A Guide to Sports Injuries for Coaches and Parents
We’re a national leader in Sports Medicine for student athletes.

Every athlete has goals. We have goals, too. Most importantly, we want every student athlete to be healthy. After all, performance can only improve when good health is maintained. This guide was designed to help you prevent, recognize and react to sports-related injuries.
Contents

Sprains and Strains ................................................................. 6
Fractures and Dislocations ...................................................... 7
Neck and Spine Injuries ........................................................... 8
Concussions ........................................................................... 9
Pulmonary and Breathing Problems ........................................ 10
Mouth Guards / Dental Injuries ............................................... 11
Cardiac Problems .................................................................. 12
Heat Illness ........................................................................... 13
Weather Guide for Activities in Heat ....................................... 14
Hydration ............................................................................... 14
Cold Weather Injuries ............................................................ 15
Weather Guide for Activities in the Cold ................................. 16
Lightning and Thunder ........................................................... 16
Diabetes ............................................................................... 17
Allergies ............................................................................... 18
Skin Disease .......................................................................... 19
Shock ................................................................................... 20
Psychological Concerns ......................................................... 21
Emergency Action Plan (EAP) .................................................. 22
EAP Fill-In ............................................................................ 23
Emergency Contacts .............................................................. 24
Venue Names & Locations ..................................................... 25
First Aid Kits .......................................................................... 26
Nationwide Children's Sports Medicine Service Guide ............. 27
Sprains and Strains

Muscle strains and sprains are some of the most common sports injuries. A strain is defined as trauma to the muscle fibers due to a strong contraction or overstretching, while a sprain involves an overstretched ligament. Remember, a ligament is connective tissue attaching bone to bone, whereas tendons connect muscle to bone.

<table>
<thead>
<tr>
<th>Grades of Sprains and Strains</th>
<th>Description</th>
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<tbody>
<tr>
<td>Grade I Mild</td>
<td>Tissue is stretched. May have slight swelling, a mild loss in range of motion, however, there is NO decrease in loss of function.</td>
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<tr>
<td>Grade II Moderate</td>
<td>Partial tearing of some tissue. Moderate amount of swelling may be present along with bruising or discoloration. There is a moderate loss of range of motion and strength to the joint. There is some decrease in loss of function.</td>
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<tr>
<td>Grade III Severe</td>
<td>Complete tearing of one or more structures. Significant swelling is almost always present. Discoloration may be seen. Near complete loss of range of motion and strength. There is a marked decrease in loss of function.</td>
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P.R.I.C.E. - Treatment of Acute Strain or Sprain

<table>
<thead>
<tr>
<th>Letter</th>
<th>Description</th>
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<tbody>
<tr>
<td>P</td>
<td>PROTECT the injured area from further damage. This can be a splint or brace or to use crutches if it is a lower extremity injury.</td>
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<tr>
<td>R</td>
<td>REST the area until evaluated by a physician or athletic trainer.</td>
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<tr>
<td>I</td>
<td>ICE the area to decrease pain and swelling. Ice should be applied no longer than 15-20 minutes at a time. Always ice and ice only for the first 2-3 days after injury and NEVER sleep with ice on an injury.</td>
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<tr>
<td>C</td>
<td>COMPRESS the area. Use and elastic wrap (ace bandage) to control swelling leaving the fingers/toes exposed. The wrap should be applied distal to proximal (example: start at toes or fingers and wrap towards the heart).</td>
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<tr>
<td>E</td>
<td>ELEVATE the area above the heart to use gravity to diminish swelling.</td>
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Fractures and Dislocations

While all fractures are painful and debilitating, some can be difficult to diagnose. Often, a dislocation or forceful disruption of a joint can emulate the bone fracture. A subluxation, defined as a dislocation that naturally realigns itself, can be equally painful.

Signs and Symptoms:
- Obvious deformity or abnormality present
- Swelling to the injured area
- Point tenderness directly over the specific area of bone
- Possible numbness sensation
- Loss of function to the area

Treatment if fracture/dislocation/subluxation is suspected:
- Splint the joints above and below the injured area in a comfortable position.
- Apply an elastic wrap to support the splint and apply pressure to the area for compression and stability.
- Use ice to control pain and swelling.
- Have the athlete transported immediately for further evaluation by a physician.
- NEVER attempt to reduce (relocate a dislocated joint) yourself. This should only be done by a physician or by emergency care personnel.

