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Stay Safe this Spring with SafetyNET

Safety in the workplace and safe homes are no accident. Being prepared for emergencies both on and off the job is essential.

Many people celebrate the arrival of Spring by playing outdoor sports. Whether your employees play softball for the company team or their children star on the local youth soccer league — all this activity increases the risk for injury. Please share this issue of **SafetyNET** with all of your employees to help them learn how to care for strains, sprains and breaks, as well as learn how to stay safe during a thunderstorm and much more. Employees can share this information with their families, helping keep safety a priority, both in and out of the workplace.

Sprains, Strains, Breaks: What's the Difference?

If you've sprained your ankle, you know what severe pain is. But maybe that "sprain" was a "strain" or possibly even a "break."

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Wound Smarts

Take a quiz to test your knowledge of the proper first aid for wounds.

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Do You Know What to Do in a Severe Thunderstorm?

Learn to separate fact from fiction when it comes to staying safe from a deadly lightning strike in a thunderstorm.

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In Case of Emergency...Be Ready for Anything.

Are you ready for an emergency? Learn about what you need to put into your disaster supplies kit.

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Sprains, Strains, Breaks: What's the Difference.

If you've sprained your ankle, you know what severe pain is. But maybe that "sprain" was a "strain" or possibly even a "break." The amount of pain in each case can be virtually equal. Only a trained medical professional can tell the difference. However, you do not need to know what kind of injury it is to provide initial care.

Just the Facts

Here are some facts on musculoskeletal injuries:

- Sprains are a stretch or tear of a ligament, the tissue connecting two bones. Ligaments stabilize and support the body's joints. For example, ligaments in the knee connect the upper leg to the lower leg, enabling people to walk and run.
- Strains are a twist, pull, or tear of a muscle or tendon. Tendons are cords of tissue that connect muscles to bones.
- Breaks are a fracture, splinter or complete break in bone, often caused by accidents, sports injuries or bone weakness.

According to the American Academy of Orthopaedic Surgeons (AAOS), physicians attend to more than 28 million Americans with musculoskeletal injuries each year, with more than 3 million requiring hospitalization.

Sprains

A sprain is caused by trauma (a fall, a twist, a blow to the body) that knocks a joint out of position and overstretches or even ruptures supporting ligaments. Some examples of this are when a person lands on an outstretched arm, slides into a base, lands on the side of the foot or runs on an uneven surface.

Though the intensity varies, pain, bruising and inflammation are common to all three categories of sprains: mild, moderate and severe. The person may feel a tear or pop in the joint. With a severe sprain, ligaments tear completely or separate from the bone. This loosening impairs joint function. A moderate sprain partially tears the ligament, producing joint instability and some swelling. A ligament is stretched in a mild sprain, but there is no joint loosening or instability.

Strains

Acute strains are caused by a direct blow to the body, overstretching or excessive muscle contraction. Chronic strains are the result of overuse—prolonged, repetitive movement—of muscles and tendons. Inadequate rest during intense training can cause a strain. Typical indications of strain include pain, muscle spasm, muscle weakness, swelling, inflammation and cramping. In severe strains, the muscle and/or tendon is partially or completely ruptured, leaving a person incapacitated. Some muscle function will be lost with a moderate strain, where the muscle/tendon is overstretched and slightly torn. With a mild strain, the muscle/tendon is stretched or pulled, slightly. One common strain is back strain – when the muscles that support the spine are twisted, pulled or torn. Athletes who engage in excessive jumping (during basketball or volleyball, for example) are vulnerable to this injury.

A hamstring muscle strain is a tear or stretch of a major muscle in the back of the thigh. The injury can sideline a person for up to six months. The likely cause is muscle strength imbalance between the hamstrings and the muscles in the front of the thigh, the quadriceps. Kicking a football, running or leaping to make a basket can pull a hamstring. Hamstring injuries tend to recur.

Breaks

Bone breaks and fractures should always be looked at by a physician to ensure proper healing and connection. If an injury has not been examined by a physician and/or its pain does not subside, seek a professional opinion.

Treat injuries with RICE

A severe sprain or strain may require surgery or immobilization followed by a period of physical therapy. Mild sprains and strains may require rehabilitation exercises and activity modification during recovery. In all but mild cases, a medical doctor should evaluate the injury and establish a treatment and rehabilitation plan.

Meanwhile, RICE (rest, immobilize, cold and elevate) will usually help minimize damage caused by sprains and strains. This process should be started immediately after the injury and continued off-and-on for about 72 hours. RICE relieves pain, minimizes swelling and speeds healing, and it is often the best treatment for soft-tissue injuries, such as sprains and strains.

Rest: The injured area should be moved as little as possible to allow healing to begin.

