



SPORTS MEDICINE GUIDE FOR COACHES & PARENTS

UW **Health Partners**

Watertown Regional
Medical Center

FORWARD...

This booklet is designed for coaches, athletes, parents and all people who participate in physical activity. It is a collection of practical and useful tips on first aid, injury prevention, and safe return to activity when an athletic trainer or other specialist trained in sports medicine is unavailable.

The following is a list of services provided by the certified athletic trainers of UW Health Partners Watertown Regional Medical Center:

- ♦ Weekly visits to area high schools to evaluate athletic injuries.
- ♦ Rehabilitation programs for injuries.
- ♦ Criteria for safe return to participation.
- ♦ Coverage of sporting events to give first aid and evaluation of injuries.
- ♦ Skin fold testing and body fat analysis for wrestling programs.
- ♦ Student Athletic Trainer Programs.
- ♦ Taping or bracing in-services/information.
- ♦ Educational seminars on injury care and prevention, conditioning, nutrition, etc., for coaches, athletes and parents.
- ♦ Follow-through of an existing rehabilitation program from Physical Therapy or Occupational Therapy in the school/sport setting.
- ♦ Constant communication with health care providers.

TABLE OF CONTENTS

FIRST AID TIPS	5
Emergency Plan	
Coaches' Responsibility	
Basic First Aid Supplies	
Vital Signs	
Guidelines for Concussions & Return to Play	
Miscellaneous Injuries	
Lightning Safety	
Heat Injuries & Recommended Treatments	
Fluid Replacement for Athletes	
INJURY PREVENTION	18
Pre-participation Physical	
Strength	
Proper Warm-up	
Terrain	
Footwear	
Overuse Injury/Proper Mechanics	
When to Call the Doctor	
GENERAL GUIDELINES FOR RETURN TO PLAY ..	21
PROTECTIVE EQUIPMENT	22
Helmets	
Mouth Guards	
Eye Protection	
Football Shoulder Pads	
Breast Support	
GUIDELINES FOR BLOOD BORNE PATHOGENS IN SPORTS	25
The Athlete	
Transmission	
Personal Protective Equipment (PPE) & Precautions & Disinfectants	

FIRST AID TIPS

EMERGENCY PLAN

Every school should have an emergency plan that includes:

- ♦ Knowing the location of the nearest phone and the emergency number - 911 or 9-911 if using a campus phone.
- ♦ Designating someone to make the call and whether he or she will need change for the call.
- ♦ Knowing who has the key for the gate to allow EMS to enter.
- ♦ Designating someone to meet and direct EMS.
- ♦ Knowing what information the caller must report to EMS:
 1. Identify yourself
 2. Type of suspected injury and present condition
 3. Assistance being given
 4. Exact location of emergency ad where to meet
 5. HANG UP LAST!

COACHES' RESPONSIBILITY

Coaches, student athletic trainers, and other personnel who work with student athletes should consider:

- ♦ Being certified in CPR
- ♦ Informing the Certified Athletic Trainer of any special illnesses the student athlete may have; i.e. asthma, diabetes, etc.
- ♦ Having water and ice with ice bags available at all practices and games

School/coaches must inform athletes of the risks associated in sports (Assumption of Risk). UW Health Partners Watertown Regional Medical Center highly recommends that both the student and parent(s) sign the waiver stating that they understand the risks of their sport.

BASIC FIRST AID SUPPLIES

UW Health Partners Watertown Regional Medical Center highly recommends that the following items be included in your first aid kits in varying quantities.

- ♦ White athletic tape (1 1/2")
- ♦ Pre-wrap
- ♦ Tufskin Spray
- ♦ Gauze pads
- ♦ Eye drops/Saline
- ♦ Contact case
- ♦ Band-Aids (variety)
- ♦ Hydrogen Peroxide/Antiseptic spray
- ♦ Latex/non-latex gloves
- ♦ Scissors
- ♦ Bacitracin ointment/first aid ointment
- ♦ Mirror
- ♦ Elastic wrap (6")
- ♦ Chemical cold packs

VITAL SIGNS

Pulse at wrist or neck:

Normal resting rate = 60-80 Beats Per Minute

- ♦ Rapid/Weak: Could indicate shock, bleeding, diabetic coma, and heat exhaustion
- ♦ Rapid/Strong: Could indicate heatstroke, severe fright
- ♦ Slow/Strong: Could indicate skull fracture, stroke

Respiration by watching chest rise and fall:

Normal resting rate = 12 breaths/min.

