



First Aid Merit Badge Guide

Requirements

[https://filestore.scouting.org/filestore/Merit_Badge_ReqandRes/35897\(22\)_First_Aid_R_EQS.pdf](https://filestore.scouting.org/filestore/Merit_Badge_ReqandRes/35897(22)_First_Aid_R_EQS.pdf)

2023 03 03

1. Demonstrate to your counselor that you have current knowledge of all first-aid requirements for Tenderfoot, Second Class, and First Class ranks.

Tenderfoot

https://www.scouting.org/wp-content/uploads/2019/01/Tenderfoot_Rank_Requirements_2019.pdf

4a. Show first aid for the following:

- Simple cuts and scrapes
- Blisters on the hand and foot
- Minor (thermal/heat) burns or scalds (superficial, or first-degree)
- Bites or stings of insects and ticks
- Venomous snakebite
- Nosebleed
- Frostbite and sunburn
- Choking

4b. Describe common poisonous or hazardous plants; identify any that grow in your local area or campsite location. Tell how to treat for exposure to them.

4c. Tell what you can do while on a campout or other outdoor activity to prevent or reduce the occurrence of injuries or exposure listed in Tenderfoot requirements 4a and 4b.

4d. Assemble a personal first-aid kit to carry with you on future campouts and hikes. Tell how each item in the kit would be used.

Second Class

https://www.scouting.org/wp-content/uploads/2019/01/Second_Class_Rank_Requirements_2019.pdf

6a. Demonstrate first aid for the following:

- Object in the eye
- Bite of a warm-blooded animal

- Puncture wounds from a splinter, nail, and fishhook
 - Serious burns (partial thickness, or second-degree)
 - Heat exhaustion
 - Shock
 - Heatstroke, dehydration, hypothermia, and hyperventilation
- 6b. Show what to do for “hurry” cases of stopped breathing, stroke, severe bleeding, and ingested poisoning.
- 6c. Tell what you can do while on a campout or hike to prevent or reduce the occurrence of the injuries listed in Second Class requirements 6a and 6b.
- 6d. Explain what to do in case of accidents that require emergency response in the home and backcountry. Explain what constitutes an emergency and what information you will need to provide to a responder.
- 6e. Tell how you should respond if you come upon the scene of a vehicular accident.

First Class

http://www.scouting.org/wp-content/uploads/2019/01/First_Class_Rank_Requirements_2018.pdf

- 7a. Demonstrate bandages for a sprained ankle and for injuries on the head, the upper arm, and the collarbone.
- 7b. By yourself and with a partner, show how to:
- Transport a person from a smoke-filled room.
 - Transport for at least 25 yards a person with a sprained ankle.
- 7c. Tell the five most common signals of a heart attack. Explain the steps (procedures) in cardiopulmonary resuscitation (CPR).
2. Explain how you would obtain emergency medical assistance from:
- a. Your home
 - b. A remote location on a wilderness camping trip
 - c. An activity on open water
3. Define the term triage. Explain the steps necessary to assess and handle a medical emergency until help arrives.
4. Explain the standard precautions as applied to the transmission of infections. Discuss the ways you should protect yourself and the victim while administering first aid.
5. Do the following:
- a. Prepare a first-aid kit for your home. Display and discuss its contents with your counselor.
 - b. With an adult leader, inspect your troop’s first-aid kit. Evaluate it for completeness. Report your findings to your counselor and Scout leader.
6. Describe the early signs and symptoms of each of the following and explain what actions you should take:
- a. Shock
 - b. Heart attack

c. Stroke

7. Do the following:

- a. Describe the conditions that must exist before performing CPR on a person. Then demonstrate proper CPR technique using a training device approved by your counselor.
- b. Explain the use of an automated external defibrillator (AED). Identify the location of the AED at your school, place of worship, and troop meeting place, if one is present.

8. Do the following:

- a. Show the steps that need to be taken for someone who has a large open wound or cut that is not bleeding severely.
- b. Show the steps that need to be taken for someone who has a large open wound or cut that is severely bleeding.
- c. Explain when it is appropriate and not appropriate to use a tourniquet. List some of the benefits and dangers of the use of a tourniquet.
- d. Describe the proper application of a tourniquet.

9. Explain when a bee sting could be life threatening and what action should be taken for prevention and for first aid.

10. Do the following:

- a. Describe the signs and symptoms of an open or closed fracture or dislocation.
- b. Explain what measures should be taken to reduce the likelihood of further complications of fractures and dislocations.

11. Demonstrate the proper procedures for handling and immobilizing suspected closed or open fractures or dislocations of the

- a. Forearm
- b. Wrist
- c. Hand and fingers
- d. Upper leg
- e. Lower leg
- f. Ankle

12. Describe the signs and symptoms, proper first-aid procedures, and possible prevention measures for the following conditions:

- a. Anaphylaxis/allergic reactions
- b. Asthma attack
- c. Bruises
- d. Sprains or strains
- e. Hypothermia
- f. Frostbite
- g. Burns—first, second, and third degree
- h. Concussion
- i. Convulsions/seizures
- j. Someone who is unconscious

- k. Dehydration
- l. Muscle cramps
- m. Heat exhaustion
- n. Heat stroke
- o. Abdominal pain
- p. Broken, chipped, or loosened tooth

13. Do the following:

- a. Describe the conditions under which an injured person should be moved.
- b. If a sick or an injured person must be moved, tell how you would determine the best method. Demonstrate this method.
- c. With helpers under your supervision, improvise a stretcher and move a presumably unconscious person.

14. Teach another Scout a first-aid skill selected by your counselor.

Scout homework for all Merit Badges before classes:

Please read and follow instructions in the Merit Badge Homework Guide posted at

https://docs.google.com/document/d/1jm7GIJ9V9FbZZQTVU3hO74bc_yaiXkBN/edit?usp=sharing&oid=109493158571682052737&rtpof=true&sd=true

Scout homework for First Aid Merit Badge before class:

Scouts must Be Prepared by reading the BSA merit badge book.

A Scout might borrow a copy from their troop library or from another Scout. The latest print editions are stocked and are for sale at the Mecklenburg County Council Scout Shop at

1410 East 7th Street Charlotte, NC 28204
704 333 5471

www.mccscouting.org

Scouts may order printed or digital copies from www.scoutshop.org.

Scouts can print current merit badge requirements from

<https://www.scouting.org/skills/merit-badges/>

Online versions from other sources may not be up-to-date because BSA has adjusted some requirements in recent years.

Unofficial merit badge workbooks with all requirements and spaces to write in answers are posted at <http://usscouts.org/mb/worksheets/list.asp>

Printing a workbook is optional and not mandatory, but Scouts will find that a workbook from <http://usscouts.org/mb/worksheets/list.asp>

can be very helpful in organizing their work and in sending in merit badge homework assignments to their merit badge counselors.

Scouts should study the excellent First Aid Merit Badge course presentation at <http://bsa344.com/First%20Aid%20Merit%20Badge.pdf>

Requirement # 1: Each Scout should bring a blue card completed in ink with a signature from a Scoutmaster and requirement # 1 initialed and dated on the blue card grid in ink to confirm that the Scout knows and can demonstrate the first aid skills required for Tenderfoot, Second Class, and First Class ranks. These skills are the building block for success in the First Aid Merit Badge.

If a Scout does not present a blue card indicating their competence with these skills, they will need to complete this requirement with their home troop merit badge counselor after the class.

Resources for Tenderfoot, Second Class, and First Class requirements:

Heat and cold reactions

Heat-related illness, heat exhaustion, heat stroke, sun poisoning
<https://www.cdc.gov/disasters/extremeheat/index.html>

<https://share.upmc.com/2014/06/dangers-sun-poisoning/>

Swelling

Blisters

Rash

Headache

Fever

Dizziness

Confusion

Nausea or vomiting

Rapid pulse and breathing

Fainting

Dehydration

Hypothermia

<https://www.scouting.org/health-and-safety/safety-moments/hypothermia/>

<https://www.cdc.gov/cpr/infographics/ast-frostbite.htm>

Choking

Choking video clip from Field of Dreams

<https://www.youtube.com/watch?v=v6bD23vEigE>

<https://www.mayoclinic.org/first-aid/first-aid-choking/basics/art-20056637>

Wounds

Blisters

<https://scoutingmagazine.org/2018/04/feet-prevent-treat-blisters/>

Leukotape can prevent and treat hotspots and blisters on the trail 05:51

<https://www.youtube.com/watch?v=0XuEa2J4SyU>

Bruises

<https://www.mayoclinic.org/first-aid/first-aid-bruise/basics/art-20056663>

Frostnip, frostbite

<https://www.mayoclinic.org/diseases-conditions/frostbite/symptoms-causes/syc-20372656>

<https://www.cdc.gov/cpr/infographics/ast-frostbite.htm>

<https://www.scouting.org/health-and-safety/safety-moments/frostbite/>

Sun exposure

<https://www.arpansa.gov.au/understanding-radiation/radiation-sources/more-radiation-sources/sun-exposure>

Slip, slop, slap, seek, slide

slip on some sun-protective clothing that covers as much skin as possible

slop on broad spectrum, water resistant SPF30+ (or higher) sunscreen. Put it on 20 minutes before you go outdoors and every two hours afterwards.

slap on a hat – broad brim or legionnaire style to protect your face, head, neck and ears

seek shade

slide on some sunglasses

Burns and scalds

<https://www.mayoclinic.org/first-aid/first-aid-burns/basics/art-20056649>

Wound Care

Clinical Impact Upon Wound Healing and Inflammation in Moist, Wet, and Dry Environments

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3842869/>

Signs of a wound infection

“The simplest definition of inflammation is best stated in Latin: *calor, dolor, rubor, tumor*. This assonant phrase refers to the heat (*calor*), pain (*dolor*), redness (*rubor*), and swelling (*tumor*) that characterize the clinical symptoms of inflammation as they were defined in the first century AD by the Roman scholar Celsus.”

