Providing for Athletes’ Safety
Take a moment to imagine yourself as a volleyball coach. One of your athletes is serving the ball when she comes down awkwardly on her left leg. You notice that she is not getting up from the floor and seems to be in pain. What do you do?

No coach wants to see athletes get hurt. But injury remains a reality of sport participation; consequently, you must be prepared to provide first aid when injuries occur and to protect yourself against unjustified lawsuits. Fortunately, coaches can institute many preventive measures to reduce the risk. In this chapter we describe steps you can take to prevent injuries, first aid and emergency responses for when injuries occur, and your legal responsibilities as a coach.

Plan for Safety

You can’t prevent all injuries from happening, but you can take preventive measures that give your athletes the best possible chance for injury-free participation. In creating the safest possible environment for your athletes, you must address these areas:

- Preseason physical examination
- Physical conditioning
- Equipment and facilities inspection
- Athlete matchups and inherent risks
- Proper supervision and record keeping
- Environmental conditions

Preseason Physical Examination

The IESA requires that your athletes have a physical examination before they begin to participate in any practices or competitions. The exam should address the most likely areas of medical concern and identify athletes at high risk.

Physical Conditioning

Athletes need to be in or get in shape to participate at the level expected. They must have adequate cardiorespiratory fitness and muscular fitness.

Cardiorespiratory fitness refers to the body’s ability to use oxygen and fuels efficiently to power muscle contractions. As athletes get in better shape, their bodies are able to more efficiently deliver oxygen to fuel muscles and carry off carbon dioxide and other wastes. Student athletes who aren’t as fit as their peers often overextend in trying to keep up, which can result in lightheadedness, nausea, fatigue, and potential injury.
Try to remember that the athletes’ goals are to participate, learn, and have fun. Therefore, you must keep the athletes active, attentive, and involved with every phase of practice. If you do, they will attain higher levels of cardiorespiratory fitness as the season progresses simply by taking part in practice. However, watch closely for signs of low cardiorespiratory fitness; don’t let your athletes do much until they’re fit.

Muscular fitness encompasses strength, muscular endurance, power, speed, and flexibility. This type of fitness is affected by physical maturity, as well as strength training and other types of training. Your team members will likely exhibit a relatively wide range of muscular fitness. Those who have greater muscular fitness will, for example, be able to run faster, jump higher, and throw farther. They will also sustain fewer muscular injuries, and any injuries that do occur will tend to be minor. And in case of injury, recovery is faster in those with higher levels of muscular fitness.

Two other components of fitness and injury prevention are the warm-up and the cool-down. Although young bodies are generally very limber, they too can become tight through inactivity. The warm-up should address each muscle group and elevate the heart rate in preparation for strenuous activity. Athletes should warm up for 5 to 10 minutes using a combination of light running, jumping, and stretching. As practice winds down, slow athletes’ heart rate with an easy jog or walk. Then have athletes stretch for 5 minutes to help prevent tight muscles before the next practice or contest.

**Equipment and Facilities Inspection**

Another way to prevent injuries is to check the quality and fit of uniforms, practice attire, and equipment used by your athletes. Make sure your athletes’ shoes, if applicable, are the proper size for their feet. Discuss with your athletes the need to double-tie their shoelaces and possibly wear two pairs of socks instead of one to help prevent blisters.

Check the quality of all equipment and uniforms before fitting them to the kids on your team. After distributing properly fitting equipment that is safe and in good condition, show athletes how to put on every part of their uniform. Give your athletes additional tips that may be helpful. For example, when coaching wrestling you can advise them to wash and completely dry all practice and match uniforms to reduce the chance of skin irritations. Wrestling coaches should clean mats at least once a day with disinfecting cleaner and allow them to dry before being used; that also helps reduce the incidence of skin problems.

