

WILDERNESS FIRST AID
INSTRUCTOR MANUAL
2021 EDITION



BOY SCOUTS OF AMERICA®



Blended Wilderness First Aid Instructor Manual

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Considerations When Teaching Blended Wilderness First Aid

CURRICULAR CONSIDERATIONS

As you know, the BSA Wilderness First Aid (WFA) course has two options. There is the traditional 16-hour in-person course. This training includes teaching information, such as the signs and symptoms of someone going into shock, as well as skill development, such as practicing in-the-field treatment of someone in shock. Additionally, the BSA Wilderness First Aid Curriculum and Doctrine Guidelines have now been adapted into a blended learning format option that can be taken instead of the 16-hour classroom model. The blended learning model will allow students to take most of the classroom portion of the course online, with an 8-hour in-person skills portion that will provide opportunities for students to put the information learned online into real-life scenarios. This will help clarify information learned online and develop skills for using that knowledge. As a reminder, all participants who have completed the 8-hour online Emergency Care & Safety Institute (ECSI) WFA course must show proof of successful completion. ECSI provides the completion certificate to all successful participants at the end of the course. It is suggested that WFA instructors obtain these completion certificates before the in-person skills class. The ECSI WFA online portion of the course must be completed before the skills check class.

The majority of this document will focus on information related to teaching the in-person component of the blended learning WFA course. However, much of the information will be helpful no matter which course is being taught.

What has not changed is the requirement that the content of the WFA course meets the curricular requirements of the most current [Boy Scouts of America Wilderness First Aid Curriculum and Doctrine Guidelines](#). Consequently, there continues to be a core curriculum as well as elective topics. The components that will be part of the 8 hours of in-person training are below. As a general guideline, about 6 of these 8 hours should be focused on the topics within the core curriculum and about 2 hours focused on the elective topics.

Core Curriculum

All WFA in-person courses must address the following. Since the emphasis of in-person training is on developing hands-on skills, WFA scenarios should be the primary mode of teaching.

1. Introduction
2. Patient Assessment – Initial
3. Patient Assessment – Focused
4. Chest Injuries
5. Shock and Heart Attack
6. Head (Brain) and Spine Injuries
7. Bone and Joint Injuries
8. Wounds and Wound Infection
9. Allergies and Anaphylaxis
10. Wilderness First-Aid Kits (Creating a trip-specific first-aid kit should be reviewed if this information was not integrated into other content.) Although listed as an elective, it is very important to carry appropriate medical supplies on a trek.



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Elective Topics

All WFA in-person courses must meet the curriculum guidance for a total of 16 hours. Whether the first 8 hours is online in the blended version or part of the in-person traditional 16-hour course, it should include additional topics from the elective list provided here.

1. Hypothermia
2. Heat Problems
3. Lightning
4. Altitude Illnesses
5. Abdominal Problems
6. Submersion Incidents

While it would be best to include **all** the elective topics in WFA training if you have time, there is **some** flexibility when deciding how best to teach these topics. To the extent possible, it is recommended that the topics meet the needs of the WFA students. Lightning and abdominal problems should always be considered because these are most likely relevant to many high- adventure trips. Likewise, issues related to dehydration are also a concern for all high-adventure outings. However, the amount of time devoted to the other topics can be balanced against the needs of the WFA students. For example, if all the WFA students are part of crews going to Northern Tier or Sea Base, then the amount of time devoted to submersion incidents is important. Altitude illnesses, in this case, could be briefly reviewed or not covered during the in-person skills check. Conversely, if all the WFA students are going to Philmont, then more time should be spent on altitude illnesses than on submersion incidents. The required skills reviewed in the core curriculum should be incorporated into the scenarios used in this portion, too.

TIPS FOR TEACHING THE IN-PERSON WFA TRAINING¹

A critically important aspect of the in-person WFA training is that the students develop competency in the needed knowledge and skills. This is why the use of scenarios is an important aspect of this training. Because people differ in how readily they learn information and master skills, some students will require more personal attention from the WFA instructor than other people will. Therefore, it is recommended that there be no more than 10 students per instructor in the in-person training sessions.

The goal of teaching is to facilitate learning, which is an active process that takes work on the part of the student. Unfortunately, the WFA instructor can't control how ready or willing the students are to learn the information and skills. But given how important wilderness first aid can be in the event of a backcountry emergency, it is hoped that all the students in a WFA class want to learn the skills. Consequently, your primary responsibility as the WFA instructor is to make learning as easy as possible. The next few pages will provide tips and methods you can use to make this happen!

First, follow the Boy Scout motto and "Be Prepared."

This includes **knowing and understanding the material** well enough that you can explain the important information without needing to refer to the WFA manual while you do so. You are a subject matter expert. Nevertheless, even the most knowledgeable WFA instructor benefits from having cue cards or props to help remind them of the details of the content and to help them stay on-task.

Second, use the EDGE method.

Recall that the EDGE method (Explain, Demonstrate, Guide, Enable) is the preferred method of teaching Scouting skills. It also works well for facilitating learning WFA skills. This is because the focus extends beyond **knowing** to that of **doing**.

¹ Much of the content in this section is excerpted from *The Trainer's Edge*, available at <https://filestore.scouting.org/filestore/pdf/26-242.pdf>



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For example, when camping, knowing how to tie a square knot is not very helpful if the person is unable to actually tie a square knot. Likewise, knowing how to splint a fractured arm is not helpful in the backcountry if the person is unable to actually splint the crew member’s fractured arm.

Below is an overview of the EDGE method, taken from page 38 of the *Scouts BSA Handbook*, 2019 printing (14th edition):

Explain. The first step is **explain**. The teacher carefully explains the skill, showing all the steps and keeping in mind that the learner is probably seeing this for the first time. Go slowly, make your actions deliberate, and use descriptive language, but don’t stop to show the intricacies in detail yet.

Demonstrate. After explaining the skill, you will **demonstrate** it. Break down each element, showing the step-by-step process and explaining the details of how each step is done and why. Here is where you allow the learner to ask questions, but not yet where they take the reins for themselves.

Guide. Now, **guide** the learner when making the first few attempts at the skill. Be sure to let them be completely hands-on, and don’t worry if mistakes are made. Just give guidance on how to fix it, or start again from the beginning. Keep at it, and be careful not to lose patience. Remember how you were when you were learning!

Enable. Lastly, the teacher **enables** the learner by allowing them the opportunity to see that the skill can be done independently — and it has! The EDGE method can be applied to teaching and learning any skill.

For the blended learning course, recall that all the students in this class have already completed the online modules of the WFA training. Consequently, **they should know how to perform WFA skills**. Therefore, the primary focus of the in-person session is to ensure that **the students can do the skills**, meaning they are able to perform the critical WFA skills. Consequently, you should spend a relatively small portion of the 8-hour in-person session in the Explain and Demonstrate stages or reviewing the information the students should have learned in the online modules. Because it is so critical that the students be able to adequately perform skills, the large majority of the blended learning in-person WFA training time should be spent in the Guide and Enable stages.

Below are concrete examples of how you can use EDGE in the WFA in-person training.

	Training Stage	Examples of Methods Used in a Training Session
Online	Explain	<ul style="list-style-type: none"> ✓ Tell them (talk, audiotape). ✓ Give written instruction or explanation (paper, book, web page).
	Demonstrate	<ul style="list-style-type: none"> ✓ Show (include role plays, videos, computer animations). ✓ Do it yourself as they watch. ✓ Use a diagram. ✓ Tell a story (can be fictional or real-life examples).
In-Person	Guide	<ul style="list-style-type: none"> ✓ Watch then do it and give verbal hints and tips. ✓ Do it together (at the same time). ✓ Let them try it; then talk about it. ✓ Let them ask questions as they try it.
	Enable	<ul style="list-style-type: none"> ✓ Give a memory aid. ✓ Give them a task that requires this learning. ✓ Ask them to teach someone the new learning. ✓ Give them the resources to do it again without you. ✓ Help them use the learning again in a new setting or situation.



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While EDGE is depicted as four separate stages, they are certainly interconnected. Consequently, you may choose to combine stages depending on your comfort level, expertise as a WFA instructor, and the backgrounds of the WFA students. For example, you may be able to combine elements of Explain and Demonstrate for some components of the WFA training, since the students have completed the online training. But other, more complicated components of the training might necessitate keeping the Explain and Demonstrate stages separate.

