

Saint Bonaventure University Sports Medicine

Emergency Action Plan Handbook



2006-2007

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SAINT BONAVENTURE UNIVERSITY SPORTS MEDICINE EMERGENCY ACTION PLAN OUTLINE

Roles within the Emergency Team

1. Establish scene safety and immediate care of the athlete
2. Activation of the Emergency Medical System
3. Emergency equipment retrieval
4. Direction of EMS to scene

Activating the EMS System

Making the Call:

- Call campus security at 375-2525 and inform them to call EMS

Providing Information:

- Name and location of caller
- Nature of emergency, whether medical or non-medical
- Number of athletes
- Condition of athlete(s)
- First aid treatment initiated by certified athletic trainer or first responder
- Specific directions as needed to locate the emergency scene
- Other information as requested by dispatcher

Emergency Action Plan: McGraw-Jennings Field

(Baseball, Softball, Soccer, Lacrosse Venues)

In-Season Athletics:

Emergency Personnel: SBU certified athletic trainer and student athletic trainer(s) on site for practice and competition; additional sports medicine staff may be accessible from Reilly Center athletic training facility.

Emergency Communication: SBU certified athletic trainer carries portable radio in contact with campus security; additional fixed telephone lines accessible from the Reilly Center athletic training facility.

Emergency Equipment: Supplies maintained by certified athletic trainer on home bench during competitions; additional emergency equipment (AED, splint kit, spine board, bag valve mask, oxygen) accessible from Reilly Center athletic training facility.

Roles of First Responders

1. Immediate care of the injured or ill student-athlete
 - a. Evaluate the athlete on the field or bench area
 - b. Determine the seriousness of the injury
 - c. In a severe injury (lack of breathing, severe bleeding, shock, head or neck injury) apply the proper First Aid and send for medical assistance immediately
 - d. Do not attempt to load or transport the athlete until medical assistance arrives
2. Activation of emergency medical system (EMS)

Call campus security at x2525 (provide name and location; number of individuals injured; condition of injured; first aid treatment; specific directions; other information as requested) MERT and security personnel will be dispatched to scene. If necessary, an ambulance will be dispatched.
3. Emergency equipment retrieval
4. Campus security directs EMS to scene
 - a. Open appropriate gates
 - b. Designate individual to “flag down” EMS and direct to scene
 - c. Scene control: limit scene to first aid providers and move bystanders away from area

Non-Traditional Athletic Season:

Emergency Personnel: Sports medicine staff may be accessible from Reilly Center athletic training facility. *In the event that a certified athletic trainer is not available, the **coach** will assume the role of first responder and initiate EMS.*

Emergency Communication: Fixed telephone lines accessible from the Reilly Center athletic training facility.

Emergency Equipment: Emergency supplies and equipment (AED, splint kit, spine board, bag valve mask, oxygen) accessible from Reilly Center athletic training facility.

Roles of First Responders

1. Immediate care of the injured or ill student-athlete
 - a. In a severe injury (lack of breathing, severe bleeding, shock, head or neck injury) apply the proper First Aid and send for medical assistance immediately
Do not attempt to load or transport the athlete until medical assistance arrives
2. Activation of emergency medical system (EMS)
 - a. Call campus security at x2525 (provide name and location; number of individuals injured; condition of injured; first aid treatment; specific directions; other information as requested)
 - b. Notify staff athletic trainer in Reilly Center athletic training facility
3. Emergency equipment retrieval from Reilly Center athletic training facility
4. Campus security directs EMS to scene
 - a. Open appropriate gates
 - b. Designate individual to “flag down” EMS and direct to scene
 - c. Scene control: limit scene to first aid providers and move bystanders away from area

Emergency Action Plan: The Reilly Center

(Gym, Pool, Varsity Weight Room Venues)

In-Season Athletics:

Emergency Personnel: SBU certified athletic trainer and student athletic trainer(s) on site for practice and competition; additional sports medicine staff may be accessible from Reilly Center athletic training facility. An ambulance and EMT are present for all men's and women's basketball games.

Emergency Communication: SBU certified athletic trainer carries portable radio in contact with campus security; fixed telephone lines accessible from the Reilly Center athletic training facility.

Emergency Equipment: Supplies are maintained by certified athletic trainer on home bench during competitions; additional emergency equipment (AED, splint kit, spine board, bag valve mask, oxygen) accessible from Reilly Center athletic training facility.

