

EXPEDITION TO SAFETY

Consolidated Version

Leader's Guide, Fact Sheet & Quiz

Item Number: 4740 © AP Safety Training

This easy-to-use Leader's Guide is provided to assist in conducting a successful presentation.

PREPARING FOR THE MEETING

Here are a few suggestions for using this program:

- a) Review the contents of the Fact Sheet that immediately follows this page to familiarize yourself with the program topic and the training points discussed in the program. The Fact Sheet also includes a list of Program Objectives that details the information that participants should learn from watching the program.
- b) If required by your organization, make an attendance record to be signed by each participant to document the training to be conducted.
- c) Prepare the area and equipment to be used for the training. Make sure the watching environment is comfortable and free from outside distractions. Also, ensure that participants can see and hear the TV screen or computer monitor without obstructions.
- d) Make copies of the Review Quiz included at the end of this Leader's Guide to be completed by participants at the conclusion of the presentation. Be aware that the page containing the answers to the quiz comes <u>before</u> the quiz itself, which is on the final page.

CONDUCTING THE PRESENTATION

- a) Begin the meeting by welcoming the participants. Introduce yourself and give each person an opportunity to become acquainted if there are new people joining the training session.
- b) Introduce the program by its title and explain to participants what they are expected to learn as stated in the Program Objectives of the Fact Sheet.
- c) Play the program without interruption. Upon completion, lead discussions about your organization's specific policies regarding the subject matter. Make sure to note any unique hazards associated with the program's topic that participants may encounter while performing their job duties at your facility.
- d) Hand out copies of the review quiz to all of the participants and make sure each one completes it before concluding the training session.

4740 EXPEDITION TO SAFETY Consolidated Version FACT SHEET

LENGTH: 27 MINUTES PRODUCTION YEAR: 2015

PROGRAM SYNOPSIS:

Jim Elzinga has been climbing mountains and pursuing outdoor adventure for over forty years. Along the way, he has learned many lessons about what it takes to stay alive in hazardous environments. You may be surprised how well his experience in the world of mountain climbing applies to staying safe in the workplace and beyond. In this program, Jim explains in spellbinding detail how the requirements of building a safety culture to survive summating Mt. Everest are no different than what is needed to build a safety culture in the workplace. Viewers will learn valuable safety lessons about the four keys to safety culture: Create it. Embrace It. Believe It. Live It.

PROGRAM OBJECTIVES:

After watching the program, the participant should be able to explain the following:

- Why all team members must contribute to achieve success;
- How success is defined by returning everyone home safely;
- How human nature impacts risk-taking;
- How goal-focused leadership can dismiss the well being of the individual;
- How individuals can embrace his or her role in helping to reach the overall goal;
- How we can use risk assessment to stay safe;
- Why it is important to pass the safety culture down from one generation to the next.

PROGRAM OUTLINE

STAYING SAFE OFTEN MEANS RESISTING TEMPTATION

- "Getting to the top of a mountain is optional. Getting down is mandatory." Jim says this quote is by Ed Viesturs, one of America's greatest mountain climbers. "It means that climbers must be willing to abandon the effort to reach the summit if it threatens their ability to get back down safely. To stay alive, climbers must truly be committed to this concept. It shows up in every decision they make, every action they take. I like to refer to this as 'Living It.'"
- "It is not easy for a climber to turn around and descend when the goal is in sight and seems so easily achievable," he adds. "At this point in a climb, there seems to be an invisible force pulling us onward that grows stronger the closer we get to the top, but to stay safe, climbers must resist this temptation and turn back before an unsafe situation develops."
- "In the workplace, workers can experience a similar force that tempts them to take a shortcut to make a job go faster or easier," Jim continues. "But to stay safe, workers must also resist this temptation and choose the safest way, not the quickest or the easiest way."

