

Medical Risk Management Guide









Contents

CONTENTS	1
PREPAREDNESS FOR MEDICAL EMERGENCIES AND PSYCHOLOGICAL SAFETY ALIGNS WITH TREX AND FIRE PRACTITIONER CORE VALUES	2
INTENT AND FORMAT	3
ACKNOWLEDGEMENTS, NONDISCRIMINATION STATEMENT, AND DISCLAIMER	4
PLANNING CHECKLISTS	5
Implement Mitigations to Work Towards a Low Medical Risk Profile	7
INCLUDE A ROBUST MEDICAL AND MENTAL HEALTH PLAN	7
IN THE IAP/ BRIEFINGS	7
Include Medical and Crisis Response as Part of	8
Participant Application and Welcome Packet	8
INCORPORATE A ROBUST DAILY MEDICAL / MENTAL HEALTH BRIEFING	9
Implement Medical Response Training Scenarios	9
Prepare for Post-Incident Response	10
APPENDICES	12
Appendix A: TREX Medical Risk Analysis Tool	12
APPENDIX B: TREX MEDICAL RESOURCE ASSESSMENT TOOL AND MEDICAL TRAINING CAPABILITIES	19
Appendix C: ICS-206 WF Medical Plan	22
APPENDIX D: INSTRUCTIONS FOR COMPLETING AN ICS-206 WF	25
Appendix E: ICS-206 Medical Incident Report	26
Appendix F: Site Specific Medical Plan	27
Appendix G: Medical History	28
Appendix H: Daily Medical Briefing	30
Appendix I: Daily Checklists for Module Leaders	33
Appendix J: Types of First Aid Kits and Litters	35
Appendix K: First Aid Kit Suggested Contents	37
Appendix L: Trauma First Aid Kit Assembly	38
APPENDIX M: DOCUMENTATION OF PATIENT; SOAP NOTE	39
APPENDIX N: TREX MEDICAL RESPONSE IMT PROTOCOL	41
APPENDIX O: TREX MEDICAL RESPONSE FIELD PROTOCOL AND MEDICAL IC DELEGATION OF NON-MEDICAL TASKS	43
Appendix P: Tourniquet Application	46
Appendix Q: Hypowrap Contents and Instruction	47
Appendix R: Improvised Litter Diagram	48
Appendix S: Short Haul Checklist	49
Appendix T: Example Medical Scenario	51
Appendix U: Psychological Safety Planning and Response	58
APPENDIX V: MENTAL HEALTH INTERVENTIONS (GROUP AND INDIVIDUAL)	63
Appendix W: Individual Mental Health Readiness Assessment Tool	65
APPENDIX X: COLUMBIA-SUICIDE SEVERITY RATING SCALE (C-SSRS)	66

Preparedness for Medical Emergencies and Psychological Safety Aligns with TREX and Fire Practitioner Core Values

TREX planners, IMT members, TREX Coaches, and participants-

A lack of medical and mental health resources is reflected throughout wildland fire management; similarly, many fire management programs lack access to scenarios to provide realistic training. TREXs can address these issues by incorporating thorough planning and providing quality experiential learning in a safe environment at every TREX event. As a TREX community we can - and should - leverage our visionary expertise to 'lead up' in the fire management community and better prepare *all* fire practitioners to competently respond to medical and mental health incidents/ emergencies and provide a psychologically safe environment for participants.

TREX core values include 'building robust local capacity' using an experiential training strategy that 'does what no one else is doing,' These principles align with wildland fire practitioner foundations of duty, integrity, and respect, and above all a commitment to safety as our top priority. TREXs implement these values by allowing and encouraging practitioners at all levels to participate in various trainings to broadly share knowledge and develop skills and confidence. Incorporating robust medical and mental health planning and hands-on emergency medical response training at every TREX is critical to supporting these shared values, increasing safety, and building local capacity.

We firmly advocate that all TREX events <u>require</u> basic training in emergency medical and mental health response *before* fire is on the ground. The MRMG and Pocket MRMG will help you succeed in 'leading up' by increasing preparedness for medical emergencies, providing support tools for medical emergencies, and conducting scenario-based medical training.

Emergency Medical and Mental Health Response Training Should be a Requirement at Every TREX

Respectfully,

Your fellow TREXers:

Jennifer Mueller; The Ember Alliance- Wilderness EMT

Leah Mathys; The Ember Alliance- Wilderness EMT

Phil Dye; Prometheus Fire Consulting LLC- Paramedic

Guy Duffner- MSP, BSN, RN

Virginia D. Avery; Avery Counseling & Services- MSW, SWLC, Clinical Social Worker

Intent and Format

The TREX Medical Risk Management Guide (MRMG) is intended to support TREX planners and participants by providing tools and training materials to:

- 1. Prepare for medical and mental health emergencies as part of the TREX planning phase
- 2. Support the IMT and participants in the event of an actual medical or mental health emergency
- 3. Conduct scenario-based training to improve participants' skills in medical and mental health emergency response with no prior training

Accidents are prevented weeks and months in advance. Use the MRMG out of the field (pre-planning and response support) and in the field (operational preparedness and emergency response).

Formats:

- Digital copy for use on a computer/tablet/mobile device or printed as a full-size guide (8.5x11). Digital copies can be found by scanning the QR code on the cover page of this document or by searching for the 'Medical Risk Management Guide' using the filter options on the <u>Fire Network</u> <u>website</u>.
- Pocket MRMG that can be printed as a standalone, or as stickers or pocket cards for quick field reference. The Pocket MRMG is formatted to be printed with the same dimensions as the IRPG. Items in the MRMG that are found in the Pocket MRMG are marked with the icon:

- 1		
	-	L
	-	L
	~ —	
		L

While the MRMG is designed specifically with TREX in mind, **the content is transferable to any incident.** We hope these materials will help improve the preparedness and response to medical and mental health emergencies for all wildland fire practitioners.

Acknowledgements, Nondiscrimination Statement, and Disclaimer

The TREX Medical Risk Management Guide is supported by *Promoting Ecosystem Resilience and Fire Adapted Communities Together*, a cooperative agreement between The Nature Conservancy, USDA Forest Service and agencies of the Department of the Interior.

In accordance with Federal law and U.S. Department of Agriculture policy, this institution is prohibited from discriminating on the basis of race, color, national origin, sex, age, or disability. (Not all prohibited bases apply to all programs.)

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 1400 Independence Avenue SW, Washington, DC 20250-9410 or call toll free voice (866) 632-9992, TDD (800) 877-8339, or voice relay (866) 377-8642. USDA is an equal opportunity provider and employer.

The MRMG and Pocket MRMG are not intended to be used as a substitute for medical training or medical/ mental health advice. Please do not distribute/ reference in an abbreviated format without prior written permission ©2025 The Ember Alliance.

This Medical Risk Management Guide is supported in part by Promoting Ecosystem Resilience and Fire Adapted Communities Together, a cooperative agreement between The Nature Conservancy, USDA Forest Service, and agencies of the Department of the Interior.

A sincere expression of gratitude to the individuals who contributed their time and expertise to making this project a success. For comments/ suggestions, please contact Leah Mathys at <u>leah.mathys@emberalliance.org</u>

Planning Checklists

Intent: A thorough medical plan, and communication of the medical plan to all operational resources, is an NWCG minimum requirement for operational engagement (<u>IRPG, PMS 461, pg. 2</u>)

Wildland firefighters work in incredibly stressful environments that can have significant impacts on their well-being. Between 2007-2016, heart attacks were the <u>most common cause</u> of wildland firefighter fatalities; in 2019 <u>44% of fatalities</u> were medical emergencies. Mental health disorders – such as depression, anxiety, and post-traumatic stress are being reported at a rate that is <u>2.5 to 4 times</u> higher than the general population.

Yet, medical and mental health resources on the fireline remain insufficient and planning for emergencies can be improved. Utilizing checklists minimizes errors and benefits the risk management process by ensuring well-known crucial steps are not missed, as outlined in Atul Gawande's Checklist Manifesto (Gawande, 2010)¹. The following checklists will help TREX planners:

- ✓ Set standards for access to medical and mental health resources
- ✓ Identify/ reduce the TREX's medical risk profile
- ✓ Build a robust medical plan for the IAP
- ✓ Include medical and crisis response as part of the participant application/ welcome packet
- ✓ Incorporate a robust daily medical and mental health briefing
- ✓ Implement medical and mental health training scenarios
- ✓ Prepare for post-incident response

Outcomes: Improved planning process for critical incidents at TREXs

Assumptions: Not all steps can be implemented immediately; however, TREXs planners should use these tools and knowledge to anticipate future planning and budgeting Checklists minimize errors and benefit the risk management process by ensuring wellknown crucial steps are not missed

Limitations: Not all planning steps can be anticipated; rely on local knowledge and expertise to fill in any gaps.

Directions: The planning checklists provide 'DO' steps and 'TALK' steps to support IMT members when planning for medical emergencies and mental health support *prior to TREX*. 'DO' steps are actionable items (e.g. including a copy of the Medical Incident Report in the IAP). 'TALK' steps ensure key players have a conversation to discuss potential issues, oversights, or find solutions (e.g. the Medical Unit Leader should talk to the local ambulance service ahead of time to discuss best access points and response limitations).

¹ Gawande, A. (2010). *Checklist manifesto, The*. Picador.

Set Standards for Medical and Mental Health Planning and Access to Care Providers/ Resources

- □ TALK: Speak with partners to designate an appropriate Medical Lead/Medical Unit Leader.
 - Individual should have robust and current medical experience (EMT or higher).
 - o Ideal candidates will also have significant fireline experience
- □ TALK: Speak with partners to designate an appropriate Mental Health Professional (MHP) to integrate into the IMT as needed.
 - o Individual should be a licensed clinician with a background in crisis management
 - Ideal candidates will also have significant fireline experience.
- □ TALK: Speak with partners to designate an appropriate Peer Support Specialist.
 - \circ Individual should have peer support certification and / or crisis intervention training.
 - Ideal candidates will also have significant fireline experience
- DO: Assign an experienced/current emergency medical care provider as Medical Leader/Medical Unit Leader who will:
 - Assist planners with the TREX Medical Risk Analysis Tool (<u>Appendix A</u>)
 - Create/verify medical plan (see Prepare ICS-206 below)
 - Coach during medical scenarios
 - Provide Daily Medical Briefing (<u>Appendix</u> <u>H</u>)
- DO: Assign an experienced MHP and/or Peer Support Specialist who will:
 - O Create/verify Psychological Safety
 Planning and Response (see <u>Appendix U</u>)
 - o Facilitate psychoeducation and training scenarios
 - o Provide Daily Mental Health Briefings
- DO: Budget for/ provide First Aid Kits (FAKs) for modules (see <u>Types of First Aid Kits</u> and <u>Appendix K</u>).
 - Recommended: (1) a Truck First Aid Kit (FAK) for each module, (2) a Trauma First Aid Kit for sawyer teams, and (3) an IMT kit to support prevention/ self-care
 - o Strongly consider standardizing medical kits for consistency among TREX events
 - Consider adding a full-size SOAP note (<u>Appendix M</u>) to FAKs (commonly used in Wilderness First Aid). Is included in the Pocket MRMG.
- DO: Require (<u>minimum</u>) one medically trained personnel per module
 - Medically trained personnel <u>should not have multiple primary duties</u> (e.g. EMT should not also be FIRB)
 - Strongly recommended to plan for a secondary medical personnel in the event the primary medical responder is the injured party
- □ TALK: Consider planned sites and site-specific resources needed

Designating an Experienced Medical Lead/ Medical Unit Leader and Mental Health Professional is Key to Preparedness

- Utilize the TREX Medical Resource Assessment Tool (<u>Appendix B</u>) to allocate appropriate medical resources for specific activities
- o Utilize <u>Medical Training Capabilities</u> chart
- □ TALK: Identify and consider accessibility to mental health resources
 - o Utilize the Psychological Safety Planning and Response (<u>Appendix U</u>) to identify and make known appropriate mental health resources for group and individual response.