Third, focus on creating a positive learning environment.

The focus of an excellent instructor is always on how best to facilitate student learning. What can you, as the instructor, do to help each of the students learn? Think about the teachers you have had in the past. You probably had some teachers who were outstanding and some who were not. How did these two groups of teachers differ?

The outstanding teachers likely had a learner-centered focus in their teaching while the less-than-outstanding teachers likely had a teacher-centered focus. The traditional method of teaching is teacher-centered, in which the instructor stands at the front of the classroom, lectures about the material, and hopes the students understand it. This is sometimes called the “sage on the stage” method. While this method has its place, it doesn’t work for everyone — especially not with adult learners. A more effective method is the learner-centered focus, sometimes called the “guide on the side” method. Here, learning is a more active and collaborative effort, wherein the teacher works hard to make sure that the information given is both received and understood by the students. This is the goal of the in-person WFA training.

Below is a list of tips that you, as the WFA instructor, can use to create a learning environment that is more learner centered. If you have participated in either Wood Badge or NYLT, these tips will be familiar to you. They are from “[The Trainer’s EDGE](#)” sessions of those trainings.

Explain. It is important to remember that communicating with others is more than just simply delivering information. Consequently, remember that while what you say is important, how you say it is important too. Likewise, nonverbal communication is important. Your body language can either facilitate or hinder student learning. If you look bored, even if you’re not, that will likely affect the students’ level of engagement in the class. Finally, remember that communication is a two-way process. Ask the WFA students questions to make sure they truly understand the information. Pay attention to the body language of your students. If they look disinterested, it might be time for a quick break!

Demonstrate. The process of demonstrating a skill, such as how to apply a splint, is not simply performing the skill while others watch. There might be subtle aspects of completing the skill that are not obvious to an onlooker. So you need to think carefully about how best to maximize the effectiveness of a demonstration. The following are tips on how to do so.

- a) Preparing for the demonstration.
 - In advance, plan the steps you will use in giving the demonstration.
 - Make a written outline of the steps you will use for a long demonstration.
 - Collect and prepare the necessary materials or equipment.
 - Practice the demonstration from beginning to end until you can do it smoothly and with ease.
 - Appear as natural as possible, even if you cannot perform the skill exactly as you would in use.



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- b) Give the demonstration.
- Briefly tell the WFA students the major points to watch for during the demonstration.
 - Adjust the speed of your demonstration to match the difficulty of learning the various steps.
 - Watch for the students' reactions. Fit the amount of detail you give and pace the action to your audience.
 - If necessary, repeat any difficult or important steps, either as you go along or after all steps are completed, to ensure that everyone understands.
 - If you warn against the wrong way by showing it, always demonstrate the right way before and after you show the wrong way.
- c) Summarize the demonstration.
- Briefly tell your students the major points to watch for during the demonstration.
 - Briefly review the important steps. Use a chalkboard or poster as a visual aid in the summary.
 - Give the students a chance to ask questions.
 - Give the students a chance to practice while you coach.

Both the Explain and Demonstrate sections of the EDGE method are important aspects of teaching a skill. Some of the WFA in-person training should therefore be spent reviewing what was taught in the online training. But the Guide and Enable components are where learning and mastery of a skill truly occurs. This is why the majority of the in-person sessions of the WFA training should be devoted to these two components — and why the use of scenarios is a critical component of this training.

Guide. The Guide component of learning entails the students practicing the skills. They might **know** what to do, as a consequence of the online WFA training and your having reviewed this information. But they might not be **able** to actually complete the skills well enough to be competent when in the backcountry. Thus, your role is to watch the students during this practice time and give them feedback to guide the students to mastering the skills.

Enable. The last component of EDGE, Enable, is where the students practice the skills without your instant feedback. The intent is for them to learn how to respond to injuries or illness when on their high adventure — without someone like you there to help them. However, as will be described here, you have a vital role to play ensuring the students master these skills.

Fourth, make extensive use of the BSA WFA scenarios.

The Boy Scouts of America has created several [WFA scenarios](#) that should be used to practice and reinforce skill development. You are strongly encouraged to use them as part of the in-person WFA training. However, depending on your WFA expertise and experiences, it is acceptable to create scenarios if they help the students achieve the learning objectives described on the following pages. Some of the scenarios are relatively simple, with only one victim to consider, while others are complex, with more serious medical issues and more victims. You should begin with simpler scenarios and, over the course of the 8 hours of training, progress to more advanced scenarios. Moreover, if the scenarios will be enacted outside, you must ensure the safety of the scene.



Considerations When Teaching Blended Wilderness First Aid

For each scenario, divide the WFA students into small groups, or crews. Since these groups mimic a crew on a high-adventure trek, consider keeping each group together throughout the entire in-person training session. The number of groups often depends on the overall size of the class, the available equipment and supplies, and the number of WFA instructors. In general, each group should be no more than four to six students. These numbers ensure that everyone in the group will have an active role in the scenarios, and they are also on the low end of the size of a typical crew. But in determining group size, consider the complexity of the scenario and the WFA skills that are needed. You might want to increase or decrease the group size. In addition, it is important that crew leadership be rotated among the group members; every group member needs to practice being in charge of an emergency.

The format of all the BSA-developed scenarios is consistent. Below is one of the simple scenarios; it is used here to illustrate the important elements of this format and what you should do with each of them.

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1

Wilderness First Aid Scenario
WOUND WITH INFECTION

Victim 1 – Youth Victim, Infected Wound at Florida Sea Base

SUMMARY

You are an adult leader sailing with your crew on a catamaran as part of a Bahamas adventure at Sea Base. It is the fifth day of a 10-day sailing trek. There are 14 Scouts aged 14–17, four adult leaders, and one adult captain. Each day, you sail to a new location and set anchor to explore the area, snorkel, swim, etc.

It is early morning and you are sailing toward your next destination. Winds are calm, and you are moving very slowly at one knot per hour. As you are sailing, one of the Scouts, age 15, tells you he got a cut on his leg while snorkeling near some coral two days ago. He thought it was just a minor cut but now thinks it is getting worse. You and another leader assess the wound on the lower calf of the Scout's left leg.

SCENARIO DETAIL

The weather is sunny with temperatures in the 90s and the possibility of thunderstorms in the late afternoon or early evening. The winds remain calm, and the boat is fairly stationary in the water. You are four hours away from the closest port and one day away from Sea Base. The captain and two adult leaders have been trained in WFA. The troop has a copy of each participant's Annual Health and Medical Record (AHMR). Several cell phones are on board, but there is no cell service. The boat has a satellite phone.

STUDENT RESPONSE

1. Scene safety:
Ensure that the scene safety assessment is completed. For this scenario, make sure that personal protective equipment is used (nonlatex disposable medical gloves, and goggles if needed).
2. Primary assessment:
A&Ox4, no immediately life-threatening distress
 - a. Physical exam: There is only a need to examine the wound area. *Follow BSA Youth Protection guidelines.*
Left lower calf: The wound, located 8 inches above the left inner ankle, is 1½-inches long, ¼-inch wide, and 1/8-inch deep with irregular edges. The wound is open and oozing some thick, yellow drainage (purulent discharge) along with some clear (serous) fluid. There is no blood noted. A ¼-inch area encircling the wound is swollen and reddened. There is also a deep red streak running from ½ inch above the wound up to the mid-thigh.
 - b. Vital signs: heart rate 78, respirations 16 (unlabored), skin color normal except as noted above, skin temperature warm near the wound but otherwise appears normal. No changes are noted in vital signs after the primary assessment.
 - c. **SAMPLE**
S – As above
A – Penicillin
M – Concerta for ADHD, Claritin for seasonal allergies
P – ADHD, seasonal allergies
L – Breakfast at 7 a.m. (one hour ago); voided clear, pale urine 30 minutes ago
E – The Scout was snorkeling two days ago in sea water and brushed up against coral, which caused the abrasion.
 The wound has become worse and, today, the Scout noticed the drainage.

Only the **Summary** and **Scenario Detail** are shared with the WFA students.

