

# EVACUATION PROCEDURES



This document describes the standard evacuation procedures and considerations used at NOLS. Individual NOLS locations adapt these procedures to fit their specific local circumstances and resources.

## NOLS EVACUATION PHILOSOPHY

NOLS models self-sufficient wilderness expeditions, and thus expects our courses, if possible and in the best interest of the patient, to run their own evacuations within the School's evacuation support system. Within this guiding philosophy, we will plan the most appropriate and effective evacuation. In some cases, this implies the use of non-NOLS emergency medical, rescue or other evacuation resources.

## PLANNING

The more you know about available resources, the wiser your decisions will be during an evacuation. Prior to going to the field, study your route and consider the possibilities for evacuation.

- Where are you farthest from a road?
- When do you cross obstacles such as passes or rivers that may impede evacuations?
- What unusual road heads or shortcuts may be viable alternatives?
- Which additional maps do you need to find them?
- Will extreme weather change your options?

The program supervisors will have advice on specific evacuation scenarios, and can provide the experience gained with other courses.

## ASSESS THE PATIENT/SITUATION

- Perform the necessary first aid and control the scene. A thorough patient assessment is essential to making a wise decision regarding method and urgency of evacuation. Use available resources and information including
- NOLS Medical Protocols
- NOLS Wilderness Medicine book
- Experience and training of the instructor team.
- For behavioral incidents refer to Student Behavior Protocols <https://drive.google.com/open?id=1DchT-Wh-Vk4leeKbGh75Fu9lDbsFF9Lo>

## DEVELOP EVACUATION PLAN

Determine the type of evacuation needed. Consider:

- |   |                                |
|---|--------------------------------|
| • Urgency of the situation                          | • Group's technical abilities  |
| • Patient's ability to walk                         | • Group's experience           |
| • Need for helicopter, plane, boat or other vehicle | • Weather factors              |
| • Distance to the roadhead                          | • Communication possibilities  |
| • Difficulty of the terrain                         | • Available outside assistance |
| • Group's physical strength                         | • Location logistics           |

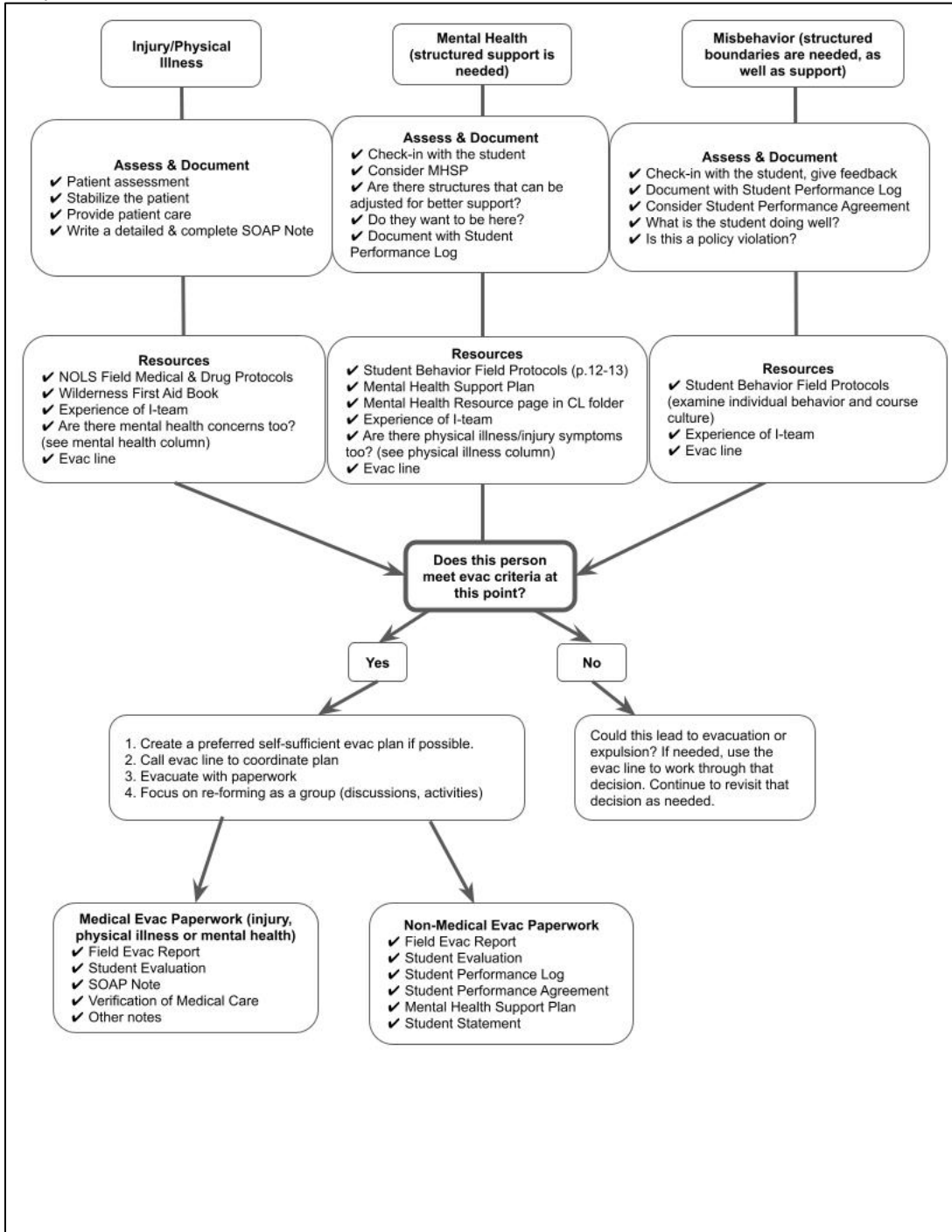
Give each of these points conscious thought. Verbally examine the "why's" of each decision. It will facilitate thorough planning and enhance understanding of the plan for the entire team.