Implement Mitigations to Work Towards a Low Medical Risk Profile

- DO: Run the TREX Medical Risk Analysis Tool (<u>Appendix A</u>) to determine the Medical Risk Profile for the TREX
- □ TALK: Determine appropriate mitigations to bring the Medical Risk Analysis closer to a Green/Low or Yellow/Moderately Low risk profile
- DO: Utilize Individual Mental Health Operational Readiness Analysis tool (<u>Appendix W</u>) and Columbia-Suicide Severity Rating Scale Protocol (<u>Appendix X</u>) to identify individual mental health operational readiness and support needs, when indicated.
- □ TALK: Determine appropriate group and individual mental health interventions and support needs.

Include a Robust Medical and Mental Health Plan in the IAP/ Briefings

- □ TALK: Discuss Primary, Alternate, Contingency, Emergency (PACE) planning for medical emergencies
- DO: Have Medical Leader/Medical Unit Leader prepare <u>ICS-206 WF Medical Plan</u> (<u>Appendix C</u>) using <u>Instructions for Completing an ICS 206 WF</u> (<u>Appendix D</u>)
- DO: Prepare Site Specific Medical Plan (<u>Appendix F</u>)
- DO: Include medical plan in IAP
 - o ICS-206 WF (<u>Appendix C</u>)
 - Site Specific Medical Plan (<u>Appendix F</u>)
 - Medical Incident Report (MIR) (Appendix E)
 - Suggestion: add MIR as standalone last page of IAP for easy access
- □ TALK: Reach out to the following organizations/individuals to inform them TREX is happening and ensure access to resources listed in ICS-206
 - Local hospitals: confirm address, phone number, level of care (e.g. burn unit, level 1 trauma), available transport options (air ambulance, ground ambulance, etc.)
 - Local Hospitals: confirm emergency room access to Mental Health Professionals / services.

- Local crisis response and disaster relief teams.
- Local law enforcement
- County emergency managers
- Dispatch: can dispatch center coordinate with on-site medical personnel? Has this been tested?
- Local ambulance services: confirm phone number, access points and/or limitation of ambulances (e.g. road requiring 4WD), etc.
- DO: Determine if local Short Haul capabilities exist.
 - PMS 512 Interagency Emergency Helicopter Extraction Source List (<u>PMS 512</u>) includes national emergency helicopter extraction resources.
 - Contact the resource to discuss availability/limitations, etc.
 - o Add the <u>Short-Haul Operations Insert</u> to the IAP
- DO: Include TREX Medical Response Field Protocol and Medical IC Delegation of Non-Medical Tasks in IAP (<u>Appendix O</u>)
- DO: Make TREX Medical Response IMT Protocol (<u>Appendix N</u>) available to IMT and other appropriate staff
 - Verify phone numbers, including on TNC's Fire Incident Response Chart (if applicable)

Include Medical and Crisis Response as Part of Participant Application and Welcome Packet

- DO: During application process, consider recent/current medical and mental health experience as a positive when selecting candidates
 - Example question, "Is medical response part of your current duties? If so, what is your current level of medical training?"
 - Example question, "Are you trained in peer support, Psychological First Aid, or crisis intervention techniques?"
- DO: Strongly recommend participants bring personal First Aid Kits (FAKs)
- DO: Require participants fill out personal Medical History Form and Emergency Contact Information (<u>Appendix G</u>)
- DO: Ensure Medical History Form and Emergency Contact are kept confidential, but available to appropriate field leadership and IMT in case of emergency.
- DO: Require participants to bring their personal medications
- DO: Send the Pocket MRMG to participants ahead of time and/or provide hard copies at TREXs
- DO: Consider printing the TREX Medical Response Field Protocol and Medical IC Delegation of Non-Medical Tasks in IAP (<u>Appendix O</u>) as a pocket card

Incorporate a Robust Daily Medical / Mental Health Briefing

- DO: Incorporate Daily Medical Briefing (<u>Appendix H)</u> into morning briefing
- DO: Assign Daily Checklist for Module Leaders (Appendix I)
- DO: Identify individual responsible for Daily Mental Health Briefings
- DO: Incorporate Daily Mental Health Briefings based on Psychological Safety Planning and Response (<u>in Appendix U</u>).

Implement Medical Response Training Scenarios

- DO: Appropriately frame: <u>not</u> intended to substitute for medical training; <u>is</u> intended to provide structure/ process to utilize tools/resources for those without medical training
- DO: Prompt use of Pocket MRMG and IRPG
- DO: Utilize the Medical Training Scenario in the TREX Activities Workbook and/or the Example Medical Scenario (<u>Appendix T</u>)

Tips for a successful scenario:

- □ TALK: Prepare scenario objectives, scene, vital signs/ changes, dispatch notes, patient programming, and debriefing questions
- DO: Have trigger points to stop the scenario if it becomes unsafe
- DO: Use a safe word(s) that will immediately stop the scenario (example: For real stop)
- DO: Remain in character we fight like we train
- DO: Use a mannequin (approximately 150 lbs.) for a litter carry (a real person could get injured).
 Otherwise improvise with sandbags covered in Nomex. The 'patient' can walk alongside and remain in character.

Practice scenario ideas:

- Blisters
- Sprains/strains

- Smoke fatigue
- Proper lifting techniques
- Heat illness/ Dehydration
- Improvised litters/ litter carry communication

Advanced scenarios – should be conducted under the supervision/guidance of an individual who has the protocol in their scope of practice

- Anaphylaxis/ Epi auto injector basics (can purchase *trainer/practice* epi pens)
- Arterial bleed/ Tourniquet use (practice tourniquets ONLY do not use actual tourniquets from medical kits and <u>do not</u> improvise)
- o Improvised c-spine support (e.g. Montana Horse Collar)
- Improvised chest seal
- Improvised splints

Potential additional discussion topics:

- Planning for medical emergencies
 - Review critical elements of a medical plan and why they are important (e.g. ICS 206)
 - Review IRPG p. 2 Planning for Medical Emergencies. Emphasize italicized sentence at the bottom (your medical plan limitations should dictate your tactics)
- First Aid Kit
 - Where do you keep your FAK?
 - Inventory. If expired/used flag with a description
 - <u>Everyone</u> should carry nitrile gloves
 - Should tell module or at least mod lead if you have a medical condition that could be life threatening (heart conditions, diabetes, anaphylaxis, epilepsy, etc.) and **exactly where** is your medication (e.g. top pocket of pack)
- How do you shift into an incident within an incident?
 - ICS review
 - Utilize Pocket MRMG
- Response
 - MIR priority items to communicate to get resources rolling, fill in/communicate the rest later
 - Proper radio communications during medical incident (e.g. protect patient privacy)
 - Backboarding misconceptions, lessons learned

Prepare for Post-Incident Response

□ TALK: Determine who will notify Emergency Contact in the event of a medical incident or emergency. The example below is based on patient priority:

- Green (minor injury/illness, 'walking wounded') = patient notifies
- Yellow (serious injury/illness) = patient notifies
- Red (life or limb threatening injury) = PIO or IC notification
- Black (fatality) = IC or police chief notification
- □ TALK: Determine appropriate media-relations representative for medical emergencies. Consider questions such as:
 - Is the PIO qualified/ experienced for the task?
 - If there is not a PIO who will speak with the media?
 - Does the representative need to change based on severity of the incident?
- □ TALK: Determine appropriate chain of communication for individual and group mental health interventions. Consider aspects such as:
 - Determine primary point of contact for care coordination
 - Sharing pertinent information while maintaining HIPPA compliance regarding privacy
 - Group and individual impact

- □ TALK: Ensure appropriate trigger points and notification pathways are identified for TNC and other participating agencies
 - For TNC, reference TNC Fire Incident Response Chart and Protocol https://www.tncfiremanual.org/require.htm#Incidents
 - Ensure agency contacts are current
- □ TALK: Determine post-incident psychological support needs
 - What intervention will be used to support management team and participants impacted by incident (Appendix V)
 - Determine qualified intervention leads and team members (example: Mental Health Professionals, clinicians / therapists, peer support, crisis team members)
 - Determine additional resource / support needs and areas of interagency cooperation
- DO: Provide Psychological First Aid and maintain access to mental health support
 - Identify and make known support tools and interventions (<u>Appendix V</u>, <u>Appendix X</u>)
 - Identify and make known access to contracted Mental Health Professionals / Peer Support Teams
 - Protect participant autonomy and privacy
- DO: Know what additional resources are available nationally and locally to support participants and those affected by the incident
 - Critical Incident Stress Management on the National Interagency Fire Center (NIFC) site <u>https://www.nifc.gov/resources/taking-care-of-our-own/about-critical-incident-stress-management</u>
 - o Local community emergency response teams and disaster relief organizations
 - Responder Alliance <u>https://www.responderalliance.com/</u>
 - Wildland Firefighter Foundation: Mental Health Program <u>https://wffoundation.org/mentalhealth</u>

Appendices Appendix A: TREX Medical Risk Analysis Tool

Intent: Similar to a Prescribed Fire Complexity Analysis, the TREX Medical Risk Analysis Tool allows TREX planners to determine a general assessment of the *medical* risk profile for a TREX event. By accounting for a wide range of risk factors, mitigations can then be implemented to reduce the medical risk profile, ideally to a Low/ Green or Yellow/ Moderately Low level. It is recommended that TREX events with a Moderately High/ Orange level of medical risk continue to mitigate to reduce the risk profile, and should be implemented with caution, High/ Red should not take place without additional mitigation.

Outcomes: The desired end state is a Low/ Green or Yellow/ Moderately Low Medical Risk Profile.

Assumptions: A complete medical plan is in place with verified resources and contingency plans

Limitations: Not all factors are accounted for; the Tools serve as an overall guide. TREX planners should use their collective experience and judgement to consider additional local factors.

Directions:

There are three parts to the analysis tool:

- I. **TREX Medical Risk Factors** Rate each factor (e.g. Activity Risk Level, Location, Participants, etc.) as Low (1), Moderate (2) or High (3) risk depending on your specific TREX
- II. Medical Risk Assessment Calculation Enter the corresponding number (1 for Low, 2 for Moderate, 3 for High) for each factor into Column A. For example, if you rated your Activity Risk Level as Moderate, you would enter '2'. Multiply each factor in Column A by the Weighted Factor in Column B and input that into Column C. Add all the values in Column C to get the Medical Risk Assessment Total
- **III.** *Risk Assessment Outcomes* Using the Medical Risk Assessment Total, determine the Medical Risk Profile for your TREX and follow the appropriate next steps.

