

Field Emergency Action Plan (EAP)

The EAP Form

Use this form as a tool for information gathering and documentation of important names and phone numbers to use in an emergency. Please fill this out completely before you deploy. Collecting information from the comfort of your office will serve you and your team well if an accident occurs.

Before you deploy, please discuss your project with your institute’s Director of Administrative Services or equivalent, reviewing insurance coverage as well as your institute’s emergency response procedures. If CPS-supported, please **provide this POC information to your CPS Project Manager.**

MEDICAL INSURANCE: Each project member must have medical/accident insurance that will cover the expenses of serious illness or accident, as well as emergency evacuation, and accidental death and dismemberment coverage. Check with your employer and/or health plans to verify that coverage applies. **Project members are responsible for all expenses in the event that they become ill, injured, or require emergency evacuation.**

Project name	Dates in the Field
Field Location Coordinates	
Medical /accident insurance company	
Policy#	Phone
Institute contacts*	
CPS contacts	
Local SAR or police contacts	
Medical contacts (Beacon, MedAire, area hospitals/clinics)	

Personal contacts or other useful numbers
Passport numbers (if international)
Pertinent medical histories for members of your group

* Please state who should be contacted 1st, 2nd, 3rd, etc.

Guidelines

Follow these guidelines to respond to a field emergency. Please also be familiar with additional requirements/procedures mandated by your institution.

FIRST RESPONSE

1. Assess the scene

Slow down, **think**, **observe** and **plan** (STOP) as you approach the incident. Make sure the scene is safe to approach and that you or someone else will not be injured. By **slowing** down you increase your chances to see what has happened, **think** about what has happened, **observe** the cause of the incident and come up with a **plan** to safely approach and control the scene so no one else is endangered. See the SOAP note at the end of this document.

2. Assess the patient(s)

Perform the necessary patient assessment, first aid and continue to control the scene.
At this point in any emergency, many things may happen simultaneously. The following is an outline, not necessarily a sequential list.

3. Create a SOAP Note

This form documents the incident and will be useful for subsequent medical care providers.

4. Determine if evacuation is necessary

Once you have assessed and stabilized the patient/situation, determine if the patient can remain in the field or should be evacuated. If you have medical contacts you can try to contact them to help with your assessment.

5. Organize

Assume leadership and delegate responsibilities. Keep everyone gainfully occupied:

- Cooking food and preparing hot drinks
- Setting up a shelter
- Finding and marking a landing site (for air evacuations)
- Packing

- Bear guarding
- Monitoring communications. If frequent or constant communication is necessary, monitor/charge batteries
- Inventorying resources – people and skills, first aid kits, stoves, shelters etc.

6. Document

Record the assessment, mechanism of injury (MOI), first aid and changes in the patient's condition.

- Age and gender
- Chief Complaint
- History of the illness or injury and MOI
- Vital signs (repeated if necessary)
- Physical exam findings/appearance of the patient
- Past medical history
- Allergies/medications
- Treatment
- Changes in patient's condition

EVACUATION

Be familiar with evacuation assets before venturing into the field. The more you know about available resources, the wiser your choices will be during an evacuation. Look over your route and consider the possibilities for evacuation. Where are you farthest from help? When do you cross obstacles such as passes, rivers or escarpments that may impede evacuations? What unusual roads or shortcuts may be viable alternatives, and which maps do you need to find them? Will extreme weather change your plans?

Prior to departing for the field, teams should know which organization—the home institution, SAR team, or CPS—will coordinate an evacuation in the case of an emergency.

There are several types of evacuation:

- The patient is ambulatory: Walking
- The group can carry the patient: Litter
- Outside ground help: Boat, 4 wheel drive, ATV
- Outside air evacuation: Helicopter / fixed wing
- A combination of the above methods

Refer to the following guidelines following an accident or illness to determine if an evacuation is necessary, and, if so, how to orchestrate the smoothest evacuation possible.

Decision Making

When determining the type of evacuation, consider the urgency of the medical situation, distance to a road head, difficulty of the terrain, the group's physical strength, technical abilities and experience. Consider also the weather, communication possibilities, outside assistance, the

transportation schedules and the suitability of landing sites. Discuss each of these considerations verbally to facilitate thorough planning and enhance understanding of the plan for the entire team.

