



SIMMONS

**ATHLETICS DEPARTMENT
ENVIRONMENTAL HEALTH AND SAFETY MANUAL**

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ATHLETIC ENVIRONMENTAL HEALTH AND SAFETY MANUAL

REVIEW SUMMARY

Revision(s)	By	Affiliation	Date	Changes

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1.0 INTRODUCTION

The purpose of the manual is to provide information to ensure a safe work environment in the Athletics Department (Athletics) at Simmons College (Simmons). Activities associated with Athletics are conducted in Simmons' Sports Center, which is located at 331 Brookline Avenue in Boston, Massachusetts and associated sports fields.

This manual provides students and staff with the information and training necessary to improve safety and health and to ensure compliance with environmental regulations. It provides methods for worker protection to protect Simmons' employees and students, our most valuable assets. Work with potentially hazardous materials, processes, and/or equipment will be evaluated through the use of a hierarchy of controls as shown by Figure 1.

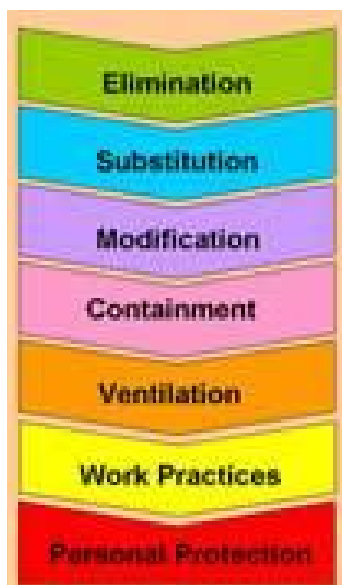


Figure 1 – Hierarchy of Controls

This manual will cover how to work with hazardous materials and processes associated with Athletics. For additional information on working with hazardous materials, please refer to Simmons':

- Controlled Substance Policy to assist Simmons' employees when investigating whether or not to use controlled substances and to provide guidelines and policies on how to ensure regulatory compliance when working with controlled substances within their departments.

- Exposure Control Plan for the policies and procedures to eliminate or minimize occupational exposure to bloodborne pathogens in accordance with the Occupational Safety and Health Administration (OSHA) Bloodborne Pathogen (BBP) Standard, 29 Code of Federal Regulations (CFR) 1910.1030
- Hazard Communication (HAZCOM) Program for information regarding labeling of chemical containers, Safety Data Sheets (SDSs), and HAZCOM training in accordance with OSHA's HAZCOM Standard, 29 CFR 1910.1200.

In addition, please refer to Simmons' Emergency Preparedness webpage developed by Public Safety for information on how to prepare for the following emergencies:

- Active Shooter
- Active Threat
- Bomb Threat and Suspicious Packages
- Chemical Spills
- Earthquake
- Fire
- Hurricanes
- Lockdown
- Power Outage
- Severe Weather

The Athletics' EH&S Manual will be reviewed annually by the Director of EH&S, at least one representative from Buildings and Grounds, and at least one representative from Athletics. It will be revised as necessary. Revisions will be documented in the table at the beginning of the document. An official copy of this manual is located in the Buildings and Grounds Offices, 300 The Fenway, Boston, MA 02115.

2.0 REGULATIONS AND STANDARDS

Federal, state, and local agencies have developed regulations and standards to assist colleges and universities with their Athletics' department. In some cases, these recommended guidelines are referenced in the state and local regulations, which enables them to be enforced as a law.

2.1 Federal

OSHA has developed various regulations to ensure a safe work environment under 29 CFR 1910. Below are the subparts to 29 CFR 1910, which are applicable to Athletics.

- A – General
- D – Walking-Working Surfaces

- E – Means of Egress
- G – Occupational Health and Environmental Control
- H – Hazardous Materials
- I – Personal Protective Equipment
- J – General Environmental Controls
- K – Medical and First Aid
- O – Machine Guarding
- P – Hand and Portable Powered Tools and Other Hand-Held Equipment
- S – Electrical
- Z – Toxic and Hazardous Substances

2.2 State

The following Massachusetts regulations apply to the operations and activities conducted by Athletics:

- 105 Code of Massachusetts Regulations (CMR) 435 – Minimum Standards for Swimming Pools (State Sanitary Code: Chapter V)
- 105 CMR 480 – Minimum Requirements for the Management of Medical or Biological Waste (State Sanitary Code Chapter VIII)

2.3 Best Management Practices

In addition, guidelines from the following agencies, colleges, and organizations were reviewed and used in this document since they provide standards of care with regards to Athletics' EH&S programs:

- American Conference of Governmental Industrial Hygienists (ACGIH)
- American Public Health Association (APHA)
- American National Standards Institute (ANSI) Standards
- American Society of Heating, Refrigerating, and Air-conditioning Engineers, Inc. (ASHRAE) Standards
- National Collegiate Athletic Association
- National Hurricane Center (NHC)
- National Institute for Occupational Safety and Health (NIOSH)
- National Lightning Safety Institute (NLSI)
- National Oceanic and Atmospheric Administration (NOAA)
- National Safety Council
- National Institute of Standards and Technology
- National Severe Storms Laboratory (NSSL)
- National Weather Service (NWS)
- OSHA

- Sports Management Resource

3.0 RESPONSIBILITIES

This section outlines the specific responsibilities associated with this manual.