Remember also to examine regularly the area on which your athletes practice and compete. Remove hazards, report conditions you cannot remedy, and request maintenance as necessary. If unsafe conditions exist, either make adaptations to prevent risk to your athletes’ safety or stop the practice or competition until safe conditions have been restored. Refer to the appendix
for the “Facilities Inspection Checklist” on page 68 for a form to guide you in verifying that the facility and equipment are safe.

**Proper Supervision and Record Keeping**

To ensure athletes’ safety, you must provide both general supervision and specific supervision. General supervision means that you are in the area of activity so that you can see and hear what is happening. You should be

- at the practice site and in position to supervise the athletes even before the formal practice begins,
- immediately accessible to the activity and able to oversee the entire activity,
- alert to conditions that may be dangerous to athletes and ready to take action to protect athletes,
- able to react immediately and appropriately to emergencies, and
- present at the practice site or competition area until the last athlete has been picked up after the practice or competition.

Specific supervision is the direct supervision of an activity at practice. For example, you should provide specific supervision when you teach new skills and continue it until your athletes understand the requirements of the activity, the risks involved, and their own ability to perform in light of these risks. You also must provide specific supervision when you notice either athletes breaking rules or a change in the condition of your athletes. As a general rule, the more dangerous the activity, the more specific the supervision required. This suggests that more specific supervision is required with younger and less experienced athletes.

As part of your supervision duty, you are expected to foresee potentially dangerous situations and to be positioned to help prevent them. This requires that you know the sport you are coaching well, especially the rules that are intended to provide for safety. Prohibit dangerous horseplay, and hold practices only under safe weather conditions. These specific supervisory activities, applied consistently, will make the practice and competition environment safer for your athletes and will help protect you from liability if a mishap occurs.

For further protection, keep records of your season plans, practice plans, and athletes’ injuries. Season and practice plans come in handy when you need evidence that athletes have been taught certain skills, whereas accurate, detailed injury report forms offer protection against unfounded lawsuits. Ask for these forms from your school administration (see page 67 in the appendix for a sample injury report form), and hold onto these records for several years so that an “old sport injury” of a former athlete doesn’t come back to haunt you.
Environmental Conditions

Most health problems caused by environmental factors are related to excessive heat or cold, although you should also consider other environmental factors such as severe weather and air pollution. A little thought about potential problems and a little effort to ensure adequate protection for your athletes will prevent most serious emergencies related to environmental conditions.

Heat

On hot, humid days the body has difficulty cooling itself. Because the air is already saturated with water vapor (humidity), sweat doesn’t evaporate as easily. Therefore, body sweat is a less effective cooling agent, and the body retains extra heat. Hot, humid environments put athletes at risk of heat exhaustion and heatstroke (see more on these in “Serious Injuries” on pages 31-32). And if you think it’s hot or humid, it’s worse for the kids, not only because they’re more active, but also because kids younger than 12 have more difficulty regulating their body temperature than adults do. To provide for athletes’ safety in hot or humid conditions, take the following preventive measures:

- Monitor weather conditions and adjust practices accordingly. The “Prevention of Heat Illness Guidelines” form in the appendix of this book shows the specific air temperatures and humidity percentages that can be hazardous.
- Acclimatize athletes exercising in high heat and humidity by beginning slowly with lighter workouts to help reduce the risk of heat illness. Athletes can adjust to high heat and humidity in 7 to 10 days. During this period, hold practices at low to moderate activity levels and give the athletes fluid breaks every 20 minutes.
- If practicing outside, switch to light clothing. Athletes should wear shorts and white T-shirts.
- Identify and monitor athletes who are prone to heat illness. Athletes who are overweight, heavily muscled, or out of shape or athletes who work excessively hard or have suffered previous heat illness are more prone to heat illness. Closely monitor these athletes and give them water breaks every 15 to 20 minutes.
- Make sure athletes replace fluids lost through sweat. Encourage athletes to drink 17 to 20 ounces of fluid two to three hours before practice or
competitions, 7 to 10 ounces every 20 minutes during practice and after practice, and to drink 16 to 24 ounces of fluid for every pound lost. Fluids, such as water and sports drinks, are preferable during competitions and practices (suggested intakes are based on NATA [National Athletic Trainers’ Association] recommendations).