Roles of First Responders

1. Immediate care of the injured or ill student-athlete*
 - a. Evaluate the athlete on the field or bench area
 - b. Determine the seriousness of the injury
 - c. In a severe injury (lack of breathing, severe bleeding, shock, head or neck injury) apply the proper First Aid and send for medical assistance immediately
 - d. Do not attempt to load or transport the athlete until medical assistance arrives
 - e. * In the event that a spectator requires medical assistance during a basketball game, the EMT on site will attend to the individual and control the situation.
2. Activation of emergency medical system (EMS)
 - a. Call campus security at x2525 (provide name and location; number of individuals injured; condition of injured; first aid treatment; specific directions; other information as requested)
3. Emergency equipment retrieval
4. Campus security directs EMS to scene
 - a. Open appropriate gates
 - b. Designate individual to "flag down" EMS and direct to scene
 - c. Scene control: limit scene to first aid providers and remove bystanders from area

Non-Traditional Athletic Season:

Emergency Personnel: Sports medicine staff may be accessible from Reilly Center athletic training facility. *In the event that a certified athletic trainer is not available, the coach will assume the role of first responder and initiate EMS.*

Emergency Communication: Fixed telephone lines accessible from the Reilly Center athletic training facility.

Emergency Equipment: Emergency supplies and equipment (AED, splint kit, spine board, bag valve mask, oxygen) accessible from Reilly Center athletic training facility.

Roles of First Responders

1. Immediate care of the injured or ill student-athlete
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SBU Catastrophic Injury Plan

St. Bonaventure University defines a catastrophic injury as:

1. The sudden death of a student athlete, coach or staff member at any time (i.e. accidents, illnesses)
2. Disabling and/or quality of life altering injuries such as spinal cord paralysis or loss of a paired organ

In the event of a catastrophic injury the Catastrophic Incident Management Team, named below, will receive all facts and disseminate all information to senior administrators, family members, the team and media. *No other person (e.g. coaches, teammates, staff) is to speak publicly about the incident.*

The Catastrophic Incident Management Team (CIMT) consists of:

Ron Zwierlein Athletic Director
Steve Campbell: Associate Director of Athletics (Internal);
Athletic Administrator Point Person
TBD: University Public Relations
Steve Mest: Director of Athletic Communications
Renee Kleszczynski: Head Athletic Trainer

In the event of a catastrophic injury defined above the following action plan will be initiated:

- Staff member (e.g. athletic trainer, coach) on the scene of the catastrophic injury will:
 - Call 911. Athlete will be transported to Olean General Hospital.
 - Notify Steve Campbell and/or Renee Kleszczynski
 - The member of the CIMT will, in turn, contact the rest of the team
 - If the injury occurs *away from home* then the athletic trainer, or member of the coaching staff if an athletic trainer is not available, will stay with the athlete at the hospital to coordinate communication and act as a university representative until relieved by the university
- **Renee Kleszczynski** will:
 - Contact Dr. Pierre Dionne: University Physician
 - Dr. Dionne will work with medical specialists assisting athlete
- **Ron Zwierlein** will contact:
 - University President
 - George Solan: VP of Student Life
 - Roger Keener: Director of Counseling

- **Steve Campbell** (Athletic Administrator point person) will:
 - Contact/update athletic staff if not yet familiar with situation
 - Contact family by appropriate individual (assist as needed)
 - Meet with athletes to discuss situation
 - No outside discussion of meeting with media

- **Steve Mest** and/or a Member from University Relations will:
 - Develop coordinated media plan
 - No contact with media/comments from athletic training staff, hospital staff or medical personnel except through SID
 - Establish hospital contact person
 - Steve: Secure game film

In addition, the CIMT will complete the following:

- Contact catastrophic/malpractice insurance providers
 - NCAA: American Specialty Insurance, Inc. 800-245-2744
- Complete documentation of events from everyone involved in incident with signatures
- Collect and secure all equipment/materials involved
- Construct detailed time line of events related to the incident. The chronology is used to critique the process and provides a basis for review of procedures.
- Involve appropriate counseling/ministerial personnel
- Assign athletic staff member to be with family at all times upon arrival; assist family as needed; protect from outside persons
- Critical incident stress debriefing/counseling as necessary for individuals involved in incident

St. Bonaventure University Sports Medicine

Head Injury Protocol

Timetable for Return to Competition After Concussion*:

Concussion Severity	First Concussion	Second Concussion	Third Concussion
1°	Return to activity after 10-30 minutes if asymptomatic	Return in 1 week if asymptomatic	Return in 1 week if asymptomatic Must be cleared by specialist
2°	Return to activity in 1 week if asymptomatic Must be cleared by specialist if some posttraumatic amnesia remains for \leq 1 hour	Return in 2 weeks if asymptomatic after 1 week Must be cleared by specialist	No contact, collision, or high-risk activity for 3-6 months Must be cleared by specialist
3°	Return to activity in 1 week if asymptomatic Must be cleared by specialist if some posttraumatic amnesia remains for \leq 1 hour	Return in 1 month if asymptomatic for final week Must be cleared by specialist	No contact, collision, or high-risk activity for 3-6 months Must be cleared by specialist
4°	Return to activity in 1 month if asymptomatic for final week Must be cleared by specialist	No contact, collision, or high-risk activity for 3-6 months Must be cleared by specialist	No contact, collision, or high-risk activity for 3-6 months Must be cleared by specialist
5°	Return to activity in 1-2 months if asymptomatic for final week Must be cleared by specialist	No contact, collision, or high-risk activity for 3-6 months Must be cleared by specialist	No contact, collision, or high-risk activity for 6-12 months Must be cleared by specialist

* Data from Cantu, R.C. (1986). Guidelines for return to contact sports after cerebral concussion. Phys. Sportsmed. 14: 75-83.