- ♦ Shallow: Could indicate shock
- ♦ Irregular/gasping: Could indicate cardiac involvement, airway obstruction
- ♦ Frothing blood from mouth: Could indicate chest injury

- ♦ High breathing rate; Could indicate hyperventilation (Athlete should breath into paper bag, cupped hands, or inhaler if athlete has one.)

Blood Pressure:

Normal Range= 110-140/60-90

- ♦ Low blood pressure: Could indicate hemorrhage, shock, heart attack, internal organ injury

Skin Temperature

- ♦ Cool, clammy skin: Could indicate shock, heat exhaustion
- ♦ Cool, dry skin: Could indicate exposure to cold
- ♦ Hot, dry skin: Could indicate heat stroke, infection

Skin Color

- ♦ Red skin: Could indicate heatstroke, high blood pressure
- ♦ White skin: Could indicate shock, heat exhaustion, insufficient circulation, insulin shock
- ♦ Blue skin: Could indicate blood poorly oxygenated in lips or fingernails, insufficient respirations

Pupils

- ♦ Dilated: One or both could indicate head injury, shock, heatstroke, hemorrhage
- ♦ Some athletes may have been born with unequal pupils; try to determine who these athletes are prior to the season's practice

GUIDELINES FOR CONCUSSION AND RETURN TO PLAY

Grade	<i>Signs & Symptoms</i>	Return to play (1st concussion)	Return to play (2nd concussion)	Return to play (3rd concussion)
Bellringer	<ul style="list-style-type: none"> ♦ No loss of consciousness ♦ No memory loss ♦ Other symptoms lasting no more than 15 minutes during rest or exertion 	Return to play if asymptomatic after 15 minutes	Return in 1 week if asymptomatic	Return in 1 week if asymptomatic
Grade I (mild)	<ul style="list-style-type: none"> ♦ No loss of consciousness ♦ No memory loss ♦ Confusion < 1 minute ♦ Other symptoms lasting between 15-30 minutes during rest or exertion 	Return in 1 week if asymptomatic <i>and</i> cleared by physician	Return in 2 weeks if asymptomatic and cleared by physician	Terminate season. May return to playing 3 months if asymptomatic
Grade II (Moderate)	<ul style="list-style-type: none"> ♦ No loss of consciousness ♦ Some memory loss (antegrade or retrograde amnesia) ♦ Moderate headache ♦ Other symptoms lasting more than 30 minutes but less than 24 hours during rest or exertion 	Return to play if asymptomatic for at least 1 week <i>and</i> cleared by physician	Consider terminating season, but may return to play if asymptomatic for at least 1 month.	Terminate season. May return to play next season if asymptomatic.
Grade III (Severe)	<ul style="list-style-type: none"> ♦ Loss of consciousness for any period of time ♦ Extensive memory loss (antegrade or retrograde amnesia) ♦ Other symptoms lasting more than 24 hours during rest or exertion 	<ul style="list-style-type: none"> ♦ Transport to medical facility immediately ♦ Return to play in 1 month after 2 consecutive asymptomatic weeks and cleared by physician 	Terminate season. May return to play next season if asymptomatic.	Terminate season. Strongly discouraged to return to contact/collision sports.

General Definitions

1. **Cerebral Concussion:** Head-trauma-induced alteration in mental status that may or may not involve loss of consciousness. Concussions are graded in four categories.
2. **Antegrade Amnesia:** Memory loss of events following the impact.
3. **Retrograde Amnesia:** Memory loss for events preceding the impact. (The longer this interval, the more severe the injury.)