Important Information

If it is determined that an evacuation is necessary, assemble the following information for the authorities:

- Your name, project name
- Your location (map system + map number + GPS lat/long *or* GPS Easting/Northing)
- Location of patient(s)
- Passport information of patient(s)(if international)
- Nature of problem
- Type of assistance required
- The number at which you can be reached (if calling from a telephone)

Access to **dedicated paramedic rescue helicopters** in most remote settings on land will usually need to be requested through the police or local authority. Police regional headquarters can also coordinate any search and rescue operations.

COMMUNICATION

There are a variety of communication devices available to field teams. These are discussed below. Despite technological advances, these devices occasionally fail and thwart communication. As a result, clear, concise messaging is critical. Messages delivered in person and by radio are generally one-way. They must be accurate, concise and complete. Written backup plans on when a contingency will be initiated serve to help people know what to expect from each other in the event plans change.

Satellite Phones

Satellite phones allow for two-way communication. Ensure battery is fully charged before heading into the field, and recharge it regularly. Emergency phone contacts should be preprogrammed into the phone for easy access.

To operate the satellite phone:

1. Extend antenna (right or left handed)
2. Power On
3. Wait for registration, signal strength
4. Dial Phone # S L O W L Y
5. Push OK to dial and connect

Satellite Phone Trouble Shooting

If you are having trouble getting reception or maintaining reception, position yourself where you have as much open sky as possible, e.g. move out of the forest to a clearing or climb out of a gully.

PLBs (Personal Locator Beacons)

PLBs should *only* be used in situations where the life or appendage of the person is in jeopardy. Once switched on, the device must remain on for the signal to be accurately located.

There is no way to confirm your signal has been received. If at sea you should broadcast a mayday on VHF and fire flares or other signal devices as well.

Help can arrive in as little as three hours or as many as three days and is usually preceded by an aircraft overflight scouting the location of the transmitter.

On land use signal mirrors to flash your location or create large geometric “patterns of three,” also known as a symbol of international distress, to help pilots locate your position.

At sea, keep your VHF radio and flares accessible to confirm the emergency to overflying aircraft that may be sent to investigate.

Radio Use

Communicating via radio is commonly used on land and on water. Unlike protocol for VHF radio use on the water, there are no specific protocols for radio use on land.

Radio Use on Land

When using VHF radio to communicate on land, follow the specific guidelines to optimize your communication:

- Pause after pushing the “talk button” before you begin your message, otherwise the first part of your message may not be transmitted.
- Make sure the antenna is vertical for best comms.
- Always deliver the most important information first. State immediately if your situation is an emergency.
- Confirm your transmission is loud and clear. If there are transmission problems, repeat what you are saying often.
- Keep transmissions clear and concise to facilitate the exchange of information. Check for understanding (repeat what has been said).
- Let the person listening know you are done talking but expect a reply by saying “over.” Saying “clear” means you are done talking, do not expect a reply but will be listening to the radio. “Out” means you are done talking, do not expect a reply and are turning off your radio.

VHF Marine Radio on Water

When sending a distress message via VHF radio on water, relay all of the following without pause:

1. MAYDAY MAYDAY MAYDAY
2. THIS IS BOAT (name of boat) (*REPEAT 3 TIMES*)
3. MAYDAY BOAT (name of boat)
4. Position lat long in degrees and minutes *or* bearings and distance to well-known geographic features

5. Number of people
6. Peoples state of health, injuries, illness
7. Description of boat
8. Safety equipment (buoyancy vests and flares)
9. Sea and wind conditions
10. Direction and speed of travel
11. Whether the boat is adrift and how much fuel is onboard.

Allow a short period for a reply. If no one answers after three tries, activate PLB or EPIRB and repeat the distress calls. If contact is made with a shore station or nearby vessel, inform them you have activated your PLB/EPIRB.

Do not turn a PLB/EPIRB/ELT off until told to do so by the rescue authority.