They are then tasked with responding to the situation. *Note that the WFA instructor should emphasize (1) the need to have the AHMRs of all crew members when on a trek and (2) being familiar with the medical needs of each crew member.*

The **Student Response** is the “ideal” response. *Because of their importance, the assessment elements of Scene Size-up, Initial and Focused (Primary and Secondary) Assessments, and needed Documentation (SOAP note methodology) should be part of every scenario.*

As the WFA instructor, you monitor each group as it works through the scenario to see how members are doing. Ideally, there a WFA instructor monitoring each group. In general, you only observe — you should not provide feedback during this time unless the crew is making a catastrophic mistake. For example, if a crew is focused on splinting a fractured leg but the victim is also severely bleeding from a wound, then you may feel compelled to point out the latter as a potentially lethal injury.



Considerations When Teaching Blended Wilderness First Aid

The **Post-Scenario Debrief** is a critical element of learning. Do not shortchange this aspect of the training!

The following tips will help ensure a successful, educational Post-Scenario Debrief:

1. Ask questions but do not provide the answers. Wait for the group(s) to answer. Give them enough time to formulate an answer. This helps the students internalize, process, and reflect on what they know as well as what they need to improve upon.
2. Start with objective “What” or “How” questions that have relatively straightforward answers. *Sample questions are provided for you as part of each scenario.*
3. Move into more subjective “What” or “How” questions. Effective initial questions are “What worked?” and “What could have been done differently?” as well as “How could this situation have been avoided?”
4. Conclude with open-ended questions that are thought-provoking, such as “What have you learned from this scenario that you can apply elsewhere?” or “How does this scenario relate to a real-life trek?”
5. Because of their importance, you should spend a considerable amount of time planning how to maximize the training components of the WFA scenarios.

Items to consider include:

- a) Determining what supplies are needed. For example, do you have enough bandages for each group of students? Will you provide SAM splints or will the students need to improvise a splint?
- b) Determining how to stage the scenarios. For example, will you use signs to denote the water’s edge or place a rope on the floor to denote it? Will you recruit volunteers to serve as victims or will WFA students play these roles? For the former, will you use moulage (makeup) to depict the injuries or simply tell the victim what their injury is?
- c) Determining the time and space needed to set up the scenarios. Try to balance the elements of realism (e.g., moulage, victims moaning in pain, two victims placed several feet apart) against the environment you have to work within (e.g., a small classroom versus outside, budget for moulage, time to prep the actors for their roles as victims) and the learning objectives (e.g., will the enhanced realism demonstrably improve how well the WFA students learn?).



+ Wilderness First Aid Scenario **Wound With Infection**

POST-SCENARIO DEBRIEF

- Did the responders put on gloves before assessing the Scout? Were BSA Youth Protection guidelines followed?
- What signs and symptoms did you find?
A small open wound with purulent drainage. The area around the wound was reddened and swollen. A red streak was noted, starting ½ inch above the wound and traveling up the leg toward the groin.
- What is the individual’s problem?
An untreated open wound that is now infected with the potential to become severe.
- How would you provide care?
Clean and bandage the wound. This wound is becoming worse and may have started to spread into the bloodstream. The Scout needs to receive advanced medical care quickly. Items needed include basic first-aid supplies.
- What would happen if the wound is left untreated?
It could lead to a blood infection.
- Does this situation require an evacuation?
Yes. The Scout needs advanced medical care beyond WFA skills. Care for the wound may require culturing (running a test on) the drainage and administering antibiotics. Because the winds are calm, you will reach help faster if you drop the sails and motor in to the nearest port with advanced medical care available. You could also contact Sea Base, the U.S. Coast Guard, or governmental officials—depending upon the region you are currently in.
- How could this scenario have been avoided?
Proper initial reporting and care of the wound might have prevented it from getting worse.
- Did the crew prepare well for the event? What first aid/WFA training did they have?
- What would the troop have done if they didn’t have a copy of the victim’s AHMR?
- Were the Scout’s parents or guardian contacted?
- Discuss the advantages of having both cell phones and a satellite phone, especially when a group is going to a remote area.



Considerations When Teaching **Blended Wilderness First Aid**

6. Debriefing each scenario is a critical component of the WFA students' learning — learning how to do things well and also learning from their mistakes. In essence, debriefing helps to close the learning loop for the students. Consequently, when debriefing a scenario, it is important that you ask questions that encourage the WFA students to do the thinking and reflect on their observations of the scenario. You should provide the structure, but the students develop the solutions. While this can be time-consuming, it is a critical element to the students' learning.

In summary, when thinking about how best to facilitate your WFA students' learning and abilities to apply these WFA skills when on a trek, there are four main concepts to keep in mind. First, follow the Boy Scout motto and “Be Prepared.” Second, use the EDGE method. Third, focus on creating a positive learning environment. And, lastly, make extensive use of the BSA WFA scenarios. These concepts will serve you well as a WFA instructor. In the next section, considerable attention is given to the nuts and bolts of what knowledge, skills and abilities must be taught in the WFA course. Most of the focus is on the in-person training; you are encouraged to pay close attention to what is covered.



Considerations When Teaching The WFA Curriculum

As mentioned earlier, the WFA training must follow the [Boy Scouts of America Wilderness First Aid Curriculum and Doctrine Guidelines](#). As the WFA instructor, it is critically important that you study these resources carefully and follow them closely.

When teaching a subject, it is important first to identify what you want the student to know. After identifying these learning objectives, the second task is to determine how best to facilitate the students' learning this information. A teacher would call this "creating a lesson plan." To that end, the following learning objectives form the critical elements of the core curriculum. These objectives are to be achieved as a consequence of completing the 16-hour BSA WFA curriculum. Some of these objectives should be completed as part of the online training and reinforced within the in-person training. But the hands-on, skill-based objectives should be major elements of the scenario portions of the in-person training. The latter are **bolded** below and should form the majority of the 8 hours of in-person training.

LEARNING OBJECTIVES – CORE CURRICULUM

Introduction

Upon completion of this lesson, the student will be able to:

1. Articulate all course goals, requirements, and resources.
2. Define wilderness first aid.
3. Describe the difference between wilderness first aid and standard first aid.

Patient Assessment: Initial (Primary) Assessment – Sizing up the Scene

Upon completion of this lesson and skill practice, the student will be able to:

1. Describe the importance of immediately establishing control of the scene.
2. Describe the importance of establishing a safe scene, including checking for hazards and standard precautions.
3. Define mechanism of injury (MOI) and describe why it is important as a factor in patient assessment.
4. **Demonstrate how to perform an initial assessment, including a quick scan for major bleeding and assessing airway, breathing, circulation, disability, and the environment (ABCDE method).**
5. **Assess the number of victims and the need for additional resources.**

Patient Assessment: Focused (Secondary) Assessment

Upon completion of this lesson and skill practice, the student will be able to:

1. Discuss the importance of a hands-on physical exam.
2. **Demonstrate a physical exam on a patient.**
3. Discuss the importance of vital signs and how they can change over time.
4. **Demonstrate how to take a set of vital signs, including level of response (LOR); heart rate, regularity, and quality (HR); respiratory rate, rhythm, and quality (RR); and skin color, temperature, and moisture (SCTM).**
5. Discuss the importance of taking a patient history and how to do so.
6. **Demonstrate taking a patient history by asking questions related to symptoms, allergies, medications, pertinent medical history, last intake and output, and events surrounding the incident (SAMPLE).**
7. Discuss the importance of documentation.
8. **Demonstrate documentation in written and verbal form using information gathered via the subjective, objective, assessment, and plan (SOAP) format.**

Note: At this level of training, the students will demonstrate mastery of these objectives by following written class notes – not from memory.



Considerations When Teaching The WFA Curriculum

Chest Injuries

Upon completion of this lesson and skill practice, the student will be able to:

1. **Demonstrate a field assessment of a patient with a chest injury.**
2. Describe the emergency treatment of and long-term care for a chest injury.
3. Describe situations that would require an evacuation versus a rapid evacuation.

