CHAPTER 25
LEADERSHIP, TEAMWORK, AND COMMUNICATION
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INTRODUCTION
In 1989, the center engine on a DC-10 passenger aircraft with 296 people on board malfunctioned over the Great Plains. Severed hydraulic lines crippled the pilot’s ability to control the plane. The three-person crew’s response to this crisis was a model of effective communication and teamwork. Working together, and using input from a pilot traveling as a passenger, they improvised a means of controlling the aircraft with the throttles.

Skilled aircrews, rescue teams, and wilderness leaders have found themselves in challenging situations in which communication, teamwork, and leadership are not optimum and things don’t work out well. Aircraft have crashed because flight crews failed to perform a routine task or a team member didn’t speak up to report a problem. Ineffective communication of snowpack and terrain observation has contributed to avalanche incidents. Maps and headlamps left behind have embarrassed wilderness travelers caught in approaching darkness. Experts have unclipped from their climbing anchors, avoiding a dangerous situation only when their observant partners noticed the error.

Human error is a prominent cause of many accidents and critical incidents in team activities. NASA estimates that 70 percent of airline accidents involve some degree of human error. The Teton Park rescue rangers estimates that human error contributes significantly to most backcountry and mountain incidents. When the airline industry realized that well-trained and technically proficient crews could crash airworthy aircrafts because of inadequate crew communication or interaction, it developed a series of programs—known as crew resource management or human factors in aviation—to focus on teamwork, communication, and leadership. The DC-10 crew had this training, and they credit it with helping them manage their emergency.

NOLS LEADERSHIP SKILLS
Leadership at NOLS is timely and effective actions that direct or guide your group to set and achieve goals. In a wilderness medical or rescue scenario, leadership may involve taking charge of a patient or a scene, ensuring a sound assessment and competent treatment, and deciding on the need for and urgency of evacuation. Or it may involve leading a litter carry or technical rescue in remote terrain. The many possible leadership styles - directive, consultative or consensus building for example - all use a core group of skills and behaviors. This chapter blends NOLS leadership skills (competence, self-awareness, tolerance for adversity and uncertainty, communication, vision and action), with lessons from crew resource management, and discusses how they apply to leadership, teamwork, and communication in a wilderness medical and rescue.

Competence
Competence is our proficiency in technical (outdoor and first aid) and group management skills. Ideally, our outdoor, first aid, and group management skills are sharp, and we train to keep them fresh.
If he or she is wise enough to capitalize on the abilities of the team the leader does not need to be a master of every group management or technical skill. For example, in a large rescue operation, a leader may not be the most experienced medical person or the technical rescue system expert. He or she can delegate this task. What the leader needs is sound and timely information from the medical and rescue people to help the leader make good decisions.

**Share Knowledge and Experience.** A directive leader, a common style in a crisis, does not have to act in isolation. Ideally, the leader utilizes the team’s skill and experience to make the best decisions. As with effective air crews, the effective wilderness leader both leads and teaches. He or she takes the initiative and time to make sure that pertinent details on the medical or evacuation plan are shared with team members. Techniques can be explained and practiced before use on the patient. Knowledge and communication strengthen the team. Everyone feels respected and engaged. Higher-quality decisions are more likely to be made.

**Self-Awareness**
Self-aware leaders learn from their experiences by acknowledging their abilities and successes, facing their limitations, admitting their mistakes, seeking feedback from others, and working to understand themselves. They know themselves well enough to know their bad habits and their tendencies, perhaps they slip into the procrastination syndrome, the hurry-up syndrome, the do-it-all syndrome, or the perfectionist syndrome. The following are some behaviors that help avert these patterns.

**Avoid Self-Imposed Workloads.** Self-imposed workloads create stress. A lack of situational awareness when mountaineering (e.g., ignoring building afternoon thunderheads) may cause a hasty descent in rain, wind, and lightning. Conversely, watch for a self-imposed and unnecessary hurry-up syndrome—working fast when you don’t need to and missing details or failing to complete procedures. There are phases to operations, some need immediate action, others have the time to be careful and thoughtful.