Saint Bonaventure University Sports Medicine Exertional Heat Illness Policies and Procedures*

The recognition and treatment of several exertional heat illnesses including exercise-associated muscle cramps, heat syncope, heat exhaustion, exertional heat stroke, and exertional hyponatremia will be as follows:

Exercise-associated muscle (heat) cramps:

- An athlete showing signs and symptoms including dehydration, thirst, sweating, transient muscle cramps, and fatigue is likely experiencing exercise-associated muscle cramps.
- To relieve muscle spasms, the athlete should stop activity, replace lost fluids with sodium-containing fluids, and begin mild stretching with massage of the muscle spasm.
- Fluid absorption is enhanced with sports drinks that contain sodium. A high-sodium sports product may be added to the rehydration beverage to prevent or relieve cramping in athletes who lose large amounts of sodium in their sweat. A simple salted fluid consists of two 10-grain salt tablets dissolved in 1 L (34 oz) of water. Intravenous fluids may be required if nausea or vomiting limits oral fluid intake; these must be ordered by a physician.
- A recumbent position may allow more rapid redistribution of blood flow cramping leg muscles.

Heat syncope:

- If an athlete experiences a brief episode of fainting associated with dizziness, tunnel vision, pale or sweaty skin, and a decreased pulse rate but has a normal rectal temperature (for exercise, 36C to 40C [97F to 104F]), then heat syncope is most likely the cause.
- Move the athlete to a shaded area, monitor vital signs, elevate the legs above the level of the head, and rehydrate.

Exercise (heat) exhaustion:

- Cognitive changes are usually minimal, but assess central nervous system function for bizarre behavior, hallucinations, altered mental status, confusion, disorientation, or coma to rule out more serious conditions.
- If feasible, measure body-core temperature (rectal temperature) and assess cognitive function and vital signs. Rectal temperature is the most accurate method possible in the field to monitor body-core temperature. The ATC should not rely on the oral, tympanic, or axillary temperature for athletes because these are inaccurate and ineffective measures of body-core temperature during and after exercise.

- If the athlete's temperature is elevated, remove his or her excess clothing to increase the evaporative surface and to facilitate cooling.
- Cool the athlete with fans, 94 ice towels, or ice bags because these may help the athlete with a temperature of more than 38.8C (102F) to feel better faster.
- Remove the athlete to a cool or shaded environment if possible.
- Start fluid replacement.
- Transfer care to a physician if intravenous fluids are needed or if recovery is not rapid and uneventful.

Exertional heat stroke:

- Measure the rectal temperature if feasible to differentiate between heat exhaustion and heat stroke. With heat stroke, rectal temperature is elevated (generally higher than 40C [104F]).
- Assess cognitive function, which is markedly altered in exertional heat stroke.
- Lower the body-core temperature as quickly as possible. The fastest way to decrease body temperature is to remove clothes and equipment and immerse the body (trunk and extremities) into a pool or tub of cold water (approximately 1C to 15C [35F to 59F]). Aggressive cooling is the most critical factor in the treatment of exertional heat stroke. Circulation of the tub water may enhance cooling.
- Monitor the temperature during the cooling therapy and recovery (every 5 to 10 minutes). Once the athlete's rectal temperature reaches approximately 38.3C to 38.9C (101F to 102F), he or she should be removed from the pool or tub to avoid overcooling.
- If a physician is present to manage the athlete's medical care on site, then initial transportation to a medical facility may not be necessary so immersion can continue uninterrupted. If a physician is not present, aggressive first-aid cooling should be initiated on site and continued during emergency medical system transport and at the hospital until the athlete is normothermic.
- Activate the emergency medical system.
- Monitor the athlete's vital signs and other signs and symptoms of heat stroke.
- During transport and when immersion is not feasible, other methods can be used to reduce body temperature: removing the clothing; sponging down the athlete with cool water and applying cold towels; applying ice bags to as much of the body as possible, especially the major vessels in the armpit, groin, and neck; providing shade; and fanning the body with air.
- In addition to cooling therapies, first-aid emergency procedures for heat stroke may include airway management. Also a physician may decide to begin intravenous fluid replacement.
- Monitor for organ-system complications for at least 24 hours.

Exertional hyponatremia:

- Attempt to differentiate between hyponatremia and heat exhaustion. Hyponatremia is characterized by increasing headache, significant mental compromise, altered consciousness, seizures, lethargy, and swelling in the extremities. The athlete may be dehydrated, normally hydrated, or overhydrated.
- Attempt to differentiate between hyponatremia and heat stroke. In hyponatremia, hypothermia is likely to be less (rectal temperature less than 40C [104F]). The plasmasodium level is less than 130 mEq/L and can be measured with a sodium analyzer on site if the device is available.
- If hyponatremia is suspected, immediate transfer to an emergency medical center via the emergency medical system is indicated. An intravenous line should be placed to administer medication as needed to increase sodium levels, induce diuresis, and control seizures.
- An athlete with suspected hyponatremia should not be administered fluids until a physician is consulted.