Returning to sport with a cast:
- Athlete must have clearance letter from a licensed medical physician stating that the he or she is permitted to play with upper extremity cast. This letter should be presented to coaches as well as officials at each sporting event.
- The Ohio High School Athletic Association states that casts over the elbow, hand, wrist or forearm, must be covered. Use a high density, closed-cell foam, or an alternate material of no less than 1/2 inch thick. The entire cast must be covered to protect the injury and other athletes. This may only be done with written approval from the treating physician.

Neck and Spine Injuries

Neck and spine injuries are common in high contact sports like football, soccer, or lacrosse. These injuries can include fractured bones, herniated discs, and/or nerve pathology.

Signs and Symptoms:
• Point tenderness and/or pain over any bony prominence in back of the neck
• Numbness/tingling in arms, legs, or down the spine
• Inability to feel or move face or limbs
• Muscle spasm
• Deformity

Treatment for neck/spine injuries:
• Remain calm.
• DO NOT move the athlete. Stabilize the head and neck in the position it is in.
• DO NOT let the athlete move.
• If any of the above symptoms persist, call 9-1-1 and have the athlete transported immediately.
• Serious neck injury should be suspected for ALL UNCONSCIOUS athletes until proven otherwise. Stabilize the athlete (do not let them move) and call 9-1-1 to have the athlete transported for further medical evaluation.

Concussions

A concussion may be caused by a blow, bump, or jolt to the head or by any fall or hit that jars the brain. This “invisible” injury disrupts the brain’s normal physiology which can affect mental stamina and function, causing the brain to work longer and harder to complete even simple tasks. A concussion may involve loss of consciousness, but the majority does not. A concussion is normally a temporary condition from which most kids make a full recovery if handled properly. Ultimately, ALL concussions are serious because they are brain injuries!

Common Concussion Symptoms

<table>
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<tr>
<th>Physical</th>
<th>Cognitive</th>
<th>Emotional</th>
<th>Sleep</th>
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<tbody>
<tr>
<td>Headache</td>
<td>Feeling mentally foggy</td>
<td>Irritability</td>
<td>Trouble falling asleep</td>
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<tr>
<td>Dizziness</td>
<td>Feeling slowed down</td>
<td>Sadness</td>
<td>Sleeping more than usual</td>
</tr>
<tr>
<td>Balance problems</td>
<td>Difficulty concentrating</td>
<td>Nervousness</td>
<td>Sleeping less than usual</td>
</tr>
<tr>
<td>Nausea/Vomiting</td>
<td>Difficulty remembering</td>
<td>More emotional than usual</td>
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<tr>
<td>Fatigue</td>
<td>Difficulty focusing</td>
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<td>Sensitivity to light</td>
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<td>Sensitivity to noise</td>
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</table>

Off the field management

As required by both Ohio law and OHSAA, any athlete with symptoms of a concussion is automatically held out for the remainder of the practice or game. Any athlete that has a suspected concussion should be evaluated by a physician. In rare cases, when repeated concussions occur over a brief interval, athletes may suffer from Second Impact Syndrome, a potentially life-threatening response in the brain. Parents should seek careful evaluation and management of any sports-related concussion. Athletes must have a physician note to return to play. Any athlete returning from a concussion should do so using a supervised, slow, step-by-step progression.

For more information, visit www.nationwidechildrens.org/concussions.

**Pulmonary and Breathing Problems**

**Asthma**

Asthma is a condition involving a restricted airway, making breathing difficult. Asthma attacks can be triggered by strenuous exercise (exercise induced), cold or dry air, infection, smoke, or allergen particles in the air. Symptoms of asthma include wheezing, coughing, extreme fatigue, and shortness of breath. These symptoms can be alleviated by using an inhaler that has been prescribed – and in the manner prescribed to the athlete. If the athlete does not have an inhaler present, he/she must refrain from practicing. If athlete does not have inhaler and has an attack, call 9-1-1.

**Pneumothorax**

Pneumothorax, or a collapsed lung, results from a ruptured air sac in the lung caused by a rib fracture or blunt trauma to the chest (tension pneumothorax). Symptoms include chest pain and shortness of breath. In a tension pneumothorax, symptoms progress rapidly and the trachea is visibly shifted to the right or left (the opposite side of injury). This can be life threatening. The athlete must be transported immediately to the hospital. Call 9-1-1.