I. TREX Medical Risk Factors

Activity Risk Level

Low (1)	Moderate (2)	High (3)
 Activities are high frequency/ low risk Limited driving exposure <50 miles RT Daytime PPE not required No JHA required Classroom setting 	 At least one activity is low frequency/high risk Moderate driving exposure 50-100 miles RT PPE Required JHA required Field setting with normal exposure to common fireline hazards Working with hand tools Low complexity prescribed fire OR pre-mitigated moderate complexity 	 Several activities are low frequency/high risk Significant driving exposure >100 mi RT End of shift/nighttime Inclement weather Additional PPE Required Unusual number of JHA elements Field setting has multiple significant hazards (e.g. many snags, difficult terrain) Working with chainsaws Moderate or high complexity prescribed fire Suppression operations

Location/Access and Communications

Low (1)	Moderate (2)	High (3)
 Less than 30 minutes to a Level 1 or 2 Trauma center (from participant location) Multiple access points for patient transfer to ambulance/ helicopter 	 30-60 minutes to a Level 1 or 2 Trauma center (from participant location) Access point for patient transfer to ambulance/ helicopter 	 More than 60 minutes to a Level 1 or 2 Trauma center (from participant location) Limited access for patient transfer to ambulance/ helicopter
 Confirmed cell phone and/or radio communications with multiple external medical resources (e.g. 911, dispatch) on-site 	 Confirmed cell phone and/or radio communications with external medical resources (e.g. 911) nearby site Communication contingency in place (e.g. InReach) 	 Unreliable external communications on-site No communication contingency

Participants

	Low (1)	Moderate (2)	High (3)
•	Most participants have significant fireline experience Minimal cumulative fatigue No known significant medical history for	 Some participants have significant fireline experience Some cumulative fatigue 0-1 participants per module have significant medical 	 Most participants have minimal fireline experience Significant cumulative fatigue Multiple participants on a module have significant
	participants (e.g. heart condition, diabetes, anaphylaxis, seizures)	 history Participants with known medical condition(s) have appropriate medication available in location known to on-site supervisor 	 medical history Participants with known medical condition(s) do not have medication or location is unknown

Environment

	Low (1)	Moderate (2)	High (3)
•	Little to no risk of hypothermia or heat- related illness	 Moderate risk for heat- related illness Moderate risk for 	High risk of heat-related illnessHigh risk for hypothermia
•	Little to no smoke fatigue Low risk of dehydration	 hypothermia <40 deg F Some smoke exposure Dehydration somewhat likely 	 <40deg F, wet conditions, inadequate clothing, etc. Cumulative smoke fatigue Dehydration very likely

Medical Personnel

	Low (1)		Moderate (2)		High (3)
•	More than one Paramedic,	•	One Paramedic, WEMT, or	•	Each module does not have
	WEMT, or EMT per module		EMT per module		access to qualified medical
•	Ratio of medical personnel	•	Ratio of participants to		personnel
	to participants is greater		medical personnel is near	•	Ratio of medical personnel
	than 1:20		1:20		to participants is less than
•	Medical personnel have	•	Medical personnel have		1:20
	significant fireline		some fireline experience	•	Medical personnel have no
	experience				fireline experience

Medical Equipment

	Low (1)		Moderate (2)		High (3)
•	Multiple Truck FAKs are provided per module	•	One Truck FAK is provided per module	•	Truck FAKs are not available for each module
•	Trauma First Aid Kits are available to all sawyer/swamper pairs	•	Trauma First Aid Kits are shared between sawyer/swamper pairs	•	Trauma First Aid Kits are not available No hypowraps are available
•	One hypowrap per site is provided	•	One hypowrap per site is provided		

Transportation Methods and Contingencies

	Low (1)	Moderate (2)	High (3)
•	Confirmed access to ambulance Confirmed access to air ambulance and/or short haul Multiple contingency transportation resources are identified (e.g. agency vehicles)	 Limited access to ambulance Contingency transportation resource is identified 	 No access to air ambulance, ambulance, or short haul on-site No contingency transportation resources are available

II. Medical Risk Assessment Calculation

	Enter: 1 for Low, 2 for Moderate, 3 for High (Column A)	Weighte near miss ((d Factor based on and accident data Column B)	Multiply: Column 1 x Column 2 (Column C)
Activity Risk Level			0.20	
Location/ Access/ Comms			0.20	
Participants			0.18	
Environment			0.14	
Medical Personnel			0.14	
Medical Equipment			0.07	
Transportation/ Contingency			0.07	
MEDICAL RISK ASSESSMENT TOTAL			Total of Column C:	

III. Risk Assessment Outcomes

IF MEDICAL RISK ASSESSMENT TOTAL IS:	THE MEDICAL RISK PROFILE FOR THE TREX IS:	NEXT STEPS
MORE THAN 2.23	HIGH (Red)	Implement mitigations to bring Medical Risk Profile to Moderately High <u>at minimum</u> . If additional mitigations are not possible do not implement the TREX.
BETWEEN 2.0-2.23	MODERATELY HIGH (orange)	Implement mitigations to bring Medical Risk Profile to Moderately Low, if possible. If additional mitigations are not possible proceed with caution when implementing the TREX.
BETWEEN 1.77-2.0	MODERATELY LOW (Yellow)	Implement mitigations to bring Medical Risk Profile to Low, if possible, before implementing the TREX.
BETWEEN 1.0-1.8	LOW (Green)	Implement the TREX with current mitigations in place.

Example:

I. TREX Medical Risk Factors

Line prep during the TREX will occur during a windy, 90 deg Fahrenheit day with limited access to shade. This fits squarely into Moderate (2) due to the moderate risk for heat-related illness and potential for dehydration.

Activity Risk Level

Environment

	Low (1)	(Moderate (2)	High (3)
•	Little to no risk of hypothermia or heat- related illness Little to no smoke fatigue Low risk of dehydration	 Moderate risk for heat- related illness Moderate risk for hypothermia <40 deg F Some smoke exposure Dehydration somewhat likely 	 High risk of heat-related illness High risk for hypothermia <40deg F, wet conditions, inadequate clothing, etc. Cumulative smoke fatigue Dehydration very likely

II. Risk Assessment Calculation

For the Environment row, we enter a '2' into column A. Multiply Column A x Column B (0.14 for Environment) to get Column C (0.28 in this instance).

	Enter: 1 for Low, 2 for Moderate, 3 for High (Column A)	Weighted Factor based on near miss and accident data (Column B)	Multiply: Column 1 x Column 2 (Column C)
Activity Risk Level		0.20	
Location/ Access/ Comms		0.20	
Participants		0.18	
Environment	2	0.14	0.28
Medical Personnel		0.14	
Medical Equipment		0.07	
Transportation/ Contingency		0.07	
MEDICAL RISK ASS	SESSMENT TOTAL	Total of Column C	

After completing the Risk Assessment Calculation for each Factor, add up everything in Column C to get the Medical Risk Assessment Total (1.91 in this instance).

	Enter: 1 for Low, 2 for Moderate, 3 for High (Column A)	Weighted Factor based on near miss and accident data (Column B)	Multiply: Column 1 x Column 2 (Column C)
Activity Risk Level	2	0.20	0.40
Location/ Access/ Comms	1	0.20	0.20
Participants	3	0.18	0.54
Environment	2	0.14	0.28
Medical Personnel	1	0.14	0.14
Medical Equipment	3	0.07	0.21
Transportation/ Contingency	2	0.07	0.14
MEDICAL RISK AS	SESSMENT TOTAL	Total of Column C	1.91

III. Risk Assessment Outcomes

Using the Medical Risk Assessment Total from the Risk Assessment Calculation (the total of everything in Column C), reference the Risk Profile for the TREX and the next steps to take. **The desired end state is a** Low /Green or Moderately Low/ Yellow Medical Risk Profile.

In this instance, the Medical Risk Profile is Moderately Low/ Yellow because the Medical Risk Assessment Total is 1.91. Planners should then review to see if additional mitigations can be made to bring the risk profile to Low/ Green.

IF MEDICAL RISK ASSESSMENT TOTAL IS:	THE MEDICAL RISK PROFILE FOR THE TREX IS:	NEXT STEPS
BETWEEN 1.77-2.0	MODERATELY LOW (Yellow)	Implement mitigations to bring Medical Risk Profile to Low, if possible, before implementing the TREX.

Appendix B: TREX Medical Resource Assessment Tool and Medical Training Capabilities

Intent: Risk assessment tool to pair appropriate medical resources (personnel, equipment, and transport) based on perceived activity risk and transport time to definitive medical care. The suggested medical resources are a guide to help determine appropriate for a specific *activity* <u>not</u> for the TREX as a whole.

Outcomes: If you are not able to fulfil the suggested medical personnel, equipment, and transport for the activity, implement additional mitigation strategies (IRPG pg. 2) or reconsider the activity.

Assumptions: A complete medical plan is in place with verified resources and contingency plans

Limitations: Activity Risk Level Examples include common situations at TREX. Planners must use their best judgement to determine level of risk based on local factors and the specifics of any given activity.

Care provided may be less than scope of practice due to lack of access to equipment (e.g. an EMT may not have access to oxygen in the field).

Directions:

涯

- 1. Talk: Determine the Activity Risk Level for your specific activity
- Choose the correct Transport Time to Definitive Care. Note that Definitive Care is defined as the level of care needed to conclusively manage a patient's condition. <u>Level 1 or 2 Trauma Center is</u> <u>definitive care for all injured patients</u>.
- 3. Reference the Medical Training Capabilities table for additional information on different levels of training
- 4. Implement the suggested medical resources



Medical Training Capabilities

All medical resources listed are trained in addressing basic life threats (Airway, Breathing, Circulation/ Bleeding, and CPR)

	License (ensure state, if current)	Certificate (ensure current)	Backcountry Experience	Oxygen/Airway Adjuncts*
CPR/ FA		~		
Wilderness First Aid (WFA)		~	~	
Wilderness First Responder (WFR)		~	~	
Wilderness EMT (WEMT)	🗸 (EMT)	🗸 ('W')	~	~
EMT or Paramedic	✓	~		~

Appendix C: ICS-206 WF Medical Plan

MEDICAL PLAN (ICS 206)

1. Incident Name:			2. Operational Perio	od:	Date From: D Time From: T		ate To: ime To:	
3. Medical Aid S	tations:							
Norma			La satista		Co	ontact	Paramedics	
Name			Location		Number(s	s)/Frequency	On	Site?
							U Yes	s LINO
							Yes	
							Yes	s <u>No</u>
							Yes	s No
							Yes	s <u>No</u>
							Yes	s 🛄 No
4. Transportatio	n (indicate	air or ground):						
Ambulance S	ervice		Location		Co Number(s	ontact s)/Frequency	Levelo	f Service
A modiance of	arrise		Locason		Humber(.	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	ALS	BLS
							ALS	BLS
							ALS	BLS
								BLS
5. Hospitals:							0.00	
	A	ddress.	Contact	Tra	vel Time			
	Latitud	e & Longitude	Number(s)/			Trauma	Burn	
Hospital Name	if	Helipad	Frequency	Air	Ground	Center	Center	Helipad
						Yes Level:	Ves No	Yes No
						Yes Level:	Yes No	Yes No
						Yes Level:	Yes No	Yes No
						Yes Level:	Yes No	Yes No
						Yes Level:	Yes No	Yes No
6. Special Medical Emergency Procedures: Check box if aviation assets are utilized for rescue. If assets are used, coordinate with Air Operations. Prepared by (Medical Unit Leader): Name: Signature:								
8. Approved by	(Safety Of	ficer): Name		_	Signatu	·P:		
ICS 206		P Page	Date/Time:		signatu	e		
103 200	IAI	- Fage	Date/Time:					

ICS 206 Medical Plan

Purpose. The Medical Plan (ICS 206) provides information on incident medical aid stations, transportation services, hospitals, and medical emergency procedures.