3.1 Athletics Department

Athletics' employees and students are responsible for adhering to the EH&S policies and procedures outlined in this manual.

3.2 Buildings and Grounds

The Department of Buildings and Grounds will assist in the testing and repairs to engineering controls, emergency equipment, and other facility related equipment used to contain or eliminate hazards. In addition, this department oversees the waste contractors.

3.3 Environmental Health and Safety

The Director of EH&S:

- Creates and revises safety policies and procedures.
- Monitors procurement, use, storage, and disposal of chemicals.
- Conducts regular inspections athletic areas and reports results to the appropriate persons.
- Maintains inspection, personnel training, and inventory records.
- Assists Athletics in developing and maintaining adequate facilities.
- Seeks ways to improve EH&S within Athletics.
- Advise Athletics' personnel on the implementation of components of this EH&S Manual.
- Conduct or hire someone to conduct exposure assessments, as needed.

3.4 Talent and Human Capital Strategy and Public Safety

Talent and Human Capital Strategy (THCS), which is Simmons' Human Resource Department, and Public Safety will assist with emergencies and exposures involving hazardous materials.

4.0 HAZARDS AND RECOMMENDATIONS

4.1 Chemical Hazards

Chemicals enter the body through four primary routes (inhalation, ingestion, absorption, and injection). When working with a chemical, it is important to understand the hazards associated with the chemical and how the chemical may enter the body. This is accomplished by reading the SDS associated with the

chemical. For more information regarding SDSs, please refer to Simmons' HAZCOM Program. Hard copies of the SDSs are provided in the Athletics' areas where chemicals are used.

To reduce or eliminate the hazards associated with chemicals, Athletics has the following engineering controls in place:

- Process control
- Ventilation

4.1.1 Process Control

Process control involves changing the way an activity or process is done to reduce the risk. Below are some examples of process control:

- Limit exposure time with the chemical
- Use a non-hazardous substitute

4.1.2 Ventilation

Ventilation is a method of control that strategically "adds" and "removes" air in the work environment. Ventilation can remove or dilute an air contaminant if designed properly. It removes the contaminant at the source so it cannot disperse into the work space and it generally uses lower exhaust rates than general ventilation. The two main types of ventilation systems are dilution ventilation and local exhaust ventilation.

4.2 Physical Hazards

Physical hazards associated with the processes used in Athletics include but are not limited to noise, vibration and light. Additional information regarding these hazards is provided below. EH&S policies and procedures associated with weather conditions are outlined in Section 5.0.

4.2.1 Noise

Working with electrical tools, blowing whistles, and/or playing loud music may produce ear damaging sound. Signs of an overexposure may include temporary ringing in the ears or difficulty hearing for a while after leaving the noisy area. Except for these minor symptoms, there are no obvious signs or pain to warn Athletics' staff that their hearing is being damaged. One indicator that noise monitoring should be conducted is that you must raise your voice to be heard by someone only two feet away. Please contact THCS to request a noise assessment.

Depending on the results of the noise assessment, engineering controls and/or PPE may be recommended for the process. Engineering controls include installing muffling and damping devices or mounting machines on vibration-absorbing pads. PPE options include ear plugs and ear muffs. When

using PPE, ensure you use a hearing protection device with the appropriate Noise Reduction Rating (NRR). The NRR reduces the noise level at most frequencies by the number of decibels referenced by the NRR. Contact the Director of EH&S if you are unsure about which NRR is required for the hearing protection device.

4.2.2 Vibration

Handheld tools transfer harmful vibration to the user. It may be noticed as tingling of the hands and arms. Methods to reduce exposure to vibration are:

- Keeping tools in working condition.
- Replace with a tool with lower amplitude of vibration.
- Taking ten-minute breaks for every hour of continuous exposure.
- Maintaining normal workplace temperatures.
- Not grasping tools harder than needed for safe use.

4.2.3 Light

Improper lighting, glare, and shadow-producing direct lighting may result in eyestrain and accidents. One example on how to provide proper lighting is to use overhead lighting combined with direct light. There are guidelines which provide luminance recommendations for different operations. Please contact THCS to request a light evaluation.

4.3 Ergonomic

Athletics activities may result in unusual body positions, stresses, and strains. Ergonomics is the science of fitting a job to a person and helps prevent fatigue and Musculoskeletal Disorders (MSDs). Some examples of MSDs associated with Athletics are:

- Carpal tunnel syndrome
- Tendinitis
- Rotator cuff injuries
- Epicondylitis (a.k.a. Tennis Elbow)
- Muscle strains
- Lower back injuries

An ergonomic assessment may be requested through THCS. Below are the risk factors, which will be evaluated during this assessment:

1. Repetition
2. Force
3. Awkward positions
4. Contact stress

5. Vibration

Table 1 provides examples of how to eliminate or reduce ergonomic hazards.