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3064252/>

Animal bites and stings

Preventing insect stings

<https://www.cdc.gov/niosh/docs/2010-117/>

Wear light-colored, smooth-finished clothing.

Avoid perfumed soaps, shampoos, and deodorants.

Do not wear cologne or perfume.

Wear clean clothing and bathe daily.

Wear clothing to cover as much of the body as possible.

Avoid flowering plants when possible.

Keep work areas clean. Some insects are attracted to discarded food.

Remain calm and still if a single stinging insect is flying around. (Swatting may cause it to sting.)

If attacked by several stinging insects, run to get away. (Bees release a chemical when they sting, which attracts other bees.)

Go indoors.

Shaded areas are better than open areas.

Do not jump into water. Some insects (ex. Africanized honey bees) are known to hover above the water.

If an insect is inside your vehicle, stop slowly, and open all the windows.

Workers with a history of severe allergic reactions to insect bites or stings should carry an epinephrine autoinjector and wear medical ID jewelry stating their allergy.

First aid for insect stings

<https://www.cdc.gov/niosh/docs/2010-117/>

Have someone stay with the victim to be sure that they do not have an allergic reaction.

Wash the site with soap and water.

Remove the stinger using gauze wiped over the area or by scraping a fingernail over the area.

Never squeeze the stinger or use tweezers.

Apply ice to reduce swelling.

Do not scratch the sting as this may increase swelling, itching, and risk of infection.

If the victim has a history of severe reactions to an insect sting, call 911 even before severe symptoms develop and find their epinephrine autoinjector to have it ready to use if wheezing, mouth or tongue swelling, or shortness of breath develop.

Fire ant bites

<https://www.medicalnewstoday.com/articles/312484>

Prevention of tick bites

<https://www.cdc.gov/ticks/tickbornediseases/tick-bites-prevention.html>

1. Use Environmental Protection Agency (EPA)-registered insect repellents containing DEET, picaridin, IR3535, oil of lemon eucalyptus, para-menthane-diol, or 2-undecanone. Treat clothing and gear, such as boots, pants, socks and tents with

products containing 0.5% permethrin. Additional repellent options are available. EPA's repellent search tool

<https://www.epa.gov/insect-repellents/find-insect-repellent-right-you>

can help find the product that best suits your needs

2. Treat dogs and cats for ticks as recommended by a veterinarian.
3. Check for ticks daily, especially under the arms, in and around the ears, inside the belly button, behind the knees, between the legs, around the waist, and on the hairline and scalp.
4. Shower soon after being outdoors.
5. Learn more about landscaping techniques that can help reduce blacklegged tick populations in the yard.

How to remove a tick

https://www.cdc.gov/ticks/removing_a_tick.html

1. Use fine-tipped tweezers to grasp the tick as close to the skin's surface as possible. The key is to remove the tick as soon as possible. Avoid folklore remedies such as using nail polish, petroleum jelly, or heat to make the tick detach from the skin.
2. Pull upward with steady, even pressure. Don't twist or jerk the tick; this can cause the mouth-parts to break off and remain in the skin. If this happens, remove the mouth-parts with clean tweezers. If you are unable to remove the mouth parts easily, leave them alone and let the skin heal.
3. After removing the tick, thoroughly clean the bite area and your hands with rubbing alcohol, an iodine scrub, or soap and water.

Scorpion stings

<https://www.cdc.gov/niosh/topics/insects/scorpions.html>

Venomous spiders

<https://www.cdc.gov/niosh/topics/spiders/default.html>

Black widow spider bites [excellent resource]

<https://medlineplus.gov/ency/article/002858.htm>

Brown recluse spider bites [excellent resource]

<https://medlineplus.gov/ency/article/002859.htm>

Venomous snakes [excellent resource]

<https://medlineplus.gov/ency/article/000031.htm>

Venomous snakes in North Carolina

<https://www.ncwildlife.org/Portals/0/News/documents/Coexist-Snakes-v3.pdf>

Injuries and illnesses from animal bites and stings

<https://wwwnc.cdc.gov/travel/yellowbook/2020/noninfectious-health-risks/animal-bites-and-stings-zoonotic-exposures>

Poisonous plants

Please watch the excellent video posted at

<https://www.fda.gov/consumers/consumer-updates/outsmarting-poison-ivy-and-other-poisonous-plants>

Poison ivy (AKA eastern poison ivy, *Toxicodendron radicans*) grows as a vine and has leaves with clusters of three leaflets. Each leaflet is almond-shaped usually with a smooth, curved edge. Mature leaves are dark green and turn red or orange or yellow in the fall.

Poison ivy has red aerial rootlets that attach to tree trunks.

https://en.wikipedia.org/wiki/Toxicodendron_radicans

Poison oak (AKA Atlantic poison oak, *Toxicodendron pubescens*) grows as a shrub up to 3 feet tall and has leaves with clusters of three leaflets. The leaflets are usually hairy and have lobes like white oak leaves. Leaflets turn orange or yellow in the fall.

https://en.wikipedia.org/wiki/Toxicodendron_pubescens

Poison sumac (AKA thunderwood, *Toxicodendron vernix*) “is a shrub or small tree, growing up to nearly 30 ft (9 m) in height. Each leaf has 7–13 leaflets, each of which is 2–4 inches (5–10 cm) long.”

https://en.wikipedia.org/wiki/Toxicodendron_vernix

Sap from the stem and leaves of poison ivy, poison oak, and poison sumac contains urushiol, a chemical that can cause an allergic, itching, irritating rash. Smoke from burning plants can contain particles or urushiol that can cause severe lung irritation and rash inside the mouth, nose, and throat, and eye irritation.

<https://my.clevelandclinic.org/health/articles/10655-poison-plants-poison-ivy--poison-oak--poison-sumac>

<https://www.kplctv.com/story/24090476/dangers-of-burning-poison-ivy/>

<https://www.webmd.com/skin-problems-and-treatments/ss/slideshow-poison-plants-guide>

<https://www.cdc.gov/niosh/topics/plants/identification.html>

<https://www.cdc.gov/niosh/docs/2010-118/pdfs/2010-118.pdf>

Leaves of three, let it be.

Berries white, run in fright.

Hairy vine, no friend of mine.

<https://www.pinterest.com/pin/46232333653327862/>

Prevention

<https://www.cdc.gov/niosh/topics/plants/recommendations.html>

1. Wear long sleeves, long pants, boots, and gloves. Wash exposed clothing separately in hot water with detergent.
2. Barrier skin creams, such as a lotion containing bentoquatam, may offer some protection before contact. Barrier creams should be washed off and reapplied twice a day.
3. After use, clean tools with rubbing alcohol (isopropanol or isopropyl alcohol) or soap and lots of water. Urushiol can remain active on the surface of objects for up to 5 years.
4. Wear disposable gloves during this process.
5. Do not burn plants that may be poison ivy, poison oak, or poison sumac. Inhaling smoke from burning plants can cause severe allergic respiratory problems.

First aid

Zanfel® Wash removes urushiol from the skin and relieves itching.

<https://www.zanfel.com/help>

Calamine lotion or diphenhydramine (antihistamine) cream or non-prescription hydrocortisone 1% cream can help itching.

Avoid scratching that can increase skin damage and predispose to infection.

Covering rash or blisters with a dressing can prevent skin damage from scratching.

Seek medical care for rash involving face or genitals or for severe rash with blisters.

Requirement # 2: Explain how you would obtain emergency medical assistance from:

- a. Your home
- b. A remote location on a wilderness camping trip
- c. An activity on open water

Anticipate, prepare in advance

Home: Shout, 911, neighbor

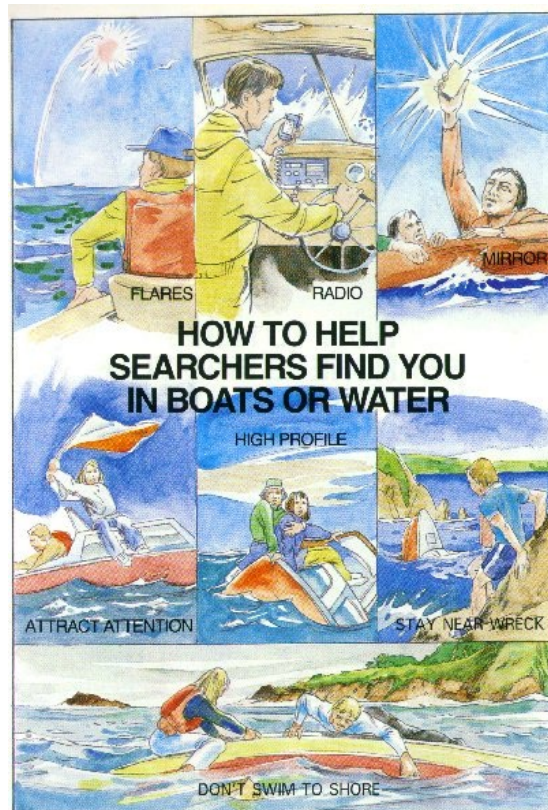
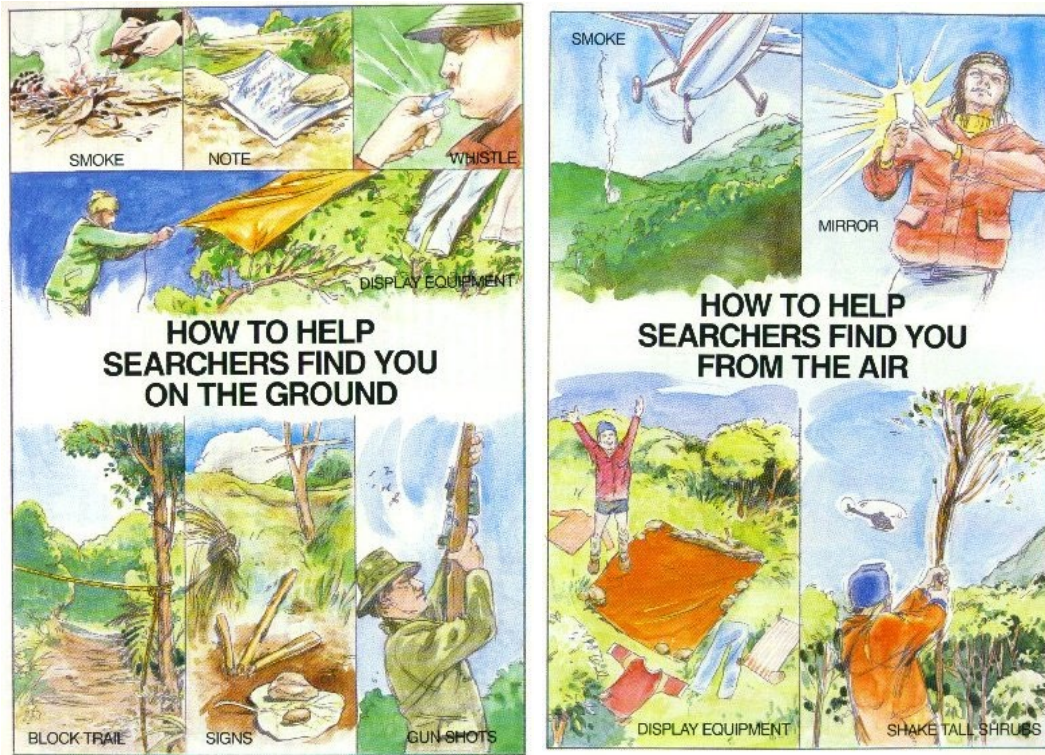
Wilderness: 911, buddy run, whistle, gunshots, mirror, contrast