Preparation. The ICS 206 is prepared by the Medical Unit Leader and reviewed by the Safety Officer to ensure ICS coordination. If aviation assets are utilized for rescue, coordinate with Air Operations.

Distribution. The ICS 206 is duplicated and attached to the Incident Objectives (ICS 202) and given to all recipients as part of the Incident Action Plan (IAP). Information from the plan pertaining to incident medical aid stations and medical emergency procedures may be noted on the Assignment List (ICS 204). All completed original forms must be given to the Documentation Unit.

Notes:

- The ICS 206 serves as part of the IAP.
- · This form can include multiple pages.

Block Number	Block Title	Instructions
1	Incident Name	Enter the name assigned to the incident.
2	Operational Period Date and Time From Date and Time To	Enter the start date (month/day/year) and time (using the 24-hour clock) and end date and time for the operational period to which the form applies.
3	Medical Aid Stations	Enter the following information on the incident medical aid station(s):
	Name	Enter name of the medical aid station.
	Location	Enter the location of the medical aid station (e.g., Staging Area, Camp Ground).
	 Contact Number(s)/Frequency 	Enter the contact number(s) and frequency for the medical aid station(s).
	 Paramedics on Site? Yes No 	Indicate (yes or no) if paramedics are at the site indicated.
4	Transportation (indicate air or ground)	Enter the following information for ambulance services available to the incident:
	 Ambulance Service 	Enter name of ambulance service.
	Location	Enter the location of the ambulance service.
	 Contact Number(s)/Frequency 	Enter the contact number(s) and frequency for the ambulance service.
	Level of Service ALS BLS	Indicate the level of service available for each ambulance, either ALS (Advanced Life Support) or BLS (Basic Life Support).

Block Number	Block Title	Instructions
5	Hospitals	Enter the following information for hospital(s) that could serve this incident:
	 Hospital Name 	Enter hospital name and identify any predesignated medivac aircraft by name a frequency.
	 Address, Latitude & Longitude if Helipad 	Enter the physical address of the hospital and the latitude and longitude if the hospital has a helipad.
	 Contact Number(s)/ Frequency 	Enter the contact number(s) and/or communications frequency(s) for the hospital.
	 Travel Time Air Ground 	Enter the travel time by air and ground from the incident to the hospital.
	Trauma Center Yes Level:	Indicate yes and the trauma level if the hospital has a trauma center.
	Burn Center Yes No	Indicate (yes or no) if the hospital has a burn center.
	Helipad	Indicate (yes or no) if the hospital has a helipad.
	Yes No	Latitude and Longitude data format need to compliment Medical Evacuation Helicopters and Medical Air Resources
6	Special Medical Emergency Procedures	Note any special emergency instructions for use by incident personnel, including (1) who should be contacted, (2) how should they be contacted; and (3) who manages an incident within an incident due to a rescue, accident, etc. Include procedures for how to report medical emergencies.
	Check box if aviation assets are utilized for rescue. If assets are used, coordinate with Air Operations.	Self explanatory. Incident assigned aviation assets should be included in ICS 220.
7	Prepared by (Medical Unit Leader) Name Signature	Enter the name and signature of the person preparing the form, typically the Medical Unit Leader. Enter date (month/day/year) and time prepared (24-hour clock).
8	Approved by (Safety Officer) Name Signature Date/Time 	Enter the name of the person who approved the plan, typically the Safety Officer. Enter date (month/day/year) and time reviewed (24-hour clock).

Link: ICS-206 WF Medical Plan and Medical Incident Report

Appendix D: Instructions for Completing an ICS-206 WF

- 1. Incident/Project Name: Name of incident or project
- 2. Operational Period: Operational period document will be used (ex. 06/15/20XX day -0600-1800)

3. Ambulance Services:

Name: Name of ambulance service

Complete Address: Street address of ambulance service

Phone Number & EMS Frequency: Valid phone number to reach ambulance service or dispatch service. EMS Frequency if available to communicate with Communications or Dispatch (ex. RX – 155.340, RX 155.340, Tone –110.0).

Advance Life Support (ALS): Yes = Paramedics, Physician's Assistants (PA), Registered Nurse (RN), etc. No = EMT or lower certification

4. Air Ambulance Service:

Name: Name of Air Ambulance service and call sign if possible

Phone Number: Valid phone number to reach air ambulance or dispatch service.

Type of Aircraft & Capability: Describe type of aircraft (ex. Type 1, 2, 3, Military) and capability (ex. Life Flight with Paramedic, Physician's Assistant, EMT, Hoist, Emergency Helicopter Extraction, etc.)

5. Hospitals:

Name & Address: Full name of hospital, complete physical address GPS Datum: WGS 84

Coordinate Standard: Degrees - Decimal Minutes (DDM)

- Lat DD° MM.MMM' North
- Long DD° MM.MMM' West

VHF: Very High Frequency (VHF), frequency for aircraft to contact hospital, or other aviation resources assigned to incident

Travel Time: Total time from fireline to definitive care

Phone Number: Valid phone number to reach ambulance or dispatch service

Helipad: Yes or No

Level of Care Facility: Capability of facility (ex. Level I, II, III, IV, Burn Center)

- Level I Total care for every aspect of injury
- Level II Ability to provide all aspects of trauma care
- · Level III Capable of surgery, and intensive care for trauma
- Level IV Basic emergency care

The following information should be included in emergency planning procedures for any staffed location. The plan must be updated, reviewed, and approved during each Planning meeting.

6. Area Location Capability:

EMS Responders & Capability: ex. EMT Smith, Paramedic Jones and ambulance 123 with RN Greene, and EMT Black

Equipment Available on Scene: ex. ALS Trauma Bag, wheeled litter, and SKED stretcher with Jones and Smith

Medical Emergency Channel: Channel 6, Command ETA for Ambulance to Scene: Approved Helispot: Lat/Long

7. Remote Camp Locations: complete as pertinent

Link: Instructions for Completing an ICS 206 WF

Appendix E: ICS-206 Medical Incident Report

		INCI	Medi	ical Incident F	Report	
FUR A NUM	-EMERGENCT	INCIL	PERSC	OGH CHAIN OF	ESSARY.	REPORT AND TRANSPORT INJURED
FOR A MEDI	CAL EMERGEN "MEDICAL EN	ICY: I MERG	DENTIFY ON SCENI ENCY" TO INITIATE	E INCIDENT CO RESPONSE FI	OMMANDER BY ROM IMT COMM	NAME AND POSITION AND ANNOUNCE IUNICATIONS/DISPATCH.
	ι	Jse the	e following items to co	mmunicate situa	tion to communic	ations/dispatch.
1. COI			ONS / DISPATCH (Verif	y correct frequer	ncy prior to startin	g report)
2. INC	IDENT STATUS: 1	Provide	e incident summary (incl	uding number of p	atients) and comm	and structure.
Ex: "Comn (Lat./Long.,	nunications, I have) This will be the 1	a Red rout M	l priority patient, uncons leadow Medical, IC is TF	cious, struck by a FLD Jones. EMT S	falling tree. Reque Smith is providing m	sting air ambulance to Forest Road 1 at nedical care."
		□ RI	ED / PRIORITY 1 Life o Ex: Unconscious, difficu. disoriented.	r limb threatening Ity breathing, blee	g injury or illness . ding severely, 2° –	. Evacuation need is IMMEDIATE 3° burns more than 4 palm sizes, heat stroke,
Severity of	f Emergency /		ELLOW / PRIORITY 2 S	erious Injury or i	Ilness. Evacuatio	n may be DELAYED if necessary
Папэр	ort i nonty	E	Ex: Significant trauma, u	nable to walk, 2º –	3° burns not more	than 1-3 palm sizes.
		L G	Ex: Sprains, strains, min	or heat-related illn	ess. Non-Emerger	icy transport
Nature of Ir	njury or Illness &					Brief Summary of Injury or Illness (Ex:
Mechani	sm of Injury					Unconscious, Struck by Failing Tree)
Transpo	ort Request					Air Ambulance / Short Haul/Hoist Ground Ambulance / Other
Patient	t Location					Descriptive Location & Lat. / Long. (WGS84)
Incide	ent Name					Geographic Name + "Medical" (Ex: Trout Meadow Medical)
On-Sce Con	ene Incident nmander					Name of on-scene IC of Incident within an Incident (Ex: TFLD Jones)
Patie	ent Care					Name of Care Provider (Ex: EMT Smith)
3. INITIAL PAT	IENT ASSESSME	NT: Co	omplete this section for ea	ch patient as applic	able (start with the n	nost severe patient)
Patient Asses	sment: See IRP	G pag	ge 108			
Treatment:						
4. TRANSPOR	T PLAN:					
Evacuation Lo Location:	ocation (<i>if differe</i>	nt): (L	Descriptive Location (drop point, inter	section, etc.) or l	Lat. / Long.) Patient's ETA to Evacuation
Helispot / Ext	raction Site Size	and I	Hazards:			
5. ADDITIONA	L RESOURCES /	EQUIP	MENT NEEDS:			
Example: Para Extrication	medic/EMT, Crew	s, Imm	obilization Devices, AED), Oxygen, Trauma	a Bag, IV/Fluid(s), S	Splints, Rope rescue, Wheeled litter, HAZMAT,
6. COMMUNIC	ATIONS: Identify	State	Air/Ground EMS Frequ	encies and Hosp	ital Contacts as a	pplicable
Function	Channel Name/N	umber	Receive (RX)	Ione/NAC *	Transmit (TX)	I one/NAC ^
AIR-TO-						
TACTICAL						
I I I I 7. CONTINGENCY: <u>Considerations:</u> If primary options fail, what actions can be implemented in conjunction with primary evacuation method? Be thinking ahead. I						
8. ADDITIONAL INFORMATION: Updates/Changes, etc.						
REMEMBER: Confirm ETA's of resources ordered. Act according to your level of training. Be Alert. Keep Calm. Think						
Clearly. Act Decisively.						

Link: ICS-206 WF Medical Plan and Medical Incident Report

Appendix F: Site Specific Medical Plan

Module _____

Location _____

Medical personnel and level of training **Do not overlap primary duties (e.g. EMT and FIRB)

Name	Level of Training
	(FA/CPR, WFA, WFR, EMT, WEMT, Paramedic)
Primary:	
Secondary:	
Additional:	

On-site medical equipment and location

Medical Equipment (e.g. FAK, Stop the Bleed Kit, AEDs)	Location

Site-specific communications limitations (e.g. limited cell phone access, In-Reach, etc.)