Type of Control	Workplace Examples
Engineering Controls	<ul style="list-style-type: none">● Use a device to lift and reposition heavy objects to limit force exertion● Reduce the weight of a load to limit force exertion● Reposition a work table to eliminate a long/excessive reach and enable working in neutral postures
Administrative and Work Practice Controls	<ul style="list-style-type: none">● Require that heavy loads are only lifted by two people to limit force exertion● Establish systems so workers are rotated away from tasks to minimize the duration of continual exertion, repetitive motions, and awkward postures. Design a job rotation system in which employees rotate between jobs that use different muscle groups
Personal Protective Equipment	<ul style="list-style-type: none">● Use padding to reduce direct contact with hard, sharp, or vibrating surfaces● Wear good fitting thermal gloves to help with cold conditions while maintaining the ability to grasp items easily

4.4 Mechanical Equipment

Use of powered equipment can present a variety of hazards including but not limited to:

- Wiring/electrical hazards,
- Moving parts (gears, pulleys, belts), and
- High noise.

Do not use equipment if you are not authorized to do so, haven't been trained, or are uncertain about what to do. Ask for help. Follow posted instructions for equipment use. Never operate mechanical equipment or power tools while under the influence of drugs, alcohol, medication or other conditions that may affect your mental alertness.

NOTE: Never alter a piece of equipment from its intended use unless you are trained to do so.

4.5 Fire/Shock

Fires and electrical shock may be caused by overloaded circuits, extension cords, or damaged wiring. Report any obvious electrical problems (smoke, sparks, tripped circuits, damaged power cord, etc.) to Buildings and Grounds or Public Safety. Do not use damaged equipment -- tag it with a warning label and remove damaged equipment from service. Do not use electrical equipment in wet or damp locations. Make sure electrical outlets in wet areas are equipped with ground fault circuit interrupters (GFCIs).

4.6 Sharps

Athletics' staff use sharps as part of their activities. Below are examples on how injuries with sharps may occur:

- Injuries occur because of the following:
 - Passing or transferring equipment
 - Recapping contaminated needles
 - Colliding with coworkers
 - Decontaminating/processing used equipment
- Injuries occur from sharps left in unusual places:
 - Laundry
 - Mattresses
 - Tables, trays, or other surfaces

Here are some guidelines to prevent sharp injuries:

- Organize equipment at the point of use
- Make sure work space has adequate lighting
- Keep sharps pointed away from the user
- Locate a sharps disposal container, or have one nearby
- Assess the patient's ability to cooperate
- Get help if necessary
- Ask the patient to avoid sudden movement
- Maintain visual contact with sharps during use
- Be aware of staff nearby
- Control the location of sharps to avoid injury to yourself and others
- Do not hand pass exposed sharps from one person to another
- Use predetermined neutral zone for placing/retrieving sharps
- Be accountable for sharps you use
- Check procedure trays, waste materials, and bedding for exposed sharps before handling
- Look for sharps/equipment left behind inadvertently

- Transport reusable sharps in a closed container
- Secure the container to prevent spillage
- Inspect container
- Keep hands behind sharps
- Never put hands or fingers into sharps container
- Visually inspect sharps container for overfilling
- Replace containers before they become overfilled
- Keep filled containers for disposal in a secure area

5.0 EXPOSURE MONITORING

5.1 Initial Monitoring

Initial monitoring will be performed if there is reason to believe that exposure levels for an the U.S. Occupational Safety and Health Administration (OSHA) regulated substance routinely exceed(s) the action level or, in the absence of an action level, the permissible exposure limit (PEL) or occupational exposure limit (OEL).

The PELs for OSHA-regulated substances can be found in, 29 CFR 1910, Subpart Z.

An OEL is an upper limit on the acceptable concentration of a hazardous chemical in workplace air for a particular chemical or class of chemicals. It is typically set by ACGIH and NIOSH.

5.2 Noise Monitoring

If there is a concern involving the level of noise associated with a process, equipment, and/or a room, please contact the THCS department to request a noise evaluation. The OEL for noise varies depending on the length of time of exposure and with the intensity of the noise (sound pressure) measured in decibels (dB). Section 4 provides additional information regarding noise.

5.3 Periodic Monitoring

Periodic monitoring will be conducted if the initial monitoring performed demonstrates employee exposure over the action level (or in the absence of an action level, the PEL or OEL). Simmons will immediately comply with the exposure monitoring provisions of the relevant standard.

Within 15 working days after the receipt of any monitoring results, the employee will be notified of these results in writing either individually or by posting results in an appropriate location that is accessible to employees.