**Recognize and Resolve Fatigue.** Actively plan and schedule for transition and rest periods. In the excitement of an emergency, you tend to ignore the effect of fatigue on your performance. Plan ahead, and prepare for the night shift. Will you need to rest, feed people, or find fresh folks to help carry the litter? Outdoor leaders and rescue personnel often work in an organizational culture where fitness and competence are valued. They may have unrealistic attitudes about their vulnerability to stress and fatigue. The author learned a valuable lesson when he was assigned to the night shift on a multiday search. Not wanting to rest when others were working hard, he found something to do. The incident commander noticed this, confirmed that he was on his night shift, and told him in no uncertain terms, “It’s your job to sleep. I need you at 100 percent tonight.”

**Recognize and Report Work Overloads.** Avoid trying to fix everything yourself and taking on too many tasks. Leaders need to be able to step back and keep their eyes on the big picture. The culture of emergency services and outdoor leadership can drive a strong work ethic and a sense that it is inappropriate for the helper to ask for help. It’s a measure of wisdom and maturity to be able to say, “I’m overloaded. Can you help?”

**Reflect and Learn from your Experiences.** Identify not only the technical details of an action - snow pack analysis, map reading, the thoroughness of a patient assessment, the gear that worked and the gear that failed - but as well, consider quality of communication and teamwork, the decisions, the distractions of the mosquitoes. What went well, what could have gone better, and when were you more lucky than competent? Reflect on and learn from these experiences.
Tolerance for Adversity and Uncertainty

Wilderness medicine can be a world of lengthy transport times, arduous conditions, inclement weather, and lack of resources—a test of any leader’s tolerance for adversity and uncertainty. Wilderness medical leaders must be able to live with uncertainty, endure hard work and challenge, and make do or improvise what they lack.

Prepare for Contingencies. Weather will turn bad. Helicopters will be delayed. Radios will break. Stable patients will take turns for the worse. Spring snow that’s firm and supports weight in the morning can become soggy pudding in the afternoon. Stay ahead of the curve by analyzing your plan over and over and asking, what if? What if one of us sprains an ankle? It’s sunny and warm now, but can I keep the patient dry if it rains?

Get Ready for the Long Haul. It’s easy to be focused during the initial stages of a crisis. In wilderness medicine, however, the rubber often meets the road when you move into the long hours of work in difficult conditions as you carry a litter or wait through a storm for the helicopter. Leaders understand this change. They stay connected to the group, keeping everyone informed and focused on the task. They make sure that team members are eating, drinking, and staying warm and dry. They keep the process moving and energy and enthusiasm high.

Be Comfortable with Uncertainty. Medicine is full of uncertainty. There are times we don’t know exactly what injury or illness or patient may have. We often work without the information we need, in uncertain and changing weather, in a fluid and evolving event. Learn to be comfortable in this arena; it’s wilderness medicine.

Communication

Effective leaders master communication skills. They have the courage to state what they think, feel, and want and they listen with openness to different viewpoints. Leaders keep their groups informed and give clear, usable, and timely feedback. They provide a safe forum where each group member can discuss ideas and contribute to the decision-making process.

Build a Team Environment. Build an environment that acknowledges and respects the skills, experiences, and contributions of team members. Your team members should clearly understand their roles and tasks: “Sandy, thanks for staying alert for hazards. I’ll stay at the head of the patient and monitor the airway and c-spine. Jack, finish the head-to-toe assessment and measure the vital signs. Jill, find a foam pad and sleeping bag for the patient.”