Open water: 911, radio, horn, flag, whistle, other boater, mirror

Use Emergency SOS on your iPhone

<https://support.apple.com/en-us/HT208076>

“On iPhone 14, you can even [use Emergency SOS via satellite to text emergency services](#) when no cellular and Wi-Fi coverage is available.”



From <http://www.sarbc.org/sarbc/survival.html> [not working as of 03/13/2016]

Requirement # 3: Define the term triage. Explain the steps necessary to assess and handle a medical emergency until help arrives.

Please write down a definition of “triage” and be ready to discuss.

Please review slides 14 through 17 of the presentation at <http://bsa344.com/First%20Aid%20Merit%20Badge.pdf>

Requirement # 4: Explain the standard precautions as applied to the transmission of infections. Discuss the ways you should protect yourself and the victim while administering first aid.

Standard precautions are ways to avoid contact with body fluids and surfaces that can transmit infections from victims to responders and from responders to victims.

Barriers: gloves, masks, face shields, glasses, gowns, hoods, coveralls, shoe covers, breathing devices

Cleaning: hand washing, wound cleaning, surface cleaning, clothes and towel laundry

Careful handling and disposal: fluids (blood, urine, saliva, sputum, feces), instruments (sharps (needles, blades), syringes, devices)

First Aid Kit Requirements

First Aid Merit Badge

Requirement # 5. Do the following:

(a) Prepare a first-aid kit for your home. Display and discuss its contents with your counselor.

(b) With an adult leader, inspect your troop's first-aid kit. Evaluate it for completeness. Report your findings to your counselor and Scout leader.

Webelos First Responder requirement

https://filestore.scouting.org/filestore/cubscouts/pdf/webelos_aol_addendum.pdf

6. Put together a simple home first-aid kit. Explain what you included and how to use each item correctly.

First Responder lesson plan

http://jccarter.info/webelos/training_packets/FirstResponder.pdf

Webelos Walkabout requirement

https://filestore.scouting.org/filestore/cubscouts/pdf/webelos_aol_addendum.pdf

2. Assemble a first-aid kit suitable for your hike or activity.

Webelos Castaway requirement

https://filestore.scouting.org/filestore/cubscouts/pdf/WEBELOS_AOL_Addendum.pdf

2. Do all of the following. A. Learn what items should be in an outdoor survival kit that you can carry in a small bag or box in a day pack. Assemble your own small survival kit, and explain to your den leader why the items you chose are important for survival.

Tenderfoot requirement

<https://www.scouting.org/wp-content/uploads/2019/02/Scouts-BSA-Requirements-3321619.pdf>

4d. Assemble a personal first-aid kit to carry with you on future campouts and hikes. Tell how each item in the kit would be used.

Building or buying a first aid kit

<https://boyslife.org/video-audio/4937/first-aid-kit-buying-guide/>

First aid kit and wilderness survival kit lists

<https://www.sccbsa.org/files/26026/May19-Castaway-Adventure-pdf>

First Aid Kit Components

	Number suggested for each		
	Personal kit	Family kit	Troop kit
Triangular bandage (cravat, sling)	1	1	4
Adhesive bandages 1" x 3" or assorted sizes	4	12	20
Sterile gauze pads 4" x 4" or 3" x 3"	3	6	12
Roll gauze non-sterile, wrapped, 2" or 3"	1	2	4
Surgical tape 1" x 1.5 yards	1	2	3
Butterfly closures	2	2	4
Moleskin, non-latex, 3" x 3" or 3" x 2"	1	2	4
Leukotape 6 to 8 inches	1	3	6
Hydrocortisone cream packets (bug bites, poison ivy rash)	4	6	12
Safety pins	4	6	12
Gloves, non-latex, plastic, disposable	4	8	12
CPR mask 30:2	1	1	1
Sanitizing wipes	3	10	12
Ring string or dental floss	1	1	1
Plastic bag (1 for kit, 1 for trash)	2	2	2
Other ideas:			
Pencil and paper	1	1	1
Tourniquet		1	1
Cotton tip swabs for cleaning wounds or dirt on eye	2	6	12
Syringe for eye irrigation			1
Tweezers	1	1	1
Miniature multi-function folding knife with scissors, tweezers	1	1	1
Nail clippers	1	1	1
Zip ties	4	4	12
Needle and thread for clothing repairs, splinters	1	1	1
Whistle	1	1	2
Non-prescription medications with parent permission:			
Glucose gel			2
Ibuprofen		10	30
Acetaminophen		10	30
Antihistamine tablets for allergies for 12 years old or older (diphenhydramine 25 mg or loratadine 5 mg or 10 mg or fexofenadine 30 or 60 mg, follow dosing on package)		6	10

First Aid Kit Skills

How to use string to remove a ring

If a ring is stuck on a finger, try lubricants like soap, hand lotion, or cooking oil to lubricate the skin and gently rotate the ring past the first knuckle.

If lubrication does not work, use a ring string, such as, string, fishing line, dental floss, sewing thread, narrow ribbon, or a rubber band cut into a single strip, to wrap the finger in a spiral from the tip toward the ring. This pressure wrapping forces swelling from the finger toward the hand, allowing the finger to shrink in size. Using a blunt probe, such as, tweezers, tooth pick, rounded end of a safety pin, a pen tip cover, slide the end of the string or rubber band underneath the ring. Pull up on the end of the string closest to the hand to allow the ring to slide toward the tip of the finger as the spiral unwinds.

Links to ring string videos

<https://www.youtube.com/watch?v=k6MjZExWmvs> 02:58

<https://www.youtube.com/watch?v=DrDROoJAF4I> 02:25

Fish hook removal

<https://www.aafp.org/pubs/afp/issues/2001/0601/p2231.html#:~:text=>

Retrograde Technique

String-Yank Technique

Needle Cover Technique

Advance and Cut Technique

How to use moleskin

https://www.healthline.com/health/moleskin-for-blisters#TOC_TITLE_HDR_1

1. Clean and dry the area around the blister.
2. Cut a patch of moleskin that is about 3/4-inch larger than your blister.
3. Fold the non-adhesive sides together. Cut a half-circle out of the moleskin to make a donut. When you unfold it, the circle in the moleskin donut should be the size of your blister.
4. Remove the backing from the adhesive side of the donut. Place the donut hole over the blister.
5. If the blister sticks out above the moleskin hole, cover the moleskin with an adhesive bandage or another layer of moleskin. Another layer of moleskin may aggravate pressure on the area, depending on how tight your shoes and socks fit at that spot on your foot.

Preventing blisters

If you have had toe blisters while hiking before, you can wrap your susceptible toes with moleskin or adhesive bandages while your feet are clean and dry in the morning **before** beginning your walk. Moleskin takes up space in tight boots and can make them tighter. Adhesive bandages are thinner and can prevent or relieve friction. Toe sleeves made of flexible, soft silicone gel are another option.

Buying your boots in the afternoon can be important in preventing blisters. Feet normal swell as the day passes because sitting and standing upright increases pressure in leg veins, promoting swelling in the feet and legs as the day passes. This means that your feet may be larger in the afternoon than in the morning.

<https://www.rei.com/blog/hike/breaking-boots-thing-past>

Wear your usual and/or thickest usual hiking socks, with liner socks, if you use them, when you buy boots. The socks take up space in your boots. Wearing thin socks when you try on and buy boots may lead to tight boots when you hike with thick socks with liner socks.

How to make a knuckle bandage

<https://www.thehealthy.com/first-aid/cuts/band-aid-hack-for-awkward-cuts/>

<https://lifehacker.com/modify-a-standard-band-aid-to-be-a-perfect-over-the-knu-1749498074>

How to use roll gauze

<https://1staidsupplies.com/2017/03/22/how-to-cover-a-wound-with-gauze/>

Roll gauze is used to hold a wound dressing in place where tape cannot or should not be applied to skin, such as, burns, large blisters or abrasions, or where skin is thin and would be easily torn by removing adhesive tape, as in elderly patients.