## ORGANIZE

Assume leadership and delegate responsibilities. Keep everyone gainfully occupied. Think through the scenario from camp to roadhead and back to the course, including contingencies for the inevitable changes. Details are important; small omissions in planning can have great consequences and tend to multiply over time. Organization and travel during evacuations is often slower than anticipated, and plans must be laid for altered timetables or equipment failure. Always plan for things to go slower.

## DOCUMENT

Record patient’s condition on the Evacuation Report Form and/or use SOAP notes on additional sheets. Record the mechanism or injury if applicable. For serious incidents sketch or photograph any pertinent or relevant environmental factors that may have contributed.



## COMMUNICATING WITH THE LOCATION

When feasible most locations want to be notified (typically via satellite phone) once an evacuation decision has been reached. This allows them to provide better support to the course and the evacuee.

**THE USE OF ELECTRONIC COMMUNICATION DEVICES IS AS FOLLOWS:**

1. The primary use of satellite phones or PLBs is for notification from the field to school management of the need for emergency assistance in a matter of life or limb.
  
2. Other times when the use of the satellite phone is appropriate is in the following situations, please call the location:
  - To seek medical advice beyond the scope of available resources.
  - To manage evacuation procedures once an evacuation is deemed necessary.
  - To report lost students (24–36 hours overdue or if other factors create greater urgency) or runaway students.
  - To notify location support staff that major logistical changes are necessary, e.g. change of road heads due to weather or other circumstances.
  - To discuss difficult student behavior problems that cannot be handled using the Student Behavior Protocols.

**BEFORE YOU CALL:**

In order to ensure efficient communication and planning it is best to be prepared prior to calling. Please **KNOW WHAT YOU WANT** so that the location program staff can provide the best possible support.

- Determine if you are seeking advice OR informing the location of your potential plans
- Prepare focused questions for the evac coordinator or program staff
- Be able to take notes (have a pen/pencil and paper ready)
- Have your documentation ready
  - Medical SOAP NOTE
  - Non-medical student performance agreement, performance log, and/or other documentation
- Have your evacuation plan ready
  - Patient's first and last name
  - Know your location
  - Know your expected timetable for the evac.
  - Be able to recite your evac plan
  - State requests for additional resources (gear, people, food transportation, support)
  - Be prepared with a back-up plan

**NOLS EMERGENCY CODES:**

In cases of serious injury/illness or fatality, the emergency codes are to be used when contacting the branch. Use these codes **ONLY** in emergency situations. In these situations be succinct! Assume that the call will get cut off and that you need to relay the most important information first.

Plan your message.

Do not shorten codes to the initial letter; use the entire word:

ALPHA = Critical - single life threatening emergency, urgent response required.

BRAVO (+ # if needed) = Situation stable, transportation needed.

DELTA = Single fatality.

ECHO + #involved = Critical, multiple life threatening injuries or illnesses, urgent response required.

ZULU + # involved = Multiple fatalities.

NOLS will respond to Alpha and Echo with helicopter (as conditions permit) with an EMT, paramedic, or flight nurse on board.

**EXAMPLE SAT/CELL PHONE CONVERSATION:**

ring ring - hello this is NOLS RM

caller: Hi this is Drew Leemon on PQR 5/4/15. I have a Bravo situation and request a helicopter for transport of a seriously injured student.

EC: OK, you have one student with a serious injury and need a helicopter?

Caller: Correct. Let me give you our location. Are you ready?