Establish a team concept and environment for open communication. If there is an urgent need for action, you may need to focus someone who is rambling or talking about a non-pertinent issue. In general, listen with patience, do not interrupt or “talk over,” and do not rush through a discussion. Include as many team members as possible in the communication flow: brief and update them as needed on weather, delays, plans, and schedules. Students in outdoor education groups, clients in guided trips, helpful bystanders, and local rescue personnel may all be part of your team.

Clearly State and Acknowledge Decisions. Clearly state and acknowledge operational decisions to team members. Restate communications, clarify, and question to see if everyone understands: “We’re going to rig an anchor here and use it to belay the patient to the ground. Let’s go around the group and have everyone say what they will do.”
**Effective Inquiry: Ask and Listen.** Foster an environment where questions are asked regarding actions and decisions. If people do not understand, they should be encouraged to speak up, to ask for clarification of unclear instructions or confusing or uncertain situations. For example:

I don’t understand this technique. . . . I’m not sure what you want me to do. . . . Why are we putting a tourniquet on this snakebite wound? I thought tourniquets weren’t indicated for snakebite. . . . You said you can’t hear breath sounds. Do you mean it’s too noisy to listen or the patient is not breathing?

**Give and Accept Appropriate Feedback.** Give positive and negative performance feedback at appropriate times. Make it a positive learning experience for the whole crew—feedback must be specific to the issue at hand, objective, based on observable behavior, and given with respect and politeness. Likewise, accept feedback objectively and non-defensively. Inhibiting communication by having an unreceptive response to feedback has played a role in accidents.

**Use Appropriate Advocacy and Assertion.** Foster an environment in which your team can speak up and state their information until there is resolution and decision. There are sad tales of a team member or leader making a mistake and another team member having the correct information but not speaking up or asserting his or her perspective. For example: “I’m uncomfortable with your delay in starting an evacuation. John has a persistent high fever. I think we should take him to a doctor.”

You may need to provide a forum for communicating views. As a leader, model advocacy by checking in with your team and listening to their responses. “Are you getting enough direction from me about what you need to be doing? If anyone disagrees, please speak up.”

**Address Conflict.** Disagreements may occur. Personalities may clash. Unresolved conflicts can impede communication and cooperation and contribute to accidents. The leader may need to step in, identify the issue, and ask the team to put aside interpersonal differences until the emergency is over, addressing only immediate issues that are impeding progress or affect safety. Later, when the crisis has passed, it’s important to debrief these issues and emotions, work to resolve the conflict, and increase the team’s ability to deal with its differences. A conflict during a crisis often means that expectations, roles, and responsibilities are unclear. People don’t know what is expected of them or others, are missing information, or don’t have a sense of the big picture. It’s the leader’s job to clarify structure and expectations.

**Vision and Action**

Leaders assure that the group knows the mission. They keep team members informed about the plan and each person’s task. They are decisive when the situation requires decisiveness and patient when it is appropriate to wait or gather more information. They are forward looking and flexible, revising the plan as necessary.
Set an Appropriate Tone to the Situation. Set an appropriate tone of urgency. If the situation isn’t dire, you may need to slow down your team. “Folks, let’s take it easy. We’ve finished the assessment, and the scene is safe. Next we have to splint Bill’s fractured leg, then log-roll him onto a sleeping bag and treat for shock. Let’s take it one step at a time.” Conversely, you may have to remind them to keep conversation and attention on the situation at hand. “Let’s worry about dinner later. Right now, let’s RICE and evaluate this ankle sprain.” Leaders ensure that nonoperational factors such as social interaction or conversation do not interfere with necessary tasks (e.g., small talk does not interfere with climbing signals).

Scene Awareness Researchers observing NASA shuttle crews call this vigilance or watchfulness. Many people call it situational awareness. Pause after scene size up and initial assessment to look over the scene. Seek hazards. Formulate a plan for the next few minutes, but be careful of the trap of creating too much organization. Many scenarios are fluid. Stay alert, and flexible.