Shock and Heart Attack

Upon completion of this lesson and skill practice, the student will be able to:

1. Define shock and discuss briefly the stages of shock.
2. List the signs and symptoms of shock and describe the patient in which shock might be a potential threat to life.
3. **Demonstrate the emergency treatment of and describe the long-term care for a patient in shock.**
4. Define heart attack and list the signs and symptoms of a heart attack.
5. **Demonstrate the emergency treatment of and describe the long-term care for a patient having a heart attack.**
6. Describe situations that would require an evacuation versus a rapid evacuation.

Head (Brain) and Spine Injuries

Upon completion of this lesson and skill practice, the student will be able to:

1. **Demonstrate a field assessment for injuries to the head.**
2. List the signs and symptoms of a closed head injury and a skull fracture.
3. Describe the emergency treatment of and long-term care for a head injury.
4. Describe how some head injuries could be prevented.
5. List the most common mechanisms of injury that can lead to spinal trauma.
6. List the signs and symptoms of spinal injury.
7. **Demonstrate a field assessment for injuries to the spine.**
8. **Demonstrate how to properly restrict spinal motion with an improvised collar.**
9. Discuss the importance of proper lifting and moving of patients.
10. **Demonstrate a one-rescuer roll from back to side, side to back, and facedown to back with placement of a protective pad underneath the patient.**
11. **Demonstrate a two- and three-rescuer roll from back to side, side to back, and facedown to back with placement of a protective pad.**
12. **Demonstrate body elevation and movement (BEAM) of a patient.**
13. Describe how some spinal injuries could be prevented.
14. Describe situations that would require an evacuation versus a rapid evacuation.



Considerations When Teaching The WFA Curriculum

Bone and Joint Injuries

Upon completion of this lesson and skill practice, the student will be able to:

1. Define muscle injury, fracture, and dislocation.
2. List the signs and symptoms of a strain, sprain, fracture, and dislocation.
3. **Demonstrate a field assessment for injuries to bones and joints.**
4. Define RICE (rest, immobilize, cold, and elevate) and describe its use.
5. **Demonstrate and/or describe the emergency treatment, including the use of improvisation, for:**
 - a) Strains and sprains
 - b) Fractures
 - c) Dislocations, including realignment of fingers, toes, patella, and shoulder
6. Describe the emergency treatment for:
 - a) Angulated fractures
 - b) Open fractures
7. Describe the long-term care for injuries to bones and joints.
8. Describe how to prevent some bone and joint injuries.
9. Describe situations that would require an evacuation versus a rapid evacuation.

Wounds and Wound Infection

Upon completion of this lesson and skill practice, the student will be able to:

1. Define serious bleeding and demonstrate control of bleeding, including direct pressure, packing the wound, and tourniquets.
2. Define abrasion, laceration, and blister, and demonstrate wilderness treatment, including the use of improvisation, for each.
3. **Demonstrate proper wound-cleaning techniques, including pressure irrigation, scrubbing, and rinsing.**
4. **Define and demonstrate the proper management of superficial, partial-thickness, and full-thickness burns in short- and long-term settings.**
5. Define and describe the treatment for chafing.
6. Define and describe treatment for common medical problems related to ears, nose, and teeth.
7. Describe treatment and prevention of bites from mosquitoes, ticks, and venomous snakes.
8. Describe the signs, symptoms, and treatment of wound and skin infections.
9. Describe personal and camp hygiene and their role in prevention of skin infections.
10. Describe how some wounds and wound infections could be prevented.
11. Describe situations that would require an evacuation versus a rapid evacuation.



Considerations When Teaching The WFA Curriculum

Allergies and Anaphylaxis

Upon completion of this lesson, the student will be able to:

1. Describe the basics of an allergic response and its treatment and prevention.
2. Define and list the signs and symptoms of anaphylaxis.
3. Describe the function of epinephrine and describe conditions under which an injection of epinephrine will be considered.
4. Describe the use of the epinephrine auto-injection system, like an EpiPen®.
5. Describe the function of oral antihistamines in anaphylaxis, and discuss when and how much will be used.
6. Describe how some allergic reactions including anaphylaxis could be prevented.
7. Describe situations that would require an evacuation versus a rapid evacuation.

Note: While not a formal learning objective, a reasonable hands-on skill to practice is demonstrating the appropriate sites for an auto-injection by EpiPen or similar system. If an epinephrine auto-injection training device, like an EpiPen skills trainer, is available, they can show students how to do so. This way, students could assist someone in taking their medication during an emergency.

Wilderness First-Aid Kits

Upon completion of this lesson, the student will be able to describe the contents and uses of an adequate wilderness first-aid kit based on size of group, destination and duration of trip, and time of year.

Note: This unit is listed under Elective Topics in the [BSA Wilderness First Aid Curriculum and Doctrine Guidelines](#). Because of its importance to every trek, it should be discussed as part of the in-person WFA training. This could be very brief if the high-adventure location already provides this information.

LEARNING OBJECTIVES – ELECTIVES

Hypothermia

Upon completion of this lesson, the student will be able to:

1. Describe the mechanisms of heat loss versus heat gain.
2. Define hypothermia.
3. List the signs and symptoms of mild and severe hypothermia.
4. **Demonstrate the emergency treatment of and describe the long-term care for mild and severe hypothermia.**
5. Describe the prevention of hypothermia.
6. Describe situations that would require an evacuation versus a rapid evacuation.



Considerations When Teaching The WFA Curriculum

Heat Problems

Upon completion of this lesson, the student will be able to:

1. Define heat cramps, heat exhaustion, heat stroke, and dilutional hyponatremia.
2. List the signs and symptoms of heat exhaustion, heat stroke, and dilutional hyponatremia.
3. Describe the emergency treatment of and long-term care for heat exhaustion, heat stroke, and dilutional hyponatremia.
4. Describe the prevention of heat illnesses.
5. Describe situations that would require an evacuation versus a rapid evacuation.

Note: While not a formal learning objective, a reasonable hands-on skill to practice is demonstrating where and how to place cool packs on a victim (e.g., not placing ice directly on the victim's skin) and how to place a victim in the recovery position. The recovery position, while taught in CPR, should be reviewed.

Lightning

Upon completion of this lesson, the student will be able to:

1. Describe how lightning can cause injury and/or death.
2. Describe the emergency treatment of and long-term care for lightning-induced injuries, including respiratory arrest and cardiac arrest.
3. Describe the prevention of a lightning-induced injury and/or death.
4. Describe situations that would require an evacuation versus a rapid evacuation.

Note: While not a formal learning objective, a reasonable hands-on skill to practice is demonstrating the body position to assume during lightning and how this position might differ depending on the surrounding environment (e.g., trees, buildings, nearby people).

Altitude Illnesses

Upon completion of this lesson, the student will be able to:

1. Define altitude illnesses, including acute mountain sickness (AMS), high-altitude cerebral edema (HACE), and high-altitude pulmonary edema (HAPE).
2. List the signs and symptoms of AMS, HACE, and HAPE.
3. Describe the emergency treatment of and long-term care for AMS, HACE, and HAPE.
4. Describe the prevention of AMS, HACE, and HAPE, including, briefly, the process of acclimatization.
5. Describe situations that would require an evacuation versus a rapid evacuation.

Note: WFA instructors are encouraged to use the scenario "[Altitude Illness](#)" to address these learning objectives.



Considerations When Teaching The WFA Curriculum

Abdominal Problems

Upon completion of this lesson and skill practice, the student will be able to:

1. **Demonstrate a field assessment for abdominal pain and/or discomfort.**
2. Define and describe the treatment of and long-term care for stomachache and diarrhea.
3. List the indications causing serious abdominal pain and/or discomfort.
4. Describe personal and camp hygiene and their role in prevention of abdominal problems.
5. Describe situations that would require an evacuation versus a rapid evacuation.

Submersion Incidents

Upon completion of this lesson, the student will be able to:

1. Describe briefly the general sequence of events at a submersion (drowning) incident.
2. Describe the safest and most efficient means of removing a submersion victim from the water.
3. Describe emergency treatment for a drowned patient.
4. Describe how to prevent some drowning incidents.
5. Describe situations that would require an evacuation versus a rapid evacuation.