Signs & Symptoms

- ♦ Persistent headache
- ♦ Amnesia
- ♦ Lightheadedness
- ♦ Disorientation
- ♦ Convulsions
- ♦ Sleep disturbances
- ♦ Slurred speech
- ♦ Nausea or vomiting
- ♦ Irritability
- ♦ Visual disturbances
- ♦ Difficulty concentrating
- ♦ Difficulty breathing
- ♦ Excessive drowsiness
- ♦ Ringing in the ears
- ♦ Poor coordination
- ♦ Memory dysfunction

Precautions

- ♦ **Second Impact Syndrome:** Two concussions (bellringer or mild) in a short period of time

*****50% of the cases of second impact syndrome result in death.*****

- ♦ In almost every (sports injury) situation the blood pressure drops. The exception is head injuries in which the blood pressure rises. Consequently, it is important

to monitor heart rate, respiration and blood pressure every 5-10 minutes.

- ♦ Signs demanding emergency attention:
 1. Increasing headache, nausea, or vomiting
 2. Inequality of pupils
 3. Progressive impairment of consciousness
 4. Gradual rise in blood pressure (upon cessation of activity)
 5. Diminution of pulse

*****These signs and symptoms may indicate a subdural hematoma, which has a 70 % mortality rate.*****

MISCELLANEOUS INJURIES

Below are possible treatments of injuries that may occur during activity:

I.C.E. (Ice Compression Elevation):

Ice should be applied immediately after an injury for 20-30 minutes. Then leave ice off for one hour and reapply ice for another 20-30 minutes in an elevated position. Repeat at least 3 to 4 times per day for at least 48 hours. Do not place chemical ice packs directly on the skin.

Heat:

Heat should not be applied if area is still swollen after an acute injury. May apply heat after 72 hours. Do not place heating pack directly on skin.

Unconscious athlete:

Do NOT move, call EMS.

Neck or back pain/tingling & numbness

Do not move a conscious athlete if they have neck or back pain or complain of numbness or tingling in arms and/or legs. Call EMS.

Eye injury:

Patch both eyes and transport to the hospital in an upright position.

Nosebleed:

Pinch the nose. Do not tilt the head back. Place cotton into the nostrils and apply an ice bag.

Teeth:

If a tooth is knocked out or chipped, you should place the tooth in water, saline, milk, or the athlete's saliva and transport to a dentist within one hour of incident.

Blisters:

Pre-season athletes must wear two pairs of socks. When the athlete feels hot spots or gets a blister, apply Vaseline/skin lube on area and cover with Band-Aid or a donut pad.

Insect bites/stings:

To remove a stinger, use the edge of a card and scrape; Do not squeeze. Wash immediately with soap and water. Apply an ice pack and transport to the hospital if warranted.

Diabetics:

Always have a soda pop or candy bar containing sugar available; if conscious, give the sugar-containing product to the athlete. If the athlete does not get any better or falls unconscious, transport immediately via EMS.

Asthma attacks:

Before practices, find out who has inhalers. During an attack, keep the athlete calm. Get the inhaler if they have one. If not, have them breathe into cupped hands or paper bag. If athlete does not get better, call EMS.

NATIONAL ATHLETIC TRAINING ASSOCIATION RECOMMENDATIONS FOR LIGHTNING SAFETY

1. Establish a chain of command that identifies who is to make the call to remove individuals from the field.
2. Name a designated weather watcher (A person who actively looks for the signs of threatening weather and notifies the chain of command if severe weather becomes dangerous).
3. Have a means of monitoring local weather forecasts and warnings.
4. Designate a safe shelter for each venue.
5. Use the flash-to-bang count to determine when to go to safety. By the time the flash-to-bang count approaches thirty seconds, all individuals should be already inside a safe structure.
6. Once activities have been suspended, wait at least thirty minutes following the last sound of thunder or lightning flash prior to resuming an activity or returning outdoors.
7. Avoid being the highest point in an open field, in contact with, or proximity to the highest point, as well as being on the open water. Do not take shelter under or near trees, flagpoles or light poles.
8. Assume the lightning safe position (crouched on the ground, weight on the balls of the feet, feet together, head lowered, and ears covered) for individuals who feel their hair stand on end, skin tingle, or hear “crackling” noises. Do not lie flat on the ground.
9. Observe the following basic first aid procedures in managing victims of a lightning strike:
 - ♦ Survey the scene for safety.
 - ♦ Activate local EMS.
 - ♦ Lightning victims do not “carry a charge” and are safe to touch.
 - ♦ If necessary, move the victim with care to a safer location.