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**Mouth Guards and Dental Injuries**

The National Youth Sports Foundation for Safety reports an athlete is 60 times more likely to sustain damage to the teeth when not wearing a protective mouth guard. Dental injuries are easily preventable through the use of a properly fitted mouth guard. There are three types of mouth guards currently available: ready-made or stock, “boil and bites”, and custom-made (made by a dentist). The most effective mouth guards should be: comfortable, resistant to tearing, properly fitted, easily cleaned, and should not restrict speech or breathing.

<table>
<thead>
<tr>
<th>Types of Dental Injuries</th>
<th>Description</th>
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<tbody>
<tr>
<td>Avulsion</td>
<td>The entire tooth is knocked out.</td>
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<tr>
<td>Fracture</td>
<td>The tooth is broken.</td>
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<tr>
<td>Luxation</td>
<td>The tooth is in the socket, but in the wrong position.</td>
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</tbody>
</table>

In any dental/tooth injury it is important to:
- **NOT** handle the tooth by the root (the part that comes out of the gums).
- **NOT** scrub or brush the tooth.
- **NOT** attempt to sterilize the tooth.

Treatment for tooth injury:
- Gently rinse off any dirt with water.
- If tooth is avulsed (the entire tooth is out) reposition the tooth in the socket. Have the athlete stabilize the tooth by gently biting down on some gauze, and transport immediately to a dentist. DO NOT reposition the tooth if it looks "too short" (pushed up into gum).
- If unable to re-plant the tooth place in:
  - Tooth preserving kit
  - Cold milk
  - Saline soaked gauze
  - Under a conscious athlete’s tongue
  - Cup of water
- The athlete needs to be transported to the dentist immediately. The tooth needs to be treated **within 30 minutes** to have the best chance of tooth survival.

(American Dental Association, Statement on Athletic Mouthguards, 2015.)
Cardiac Problems

If an athlete experiences any warning signs or has a history of any heart issues, they should be evaluated and cleared by a physician before being permitted to participate in sports. A child is also more likely to have a cardiac issue if there is a family history of cardiac diseases or sudden cardiac death of a family member before the age of 50.

<table>
<thead>
<tr>
<th>Warning Signs of Cardiac Problems</th>
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<tbody>
<tr>
<td>Chest pain or light-headedness with exertion</td>
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<tr>
<td>Rapid heart rate (tachycardia)</td>
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<tr>
<td>Irregular/difficulty breathing</td>
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<tr>
<td>Excessive/unexplained shortness of breath or fatigue with exercise</td>
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</tbody>
</table>

If an athlete exhibits any of the above symptoms during exercise, they should promptly be sent to a physician for a thorough medical evaluation.


Heat Illness

Heat Cramps
Heat Cramps are caused by excessive sweating or an electrolyte imbalance.

Treatment:
• Proper fluid replacement
• Rest
• Stretching the affected muscles

Heat Exhaustion
Heat Exhaustion is caused by excessive fluid loss that has been inadequately replaced.

Treatment:
• Cool athlete with cold water and ice.
• Fluid replacement (either water or IV fluids, cool athlete with water or ice).
• Move athlete to cool location (shade, air conditioning, etc.).

Heat Stroke
Heat stroke is the failure of the body's heat-control mechanism and can cause other organ systems to shut down. Heat stroke is the most dangerous heat illness and is a life threatening medical emergency. Call 9-1-1.

Treatment:
• Remove the athlete from sun/warm environment.
• Cool the body as quickly as possible.
• Remove most of athlete's clothing and quickly cool athlete with liberal quantities of cold towels and ice packs, primarily around the neck, armpits and groin.

Symptoms of Heat Illness

<table>
<thead>
<tr>
<th>Heat Cramps</th>
<th>Heat Exhaustion</th>
<th>Heat Stroke</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sweating</td>
<td>Headache</td>
<td>Incoherent speech</td>
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<tr>
<td>Muscle Cramps</td>
<td>Nausea</td>
<td>Disorientation</td>
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<tr>
<td>Chills</td>
<td>Unconsciousness</td>
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<tr>
<td>Unsteadiness</td>
<td>Rapid or irregular pulse</td>
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<tr>
<td>Fatigue</td>
<td>Very warm and dry skin</td>
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<tr>
<td>Dizziness</td>
<td>Sweating stops</td>
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<tr>
<td>Rapid pulse</td>
<td>Cool and pale skin</td>
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<tr>
<td>Sweating stops</td>
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</table>

Tips for prevention:
• Slowly acclimate athlete to practicing in warm climate.
• Clothing should be light in color and weight.
• Identify athletes more at risk (i.e. overweight, out of shape, heavily muscled, and those who seem to sweat less).
• Water breaks should be given AT LEAST every 15-30 minutes (10-15 in warmer, more humid weather) and athletes should be encouraged to drink more water before and after practices.