The WFA Curriculum

Creating A Lesson Plan

When deciding what and how much to teach, it is important to remember that adult learners differ in their goals, attitudes, knowledge, expertise and needs. Consequently, a lesson plan that works well for one person or one group of WFA students might not work well with others. Be mindful of the pace of your teaching and adjust as needed. Having said that, it is important that all the learning objectives be met as a result of the 16-hour WFA course.

When deciding how best to achieve the aforementioned learning objectives, follow the EDGE method. Again, spend a relatively small portion of time on a topic when focusing on *explaining* and *demonstrating* but a considerable portion of time on *guiding* and *enabling*. Spend the bulk of this time achieving the **bolded** learning objectives.

For example, consider the learning objectives associated with performing an initial patient assessment (see box). There are five objectives; achieving the first three require the WFA student to “describe” or “define,” while the last two require “demonstrate” and “assess.” Within the context of the EDGE method, achieving the first three objectives is likely a matter of *explaining* this content. Since this content was part of the online curriculum and should therefore be a review for the WFA students, you do not need to devote a great deal of time to these. On the other hand, achieving the last two objectives will require considerably more time. Here, you will likely need to *explain* and *demonstrate* the skills and then, by use of relevant scenarios, the WFA students will master these skills via your *guiding* and *enabling* them as they work through the scenarios.

Patient Assessment: Initial (Primary) Assessment—Sizing up the Scene

Upon completion of this lesson and skill practice, the student will be able to:

1. Describe the importance of immediately establishing control of the scene.
2. Describe the importance of establishing a safe scene including checking for hazards and standard precautions.
3. Define *mechanism of injury* (MOI) and describe why it is important as a factor in patient assessment.
4. **Demonstrate how to perform an initial assessment including a quick scan for major bleeding and assessing airway, breathing, circulation, disability, and the environment (ABCDE method).**
5. **Assess the number of victims and the need for additional resources.**

An example:

Given the importance of knowing how to do an initial and focused patient assessment in the backcountry, you may decide to devote 2 hours of the 8 hours of training to developing these skills. You may decide to spend about one-third of this time (or 40 minutes) on *explaining* and *demonstrating* and two-thirds (or 80 minutes) on the scenario-based training associated with *guiding* and *enabling*.

But these need not be 40 continuous minutes of *explaining* and *demonstrating* followed by 80 continuous minutes of *guiding* and *enabling*.

For example, you may choose to quickly explain, or review, the information associated with the first three learning objectives. You'll follow this with *explaining* and *demonstrating* the skills needed for the last two learning objectives. All of this might take only 20 minutes. You could then divide the WFA students into small groups (three to five students in each group) where they practice these skills using a simple BSA WFA scenario. This section could be concluded by a post-scenario debriefing so that a total of 20 minutes was spent with the scenario, or a total of 40 minutes to achieve the



The WFA Curriculum

Creating A Lesson Plan

learning objectives of performing an initial patient assessment. You could then reconvene the WFA students and move on to the next set of learning objectives, those of the focused patient assessment. Here, you may repeat this sequence of *explaining*, *demonstrating*, *guiding*, and *enabling*. But this time, when working through a scenario, they are expected to incorporate the skills they learned during the initial patient assessment. Because the WFA students are now expected to practice more complex skills with this scenario, it may take relatively more time for them to complete the scenario and be debriefed. Given that this was an intense 120 minutes of learning, both the WFA students and you might then need a 10-minute break!

After the break, move on to achieving the learning objectives of the other components of the core curriculum. While these other components focus on different types of injuries, they are similar in that the students need to practice a series of skills. For example, there are several different types of bandages and a number of different bandaging techniques, as well as several different types of splints and splinting techniques. Consequently, you may spend some time *explaining* and *demonstrating* these various aspects but, rather than having the students practice these skills in a scenario, you divide the students into pairs to practice these skills. You could then convene several small groups of students to work on a more complex BSA WFA scenario. This scenario requires them to revisit the patient assessment skills learned earlier but also use the other WFA skills.

On the following pages is an example day to consider when creating the 8-hour in-person training session. The scenarios are presented in a suggested order, based on the requirements of the WFA core curriculum and elective topics of the [Boy Scouts of America Wilderness First Aid Curriculum and Doctrine Guidelines](#). As described earlier, each scenario provided by the BSA has embedded questions that can be used as part of the debriefing. Additional questions are provided here that you may consider using. Finally, there are suggested supply lists for each scenario; these lists include items required for the scenario as well as optional items. The optional items are not critical to practicing WFA skills with each scenario but primarily help enhance the scenario. Depending on funding and personal interests, you may want to consider including them. In addition, immediately following this example day is a blank template that you can use to create your lesson plans for each of these topics.



Suggested Order of Scenarios To Use In The 8-Hour In-Person WFA Training

CORE CURRICULUM

Topic 1: Introduction

Items to consider reviewing with the WFA students:

1. The importance of situational awareness when on a trek:
 - a) Understanding your crew health: reviewing all crew members' AHMRs prior to leaving on a high-adventure trip, being aware of any crew health issues, talking to parents of crew members to clarify these health issues or medication needs, etc.
 - b) Being sure to have the AHMRs with you while on the trek.
 - c) Paying attention to the environment and the weather when going to the trek site, during the trek, and on the way home so you are aware of potentially hazardous situations and can avoid them, if possible.
2. Review SOAP note methods.
3. Review SAMPLE and DOTS (deformities, open wounds, tenderness, swelling) as tools to use in assessing a victim.
4. The importance of someone being in charge and leading the response to injury(ies). This includes the importance of knowing the skill sets of each crew member so the leader can delegate responsibilities.

Topic 2: Patient Assessment (Initial and Focused)

Suggested scenario: [Orthopedic Injuries](#)

This scenario includes multiple victims, but to maximize the focus on how to perform an initial and focused assessment, adjust the scenario so that only Victim 2 is injured. In other words, Victim 1 in the scenario has not been injured and is not a victim.

Additional debriefing questions (in addition to those provided in the scenario):

1. What is a potentially lethal mistake when performing a patient assessment? (Answer: Focusing on the first injury that is encountered and overlooking a more serious injury. For example, a person provides first aid for the bloody but superficial cut on a victim's head and overlooks the cut on their thigh that severed their femoral artery. These are often called "ninja" or "gotcha" injuries — quiet but deadly injuries that can be missed with a careless assessment.)
2. How can you reduce the risk of overlooking an injury? (Answer: Always perform an initial assessment for all injuries. This may be a rapid head-to-toe 60- to 90-second assessment.)

Questions to consider using for all scenario debriefings:

1. Consider asking "Thorns and Roses" or "Start/Stop/Continue" type questions.
2. Avoid asking "yes/no" questions. Ask open-ended questions. If you ask a "yes/no" question, follow it up with "Why?"
3. Consider leading off with "What went well?" and "What could have been done better?" These questions are relatively easy to respond to, so the risk of an incorrect answer is low. Consequently, crew members may be more willing to respond so that you won't have to "pull" answers from the crew.

Supplies:

Required: None, since the focus is on the initial and focused assessments.

Optional: For treating the victim, the following are required: Splints (material for improvised splints; consider having WFA students bring a loaded backpack to the class so they must improvise first-aid supplies using only what they have on hand), cravats, elastic bandages, coat/jacket/blanket (for heat loss or environmental concerns), nonlatex gloves, other PPE if needed. If desired, an additional item could be moulage (makeup) to illustrate skin abrasions.



Suggested Order of Scenarios To Use In The 8-Hour In-Person WFA Training

Topic 3: Shock and Heart Attack

Suggested scenario: [Heart Attack](#)

Reiterate to the WFA students that the initial and focused patient assessment should be performed in all these scenarios.

Additional debriefing questions (in addition to those provided in the scenario):

1. What are the common signs and symptoms of a heart attack?
2. What are signs and symptoms that might not be a heart attack? (Answers: indigestion, anxiety attack)
3. In your unit back home, how many are trained in CPR, first aid, WFA? Consider increasing this number.

Supplies:

Required: None.

Optional: CPR manikin (can place next to victim and use to demonstrate CPR), various barrier devices (to show how small and inexpensive some of them are and that these could fit in a backpack). Remember that CPR is a prerequisite for this course. Whether or not to spend time on demonstrating CPR should be evaluated by the instructor since there are so many skills to review. If time allows for CPR practice, and if you are a certified CPR instructor, consider adding it toward the end of the course.