Return to activity:

- In cases of exercise-associated muscle (heat) cramps or heat syncope, the ATC should discuss the athlete's case with the supervising physician. The cases of athletes with heat exhaustion who were not transferred to the physician's care should also be discussed with the physician. After exertional heat stroke or exertional hyponatremia, a physician must clear the athlete before returning to athletic participation. The return to full activity should be gradual and monitored.

* Adapted from National Athletic Trainers' Association Position Statement on Exertional Heat Illness

Saint Bonaventure University Sports Medicine LIGHTNING/INCLEMENT WEATHER SAFETY POLICY

Saint Bonaventure University follows the recommended NATA guidelines, which have been endorsed by the Atlantic 10 Conference. It is the responsibility of the Staff Athletic Trainer to obtain a weather report prior to each activity or contest. The Staff Athletic Trainer will actively look for signs of threatening weather and notify the Head Official or Head Coach if severe weather becomes dangerous.

Protocol:

The Head Official, in consultation with the Staff Athletic Trainer and Head Coach, will make any decisions to delay the start, interrupt the contest, or in extreme cases, cancel the contest due to weather safety issues. The Staff Athletic Trainer will make any decisions during all other activities (i.e. team practice).

Lightning:

Lightning awareness should be increased with the first flash of lightning or the first clap of thunder, no matter how far away. When the flash-to-bang count* approaches thirty seconds, all individuals will leave McGraw-Jennings Field and go directly into the Reilly Center. Everyone will wait at least thirty minutes after the last flash of lightning or sound of thunder before returning to the field or activity.

Observe the following basic first aid procedures in managing victims of 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

* 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.

Saint Bonaventure University Sports Medicine Automated External Defibrillator Policies and Procedures

Medical Necessity for Use of AED

Defibrillation is a recognized means of terminating certain potentially fatal arrhythmias during a cardiac arrest. A direct current defibrillator applies a brief, high-energy pulse of electricity to the heart muscle. Automated external defibrillators, or AED's, were introduced in 1979. AED's accurately analyze cardiac rhythms and, if appropriate, advise/deliver an electric counter shock. AED's are currently widely used by trained emergency personnel and have become an essential link in the "chain of survival" as defined by the American Heart Association:

- Early access
- Early CPR by first responders or bystanders
- Early defibrillation
- Early advanced life support

It is recognized that successful resuscitation is related to the length of time between the onset of a heart rhythm that does not circulate blood (ventricular fibrillation, pulseless ventricular tachycardia) and defibrillation. The AHA states with every minute it takes to respond, the chance for successful defibrillation decreases 7-10%. The provision of timely emergency attention saves lives. Athletic events (both practice and competition) present a high risk for cardiopulmonary emergencies. Therefore, by training certified athletic trainers and team physicians in the use of AED's, the emergency response time is shortened.

Explanation of the Use of AED

Automated external defibrillator, or AED, means a defibrillator which:

- Is capable of cardiac rhythm analysis
- Will charge and deliver a countershock after electrically detecting the presence of cardiac dysrhythmias
- Is capable of continuous recording of the cardiac dysrhythmia at the scene
- Is capable of producing a hard copy of the electrocardiogram.

Defibrillation is only one aspect of the medical care required to resuscitate a patient with a shockable ECG rhythm. Dependent on the situation, other supportive measures may include:

- Cardiopulmonary resuscitation (CPR)

- Administration of supplemental oxygen
- Drug therapy

MEDICAL ADVISOR: Dr. Storch, Cardiologist, Olean Medical Group 535 Main Street, Olean, NY 14760, 716-376-2237

The Medical Advisor is responsible for:

- Providing medical direction for use of AED's
- Writing a prescription for AED's
- Reviewing and approving guidelines for emergency procedures related to use of AED's and CPR
- Evaluation of post-event review forms and digital files downloaded from the AED

AED COORDINATOR for the Department of Athletics: Renee Kleszczyński, MA, ATC Head Athletic Trainer

- Oversee the medical emergency response team (Athletics)
- Coordinate training for emergency responders
- Coordinate with Security and local EMS the response protocol
- Coordinate the equipment and accessory maintenance
- Coordinate post event documentation & review
- Coordinate Monthly and Annual system checks
- Revision of the policy as required
- Serves as a liaison to the Medical Advisor

MEDICAL RESPONSE TEAM: St. Bonaventure Department of Athletics

- Certified Athletic Trainers: Renee Kleszczyński, Head Athletic Trainer, Kevin Blasczynski, Tom Monagan Assistant Athletic Trainer's.
- Activate the Department of Athletics emergency response system during medical emergencies
- Provide emergency First Aid, CPR, and application of AED's to victims of sudden cardiac arrest
- Understand and comply with the requirements of this policy

TRAINING REQUIRMENTS:

Any Certified Athletic Trainer or coach who is expected to provide emergency care to a patient of sudden cardiac arrest or other medical emergency, will be trained in basic First Aid, CPR and AED use. The training will conform to the standards of the American Heart Association. Training will also include information on observing "Universal Precautions" against bloodborne pathogens when treating sudden cardiac and/or accident victims. The AED Coordinator will maintain all training records. Training is required every year.