Weather Guide for Activities in the Heat

National Weather Service Heat Index

<table>
<thead>
<tr>
<th>Temperature (°F)</th>
<th>Relative Humidity (%)</th>
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<tbody>
<tr>
<td>60</td>
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<td>108</td>
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<td>110</td>
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</tbody>
</table>

With Prolonged Exposure and/or Physical Activity

- **Extreme Danger:** Heat stroke or sunstroke highly likely
- **Danger:** Sunstroke, muscle cramps, and/or heat exhaustion likely
- **Extreme Caution:** Sunstroke, muscle cramps, and/or heat exhaustion possible
- **Caution:** Fatigue possible

- **Caution:** Water breaks every 15 minutes.
- **Extreme Caution:** Modify practice intensity. Keep a close eye on kids who are deconditioned and/or have a history of heat illness.
- **Danger:** Consider changing practice times to a less humid part of the day. Eliminate need for additional equipment/layers. Have a 10 minute rest break every 60 minutes.
- **Extreme Danger:** Cancel practice.

(HAFA National Weather Service Heat Index Chart, retrieval 2016)

Hydration

The human body contains 60% water and a fluid loss of as little as 2 - 3% of a person’s body weight can impair athletic performance. In a 50-pound child, that’s only a loss of one pound due to exercise. Fluid losses of 7 - 10% can lead to heat stroke and even death. Thus, dehydration and fluid replacement is of special concern for children involved in athletic activities.

Suggested Guidelines for Energy And Fluid Replacement:

- Pre-competition meals should be eaten one to four hours prior to the athletic event.
- Include high-water content foods in the diet, such as watermelon.
- Drink 16 oz. of cool water about two hours before the athletic event (training, practice or competition).
- Drink another 8 – 16 oz. of fluid 15 minutes before the event.
- Drink 4 – 6 oz. of cool water or sports drink every 10-15 minutes during the event
- Weigh athlete before and after activity. For every pound of weight lost, replace with 16 oz. of plain water.
- Avoid caffeine-containing beverages as they act as diuretics, causing increased urination and fluid loss.

(Cold Weather Injuries

Frostnip

Frostnip is the freezing of the first few layers of skin and happens before frostbite. It can occur due to skin exposure to a cold surface or cold weather. The skin is usually not permanently damaged; however, it will be more sensitive to cold and more likely to develop frostnip and frostbite in the future.

Frostbite

Frostbite is damage to the skin and underlying tissues caused by prolonged exposure to dry cold. It begins as a red and painful area and progresses to a cold, hard, numb area. Frostbite occurs more often on small, exposed areas of the body such as hands, fingers, feet, toes, ears, nose and cheeks. Early signs of frostbite can be seen by looking for skin that is unusually pale and/or cold and dry. A child might also experience a burning or aching feeling and may see swelling. An additional sign of frostbite is blisters within 24 hours of cold exposure.

Treatment:

- Make sure you do not rub or massage the injured area.
- Fill a sink with warm water and put the injured area in the water for 30 minutes or until it turns pink.
- Then gently pat dry the area and keep it warm and clean.
- Do not break any blisters.
- To rewarm the face and ears, apply warm washcloths and replace them as they get cool.
- Give warm liquids to drink.
- If any area feels numb, tingling, hard, or is gray or black in color, seek medical care immediately.

Hypothermia

Hypothermia is a condition that occurs when body temperature drops below normal (98.6°F). When body temperature drops significantly, the body’s metabolism slows down, which increases the risk of severe injury from freezing. Hypothermia is more likely to occur when body temperature remains low for more than a few hours. Younger children are more susceptible to hypothermia.

Treatment:

- Hypothermia is an emergency situation. Call 911 immediately to get emergency medical help.
- Victims of hypothermia must be warmed slowly.
- Move patient to a warm room.
- Remove wet clothing and replace with warm, dry clothes and blankets.
- Give warm (not hot) fluids to drink.
- If not responding to conservative treatment, the person can also be placed in warm (not hot) bath.