Transportation plan to ambulance/LZ

Personnel to move/carry the patient? Generally 4-6 for short distance/moderate terrain, up to 18 for longer distances/difficult terrain Y N

Latitude/longitude for landing zones (LZs) on-site

Drop Point/ LZ	Lat/Long	
(e.g. DP-A or LZ-1)		
	Lat - DD° MM.MMM' North	
	Long - DD° MM.MMM' West	
	Lat - DD° MM.MMM' North	
	Long - DD° MM.MMM' West	
	Lat - DD° MM.MMM' North	
	Long - DD° MM.MMM' West	

Prepared by _____

Date _____

Appendix G: Medical History

The purpose of this data is to safeguard the health, safety, and welfare of TREX participants. TREX will limit access to this information on a need-to-know basis. Relevant information will be shared only with supervisors to protect the safety of a participant, or with medical professionals in the event treatment is necessary.							
1. Na	1. Name (Last, First, Middle Initial)						
2. Ac	Idress (Street, City, State, including	Zip Code	e)				
3. Do	you have health and accident insu Yes - If yes, list name of insurer	rance?	4. Insured by and policy nu	mber	5. Date of birth (mm/dd/yyyy)		
6. Ha	No ave you had or are you having any c describe in remarks)	of the follo	owing health conditions? (Ent	ter x in the col	umn where appropriate		
	Hay Fayer/Allergias	Convi	lisions	Poorvie	sion		
	Asthma	Egiptic		Problem	a with blood not clotting		
		Sleen	ly welking	Heart o	andition		
	Poison Ivy or Oak	Heada	ache	Diabetic			
	Nuts	Nervo	us condition	Pregna	ncv		
	Other food allergies	Ulcers	3	Shortne	ess of breath		
	Cold	Hernia	à	Chest p	ains		
	Sore throat	Poor h	nearing	Easily f	atigued		
	Bladder or intestinal infection	Difficu	Ity with sense of balance	Defects	Defects in legs or feet		
	Ear Ache	Emotio	onal problems	Rheum	Rheumatism or arthritis		
	Frequent Infections	Back t	rouble or injury	Other (please identify)		
7. ;	 7. a. Are you currently taking any medication? □ Yes - if yes, explain below. □ No b. Are you allergic to any medications? □ Yes - if yes, explain below □ No 						
8. Im	imunization history (Enter date(s) as	s indicate	d.) Data of original sorias	De	to of lost boostor		
	Date of original series Date of last booster Tetanus vaccine						

In the remarks block, indicate any of the basic functional requirements or environmental factors that would restrict your full participation in TREX and describe any special care or treatment that may be required					
Heavy lifting, 45 pounds or more Use of fingers Climbing, use of legs and arms					
	Heavy carrying, 45 pounds or over	Both hands required		Both legs required	
	Straight pulling	Walking		Slippery/ uneven walking surfaces	
	Pulling hand over hand	Standing		Far vision correctable in one eye to 20/20,	
	Pushing	Kneeling		20/40 in the other	
	Reaching above shoulder	Crawling		Hearing (aid permitted)	
	Outside	Dry atmospheric conditions	;	Working on ladders	
	Excessive heat	Excessive, intermittent nois	se	Working with hands in water	
	Excessive cold	Dust		Working closely with others	
	Excessive humidity	Repeated bending		Working alone	
	Excessive dampness or chilling	Climbing, legs only		Working around moving objects or vehicles	
Remarks: Enter information regarding any prescribed medication, allergies, reactions to drugs, and/or other health conditions or physical limitations of which we should be made aware.					
To my knowledge, I have not been exposed to a contagious or infectious disease in the past three weeks, and I am					
Emergency Contact Name and Phone Number					
Signature Date (mm/dd/yyyy)]

Appendix H: Daily Medical Briefing

Intent: The Daily Medical Briefing is designed to be incorporated in the morning briefing (2-3 minutes) to help participants familiarize themselves with tools available to support them in preparation for, and in the event of, a medical incident/ emergency. Utilizes repetition of concepts to build comprehension.

Outcomes: Build capacity in TREX medical response and share knowledge that can be brought to participants' home units

Assumptions: Daily Medical Briefing should be given by the Medical Unit Leader/ Medical Leader

Limitations: Include additional local factors and knowledge to cover pertinent topics

Directions: Recommended to incorporate the briefing topics in a similar fashion to the timeline below

Day 1:

- Location of Medical Plan in IAP and MIR in IAP and IRPG
- □ Describe the intent of the Medical Plan part of the operational planning process, describes available resources
- Describe intent of the MIR provide organized response and convey critical information
- □ Part of the medical response toolkit (IAP, IRPG, and Pocket MRMG)
- □ Module break-out discussion review the Medical Plan in the IAP

Day 2:

- □ Ask/remind participants: Location of MIR in IAP and IRPG
- □ Introduce Pocket MRMG
- □ Contains support tools/ checklists for medical response. Can be used by emergency medical professionals and *all* fire practitioners.
- □ Part of medical response toolkit (IAP, IRPG, and Pocket MRMG). Be familiar with these lifesaving resources regardless if you have medical training or not.
- □ Module break-out discussion familiarize yourself with the contents in the Pocket MRMG. Specific pages will be discussed in-depth later.

Day 3:

- Ask/remind participants: the medical response toolkit includes IAP, IRPG, and Pocket MRMG
- □ Introduce TREX Medical Response Field Protocol in Pocket MRMG
- □ Checklist to provide on-site guidance for the *process* of medical response (both emergency and non-emergency). Can be used by emergency medical professionals and *all* fire practitioners.
- □ Module break-out discussion take 15 minutes to review the TREX Medical Response Field Protocol; module emergency medical personnel can guide a discussion and answer questions

Day 4:

- □ Ask/remind participants: TREX Medical Response Field Protocol supports the *process* of emergency and non-emergency response
- Part of your medical response toolbox (IAP, IRPG, Pocket MRMG). As noted in the checklists, is to be used in combination with the Medical Section and Helicopter Extraction Operations (if needed) in the IRPG as well as with the Short Haul Checklist in the Pocket MRMG.

 Module break-out discussion – Review sections in the IRPG that are referenced in the Pocket MRMG

Day 5:

- □ Ask/remind participants: Pocket MRMG references the medical section in the IRPG. Be familiar with both resources ahead of time
- □ Introduce Medical IC Delegation of Non-Medical Tasks in Pocket MRMG
- □ Checklist to support on-scene Medical Incident Commanders in delegating critical tasks to nonmedical personnel.
- □ *Everyone* can help during a medical incident. Including all personnel in the medical response helps ensure appropriate information is communicated, documented, medical responders are supported, and the patient is prepared for a timely transport.
- Module break-out discussion review the Medical IC Delegation of Non-Medical Tasks in the Pocket MRMG

Day 6:

- □ Ask/remind participants: You do not need medical training to help during a medical incident
- □ Location of MIR in IRPG (p. 120-121)
- □ Four crucial items to report immediately (informs decision makers)
 - *Take a deep breath, check radio channel. 'Stand-by for Emergency Traffic'
 - o Number of patients involved (do not say patient names on radio)
 - Patient Priority (p. 116 IRPG)
 - Describe injury and mechanism (how)
 - Current location
- □ These four crucial items are in TREX Medical Response Field Protocol in Pocket MRMG
- □ Module break-out discussion review four crucial items in MIR; consider highlighting in IRPG

Day 7:

- Ask/remind participants: four crucial items to report immediately. Encourage participants to highlight IRPG.
- □ Introduce Patient Priority (p. 116 IRPG)
 - Green walking wounded
 - Yellow serious injury/illness
 - o Red immediate threat to life/limb, immediate evacuation
- □ Module break-out discussion review Patient Priority in IRPG and discuss what types of injuries would fall into each category. How does this inform our evacuation urgency?

Day 8:

- □ Ask/remind participants: Patient Priority in IRPG
- □ If you are unsure if Red or Yellow, ok to assume Red
- Order contingency resources and make contingency transport plan for Red patient. If unsure ask for help
- Do NOT assume helicopter is available (low visibility, weather, etc.)
- Module break-out discussion what could a contingency transportation plan look like?
 Reference Medical Plan in IAP

Day 9:

- □ Ask/remind participants: order contingency resources for and make contingency transport plan for Red patient
- □ First mention of medical in IRPG is <u>Planning</u> for Medical Emergencies (pg. 2)
 - Who/what do we have to help?
 - Transport plan? Do we have enough people to carry a litter? Generally, 6 people for short distance, 18 for a longer carry
 - How long to definitive care?
 - Emphasize: ALL operational activities should be based on answers to these questions. If the answers are insufficient, stop, reassess, and consider alternate strategies.
- □ Module break-out discussion can everyone answer the three questions on IRPG pg. 2?

Day 10:

- □ Ask/remind participants: operational activities should be based on planning for a medical emergency
- □ Introduce Tourniquet Application in Pocket MRMG
- □ Tourniquets save lives! For arterial bleeds (bright red, spurting) and venous bleeds (dark red, oozing)
- □ 2-3 inches above bleed; do not apply over joints
- □ Keep patient warm and transport immediately
- □ Module break-out discussion review Tourniquet Application in Pocket MRMG. Look at tourniquets in First Aid Kits (do <u>not</u> practice with actual tourniquets from medical kits).

Day 11:

- Ask/remind participants: Tourniquets should be 2-3 inches above bleed, and tight
- □ Introduce Hypowrap Directions in Pocket MRMG
- □ Critical for hypothermic patients and trauma patients; Keeps them off the ground and insulated to reduce heat loss
- □ Module break-out discussion what are some other items you could use to keep a patient warm if you do not have a hypowrap?

Day 12:

- □ Ask/remind participants:
- □ Introduce Improvised Litters in Pocket MRMG
- □ For transporting short distances only
- □ Module discussion What are safety concerns when using an improvised litter? What are some other items you could use for an improvised litter?

Day 13

- □ Ask/remind participants:
- Introduce Short Haul Checklist in Pocket MRMG. Note if short haul capabilities exist for TREX or not
- □ Short haul is not transport to definitive care moves patient from inaccessible location to safe landing area

Day 14: insert any local topics



Appendix I: Daily Checklists for Module Leaders

Intent: Ensure appropriate medical planning for operational period. Identify and discuss critical elements of the medical plan for the Module's operational period. Review tools and resources available to support participants in the event of a medical incident/ emergency. Provide daily repetition to increase knowledge, skills, and confidence with respect to medical preparedness and response.

Outcomes: All components of medical plan are in place and known for the operational period. Improved understanding and positive habit formation regarding medical planning, preparedness, and response.

Assumptions: If a critical element is lacking, resources should stop and mitigate or consider an alternate assignment

Limitations: Include additional content specific to each site, as needed.

Directions:

Daily, Modules Leaders should use the following checklist to prepare for operations and brief module members. Allow time for questions/ discussion.