6.0 ADMINISTRATION OF DRUGS

As of November 2015, prescription drugs, medications, vitamins, nutritional or ergogenic aid, or other ingestible solid or liquid supplement to improve health or performance to any student-athlete by a non-medical personnel is grounds for immediate termination of employment.

7.0 SEVERE WEATHER

Since games and other activities associated with Athletics are performed outside, severe weather is a safety concern. This section outlines the potential severe weather conditions applicable to Simmons and how to prevent exposure to these conditions. In addition to this section, please adhere to Simmons' internal Severe Weather Policies.

Athletics should be aware of weather hazards and the specific safety shelter for their venue. In the event of severe weather during an official sport practice or event, precautions must be taken to ensure the safety of both athletes and others at the event. The Sport Medicine Department, Staff and/or coaches will be responsible for monitoring inclement weather each day before any practice or event.

In the event of severe weather, the Sport Medicine Department, Staff and/or coaches will make an announcement to inform the athletes and others to evacuate the event to the (specific designated locations) until it is determined that it is safe to re-enter the event and the "ALL CLEAR" signal is given by Sport Medicine Department, Staff and/or coaches.

7.1 Lightning

All Athletic staff have mobile access to the NWS and Accuweather. To determine how close lightning is to a location, use the Flash-to-Bang method, which is as follows:

- Count the seconds from the time lightning is sighted to when the clap of thunder is heard.
- Divide this number by five (5) to determine how far away in miles the lightning is occurring.

For Example: *If an individual counts 30 seconds between seeing the flash and hearing the bang, 30 divided by 5 equals 6; therefore, the lightning flash is approximately 6 miles away.*

- The NCAA and NSSL strongly recommend that all individuals leave the athletic site and reach a safe location by the flash-to-bang method of 30 seconds (6 miles).

Athletic events or activities will be suspended and venues will be evacuated when the Flash-to-Bang method identifies a 6-mile warning. The Sport Medicine Department, Staff and/or coaches will use the

“ALL CLEAR” signal when a lightning strike and/or thunder has not occurred within the 6-mile range for least 30 minutes.

Below are some examples of designated Lightning Safe Shelters:

- Club House
- Field House
- Vehicle

Dugouts, refreshment stands, open press boxes, rain shelters, golf shelters, and picnic shelters, even if they are properly grounded for structural safety, are usually not properly grounded from the effects of lightning and side flashes to people. They are usually unsafe and may actually increase the risk of lightning injury. Other dangerous locations included bodies of water and areas connected to, or near light poles, towers, and fences that can carry a nearby strike to people. Also, any location which makes a person the highest location is dangerous.

The NLSI provides recommendations for aquatic safety in the case of lightning.

7.2 Extreme Hot and Cold Temperatures

Anyone in a cold or hot environment may be at risk of overexposure and cold or heat stress. Extreme weather can bring on health emergencies in susceptible people, such as those without shelter, outdoor workers, and those who work in an area that is poorly insulated or without temperature regulation. Weather-related conditions including extreme temperatures and high winds may lead to serious health problems. In addition, adhere to Simmons’ specific policies about extreme hot and cold temperatures.

The following factors may have an impact on how a person responds to extreme temperatures:

- A previous cold or hot weather injury
- Race
- Geological origin
- Ambient temperature
- Use of medications
- Clothing attire
- Fatigue
- Hydration
- Age
- Activity
- Body size
- Aerobic fitness level
- Clothing

- Acclimatization
- Low or high caloric intake

7.2.1 Cold Injuries and Illnesses

Hypothermia

When exposed to cold temperatures, your body begins to lose heat faster than it can be produced. Prolonged exposure to cold will eventually use up your body's stored energy. The result is hypothermia, or abnormally low body temperature. A body temperature that is too low affects the brain, making the victim unable to think clearly or move well. This makes hypothermia particularly dangerous because a person may not know it is happening and will not be able to do anything about it.

Symptoms

Symptoms of hypothermia can vary depending on how long you have been exposed to the cold temperatures.

Early Symptoms

- Shivering
- Fatigue
- Loss of coordination
- Confusion and disorientation

Late Symptoms

- No shivering
- Blue skin
- Dilated pupils
- Slowed pulse and breathing
- Loss of consciousness

First Aid

1. Take the following steps to treat a worker with hypothermia:
2. Alert the supervisor and request medical assistance.
3. Move the victim into a warm room or shelter.
4. Remove their wet clothing.
5. Warm the center of their body first—chest, neck, head, and groin—using an electric blanket, if available; or use skin-to-skin contact under loose, dry layers of blankets, clothing, towels, or sheets.

6. Warm beverages may help increase the body temperature, but do not give alcoholic beverages. Do not try to give beverages to an unconscious person.
7. After their body temperature has increased, keep the victim dry and wrapped in a warm blanket, including the head and neck.
8. If victim has no pulse, begin cardiopulmonary resuscitation (CPR).