SUCCESS: RETURNING EVERYONE HOME SAFELY

- Jim says he has been climbing and pursuing outdoor adventure for over 40 years and along the way, he has learned many lessons about what it takes to stay alive in hazardous environments. "And you may be surprised how well my experience in the world of mountain climbing applies to staying healthy and alive in your world, here in the workplace and beyond."
- "Reaching the top is not my definition of success on the mountain. For me, success also means getting everyone to the bottom again, safe and alive," Jim says. "This must also be the goal at your facility, to return everyone home safely at the end of each shift."
- "This may seem simple, but when faced with everyday pressures and challenges, this commitment can fade and people die. That was certainly the case on my first expedition to Mt. Everest in 1982," he continues.

BREAKDOWN OF SAFETY PROTOCOLS LEADS TO FATALITIES

- On his first expedition to Everest, Jim was a member of a very large national expedition. The stated goal and primary focus was to place a Canadian on the top of Mt. Everest for the first time in history. He says he later learned this was not the goal we should have been focused on.
- According to Jim, the problem was what lay between base camp and camp 1: the Khumbu Ice Fall. "The icefall is a huge glacier that moves at a rate of over three feet or about one meter per day. Because the glacier is constantly flowing down the mountain, it can open up huge crevasses in the ice and cause large towers of ice to fall over without warning."
- "Because of the hazardous, unpredictable and uncontrollable conditions in the icefall, it is not uncommon for people to be killed while climbing through it. So why go this way?" asks Jim. "For some, traversing the icefall is a rite of passage and a tribute to earlier climbers, like Sir Edmund Hillary and Tensing Norgay who have passed through before them. And the vast majority of climbers end up here because it's simply 'the way it's always been done."

- "Does that sound familiar to any of you? Well, I can tell you, in mountain climbing and here in your workplace, blindly following tradition and 'doing it the way it's always been done' is not necessarily the best way to deal with hazards or unsafe conditions," says Jim.
- He adds that unfortunately, like many expeditions before and after them, the leadership of our 1982 expedition to Mt. Everest chose to take on the Khumbu icefall.
- "Our plan for the icefall was to send lead climbers to establish anchors into the ice and snow and lay a trail of secure, fixed lines so subsequent climbers could clip onto the fixed line and ascend safely," notes Jim. "To cross the crevasses, we lashed together long aluminum ladders and anchored them on either side of the crevasse."
- They would then install a fixed line across the crevasse so climbers could clip in and cross the ladder safely. These fixed lines and ladders were part of our plan to ascend the icefall. They thought they were being safe; they had no idea what was to come, says Jim.
- "Another part of our safety plan was our communication protocol. This was a set procedure in which the lead climbers at higher elevations would inform those lower down of weather conditions and avalanche hazard," Jim adds. "The protocol that everyone was familiar with was that this report would be delivered by radio at 3 a.m. each morning. For the climbers at base camp, this would determine if it was safe to enter the icefall and begin carrying loads up from base camp to camp 1.
- Jim says good communication is a key element of any safety plan. When communication breaks down, people can easily assume they know how best to proceed and that all hazards have been controlled.
- During this time, their team leader, Bill, was part of a group of lead climbers who were installing the anchors and fixed lines along the route to camp 2. This was exhausting work and Bill was very fatigued and wasn't acclimatizing well to the altitude.
- That evening, Bill decided to change the radio call to base camp from 3 a.m. to 5 a.m. so he could sleep in. Another climber, Dave, thought that was a bad idea and offered to get up at 3 a.m. and make the call. "Bill bluntly refused the offer, telling Dave that only the team leader could make the call and that he would make it at 5 a.m.," says Jim.
- "Making safety decisions under physical or mental duress can lead to a serious incident," he adds. "In our case, Dave recognized the potential problem and tried to speak up, but the leadership culture of our expedition didn't allow for the input of other team members."
- That night, unbeknownst to the climbers at base camp, it snowed over three feet, one meter, at camp 1. This created an extreme avalanche hazard on the slopes just above the icefall.
- Unfortunately, back at base camp, when no radio call was received at 3 a.m., the climbers assumed it was safe to proceed," says Jim. "For the climbers and Sherpas at base camp, it was business as usual and they began ascending the icefall."
- Jim adds that the fact that the base camp climbers were willing to proceed assuming "someone" had received the radio report is a sign of a breakdown in leadership and safety culture. Similar breakdowns occur in workplaces when safety procedures are skipped and workers make assumptions about their safety.
- "Back up the mountain at 5 a.m., just as Bill was making the radio call to base camp to report the avalanche danger, there was a loud boom and all of that new snow broke off the steep face of the mountain, forming an avalanche half a mile wide and heading towards the icefall at nearly 200 miles per hour," says Jim.
- At base camp, Jim was awoken by the roar of the onrushing avalanche and rushed out of his tent where he saw this huge white wall as high and wide as he could see, just storming out of the sky and into the icefall. "It was literally blasting tons of ice and snow out of its way like a runaway freight train. When it all settled, we realized that a massive avalanche had come down into the icefall and rolled right over the climbers and Sherpas," he says.
- "To this day, I still get angry about this because I know those climbers would not have been there but for the breakdown of our safety protocols and the culture of poor leadership that had taken hold in our expedition," notes Jim.
- After a frantic rescue effort, it was determined that the avalanche had killed three Sherpa climbers. The Sherpas are the indigenous people who live in the Mount Everest region. "We were only able to recover one body," says Jim. "To this day, the other two Sherpas remain buried up there under tons and tons of ice and snow."
- They were able to carry the one body down to a nearby village called Dughla which lies in the shadow of Mt Everest where the families of the Sherpa had gathered to perform their cremation ceremonies.