EVACUATION BY AIRCRAFT

Gather Information

Please have the following information for the air services:

- Number of patients.
- Patient weight (including minimal gear that needs to be sent out), medical condition, and ability to sit up/need to lie down.
- Approximate wind speed and direction at landing zone.
- Current weather conditions at landing zone (cloudy, raining, etc.).
- GPS coordinates (ideally UTM and lat/long) of landing zone.
- Geographic description of landing zone, features, markings, etc.
- Leader's name and phone contact number if applicable.

What to expect

- The pilot may choose his or her own landing site. Be prepared to move the patient to the aircraft once the pilot signals to you that it is safe to approach.
- In most cases the pilot will shut down the airplane or helicopter before the patient is loaded.
- The patient should be accompanied by these documents: a copy of all medical records and a passport or other ID / documentation
- No one from your group may be able to travel with the patient to the hospital. Be sure you know where the evacuee is being flown and make arrangements for their continued care.
- If a plane or helicopter is unable to land, is grounded, or is otherwise unavailable, a local sheriff or SAR team should have a back-up plan for ground-assisted transport.

How to prepare for an airplane evacuation

- Scout the area for a landing strip, should a plane arrive instead of a helicopter. Look for: the longest, widest, flattest area around. Gravel bars, relatively smooth tundra, lakes, rivers, snow or ice can all be considered. The ideal length is 2,000 feet or longer. You can estimate distance by pacing off 10 steps and measuring that distance with something of known length, such as your height. Pace off the potential site to get the distances, pace more than once to get an average.
- Airplanes have different requirements for takeoff and landing. Therefore, be ready to relay the following to the pilot or the person from whom you are requesting assistance.
 - Width of the runway (from the narrowest area)
 - Length of the runway
 - Direction of the runway (east, west etc. give in degrees of true North if possible)
 - Any large obstacles on either end of the runway.
 - Condition of the runway e.g., is the surface snowy, wet, dry, soft, muddy, grassy, sandy, hard or rocky? Is the runway flat, or does it have rollers in it, and how does it slope and at what kind of angle?
 - Weather conditions at the runway. If cloudy, estimate the height of the clouds. If it is windy, determine the strength and direction of the wind.
- Additional information: Mark the ends and middle of the runway with brightly colored objects to increase visibility and to give the pilot better depth perception. In the absence of colored objects, dark items as well as tracks (skiing, walking, or snow machine) can help delineate the runway. Consider erecting a makeshift windsock on the end and to the side of the runway. A large garbage bag or streams of survey tape will give the pilot wind direction. It must be large and high enough for them to see it from the air. Expect the pilot to fly over low to look at the site and possibly even drag it by touching down briefly and then taking off again.

How to prepare for a helicopter evacuation

- Choose a clear, flat landing zone of 60-100 feet in diameter. (Tall brush and small trees can be cleared with a saw)
- Mark your location with TIGHTLY ANCHORED, brightly colored markers (yellow, red, or orange are good especially if they are fluorescent.)
- Secure all loose items, which may fly up into the rotors.
- Clear people away from the landing zone.
- Use a mirror or other reflective surface to signal your location to the pilot, if necessary.
- Once the helicopter has spotted you, signal the landing zone by having one person standing with back to the wind and arms pointing at the landing zone.
- Once the helicopter has identified the landing zone this person should move away from the landing zone.
- Watch the helicopter until it lands and alert the pilot if the landing should be aborted due to unforeseen obstacles or hazards by waving outstretched arms back and forth.

- Helicopter safety protocol:
 - Approach the helicopter **ONLY** when the pilot signals you to do so.
 - Stand or approach so the pilot can see you. Stay away from the tail rotors (the rotating blades on the tail of the helicopter). Never approach a helicopter from the rear.
 - Do not walk in front of the helicopter, in case it needs to take off.
 - Do not approach the helicopter from uphill.
 - Stay low whenever you are near the rotors.
 - When carrying long equipment, make sure it is held horizontally and low to the ground
 - Control ALL people near the landing zone.
 - Anticipate prop wash
 - Wear PPE (hearing protection reduces stress around operating helicopters)
 - Communicate the plan to all team members before the helicopter arrives

DEBRIEFING

Consider a debriefing of the evacuation, both as a learning tool and as an opportunity to manage stress.