Cold Water Immersion

Cold water immersion creates a specific condition known as immersion hypothermia. It develops much more quickly than standard hypothermia because water conducts heat away from the body 25 times faster than air. Typically people in temperate climates don't consider themselves at risk from hypothermia in the water, but hypothermia can occur in any water temperature below 70 degrees F (°F). Survival times can be lengthened by wearing proper clothing (wool and synthetics and not cotton), using a personal flotation device (PFD, life vest, immersion suit, dry suit), and having a means of both signaling rescuers (strobe lights, personal locator beacon, whistles, flares, waterproof radio) and having a means of being retrieved from the water.

Frostbite



Frostbite is an injury to the body that is caused by freezing. Frostbite causes a loss of feeling and color in the affected areas. It most often affects the nose, ears, cheeks, chin, fingers, or toes. Frostbite can permanently damage body tissues, and severe cases can lead to amputation. In extremely cold temperatures, the risk of frostbite is increased in workers with reduced blood circulation and among workers who are not dressed properly.

Symptoms

Symptoms of frostbite include:

- Reduced blood flow to hands and feet (fingers or toes can freeze)
- Numbness
- Tingling or stinging

- Aching
- Bluish or pail, waxy skin

First Aid

Workers suffering from frostbite should:

1. Get into a warm room as soon as possible.
2. Unless absolutely necessary, do not walk on frostbitten feet or toes-this increases the damage.
3. Immerse the affected area in warm-not hot-water (the temperature should be comfortable to the touch for unaffected parts of the body).
4. Warm the affected area using body heat; for example, the heat of an armpit can be used to warm frostbitten fingers.
5. Do not rub or massage the frostbitten area; doing so may cause more damage.
6. Do not use a heating pad, heat lamp, or the heat of a stove, fireplace, or radiator for warming. Affected areas are numb and can be easily burned.

Trench Foot

Trench foot, also known as immersion foot, is an injury of the feet resulting from prolonged exposure to wet and cold conditions. Trench foot can occur at temperatures as high as 60°F if the feet are constantly wet. Injury occurs because wet feet lose heat 25-times faster than dry feet. Therefore, to prevent heat loss, the body constricts blood vessels to shut down circulation in the feet. Skin tissue begins to die because of lack of oxygen and nutrients and due to the buildup of toxic products.

Symptoms

Symptoms of trench foot include:

- Reddening of the skin
- Numbness
- Leg cramps
- Swelling
- Tingling pain
- Blisters or ulcers
- Bleeding under the skin
- Gangrene (the foot may turn dark purple, blue, or gray)

First Aid

Staff and students suffering from trench foot should:

1. Remove shoes/boots and wet socks.
2. Dry their feet.
3. Avoid walking on feet, as this may cause tissue damage.

Chilblains

Chilblains are caused by the repeated exposure of skin to temperatures just above freezing to as high as 60 °F. The cold exposure causes damage to the capillary beds (groups of small blood vessels) in the skin. This damage is permanent and the redness and itching will return with additional exposure. The redness and itching typically occurs on cheeks, ears, fingers, and toes.

Symptoms

Symptoms of chilblains include:

- Redness
- Itching
- Possible blistering
- Inflammation
- Possible ulceration in severe cases

First Aid

Staff and students suffering from chilblains should:

- Avoid scratching
- Slowly warm the skin
- Use corticosteroid creams to relieve itching and swelling
- Keep blisters and ulcers clean and covered

Recommendations for Athletics' Coaches, Trainers, and Management

The Athletics should take the following steps to protect staff and students from cold stress:

- Schedule practices and games in cold areas for warmer months.
- Schedule practices and games for the warmer part of the day.
- Reduce the physical demands of staff and students.
- Minimize duration of exposure.
- Provide warm liquids to staff and students.
- Provide warm areas for use during break periods.
- Monitor staff and students who are at risk of cold stress.
- Provide cold stress training that includes information about:
 - Risk

- Prevention
- Symptoms
- The importance of monitoring yourself and others for symptoms
- Treatment
- Personal protective equipment

Recommendations for Staff and Students

Staff and students should avoid exposure to extremely cold temperatures when possible. When cold environments or temperatures cannot be avoided, staff and students should follow these recommendations to protect themselves from cold stress:

- Wear appropriate clothing.
 - Wear several layers of loose clothing. Layering provides better insulation.
 - Tight clothing reduces blood circulation. Warm blood needs to be circulated to the extremities.
 - When choosing clothing, be aware that some clothing may restrict movement resulting in a hazardous situation.
- Make sure to protect the ears, face, hands and feet in extremely cold weather.
 - Boots should be waterproof and insulated.
 - Wear a hat; it will keep your whole body warmer. (Hats reduce the amount of body heat that escapes from your head.)
- Move into warm locations during work breaks; limit the amount of time outside on extremely cold days.
- Carry cold weather gear, such as extra socks, gloves, hats, jacket, blankets, a change of clothes and a thermos of hot liquid.
- Include a thermometer and chemical hot packs in your first aid kit.
- Avoid touching cold metal surfaces with bare skin.
- Monitor your physical condition and that of others.