1. Wash your hands. Wear gloves. Apply a large sterile gauze squares to completely cover the wound or burn.
2. Wrap roll gauze around the arm or leg to hold the gauze squares in place.
3. Secure the roll gauze with a clip or with adhesive tape or adhesive wrap bandage (brand name Coban) applied to the gauze (not to skin).

How to use butterfly stitches (aka butterfly strips or butterfly bandages or brand Steri-Strip bandages)

<https://www.healthline.com/health/butterfly-stitches>

<https://www.utahmountainbiking.com/firstaid/bandaids.htm>

For a temporary fix to missing screws on frames, safety pins, dental floss, and paper clips are OK, but please do not use wooden toothpicks. What happens is that the toothpick will swell inside the hole and become almost impossible to remove. Repair technicians may have to drill them out.

<https://www.chron.com/life/article/Hints-From-Heloise-Toothpicks-not-for-glasses-1622121.php>

Requirement # 6: Describe the early signs and symptoms of each of the following and explain what actions you should take:

- a. Shock
- b. Heart attack
- c. Stroke

“Symptom” means “A physical or mental problem that a person experiences that may indicate a disease or condition.”

<https://www.cancer.gov/publications/dictionaries/cancer-terms/def/symptom>

“Sign” means “something found during a physical exam or from a laboratory test that shows that a person may have a condition or disease.”

<https://www.cancer.gov/publications/dictionaries/cancer-terms/search/sign/?searchMode=Begins>

“Shock” means “a state of poor blood circulation” and means “a state of emotional upset” and means “an electrical shock”. In first aid, we are interested in the first meaning.

<https://www.verywellhealth.com/what-is-shock-1298677>

Good blood circulation occurs when the heart is strong and is pumping at a normal rate (60 to 100 times per minute), when there is plenty of blood, and when blood is flowing normally in the arteries carrying blood away from the heart and in the veins bringing blood back to the heart. If a disease or an injury severely impairs the function of the heart or decreases the amount of blood circulating or disrupts arteries or veins, then shock can occur.

Causes of Shock

Heart = cardiogenic shock	Low blood volume = hypovolemic shock	Distributive shock	Compressive shock
Heart attack	Severe bleeding from damage to arteries or veins from a wound or stomach or intestinal ulcer or varicose veins in legs or esophagus	Spinal cord injuries with neurogenic shock with loss of nerve control of blood pressure	Fluid build up in the sac around the heart compressing the heart
	Dehydration from fluid loss with sweating from heat exposure and/or exercise and/or fever, vomiting, diarrhea, or diabetes with not enough fluids to drink	Anaphylactic shock from severe allergy reaction with blood vessel dilation and fluid shift from blood to swelling	Air build up in the chest (tension pneumothorax) compressing the heart

	Symptoms	Signs	Treatment
Shock https://www.mayoclinic.org/first-aid/first-aid-shock/basics/art-20056620	Cool, clammy skin Nausea, vomiting Weakness, fatigue Dizziness Changes in mental status or behavior, such as anxiousness or agitation	Cool, clammy skin Pale or ashen skin Bluish tinge to lips or fingernails (or gray in the case of dark complexions) Rapid pulse Rapid breathing Vomiting Enlarged pupils Fainting Changes in mental status or behavior, such as anxiousness or agitation	Call 911. Lay the person down and elevate the legs and feet slightly, unless you think this may cause pain or further injury. Keep the person still and don't move him or her unless necessary. Begin CPR if the person shows no signs of life, such as not breathing, coughing or moving. Loosen tight clothing and, if needed, cover the person with a blanket to prevent chilling. Don't let the person eat or drink anything. If you suspect that the person is having an allergic reaction, and you have access to an epinephrine autoinjector, use it according to its instructions. If the person is bleeding, hold pressure over the bleeding area, using a towel or sheet. If the person vomits or begins bleeding from the mouth, and no spinal injury is suspected, turn him or her onto a side to prevent choking.

	Symptoms	Signs	Treatment
Heart attack	<p>Chest pain, pressure or tightness, or a squeezing or aching sensation in the center of the chest</p> <p>Pain or discomfort that spreads to the shoulder, arm, back, neck, jaw, teeth or occasionally upper abdomen</p> <p>Nausea, indigestion, heartburn or abdominal pain</p> <p>Shortness of breath</p> <p>Lightheadedness, dizziness</p> <p>Sweating</p>	<p>Fainting</p> <p>Sweating</p>	<p>Call 911</p> <p>The person should go to the nearest hospital by ambulance.</p> <p>If the person is not allergic to aspirin and has not had medical advice not to take aspirin, the person should chew and swallow an aspirin while waiting for emergency help. Aspirin acts as a mild blood thinner.</p> <p>Take nitroglycerin, if prescribed.</p> <p>Begin CPR if the person is unconscious. If the person isn't breathing or you don't find a pulse, begin CPR with 100 to 120 compressions per minute after you call for emergency medical help.</p> <p>If an automated external defibrillator (AED) is immediately available and the person is unconscious, turn the device on and follow the device instructions for using it.</p>

What is a stroke?

<https://www.youtube.com/watch?v=AM-r6AcPsaw>

	Symptoms	Signs	Treatment
Stroke https://www.mayoclinic.org/first-aid/first-aid-stroke/basics/art-20056602	Weakness or numbness on one side of the body, including the face, arm or leg. Dimness, blurring or loss of vision, particularly in one eye. Or sudden double vision. Sudden, severe headache with no clear cause. Unexplained dizziness, unsteadiness or a sudden fall. Especially if dizziness is accompanied by any of the other signs or symptoms.	FAST F ace. Does the face droop on one side when the person tries to smile? A rms. Is one arm lower when the person tries to raise both arms? S peech. Can the person repeat a simple sentence? Is speech slurred or hard to understand? T ime. During a stroke every minute counts. If you see any of these signs, call 911 or your local emergency number right away.	Call 911. The person should go to the nearest hospital by ambulance. Have the person lie down to prevent falling.

Check out these Hurry Case Cards:

<https://cubscoutideas.com/wp-content/uploads/2019/04/hurry-case-first-aid-cards.pdf>

What is a “Hurry Case”?

Learn the signs of stroke

F **ace** is it drooping?

A **rms** can you raise both?

S **peech** is it slurred or jumbled?

T **ime** to call 9-1-1 right away.

Act **F****A****S****T**. Lifesaving treatment begins the second you call 9-1-1.

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<https://www.heartandstroke.ca/stroke/signs-of-stroke/share-the-fast-stroke-signs>

Requirement # 7: Do the following:

- a. Describe the conditions that must exist before performing CPR on a person. Then demonstrate proper CPR technique using a training device approved by your counselor.
- b. Explain the use of an automated external defibrillator (AED). Identify the location of the AED at your school, place of worship, and troop meeting place, if one is present.

Webelos First Responder Adventure

Practice three C's: Check – Call - Care

<https://www.redcross.org/take-a-class/cpr/performing-cpr/cpr-steps>

Check for safety: Scene is safe.

Check for responsiveness (Shout, tap, shout), ABC's

Check for ABC's (Airway, Breathing, Circulation)

Look, Listen, Feel for 10 seconds

Call for help, Call 911, Call for AED

Care for the victim with CAB (Compressions, Airway, Breathing)

Compressions (100-120 per minute), Airway (chin tilt), Breaths x 2

Repeat

Compressions:

Hand position: Two hands centered on the chest

Body position: Shoulders directly over hands; elbows locked

Depth: At least 2 inches

Rate: 100 to 120 per minute

Allow chest to return to normal position after each compression

Breaths x 2:

Open the airway to a past-neutral position using the head-tilt/chin-lift technique

Ensure each breath lasts about 1 second and makes the chest rise; allow air to exit before giving the next breath

American Heart Association AED video 2:04

<https://newsroom.heart.org/multimedia/animation-video/cpr-and-aeds-9749/aeds>**Requirement # 8:** Do the following:

- a. Show the steps that need to be taken for someone who has a large open wound or cut that is not bleeding severely.
- b. Show the steps that need to be taken for someone who has a large open wound or cut that is severely bleeding.
- c. Explain when it is appropriate and not appropriate to use a tourniquet. List some of the benefits and dangers of the use of a tourniquet.
- d. Describe the proper application of a tourniquet.

Wound and bleeding management

<https://www.mayoclinic.org/first-aid/first-aid-severe-bleeding/basics/art-20056661>

Call 911 or your local emergency number if the wound is deep or you're not sure how serious it is. Don't move the injured person except if needed to avoid further injury.

Before checking for the source of the wound, put on disposable gloves and other personal protective equipment if you have them.

Remove any clothing or debris from the wound. Look for the source of the bleeding. There could be more than one injury. Remove any obvious debris but don't try to clean the wound. Don't remove large or deeply embedded objects, and don't probe the wound.

Stop the bleeding. Cover the wound with sterile gauze or a clean cloth. Press on it firmly with the palm of your hand until bleeding stops. But don't press on an eye injury or embedded object. Don't press on a head wound if you suspect a skull fracture.

Wrap the wound with a thick bandage or clean cloth and tape. Lift the wound above heart level if possible.

Help the injured person lie down. If possible, place the person on a rug or blanket to prevent loss of body heat. Elevate the feet if you notice signs of shock, such as weakness, clammy skin or a rapid pulse. Calmly reassure the injured person. Add more bandages as needed. If the blood seeps through the bandage, add more gauze or cloth on top of the existing bandage. Then keep pressing firmly on the area.

Tourniquets: A tourniquet is effective in controlling life-threatening bleeding from a limb. If needed, apply a commercially made tourniquet if it's available and you're trained in how to use it. Don't use an improvised tourniquet, such as a scarf or a belt.

When emergency help arrives, tell them how long the tourniquet has been in place.

Keep the person still. If you're waiting for emergency help to arrive, try to keep the injured person from moving.

If you haven't called for emergency help, get the injured person to an emergency room as soon as possible.