EC: yes, go ahead

Caller: we are at XXX lake, lat xx, long xx. (NOLS generally uses UTM, pilots generally use Lat/Long)

EC: OK I'll repeat that you are at XXX lake, lat xx, long xx

Caller: correct. The patient's name is xxx xxxxxx

If the phone cuts out and you can't talk again, you have enough information to respond. If you can keep talking then you can get more information or discuss a different evacuation plan, get weather data, get the patient's name etc.

### RUNNER/MESSENGER TEAMS AND EVACUATION TEAMS

If electronic communication is not possible and as a backup to electronic communication, then runner/messenger teams can be sent to a roadhead to find a landline telephone to communicate to NOLS location management. The evacuation may be conducted without additional support. Generally, this is when the evacuee is ambulatory or in rare cases is carried out of the field.

The ideal minimum group size for an evacuation or runner team is four; small enough to be efficient, large enough to allow two to remain together if someone in the party is incapacitated while two continue. NOLS courses generally have enough people available for a four-person messenger/evacuation team. The choice of a smaller group may be appropriate in some situations, however, careful thought should be given to the safety, the example, and the opportunity for student participation of in this decision. An instructor should lead the group, if possible. Always have a timetable and plan for returning the runner party to the field.

#### AT THE ROADHEAD:

- Call the location
- Stay with the evacuee until they are turned over to NOLS or authorized personnel.
- Send the completed Field Evacuation Report form and further documentation, in a sealed envelope, with the evacuee.
- All vehicles used during evacuations must be NOLS owned or authorized. Instructors may have to hitchhike to report an evacuation, but avoid, if possible, hitchhiking with an evacuee.
- Likely you'll use a local resident's land line phone or your personal cell phone to contact NOLS
- If you have any expenses, save your receipts in order to be reimbursed.

#### ADDITIONAL TOPICS FOR COMMUNICATING WITH THE BRANCH.

- Branch specific telephone numbers would follow here.
- Some headquarters staff home and office numbers such as operations director or risk management director would be included.
- Specific instructions for the type of electronic communication device(s) used at the branch would be included.

### STANDARD NOLS HELICOPTER INSTRUCTIONS

Helicopter services will request the following information:

- a. Number of patients.
- b. Patient's weight, medical status, and ability to sit up/need to lie down.
- c. Current weather conditions at the landing zone (cloud ceiling, precipitation, wind direction, temperature, etc.).
- d. Latitude and longitude and altitude of the landing zone.
- e. Instructor's name and satellite phone number, many helicopter pilots carry satellite phones. If you have a 2-way radio provide the frequency, call sign / #.
- f. Geographical description of landing zone and distance from observable landmarks.
  - Use an aimed reflecting surface, such as a signal mirror or compass. Reflected light can be easily visible to pilots.
  - Maintain visual contact until the helicopter has landed.
  - Mark your location with tightly anchored, brightly colored markings. Yellow, red, blue and orange are good signal colors, especially if they are day-glo. Dull colors are not very useful.
  - **Failure to anchor and secure objects in the landing zone can result in catastrophic results, i.e. objects get sucked into rotors and cause mechanical failure of the aircraft.**
  - Background contrast is important. Use your signal mirror or reflective device (i.e., compass).

## NOLS GENERAL EVACUATION PROCEDURES

The pilot may choose their own landing site. Be prepared to move the victim to the helicopter after the pilot lands. Landing zones that are 60-foot diameter are best. Think about a football-field-sized space. Avoid LZs near the tops of ridges, which can create tricky winds for the pilot. Clear away loose objects from the landing zone. Other option might include a military aircraft with hoist capabilities or a SAR team trained in short haul evacuations.

Numbers of people on the landing zone will confuse the pilot. One person on the ground should use proper ground-to-air signals. The most important is "land here, my back is into the wind." In most cases, the pilot will shut down the helicopter while the patient is assessed, packaged and loaded. The evacuee's equipment may be a low-priority cargo.

Helicopters may not be able to fly. Helicopters can be grounded by high winds, low visibility, precipitation, and low temperatures and high humidity (rotor blades can ice up). Always have an alternate plan, and inform NOLS accordingly.

Avoid becoming another evacuee:

- Approach a helicopter only when the pilot motions you to do so. Stand or approach where the pilot can see you.
- Do not walk in front of a helicopter or approach it from uphill. Never walk around the rear of the helicopter.
- Be careful on snow, not to slide toward the helicopter accidentally.
- Stay low whenever you are around the rotors.
- Control people on the landing zone.

### ADDITIONAL INFORMATION TO BE INCLUDED IN THIS DOCUMENT MAY BE:

*Cancellation policies*

*Hospital location and contact information*

*Law enforcement agency contact information*

*Program specific information*

*Transportation schedules*

*Rerotation schedules*

*Road head location descriptions*

*Rerotation location descriptions*

*Other specific information relative to the program area.*