7.2.2 Heat Injuries and Illnesses

Heat Stroke

Heat stroke is the most serious heat-related disorder. It occurs when the body becomes unable to control its temperature: the body's temperature rises rapidly, the sweating mechanism fails, and the body is unable to cool down. When heat stroke occurs, the body temperature can rise to 106 degrees Fahrenheit or higher within 10 to 15 minutes. Heat stroke can cause death or permanent disability if emergency treatment is not given.

Symptoms

Symptoms of heat stroke include:

- Hot, dry skin or profuse sweating
- Hallucinations
- Chills
- Throbbing headache
- High body temperature
- Confusion/dizziness
- Slurred speech

First Aid

Take the following steps to treat a staff member or student with heat stroke:

1. Call 911 and notify their supervisor.
2. Move the sick worker to a cool shaded area.
3. Cool the worker using methods such as:
4. Soaking their clothes with water.
5. Spraying, sponging, or showering them with water.
6. Fanning their body.

Heat Exhaustion

Heat exhaustion is the body's response to an excessive loss of the water and salt, usually through excessive sweating. Staff and students most prone to heat exhaustion are those that are elderly, have high blood pressure, and those working in a hot environment.

Symptoms

Symptoms of heat exhaustion include:

- Heavy sweating
- Extreme weakness or fatigue
- Dizziness, confusion
- Nausea
- Clammy, moist skin
- Pale or flushed complexion
- Muscle cramps
- Slightly elevated body temperature
- Fast and shallow breathing

First Aid

Treat a staff member or a student suffering from heat exhaustion with the following:

1. Have them rest in a cool, shaded or air-conditioned area.
2. Have them drink plenty of water or other cool, nonalcoholic beverages.
3. Have them take a cool shower, bath, or sponge bath.

Heat Syncope

Heat syncope is a fainting (syncope) episode or dizziness that usually occurs with prolonged standing or sudden rising from a sitting or lying position. Factors that may contribute to heat syncope include dehydration and lack of acclimatization.

Symptoms

Symptoms of heat syncope include:

- Light-headedness
- Dizziness
- Fainting

First Aid

Staff and students with heat syncope should:

1. Sit or lie down in a cool place when they begin to feel symptoms.
2. Slowly drink water, clear juice, or a sports beverage.

Heat Cramps

Heat cramps usually affect staff and students who sweat a lot during strenuous activity. This sweating depletes the body's salt and moisture levels. Low salt levels in muscles causes painful cramps. Heat cramps may also be a symptom of heat exhaustion.

Symptoms

Muscle pain or spasms usually in the abdomen, arms, or legs.

First Aid

Staff and students with heat cramps should:

1. Stop all activity, and sit in a cool place.

2. Drink clear juice or a sports beverage.
3. Do not return to strenuous activities for a few hours after the cramps subside because further exertion may lead to heat exhaustion or heat stroke.
4. Seek medical attention if any of the following apply:
 - a. The person has heart problems.
 - b. The person is on a low-sodium diet.
 - c. The cramps do not subside within one hour.

Heat Rash

Heat rash is a skin irritation caused by excessive sweating during hot, humid weather.

Symptoms

Symptoms of heat rash include:

- Heat rash looks like a red cluster of pimples or small blisters.
- It is more likely to occur on the neck and upper chest, in the groin, under the breasts, and in elbow creases.

First Aid

Staff and students experiencing heat rash should:

- Try to stay in a cooler, less humid environment when possible.
- Keep the affected area dry.
- Dusting powder may be used to increase comfort.

Recommendations for Athletics' Coaches, Trainers, and Management

Athletic staff should take the following steps to protect staff and students from heat stress:

- Schedule practices and games for the cooler part of the day.
- Acclimatize staff and students by exposing them for progressively longer periods to hot environments.
- Reduce the physical demands of staff and students.
- Minimize exposure.
- Provide cool water or liquids to staff and students.
- Avoid alcohol, and drinks with large amounts of caffeine or sugar.
- Provide rest periods with water breaks.
- Provide cool areas for use during break periods.

- Monitor staff and students who are at risk of heat stress.
- Provide heat stress training that includes information about:
 - Risk
 - Prevention
- Symptoms
- The importance of monitoring yourself and others for symptoms
- Treatment
- Personal protective equipment

Recommendations for Staff and students

Staff and students should avoid exposure to extreme heat, sun exposure, and high humidity when possible. When these exposures cannot be avoided, staff and students should take the following steps to prevent heat stress:

- Wear light-colored, loose-fitting, breathable clothing such as cotton.
- Avoid non-breathing synthetic clothing.
- Gradually build up to heavy work.
- Schedule heavy work during the coolest parts of day.
- Take more breaks in extreme heat and humidity.
- Take breaks in the shade or a cool area when possible.
- Drink water frequently. Drink enough water that you never become thirsty. Approximately 1 cup every 15-20 minutes.
- Avoid alcohol, and drinks with large amounts of caffeine or sugar.
- Be aware that protective clothing or personal protective equipment may increase the risk of heat stress.
- Monitor your physical condition and that of your others.