Operator Considerations

The Saint Bonaventure University sports medicine program utilizes the LIFEPACK CR Plus Defibrillator. The LIFEPACK CR Plus Defibrillator is a semi-automatic defibrillator that uses a patented Shock Advisory System. This software algorithm analyzes the patient's electrocardiograph (ECG) rhythm and indicates whether or not it detects a shockable rhythm. The LIFEPACK CR Plus Defibrillator requires operator interaction in order to defibrillate the patient. The LIFEPACK CR Plus Defibrillator is intended for use by personnel (certified athletic trainers, student athletic trainers, coaches, and team physicians) who are authorized by the physician/medical director (Dr. Storch) and have, at a minimum, the following skills and training:

- First Aid, CPR and AED training recommended by the American Heart Association
- Training in the use of the LIFEPACK CR Plus Defibrillator

Procedures for Training and Testing in Use of AED

Personnel using the AED must complete a training session each year, to include instruction in:

- The proper use, maintenance, and periodic inspection of the AED
- Defibrillator safety precautions to enable the user to administer a shock without jeopardizing the safety of the patient, the user, or other individuals
- Assessment of an unconscious person to determine if cardiac arrest has occurred and the appropriateness of applying an AED
- Recognizing that an electrical shock has been delivered to the patient and that the defibrillator is no longer charged
- Rapid, accurate assessment of the patient's post-shock status to determine if further activation of the AED is necessary
- The operations of the local emergency medical services system, including methods of access to the emergency response system, and interaction with emergency medical services personnel
- The role of the user and coordination with other emergency medical service providers in the provision of CPR, defibrillation, basic life support, and advanced life support
- The responsibility of the user to continue care until the arrival of medically qualified personnel

Written Medical Protocol Regarding Use of AED

Use of the AED will follow the American Heart Association AED guidelines. The AED is to be used only on patients in cardiopulmonary arrest.

NOTE: If AED is not immediately available, perform CPR until AED arrives on the scene.

- Asses scene for safety
- Determine unresponsiveness
- Call Security 375-2525 or by radio
- Have AED brought to the scene
- Open Airway
- Check for breathing – if not breathing give 2 breaths
- Check for signs of circulation, such as pulse and coughing, or movement
- If no signs of circulation, apply AED immediately
- Turn ON AED – follow notice prompts
- Apply electrodes (according to diagram on back of electrodes) to victim's bare chest. Shave chest hair if is so excessive to prevents a good seal between e lectrodes and skin. Press pads on skin.
- * Stand clear of victim while machine analyzes rhythm

SHOCK ADVISED

- Clear area, making sure no one is touching the victim. Push SHOCK button when instructed. Device will analyze and shock up to three times. After three shocks device will prompt to check pulse (or for breathing and movement) and if absent, start CPR. If pulse and/or signs of circulation such as normal breathing and movements are absent, perform CPR for one minute. Device will countdown one minute of CPR and will analyze when CPR time is over.

NO SHOCK ADVISED

- Device will prompt to check pulse (or for breathing and movement) and if absent, start CPR. If pulse and/or signs of circulation such as normal breathing and movement are absent, perform CPR for one minute. If pulse/signs of circulation such as breathing and movement are present, check for normal breathing. If victim is not breathing normally, give rescue breaths at a rate of 12 per minute. AED will re-analyze after one minute.
- Continue cycles of analyses, shocks (if advised) and CPR until professional help arrives, Victim must be transported to hospital. Leave AED attached to victim until EMS arrives and disconnects AED.
- AED data will be downloaded with 24 hours with copies sent to Dr. Starch.
- After use: The will be serviced, electrodes will be replaces and reconnected to device and contents of attached resuscitation kit will be replace if used.

Medical Control Reporting and Incident Review

The LIFEPACK CR Plus Defibrillator AED digitally records patient data, including ECG rhythm and delivered shocks. Recorded data may be transferred by direct connection to a printer or computer or by modem to a remote computer.

Following an incident of application, the data will be downloaded from the AED and reviewed by both the medical director and the attending physician(s) at the emergency facility where emergency care was provided. In addition, a report detailing the emergency scene and treatment will be documented in writing, by the first responder and the AED Medical Director. This will be forwarded to the Medical Advisor and to New York State Western Regional Emergency Medical System, Inc.

The Medical Response Team shall conduct an incident debriefing to determine any deficient practices and opportunities for improvement. All depleted AED supplies must be restocked, and the AED checked for damage. The AED battery must be checked prior to returning to service.