Module Leader Daily Checklist

Planning/ Prior to briefing

Use TREX Medical Resource Assessment Tool (p. 2)

Complete Site-specific Medical Plan (Appendix F MRMG*)

Ensure (confidential) access to Medical History Forms/ Emergency Contacts (Appendix G MRMG*)

During briefing

 Identify medically trained personnel, level, currency
 Primary/ secondary (contingency) responders
 Primary should not have additional primary duties
 Make known all medical equipment & location
 Review transport options/ contingency plans
 Determine direct point of contact for immediate notification of medical issues/ emergencies
 Identify medical emergency radio frequency
 Ask resources to *voluntarily* share significant medical conditions and medication location
 Review Medical IC Delegation of Non-Medical Tasks & Medical Emergency Response Field Protocol (p. 9-10)
 Review medical briefing from morning operational briefing/ relevant sections of IAP

Appendix J: Types of First Aid Kits and Litters

Intent: Provide tools for organizers to determine appropriate types of First Aid Kits and Litters for their TREX and budget appropriately

Outcomes: Desired end state is (1) a Truck First Aid Kit (FAK) for each module, (2) a Trauma First Aid Kit for sawyer teams, and (3) an IMT kit to support prevention.

Assumptions: Medical Leader/ Medical Unit Leader should lead this process

Limitations:

- **Important: Many fake CAT tourniquets exists. North American Rescue (<u>www.NARescue.com</u>) manufactures and distributes authentic CAT tourniquets **
- Additional supplies to include if your TREX is remote (> 1 hour from a Level 1 or 2 Trauma Center) and/or access is limited:
 - Portable AED- 9/10 Cardiac arrest victims who receive a shock in the first minute will live (<u>https://cpr.heart.org/-/media/CPR-Files/Training-Programs/AED-</u> Implementation/2023-updates/AED-fact-sheet-Feb-2023.pdf)
 - Hypowrap (<u>Appendix Q</u>) to help prevent hypothermia in trauma patients. This is critical even in hot environments to prevent the <u>Trauma Triad of Death</u>. The Trauma FAK contains an emergency blanket for immediate use; a full hypowrap should be kept in a vehicle on-site or in the Truck First Aid Kit.
 - Litter plus litter straps to secure the patient, see options below

Directions:

- 1. Determine appropriate FAKs using the Types of First Aid Kits table on the next page
- 2. Reference FAK Suggested Contents (<u>Appendix K</u>) for recommended kit inventories
- 3. Reach out to suppliers they often offer discounts for fire professionals, non-profits, etc.

Types of First Aid Kits (FAKs)

	Addresses	Audience	Location	Approximate Cost/kit
Trauma FAK	 ✓ Arterial bleeds ✓ Provide CPR Prevent hypothermia 	 Basic FA/CPR Wilderness First Aid Wilderness Advanced First Aid Wilderness First Responder <u>Highly recommended one</u> <u>Trauma FAK per</u> <u>sawyer/swamper pair</u> 	Field	\$100
Truck FAK	 ✓ Immediate life threats ✓ Provide CPR ✓ Basic medications ✓ Treat minor injuries 	 Basic FA/CPR Wilderness First Aid Wilderness Advanced First Aid Wilderness First Responder 	Field	\$200
IMT KIt	 ✓ Non-emergency basic care ✓ Prevention 	All participants	Incident Command Post	Depends on the number of participants

Types of Evacuation Litters

	LONG CARRIES	LIGHTWEIGHT/ PACKABLE	HELICOPTER EVAC	PROVIDES SPINAL SUPPORT	PRICE/ MANUFACTURER
HEAVY-DUTY TARP/ TYVEK SHEET	Ν	Y	Ν	Ν	~\$20
QUIKLITTER	Ν	Y	Ν	Ν	\$20, <u>Rescue</u> <u>Essentials</u>
SKED	Y, can be dragged	Ν	Y	Ν	\$700-\$850, <u>Skedco</u>
VACUUM LITTER	Y, with backboard or other litter	Ν	Ν	Y	\$750-\$1165, <u>Rescue Essentials</u>
STOKES LITTER	Υ	Ν	Y	Ν	\$1000, <u>Cascade</u> <u>Rescue</u>

Appendix K: First Aid Kit Suggested Contents

Trauma Kit	
Item	Quantity
Trauma FAK Bag (red)	1
CAT Tourniquet	2
CPR Pocket Mask	1
Masks & Gloves in bag- assorted sizes	
SOL Emergency Blanket	1
Trauma Shears	1
Pressure Wrap	
4x4 gauze	5
Elastic Bandage Ember	2
Kerlix Roll	2
Roller Gauze	2

Item	Quantity
Truck FAK bag (Red)	1
CAT Tourniquet	2
CPR Mask & Case	1
Eye Protection	2
Eye Wash Ember	5
Eye Wash Cups	1
Floss	1
Gold Bond Body Powder	1
Hand Sanitizer	1
Heavy Duty Tupperware	1
Israeli Bandage	1
Masks & Gloves in bag- assorted sizes	YES
PenLight	1
SAM Pelvic Splint	1
Small Notepad & Pens	1& 2
Sunscreen & Aloe	1each
Tampons	5-10
Thermometer	1
Trauma Shears	1
BP cuff (EMTs only)	1
BVM <i>(EMTs only)</i>	1
OPAINPA (EMTs only)	1
Stethoscope (EMTs anly)	1
Pressure Wrap	
4x4 Gauze	2
Elastic Bandage	2
Kerlix Roll	2
Roller Gauze	2
Blister Care	
Duct Tape	1
Mole skin/foam	8 or 10
Second Skin	2
Solint Kit	
Elastic Bandage	1
Roller gauze	2
SAM Splint	1
Triangular bandage	2
Hypothermic Wrap/Evacuation Set	
Foam Pad	1
Quik Litter	1
Sleening Bag	1
Tarp	1
Emergency Blanket	1
Medications	
Antacid	2
Antibiotamine	E
Pauer: Pain Peliever/Fever Peducer	5
Diotame: Anti-diarrhea	5
Diotanie, Anti-Giannea	0
Electrolyte Supplement	4
Neg Draway Singe Dagangastant	5
Taskey, Dawle	5
Technu Bottle	
Avd Gaura Bada	F
4x4 Gauze Faus	5
ABU pad	1
Alconol wipes	5 or 10
Assorted Dandalds	
Dandalds Ember	10
2 bandaids	5
Knuckle, Fingertip & big bandaids	3 each
	1
Athletic Tape	1
Athletic Tape Cotton swab	4
Athletic Tape Cotton swab Tegaderm	4
Athletic Tape Cotton swab Tegaderm Tweezers	4 5 1

IMT Kit

It is recommended that TREX organizers have the truck & trauma FAKs in addition to purchasing/distributing extra of the following for all participants:

- Mole skin
- Second skin
- Foot powder
- □ Sunscreen
- Hand sanitizer
- □ Updated IRPG

Notes:

- 1. Many fake CAT tourniquets exist. North American Rescue (<u>www.NARescue.com</u>) manufactures and distributes authentic CAT tourniquets (often at a lower cost for non-profits)
- 2. S.O.L is a good emergency blanket
- 3. Orca Tactical Molle Bag (<\$20) or similar military bags are more durable. Otherwise, two (2) Ziplock bags (1 gallon size) double-bagged will suffice.



Appendix L: Trauma First Aid Kit Assembly

Pressure Wrap Assembly





		Aerie Wildern	ess Inciden	t SOAP	Notes		
SUBJECTIVE							
Patient's Nam	e:			Age:	Weight (lbs):	DOB:	
Location:		Lat:		Mechanis	m of Injury:	•	
Environment:		Fall?		Dis	stance?	Helme	et?
		Motor Vehicle	Collision?	Sp	eed?	Seat E	Belt?
Other Patients	:	Y / N	How Many?				
		SUBJ	ECTIVE: Pat	ient Hist	ory		
Chief Complai	nt (S/S):						
Onset:				Allergies:			
Palliates/Prov	okes:			Medicatio	ons:		
Quality:				Past Perti	nent Medical Hist	ory:	
Radiates:				Last Oral	Intake/Output:		
Severity:				Events Le	ading up to the Co	omplaint:	
Time:							
		OBJECT	IVE: Patient	Physical	Exam		
Airway:	Clear	Obstructed		Abdomen	: Pai	n Sof	t
Breathing:	Labo	red Non-Labor	ed	1	Ter	nder Rigi	id
Circulation:	Radia	l Carotid	-	Back:	Pai	n Def	ormity
	Pulse	Strong Weak_			Ter	nder	
	Majo	r Bleeds Bruisir	ng	Pelvis:	Sta	ble Uns	stable
Deficit (Neuro	logical):				Ter	nder Rigi	id
Environmenta	l Problems:			Extremiti	es (Circulation, Se	nsation, & Movem	ent):
Head:				Right Arm	: Lef	t Arm:	
Neck/Spine:	Tend	er Pain De	formity]			
Chest:	Tender	_Pain		Right Leg:	Lef	t Leg:	
	Crepitus	Equal Expansion_					
			VITAL SIG	iNS:			
Time	Level of Responsiveness	Respiratory Rate	Heart Rate	Skin Col	or, Temperature, Moisture	Blood Pressure	Pupils
						1	
		Aorio Backer	untry Medicin	o @ 15th F	dition		



Aerie E Wilderne	Backcountry Medicine		AERIE
ASSESSMENT o	f Situation and Plan of Treatm	ent	
Injury List	Pot	ential Problems	
			MEDICIN
Urgency: Critical Stable Minor	PLAN of Action		
Patient: Ambulatory Litter Carry Soi	nal Motion Restriction		
Fateric AmbuatorySpi			
Injury/Illness:	Action Taken:	Planned Treatment:	
Evenuation Plan (including back-up plan):			
Evacuation Fran (including back-up plan).			
	Notes		
	Notes		
(***)			
Two Y has and the			
Aerie Back	country Medicine © 15th Edition	Ω	
		0	



Appendix N: TREX Medical Response IMT Protocol

Intent: Provides guidance to IMT members in the *process* of:

- A. Supporting medical responder(s) on-scene to ensure a thorough plan/ contingency plan are enacted with appropriate resources
- B. Initiating notification to critical TNC personnel in the instance TREX participant(s) require professional medical care

Outcomes: Improved support for field staff and rapid notifications for medical issues and/or emergencies

Assumptions: A complete medical plan is in place with verified resources and contingency plans. Contact information is verified before each TREX event.

Limitations: The TREX Medical Response IMT Protocol focuses solely on response to medical injuries and emergencies. This is a condensed version of TNC's complete response protocol for incidents/accidents. Reference TNC Fire Incident Response document for complete response for all types of incidents/accidents.

Directions: Based on information provided from field personnel, determine if there is an injury needing professional medical care and follow the corresponding checklist.





Appendix O: TREX Medical Response Field Protocol and Medical IC Delegation of Non-Medical Tasks

Intent: These two Tools are designed to be used together and could be printed as companion stickers or a double-sided pocket card

١. The TREX Medical Response Field Protocol

Provides on-site guidance for the process of medical response (both emergency and nonemergency). Can be used by emergency medical professionals as well as those with limited/no medical training. To be used in combination with the Medical Section and Helicopter Extraction Operations (if needed) in the IRPG as well as with the Short Haul Checklist in the Pocket MRMG.

Π. Medical IC Delegation of Non-Medical Tasks

Supports on-scene Medical Incident Commanders in delegating critical tasks to non-medical personnel. Including all personnel in the medical response can help ensure appropriate information is communicated, documented, medical responders are supported, and the patient is prepared for a timely transport.

Outcomes: Improved thoroughness and response time for medical issues and/or emergencies

Assumptions: A complete medical plan is in place with verified resources and contingency plans

Limitations: Is not a substitute for having appropriate medical personnel and equipment on-site. Should be reviewed and practiced in non-emergency situations prior to putting fire on the ground.