7.2.3 Heat Index

The heat index is a method to determine the risk of heat-related illnesses for outdoor activities, what actions are needed to protect staff and students, and when those actions are triggered. Please refer to Simmons' internal policy regarding heat index for details.

8.0 INDOOR SWIMMING POOL

8.1 Chemical Safety

Chemicals are added to pool water to kill disease-causing germs, maximize the efficacy of the disinfection process (for example, pH control), improve water quality, stop corrosion and scaling of

equipment, and protect against algal growth. However, pool chemicals can also lead to injury when mixed together or when appropriate personal protective equipment is not used during handling.

The following recommendations are based on a review of reports of pool chemical–associated injuries:

- Get trained in pool chemical safety (for example, during operator training course)
- Ask for help if you are NOT trained for specific tasks
- Read entire product label or Safety Data Sheet (SDS) before using
- Learn your Simmons' Emergency Response Procedures and practices steps (for example: evacuation)
- Wear appropriate safety equipment (for example, safety goggles, face shield, arm extended gloves, and mask)
- Read chemical product label before each use
- Handle in a well-ventilated area
- Open one product container at a time and close it before opening another
- Minimize dust, fumes, and splashes
- Measure carefully
- Never mix chlorine products with acid; this could create toxic gases. Different pool chemicals (for example, different types of chlorine products) with each other or with any other substance
- Only pre-dissolve pool chemicals when directed by product label. If product label directs pre-dissolving, add pool chemical to water; NEVER add water to pool chemical because violent (potentially explosive) reaction can occur

8.2 MADPH Requirements

The MADPH requires the following for swimming pools:

- An annual pool permit
- Health restrictions including but not limited to:
 - No person having a communicable disease shall work at a swimming pool
 - No bather shall enter the pool unless (s)he takes a cleansing shower
 - No bather shall wear a bathing suit, which is not clean
 - No one with a fever, cough, cold, inflammation of the eyes, nasal, or ear discharges are allowed in the pool
 - No person with open sores or other evidence of skin disease is not permitted in the pool
 - No spitting onto the floor adjacent to the pool or into the pool
 - No glass except shatterproof light shields are permitted in the pool or within 8 feet of the pool
 - No one is permitted to throw or bring any object that may carry contamination or endanger the health and safety of others

- No one is permitted to use the pool alone
- Do not use the pool under the influence of alcohol or drugs (prescription and non-prescription). NOTE: If you have a doctor's note stating that you are able to use the pool while taking prescription or non-prescription drugs, then you are permitted to use the pool.
- Do not use the pool if you have a medical condition (e.g., pregnancy, heart disease, diabetes, high or low blood pressure) unless you consult with your physician and receive a note that you are permitted to use the pool.
- Use of oils and body lotion is prohibited.
- Signage near entrances reminding people to bath before entering and the statements above
- A clock with a large dial located in an area, where it is easily readable by people within the pool
- One lifeguard for each 25 pool users
- Red Cross, Royal Bronze, Boy Scouts, or YMCA, CPR, and First Aid certified lifeguards
- If no lifeguard is required by MADPH, then a warning sign must be posted
- Lifeguards must wear red or bright orange bathing suits, red or bright orange jackets with the word "GUARD" printed in 4-inch lettering on the back
- Simmons will provide whistles and bull horns or other amplification devices to lifeguards
- One ring buoy (if water surface area is greater than 2,000 square feet)
- First aid kit
- Emergency communication system
- Wastewater disposal
- Bacterial Quality
 - Testing in accordance with Standard Methods for the Examination of Water and Wastewater (APHA)
 - No pool water sample shall:
 - Contain more than 200 bacteria per milliliter, as determined by the standard (35°C) Agar plate count, or show a positive test (confirmed test) for coliform organisms in any of the five 10-milliliter portions of a sample or more than 1.0 coliform organism per 50 milliliters when the membrane filter test is used; and
 - Show a positive test (confirmed test) for pseudomonas aeruginosa organisms in any of the five 10 milliliter portions of a sample or more than 1.0 pseudomonas aeruginosa organisms per 100 milliliters when the membrane filter test is used.
- Chemical Standards
 - 1.0-3.0 parts per million free chlorine
 - 0.0-0.2 ppm combined chlorine
 - 2.0-6.0 ppm bromine

