free to contact any of the numbers provided if you have any special requests or questions.

Important Phone Numbers:

Head Athletic Trainer, Kalei Cerone
808.285.1793

Vice President K-12 Athletics, Eric Scharrenberg
408.513.2456

High School Athletic Director, Ryan Realini
408.607.1683

Assistant Athletic Director, Rob Fair
408.316.6966

Assistant Athletic Director, Kaela Watson
408.348.3549

VCS Security
408.639.6865

Athletic Training Room:

Located on the second floor underneath the Football Stadium.

Please notify our Athletic Trainer if an athlete will need taping, wrapping, or treatment prior to athletic participation. Please provide any materials, like tape, ace bandages, etc.

Locker Rooms:

If your team needs use of locker room facilities, please alert VCHS Athletics staff ahead of time.

Visitor's Bench, we will provide:

Water

Bottles

Injury Ice

Ice Bags

Nearby Medical Facilities:

Urgent Care:

5138 Monterey Rd g, San Jose, CA 95111

Kaiser:

250 Hospital Pkwy, San Jose, CA 95119

Good Samaritan Hospital

2425 Samaritan Dr, San Jose, CA 95124

Medical Emergency Protocol:

1) Immediate care of injured athlete, most critical first

2) Emergency equipment retrieval (AED, splint bag, etc.)

3) Activation of EMS – student or coach

·Call 9-1-1 (Provide name, location, phone number, number of athletes injured and severity, etc.)

·Notify emergency contact as soon as possible

4)Direct EMS to location of emergency

·Open necessary gates

·Clear access to injured athlete

·"Flag down" EMS as they arrive and provide direction

·Control the scene and the crowd (keep bystanders away and allow only emergency personal and responders near athlete)

Please familiarize yourself with the closest AED location (see map on reverse side)

Evacuation Protocol:

All visiting teams should make themselves familiar with the exit maps and evacuation destination posters in their specific area. When an alarm sounds they should report to the evacuation site listed in that area using the route directed on the map.

Gymnasiums:

Evacuate to the Baseball Field

Pool:

Evacuate to the Baseball Field.

Baseball Field:

Stay on Baseball Field

Soccer Field:

Stay put on the Soccer Field.

Softball Field:

Evacuate to the Soccer Field.

Appendix #4: CIF Concussion Return to Play Protocol

CIF Concussion Return to Play (RTP) Protocol

CA STATE LAW AB 2127 STATES THAT RETURN TO PLAY (I.E., COMPETITION) CANNOT BE SOONER THAN 7 DAYS AFTER EVALUATION BY A PHYSICIAN (MD/DO) WHO HAS MADE THE DIAGNOSIS OF CONCUSSION, AND ONLY AFTER COMPLETING A GRADUATED RETURN TO PLAY PROTOCOL.

Instructions:

- A graduated return to play protocol MUST be completed before you can return to FULL COMPETITION. Below is the CIF RTP Protocol.
  - A certified athletic trainer (AT), physician, or identified concussion monitor (e.g., athletic director, coach), must initial each stage after you successfully pass it.
  - You should be back to normal academic activities before beginning Stage II, unless otherwise instructed by your physician.
- After Stage I, you cannot progress more than one stage per day (or longer if instructed by your physician).
- If symptoms worsen at any stage in the progression, IMMEDIATELY STOP any physical activity and follow up with your school's AT, other identified concussion monitor, or your physician. In general, if you are symptom-free the next day, return to the previous stage where symptoms had not occurred.
- Seek further medical attention if you cannot pass a stage after 3 attempts due to concussion symptoms, or if you feel uncomfortable at any time during the progression.