THE DESTRUCTIVE NATURE OF GOAL-FOCUSED LEADERSHIP

- "On our return from Dughla, I led a small group of climbers back into the icefall to re-lay the anchors and fixed lines and repair the broken ladders in order to reestablish the route to camp 1," says Jim.
- "After finally reaching camp 1, we were resting and reflecting on the tragic events when I decided to radio down to base camp to check in," he continues. "That's when I got the shocking news that a large section of the icefall had collapsed and killed my friend and teammate, Blair Griffiths."
- They checked in with our team leader Bill, and he said they were to leave Blair's body half buried under the ice and continue to push up the mountain towards the summit. "I couldn't believe what I was hearing," says Jim.
- When Bill later decided to address the safety concerns with the group as a whole he said, "Everest is cold and hard and if more people die, we are going to leave them there and keep marching up the mountain."
- "That was the breaking point for some of the climbers and several left the expedition right then and there," notes Jim. "I decided to sleep on it and stay another night. I had invested three years of my life in the expedition and didn't want to give up too easily."

- When he woke the next morning and tried to make sense of everything that had happened, he kept coming back to safety and leadership. "I realized that safety must be a core value that is held equally by everybody, especially but not only by leadership," says Jim.
- "I concluded that trust in leadership could be irreparably damaged when leadership blindly dismisses individual concerns and reaching a goal is deemed more important than the well being of individuals," he continues. "Once I recognized the brokenness of our current situation, I knew I had no choice but to walk away."

ACHIEVING A GOAL BY PUTTING OTHERS' LIVES AT RISK IS NOT A SUCCESS

- "Over half of the expedition joined me in walking away from what we saw as an unsafe situation. The remaining climbers continued up the mountain and two Canadians, supported by three Sherpas, eventually reached the summit, making the expedition a success in the eyes of its leadership and to the casual observer," says Jim.
- He adds that what he has learned is that achieving a goal by putting other's lives at risk should not be considered a success. "This is why I always refer to this 1982 expedition as a failure."
- Jim tells the audience that "I was so affected that I felt compelled to return to the mountain and bring with me a new approach to climbing. I knew that a return expedition to Mt. Everest must have the fundamental goal of bringing everyone back alive and that to do this, safety would have to be held as the highest value by all team members and leaders."

CREATING A VALUE-BASED SAFETY CULTURE

- "So you can see there are strong similarities between my inspiration to achieve a culture of safety in a climbing expedition and an organization's inspiration to achieve a culture of safety in the workplace," he adds.
- Jim says it takes all of us to make it happen. "Whether you are in management, are an experienced worker or are the newest employee, take the lessons learned from our failed expedition and apply them to your daily work."