- Test for residual disinfectant four times daily or more often if required to do so by MADPH or Boston Public Health Commission (BPHC)
- Hydrogen-ion concentration (pH) at same time as residual disinfectant or more often if required to do so by MADPH or BPHC
- Alkalinity and calcium hardness weekly or more often if required to do so by MADPH or BPHC
- Check monitoring systems at least once every 24 hours
- Unbreakable thermometer
- Working and calibrated testing equipment (e.g., no signs of damage) with reagents less than one year old
- A black 6-inch disc to test visibility
- Turnover rates for filtration system is once every eight hours
- Temperature cannot exceed 104°F
- Temperature is checked at same as residual disinfectant and pH are checked by operator
- The pool will be closed if the fore-mentioned parameters (bacterial quality through temperature) are not met
- All testing must be recorded and records are maintained by Director of Aquatics
- The entire pool area and bathhouses must be maintained in good repair and in a safe and sanitary manner

9.0 LAUNDRY

Laundrying will be performed by a designated person when needed. Below are the hazards associated with laundry:

- Bloodborne pathogens – See Simmons' Exposure Control Plan
- Back injuries – See Section 4.0
- Heat stress – See Section 7.0
- Slips, trips, and falls – See Section 4.0
- Noise – See Section 4.0
- Machine hazards – See Section 4.0 and the information provided below

9.1 Washer Safety

Inspect hoses for cracks. Contact Buildings and Grounds if the hoses need to be replaced.

The water that leaves the washing machine during the spin cycle is ejected forcefully. Find the rubber hose that takes the dirty water down the drain and make sure the hose is securely connected at the drain, so the force of the water doesn't push the hose out, spraying the laundry room with dirty water. If

the hose flows into a utility sink instead, be sure you never leave anything in the sink that could float around and ultimately block the sink drain, causing water to flood your laundry room.

9.2 Dryer Safety

Below are some dryer safety tips:

- Mandatory cleaning of the lint filter after each dryer cycle. Routine cleaning of the backside of the dryer where lint and dust can collect.
- Visually inspect the venting system behind the dryer for any signs of damage, crushing or restriction. Contact Buildings and Grounds to replace vent.
- Never operate a clothes dryer without a lint filter or operate with a lint filter that is damaged, loose or clogged. Contact Buildings and Grounds to replace lint filter.
- Never dry rubber, foam or plastic in the clothes dryer.
- Never dry any article with explicit care instructions that state “Dry away from heat”.
- Never dry glass fiber materials.
- Never dry clothes or other items that have come into contact with flammable items such as: alcohol, cooking oils, gasoline and the like. Such items should be dried outdoors or in a well-ventilated room away from any heat source.

10.0 WASTE DISPOSAL

Chemical and biological waste may be generated by Athletics. As a result, this section outlines the proper methods for disposing of these waste streams. Refer to Athletics’ Waste Flowchart for details.

10.1 Chemical Waste

Safe and environmentally sound management of hazardous waste is an integral part of Simmons environmental management mission. Failure to comply with regulatory requirements can result in significant fines and liability, increased costs, and adverse publicity. Simmons is committed to meeting stringent federal, state, and local hazardous waste regulations. Responsibility for compliance with hazardous waste regulations begins with those generating waste material.

In the Athletics Department, hazardous chemicals that have been used and are no longer needed *may be* classified as hazardous waste. Because of the volume of hazardous waste generated and accumulated by Simmons, it is designated as a “small quantity generator”, SQG, of hazardous waste. This category places numerous requirements, obligations, restrictions, etc., on how waste must be stored, managed, disposed, etc. Although beyond the scope of this program, a brief description of the critical requirements that are relevant to the Athletics Department is provided below.

The Buildings and Grounds Department is Simmons' resource for management and disposal of hazardous waste generated in on campus. Buildings and Grounds manages the collection, processing, and disposal of chemical waste and provides resources for other hazardous waste and environmental compliance responsibilities.

Accumulation: To effectively manage hazardous waste in the Athletics Department, Simmons has established "Satellite Accumulation Areas", (SAA), in each area. SAAs are clearly labeled and delineated and contain bins for storage of containers holding hazardous waste material, pending off-site disposal. Once a hazardous material is no longer needed and will be discarded, **it must never** be discharged to a drain, but must be transferred to an appropriate container and then relocated to the SAA. Once the container is full, notify the Buildings and Grounds Department to arrange for the container's removal to Simmons' Main Accumulation Area. The disposal occurs at an approved hazardous waste management facility.

See Simmons' Chemical Hygiene Plan for additional information.

10.2 Biological Waste

Regulated waste is placed in containers which are closable, constructed to contain all contents and prevent leakage, appropriately labeled or color-coded and closed prior to removal to prevent spillage or protrusion of contents during handling.

Contaminated sharps are discarded immediately or as soon as possible in containers that are closable, puncture-resistant, leak proof on sides and bottoms, and appropriately labeled or color coded. Sharps disposal containers are available at point of generation. Bins and pails (e.g., wash or emesis basins) are cleaned and decontaminated as soon as feasible after visible contamination. Broken glassware that may be contaminated is only picked up using mechanical means, such as a brush and dustpan or tongs.

Refer to Simmons' Exposure Control Plan for details.