Tips for prevention:

- Wear several layers of warm, breathable clothing.
- Wear a waterproof and windproof outer layer.
- Wear a moisture wicking layer closest to the skin.
- Cover your head, face, and neck to retain body heat.
- Try to stay as dry as possible and replace any wet layers.
- Take multiple breaks indoors to rewarm.
- Have emergency supplies such as blankets, extra clothing, and warm liquids nearby area.


Weather Guide for Activities in the Cold

National Weather Service Windchill Chart

<table>
<thead>
<tr>
<th>Wind Chill (°F)</th>
<th>Extreme Danger</th>
<th>Danger</th>
<th>Caution</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>-48</td>
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<td>60</td>
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Frostbite Times

-10°F: 60 minutes
-5°F: 30 minutes
-0°F: 15 minutes
5°F: 5 minutes
10°F: 2 minutes
15°F: 1 minute
20°F: 1 minute
25°F: 1 minute
30°F: 30 minutes
35°F: 60 minutes
40°F: 6 hours
45°F: 12 hours
50°F: 24 hours

Frostbite can occur in 5 minutes or less.
- Extreme Danger: Frostbite can occur in 5 minutes or less.
- Danger: Frostbite can occur in 10 minutes or less.
- Extreme Caution: Frostbite can occur in 30 minutes or less.
- Caution: Frostbite can occur in 10 minutes or less.
- Calm: Frostbite can occur in 12 hours or more.

Wind Chill (°F) = 35.74 + 0.6215T - 35.75(V0.16) + 0.4275T(V0.16)

Effective 11/01/01

Weather Guide for Activities in the Cold

Diabetes

Diabetes is the body's inability to produce or use insulin properly. Insulin converts sugar, starches, and other foods into energy the body uses for everyday living.

Type I diabetes results from the body's failure to produce insulin, and requires multiple insulin injections daily to help the body convert food to energy.

Type II diabetes results from the body's failure to properly use insulin, combined with relative insulin deficiency. If an athlete's blood sugar dips too low, he/she may go into hypoglycemic or diabetic shock. Diabetes often goes undiagnosed because many of its symptoms appear to be harmless.

**Diabetic Shock Signs and Symptoms**

- Claymmy skin
- Slurred speech
- Poor balance
- Tremors
- Extreme irritability
- Blurry vision
- Convulsions
- Other neurological effects

**Treatment for Hypoglycemic / Diabetic Shock:**
- Remove athlete from play.
- Give the athlete a quick acting source of carbohydrate such as glucose tablets or orange juice, followed by a long acting carbohydrate source such as cheese and crackers.
- Continue to monitor athlete's condition after diabetic episode for at least 15 minutes.
- If symptoms resolve, contract guardian and follow the "return to play action plan" put in place by the treating physician.
- If symptoms worsen, contact guardian and transport to the hospital.
- NEVER attempt to have an athlete ingest anything while convulsing or unconscious.

**Ongoing Treatment:**
- Eating a consistent well balanced diet that is high in fiber, low in saturated fat, and low in concentrated sweets.
- Correct dose of medication throughout the day.
- Regular exercise.

Lightning and Thunderstorms

A good reminder during lightning and thunderstorms is to use the phrase:

If you see it (lightning), flee it. If you hear it (thunder), clear it.

- All persons should be seeking—or already safe inside—a safe structure or location. Safe shelter includes inside a building, or in a car or bus. Taking shelter under the bleachers or in the dugout is NOT safe.
- It is important to wait at least 30 minutes after the last lightning flash or sound of thunder before resuming any activity or returning outdoors.


Allergies

Anaphylaxis is a severe allergic reaction to venom, food, or medication. These severe reactions are most typically caused by an insect sting or ingesting foods the athlete may be allergic to. Common food allergies include milk, peanuts, or tree nuts. Anaphylaxis can be deadly. Therefore, IMMEDIATE treatment is a must! If an athlete has a known severe allergy to any substance, he or she must carry an EpiPen with them to all events and venues.

Signs and Symptoms of Anaphylaxis

- Pale skin
- Rash
- Facial, throat, or mouth swelling
- Weak rapid pulse
- Rapid shallow breathing or difficulty breathing

Treatment for Unknown Allergy

- Remove athlete from play.
- Allow athlete to sit down.
- Inspect bite or sting.
- Remove stinger if able and apply ice.
- Monitor athlete for 15 minutes.
- If symptoms resolve allow athlete to return to play.
- If symptoms have not resolved Call 9-1-1.