- ♦ Evaluate airway, breathing and circulation and begin CPR if necessary.
 - ♦ Evaluate and treat for hypothermia, shock, fractures and /or burns.
10. All individuals have the right to leave an athletic site in order to seek a safe structure if the person feels in danger of impending lightning activity, without fear of repercussions or penalty from anyone.

Safe Shelter:

1. A safe location is any substantial, frequently inhabited building. The building should have four solid walls (not a dug out), electrical and telephone wiring, as well as plumbing, all of which aid in grounding a structure.
2. The secondary choice for a safer location from the lightning hazard is a fully enclosed vehicle with a metal roof and the windows completely closed. It is important to not touch any part of the metal framework of the vehicle while inside it during ongoing thunderstorms.
3. It is not safe to shower, bathe, or talk on land line phones while inside of a safer shelter during thunderstorms (cell phones are ok).

Flash-to-Bang:

To use the flash-to-bang method, begin counting when sighting a lightning flash. Counting is stopped when the associated bang (thunder) is heard. Divide this count by five to determine the distance to the lightning flash (in miles).

For example, a flash-to-bang count of thirty seconds equates to a distance of six miles. Lightning has struck from as far away as 10 miles from the storm center.

“If you hear it, clear it; if you see it, flee it.”

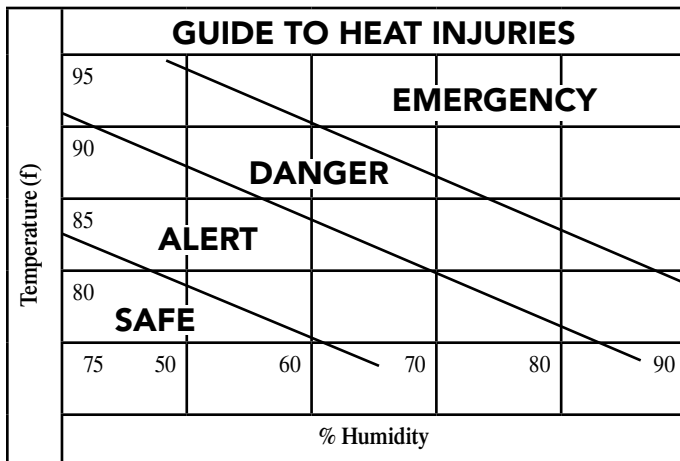
Postpone or suspend activity if a thunderstorm appears imminent before or during an activity or contest, (irrespective of whether lightning is seen or thunder heard) until the hazard has passed. Signs of imminent tunderstorm activity

are darkening clouds, high winds, and thunder or lightning activity.

HEAT INJURIES AND RECOMMENDED TREATMENT

Injury	Symptoms	Treatment
Heat Cramps	Painful spasms in calf and thigh muscles	<ul style="list-style-type: none"> ♦ Rest in an area of shade and replace fluids with water or sports drink with <8% carbohydrate ♦ Stretch calf or thigh muscle(s) ♦ Monitor vital signs
Heat Exhaustion	<ul style="list-style-type: none"> ♦ Weakness, dizziness, headaches ♦ Excessive sweating ♦ Possible unconsciousness 	<ul style="list-style-type: none"> ♦ Rest in shade or cooler area ♦ Remove restrictive clothing ♦ Cool athlete with ice packs in arm pits, groin, cool cloth around neck ♦ Replace fluid with water or sports drink with <8% carbohydrate ♦ Monitor vital signs
Heat Stroke	<ul style="list-style-type: none"> ♦ Disorientation and incoherent speech ♦ Aggression ♦ Unconsciousness 	<ul style="list-style-type: none"> ♦ Immediately activate EMS and transport to nearest hospital ♦ Cool athlete with ice packs in arm pits, groin, behind knees, cool cloth around neck and trunk ♦ Monitor vital signs until EMS arrives