Immobilize: Using a pressure bandage helps to prevent or reduce swelling. Use an elastic, or ACE, bandage. Wrap the injured area without making it so tight that it will restrict the blood supply. Splint the injured part if the person must be moved and it does not cause more pain.

Cold: Apply it immediately to reduce inflammation, which causes more pain and slows healing. Cover the injured area with an ice pack (inside a wet cloth) and apply the ice for 20 minutes intermittently for 48 to 72 hours. Never ice for more than 20 minutes because it can cause a nerve injury.

Elevate: Raise the injured area above the level of the heart if it does not cause more pain. Prop up a leg or arm while resting it. You may need to lie down to get your leg above your heart level.

Do all four parts of the RICE treatment at the same time. If you suspect a more serious injury, such as a broken bone, don't hesitate to consult with your health care provider immediately.

Wound Smarts

Wounds, such as cuts and burns, are always unexpected. If you were suddenly faced with this type of injury, would you know how to properly take care of it? To test your knowledge of first aid for wounds, answer “True” or “False” to the statements below.

1. The first thing you should do when you get a wound is wash it with soap and water and then bandage it.

True

False

2. Bandages should be changed every day, unless your doctor tells you otherwise.

True

False

3. A wound heals most quickly when exposed to air or when you put heat on it.

True

False

4. When blood from a deep cut soaks through the bandage, you should take off the soaked bandage and put on a clean one.

True

False

5. Greasy substances such as butter can soothe a burn.

True

False

6. An imbedded object such as a piece of glass or metal should be left in a wound.

True

False

7. Signs of an infected wound include swelling, redness, throbbing, pus and fever.

True

False

The Answers

1. **True.** You might also want to apply iodine or hydrogen peroxide to help prevent infection. But keep in mind that you should use antiseptics such as these only on a fresh wound. Soaking a wound with antiseptic every time you change your bandage kills white blood cells, which help wounds heal.

2. **True.** Changing your bandage every day can help prevent infection. When applying a bandage, be sure that it is not too tight, or it could restrict your circulation.

3. **False.** Air and heat dry out wounds, which slows healing. Use an antibiotic cream or ointment on your wound to prevent it from drying out, and keep it bandaged.

4. **False.** Do not remove a blood-soaked bandage. Instead, put a clean bandage over it, and apply more pressure to the wound.

5. **False.** Greasy substances like butter can seal in the heat from a burn, and they won't relieve the pain. If your burn is minor, hold it under cold water, then apply an antibiotic cream or ointment and put a dry, sterile bandage on it. Be sure to apply the bandage loosely. Covering your burn with a bandage can help keep air out and prevent infection. Keep an eye on the burn for signs of infection.

6. **True.** Don't remove an object from a wound, unless it's a splinter. If you are wounded by an object such as a nail, have your doctor remove it. Your doctor will advise you if a tetanus booster is necessary.

7. **True.** Any wound can become infected if you don't clean it or protect it properly. Infection usually occurs within 24 hours of the injury but can take three to four days to develop, so watch the wound closely.

To learn more about caring for wounds, enroll in an American Red Cross first aid course. It's also a good idea to keep a first aid kit handy. First aid kits are available on the [Red Cross online store](#). That way, you'll be prepared for the unexpected.

Do You Know What to Do in A Severe Thunderstorm?

Lightning Facts and Fiction

Fiction: If it is not raining, there is no danger from lightning.

Facts: Lightning often strikes outside heavy rain and may occur as far as 10 miles away from any rainfall. This is especially true in the western United States where thunderstorms sometimes produce very little rain.

Fiction: The rubber soles of shoes or rubber tires on a vehicle will protect you from being struck by lightning.

Facts: Rubber-soled shoes and rubber tires do not provide protection from lightning. The steel frame of a hard-topped vehicle provides increased protection if you are not touching metal. Although you may be injured if lightning strikes your vehicle, you are much safer inside a vehicle than outside.

Fiction: People struck by lightning carry an electrical charge and should not be touched.

Facts: Lightning-strike victims carry no electrical charge and should be attended to immediately.

Fiction: Lightning never strikes twice in the same place.

Facts: Just because lightning struck a place once does not make it less likely that it will strike again in the same place. In fact, it may indicate that the place is more vulnerable to lightning strikes than other places in the immediate area.

How dangerous is lightning?

Lightning is a major threat during a thunderstorm. Lightning produces thunder in a thunderstorm and is very unpredictable, increasing the risk to individuals and property.

According to the National Weather Service, lightning kills on average more than 70 people and injures at least 300 each year in the U.S. While only about 10 percent of those struck are killed, the large majority of the 90 percent who survive suffer long-term injuries, such as memory loss, dizziness, muscle spasms, depression and fatigue. Lightning also causes about \$5 billion in economic loss each year in the U.S.