Directions:

- ١. TREX Medical Response Field Protocol: Determine if there is an immediate threat to lift/limb and follow the corresponding checklist.
- II. Medical IC Delegation of Non-Medical Tasks: When prompted in the TREX Medical Response Field Protocol, use this checklist to delegate tasks to support personnel in order of urgency/ importance.



of <u>Non-Medical</u> Tasks	As Needed Assist medical providers (when asked) Prepare for/get transport Flag access Construct litter (p. 5), clear path Construct litter (p. 5), clear path Construct litter (p. 5), clear path Providers Providers Providers Providers Protect patient privacy (no photos/videos) trauma patient (p. 4) trauma patient (p. 4) trauma patient (p. 4) cort Haul Checklist (p. 6)	
Medical IC Delegation	Manage Radio communications Check frequency before speaking If Red: "Standby for emergency medical traffic" # individuals involved (no names) # individuals involved (no names) Describe injury/mechanism (how) Current location and access Patient Priority (p. 110 and 116 IRPG) Patient Priority (p. 110 and 116 IRPG) Patient Priority (p. 110 and 116 IRPG) Document (assign scribe) Important Actions / time stamps Fill out SOAP note (p. 7-8) Fill out SOAP note (p. 7-8) Bet up hypowrap for Bet up hypowrap for Pro short hauls see Sh	



Tourniquets - 2^{*} above injury, Keep Them Warm!

<u>ا</u>







Improvised Tarp or Blanket Litter





Appendix S: Short Haul Checklist

Intent: Supplement the IRPG's Helicopter Extraction Operations with information specific to Short Haul flights

Outcomes: Improved response and preparation for helicopter extraction operations

Assumptions: TREX planners have contacted local Short Haul response teams to verify availability and any specific requirements

Limitations: Not all TREXs have access to Short Haul response teams. If the TREX does not have this capability make known to participants so they do not use the Short Haul checklist. Available Short Haul teams may be unavailable or grounded, ensure a contingency plan is in place.

Directions:

1. When prompted in the TREX Medical Response Field Protocol, utilize the Short Haul checklist to prepare for helicopter extraction



Appendix T: Example Medical Scenario

Intent: Provide tools for TREX leaders to facilitate hands-on and/or scenario-based emergency medical response.

Total Time: 120-160 minutes

Implementation Time: 90-120 minutes

Ideally implemented by Medical Unit Leader/Medical Leader with support from other staff to act at dispatch/ program patients.

Objectives (Read aloud to the full group before Module breakouts)

- 1. Utilize the Pocket Medical Risk Management Guide and IRPG to **practice the process of emergency medical response**. In particular:
 - a. TREX Medical Emergency Response Field Protocol
 - b. Medical IC Delegation of Non-Medical Tasks
 - c. Medical Incident Report (MIR)
- 2. Identify ICS within the incident and practice documentation
- 3. Communicate clearly and concisely using dispatch
- 4. Determine if the patient is sick or not sick
- 5. Allow EMT and WFRs to work on patient while assigning **meaningful participation roles** for non-medical crew members
- 6. Determine transportation and contingency plan

Supplies

- MRMG Pocket Guide and IRPG (for participants)
- Printouts (see section below)
- IAP and local burn maps, optional

- Radios
- TREX medical supplies
- Theater/ Halloween makeup (optional)
- Sand table (optional)

Preparation/ Facilitation Tips

- Assign someone to serve as dispatch who will run the scenario for the module and serve as a dispatch that participants can practice radio communications with during the scenario
 - Identify an appropriate channel for practicing emergency response
 - o Remember to frequently communicate on the radio that this is a scenario
 - o If it is not possible to use radios, you can still have face to face communications
- If available, integrate a Burn Boss or Burn Boss Trainee to add complexity to the scenario. The Burn Boss can continue to manage the 'burn' during the scenario
- Give participants local burn maps to enhance the scenario/ make it feel more realistic
 - Consider more spatial complexity (e.g. not having Dispatch in the same room as the scenario, patient and responders in different locations so the responders need to go to/find the patient)
- Provide a realistic list of resources that participants can request (ambulance, short haul, nearby crew/ personnel, etc.). These could be local resources included in the burn plan

- If local medical response resources are available, consider asking them to show up and receive a briefing from the IC/ medical care provider during patient transfer (surprising participants with this creates a very real feel)
- Have TREX medical supplies on hand so participants can familiarize themselves with the contents (even if they are not actually used)
- If weather allows, run the scenario in the field and place the patient in a realistic location.
 - If time allows, you can run the scenario longer and have the participants transport the patient to a location where they could hand them off to advanced medical care (e.g. ambulance or air resource identified in the burn plan)
- For inclement weather, consider combining a sand table exercise with the medical scenario or a relevant Lessons Learned
- Consider makeup (post-Halloween is a great time to pick up some makeup). You can search the internet for tips on applying the makeup to create a more realistic scenario (bruises, a little fake blood, etc.)

Sample Schedule (90-120 minutes total)

1. Preparation (20-30 minutes)

- a. MEDL:
 - i. Print out Scene, Vital Signs, and Patient Programming, Dispatch Notes, and Debrief (see printouts below) for the patient and dispatch
 - ii. Print other materials, such as burn maps
 - iii. Scout location for each module's scenario (space between them allows for a more realistic scenario)
 - iv. Prep sand table, if using
 - v. Prepare gear (gather medical equipment, radios, etc.)
- b. With Participants:
 - i. Assign dispatch and patient for each module (and Burn Boss/trainee, if applicable) and give them the printouts to review/ ask questions they may have
 - ii. Ensure participants have a copy of the MRMG Pocket Guide and IRPG, and are briefed on the intent and use of it

2. Briefing (10 minutes)

- a. Read objectives (above)
- b. Discuss the flow of the scenario with all participants:
 - i. Break into modules, assign roles within the module (IC and medical responders at minimum)
 - ii. Explain the role of dispatch; have dispatch read the scene
 - iii. Run the scenario ~20 min (or more if time allows)
 - iv. Debrief within modules (AAR Trainee opportunity) ~10 min
 - v. Run scenario two and debrief (participants should trade roles)
 - vi. Full group debrief; have each module prepare three takeaways

3. Scenario 1 Preparation (10 minutes)

- a. Break into modules and allow them to gather their gear, prepare their response strategy, and identify the IC and medical responders for the scenario (at minimum)
 - i. Encourage participants to try an uncomfortable/unfamiliar role

- b. Get patient in position
 - i. If using makeup, apply to patient

4. Scenario 1 (30 minutes)

- a. Dispatch should help control the difficulty/ pacing by adjusting response time for resources, equipment failure, changes in weather, etc.
- b. Participants should be challenged but not overwhelmed

5. Scenario 1 Debrief (10 minutes)

- a. Within module, have a participant lead the debrief (see printout)
- 6. Break (10 minutes)

7. Scenario 2 Preparation (10 minutes)

- a. Prepare the second patient (give printout, in position, makeup if using)
- b. Allow participants to identify new roles. Suggest that if they were in a leadership position in Scenario 1 try acting as a good follower in Scenario 2 and vice versa for those in a followership position.

8. Scenario 2 (30 minutes)

9. Scenario 2 Debrief (10 minutes)

- a. Assign a participant to discuss what improvements occurred between scenario 1 and 2 and why those occurred
- b. One participant should be prepared to share three takeaways for the group at the full group debrief

10. Full Group Debrief (10 minutes)

a. Have each module share three takeaways

Dispatch Printout

Dispatch Notes:

Please allow participants to work through the TREX Medical Response Field Protocol and Medical IC Delegation of Non-Medical Tasks in the Pocket Medical Risk Management Guide (MRMG). If they are not providing critical information (#5 in TREX Medical Response Field Protocol) please prompt them. If they ask for transportation, the following is available: ambulance 60 minutes out, helicopter 60 minutes out (or assign resources available locally in the IAP). If you wish to act as the helicopter/ambulance, you can continue on the same freq. Please take notes to provide constructive feedback during the debrief.

Scene for Scenario 1 (Read aloud to the Module)

It is towards the end of TREX and your mod is wrapping up a 150A burn in steep terrain and your crew is transitioning into monitoring. Time is 1700 and weather is as you are experiencing it currently. One of your crew members fails to return radio traffic and you go to investigate. You find your fellow crewmember sitting under a tree.

Scene for Scenario 2 (Read aloud to the Module)

Your mod is working on prep for a unit to burn later in the week. One of your crewmembers isn't feeling well and went to sit in the truck so you go check on them. Time is 1500, weather is as you are experiencing it currently.

Scenario 1 Patient Printout

Patient programming for Scenario 1 (Delegate someone to program patients)

- Situation: You are found sitting under a tree, helmet off, feeling very poorly.
- Chief complaint: bad headache and you can't remember what happened.
- LOR: You know your name and that you are on a burn somewhere in SC as part of TREX, but you are unsure of the time of day and the events leading up to the current moment.
- SAMPLE History:
 - You think you ate breakfast with lots of coffee, a small lunch and not much water.
 - Your sleep has been poor the last week and you feel weak and tired. If they ask you to walk, you are very dizzy and become nauseated and don't think you can stand.
 - No allergies, are currently taking a prescription for anxiety (which you took this am).
- Changes: As the care provider starts to ask more questions, you become slightly irritated and your headache gets worse (8/10). You do not have any other notable pain or symptoms.

Vital signs for Scenario 1 (Allow the care provider to take vital signs before giving adjustments):

*Note, the '+' indicates that the patient would add this to the actual vitals taken by the care provider. For example, if the heart rate was 85 beats per minute a +20 would mean that the patient's heart rate in the scenario is 105.

Initial:	After 10 mins:	After 20 mins:
Heart rate: +20 strong/regular	Heart rate: +30 weak	Heart rate: +30 weak
Respiratory rate +10 unlabored	Respiratory rate +10	Respiratory rate +10
Skin: Pale cool and clammy	Skin: Pale cool and clammy	Skin: Pale cool and clammy
Pupils: PERRL	Pupils: PERRL	Pupils: PERRL

Scenario 2 Patient Printout

Patient programming for Scenario 2 (Delegate someone to program patients)

- Situation: You are found sitting in the truck with the AC on full blast
- Chief complaint: You feel nauseated, a little dizzy, and thirsty
- LOR: You are fully alert (you know your name, place, time, and what happened)
- SAMPLE History:
 - You are allergic to dairy (it gives you an upset stomach). You don't think you ate anything with dairy but are unsure you didn't read all the labels on your lunch snacks
 - You don't take any medications except a multi vitamin
 - You have been eating a lot because of all the physical work but feel like you can't keep up with liquids. You've mostly been drinking Gatorade and coffee
 - You haven't urinated since just before breakfast, can't remember the color
 - The nausea/ dizziness came on suddenly, but you had a headache earlier in the day
 - The AC makes you feel a little better
- Changes: As the care provider is asking questions your nausea gets worse and you want to recline the seat in the truck

Vital signs for Scenario 2 (Allow the care provider to take vital signs before giving adjustments):

*Note, the '+' indicates that the patient would add this to the actual vitals taken by the care provider. For example, if the heart rate was 85 beats per minute a +20 would mean that the patient's heart rate in the scenario is 105.