Location of and Maintenance Required for AED's

The St. Bonaventure University Department of Athletics has two (2) LIFEPACK CR Plus Defibrillator AED units. They are housed in the Sports Medicine Department located in the basement of the Reilly Center.

- (1) LIFEPACK CR Plus AED will be located on the wall in the Sports Medicine facility
- (1) LIFEPACK CR Plus AED will be located with the Certified Athletic Trainer at all times for outdoor events.

Based upon the sports covered, the AED units may either be maintained in the athletic training facility or carried on-site to the athletic venue. The medical staff will determine the location and use of the AED units at the athletic venues.

The LIFEPACK CR Plus Defibrillator AED performs an automatic self-test every 24 hours. If service is required, the AED activates an alarm. The non-rechargeable lithium batteries have a five-year life. If batteries require replacement, the AED activates an alarm. Personnel using the AED on a regular basis and after each time the AED is used should inspect and clean the AED and check to make sure that all necessary supplies and accessories are readily available. This will be recorded monthly.

Universal Precautions

Blood-borne pathogens are disease-causing microorganisms that can be potentially transmitted through blood contact. The blood-borne pathogens in concern are hepatitis B virus (HBV) and the human immunodeficiency virus. (HIV) These diseases have potential for catastrophic health consequences. The particular blood-borne pathogens in discussion (HBV and HIV) are transmitted by direct contact with infected blood, or blood components, through sexual contact, and perinatally from mother to baby.

The following recommendations are designed to further minimize risk of blood-borne pathogen transmission in the context of athletics and to provide treatment guidelines for caregivers.

Within the sports world, increased attention has been focused on the Acquired Immunodeficiency Syndrome (AIDS), the human Immunodeficiency Virus (HIV), and the Hepatitis B Virus (HBV). The center for disease control in Atlanta, GA recently issued universal precautions to be employed by all health care professionals and those that deal with injured or ill individuals.

Because the review of a person's medical history and a physical examination alone are not reliable methods of identifying those who are infected with these blood-borne pathogens, coaches, athletic trainers and athletes should **adhere to the following recommendations.**

- ✓ Routinely, all parties should use appropriate barrier precautions to prevent skin and mucous-membrane exposure when contact with blood or other body fluids of any patient is anticipated.
- ✓ Gloves should be worn for touching blood, body fluids, mucous membranes, or non-intact skin (such as occurs with skin abrasions or dermatitis) of all patients, for handling items or surfaces soiled with blood or body fluids.
- ✓ Gloves should be changed after contact with each patient. Masks and protective eyewear or face shields should be worn during procedures that are likely to generate droplets of blood or other body fluids so that exposure of the mucous membranes of the mouth, nose, and eyes are prevented. Gowns or aprons should be worn during procedures that are likely to generate splashed of blood or other bodily fluids.

- ✓ Hands and other skin surfaces should be washed immediately and thoroughly if contaminated with blood or other bodily fluids. In every instance, hands should be washed immediately after gloves are removed.
- ✓ Surfaces contaminated with blood should be cleaned with a solution made from a one-to-ten (1:10) dilution of household bleach to water.
- ✓ All parties should take precautions to prevent infection, by instruments and bandages. Extra care should be taken when performing medical procedures, cleaning used instruments, disposing of used bandages and handling instruments after procedures. After use, instruments and bandages should be placed in puncture resistant containers then should be placed into another puncture resistant container for transport to the processing area.
- ✓ Although saliva has not been implicated in HIV, AIDS, and HBV transmission, to minimize the risk of infection if emergency resuscitation is needed, it is recommended that mouth pieces, resuscitation bags, or other ventilation devices be available for use in areas in which the need for resuscitation is likely.
- ✓ Parties who have exudative lesions or weeping dermatitis should refrain from all direct patient care and from handling patient-care equipment until the skin condition is resolved.
- ✓ Soiled linens should be bagged and washed in hot water with detergent and bleach.
- ✓ In the athletic environment, universal guidelines should be considered for the immediate control of bleeding and for handling bloody dressings, mouthpieces, and other articles contaminated with blood and bodily fluids.

Tasks and activities in athletics that may involve contact with blood:

- Cleaning a wound (including abrasion, blister, laceration, puncture, and turf burn)
- Being in contact with contaminated material (bloody towel)
- Caring for bloody blisters (blood may splash into eyes)
- Treating an athlete with an open wound (incidental contact)
- Controlling bleeding (open wound, bloody nose)
- Performing on-field evaluations
- draining blood from a scar that has resulted from surgery
- Stabilizing a compound fracture or impaled object

Unreported, but potentially hazardous tasks:

- Cleaning contaminated surfaces materials, or instruments
- Disposing of contaminated materials, or instruments
- Performing CPR or mouth to mouth resuscitation

Protective equipment to carry each game/practice:

- 2 pairs of latex disposable gloves
- A pocket CPR mask
- 4 plastic bags, to be used as barriers or disposable containers

Checklist for infection control in the athletic training room:

Before evaluation or treatment

- Ensure that all appliances are disinfected with the appropriate agent
- Place a disposable cover on the surface of the appliances to prevent contamination, if necessary.