Wash your hands. After helping the injured person, wash your hands, even if it doesn't look like any blood got on your hands.

Tourniquets

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9440764/#>

The term "Tourniquet" is derived from the French word "Tourner" which means "to turn." Complications from tourniquets include inability to adequately control bleeding and injury to the skin, blood vessels, nerves, and muscles.

Requirement # 9: Explain when a bee sting could be life threatening and what action should be taken for prevention and for first aid.

Insect bite or bee sting	Symptoms	Signs	Treatment
Mild reaction https://www.mayoclinic.org/first-aid/first-aid-insect-bites/basics/art-20056593	Stinging pain Itching	Mild swelling and redness (papule or "mosquito bite") Local swelling over a finger or hand or larger area	Move to a safe area to avoid more bites or stings. Remove any stingers. Gently wash the area with soap and water. Apply a cloth dampened with cold water or filled with ice to the area of the bite or sting for 10 to 20 minutes. to reduce pain and swelling. If the injury is on an arm or leg, raise it. Remove jewelry because swelling may hamper later removal. Apply to the affected area calamine lotion, baking soda paste, or 0.5% or 1% hydrocortisone cream. Do this several times a day until your symptoms go away. Take an anti-itch medicine (antihistamine) by mouth to reduce itching. Options include non-prescription cetirizine, fexofenadine (Allegra Allergy, Children's Allegra Allergy), loratadine (Claritin). Take a non-prescription pain reliever as needed. Seek medical care if the swelling gets worse, the site shows signs of infection or you don't feel well.
Severe reaction	Trouble breathing Swelling of the lips, face, eyelids or throat Dizziness Fainting or unconsciousness Hives Nausea, vomiting or diarrhea	Wheezing Swelling of the lips, face, eyelids or throat Fainting or unconsciousness A weak and rapid pulse Hives Vomiting or diarrhea	Call 911. Transport the person to a hospital by ambulance. Ask whether the injured person is carrying an epinephrine autoinjector (EpiPen, Auvi-Q, others). Ask whether you should help inject the medication. This is usually done by pressing the autoinjector against the thigh and holding it in place for several seconds. Loosen tight clothing and cover the person with a blanket. Remove jewelry because swelling may hamper later removal. Don't offer anything to drink.

			If needed, position the person to prevent choking on vomit.
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Requirement # 10: Do the following:

- a. Describe the signs and symptoms of an open or closed fracture or dislocation.
- b. Explain what measures should be taken to reduce the likelihood of further complications of fractures and dislocations.

Definitions:

Closed fracture (also called simple fracture). The bone is broken, but the skin is intact.

Open fracture (also called compound fracture): The bone pokes through the skin and can be seen, or a deep wound exposes the bone through the skin.

<https://www.hopkinsmedicine.org/health/conditions-and-diseases/fractures>

Dislocation is a joint injury when the ends of 2 connected bones come apart.

Ligaments are flexible bands of fibrous tissue that join bones and cartilage that bind the bones in a joint together. Excessive force on the ligaments of a joint may cause the bones forming the joint to separate or dislocate. The most commonly dislocated joint is the ball-and-socket joint of the shoulder.

<https://www.hopkinsmedicine.org/health/conditions-and-diseases/dislocations>

Injury	Symptoms	Signs	Treatment
Closed fracture	Sudden pain Swelling Bruising or redness Warmth Obvious deformity Trouble using or moving the injured area or nearby joints	Swelling Bruising or redness Warmth Obvious deformity Trouble using or moving the injured area or nearby joints	Call 911 if: The person is unresponsive, isn't breathing or isn't moving. Begin CPR if there's no breathing or heartbeat. There is heavy bleeding. Even gentle pressure or movement causes pain. The limb or joint appears deformed. The bone has pierced the skin. The extremity of the injured arm or leg, such as a toe or finger, is numb or bluish at the tip. You suspect a bone is broken in the neck, head or back. Don't move the person except if necessary to avoid further injury. Stop any bleeding. Apply pressure to the wound with a sterile bandage, a clean cloth or a clean piece of clothing. Immobilize the injured area. Don't try to realign the bone or push a bone that's sticking out back in. If you've been trained in how to splint and professional help isn't readily available, apply a splint to the area above and below the fracture sites. Padding the splints can help reduce discomfort.

			Apply ice packs to limit swelling and help relieve pain. Don't apply ice directly to the skin. Wrap the ice in a towel, piece of cloth or some other material. Treat for shock. If the person feels faint or is breathing in short, rapid breaths, lay the person down with the head slightly lower than the trunk and, if possible, elevate the legs.
Open fracture	Above Wound with exposed bone	Above Wound with exposed bone	Call 911. An open fracture is a medical emergency.
Dislocation	Pain Swelling Bruising or redness Numbness or weakness Deformity Trouble using or moving the joint in a normal way	Swelling Bruising or redness Numbness or weakness Deformity Trouble using or moving the joint in a normal way	Seek medical care for accurate diagnosis and treatment. Immobilize the affected area. RICE = Rest, Ice, Compression, and Elevation of the dislocated area.

Complications of fractures

<https://www.merckmanuals.com/home/injuries-and-poisoning/fractures/overview-of-fractures>

Immediate, hours to days

Blood vessel damage with bleeding (rib fractures, thigh bone and pelvic fractures, hemorrhagic shock)

Nerve damage with stretched, bruised, crushed by impact or torn by sharp bone fragments. Intact nerves often heal. Torn nerves may need surgery for repair. Nerve damage can cause numbness and impaired muscle function with weakness or paralysis.

Pulmonary embolism can occur with hip or pelvic fractures when blood clots form in the veins of the legs, break off, and travel to the lungs.

Fat embolism is a relatively uncommon type of pulmonary embolism when fat from the marrow of a long bone (like the thigh bone) is carried by the vein circulation to the lung. Compartment syndrome is a relatively uncommon problem when a fracture, usually of the lower leg, leads to muscle swelling that compromises artery circulation, which can lead to severe tissue damage if untreated.

Bone infections can occur with open fractures if the skin wound becomes infected.

Weeks to months

Bone fractures can extend into joints, causing damage and long-term arthritis, even if the bone heals uneventfully.

Prompt evaluation for diagnosis and treatment of fractures with splints, casts, surgery, physical therapy can help to minimize the risks of these complications.

Requirement # 11: Demonstrate the proper procedures for handling and immobilizing suspected closed or open fractures or dislocations of the

- a. Forearm
- b. Wrist
- c. Hand and fingers
- d. Upper leg
- e. Lower leg
- f. Ankle

Splinting an upper leg fracture

<https://www.youtube.com/watch?v=6alGHR045hs>

Splinting lower leg and ankle fractures

<https://www.youtube.com/watch?v=udB00LI6hO0>

<https://www.youtube.com/watch?v=TacM-3A5Ozk>

“CSM” is an acronym for “Circulation, Sensation, Motion”.

Requirement # 12: Describe the signs and symptoms, proper first-aid procedures, and possible prevention measures for the following conditions:

- a. Anaphylaxis/allergic reactions
- b. Asthma attack
- c. Bruises
- d. Sprains or strains
- e. Hypothermia
- f. Frostbite

g. Burns—first, second, and third degree

<https://www.mayoclinic.org/diseases-conditions/burns/symptoms-causes/syc-20370539#>

h. Concussion

Signs and Symptoms of a Concussion?

The most common symptoms of concussion are:

Temporary loss of consciousness
 Headache
 Confusion
 Dizziness

Nausea
 Vomiting
 Slurred speech
 Delayed response to questions
 Appearing dazed and not remembering the event that caused the possible concussion

The signs of a concussion (dizziness, nausea, headaches, light sensitivity and confusion).

In some instances, these symptoms can go away in as little as 15 minutes. But that doesn't mean that a concussion has run its course. Concussion symptoms continue to affect 30% of people three months after injury and adolescents face an even higher risk of delayed recovery. Additional symptoms may not occur until hours – or even days – after the trauma.

The presence of any of these delayed symptoms should prompt a visit to a health care provider, especially if they become worse:

Fatigue
 Problems with thinking, concentration and memory
 Sensitivity to light and noise
 Difficulties with sleep
 Emotional issues such as mood swings, irritability, anxiety and depression
 “The key thing is making the diagnosis early,” says Dr. David Popoli, assistant professor of pediatric orthopaedics and rehabilitation at Wake Forest University School of Medicine. “The longer something goes undiagnosed, the trickier it becomes to manage the different elements of concussion. A lot of treatment is tailoring it to what people are experiencing. There’s really not a one-size-fits-all solution.”

How Long Does it Take to Recover from a Concussion?

One thing all concussion treatment regimens share is rest, which allows the brain to heal. This generally includes avoiding physical exertion – especially manual labor and sports – and mental activities, such as reading, watching TV and using a computer, until the symptoms subside, followed by a gradual return to normal activities.

Going back to school, work or the playing field prematurely is inviting trouble, since the primary risk factor for concussion is a previous concussion. “There’s no time frame during which you should expect a complete recovery,” Popoli says. “The vast majority of patients will resolve their symptoms within a month. At a bare minimum, you’re looking at five days.”