Initial:	After 10 mins:	After 20 mins:
Heart rate: +10 strong/regular	Heart rate: +10 strong/regular	Heart rate: +15 strong/regular
Respiratory rate +5 unlabored	Respiratory rate +8	Respiratory rate +8
Skin: Pink, Warm, Dry	Skin: Pink, Warm, Dry	Skin: Pink, Warm, Dry
Pupils: PERRL	Pupils: PERRL	Pupils: PERRL

Debrief Printout

Debrief (Delegate to participant)

- 1. Volunteer to give a clear and concise radio report for:
 - a. # individuals involved
 - b. Injury and mechanism
 - c. Current location/ access
 - d. Patient Priority

Any constructive feedback from the group? From dispatch?

- 2. What challenges did your patient present for both care providers and supporting crew?
- 3. What were the strengths of the team?
- 4. Is this patient sick or not sick?
- 5. If you do not have medical training, how did you participate in the success of patient care?
- 6. Any questions about the process?

Appendix U: Psychological Safety Planning and Response

Intent: To guide IMT members in:

- A. Supporting psychological safety and resilience for all unit and/or event members.
- B. Preventing, intervening, and stabilizing crises.
- C. Establishing a comprehensive Psychological Support Plan (PSP) and Adverse Event Plan (AEP) for handling adverse events or mental health crises for both group and individuals.
- D. Identifying and communicating psychological safety and mental health resources.

Outcomes: Enhanced support for field staff and participants. Decreased mental and physical stress injuries. Increased culture of psychological resilience and whole health wellness.

Assumptions: Contact information is confirmed before each TREX event. IMT understand both proactive and reactive nature of PSP and AEP.

Limitations: The TREX IMT may have limited access to integrated Mental Health Professionals and/or qualified Peer Support Personnel.

Psychological Support Planning Checklist: aims to create a supportive environment that promotes mental health and well-being for all individuals involved. This tool should guide IMT planning discussions both before and during the event.

Availability and Access to Mental Health Support (Identify and Make Known)

- **24/7 Helpline**: 988
- □ **On-Site Support**: Ensure on-site access to Mental Health Professional and/or designated Peer Support Specialist.
- □ Off-Site Support: Closest emergency facilities with access to mental health services, available crisis clinics, area Mobile Crisis Teams, Community Emergency Response Teams, other disaster relief organizations, and designated transportation to facilities.
- □ **Emergency Response Team**: Designate an emergency response team trained in Psychological First Aid to handle crises.

Community Culture and Social Support

- □ Peer Support Program: Integrate a peer support program where peers who are trained in psychological safety or crisis intervention provide support and guidance to their colleagues.
- □ Welcoming Environment: Foster a welcoming environment that promotes respect and open communication for everyone.
- □ Social Events: Plan regular social events and team-building activities to strengthen community bonds and reduce isolation.

Daily Mental Health Briefings

- ☐ Morning Briefings: Conduct daily morning briefings that include psychological safety.
- U Wellness Tips: Include daily wellness tips and mental health information during briefings to educate and empower individuals.
- □ **Mindfulness Exercises**: Incorporate brief mindfulness or relaxation exercises to help individuals start their day with a calm and focused mindset.
- □ Feedback Loop: Create a feedback loop where individuals can anonymously provide feedback or suggestions about mental health initiatives.

Psychoeducation and Skill Building

- **Education**: Offer regular workshops on topics such as stress management, emotional regulation, and coping strategies.
- **Resource Library**: Create a resource library related to mental health and well-being.
- Skill-Building Programs: Implement programs to build skills such as mindfulness, resilience, and effective communication.
- **Regular Assessments**: Conduct regular assessments to identify individual and group needs and tailor psychoeducation programs accordingly.

Work/Rest/Self-Care Balance

- □ Work Schedules: Encourage a workflow schedule that allows individuals to balance work with personal and family responsibilities.
- □ Scheduled Breaks: Ensure that individuals take regular breaks during work hours to rest and recharge.
- □ Self-Care Activities: Promote self-care activities such as exercise and relaxation techniques.

□ Wellness: Implement wellness programs that include activities like yoga, meditation, and fitness classes.

Adverse Event Response Plan (AEP) Form: pre-identify response pathways and resources for both an individual mental health crisis and a group crisis. This form should be completed by one of the event's qualified mental health specialists, early in the response to an adverse event, and drawing from the resources pre-identified in the Psychological Support Planning Checklist.

Section A: Individual Mental Health Crisis

1. Utilize Appropriate Emergency Assessment with SOAP Note

Subjective – Description of the crisis (individual's report of the event, feelings, and concerns):

Objective – Observable symptoms and behaviors:

Assessment – Initial assessment of the situation:

Plan – Immediate actions and interventions to be taken:

2. Chain of Communication						
Primary Contact	Secondary Contact	Tertiary Contact				
Name:	Name:	Name:				
Role/Position:	Role/Position:	Role/Position:				
Contact Information:	Contact Information:	Contact Information:				
3. Resource Connections						
Mental Health Professional	Crisis Centers	Additional Resources				
Name:	Center Name:	Resource Name:				
Contact Information:	Location:	Contact Information:				
	Contact Information:					

Section B: Group Crisis					
1. Chain of Communication					
Primary Contact	Secondary Contact	Tertiary Contact			
Name:	Name:	Name:			
Role/Position:	Role/Position:	Role/Position:			
Contact Information:	Contact Information:	Contact Information:			
2. Identify Areas of Interagence	cy Cooperation				
Agency Involved	Agency Involved	Agency Involved			
Agency Name:	Agency Name:	Agency Name:			
Contact Person:	Contact Person:	Contact Person:			
Role/Position:	Role/Position:	Role/Position:			
Contact Information:	Contact Information:	Contact Information:			
 3. Determine Responses (Plan Primary Plan – Description of th 	+ Contingency) e initial response plan:				
Contingency Plan – Description	of alternative response plan:				
4. Immediate Interventions					
Intervention 1 – Description:					
Intervention 2 – Description:					
Intervention 3 – Description:					

5. Assess Ongoing Support Needs

Assessment Details – Description of support needs:

Follow-up Plan – Description of follow-up actions:

6. Resource Connections		
Mental Health Professional	Crisis Centers	Additional Resources
Name:	Center Name:	Resource Name:
Contact Information:	Location:	Contact Information:
	Contact Information:	

Appendix V: Mental Health Interventions (Group and Individual)

This list provides a brief description of several group and individual crisis intervention techniques. Many of these techniques require professionals that are trained to implement them. This list should be used as a guide for the event's mental health support lead to determine the appropriate technique to be used in response to a crisis and any external resources that should be requested.

Group Crisis Intervention Techniques

1. Critical Incident Stress Management (CISM):

- Definition: A comprehensive, integrative, multicomponent crisis intervention system.
 Implementation requires clinician and care team.
- Components:
 - Pre-Crisis Preparation: Education and training about stress management.
 - **Demobilization**: Brief intervention immediately after a large-scale incident.
 - **Defusing**: Short, informal discussion after a critical event, usually within hours.
 - Follow-Up: Ongoing support and referral for professional help if needed.
- **Purpose**: To mitigate the impact of a traumatic event, facilitate recovery, and identify those who may need further support.

2. Critical Incident Stress Debriefing (CISD):

- **Definition**: A specific, structured small-group discussion.
 - Implementation requires clinician and care team.
- Stages:
 - Introduction: Explain the process and set ground rules.
 - Fact Phase: Participants describe the event.
 - Thought Phase: Participants share initial thoughts.
 - Reaction Phase: Discuss emotional reactions.
 - Symptom Phase: Identify stress symptoms.
 - Teaching Phase: Provide information on stress responses.
 - Re-entry Phase: Summarize and provide closure.
- **Purpose**: To reduce stress, provide a sense of normalization, and encourage peer support.

3. Crisis Management Briefings (CMB):

- Definition: Structured, large-group information sessions.
 - Implementation requires clinician and care team.
- Components:

0

- Introduction: Overview of the situation and purpose of the briefing.
- Factual Information: Provide accurate information about the event.
- **Reactions and Questions**: Allow participants to ask questions and express concerns.
- Stress Management Information: Educate on typical stress reactions and coping mechanisms.
- Resources: Inform about available resources for further support.
- **Purpose**: To provide clear, accurate information, reduce misinformation and rumors, and offer strategies for coping.

Individual Crisis Intervention Techniques

- 1. Psychological First Aid (PFA):
 - **Definition**: Immediate support provided to individuals after a traumatic event.
 - Can be implemented by anyone trained in PFA.
 - **Components**:
 - Contact and Engagement: Establish connection with the person.
 - Safety and Comfort: Ensure physical and emotional safety.
 - Stabilization: Help the person manage overwhelming emotions.
 - Information Gathering: Assess needs and concerns.
 - **Practical Assistance**: Offer practical help and solutions.
 - **Connection with Social Supports**: Connect individuals to family, friends, and community resources.
 - **Information on Coping**: Provide education about stress reactions and coping strategies.
 - Linkage with Collaborative Services: Refer to professional help if needed.
 - **Purpose**: To reduce initial distress and foster short- and long-term adaptive functioning.

2. Integrated Mental Health Support:

- **Definition**: Mental Health Professionals integrated into modules and teams to provide on-site mental health support, utilizing relational therapeutic approaches.
 - Should be implemented by mental health clinician.
- Components:
 - **Cultural Competence**: Awareness and sensitivity to cultural differences and needs of wildland fire practitioners and individual participants.
 - **Integration into Teams**: Member of a team working collaboratively with individuals and groups on-site as a proactive measure towards psychological safety.
 - **Relational Therapeutic Approaches**: Fostering therapeutic relationships to support emotional and psychological healing.
 - **Support**: Continuous mental health support tailored to individual and group needs.
 - Education and Resources: Providing information about mental health, coping strategies, and available resources.
 - **Referral**: Connecting individuals to specialized services when necessary.
- **Purpose**: To provide preventive mental health care and support as well as maintain psychological safety during and after a crisis.





Appendix X: Columbia-Suicide Severity Rating Scale (C-SSRS)

Always ask questions 1 and 2.			
 Have you wished you were dead or wished you could go to sleep and not wake up? 			
2) Have you actually had any thoughts about killing yourself?			
If YES to 1 or 2, ask questions 3, 4, 5, and 6. If NO to 1 and 2, skip to question 6.			
3) Have you been thinking about how you might do this?			
4) Have you had these thoughts and had some intention of acting on them?		High Risk	
5) Have you started to work out or worked out the details of how to kill yourself? Did you intend to carry out this plan?		High Risk	
Always Ask Question 6	Life- time	Past 3 Months	
6) Have you done anything, started to do anything, or prepared to do anything to end your life? Examples: Took pills, tried to shoot yourself, cut yourself, tried to hang yourself, or collected pills, obtained a gun, gave away valuables, wrote a will or suicide note, took out pills but didn't swallow any, held a gun but changed your mind or it was grabbed from your hand, went to the roof but didn't jump, etc. If yes, was this within the past 3 months?		High Risk	



If YES to 1, 2 or 3, seek behavioral healthcare for further evaluation. If the answer to 4, 5 or 6 is YES, get immediate help: Call or text 988, call 911 or go to the emergency room. **<u>STAY WITH THEM</u>** until they can be evaluated.



Download Columbia Protocol app