During evaluation or treatment

- Treat all athletes as potential sources of infection
- Use protective attire and the barrier technique based on the task or categorization
- Protect your hands. Wash before putting on gloves, and after removing them. Change gloves each time a different athlete is treated. Discard gloves that are torn, cut, or punctured. Avoid personal hand injury.
- Avoid injury with sharp instruments and needles. Handle sharp instruments carefully and place them in appropriate containers.

After evaluation and treatment

- Wear Rubber gloves
- Clean instruments thoroughly

- Sterilize instruments and other equipment that comes into contact with the athlete's mucous membranes.
- Handle Sharp instruments with caution. Place scalpels and other sharp instruments into specific puncture resistant containers.
- Decontaminate environmental surfaces. Wipe work surfaces with absorbent towels and place the towels in an appropriate container for laundry.
- Disinfect with suitable chemical disinfectants or bleach solution.
- Communicate the infection control program to all personnel.
- Remove contaminated waste appropriately. Place solid waste that is contaminated with blood or other potentially hazardous body fluids in double sealed sturdy impervious bags.
- Remove gloves and wash hands properly.

Infection control for athletic training tasks on the field:

Before going to Practice/Games

- Ensure that scissors and other instruments are disinfected
- Carry protective gloves/mask/eye shields to deal with any task and potential hazardous situation that may occur (gloves that are not punctured).
- Check any exudative lesions or weeping dermatitis. If you have them refrain from all contact with athletes, inform coaches and fellow student trainers and protect your wounds with a dressing.
- Bring plastic bags or other disposable container for use in disposing of contaminated materials.
- Wear long-sleeved shirts when skin contact with an athlete is likely.

During Practice/Games

- Treat all athletes as if they were potentially infectious.
- Use protective attire and the barrier technique based on survey of the scene.

- Protect your hands.
- Avoid injury with sharp instruments such as cleats, spikes, scissors, or scalpels.
- If you do not have protective gear, such as gloves, with you:
 - *Use available material to protect yourself from direct contact
 - * If the athlete is conscious, ask them to perform the necessary task in which you may have contact with contaminated fluid.
- Dispose of contaminated materials in appropriate, tagged containers.
- Use plastic bags on the field. Double bag the contents.

After Practice/Games

- Wash your hands and other exposed skin surfaces as soon as possible after contacts or at the first available area to cleanse skin.
- Disinfect all instruments that you have used. Disinfect in proper bleach to water ratio, usually over night.

ENVIRONMENTAL CLEANING

The Reilly Center Athletic Training Room are cleaned and decontaminated according to the following schedule:

<u>AREA</u>	<u>ITEMS</u>	<u>Schedule</u>
Treatment area	Treatment tables Counter tops, floors, Waste containers, towels Sinks, prone pillows, elastic wraps	Decontaminated twice daily or more as needed.
Wet Room	Whirlpools	As needed
	Ice machines, hydrocollator and refrigerators	Weekly
	Modalities, coolers, water bottles	After each use

Preparing the 1:10 Bleach Solution

By: Bill Lyons

- 1) In a spray bottle, add 1 ounce of bleach to 9 ounces of water. The bleach should be mixed with cool water. Warm or hot deactivates the bleaches basic cleaning agent “hypochlorite.”**
- 2) Label the bottle and store it so it is accessible only to those who are going to use it.**
- 3) This mixture solution is good only ONE DAY. To be effective, the solution must be made daily.**

Use of Bleach Cleaning Solution (Recommended for cleaning up bodily fluids)

- 1) After donning gloves, absorb the fluids with paper towels
- 2) Scrub the area with soap and water using a paper towel
- 3) Rinse the area
- 4) Saturate the area with bleach solution and allow soaking 20 minutes before absorbing it with another paper towel.

- 5) All soiled materials, including gloves, should be placed in the biohazard container.
- 6) Wash hands thoroughly after disposal of materials

Infectious Waste/ Bio Hazardous Material

In the athletic training room environment there exists several types of potentially infectious wastes/bio hazardous materials. In response to this and to both present accepted practices and NCAA recommended guidelines, the following safeguards and universal precautions will be used in the athletic training rooms at ST. Bonaventure University by the Athletic Training staff.

INFECTIOUS WASTE DEFINED:

Gauze, dressings, tissue, towels, gloves, and other material having been in contact with bodily fluids (ex: blood) and all sharp instruments having been in contact with bodily fluids is considered infectious waste.

1) Infectious Waste containers will be available in the training room. Infectious waste containers will be near by during all practices at our facility. The containers are to be used **ONLY FOR INFECTIOUS WASTES** (as defined above) and not trash. Containers will be lined with a biohazard bag and appropriately labeled with a Bio-Hazardous warning tag.

2) SHARPS containers will be available in the training room as well. These containers are for disposing of sharp instruments. Syringes with needles should be disposed of intact, needle remains in syringe.