Topic 4: Head (Brain) and Spine Injuries

Suggested scenario: [Multiple Injuries on a Sailboat](#)

This scenario includes multiple victims, but to maximize the focus on how to respond to head or spine injuries, adjust the scenario so that only Victim 2 is injured. Depending on the number and expertise of the WFA students, you could use Victim 3 instead of Victim 2 or could include both.

Additional debriefing questions (in addition to those provided in the scenario):

1. If this situation occurred on land, such as a tree falling into camp, how would you respond differently?
2. If working with Victim 2: Should you have assessed his spine? (Answer is “no.” But you could then discuss WHEN the spine should be assessed, how to do so, etc.)
3. If working with Victim 3: Should you have assessed his spine? (Answer is “yes.” And if this situation occurred on land, then you could discuss considerations for how to evacuate the victim.)
4. Discuss other considerations. For example, if loss of consciousness or shock occurs, how should you respond? How would you maintain head/neck control? How would you delegate responsibilities among your crew members?

Supplies:

Required: Padding to lay victim on (e.g., blankets or require WFA students to improvise); materials to improvise collar/loose neck support; a participant volunteer to use when demonstrating positioning for logrolling.

Optional: Dressings (depending on time/expertise of WFA students, a head wound can be added to the scenario if desired).



Suggested Order of Scenarios To Use In The 8-Hour In-Person WFA Training

Topic 5: Bone and Joint Injuries

Suggested scenario: [Orthopedic Injuries](#)

This scenario was used when teaching patient assessment skills; therefore, the WFA students should be familiar with it and, by now, comfortable completing an initial and focused assessment when they perform it here. But the focus is now on treating the victim; depending on the expertise of the WFA students, Victim 1 can be included in this scenario.

Additional debriefing questions (in addition to those provided in the scenario):

1. What does “triage” mean? Who is the higher priority for treatment: Victim 1 or Victim 2?
2. Should either victim be evacuated? Why or why not?
3. With Victim 2, how would you splint the hip for evacuation? How would you evacuate this person? Or would you?
4. How would you delegate responsibilities for treating these two victims? (Discuss how someone has to be in charge and lead the response while others have to follow.)

Supplies:

Required: Splints (material for improvised splints; consider having WFA students bring a loaded backpack to the class so they must improvise first-aid supplies using only what they have on hand), cravats, elastic bandages, coat/jacket/blanket (for heat loss, environmental concerns), nonlatex gloves, other PPE if needed.

Optional: SAM splints; moulage (makeup) to illustrate skin abrasions and injuries.

Topic 6: Wounds and Wound Infection

Suggested scenario: [Wound With Infection](#)

This scenario has one victim, and the expected response is primarily focused on the wound being infected rather than the immediate post-injury response. For the latter, an additional scenario is [Deep Wound With Severe Bleeding](#). An additional resource that might be helpful to include as part of the debriefing is the BSA Safety Incident Review: [Dog Bites](#).

Additional debriefing questions (in addition to those provided in the scenario):

1. What are the next steps if the initial pressure dressing became saturated with blood? (Answer: Apply more gauze but do not remove the original dressing.)
2. Why shouldn't you remove the original dressing? (Answer: Doing so might pull off the clot.)
3. Being able to improvise first-aid items is an important skill to develop. What could you use as improvised items in responding to this emergency? (Can use this question as an opportunity to discuss how atypical first-aid items, such as tampons and menstrual pads, are excellent, inexpensive devices for controlling bleeding. Tampons are helpful for nose bleeds and puncture wounds while, because of their absorbency, menstrual pads are effective for large wounds, such as abdominal wounds. Cotton T-shirts are also excellent for improvised pads and bandages. A disposable water bottle or zip-top bag can be used as a wound irrigation device — make a pinpoint-size hole in the bottle or bag and then squeeze it to irrigate the wound.)

Supplies:

Required: Gauze pads (4x4 is a good choice); adhesive tape; PPE such as gloves/eye protection; roller bandages/gauze; cotton muslin (torn into 2' x 4' strips, with “tails” for tying around an extremity); triangular bandages/cravats/neckerchiefs to use for bandaging; equipment to improvise a tourniquet (described in the Scouts BSA Handbook).

Optional: Moulage to create fake wounds (an inexpensive way to create a “wound library” is to purchase fake wounds at post-Halloween clearance sales); commercial tourniquet; old T-shirts to create makeshift bandages.



Suggested Order of Scenarios To Use In The 8-Hour In-Person WFA Training

Topic 7: Chest Injuries

Chest injuries are the third topic in the WFA BSA core curriculum. This topic was moved here because chest injuries are often bone injuries or wounds.

Scenario:

Consider reviewing this topic at the end of the section on either Bone and Joint Injuries or Wounds and Wound Infection. The scenario of [Respiratory Distress](#) is focused on breathing-related concerns but may be adapted, if desired, to discuss chest injuries in general.

Additional debriefing questions (in addition to those provided in the scenario):

1. What would you do if the injury was a suspected rib fracture?
2. What would you do if the wound was in the chest injury? If it was a penetrating wound? An open chest injury?

Supplies:

Required: None, other than what has been used with previous topics.

Optional: Moulage (makeup) to illustrate the chest injury(ies).

Topic 8: Allergies and Anaphylaxis

Suggested scenario: [Allergy/Anaphylaxis](#)

Additional debriefing questions (in addition to those provided in the scenario):

1. What is the appropriate way to hold and use an epinephrine auto-injector? (Answer: Hold it within your fist, but to reduce the risk of injecting yourself, not with your thumb over the end.)
2. What is the best site to administer the epinephrine auto-injector? (Answer: In lateral aspect of the thigh, over the vastus lateralis muscle. Should gently massage the muscle after injecting. In addition, can suggest that Scouts always carry their auto-injectors, rescue inhalers, etc. in a known location, such as their right front pant pocket. This will save time if someone else needs to help locate the device, since they will know where it is.)
3. How can you ensure that the epinephrine auto-injector actually injects into the skin? (Answer: An autoinjector is designed to go through a layer of cloth, such as jeans. But it is important to make sure that there is nothing else, such as coins in a pant pocket, that might get in the way and deflect the auto-injector needle.)
4. How would you respond to a different allergic reaction? (Answer: A food allergy is depicted in the scenario, but allergies to insect stings, such as bees or wasps, are also common.)
5. What could have been done to prevent this situation? (Re-emphasize the need to prevent emergency situations. The most effective WFA kit is one that is never needed.)

Supplies:

Required: If you do not have access to a practice epinephrine auto-injector (also called a “trainer pen”), then it is critical to have pictures of how to perform an injection; an auto-injector prop could be a short section of PVC pipe.

Optional: A demonstration auto-injector (A free trainer comes with every box of prescription auto-injectors. Alternatively, you can ask for one from someone who has an allergy, consult drug company websites, request one from a drug store, and check schools that stock auto-injectors — they will likely have a supply of trainers.)



Suggested Order of Scenarios To Use In The 8-Hour In-Person WFA Training

Topic 9: Wilderness First-Aid Kits

Creating a trip-specific first-aid kit should be reviewed if this information was not integrated into other content. Remember that BSA high-adventure bases supply this information to all participants. Many council high-adventure programs do the same. Consider if this is necessary during the course planning phase.

An internet search will quickly yield a number of lists of suggested equipment and supplies for a wilderness first-aid kit. As an example of what might be needed for a WFA kit, the list of equipment required for a previous high-adventure trip through Northern Tier is provided at the end of this section. Know that this list may have changed and is not meant to be the recommended list. Check each high-adventure base or council high-adventure website for the current list of necessary items to place in your WFA kit. This list was carefully designed to meet most first-aid needs during a multiday canoe trip in the Boundary Waters. It may not be appropriate for a high-adventure trip elsewhere.