Treatment for Known Allergy

- Remove athlete from play.
- Call 9-1-1.
- Lay athlete on their back and keep calm.
- Elevate legs and cover with blanket.
- Remove stinger if able.

Note: A stinger can be removed by pinching the skin slightly below the sting and scraping upward with a credit card.

* In the event an athlete suffers a sting or anaphylactic shock, all coaches must be trained to use an epinephrine auto-injector (EpiPen). To use, pull off the top protector on the device and push the injection end into the athlete’s thigh and hold. Because EpiPen can differ, coaches should become familiar with their athlete’s EpiPen before an emergency event occurs.

Skin Diseases

At any given time, one out of every three people suffers from some sort of skin disease. With the prevalence of close contact in youth sports, athletes and parents must be on high alert for spotting these lesions. If a potential infection presents itself, the athlete must be seen by a trained medical professional before being allowed to return back to sport. Skin diseases fall into three major categories: Fungal, viral, and bacterial.

<table>
<thead>
<tr>
<th>Types of Infection</th>
<th>Common Infections</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fungal</td>
<td>Tinea (ring worm) can be found anywhere on the body, but is most commonly found on the head, trunk, neck and arms. These typically round lesions can be red or gray in color and have a scaly consistency.</td>
<td>Topical and/or oral medication</td>
</tr>
<tr>
<td>Viral</td>
<td>Herpes Simplex virus is a painful, often recurring infection of clusters of small fluid filled sacs on a base of red skin.</td>
<td>Antiviral medications</td>
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<tr>
<td></td>
<td>Molluscum Contagiosum is a highly infectious disease most commonly seen in children and is manifested by smooth flesh colored, dome-shaped bumps with a tiny depression in the center.</td>
<td>Antiviral medications</td>
</tr>
<tr>
<td>Bacterial</td>
<td>Staphylococcus Aureus (Staph) and Streptococcus bacteria can infiltrate the skin through minor trauma, preexisting skin disease or poor hygiene. Staph infections are highly contagious and are treated with proper wound care and antibiotics. A staph bacterium that has become immune to common antibiotic treatment is known commonly as MRSA. If left untreated, this infection may become life threatening.</td>
<td>Proper wound care and antibiotics</td>
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<td></td>
<td>Impetigo shows as thin walled sacs filled with fluid that rupture into honey colored crust often found on the face and neck.</td>
<td>Antibiotics</td>
</tr>
<tr>
<td></td>
<td>Folliculits/Carbunculosis is a superficial infection of the hair follicles characterized by redness, fluid or pus filled sacs at the base of hair follicles.</td>
<td>Antibiotics</td>
</tr>
</tbody>
</table>

Note: Viruses main remain dormant in the body for years manifesting themselves in situations of lowered immunity and stress.

Tips to Prevention:

- Hand washing and daily showering by athletes is the best way to prevent the spread of these infectious diseases.
- Athletes must be discouraged from sharing towels, athletic gear, water bottles, disposable razors and hair clippers.
- All clothing and equipment should be laundered and/or disinfected on a daily basis.
- Athletes should be encouraged to complete daily skin surveillance and report any suspicious lesions for treatment.

Note: To return back to an Ohio High School Athletic Association sanctioned wrestling event, the athlete must have the official National Federation of State High School Associations medical release form signed by the physician. These forms can be found on the OHSAA.org web site.


Shock

Shock is a medical emergency, typically due to trauma, occurring when the organs and tissues of the body are not receiving an adequate blood flow. This deprives the organs and tissues of oxygen (carried in the blood) and allows the buildup of waste products. Shock can result in serious damage or even death.

Signs and symptoms:
- Moist, pale, cool, clammy (often ashen looking) skin
- Weak, rapid pulse
- Respiration is increased but shallow
- Decreased blood pressure
- Urinary retention
- Fecal incontinence
- Irritability
- Restlessness
- Excitement

Treatment:
- Call 9-1-1.
- Maintain body temperature as close to normal as possible.
- Elevate feet and legs 8-12 inches above heart.
- Loosen clothing.
- Nothing should be given by mouth.