<https://atriumhealth.org/dailydose/2022/09/14/going-the-extra-yard-for-concussion-safety>

2023 06 12

i. Convulsions/seizures

<https://www.mayoclinichealthsystem.org/hometown-health/speaking-of-health/how-to-help-someone-having-a-seizure>

<https://www.ncbi.nlm.nih.gov/books/NBK343305/>

j. Someone who is unconscious

k. Dehydration

l. Muscle cramps

m. Heat exhaustion

n. Heat stroke

o. Abdominal pain

p. Broken, chipped, or loosened tooth

First aid situation	Anticipate	Prevent	History	Symptoms / Signs	Mitigate	dd
Heat and cold reactions	Planning	Buddy system				Cell phone
Dehydration	Carry water, purifier, tablets, fuel, stove, pot to boil	Carry and drink water	Heat exposure, vomiting, diarrhea, fever, limited water access, diabetes	Lightheadedness, fatigue, fainting, sweating, low blood pressure, fast pulse	Drink. Urine should be clear.	Drink, rest in shade, lie down
Heat exhaustion	Plan to prevent	Check weather, limit exertion during heat, carry water, purifier, tablets, stove and pot to boil, schedule rest	Heat exposure, limited water access	Lightheadedness, fatigue, sweating, low blood pressure, fast pulse	Buddy help, drink, Urine should be clear. rest in shade, lie down	Medical care
Heat stroke (sunstroke)	Plan to prevent, carry water, purifier, tablets, stove and pot to boil	Check weather, limit exertion during heat, schedule rest	Heat exposure, heavy exertion (football player, construction worker), elderly with hot home and no AC	Confusion, lethargy, coma, temperature 104F or higher, low blood pressure, fast pulse, face is like sun: hot, red, dry, no sweating	Buddy help, drink, clear urine, rest in shade, lie down	911, rapid cooling, cool wraps applied at neck, groins, spray, emergency medical care
Hypothermia (exposure)	Plan to prevent, carry space blanket, dry clothes	Check weather, dress in layers, use waders to keep dry, rain gear, mittens preferred over gloves	Prolonged cold exposure or immersion in cool or cold water, can occur with summer rain	Shivering, slurred speech, confusion, lethargy, coma, temperature 95F or lower, low blood pressure, slow pulse	Move to a warm room or shelter. Remove wet clothing. Offer food, warm drinks.	Warm victim under layers of dry blankets and clothing. Seek medical care. 911
First aid situation	Anticipate	Prevent	History	Symptoms / Signs	Mitigate	Respond / Treat
Wounds	Planning	Buddy system				Cell phone
Bruises, aka contusion		Avoid falls, sports padding	Hard contact with soft tissue	Immediate pain, mild swelling, no broken skin, mild	RICE (Rest, Ice, Compression, Elevation), no dressing needed	pain medication with supervision (acetaminophen,

				discoloration that changes color with healing		ibuprofen, naproxen), medical care if painful swelling after 3 days, recurrent bruising with minor trauma
Blisters, friction See reference	Experience, synthetic or wool or wicking socks, liner socks optional, fit boots in late afternoon when feet have swelled	Foot powder, adhesive bandages on toes or moleskin before walking, laces loose or tight			Stop for hot spots and wet socks	Moleskin donut, controlled rupture at edge with sterile needle, cover, antiseptic, pain, if pus, redness, infection, medical care
Blisters, fire ant or insect bites, frostbite, thermal burns, sunburn				Increasing pain, redness, pus, swelling, fever indicate infection.	Protect blisters from pressure and injury	Controlled rupture at edge with sterile needle, cover, antiseptic, medical care if face, genital, or large or for infection
Cut (aka laceration)	Cut strokes away from you	Cut strokes away from you, use cut protection fishing or filet gloves, use cutting board		Increasing pain, redness, pus, swelling, fever indicate infection.	Direct pressure to stop bleeding, clean wound with clean water	Clean dry dressing, monitor for infection, medical care
Scratches and scrapes (aka abrasions, road rash)	Know risk, plan clothing, hiking poles	Wear gloves, long pants, long sleeves, safety glasses for protection from falls, brush, thorns		Increasing pain, redness, pus, swelling, fever indicate infection.	Direct pressure to stop bleeding, clean wound with clean water	Clean dry dressing, monitor for infection, medical care
Puncture wounds	Carry tweezers in first aid kit for splinter removal	Wear gloves to protect hands in falls		Increasing pain, redness, pus, swelling, fever indicate infection.	Direct pressure to stop bleeding, clean wound with clean water, extract splinters if possible	Clean dry dressing, monitor for infection (pain redness, pus, swelling, fever) medical care
Puncture wounds: Fish hook injuries	Use barbless hooks, do not use treble hooks or bait holder hooks	Broad-brim hat, glasses, long sleeves			First aid kit supplies: wipes, hand gel, dressings	Wire cutters, know extraction techniques, Clean wound with clean water, direct pressure to

	with barbs on shanks to prevent bait from sliding, carry needle nose pliers with cutter edges on lanyard					stop bleeding, clean dry dressing, medical evaluation, monitor for infection (pain redness, pus, swelling, fever) medical care
Sunburn, eyes (photokeratitis, snow blindness, welder's flash)	Open water, fishing, snow	99% protective UV400 sunglasses, limit sun exposure 10 am to 4 pm			Cool compresses, eyes closed, dark room, no eye rubbing, no contact lenses, artificial tears	Medical evaluation
Sunburn, skin; severe sunburn (sun poisoning)	Know risk	Sun avoidance and protection, limit sun exposure 10 am to 4 pm, SPF 30+ sunscreen, apply every 2 hours, after swimming, UPF 30+ or best 50+ sun protective clothing, sleeves, gloves, broad brim hat		Redness, pain, tenderness, more severe with blisters, more severe with rash, fever, chills, dizziness, fainting	Cool compresses or bath, aloe, hydrocortisone 1% cream, moisturizer lotion, no topical alcohol	keep blisters intact, ibuprofen or acetaminophen for pain, oral fluids for dehydration, urgent medical evaluation for fever, chills, dizziness, fainting
Burns, scalds	PPE appropriate for welding, kitchen, camp, work area clear of flammables and trip hazards	Use PPE or tools (not gloves) to handle hot metal (welding, Dutch ovens), avoid spills			Cover the burn with a sterile, non-adhesive bandage or clean lint-free cloth. Do not apply tape directly to injured skin; use roll gauze to hold bandage in place. Do not apply ointments or butter to burn; these may cause infection.	Prevent shock: lay the victim flat, elevate the feet about 12 inches, and cover the victim with a coat or blanket. Do not place the victim in the shock position if a head, neck, back, or leg injury is suspected, or if it makes the victim uncomfortable.

burns, 1st degree, superficial, closed wound				Pain, redness, swelling, tenderness	Apply cool, wet compresses, or immerse in cool, clean water until pain subsides.	
burns, 2nd degree, partial thickness				Pain, redness, swelling, glossy from fluid	Apply cool, wet compresses, or immerse in cool, fresh water until pain subsides. Do not break blisters.	Seek medical care, especially if large, involves, face, hands, genitalia
burns, 3rd degree, full thickness				Pain (1st and 2nd degree components) and numbness, dry, leathery, charred or patches of white, brown or black	Do not place a pillow under the victim's head because of risk of airway closure if airway burn is present.	Seek immediate medical care.
Frostbite, frostnip	Follow weather forecasts	Protection for hands, feet, ears, face from wind and cold	Cold exposure, immersion	Frostnip: cold skin, prickling feeling, numbness, inflamed or discolored skin; frostbite: skin with red, white, bluish-white, grayish-yellow, purplish, brown or ashen color, hard or waxy skin, hard or waxy-looking skin, clumsiness	Do not walk on feet or toes with frostbite Do not use a fireplace, heat lamp, radiator, stove, heating pad or electric blanket for warming. Do not rub or massage areas with frostbite. Move to a warm room or shelter. Remove wet clothing.	Warm victim under layers of dry blankets and clothing. Place areas affected by frostbite in warm-to-touch water. Seek medical care.

				due to joint and muscle stiffness, possible blistering after rewarming		
Poisonous animals	Planning	Buddy system				Cell phone
Insect bites, fire ants	Know risk	Do not sit or lie on ground, do not go barefoot, boots, heavy socks, avoid mounds, insect repellent		Immediate intense pinching or burning pain, later itching or burning and pus-filled blisters	Okay for no treatment, cold compresses, hydrocortisone 1% cream, antihistamine, medical evaluation for symptoms lasting more than a few days	
Insect bites, mosquitoes	Season, terrain, time of day	Insect repellent, boots, long pants and sleeves, clothing and tents treated with permethrin			Sleep under mosquito net or within screened or air-conditioned room	Cool compresses, hydrocortisone 1% cream for itching, observe for fever (Zika, dengue, malaria, Heartland virus, West Nile virus)
Insect bites, ticks (arachnids)	Season, terrain	Take precautions to avoid, tick repellent, boots, long pants and sleeves, clothing and tents treated with permethrin			Proper removal	Observe for signs of tick-borne illness (fever, headache, muscle aches, rash) during next 2 weeks
Insect stings, bees	Medical history, pack bee sting kit with epinephrine pen, antihistamines	Take precautions to avoid		Instant burning pain at sting site, later red itchy, painful swelling, hives or swelling lasting days	Okay for no treatment, cold compresses, hydrocortisone 1% cream, antihistamine	Medical evaluation for symptoms lasting more than a few days, urgent medical evaluation for multiple stings, especially in children or with swelling and fever
Insect stings, bees, anaphylaxis , also	Medical history, pack bee sting kit with epinephrine	Take precautions to avoid		Instant burning pain at sting site, immediate, progressive		Treat anaphylaxis with epinephrine pen, antihistamine, 911

caused by severe food reactions	pen, antihistamines			swelling, hives, trouble breathing, wheezing, swelling of tongue or throat, dizziness, confusion, loss of consciousness		
Scorpion sting	Scorpions hide during the day and are active at night. They hide under rocks and wood on the ground. Found in South and Southwest. Pack bee sting kit with epinephrine pen if history of insect allergy.	Wear long sleeves and pants and leather gloves. Shake out clothing or shoes before putting them on.			Symptoms: stinging or burning at injection site (very little swelling or inflammation), positive "tap test" (i.e., extreme pain when the sting site is tapped with a finger), restlessness, convulsions, roving eyes, staggering gait, thick tongue sensation, slurred speech, drooling, muscle twitches, abdominal pain and cramps, respiratory depression	Medical care, 911, Apply ice to sting site (never submerge the affected limb in ice water). Remain relaxed and calm. Do not take sedatives.
Snake bite (Venomous in NC: Copperhead, Cottonmouth, Eastern Coral Snake, Rattlesnakes: Eastern Diamondback, Pigmy, Timber)	Know risk, know snakes	Avoid areas where snakes may be hiding, such as under rocks and logs. Avoid picking up or playing with or provoking any snake. Tap ahead of you with a walking stick before entering an area where you cannot see your feet so that snakes will avoid you. Wear			Bleeding from wound, blurred vision, burning feeling, seizures, diarrhea, dizziness, excessive sweating, fainting, fang marks, fever, increased thirst, loss of muscle coordination, nausea, vomiting, numbness, tingling, rapid pulse, severe pain, skin discoloration, bite site swelling, weakness	Immediate medical care, 911. If bite swells or changes color, snake was probably venomous. Keep victim calm, restrict motion with loose splint, remove rings, loosen clothing. If signs of shock (pallor, sweating), have victim lie down, elevate feet 1 foot, cover with blanket. DO NOT try to pick up snake or trap it.