*****Coaches should always check the temperature, humidity and wind velocity on practice and games days.*****



NATIONAL ATHLETIC TRAINERS' ASSOCIATION POSITION STATEMENT: FLUID REPLACEMENT FOR ATHLETES

A Summary of Practical Applications

Background:

Dehydration can compromise athletic performance and increase the risk of exertional heat injury.

Recommendations:

Educate athletes regarding the risks of dehydration and overhydration on health and physical performance. Work with individual athletes to develop fluid-replacement strategies that optimize hydration status before, during, and after competition.

Effects of Dehydration

Dehydration can affect an athlete's performance in less than an hour of exercise - sooner if the athlete begins the session dehydrated.

Dehydration of just 1%–2% of body weight (only 1.5–3 lbs for a 150 lb. athlete) can negatively influence performance.

Dehydration of greater than 3% of body weight increases an athlete's risk of heat illness (heat cramps, heat exhaustion, heat stroke).

Warning Signs of Dehydration

Recognize the basic signs of dehydration:

- ♦ Thirst
- ♦ Irritability
- ♦ Headache
- ♦ Weakness
- ♦ Dizziness
- ♦ Cramps
- ♦ Nausea
- ♦ Decrease performance

What to Drink during Exercise

Athletes benefit in many situations from drinking a sports drink containing carbohydrate.

If exercise lasts more than 45–50 minutes or is intense, a sports drink should be provided during the session.

The carbohydrate concentration in the ideal fluid replacement solution should be in the range of 6%–8%.

During events when a high rate of fluid intake is necessary to sustain hydration, sports drinks with less than 7% carbohydrate should be used to optimize fluid delivery.

Cool beverages at temperatures of 50–90 degrees Fahrenheit are recommended.

What NOT to Drink During Exercise

Fruit juices, carbohydrate gels, sodas, and those sports drinks that have carbohydrate levels greater than 8% are not recommended during exercise as the sole beverage.

Beverages containing caffeine, alcohol, and carbonation are discouraged during activity because they can dehydrate the body by stimulating excess urine production, or decreased voluntary fluid intake.

Hydration Tips

Drink according to a schedule based on individual fluid needs. By the time you become thirsty, you are already dehydrated.

Drink before, during, and after practices and games (follow the fluid guidelines listed below to maintain hydration and maximize performance).

Avoid soft drinks and juice during play. The high carbs may cause stomach problems.

Fluid Guidelines

Before Exercise

- ♦ 2–3 hours before exercise, drink 17–20 oz of water or a sports drink.
- ♦ 10–20 minutes before exercise, drink another 7–10 oz of water or a sports drink.

During Exercise

- ♦ Drink Early–Even minimal dehydration compromises performance.
- ♦ In general, every 10–20 minutes, drink at least 7–10 oz of water or a sports drink.
- ♦ To maintain hydration, remember to drink beyond your thirst. Optimally, drink fluids based on amount of sweat and urine loss.

After Exercise

- ♦ Within two hours, drink enough to replace any weight loss from exercise. Drink approximately 20–24 oz of a sports drink per pound of weight loss.

INJURY PREVENTION

PRE-PARTICIPATION PHYSICAL EXAM

***Every athlete of freshman and junior status is required to have a physical examination by a physician prior to the start of the season.*

- ♦ It is recommended that the exam should be accomplished six weeks prior to the start of the season. This would allow time to address any physical limitations that the physician feels would limit performance.
- ♦ The physical examination will include: vital signs, height, weight, eyes, ears, nose, throat and identify previous injuries as well as predisposing conditions such as lack of strength/muscle imbalance, flexibility, and joint laxity.
- ♦ The physician will perform a complete medical history that identifies allergies, family history, medications, surgeries, and major illnesses. It is important that coaches are aware of allergies and current medications of all athletes.