Because of the uniqueness of each high-adventure trip, it is important not to blindly use a “generic” kit for all high-adventure trips. There are a whole host of considerations when creating a WFA kit for the backcountry. The following are suggestions to consider:

1. The most important item in the WFA kit is your own knowledge and skills. This is why you are taking this WFA class! Nevertheless, it is difficult to remember everything you need to know for WFA in the backcountry. Consequently, find a lightweight reference that meets your needs and make sure it is among the first items you pack for your trek. The ECSI Field Guide is an excellent example.
2. Think of a WFA kit as temporary. The contents change regularly depending upon a variety of factors. For example, the inherent risks differ among the four national BSA high-adventure bases and among council high-adventure activities. Therefore, the kit required for a trek at Northern Tier might be inappropriate for a trek elsewhere.
3. The bulk and weight of the kit is important. When backpacking, every ounce matters; consequently, many backpackers work hard to remove as much weight as possible from their packs. A bulky and heavy first-aid kit can take up space needed for other items and can be exhausting to carry.
4. It is acceptable to divide the kit so that it is carried among several crew members. While this will better distribute the weight, it is important that crew members who have pieces of the WFA kit stay together. And all crew members should also carry their own personal kits.
5. Focus your WFA kit on (a) a few items that are difficult to improvise, (b) items for common illnesses and injuries, and (c) a great reference you can use if you are uncertain of how to respond to a WFA emergency. There are many hazards to which you must be prepared to respond, but there are also situations that are more common. There will likely be blisters on hikes, constipation or diarrhea, and chafing. For this reason, the WFA kits of many veteran trekkers include an excellent blister kit with moleskin, prunes, antidiarrheal medication, and diaper-rash cream. Participants from your course may have additional ideas. This is a great conversation/ice-breaker activity.
6. Know your companions. What are their health concerns? Their physical capabilities? Their WFA skills? In Scouting, you have the opportunity to review the Annual Health and Medical Records forms in advance of your trek. If you are going on a non-Scout-related trek with friends, take the time to have honest discussions among yourselves so you can plan appropriately. Knowing about your companions’ chronic and acute illnesses/injuries might save their lives on the trail. No matter how well you know those you are traveling with, there’s always the possibility you might come upon others in the backcountry in need of help.

(Suggestions continue next page)



Suggested Order of Scenarios To Use In The **8-Hour In-Person WFA Training**

7. Know where you are going and how long you'll be away, as well as the usual weather and hazards for the time of year. And, just as important, make sure others who are not on the trip know this information as well. Have a communication plan in place, including regular check-ins when possible. Pack the WFA kit for the conditions you expect to encounter — going to the desert in the summer will require a very different WFA kit than going backpacking in the mountains in the winter. Check the weather before you go and compare it to the usual weather for that region, in case things change. Consider the natural hazards for your destination. For example, are there poisonous snakes? Rocky terrain? Risk of flooding?
8. Now that you've considered the aforementioned, such as who's going, how many are going, where you're going, and what you're likely to encounter, you can begin thinking about the contents of the WFA first-aid kit. This might include thinking about all the gadgets you want to take with you. Avoid this impulse. For some items, there's no substitute: A CAT tourniquet and some clotting gauze are invaluable tools for severe traumatic bleeding. They are difficult to improvise in the backcountry and should always be part of your WFA kit. A transport litter is also a great tool to have when evacuating someone from the wilderness. However, a litter is heavy and bulky, and you can improvise one using a variety of items you either carry with you or that you can find.
9. If you do choose to take gadgets or specialty items, it is important that you know how to use them. Don't take anything you don't know how to use. It is not good practice when the first time you are using an item in the backcountry is also the first time you have taken it out of its packaging. If a WFA gadget is so exciting that you want to take it, learn how and when to use it, and practice before you take it anywhere.
10. Recommendations include packing/using latex-free medical type gloves for any first-aid kit. This is due to so many latex allergies.



One Example Of A Wilderness First-Aid Kit

Here is an example of a wilderness first-aid kit — the kit required for a previous Northern Tier² trek. Note that this list dates from many years ago and is not the suggested list for Northern Tier or other high-adventure first-aid kits.

Every crew must bring one fully stocked first-aid kit

All BSA crews should carry a first-aid kit. The kit can be personalized to meet the demands of the crew. The crew’s first-aid kit should be stored in a waterproof container for use en route as well as at Northern Tier and should contain the following items:

A FULLY STOCKED FIRST-AID KIT	
<input type="checkbox"/> Adhesive bandages (assorted sizes)	<input type="checkbox"/> Antacids
<input type="checkbox"/> Knuckle and fingertip bandages	<input type="checkbox"/> Antihistamines
<input type="checkbox"/> Steri strips	<input type="checkbox"/> Steroid cream
<input type="checkbox"/> Moleskin/molefoam	<input type="checkbox"/> Anaphylaxis kit (if needed)
<input type="checkbox"/> Second skin	<input type="checkbox"/> Throat lozenges
<input type="checkbox"/> Gauze pads — 3" x 3"	<input type="checkbox"/> Small bar soap
<input type="checkbox"/> Adhesive tape — 1" x 15'	<input type="checkbox"/> Lip balm
<input type="checkbox"/> 1" or 2" roll of gauze	<input type="checkbox"/> Thermometer
<input type="checkbox"/> 4" elastic bandage	<input type="checkbox"/> Scissors
<input type="checkbox"/> Oval eye patch	<input type="checkbox"/> Tweezers
<input type="checkbox"/> Antibiotic ointment	<input type="checkbox"/> Safety pins
<input type="checkbox"/> Disposable alcohol wipes	<input type="checkbox"/> Nitrile or latex-free gloves
<input type="checkbox"/> Triangular bandage	<input type="checkbox"/> Barrier device for resuscitation
<input type="checkbox"/> Acetaminophen	<input type="checkbox"/> Sunscreen
<input type="checkbox"/> Ibuprofen tablets	<input type="checkbox"/> First-aid manual
<input type="checkbox"/> Cold caplets	

Be sure to share this list with all crew members, Advisors and parents prior to departure for Northern Tier.

Check all medical forms prior to departure for Northern Tier, noting allergies and other special considerations.

² From <https://www.ntier.org/firstaidkit>



Wilderness First-Aid Training

Elective Topics**Elective Topic 1: Hypothermia**

Scenario: [Hypothermia](#)

There are two victims in this scenario. Depending on the skill level of the WFA students, you may choose to make it a simple scenario with just Victim 2 or make it more complex and include both victims.

Additional debriefing questions (in addition to those provided in the scenario): None.

Supplies:

Required: None.

Optional: Wet clothes for the victims to wear (this is weather dependent); reflective blanket (these work quite well to retain heat); water bottles or other containers (e.g., zip-top bags) for holding hot water (use to demonstrate how to improvise warming a victim of hypothermia); sleeping bags (props for warming the victim).

Elective Topic 2: Heat Problems, Including Dehydration

Scenario: [Heat-Related Illness](#)

Additional debriefing questions (in addition to those provided in the scenario):

1. What signs does this victim have of dehydration? (Answer: The victim has not gone to the bathroom.)
2. What would you do differently if this victim developed heat stroke?
3. How would you recognize that this victim has developed heat stroke?

Supplies:

Required: BSA [Heat Index/Urine Color Chart](#) card (can discuss the different colors for the heat index since some camps use these colors as “safety flags”; the urine color card could be shrunk down, laminated, and affixed to crew water bottles).

Optional: None.

Elective Topic 3: Lightning

Scenario: No scenario is available. Consider using the [BSA Safety Incident Review: Lightning](#). Consider reviewing and using this topic from the [BSA WFA Curriculum and Doctrine Guidelines](#).

Debriefing questions:

1. How would you respond to a “lightning-centric” weather event?
2. How do you position your body to prepare?
3. How do you determine your distance from lightning/thunder? (Answer: The speed of sound travels at ~767 mph or 1 mile in ~5 seconds. Keep track of the time between when lightning is seen and thunder is heard.)
How do you respond if a person is struck by lightning? (Answer: This is a hurry case. Focus on ABCs and basic life support; look for entry/exit wounds.)
4. How do you respond if there are multiple victims?

Supplies:

Required: None.

Optional: Identify a location suitable for practicing the lightning position at appropriate distances from other crew members.



Wilderness First-Aid Training

Elective Topics

Elective Topic 4: Altitude Illnesses

Scenario: [Altitude Illness](#)

Additional debriefing questions (in addition to those provided in the scenario):

1. How could this situation have been prevented?
2. How did you know that this was a medical emergency? (Answer: Because of the victim's altered mental status and complaint of a headache.)