- Replenish electrolytes, such as sodium (salt) and potassium, which are lost through sweat. The best way to replace these lost nutrients in addition to others such as carbohydrate (energy) and protein (muscle building) is by eating a balanced diet. Experts say that during the most intense training periods in the heat, additional salt intake may be helpful.

See the NFHS guidelines related to heat-related illness in the appendix.

**Cold**

When a person is exposed to cold weather, body temperature starts to drop below normal. To counteract this, the body shivers to create heat and reduces blood flow to the extremities to conserve heat in the core of the body. But no matter how effective the body’s natural heating mechanism is, the body will better withstand cold temperatures if it is prepared to handle them. To reduce the risk of cold-related illnesses, make sure athletes wear appropriate protective clothing and keep them active to maintain body heat. Also monitor the windchill because it can drastically affect the severity of athletes’ responses to the weather. The windchill factor index is shown in table 3.1.

<table>
<thead>
<tr>
<th>Temperature (°F)</th>
<th>Wind chill temperature (°F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>35</td>
<td>35</td>
</tr>
<tr>
<td>40</td>
<td>40</td>
</tr>
</tbody>
</table>

Table 3.1 Windchill Factor Index

<table>
<thead>
<tr>
<th>Temperature (°F)</th>
<th>Windchill temperature (°F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>35</td>
<td>35</td>
</tr>
<tr>
<td>40</td>
<td>40</td>
</tr>
</tbody>
</table>

Windchill may freeze within one minute
**IESA Severe Weather Policy**

Severe weather refers to a host of potential dangers, including lightning storms, tornadoes, hail, and heavy rains, which can cause injuries by creating sloppy field conditions for outdoor sports. Lightning is of special concern because it can come up quickly and can cause great harm or even kill. For each 5-second count from the flash of lightning to the bang of thunder, lightning is one mile away. A flash-bang of 10 seconds means lightning is two miles away; a flash-bang of 15 seconds indicates lightning is three miles away. An outdoor practice or competition should be stopped for the day if lightning is three miles away or closer (15 seconds or less from flash to bang). In addition to these suggestions, your school, league, or state association may also have additional rules that you will want to consider in severe weather.

When coaching an outdoor sport you should be aware of safe places in which to take cover when lightning strikes. They include fully enclosed metal vehicles with the windows up, enclosed buildings, and low ground (under cover of bushes, if possible). It’s not safe to be near metal objects such as flag poles, fences, light poles, and metal bleachers. Also avoid trees, water, and open fields.

Cancel an outdoor practice when under either a tornado watch or warning. If you are practicing or competing when a tornado is nearby, you should get inside a building if possible. If you cannot get into a building, lie in a ditch or other low-lying area or crouch near a strong building and use your arms to protect your head and neck.

The keys to handling severe weather are caution and prudence. Don’t try to get that last 10 minutes of practice in if lightning is on the horizon. Don’t continue a competition in heavy rain. Many storms can strike both quickly and ferociously. Respect the weather and play it safe.

Consult the IESA severe weather safety guidelines in the appendix.

**Air Pollution**

Poor air quality and smog can present real dangers to your athletes. Both short- and long-term lung damage are possible from participating in unsafe air. Although it’s true that participating in clean air is not possible in many areas, restricting activity is recommended when the air-quality ratings are lower than moderate or when there is a smog alert. Your local health department or air-quality control board can inform you of the air-quality ratings for your area and when restricting activities is recommended.