STRENGTH

It is important for athletes to maintain a strength training program pre-season, in-season, and post-season which should include core strengthening (abdominals, hips, and back) and sports-specific strengthening exercises.

- ♦ Insufficient strength or muscle imbalance can make an athlete more susceptible to tears, strains, tendonitis, or ligament injury.
- ♦ For more information on sports-specific strength training, contact your Certified Athletic Trainer.

PROPER WARM-UP

It is important for every athlete to aerobically warm-up prior to practice, competition, or workout to prevent injury.

- ♦ Jog, bike, roller blade, etc. for at least five minutes to increase elasticity of the muscles and increase blood flow throughout the body.
- ♦ Follow immediately by static stretches to large muscle groups (e.g. hamstrings, quads, calves, shoulder, back) for at least 20 seconds x 2.

TERRAIN

It is important to be aware of the type of terrain athletes are training on in order to prevent injuries. There has been an ongoing debate over the advantages and disadvantages of artificial surfaces as compared with natural surfaces (3). However, most people in sports agree that more injuries are likely to occur on artificial surfaces due to their loss of shock absorption. The following can cause overuse injuries:

- ♦ Repetitively running on hills, stairs, same side of road, same direction on track
- ♦ Surfaces without shock absorption such as pavement, floors, or hard packed ground
- ♦ Uneven surfaces/holes in playing surfaces

FOOTWEAR

Footwear could mean the difference between success, failure, or injury during sports activities. The two types of footwear to consider are socks and shoes. Poorly fitted socks can cause abnormal stresses on the foot and even more damaging are improperly fitted shoes.

- ♦ All athletic socks should be clean, dry, and without holes
- ♦ Socks that are the wrong size can cause blisters or calluses.
- ♦ Improperly fitted shoes cause abnormal pressures on the foot which can lead to postural imbalances, predisposed injuries to the leg and foot, and are known to create hip and low back pain.
- ♦ Athletic shoes should be replaced annually to prevent injuries due to worn out shoes.

- ◆ Athletes with abnormal (high or flat) arches should ensure that their footwear adequately supports their arch. These athletes may benefit from an over-the-counter arch support or referral to a podiatrist.
- ◆ To ensure that you are buying the proper size shoe, make sure that the eyelets are about one inch apart when the shoe is tied. When the distance is greater than that, the shoe is too small. When the distance is less than that, the shoe is too big.
- ◆ Only wear shoes that are manufactured for that particular sport.

OVERUSE INJURY

Overuse injuries are caused by abnormal and repetitive stress on the body. By specifically training the major muscle groups used in each sport, you can decrease the likelihood of overuse injuries.

- ◆ Most of these injuries in athletes occur when throwing, running, and/or jumping
- ◆ Common overuse injuries in athletes include: shin splints, Achilles tendonitis, Osgood-Schlatter disease, stress fracture, rotator cuff tendonitis, patellar tendonitis.
- ◆ If an athlete sustains an overuse injury, a pain-free alternative training method should be implemented until the injury resolves (e.g. pool or bike).
- ◆ It is necessary for athletes to use good technique (e.g. throwing, tackling, serving, blocking, kicking) to optimize performance and prevent injury.
- ◆ Consult books or local sports medicine facility for information on proper techniques for each sport.

