



Wilderness First Aid (WFA) Syllabus

Welcome to Wilderness First Aid (WFA). We offer the only WFA course in the world that is completely online and self-paced. Our innovative curriculum was developed by wilderness and emergency medicine physicians at the University of Utah and Southern California, in response to an international need to improve the accessibility and affordability of outdoor education and wilderness certifications. It is widely accepted, both nationally and internationally, including by the National Association of Search and Rescue, American Canoe Association, National Park Service, USDA Forest Service, expedition and guide companies, and many more.

For questions about the curriculum or certification, or inquiries about group courses or partnerships, please contact us at survivalmedteam@gmail.com.

Course Content

- Two-hour General Wilderness First Aid Zoom course with interactive scenarios and hands-on instruction of practical skills. Available as a live, interactive course, or recording.
- One-hour prerecorded state or region-specific content
- One hour of additional practical skills demonstrations (prerecorded)
- 40+ hours of optional wilderness medicine podcasts with the University of Utah School of Medicine
- Optional Wilderness First Aid textbook
- Certification Exam (requires >70% correct) to pass and three-year WFA certificate

General WFA Course Content

1. Core Skills Patient Assessment and Basic Life Support

- Evaluate the scene
 - Assess for safety and causes, emphasizing personal and team protection
- Perform a Primary Survey (Identify and treat life threats)
 - o Respiratory System
 - Manually open, maintain and protect an airway with standard BLS technique and the recovery position.
 - Provide adequate ventilations by mouth to mask.
 - o Circulatory System
 - Assess for pulse and signs of life, administer chest compressions, and use AED if available.
 - Emphasize early, uninterrupted chest compressions for those with limited CPR training.
 - *Practical Skill: Control serious bleeding with well-aimed direct pressure, pressure/clot enhancing bandage.
 - *Practical Skill: Tie a tourniquet.
 - o Nervous System
 - Assess Level of Consciousness/Level of Responsiveness (LOC/LOR), identify a potential mechanism for spine injury, protect the spine and minimize movement.
 - Monitor and maintain airway control and breathing for people with an impaired LOC/LOR.
 - *Practical skill: improvise a neck brace with a rolled-up jacket
- Perform a Secondary Survey
 - o S-A-M-P-L-E as a guide

2. Common Medical Problems

- Manage blisters (prevention and treatment)
- Manage impaled objects (more than a fishhook or splinter).
- Manage Amputations
 - o Fingers

- o Teeth
- Musculoskeletal injuries
 - o Assess circulation, sensation, and motion
 - o Initiate appropriate treatment
 - o Treat stable injuries using RICE as available and a brace/tape as needed.
 - *Practical skill: construct an upper or lower extremity splint
- Recognize Anaphylaxis
 - o Understand how to use an epinephrine auto-injector
 - o Recognize the need for evacuation and assessment

3. Environmental Medicine

- Heat Illness
 - o Recognize signs and symptoms of heat exhaustion/dehydration and heat stroke.
 - o Recognize symptoms of heat cramps
 - o Initiate appropriate treatment
- Hypothermia
 - o Recognize signs and symptoms of mild and severe hypothermia.
 - o Initiate appropriate treatment
 - *Practical skill: construct a hypothermia wrap
- Local Cold Injury (Frostbite and Non-Freezing Cold Injury)
 - o Recognize signs and symptoms of Frostbite and Non- Freezing Cold Injury.
 - o Initiate appropriate treatment
 - o Understand evacuation guidelines and the importance of preventing re-freezing the injury
- Lightning
 - o Prevention: Recognize high risk conditions and preventive strategies.
 - o Know local weather patterns, leave the scene and/or seek adequate shelter.
 - o Initiate appropriate treatment for lightning strike victims
- Altitude

- o Recognize signs and symptoms of Acute Mountain Sickness (AMS) and key indicators of serious altitude illness (HACE and HAPE)

- o Initiate appropriate treatment and understand importance of stopping ascent

4. Animals

- o Understand what to do when confronted or attacked by:

- Grizzly bears

- Black bears

- Mountain lions

- Snakes

- Scorpions

- Animals unique to certain regions

- o Understand the importance of animal bite evacuation and rabies prophylaxis

5. Basic Survival Skills

- Trip preparation
- Preventing getting lost
- Signaling for rescue
- Finding and treating water

State-Specific Course Content

1. Animals

- Animals, insects, and attacks common in that particular region

2. Natural Disasters

- Hurricanes, flash floods, earthquakes, tornadoes, rip tides, tsunamis, landslides, and any other natural disasters common in that state

3. Common Search and Rescue Calls

- The most common medical incidents, search and rescue missions, and emergency room visits in the National and State parks in that region

4. Preparation

- Special considerations for medical kits, gear, clothing, and trip preparation based on the dangers and environment in that state

Practical Skills Video Content

Pre-recorded videos to demonstrate how to treat many outdoor medical conditions, with the gear you'd typically carry in your own pack.

- Bleeding control pressure wraps
- Tourniquets
- Unconscious victim recovery position
- Spinal injury stabilization
- Heimlich maneuver
- CPR basics
- Splinting upper and lower extremities
- Reducing a shoulder dislocation
- Hypothermia wrap

Podcast Content (40+ hours)

Optional resource for those interested in learning more about any topic.

- a. Assessment of a Patient Parts 1 and 2
- b. Altitude
- c. Avalanches
- d. Bites and Stings: Bears, Snakes, Spiders, Mosquitoes, and Scorpions
- e. Cold Related Injuries
- f. Dental Problems
- g. Dermatology
- h. Dive Medicine
- i. Drowning and Water Safety
- j. Eye injuries
- k. Frostbite, Chilblains, Immersion Foot
- l. Heat stroke
- m. Infectious disease: Diarrhea
- n. Lightning
- o. Medical Problems in the Wilderness Parts 1 and 2

- p. Ultrasound in the wilderness
- q. Water treatment
- r. Wilderness First Aid and Medical Kits
- s. Wound Management
- t. Crossing a Stream
- u. Backpacks and Back Pain
- v. Clothing for the Wilderness
- w. Foot problems
- x. Immunizations for travel
- y. Zika, Dengue, Chikungunya, Schistosomiasis, and Malaria
- z. Parasites

Textbook Content

A supplemental resource to enhance the learning for those interested in reading more detail.

- Chapter 1: Assessment of a Patient in the Wilderness
- Chapter 2: The Management of Wounds in the Wilderness
- Chapter 3: The Wilderness Management of Bites and Stings
- Chapter 4: Lightning
- Chapter 5: Flash Floods
- Chapter 6: Heat Related Illness
- Chapter 7: Cold Related Illness
- Chapter 8: Law and the Wilderness
- Chapter 9: Medical Problems in the Wilderness
- Chapter 10: Water Safety and Drowning
- Chapter 11: Avalanches
- Chapter 12: Wilderness First Aid Kits

Chapter 13: Water Treatment

Chapter 14: Management of Hand and Wrist Injuries

Course Contributors

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Kevin Grange



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