**Responding to Athletes’ Injuries**

No matter how good and thorough your prevention program is, injuries most likely will occur. When injury does strike, chances are you will be the one in charge. The severity and nature of the injury will determine how actively
involved you’ll be in treating it. But regardless of how seriously an athlete is hurt, it is your responsibility to know what steps to take. Therefore, you must be prepared to take appropriate action and provide basic emergency care when an injury occurs.

Of course, if your school has a certified ATC on site, follow the school’s policy about contacting him or her.

First Aid Kit

A well-stocked first aid kit should include the following:

- Antibacterial soap or wipes
- Arm sling
- Athletic tape—one and a half inches
- Bandage scissors
- Bandage strips—assorted sizes
- Blood spill kit
- Cell phone
- Contact lens case
- Cotton swabs
- Elastic wraps—three inches, four inches, and six inches
- Emergency blanket
- Examination gloves—latex free
- Eye patch
- Face mask removal tool
- Foam rubber—one-eighth inch, one-fourth inch, and one-half inch
- Insect sting kit
- List of emergency phone numbers
- Mirror
- Moleskin
- Nail clippers
- Oral thermometer (to determine if an athlete has a fever caused by illness)
- Penlight
- Petroleum jelly
- Plastic bags for crushed ice
- Prewrap (underwrap for tape)
- Rescue breathing or CPR face mask
- Safety glasses (for first aiders)
- Safety pins
- Saline solution for eyes
- Sterile gauze pads—three-inch and four-inch squares (preferably nonstick)
- Sterile gauze rolls
- Sunscreen—sun protection factor (SPF) 30 or greater
- Tape adherent and tape remover
- Tongue depressors
- Tooth saver kit
- Triangular bandages
- Tweezers

Being Prepared

Being prepared to provide basic emergency care involves many things, including being trained in cardiopulmonary resuscitation (CPR) and first aid and having an emergency plan.

CPR and First Aid Training

We recommend that all coaches receive CPR and first aid training from a nationally recognized organization such as the National Safety Council, the American Heart Association, the American Red Cross, or the American Sport Education Program (ASEP). You should be certified based on a practical test and a written test of knowledge. CPR training should include pediatric and adult basic life support and obstructed airway procedures.

Emergency Plan

An emergency plan is the final step in being prepared to take appropriate action for severe or serious injuries. The plan calls for three steps:

1. Evaluate the injured athlete.
   Use your CPR and first aid training to guide you. Be sure to keep these certifications up to date. Practice your skill frequently to keep them fresh and ready to use when you need them.

2. Call the appropriate medical personnel.
   If possible, delegate the responsibility for seeking medical help to another calm and responsible adult who attends all practices and competitions. Write out a list of emergency phone numbers and keep it with you at practices and competitions. Include the following phone numbers:
   - Rescue unit
   - Hospital
   - Physician
   - Police
   - Fire department

   Take each athlete’s emergency information to every practice and competition (see “Emergency Information Card” in the appendix on page 68). This information includes the person to contact in case of an emergency, what types of medications the athlete is using, what types of drugs the athlete is allergic to, and so on.

   Give an emergency response card (see “Emergency Response Card” in the appendix on page 69) to the contact person calling for emergency assistance. Having this information ready should help the contact person remain calm. You also must complete an injury report form and keep it on file for all injuries.
3. **Provide first aid.**

If medical personnel are not on hand at the time of the injury, you should provide first aid care to the extent of your qualifications. Although your CPR and first aid training will guide you, it is important to remember the following:

- Do not move the injured athlete if the injury is to the head, neck, or back; if a large joint (ankle, knee, elbow, shoulder) is dislocated; or if the pelvis, a rib, or an arm or leg is fractured.
- Calm the injured athlete and keep others away from him as much as possible.
- Evaluate whether the athlete’s breathing has stopped or is irregular, and if necessary, clear the airway with your fingers.
- Administer artificial respiration if the athlete’s breathing has stopped. Administer CPR if the athlete’s circulation has stopped.
- Remain with the athlete until medical personnel arrive.