WHEN TO CALL THE DOCTOR

If the following injuries are present, stop activity until a physician sees you:

- ◆ Unable to move a body part
- ◆ Constant tingling, numbness, or weakness

- ♦ Lacerations and deep/dirty cuts
- ♦ Deformity (suspect possible fracture or dislocation)
- ♦ Severe abdominal pain or pain to the shoulders
- ♦ Blood in urine
- ♦ Any head or neck injury

If the athlete is caring for themselves (such as ice or heat) for several days, see a physician when:

- ♦ Pain has not decreased
- ♦ Motion or strength had decreased
- ♦ There is no change in swelling with the use of ice/heat and elevation
- ♦ The joint feels loose or unstable

GENERAL GUIDELINES FOR RETURN TO PLAY

In the absence of a Certified Athletic Trainer or physician, these guidelines should be used to determine whether an athlete can return to play:

- ♦ No tenderness
- ♦ No swelling or discoloration
- ♦ Can perform a full range of motion compared to the uninvolved side
- ♦ Exhibits 90% strength compared to the uninvolved side
- ♦ Lower extremity injuries—able to run/jump without pain or limp
- ♦ Upper extremity injuries—able to perform a full swing/throw without pain

PROTECTIVE EQUIPMENT

HELMETS

Both baseball and football helmets should carry a current NOCSAE certification sticker. Helmet fitting should follow manufacturer guidelines along with these general guidelines.

Football

- ♦ Helmet should cover the base of the skull.
- ♦ Helmet should not come down over the player's eyes
- ♦ Helmet should not shift when manual pressure is applied.
- ♦ Helmet should not recoil on impact.
- ♦ Helmet ear cutouts should line up with player's ears.
- ♦ The front edge of the helmet should sit 3/4 inch above the player's eyebrows.
- ♦ The chinstrap should be positioned equal distance from the center of the helmet.
- ♦ Cheek/jaw pads should fit snugly against athlete's cheekbones to prevent the helmet from rocking laterally.
- ♦ Face guard should not have less than two bars; should be 3 inches (7.62 cm) space between the top of the face guard and the lower edge of the helmet; should be a space of 1 to 1 1/2 inches (3.81 cm) between the player's nose and the face guard.

MOUTH GUARDS

A properly fitted mouth guard protects the teeth, absorbs blows to the chin, and can prevent concussions. They also service to prevent lacerations to the lips and cheeks and fractures to the mandible.

- ♦ Mouth guards should have the proper tight fit, comfort, unrestricted breathing, and athletes should have no problems with speech during competition.

- ♦ The best fit is when the mouthpiece is retained on the upper jaw and projects backward only as far as the last molar.
- ♦ Cutting down the mouth guard to only cover the front four teeth should never be permitted. This invalidates the manufacturer's warranty against dental injuries, and a cut-down mouth guard can easily become dislodged and lead to an obstructed airway, which could be life threatening.

EYE PROTECTION

For athletes who must wear corrective lenses, glasses can be both a blessing and a nuisance. The highest percentage of eye injuries is related to sports or play and occurs from blunt trauma. Make sure that athletes wear sports-specific protective devices.

- ♦ If the athlete has glass lenses, they must be case-hardened to prevent them from splintering on impact. (These glasses are a little heavier and may be scratched more easily than regular glasses.)
- ♦ Plastic lenses for glasses are becoming more popular. They are much lighter in weight than glass lenses; however, are prone to scratching.
- ♦ Contact lenses: Make sure you know which athletes wear contact lenses because if they sustain an eye injury, they would need to remove the lens immediately before the eye begins to swell.

FOOTBALL SHOULDER PADS

There are two general types of pads: flat and cantilevered. The athlete who uses the shoulder a great deal in blocking and tackling requires the bulkier cantilevered type as compared with the quarterback or receiver who would use the flat type. Rules for fitting the football shoulder pad:

- ♦ The width of the shoulder is measured to determine the proper size of pad.

- ♦ The inside shoulder pad should cover the tip of the shoulder in a direct line with the lateral aspect of the shoulder.
- ♦ The epaulets and cups should cover the deltoid muscle and allow movement required by the athlete's specific position.
- ♦ The neck opening must allow the athlete to raise the arm overhead but not allow the pad to slide back and forth.
- ♦ If a split-clavicle shoulder pad is used, the channel for the tip of the shoulder must be in the proper position.
- ♦ Straps underneath the arm must hold the pads firmly in place, but not so they constrict soft tissue. A collar and drop-down pads may be added to provide additional protection.