Psychological Concerns

With student-athletes reporting higher levels of stress and negative emotions than non-athlete students, it is essential that coaches are aware of signs and symptoms of psychological concerns. Due to their daily interaction, a coach might be the first person to observe changes in the athlete. These behavioral changes may be subtle or drastic, and can range in the number of changes from few to many. Coaches should be familiar with their school district or organization’s plans to refer a student with psychological concerns. While it is uncommon to have these instances as a medical emergency or catastrophic event, it is vital to know the organization’s plans for how to refer a student in psychological distress (i.e. threatening self-harm or harm to others, suicide, homicide, etc.).

Note: Only trained and licensed individuals, such as psychologists and psychiatrists, can diagnose mental illness; however, early recognition can lead to better treatment and management of these conditions.

Examples of Behaviors to Monitor in Student Athletes

<table>
<thead>
<tr>
<th>Changes in weight</th>
<th>Gambling</th>
<th>Drug Abuse</th>
<th>Alcohol Abuse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feelings of loss of control or helplessness</td>
<td>Changes in Sleeping patterns</td>
<td>Withdrawal from friends</td>
<td>Problems managing anger or stress</td>
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<tr>
<td>Self-Harm</td>
<td>Unexplained Wounds</td>
<td>Mood swings</td>
<td>Agitation</td>
</tr>
<tr>
<td>Talk about death/dying</td>
<td>Lying</td>
<td>Loss of emotion</td>
<td>Irritability</td>
</tr>
<tr>
<td>Extreme worry or fear</td>
<td>Risky behavior</td>
<td>Memory issues</td>
<td>Fighting</td>
</tr>
<tr>
<td>Lack of interest in activities once enjoyed</td>
<td>Increase complaints of injury, illness, or fatigue</td>
<td>Shaking or trembling</td>
<td>Sudden emotional changes in a short period of time</td>
</tr>
<tr>
<td>Issues with authority</td>
<td>All or nothing thinking</td>
<td>Negative self-talk</td>
<td>Changes in eating habits</td>
</tr>
</tbody>
</table>

Emergency Action Plan

Any Emergency Medical Plan should include the following:
• A protocol for medical emergencies, including who stays with the athlete and who will call/go for help. Make sure to identify the person responsible for contacting the parents.
• All athletes are required to have a pre-participation physical (PPE) form. All forms should be easily accessible to the coach and athletic trainer. Emergency contact information should be included on the PPE. Any high-risk conditions, including asthma, diabetes, or any allergy should be brought to the attention of the coach.
• Any persons calling 911 for an emergency should be taught to identify their location and proper routes for the ambulance to access the playing fields or gymnasium. Make sure the routes identified have no locked gates or obstructions. Make sure to identify a person responsible for meeting the EMS at the arrival location and directing the EMS to the injured person.
• All coaches should be trained and certified in CPR and the use of an AED. The AED should be clearly marked and available at all athletic events. Identify the individual in charge of getting the AED in case of an emergency.
• A lightning protocol, identifying who decides when games are postponed and a location for athletes/spectators/officials to take cover. Events should be stopped for any lightning occurring within a 6-mile radius. Play may be resumed 30 minutes following the last lightning strike or sound of thunder.
• A plan for caring for athletes with neck or brain injuries, unconsciousness, collapse, respiratory distress, bee stings, heat illness, suspected fracture, tooth injury or anaphylactic shock.

Tips to Prevent Emergencies:
• Have someone responsible for checking all sporting equipment and identify any hazards on the field of play.
• Have water available for all athletes and NEVER restrict water breaks.
• Identify how athletes will be monitored for heat exhaustion and hydration during hot, humid days.

Emergency Action Plan for ____________________________________________
(venue or team name)

___________________________________ will call 9-1-1 in the event of an emergency situation. This person will also:
• Instruct emergency medical services (EMS) personnel to “report to and meet at a particular location as we have an injured athlete in need of emergency medical treatment.”
• Provide necessary information to EMS personnel:
  - Name, address, telephone number of caller
  - Number of victims; condition of victims
  - First-aid treatment initiated
  - Specific directions to locate scene
  - Other information as requested by dispatcher

___________________________________ will provide appropriate emergency care until arrival of EMS personnel: on arrival of EMS personnel, provide pertinent information (method of injury, vital signs, treatment rendered, medical history) and assist with emergency care as needed.

___________________________________ will notify parents and obtain medical history and insurance information if needed.

• Each coach should have emergency medical forms easily accessible at all times where emergency contact information can be found.
• Each coach should be aware of existing medical conditions of each athlete participating. For example, these conditions include asthma, diabetes, or bee sting allergies.