3) Sterile & non-sterile latex gloves will be available for use in all athletic training facilities. All athletic training staff members are asked to wear the gloves when at all possible when dealing with bodily fluids and wounds. Proper hand washing procedures must be followed after each potential exposure.

4) Contaminated surfaces shall be cleaned with a water-diluted solution of household bleach (1:10) and an OSHA approved cleaning solution.

5) Lightly soiled towels, clothing, uniforms, etc may be washed in the regular hot water cycle without risk of contamination. Grossly soiled articles must be disposed of in the appropriate manner as described in number one above.

*Proper disposal of the infectious waste container liners and SHARPS containers will be handled by the staff athletic trainers. The disposal will be as follows:

Infectious waste liners-

Liners will have as much air as possible removed from bag and then tied shut. Sealed liners will be placed in the Bio-Hazard Box which will be located in the storage room behind the Head Athletic Trainer's office. When the Bio-Hazard box is full, contact the environmental compliance officer for proper disposal.

SHARPS containers-

Seal when full and contact the environmental compliance officer for proper disposal. **DO NOT** place in Bio-Hazard box!

VISITING TEAMS

As a courtesy to visiting athletic trainers, provide the following:

- 1) Infectious waste containers will be provided at court/field side (bench areas) and in the locker rooms. Discretion will be used as to routinely placing in locker rooms without regard to security.
- 2) SHARPS Containers will not be routinely placed in visitors' locker rooms, but will be supplied upon request, this again for security reasons.
- 3) Disposable Gloves will also be provided, using the same measures above.

Epinephrine Administration

Approximately two million people in the United States are at risk for anaphylaxis, and each year 400 to 800 people in the United States die from anaphylactic reactions. Insect stings; penicillin; aspirin; food additives, such as sulfites; and certain foods, such as shell fish, fish, and nuts can trigger anaphylaxis in susceptible individuals. These reactions may be life threatening and require immediate care. An ID bracelet should be worn by the individual at risk. Some possible signs and symptoms in anaphylactic victims include:

- Swelling to the face, neck, hands, throat, tongue, or any body part;
- Itching of tongue, armpits, groin, or any body part;
- Dizziness;
- Redness or welts on the skin;
- Red watery eyes;
- Nausea, abdominal pain or vomiting;
- Rapid heart rate;
- **Difficulty breathing** or swallowing; and
- Feeling of constriction in the throat or chest.

Epinephrine is a prescribed medication of choice to treat the signs and symptoms of these reactions. Call 9-1-1 or the local emergency number or summon more advanced medical personnel immediately.

Note: Rescuers should follow local protocols or medical directives when applicable

Use an epi-pen when a victim:

- Relates a history of allergies or allergic reactions;
- Is having an allergic reaction;
- Requests assistance to administer epinephrine;
- Provides the epinephrine or auto-injector (epi-pen); or
- Has a family member who relates a victim history of allergies or allergic reactions and provides the victim's epi-pen

Before assisting or administering epinephrine to the victim:

- Call 9-1-1 or the local emergency number or summon more advanced medical personnel immediately.
- Ensure that the prescription is for the victim;
- Ensure that the prescription expiration date has not lapsed;
- Ensure that the medication is clear and not cloudy or discolored; and
- Read and follow instructions provided with the epi-pen

The epi-pen is simple and easy to use. However, it needs to be accessed quickly. Assisting the victim with the medication can include getting the pen from a purse, car, home or out of a specially designed carrier on a belt. It may also include taking it out of the plastic tube or assisting the victim with the injection into the thigh.

The standard epinephrine dose is 0.3mg for an adult or 0.15 mg for a child weighing less than 45 pounds. To administer an intramuscular injection:

1. Place tip of the auto-injector against the lateral (outside) portion of the victim's thigh, midway between the waist and the knee.
2. Remove the safety cap from the auto-injector.
3. Administer injection:
 - Push the injector firmly against the victims thigh until the injector is activated (Do not place thumb on the end of the injector—this prevents accidental disbursement and possible injury to the rescuer);
 - Hold injector in place until the medication is injected (about 10 seconds); and
 - Note the time of injection and any changes in the victim's condition.

In all cases of epi-pen administration, follow-up care and transport to a medical facility is needed. The beneficial effect of epinephrine is relatively short in duration. Victims having a severe allergic reaction may require additional medications that can be administered only in a hospital.

The following resources were used to develop the procedures and policies outlined in this emergency action plan:

Anderson, J.C. et al. (2002). NATA position statement: Emergency planning in athletics. Journal of Athletic Training; 37 (1): 99-104.

Magee, D.J. Orthopedic Physical Assessment (3rd ed.). W.B. Saunders Company, Philadelphia, PA. 1997: 59, 73.

Neal, T. (2003). Catastrophic incident guideline plan. NATA News. May: 12.

University of Georgia Sports Medicine Emergency Plan:

nata.org/committees/cuatc/cuatc_emergency/cuatc_emergency_action_plan.htm