You must have written physician (MD/DO) clearance to begin and progress through the following Stages as outlined below, or as otherwise directed by your physician. Minimum of 6 days to pass Stages I and II.				
Date & Initials	**Stage**	**Activity**	**Exercise Example**	**Objective of the Stage**
	I	Limited physical activity that does not exacerbate symptoms for at least 2 days	• Untimed walking okay • No activities requiring exertion (weight lifting, jogging, P.E. classes)	• Recovery and reduction/elimination of symptoms
	II-A	Light aerobic activity	• 10-15 minutes *(min)* of brisk walking or stationary biking • **Must be performed under direct supervision by designated individual**	• Increase heart rate to ≤ 50% of perceived maximum *(max)* exertion (e.g.,< 100 beats per min) • Monitor for symptom return
	II-B	Moderate aerobic activity *(Light resistance training)*	• 20-30 min jogging or stationary biking • Body weight exercises (squats, planks, push-ups), max 1 set of 10, ≤ 10 min total	• Increase heart rate to 50-75% max exertion (e.g.,100-150 bpm) • Monitor for symptom return
	II-C	Strenuous aerobic activity *(Moderate resistance training)*	• 30-45 min running or stationary biking • Weight lifting ≤ 50% of max weight	• Increase heart rate to > 75% max exertion • Monitor for symptom return
	II-D	Non-contact training with sport-specific drills *(No restrictions for weightlifting)*	• Non-contact drills, sport-specific activities (cutting, jumping, sprinting) • No contact with people, padding or the floor/mat	• Add total body movement • Monitor for symptom return
Prior to beginning Stage III, please make sure that written physician (MD/DO) clearance for return to play, after successful completion of Stages I and II, has been given to your school's concussion monitor. *You must be symptom-free prior to beginning Stage III.*				
	III	Limited contact practice	• Controlled contact drills allowed (no scrimmaging)	• Increase acceleration, deceleration and rotational forces • Restore confidence, assess readiness for return to play • Monitor for symptom return
		Full contact practice Full unrestricted practice	• Return to normal training, with contact • Return to normal unrestricted training	
MANDATORY: You must complete at least ONE contact practice before return to competition, or if non-contact sport, ONE unrestricted practice *(If contact sport, highly recommend that Stage III be divided into 2 contact practice days as outlined above)*				
	IV	Return to play (competition)	• Normal game play (competitive event)	• Return to full sports activity without restrictions

Athlete's Name: _____ **Date of Injury** _____ **Date of Concussion Diagnosis:** _____

Appendix #5: COVID-19 Modifications (Fall 2020)

The sports medicine healthcare team will follow state and county healthcare guidelines and governing body recommendations in reopening the athletic training facilities.

Modifications and Considerations will include, but are not limited to:

- Requirement of staff and student-athletes to properly wear an appropriate mask or face covering at all times when in the athletic training facility. Mask may be removed, at the request of the sports medicine healthcare team, if mask inhibits ability to complete injury evaluation.
- Treatment tables and tools will be cleaned between each patient with appropriate solutions. All other treatment areas will be cleaned at the start and end of the day or when possibly contaminated.
- Social distancing will be maintained at all times when possible in the athletic training facility. No more than 5 students-athletes will be allowed in the athletic training room at a time. Maximum capacity: 10
- Communal hydration supplies, including water coolers and bottles, will not be supplied by the sports medicine healthcare team, per NATA and CIF recommendations. Athletes are expected to supply their own water for all sport related activities. Athletes will not be allowed to scoop ice into personal bottles.
- Injury ice will be distributed at the discretion of the sports medicine care team. Injury ice will not be wrapped to decrease close contact with student- athletes.
- No ice tubs will be utilized unless the sports medicine care team determines otherwise, like the event of an emergency.
    - Towels will not be distributed for ice bath use.
- Baseline ImPACT testing will be completed at home using ImPACT instructions provided by the sports medicine staff.
- Sports medicine care team will continue to be available online for injury evaluation and injury rehabilitation.
- Priority of Assistance:
    - Game day athletes
    - Practice athletes
    - Continuation of rehabilitation and new injury triage

All modifications are subject to change without notice, based upon best practice guidelines from local and governing bodies.