Location of First Aid/Medical Kit: ________________________________________
Location of automated external defibrillator (AED): ________________________
Location of safe shelter in case of inclement weather: _______________________

In the event of severe or inclement weather, _____________________________ will be in charge of making the final decision to postpone or cancel event.
Emergency Contacts

In a life-threatening emergency, always call 911 first.

Central Ohio Poison Control Center
(614) 228-1323 or (800) 222-1222 (TTY 228-2272)

Nationwide Children's Hospital Emergency Department
700 Children's Drive
Columbus, Ohio 43205
(614) 722-4300

Nearby Hospitals/Emergency Departments:

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<thead>
<tr>
<th>Name</th>
<th>Location</th>
<th>Phone</th>
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Police:

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<th>Department</th>
<th>Location</th>
<th>Phone</th>
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League Manager/Director:

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<th>Name</th>
<th>Phone</th>
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Venue Names and Locations:

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<th>Venue 3</th>
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First-Aid Kits

First aid kits should be at all practices and events. Each kit should include the following items:

• Gloves
• Tape (1.5-2")
• Scissors
• Band-Aids
• Non-stick gauze
• Alcohol
• Neosporin
• Saline Solution (cleaning wounds/rinsing eyes)
• Tissues
• Shoulder Sling
• 4” or 6” Ace wrap
• Plastic bags
• Tweezers
• CPR Mask
• Nail Clippers
• Antibacterial Wipes
• Hand Sanitizer
• Fast and slow acting carbohydrate (glucose tabs/cheese and crackers)
• Sterile gauze
• Emergency contact information
• Instant ice pack if ice will not be readily available

How can I share this resource with others?
Nationwide Children’s Hospital Sports Medicine provides an in-service on any of these topics free of charge. The length of the presentation and content can be tailored to fit the specific needs of the group.
Please call (614) 355-6000 for more information.

What if I want to learn more?
Nationwide Children’s Hospital Sports Medicine provides further educational resources, presentations, and print materials on concussions and other sports-related injuries, fitness, and well-being.

What other services does Nationwide Children’s Hospital Sports Medicine Offer?
Nationwide Children’s Hospital Sports Medicine utilizes the expertise of Pediatric Sports Medicine specialists and Physical Medicine and Rehabilitation specialists to provide the following services:

Clinical
• Sports Medicine Clinics:
  - Specially trained physicians diagnose and treat young athletes with fractures, sprains and strains, or bumps and bruises.
• Sports Concussion Clinics:
  - Pediatric concussions are evaluated by specialists using the most current research and practices to best manage these brain injuries.

Programming
• Functional Rehabilitation
  - Sports
  - Performing Arts
  - Concussions
• Mechanical analysis of throwing, running, and swimming using video software
• Sports Performance
• Concussion Baseline Testing

Outreach & Education
• Outreach Athletic Training and Medical Services for:
  - High schools and colleges
  - Youth sports and tournaments
• Sports medicine education for:
  - Physicians
  - EMS personnel
  - School nurses
  - Coaches (PAV certification)
  - Athletes
  - Student Aides

Research & Professional Advancement
• Research studies
• Athletic Training Student Internships
• Primary Care Sports Medicine Fellowship
Nationwide Children's Hospital Sports Medicine provides care at eight locations throughout central Ohio. For maps, directions and office hours of our locations, visit NationwideChildrens.org/Sports-Medicine-Locations.

To schedule an appointment at any location, call (614) 355-6000.

**Canal Winchester**  
*Close To Home℠ Center*  
7901 Diley Road, Suite 150  
Canal Winchester, OH 43110

**Dublin**  
Sports Medicine and Orthopedic Center  
5680 Venture Drive  
Dublin, OH 43017

**Hilliard**  
*Close To Home℠ Center*  
4363 All Seasons Drive  
Hilliard, OH 43026

**New Albany**  
Philip Heit Center for Healthy New Albany  
150 West Main St.  
New Albany, OH 43054

**Downtown**  
Orthopedic Center  
479 Parsons Ave.  
Columbus, OH 43215

**East Columbus**  
*Close To Home℠ Center*  
6435 East Broad St.  
Columbus, OH 43213

**Marysville**  
*Close To Home℠ Center*  
100 Colemans Crossing Blvd.  
Marysville, OH 43040

**Westerville**  
Sports Medicine and Orthopedic Center  
584 County Line Road West  
Westerville, OH 43082

Engage With Us  
NationwideChildrens.org/Sports-Medicine