THE RELATIONSHIP BETWEEN HAZARD AND RISK

- Jim says in order to prevent injuries we need to understand the relationship between hazard and risk. For example, an unstable snowfield on a remote mountain slope or an unguarded machine in an empty workplace are hazards, but neither one of them presents any risk until a climber makes his way onto the slope below or a worker enters the work area near the machine."
- "Because of this relationship between hazard and risk, I knew that I needed to separate the climbers from exposure to the hazards of the mountain. Your organization uses this same concept to reduce risk and prevent injuries here in your workplace. A well-designed safety program uses safe work procedures, machine guarding, protective equipment and other measures to separate workers from exposure to hazards, thus reducing risk."

THE IMPACT OF HUMAN NATURE ON RISK-TAKING

- "To understand and manage risk, you need to understand a little about human nature. People do not take risks unless there is something to be gained from it. I would not have been climbing all those mountains for the last four decades if I didn't get something from it. The problem with this is that people can become so focused on the potential pay off of the risk that they lose all perspective of the potential loss," says Jim.
- "For example, many climbers die on Mt. Everest when they become so fixated on reaching the summit that they lose all perspective of the dangers around them," he adds. "Many exhausted and dehydrated climbers continue to press on, well past the point of any reasonable chance to survive the effort, only to die of oxygen deprivation and exposure as they get near the summit or on the way back down."
- Jim notes that one section of the mountain near the summit is so littered with bodies dressed in brightly-colored climbing gear that everyone calls it the "rainbow valley." "This is an example from my world of a very skewed weighing of the potential gain against the potential cost of risk."
- "You might think these climbers are crazy to press on like that and I certainly don't condone it, but I can at least understand it because I know all about the years and years of hard work and training and planning that goes into a once-in-a-lifetime attempt to reach the top of Mt. Everest," Jim continues.
- "What I can't understand are the chances some of you are willing to take here on your job," says Jim. "And just like climbers, I find that workers frequently overinflate the benefit they might derive from a risky action and they consistently underestimate the potential loss that might occur."
- "In reality the potential gain from skipping a safety procedure can only be a few minutes of time or maybe working for a moment without wearing uncomfortable protective gear, but the potential cost in money from lost time or the pain from injury or the impact to your family if you are killed is huge, almost immeasurable," he adds.
- If you are one of the ones taking risks here at work, you really need to stop and re-think what you are doing because you clearly have a very skewed perspective of risk and reward and the value of your own health and life," concludes Jim.

USING RISK ASSESSMENT TO STAY SAFE

• "As for me I was performing these same exact types of risk assessment," continues Jim. "Remembering the four deaths that occurred in '82, I simply could not find a way to reduce the risk of climbing through the Khumbu icefall to an acceptable level."

- "So I came up with the only solution possible that was also compatible with the core safety values of our expedition. We would climb the mountain from the other side, from Tibet, bypassing the icefall altogether. In doing this, we would be attempting to ascend a side of the mountain and on a route that had never been climbed before," says Jim.
- "I encourage each of you and your management teams to also be willing to think in terms of alternatives to the way things have always been done and seek out new ways of doing things that will reduce risk," he adds. "This is a creative way of embracing your responsibility for your own safety and the safety of everyone you work with that could take your facility's safety standard to a whole new level."

THE IMPORTANCE OF MEASUREABLE MILESTONES IN ACHIEVING A LARGER GOAL

- "So just to give you an idea of our planned route, from base camp we would climb up to the site of camp 1 which was at 19,000 feet," says Jim. "From there, we planned to move our supplies across the mountain and then up 1,000 vertical feet to establish camp 2 at 20,000 feet."
- He adds that using camp 2 as a high-altitude advance base camp, they would push on up the mountain to camp 3 and then establish camp 4 at 24,000 feet.
- The most logistically challenging part of the expedition would be establishing camp 5, according to Jim. "This would require carrying equipment and supplies from camp 4 over a mile and a half traverse to the site of camp 5 which would be established at just over 25,500 feet."
- "We found it really helpful to focus on this plan and on establishing each camp one at a time," Jim notes.
- "And this is exactly what I would encourage you and your organization to do. Establish some milestones, some measurable steps that each worker and each department can focus on as steps towards the larger goal," he continues. "Every organization is different, but some examples could be to achieve a certain number of housekeeping inspections each month or a certain number of job safety observations per worker. Perhaps each department would set a goal for 100 percent PPE compliance or performing a certain number of job safety audits each quarter."