BREAST SUPPORT

Until recently the primary concern for female breast protection had been against external forces that could cause bruising. With the vast increase in the number of female athletes, concern has been redirected to protecting the breasts against movement that stems from running and jumping. A bra should hold the breasts to the chest and prevent stretching of the Cooper's ligament, which causes premature sagging. Sports bras fall into three categories:

- ♦ Bras with good upward support with elastic material have wide bands under the breasts with wide shoulder straps that are attached close to the hooks in the back.
- ♦ Compressive bras function like wide elastic bandages, binding the breasts to the chest wall.
- ♦ An effective bra should hold the breasts to the chest and prevent stretching of the Cooper's ligament, which causes premature sagging. Metal parts rub and abrade the skin.

GUIDELINES FOR BLOOD BORNE PATHOGENS IN SPORTS

It is essential that every institution and sports program develop and carry out a blood borne pathogen exposure control plan which should include counseling, education, volunteer testing, and the management of bodily fluids. For guidance on policies and procedures, check with Occupational Safety and Health Administration (OSHA), National Collegiate Athletic Association (NCAA), and/or Wisconsin Interscholastic Athletic Association (WIAA).

THE ATHLETE

Before an athlete participates in practice or competition, all open skin wounds and lesions must be covered with a dressing that is fixed in place and does not allow for transmission to or from an athlete. An occlusive dressing or a simple Band-Aid with tape to secure it will lessen the chance of cross-contamination. It is also highly recommended that all athletes shower immediately after practice or game to reduce transmission. The risk of an athlete being exposed to blood borne pathogens on the field is minimal. It is the off-field activities involving risky sexual behaviors that increase the risk for transmission.

TRANSMISSION

Open wounds or skin lesions are to be considered a risk for disease transmission and should be treated aggressively with soap and water, hydrogen peroxide, etc. as a preventative measure. An athlete who is bleeding during a practice or competition should be immediately removed from play and returned after the appropriate treatment is completed. If the uniform is soaked with blood, it must be removed and replaced with a clean uniform before returning to play. All personnel who are exposed to blood or other bodily fluid must follow standard precautions.

PERSONAL PROTECTIVE EQUIPMENT (PPE) & PRECAUTIONS & DISINFECTANTS

The following PPE should be available for practice and competition:

1. Disposable latex gloves
2. Gowns or aprons
3. Masks and shields
4. Eye protection
5. Disposable mouthpiece for resuscitation devices or personal device
6. Towelettes for cleaning surfaces
7. Anti-germicidal agents for disinfecting hands after exposure
8. Biohazard bags for soiled equipment/bandages

All contaminated surfaces must be cleaned immediately after an injury with a solution consisting of one part bleach to ten parts water (1:10) or a disinfectant approved by the Environmental Protection Agency.

Follow these guidelines to remove contaminated latex/vinyl gloves:

1. Avoid touching anything on you or surrounding surfaces
2. Remove the first glove by turning it inside out beginning at your wrist without touching your skin.
3. Remove the second glove making sure not to touch ungloved hand with soiled glove.
4. Discard gloves in proper receptacle.
5. Wash hands immediately after glove removal.

REHABILITATION AND SPORTS MEDICINE CLINICS

REHABILITATION AND SPORTS MEDICINE

1684 Hwy. 26
Watertown, WI 53094

WATERTOWN MEDICAL OFFICE BUILDING

123 Hospital Drive, Suite 1009
Watertown, WI 53098

JUNEAU CLINIC

334 S. Western Avenue
Juneau, WI 53039

LAKE MILLS CLINIC

1025 Mulberry Street
Lake Mills, WI 53551

WATERLOO CLINIC

105 Highland Terrace
Waterloo, WI 53594

*To schedule an appointment
at any of our locations, call (920) 262-4220*

UW **Health Partners**

**Watertown Regional
Medical Center**

125 Hospital Drive, Watertown WI 53098
(920) 262-4220
uwhpwatertown.com