PRE-PLAN: SERIOUS INJURY/ILLNESS/FATALITY PROTOCOL

(Adapted from NOLS and used with Permission)

In the event of a Fatality

A Coroner or Licensed Physician must officially establish death in the USA and most other countries. In addition, law enforcement agencies have a legal interest to determine the cause of death and will want to inspect the body and the place of death. They will also want to determine whether a crime was committed and if a public health hazard exists. For this reason it is important to avoid disturbing the scene and to preserve the body.

Consider moving the body only if it presents a hazard to rescuers or to preserve it because of environmental or other factors. Law officials are also responsible for making sure the body is disposed of properly.

In the event of a fatality, it is important that staff or others document the scene as soon as possible once the situation has been stabilized.

- Describe, diagram and photograph the accident scene and/or the body before it is moved.
- Photograph the weather conditions, landmarks, victim perspective, and surrounding area from different angles.
- Photograph and preserve injury-causing mechanisms or equipment failures.
- Obtain written statements from all witnesses present. These should be factual, avoiding opinions and judgmental statements.
- Write a detailed summary of the events immediately before, during and after the incident.
- Describe the medical appearance/condition of the victim.
- Preserve the scene. Cover the victim. Protect the body.

Psychological Maintenance after a Serious Incident

Management of serious incident stress is intended to prevent or reduce Post Traumatic Stress Syndrome (PTSS). Serious incident stress is a complex set of physical, emotional and cognitive responses that are part of our body's protective mechanisms. Stress will affect different people in different ways, if at all.

Research into people's responses to potentially traumatic situations suggests that performing "psychological first aid" can help reduce the incidence of PTSS. Psychological first aid entails many activities that might seem intuitive including: listening, empathy, assessing needs, ensuring that basic physical needs are met, protecting from additional harm, allowing people to abstain from talking and supporting access to family or significant others.



Psychological First Aid During and/or Immediately After an Incident

The following list of behaviors can help to minimize stress reactions. Coach team members to do these things for themselves when possible.

- Address safety needs: secure the scene, and keep people warm, fed, hydrated and organized.
- Inquire about people's immediate concerns and help them feel as secure as possible. Identify if people are fearful about a second incident, and try to identify what might comfort them.
- Be cautious about taking over too many responsibilities or doing too much for people with the intent of helping them. Giving people responsibility and keeping them occupied with useful tasks and incremental goals can help them maintain a feeling of control.
- Highlight what people are doing well during the incident response.
- Find humor where appropriate. This is helpful for people, and it is okay.
- To the best of your ability, keep the group informed about what will happen next. If appropriate, share the plans that are being developed for their support.
- Provide opportunities for individuals and groups to talk with someone when possible and appropriate. Do not force anyone to talk about his or her feelings. For some people, talking about the incident will increase stress.

WFR/WFA SOAP NOTE

Name:		Date:	
Subjective			
Age:	<input type="checkbox"/> Male <input type="checkbox"/> Female	Mechanism of injury/illness:	
Chief Complaint:			
Objective			
Vital Signs:*			
Time	LOR	Pulse	Resp.
SCTM	Temp	Pupils	Blood Pressure
Time	LOR	Pulse	Resp.
SCTM	Temp	Pupils	Blood Pressure
Time	LOR	Pulse	Resp.
SCTM	Temp	Pupils	Blood Pressure
Time	LOR	Pulse	Resp.
SCTM	Temp	Pupils	Blood Pressure
Time	LOR	Pulse	Resp.
SCTM	Temp	Pupils	Blood Pressure
Signs/Symptoms (patient exam):			
Allergies			
Medications:			

Pertinent medical history:
Last Intake/Output:
Events (Recent/Relevant):
Assessment (Problem List – Prioritize)
Changes in Patient’s Condition:
Plan: Emergency Care Rendered/Evacuation Plan:

*LOR = AlertX4 (person, place, time, event) Verbal, Pain, Unresponsive. Pulse = rate, strength and rhythm:

RR = respiratory rate, depth and rhythm. SCTM=skin color, temperature, moisture. Pupils = equality, roundness, reactivity to light.

*OPQRST onset, provokes, quality, region/radiation, severity, time sequence.