---

**Emergency Steps**

It is important that you have a clear, well-rehearsed emergency action plan. You want to be sure you are prepared in case of an emergency because every second counts.

Your emergency plan should follow this sequence:

1. Check the athlete’s level of consciousness.
2. Send a contact person to call the appropriate medical personnel and to call the athlete’s parents.
3. Send someone to wait for the rescue team and direct them to the injured athlete.
4. Assess the injury.
5. Administer first aid.
6. Assist emergency medical personnel in preparing the athlete for transportation to a medical facility.
7. Appoint someone to go with the athlete if the parents are not available. This person should be responsible, calm, and familiar with the athlete. Assistant coaches or parents are best for this job.
8. Complete an injury report form while the incident is fresh in your mind (see page 67 in the appendix).
Taking Appropriate Action

Proper CPR and first aid training, a well-stocked first aid kit, and an emergency plan help prepare you to take appropriate action when an injury occurs. We spoke in the previous section about the importance of providing first aid to the extent of your qualifications. Don’t attempt to “play doctor” with injuries; sort out minor injuries that you can treat from those that need medical attention. Let’s take a look at taking the appropriate action for minor injuries and more serious injuries.

Minor Injuries

Although no injury seems minor to the person experiencing it, most injuries are neither life threatening nor severe enough to restrict participation. When these injuries occur, you can take an active role in their initial treatment.

Scrapes and Cuts  When one of your athletes has an open wound, the first thing you should do is put on a pair of disposable latex-free examination gloves or some other effective blood barrier. Then follow these four steps:

1. Stop the bleeding by applying direct pressure with a clean dressing to the wound and elevating it. The athlete may be able to apply this pressure while you put on your gloves. Do not remove the dressing if it becomes soaked with blood. Instead, place an additional dressing on top of the one already in place. If bleeding continues, elevate the injured area above the heart and maintain pressure.

2. Cleanse the wound thoroughly once the bleeding is controlled. A good rinsing with a forceful stream of water, and perhaps light scrubbing with soap, will help prevent infection.

3. Protect the wound with sterile gauze or a bandage strip. If the athlete continues to participate, apply protective padding over the injured area.

4. Remove and dispose of gloves carefully to prevent you or anyone else from coming into contact with blood.

Coaching Tip

You shouldn’t let a fear of acquired immune deficiency syndrome (AIDS) and other communicable diseases stop you from helping an athlete. You are only at risk if you allow contaminated blood to come in contact with an open wound on your body, so the disposable examination gloves that you wear will protect you from AIDS should one of your athletes carry this disease. Check with your sport director, your sport league organization, or the Centers for Disease Control and Prevention (CDC) for more information about protecting yourself and your participants from AIDS.
For bloody noses not associated with serious facial injury, have the athlete sit and lean slightly forward. Then pinch the athlete’s nostrils shut. If the bleeding continues after several minutes, or if the athlete has a history of nosebleeds, seek medical assistance.

**Strains and Sprains** The physical demands of sport practices and competitions often result in injury to the muscles or tendons (strains) or to the ligaments (sprains). When your athletes suffer minor strains or sprains, immediately apply the PRICE method of injury care:

- **P** Protect the athlete and injured body part from further danger or trauma.
- **R** Rest the area to avoid further damage and foster healing.
- **I** Ice the area to reduce swelling and pain.
- **C** Compress the area by securing an ice bag in place with an elastic wrap.
- **E** Elevate the injury above heart level to keep the blood from pooling in the area.

**Bumps and Bruises** Inevitably, sport-participants make contact with each other and with the ground, especially in contact sports. If the force applied to a body part at impact is great enough, a bump or bruise will result. Many athletes continue practicing and competing with these sore spots, but if the bump or bruise is large and painful, you should act appropriately. Again, use the PRICE method for injury care and monitor the injury. If swelling, discoloration, and pain have lessened, the athlete may resume participation with protective padding; if not, the athlete should be examined by a physician.