Workload Management: State Clear Expectations of Roles and Responsibilities. Make clear roles, responsibilities, and the big picture:

I’ll keep myself visible and in the open in case the rest of the group comes by. John, you’re in charge of Fred and Sally. Scout for the best trail through these boulders back to camp. Check back with me before a half hour is up. Allison, you’re in charge of patient care. Stay with the patient and monitor vitals. Blow your whistle three times if you need me.

A team works well when people know what they have to do and have a sense of where they fit in the big picture. As well, clear expectations prevent people from doing unnecessary tasks or getting in one another’s way. Let others know what you expect of them, and what they can expect from you. “Folks, let’s splint this arm first, then move the patient to the litter.”

Provide Adequate Time for Completion of Tasks. Half-completed tasks—for example, flaps not adjusted on takeoff—have caused aircraft accidents. Backboard straps left loose when a team stops one task to start another are a real possibility on an emergency scene. Identify your key tasks, tell people what needs to be done, allow enough time, and complete each task—one by one.

Brief Effectively. Briefings are clear, complete, and interesting, and address team coordination and planning for potential problems. The team puts aside social conversation or low-priority tasks, pays attention, and asks clarifying questions. Expectations are set for handling possible deviations from normal operations or unusual conditions. For example: “We sent four people walking to the roadhead to ask for help carrying Pete. They should arrive tonight. If we don’t hear from them by tomorrow noon, we’ll send a second team.”

A briefing should be brief. Short and concise briefings help people remember details. Several two or three-minute briefings may be more effective than one 20 minute briefing. Keep it simple. Strive for the three sentence briefing. Brief at phase changes: at the start, when the assessment is done, when you reach an obvious rest stop or obstacle in a litter carry. Brief to keep your team informed. Share information. State decisions and plans. Speak to both who will do it, and how they will do it.

sidebar

A Simple Briefing Format. 
Leader to team

After Action Review/Hot Debrief
Stay Vigilant during Both High and Low Workloads. Look around, check details, and check in with people when you’re busy and when workload is low. It’s easy to focus your attention when you’re on duty and in the middle of the event. It’s harder in the routine situation or when the initial excitement ebbs and the work of a long but apparently routine situation sets in. Accidents can happen when you overlook the obvious, missing the moment when you could have intervened or prevented a problem. How many of us have walked away from a rest break without looking around and noticing the water bottle and map left on the rock?

Prioritize Secondary Tasks. Prioritize secondary tasks to allow sufficient resources for dealing effectively with the important tasks. Talking about whether you will be able to continue your trip in the face of this illness may be the secondary task, the distraction. Feeding your team, having them gather personal gear, and preparing camp may be the primary tasks. Effective leaders keep their teams’ eyes on the ball.

EXPEDITION BEHAVIOR

We have been focusing on leadership, but leaders need teams and teams need good expedition behavior. The two go hand in hand. Expedition behavior is a set of behaviors we value: working together, serving the mission, treating each other with dignity and respect. Expedition behavior is not about leading. It’s an intentional choice to be a good teammate, a good follower, a good citizen.

Good expedition behavior is demonstrated by practical tangible tasks done to support the team. It’s team members taking care of one another, watching for fatigue and hazards, lending a helping hand without being asked and asking for help when needed. Good expedition behavior is treating people with respect and politeness. It is acting without being asked, without complaining and with the good of the group in mind.

Service to the Mission. People engage in search and rescue for many reasons. We want to help people. We enjoy the wilderness. We’re proud of using our skills. We want the challenge. Yet, sometimes we’re assigned boring tasks or we disagree with the plan. Regardless, it’s our job to see the boring task through to completion. It’s our job to work with the team and within the plan. Let us never forget, the mission is the patient.

FINAL THOUGHTS

In my years of wilderness expedition, medicine and rescue experience I have found that the medicine we can practice in the wilderness is often limited; sick people need doctors and hospitals. The quality of care we provide the patient often hinges, not on our first aid skill, but on the quality of our leadership, teamwork, and communication.