TEAM MEMBERS MUST BELIEVE 100 PERCENT IN THEIR INDIVIDUAL EFFORT TOWARDS ACHIEVING THE GOAL

- "Remember, stepping onto the pinnacle of a mountain is only possible because of the many hard fought steps previously taken by each individual team member, the majority of whom will never get the opportunity to reach the summit," says Jim. "These team members believe 100 percent in the plan to reach the summit and embrace their individual roles in making it happen."
- "Organizations who achieve a world class safety culture have employees who believe 100 percent believe that reaching the pinnacle of safety is achieved in the same way that reaching the pinnacle of Mt. Everest is achieved; one step at a time taken by individuals working towards a common goal," says Jim.

SHARON WOOD 'LIVES IT' BY DECIDING TO CALL OFF THE SUMMIT BID

- "In theory, every climber on our expedition had a chance to be chosen for the summit bid, but ultimately it came down to who was performing the best and was also the healthiest," says Jim. "Dwayne Congdon and Sharon Wood were selected for the summit bid
- "Of course, there was no guarantee that Dwayne or Sharon would get to the summit. There were a thousand things that could stop the ascent and mandate turning back, but the guarantee they did have was that they would get the best of the resources we had left and have the benefit of everyone's freshest effort to support their summit bid," he adds.
- Jim says Dwayne and Sharon descended down to base camp to rest up while the rest of the team went back up the mountain, making sure everything was in place for their summit bid.
- "Once everything was in place, Dwayne and Sharon, along with three support climbers, made their way up to camp 5 at 25,500 feet and began assembling the supplies they needed for their summit bid," he continues.
- "This is when Sharon discovers that there are several fuel canisters missing which means that she and Dwayne won't have enough fuel to melt snow for drinking water. This is a major problem because at these altitudes and conditions, a dehydrated climber can quickly become a dead climber," Jim explains.
- Sharon immediately recognized the danger of the situation and radioed down that the summit bid should be called off, according to Jim. "This was a huge decision for her because she was poised to become the first woman from the western hemisphere to reach the summit of Mt. Everest. Sharon was truly 'living It' by making a decision that her and Dwayne's safety were more important than her personal ambitions."
- "I'm telling you again that is not an easy choice to make and it is also the type of choice each of you must be willing to make in similar circumstances," Jim says. When unsafe conditions develop while performing your job, you must be able to stop the work until the conditions are corrected. That's 'living it.'"

ALL TEAM MEMBERS CONTRIBUTE TO ACHIEVING SUCCESS

• "While Sharon was on the radio calling off the summit bid, we were all frantically digging in the snow looking for the lost fuel canisters. Surprisingly, we found one fuel canister buried in a place it had no business being," says Jim. "This one canister was just enough so Sharon and Dwayne were back on track. To this day, I have no idea what happened to the other missing fuel canisters or how this one canister ended up where it did."

- The next morning Dwayne, Sharon, Jim and two support climbers climbed for over 10 hours to reach 26,800 feet and establish the final camp, camp 6.
- "Once we got them settled into camp, the support climbers and I descended back to the lower camps leaving Dwayne and Sharon alone at 26,800 feet on the north face of Mt. Everest," Jim says.
- "Due to volatile conditions, they were unable to set out the next morning until 9 a.m. and start climbing towards the summit, which was still more than 2,000 vertical feet above them at 29,029 feet," adds Jim.
- He says that as they are climbing we are in radio communication and after several hours, they finally hear Sharon say, "We think we see the summit, we're almost there." But then we hear that it was a false summit, just a hump in the ridge they were climbing and from there, it was one false summit after another, but they kept pressing on, one step at a time and eventually at 9 p.m., 12 hours after they first set out, we get word by radio that they are now standing on the summit of Mt. Everest."
- "Down below, we all celebrated our success in getting them to the top because we all had a part in achieving it," notes Jim. "It took all of our efforts, every one of us, to reach such a seemingly impossible goal."
- It's like that here at your organization also, according to Jim. Creating a safety culture where zero injuries are possible can be achieved when each person "lives it" by putting safety into each choice and decision they make.
- .• "Each day at work, there are hundreds of choices and decisions that must be made. Each one must be made with worker safety in mind. Many of these decisions may seem small to you at the time like, 'Am I going to inspect my tool before I use it?' or 'Am I going to correct this tripping hazard?'" But every decision is important and the cumulative result of all of these individual safety decisions becomes your organization's safety culture."