**Serious Injuries**

Head, neck, and back injuries; fractures; and injuries that cause an athlete to lose consciousness are among a class of injuries that you cannot and should not try to treat yourself. In these cases you should follow the emergency plan outlined on page 28. We do want to examine more closely, however, your role in preventing and handling heat exhaustion and heatstroke. Additionally, please refer to figure 3.1 for signs and symptoms associated with heat exhaustion and heatstroke.

**Heat Cramps** Tough practices combined with heat stress and substantial fluid loss from sweating can provoke muscle cramps commonly known as heat cramps. Cramping is most common during the early part of the season when weather is the hottest and athletes may be least adapted to heat. The
cramp, a severe tightening up of the muscle, can drop athletes and prevent continued participation. Dehydration, electrolyte loss, and fatigue are the contributing factors. The immediate treatment is to have athletes cool off and slowly stretch the contracted muscle. Fluids with electrolytes should also be consumed to rehydrate the athlete. Athletes may return to participation later that day or the next day provided the cramp doesn’t cause a muscle strain.

**Heat Exhaustion**  Heat exhaustion is a shocklike condition caused by dehydration and electrolyte depletion. Symptoms include headache, nausea, dizziness, chills, fatigue, and extreme thirst. Profuse sweating is a key sign of heat exhaustion. Other signs include pale, cool, and clammy skin; rapid, weak pulse; loss of coordination; and dilated pupils.

An athlete suffering from heat exhaustion should rest in a cool area, shaded if outdoors; drink cool fluids, particularly those containing electrolytes; and apply ice to the neck, back, or abdomen to help cool the body. If you believe an athlete is suffering from heat exhaustion, seek medical attention. Under no conditions should the athlete return to activity that day or before regaining all the weight lost through sweat. If the athlete has to see a physician, he shouldn’t return to the team until he has a written release from the physician.

![Figure 3.1](image)  Signs and symptoms of heat exhaustion and heatstroke.
Heatstroke  Heatstroke is a life-threatening condition in which the body stops sweating and body temperature rises dangerously high. It occurs when dehydration causes a malfunction in the body’s temperature control center in the brain. Symptoms include the feeling of being extremely hot, nausea, confusion, irritability, and fatigue. Signs include hot, dry, and flushed or red skin (this is a key sign); lack of sweat; rapid pulse; rapid breathing; constricted pupils; vomiting; diarrhea; and possibly seizures, unconsciousness, or respiratory or cardiac arrest.

If an athlete experiences heatstroke, send for emergency medical assistance immediately and cool the athlete as quickly as possible. Remove excess clothing and equipment from the athlete, and cool her body with cool, wet towels or by pouring cool water over her or place her in a cold water bath. Apply ice packs to the armpits, neck, back, abdomen, and between the legs. If the athlete is conscious, give her cool fluids to drink. If the athlete is unconscious, place her on her side to allow fluids and vomit to drain from the mouth. An athlete who has suffered heatstroke may not return to the team until getting a written release from a physician.

Protecting Yourself

When one of your athletes is injured, naturally your first concern is the athlete’s well-being. Your feelings for youngsters, after all, are what made you decide to coach. Unfortunately, you must consider something else: Can you be held liable for the injury?

From a legal standpoint, a coach must fulfill nine duties. We’ve discussed all but planning in this chapter (planning is discussed in chapters 4 and 6). The following is a summary of your legal duties:

1. Provide a safe environment.
2. Properly plan the activity.
3. Provide adequate and proper equipment.
5. Warn of inherent risks in the sport.
6. Supervise the activity closely.
7. Evaluate athletes for injury or incapacitation.
8. Know emergency procedures, CPR, and first aid.

In addition to fulfilling these nine legal duties, you should check your school or school district’s insurance coverage and your insurance coverage to make sure these policies will properly protect you from liability.