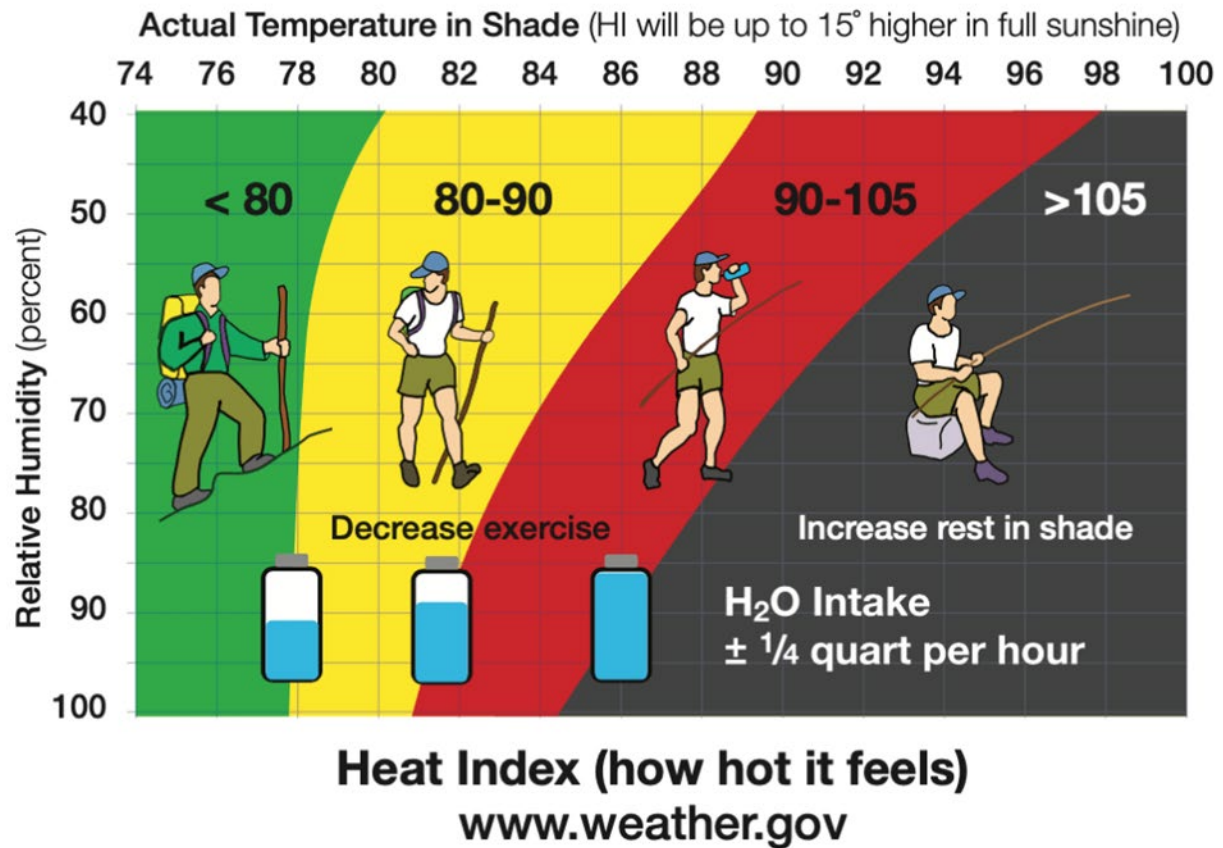
		long pants and boots.				DO NOT wait for symptoms. Seek immediate medical attention. DO NOT allow the victim to become over-exerted. If necessary, carry the person to safety. DO NOT apply a tourniquet, cold compress, ice. DO NOT cut into a snake bite with a knife or razor. DO NOT try to suck out the venom by mouth. DO NOT give the victim stimulants or pain medicines unless a doctor tells you to do so. DO NOT give the person anything by mouth. DO NOT raise the site of the bite above the level of the victim's heart.
Spider bites, black widow	Found throughout North America, common in South and West of US. Spiders have red hourglass on abdomen. Found in woodpiles, under eaves, fences, near debris and outdoor toilets where flies are plentiful. Bites	Inspect or shake out clothing, shoes, towels, or equipment before use. Wear long-sleeves, long pants, hat, gloves, boots when handling piles of materials. Reduce empty spaces between stacked materials. Reduce debris and trim tall grasses from work			Pinprick, minor swelling, redness, target-shaped sore, later body pain, anxiety, difficulty breathing, headache, high blood pressure, increased saliva, increased sweating, light sensitivity, muscle weakness, nausea, vomiting, numbness and tingling around the bite site, restlessness, seizures, painful muscle cramps or spasms, facial swelling	Immediate medical care, 911, clean bite with soap and water, apply ice 10 minutes on and 10 minutes off, keep area still with splint or sling, loosen clothing and remove rings and watch

	usually occur when humans come into contact with webs.	areas. Store clothing and equipment in tightly closed plastic bags.			hours after the bite (sometimes confused with allergy to drug treatment)	
Spider bites, brown recluse	Found in South and Midwest in sheltered areas like logs, piles of rocks or leaves, in dark closets, shoes, attics. Brown with fiddle-shaped mark on head.	Inspect or shake out clothing, shoes, towels, or equipment before use. Wear long-sleeves, long pants, hat, gloves, boots when handling piles of materials. Reduce empty spaces between stacked materials. Reduce debris and trim tall grasses from work areas. Store apparel and equipment in tightly closed plastic bags.			Bite causes stinging sensation and localized pain and a small white blister. Venom can cause a severe skin ulcer.	Wash bite with soap and water. Apply a cloth dampened with cold water or filled with ice to the bite area to reduce swelling. Elevate bite area if possible. Do not attempt to remove venom. Medical care.
Poisonous plants	Planning	Buddy system				Cell phone
Poison ivy, poison oak, poison sumac	Know plants	Long pants, long sleeves, gloves, avoid smoke			Rinse skin with rubbing alcohol, specialized poison plant wash, soap and water, wash clothes	Wet compresses, calamine lotion, hydrocortisone 1% cream, antihistamine for itching or sleep, doctor exam for face or genital rash
Musculo-skeletal injuries	Planning	Buddy system				Cell phone
Sprains	Walk around-over-on for safety	No jumping, ankle-high boots, hiking poles			Ankle wrap, leave boot on, non-weight bearing	RICE (Rest, Ice, Compression, Elevation), pain medication with supervision (acetaminophen, ibuprofen, naproxen)

Strains						
Muscle cramps						
Other conditions	Anticipate	Prevent	History	Symptoms / Signs	Mitigate	Respond / Treat
Tooth, broken or chipped		Wear mouthguard, do not use teeth as tools	Trauma (falls, fight, car accident, bite on hard food fragment)	Immediate pain on gums, cheek, lips, sharp tooth edges	Rinse mouth with warm water to clean the area. Put cold compresses on the face to keep any swelling down. Apply pressure to stop bleeding.	Wrap tooth fragment in wet gauze, bring to dentist ASAP.
Tooth, loosened or knocked out		Wear mouthguard, do not use teeth as tools	Trauma (falls, fight, car accident)	Immediate pain on gums, cheek, lips	Rinse mouth with warm water to clean the area. Put cold compresses on the face to keep any swelling down. Apply pressure to stop bleeding.	Find tooth, wrap in wet gauze or place in milk, may rinse in water, replace tooth in socket, bite on handkerchief to hold it in position, see dentist ASAP
Abdominal pain		Avoid possibly spoiled foods (no refrigeration or warm too long)	Constipation, injury, duration, location, food and water history	Fever-infection, bloody stools - colon inflammation or infection, bloody urine - infection, kidney stone, vomiting - infection, bowel blockage, local tenderness - appendicitis, colon or gallbladder infection	Sips of clear fluids if tolerated. BRAT diet (Bananas, Rice, Applesauce, Toast) is out of favor. Resume normal balanced diet.	Medical care for fever, bleeding, severe or persisting pain, recent or current injury, prolonged or severe vomiting or diarrhea, lightheadedness, shock

Convulsions / seizures		Keep current on medications	Know history from BSA health form, check for medical alert bracelet	Grand mal seizures show violent muscle contractions and loss of consciousness. Other seizures may show lip smacking, staring, loss of awareness, unusual finger motions or repetitive chewing or swallowing.	Protect victim by helping them to lie on ground, on side to prevent aspiration and to keep airway open. Move objects that they could strike. Do not place objects in victim's mouth. Stay with victim. Reassure. Stay calm.	Seek medical care. Call 911. Look for rescue plan on medical alert bracelet or necklace with medication information.
Hurry cases	Anticipate	Prevent	History	Symptoms / Signs	Mitigate	Respond / Treat
Shock						
Heart attack						
Heart stopped						
Stroke						
Severe bleeding						
Internal poisoning						
Breathing stopped						