You are in danger from lightning if you can hear thunder. Because light travels so much faster than sound, lightning flashes can sometimes be seen long before the resulting thunder is heard. When the lightning and thunder occur very close to one another, the lightning is striking nearby. Every five seconds between the flash of lightning and the clap of thunder equals 1 mile of distance. This can help you to estimate the number of miles you are from a thunderstorm. Heat lightning is actually lightning from a thunderstorm too far away to be heard.

More than 50 percent of lightning deaths occur after the thunderstorm has passed. The National Weather Service encourages you to practice the 30/30 lightning rule: If the time between seeing the lightning and hearing the thunder is less than 30 seconds, you are in danger. Stay indoors for 30 minutes after hearing the last clap of thunder.

What to do if you are outside

- Find shelter immediately. If you are boating or swimming, get to land, get off the beach and find shelter immediately.
- Take shelter in a substantial, permanent enclosed structure, such as a reinforced building. Avoid gazebos, rain or picnic shelters, golf carts, baseball dugouts, bleachers and other isolated structures in otherwise open areas because such places are often struck by lightning.
- If there is no reinforced building in sight, take shelter in a vehicle. Keep the windows closed and avoid convertibles. Do not touch any of the car's metal framework when in the car.
- If you are in the woods, find an area protected by a low clump of trees. Never stand beneath a single large tree in the open.
- As a last resort and if no suitable structure or vehicle is available, go to a low-lying, open place away from trees, poles or metal objects. Make sure the place you pick is not subject to flooding. Crouch low to the ground on the balls of your feet. Place your hands on your knees and your head between your knees. Minimize your body's surface area, and minimize your contact with the ground.
- Avoid tall structures, such as towers, tall trees, fences, telephone lines and power lines. Lightning strikes the tallest objects in an area.
- Stay away from natural lightning rods such as golf clubs, tractors, fishing rods, bicycles and camping equipment. Lightning is attracted to metal and poles or rods.
- If you are isolated in a level field or prairie and you feel your hair stand on end (which indicates that lightning is about to strike), crouch low to the ground on the balls of your feet. Place your hands on your knees and your head between your knees. Minimize your body's surface area, and minimize your contact with the ground. Lightning current often enters a victim through the ground rather than by a direct overhead strike.
- Do not use cell phones except for emergencies.

What to do if someone is struck by lightning

You should:

- Check the scene for safety.
- Call for help. Get someone to dial 9-1-1 or your local emergency number. Medical attention is needed as quickly as possible.
- Give first aid. Check for life-threatening conditions, such as respiratory or cardiac arrest. If the person has stopped breathing, begin rescue breathing. If the person shows no signs of circulation, a trained person should give CPR. If the person has a pulse and is breathing, look for other possible injuries and care for them if necessary.
- Check the person for burn marks on the skin (entry and exit of current). The injured person has received an electrical shock and may be burned both where the current entered and where it exited his or her body. Being struck by lightning can also cause nervous system damage, broken bones, and loss of hearing or eyesight.

In Case of Emergency ... Be Ready for Anything

You may not want to think about it, but wherever you live you could someday face the wrath of nature—or man. You shouldn't duck this subject until you're dealing with the threat or the aftermath of a hurricane, tornado, earthquake, flood, fire, avalanche or even a terrorist attack. In the hurried confusion, you're likely to miss important items as you prepare your home or leave to seek shelter.

Experts at the American Red Cross and the Federal Emergency Management Agency say planning is the key. While disasters differ, your first defense is a disaster supplies kit in an easily accessible place. "You can keep a kit in a footlocker or other sturdy container," said Darcy Brune, American Red Cross. "It's important to have kits both at work and at home, and it's a good idea to keep a smaller kit in your car."

Think about where you live and how you would leave, both from your home and on the roads around it. Consider the geography and pay attention to whether you're near a nuclear power plant, refinery, manufacturing plant, lake, river, dam, forest or mountain. You should be aware of the threats in your area. Know where to go (a shelter, a close friend or relative's home) in an emergency, and set up a place to meet in case the family gets separated.

One item many people don't think about is cash. In the event of a disaster, phone lines may be down, rendering credit cards useless. You should also keep a set of important family documents in your kit, unless you have them in a safe deposit box. Have an extra set of car keys handy.

Red Cross disaster shelters don't allow pets, and neither do many hotels. Pick out at least two kennels along an evacuation route. If you plan to travel to a place where you can have a pet, take enough food and water for your pet, too. Be sure your pet has a leash, collar and tags that show vaccinations.

[Click here](#) to see the recommended contents of a disaster supplies kit for your home or work.

For more information about the steps you and your family should take to prepare for a disaster, contact your local Red Cross chapter. Disaster supplies kits are available on the [Red Cross online store](#).