



Wilderness First Responder (WFR) Curriculum

Overview

Survival Med offers the only Wilderness First Responder 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 in 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:

- National Association of Search and Rescue
- American Canoe Association
- National Park Service
- USDA Forest Service
- Expedition and guide companies and outdoor organizations

The course also qualifies for the Wilderness EMT (W-EMT) certificate upon provision of the student's EMT license.

Survival Med students also receive free enrollment in the University of Utah's Associate in Wilderness Medicine certification program and our Wilderness First Responder certificate counts towards the program requirements.

This 16-part class is tailored to a variety of learning styles- video lectures, skills instruction, podcasts, worksheets, and virtual medical scenarios. We highly value hands-on practical skills, and we require demonstration of skills mastery as part of the certification process.

Certification requirements include:

- completion of all portions of the class
- passing the final written exam (>70%)
- submission of all additional materials, including SOAP notes and practical skills.

Each component is checked thoroughly, and feedback is provided before certification is granted.

For questions about the curriculum or certification, requests for group courses, or inquiries for partnerships, please contact us via our website.

Syllabus

Part 1. Basic Life Support:

- Establishing priorities in an emergency
- Evaluating a scene
- Primary assessment
- CPR
- Emergency respiratory management
 - Pulse oximeters
- Airway complications
- Manual airway techniques and ventilation
- Automatic external defibrillators
- Secondary survey
- SOAP Notes
- Evacuation decisions and calling EMS

➤ Part 1. Interactive Skills:

- ✓ Submit video of performing a complete physical exam



Part 2. Circulatory System:

- recognizing cardiovascular shock
- Field treatment of shock and evacuation guidelines
- Acute Coronary Syndrome

- Nitroglycerin and other treatments in the wilderness
- Vascular injuries
- Bleeding control
- Arrhythmias
 - Carotid sinus massage
 - Diving reflex
- Syncope

- Part 2. Interactive Skills to submit:
 - ✓ Two SOAP note medical cases

Part 3. Respiratory System:

- Respiratory Distress, Respiratory Failure, and Respiratory Arrest
- Primary Survey
- Signs of Respiratory Distress
- The Flu
- Foreign Body Aspiration
- Anaphylaxis
- Asthma
- Panic Attacks
- Pneumothorax
- Pulmonary Embolism

- Part 3. Interactive Skills:
 - ✓ Two SOAP note medical cases

Part 4A. Nervous System and Nontraumatic Brain Injuries:

- Primary survey
- Glasgow Coma Scale
- Secondary assessment
- Non-Traumatic Brain Injury
- Altered Mental Status
- Altitude Illness
- High Altitude Cerebral Edema
- Epilepsy and seizures
- Diabetes

- Hypoglycemia
- Hyperglycemia
- Stroke
- Traumatic Brain Injuries

Part 4B. Traumatic Brain Injuries:

- Direct brain injuries
- Epidural hematomas
- Subdural hematomas
- Cushing's triad
- Neuro exam
- Subarachnoid hemorrhage
- Intracranial hemorrhage
- Drunk patients
- Basilar skull fracture

- Part 4A. & 4B. Interactive Skills:
 - ✓ SOAP note medical case

Part 5. Spinal Injury:

- Spinal Assessment Protocol
- Focused Spine Assessment
- Stabilizing the spine
- Moving patients
- Evacuation guidelines and prolonged rescue

- Part 4. and 5. Interactive Skills:
 - ✓ Two SOAP note medical cases
 - ✓ Submit video demonstrating Spinal Assessment Protocol
 - ✓ Submit video demonstrating rolling a patient and back inspection
 - ✓ Submit video demonstrating improvised litter and moving a patient



Part 6. Soft Tissue Injury:

- Closed wounds
- Open wounds
 - Abrasions
 - Lacerations
 - Punctures
- Major traumatic injuries
 - Avulsions
 - Amputations
- Bleeding control
 - Direct pressure
 - Tourniquets
- Preventing and recognizing infection
- Blisters
- Burns

➤ Part 6. Interactive Skills:

- ✓ Submit photos demonstrating bleeding control wrap and tourniquet



Part 7. Musculoskeletal Injuries:

- Recognizing fractures and Dislocations
 - Compartment syndrome
 - Fracture treatment
 - Dislocation treatment
 - Sprains
 - Tendinitis
 - Video of reducing shoulder dislocation
- Part 7. Interactive Skills:
- ✓ Submit photos demonstrating upper and lower extremity splints



Part 8. Heat Illness:

- Physiology of heat illness
- Heat cramps
- Heat syncope
- Heat exhaustion
- Heat stroke
- Acclimatization
- Gaging hydration status
- Finding water in the wild
- Basic water treatment steps

Part 9. Cold Injury:

- Hypothermia
- Hypothermia wraps
- After-Drop
- Cold Water Shock

- Frostbite
 - Trench Foot
- Part 9. Practical Skills:
- ✓ Submit photo demonstrating hypothermia wrap



Part 10. Lightning, Altitude, Flash Floods, and Drowning:

- Surviving lightning
- Treating lightning injuries
 - Reverse triage
- Flash floods
 - Weather patterns
 - Surviving the flood
- Altitude
 - Altitude illness and adaptations
 - High Altitude Cerebral Edema
 - High Altitude Pulmonary Edema
- Drowning

Part 11. Common Outdoor Medical Problems:

- Flu and Sore Throat
- Gastroenteritis
- Kidney stones
- Appendicitis
- Hemorrhoids

- Allergic reactions

- Part 11. Interactive Skills:
 - ✓ SOAP Note medical case

Part 12. Obstetric, Gynecologic, and Genitourinary:

- Vaginal bleeding
- Pregnancy and exercise
- Air travel
- Obstetrical emergencies in the outdoors
- Trauma in pregnancy
- Labor and Delivery in the outdoors
- Ectopic pregnancies
- Vaginal infections
- UTIs
- Testicular torsion

Part 13. Eyes and Teeth:

- Eye examination
- Removing foreign bodies
- Lid lacerations
- Corneal abrasions
- Subconjunctival hemorrhage
- Hyphema
- Snow blindness
- Dental infections
- Lost fillings and crowns
- Chipped teeth
- Tooth avulsions

Part 14. Toxins:

- Ingested poisons
- Poison control
- Inducing vomiting
- Diluting poisons

- Carbon monoxide
- Absorbed poisons

Part 15. Animals and Insects:

- Grizzly bears
- Black bears
- Mountain lions
- Snake bites
- Scorpions
- Ticks
- Mosquitoes
- Rabies
- Bees
- Spiders

Part 16. Medical Legal Concepts in Wilderness Medicine:

- Scope of Practice and Standard of Care
- Associating with a medical director
- Documentation
- Consent
- Confidentiality
- Abandonment
- Medication administration
- Good Samaritan laws
- Gross Negligence
- Affirmative Obligation to Help
- Tort
- Jurisdiction

Course Contributors



- Natalie Bonthius, MD
- Emergency Medicine Physician, UHS Southern California
- Fellow in the Academy of Wilderness Medicine (FAWM) Candidate
- Advanced Wilderness and Expedition Provider (AWEP)
- Advanced Wilderness Life Support
- Advanced Cardiac Life Support (ACLS) and Advanced Trauma Life Support (ATLS)



- Richard Ingebretsen, MD PhD
- University of Utah School of Medicine clinical instructor
- Program Director, University of Utah “Wild Med U” Program
- Medical Director, Salt Lake County Sheriff’s Search and Rescue
- Former Associate Dean of Students Affairs, University of Utah College of Science
- Founder of the Glen Canyon Institute
- Vice-Chair of Southern Utah Wilderness Alliance

- Founder of Wilderness Medicine of Utah
- Owner River Bound Adventures



- Kevin Grange
- Firefighter/Paramedic, Jackson Hole Fire/EMS and Grand Teton National Park
- Award-winning author of Wild Rescues, Lights and Sirens, and Beneath Blossom Rain
- Graduate of UCLA'S renowned Daniel Freeman Paramedic Program



- Robert Scanlon, MD
- Board Certified in Internal Medicine, Pulmonary Medicine, Critical Care Medicine, and Sleep Medicine
- Advanced Cardiac Life Support (ACLS)
- Advanced Trauma Life Support (ATLS)



This curriculum is representative of the topics covered in Survival Med's Wilderness First Responder Course. Details may vary as we continuously update our courses.