<https://blog.scoutingmagazine.org/2022/06/22/these-three-steps-can-help-you-beat-the-heat-during-a-hot-weather-outing/>



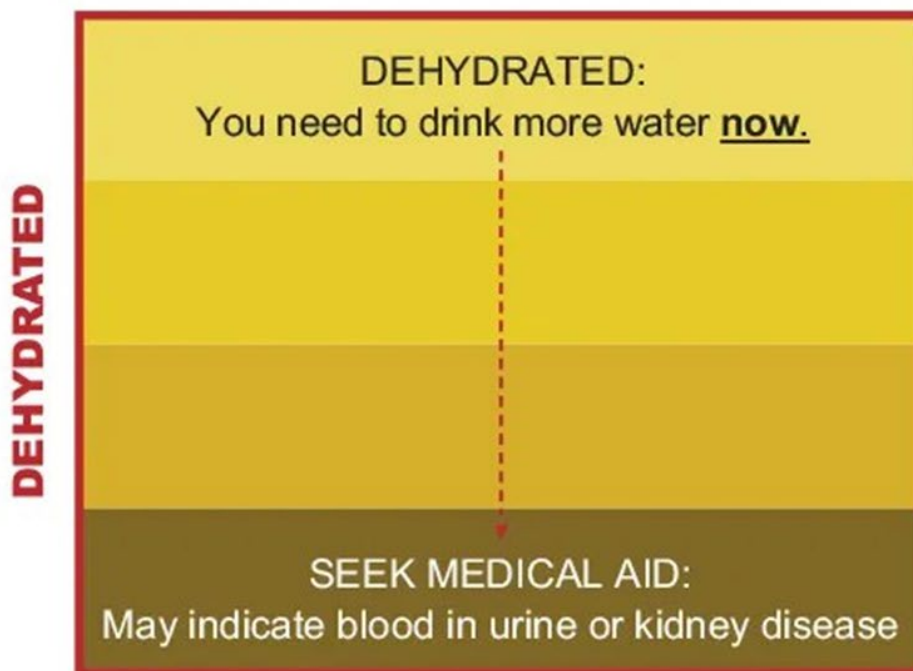
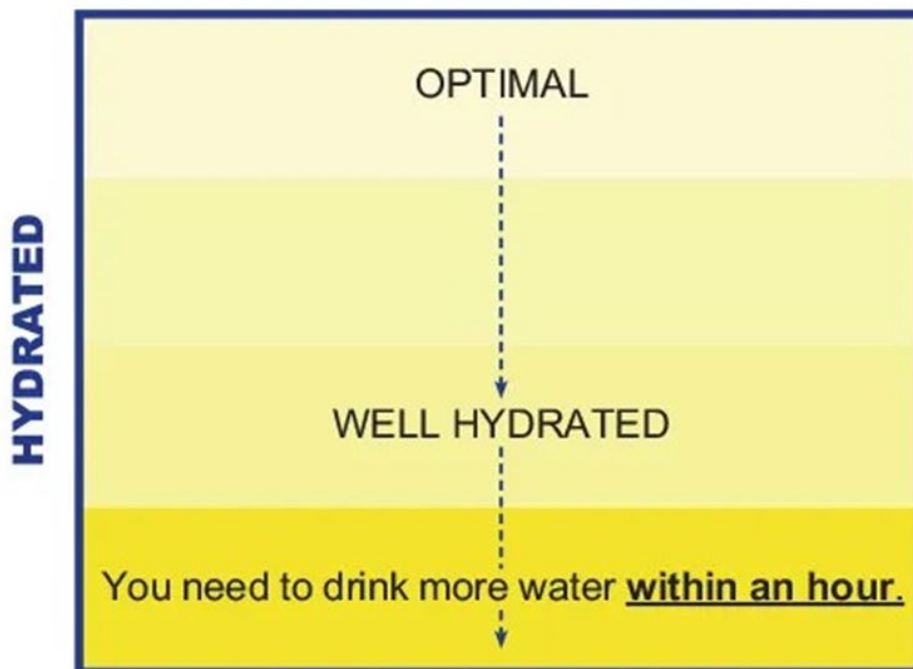
3 Ways to Be Prepared for Heat

Acclimatization

Hydration (with electrolytes to prevent dilutional hyponatremia (low sodium blood levels)

Nutrition (exertion suppresses appetite)

Urine Color Chart*



*This color chart is not for clinical use.

Moving an Injured Person

Requirement # 13: Do the following:

- a. Describe the conditions under which an injured person should be moved.
- b. If a sick or an injured person must be moved, tell how you would determine the best method. Demonstrate this method.
- c. With helpers under your supervision, improvise a stretcher and move a presumably unconscious person.

<https://unifirstfirstaidandsafety.com/how-to-move-an-injured-victim/>

you should not move a casualty from the place of the accident. You should only move a victim if they are in uncontrollable danger, if the safety of the situation is not assured, and if you are able to take action without placing yourself at risk. If necessary, move them to the nearest safe location. If the victim is conscious, explain what you are going to do and ask for their cooperation.

Spinal Cord Injury

<https://www.mayoclinic.org/diseases-conditions/spinal-cord-injury/symptoms-causes/syc-20377890>

Emergency signs and symptoms of a spinal cord injury after an accident include:

- Extreme back pain or pressure in your neck, head or back
- Weakness, incoordination or paralysis in any part of your body
- Numbness, tingling or loss of sensation in your hands, fingers, feet or toes
- Loss of bladder or bowel control
- Difficulty with balance and walking
- Impaired breathing after injury
- An oddly positioned or twisted neck or back

Assume that trauma victims have a spinal injury until proved otherwise.

Don't move the injured person — permanent paralysis and other serious complications can result

Call 911 or your local emergency medical assistance number

Keep the person still

Place heavy towels on both sides of the neck or hold the head and neck to prevent them from moving until emergency care arrives

Provide basic first aid, such as stopping bleeding and making the person comfortable, without moving the head or neck

<https://www.cert-la.com/cert-training-education/lifts-carries/>

<https://www.cert-la.com/downloads/liftcarry/Liftcarry.pdf>

7-page BSA pdf from 1995 with excellent line drawings

8 Emergency Carry Techniques - Animated 2:29

<https://www.youtube.com/watch?v=U0yDJ0udMkg>

One Person Carries:

- The Cradle [Lover's Carry]
- Piggyback

- Fireman Carry
- Packstrap Carry (unconscious victim)
- Human Crutch (walk with assistance)

Two Person Carries:

- Double Human Crutch
- Two-handed Seat
- Two Person Front-Back (taller at head)

First-Aid Tips - Transport of the Injured - Animated 0:59

<https://www.youtube.com/watch?v=ApzANyz15KI>

One Person Carries:

- Pick-a-Back Carry
- Cradle Lift
- Human Crutch
- Firefighter's Crawl Method to transport an unconscious victim

Two Person Carries:

- Handed Seat or Swing Carry (2- or 3- or 4-handed seat)
- Fore and Aft Carry
- Arm Carry [Chair Carry]

Three Person Carries:

- Hammock Carry for an unconscious victim
- [Strap or Scarf Lifting Carry]
- Stretcher Lift
 - Improvised Blanket Stretcher
 - Improvised Shirt Stretcher

<https://www.youtube.com/watch?v=Urr6-5geZM4>

One Man Carries

- Assist to Walk (stay on victim's affected side)
- Lover's Carry
- Packstrap
- Fireman's Carry
- Piggyback

Two Man Carries

- Four-handed Seat
- Two-handed Seat
- Assist to Walk
- Carry by Extremities

Three Man Carries

- Alternating Hammock Carry (tallest at head, supine lift and carry)
- Same-side Hammock Carry (tallest at head, supine lift and carry)

Four-man Carry

- Alternating Hammock Carry (tallest at head, supine lift and carry)

Six-man Carry

- Alternating Hammock Carry (tallest at head, supine lift)

Drags

Arm Drag
 Shoulder Drag
 Fireman [Crawling] Drag (victim's wrists tied with triangular bandage)
 Blanket Drag (tie foot of blanket)
 Guidelines for Carries, Lifts, Drags
 Survey the scene
 Position feet properly
 Use legs and not back while lifting
 Keep back straight when lifting
 Know your physical abilities and limitations
 Do not hyperextend your back
 Use commands
 Tall person positioned at head of victim

<http://www.tpub.com/dental1/106.htm>

Improvised stretcher with rolled edges (not sufficient support for fractures or wounds)

<https://www.offgridweb.com/preparation/carrying-dragging-techniques-lets-get-carried-away/>

Requirement # 14: Teach another Scout a first-aid skill selected by your counselor.

Using the EDGE method of teaching:

Explain how it is done.
 Demonstrate the steps.
 Guide learners as they practice.
 Enable them to succeed on their own.

References:

<https://blog.scoutingmagazine.org/2018/05/05/living-on-the-edge-this-is-the-correct-way-to-teach-someone-a-skill/>

Alludes to 13th edition of Boy Scout Handbook, page 38

<https://scoutingmagazine.org/2016/12/use-edge-method-outdoors/>

<http://www.scouting.org/filestore/outdoorethicsguide/pdf/TeachingEdgeMethod.pdf>

Trainer's EDGE course syllabus, pages 11-13, 50

<http://www.scouting.org/filestore/pdf/26-242.pdf>

Quizzes

First Aid Test with 25 multiple-choice questions

<http://www.scoutcpr.org/documents/FA-Test.PDF>

Test your skills in 10 emergency scenarios

<https://scoutlife.org/outdoors/outdoorarticles/139031/test-your-skills-in-ten-emergency-scenarios/>

How do these instructions apply to first aid?

Check

Call

Care

Compress it

Clear it

Cool it

Clean it

Close it

Coat it

Cover it

Cap it

Complete