Supplies: None.

Elective Topic 5: Abdominal Problems

Scenario: No scenario available. Consider using the [BSA Safety Incident Review: Communicable Disease](#) and focusing on Incident Review #2. Consider reviewing and using this topic from the [BSA WFA Curriculum and Doctrine Guidelines](#).

Debriefing questions:

1. What are the common signs/symptoms? (Answer: It depends on the condition. Diarrhea and constipation are common issues. Constipation is often due to the victim having a low intake of fluids because they are reluctant to use the bathroom in the backcountry or due to a change in diet. Excessive flatulence is another common indicator.)
2. How do you differentiate between these concerns: a local injury (e.g., fell and hit abdomen) or appendicitis? (This is done as part of the initial and focused patient assessment.) (Answer: Note that a victim with appendicitis will often have rebound tenderness, where palpation of the lower right quadrant of the abdomen hurts more upon quick release of the palpation. In addition, appendicitis will typically cause pain between the right hip and ribs on that side. Finally, a simple field assessment for appendicitis is to have the victim lie down and lift their right heel and you then firmly strike their heel. If this causes pain in their abdomen, then it may be appendicitis. If it does not, then it probably is not appendicitis.)

Supplies: None.

Elective Topic 6: Submersion Incidents

Scenario: No scenario is available. Consider using [BSA Safety Incident Review: Swimming](#). Consider reviewing and using this topic from the [BSA WFA Curriculum and Doctrine Guidelines](#).

Additional debriefing questions (in addition to those provided in the scenario):

1. How would the temperature of the water affect your response? (Answer: Victims in very cold water may have slowed vital organs. Continued efforts for reviving may be needed.)
2. How can you prevent these situations? (Answer: Practice the principles of Safe Swim Defense, such as careful supervision and identifying the boundaries of the safe swim area.)
3. How would you rescue the victim? (As described in the *Scouts BSA Handbook*: Reach, throw, row, go)
4. Would you evacuate a potential drowning person? (Answer: Yes, regardless of whether spontaneous breathing returned. If the victim lost consciousness or was at risk of choking/aspirating fluids, they also need to be evacuated.)
5. How would you respond if the victim fell through ice? (See *Scouts BSA Handbook* for descriptions of rescues.)

Supplies:

Required: Rope for rescuing (use to improvise "reach, throw, go").

Optional: CPR manikin (CPR will be part of the response to a submerged victim); signs or rope to delineate water's edge.



Suggested Template For In-Person Personalizing WFA Training Topics

Topic Lesson Plan and Overview Title:

Total Time: _____

Learning Objectives:

By the end of this module, you will be able to:

1. _____
2. _____
3. _____

Activities:

This module contains a breakdown of what is needed to teach this content.

Setup Time: _____ min.

Individual for each scenario and how in-depth you plan to go.

Introduction of Scenario: _____ min. (Explain)

Divide class into crews to participate in scenario, define roles, and introduce what is real and what will need to be imagined within the scenario.

Share background with class.

Running Scenario: _____ min. (Demonstrate)

Groups should be small to allow for active participation. Have participants not actively participating watch the scenario.

Debriefing Scenario: _____ min. (Guide and Enable)

This is where the learning occurs. All WFA students should have the opportunity to answer questions. As a best practice, plan for this to take twice as long as the running of the scenario.

Breakdown Time: _____ min.

Required Items:

1. _____
2. _____
3. _____

Optional Items:

1. _____
2. _____
3. _____



Considerations To Make As A **More-Experienced WFA Instructor**

After you have taught this class a few times and have become more comfortable as an instructor, you may begin looking for ways to add even more fun into your class. The following are suggestions to consider. But a word of caution: These techniques and games are intended to enhance and not overshadow the learning. Do not use more than one of these suggestions per class since doing so might begin to detract from the learning experiences of the WFA students. Some suggestions might also be helpful at troop or crew meetings to reinforce first-aid skills.

Moulage

Some WFA instructors look for ways to increase the realism of scenarios. “Moulage” is the industry term for the art of applying mock injuries using makeup and other means to train emergency medicine practitioners and first responders. You are not required to use moulage in your classes. If you choose to do so, it does not have to cost a lot of money. The internet is full of injury “recipes” for skin, blood, and bruises. YouTube also has a wealth of tutorial videos. Old clothing can be torn and used over and over. Dollar stores carry makeup, brushes, and sponges year-round. Halloween stores often have clearance sales immediately after Halloween. Note: To use moulage effectively, you must have dedicated staff of at least one makeup artist and one victim. Do not add moulage to your class if either you or your students must take breaks (or time away from learning WFA) in order to participate in moulage activities.

Scenario realism can be enhanced in other ways. For example, you can add realism to the scene by including visual representations, such as cardboard box boulders, rubber snakes, and the sort. Another suggestion is to use your cellphone to play sounds of buzzing bees or rattling snakes to ensure students truly assess the scene safety when approaching the victim.

Being in the outdoors always enhances the presentation of the course material. Try to use safe outdoor venues whenever possible.

Use What You Brought

As a preclass assignment, ask the WFA students to bring a list of all the items they take with them on backcountry treks, including a detailed list of first-aid items. Before the in-training session, prepare generic lists for those who forget to bring their lists. Keep these lists available and ask the students to refer to them when working on a scenario. For example, if the scenario includes significant bleeding, give the students what was on their lists to treat the victim. If gauze isn't on the list, then they don't get it. If a triangular bandage or tourniquet isn't on the list, they don't get those either. Use of this technique is helpful for the first one or two scenarios only.

Encourage them to identify other items in their pack — not first-aid items — that can be improvised if necessary. Encourage improvisation from the environment and the surroundings. Use this activity as a jumping off point to open discussions about WFA kit contents, pack weight, and improvisation. Alternately, you can use your generic lists exclusively, since this avoids preclass speculation about the homework. However, true packing lists will often help students learn from each other.

What's in Your Kit?

Invite the WFA students to bring their personal “basic” or “usual” WFA kit to class. Provide time during lunch for the students to show their kit contents. Ask them to offer suggestions for items that can be removed or added. Ask each kit owner to identify their most useful or most frequently used kit item. This can be done in pairs or as a group. The benefit of this activity is that participants generally leave with new ideas for their own kits, particularly if the instructor also shares their personal WFA kit.



Considerations To Make As A **More-Experienced WFA Instructor**

See the Kit Change

Bring first-aid items (these can be expired items or just the empty box of a used item) and scatter them on a table at the back of the room (or under a tree if you are teaching outdoors). Prepare scenarios in advance of class that include a destination, the number of days/nights away, the size of the unit, genders and ages of participants, any known conditions, and time of year. For instance, the trek will be to the desert for three days and two nights during the month of January, with a small girls' troop (six girls, ages 12-15), one girl is allergic to bees and one has asthma with an inhaler, two adult female leaders (35 and 54), and one adult male leader (42) who is a diabetic.

Now have the WFA students make a kit for that trek. Talk to the WFA students about the items selected, whether they are needed, nice to have, or not needed. Include considerations about how weather, known/expected hazards, and the participants themselves might create needs for choosing some kit contents over others. Put all the items back and then create another trek scenario.

After two scenarios, ask the participants to create their own scenario. Debrief the items chosen and not chosen following each kit. Emphasize how some kit contents stay the same and some kit contents change based upon weather, types of hazards, participants, etc. Alternately, you can create a deck of cards of kit contents — using photos from the internet, WFA kits, or even from sporting goods stores. The deck is lighter, easier to bring to training events, and much less expensive to create.

Relay

Demonstrate or show video instructions for a skill (e.g., applying a wound dressing or creating a rope litter). Organize the WFA students into teams and have them race one another carrying out the skill. Carry a stopwatch and pressure them verbally as they race; Jeopardy! music is appropriate here. When everyone has completed the race and they have their times, give prizes for the best-performed (not the fastest) skill. This will reinforce the importance of administering first aid quickly but also well.

Excellent prizes include triangular bandages, roller gauze, band-aids, or other first-aid kit items that you deem appropriate. If prizes aren't planned or budgeted, recognition also works.