PASSING DOWN THE SAFETY CULTURE FROM ONE GENERATION TO THE NEXT

- .• "We had reached the pinnacle of Mt. Everest and I was very proud of what we had done. We had successfully climbed a new route up Mt. Everest, Sharon Wood became the first woman in the western hemisphere to reach the summit and most, importantly we brought everyone back off the mountain safely," says Jim.
- .• So, what's next? Well, for me I truly love climbing and I continue to climb all over the world," Jim continues. "And as I climb, and you may be surprised to hear me say this, I'm not the youngest climber out there. In fact, I'm one of the oldest. And as an experienced climber, what I really enjoy is mentoring younger climbers, teaching them the skills and techniques I have learned over the years to help them be successful climbers."
- "I teach them many of the same safety and survival lessons I have shared with you today," he adds. "You see the safety culture we created on our Everest expedition didn't end with the final descent, it went home with all the climbers. And we have passed it down from older climbers to younger climbers not only through words, but through our actions, by our example."
- "The same can be true of your workplace, or any workplace that has developed a successful safety culture. Once established, a safety culture can be passed down to the next generation of workers by the words and deeds of experienced workers. And when that happens, when a zero-injury safety culture becomes self-sustaining because the workers value it enough to pass it down, that's when you know that your organization has truly reached the pinnacle of safety," Jim says.

EXPEDITION TO SAFETY *Consolidated Version*

ANSWERS TO THE REVIEW QUIZ

- 1. c
- 2. d
- 3. c
- 4. a
- 5. c
- 6. a
- 7. b
- 8. a
- 9. c
- 10. c

EXPEDITION TO SAFETY

Consilidated Version REVIEW QUIZ

The following questions are provided to determine how well you understand the information presented in this program

•	The joilowing questions are provided to determine now wen you understand the injornation presented in this program.	
Na	ameDate	
1.	Which of the following statements best describes the definition of success?	
b. c.	Reaching the top of a mountain Giving 100 percent effort Returning home safely All of the above	
2.	Which of the following factors contributed to the climbers being in the icefall during an avalanche?	
b. c.	Making decisions under mental and physical duress A leadership culture that discouraged group input Making assumptions All of the above	
	After Jim Elzinga and many others left the 1982 expedition, the remaining climbers eventually reached the summit of Mt. Everest. hy does Jim Elzinga refer to this expedition as a failure?	
b.	Because he quit and did not reach the summit Because the expedition was over budget Because the goal was reached by placing lives at risk	
4.	Separating workers from exposure to hazards is a way to reduce risk.	
	True False	
5.	To what does Jim Elzinga attribute a person's willingness to take extreme risks?	
b. c.	Unforeseeable circumstances Bad habits and poor training A skewed perspective of risk and reward Succumbing to peer pressure	
6.	According to Jim Elzinga, one common mistake people make is underestimating the severity of the consequence of risk-taking.	
	True False	
a. b. c.	What does Jim Elzinga encourage workers and organizations to do to prevent being overwhelmed by a large goal? Don't discuss the larger goal publicly Focus on smaller and measurable milestones Remind everyone that goals are management's responsibility Decide not to strive for challenging goals	
	In order to remain safe, workers must resist the temptation to perform a job in the quickest or easiest way and instead perform eir job in the safest way.	
	True False	
	Which of the following best describes the concept of "Living It"? Do anything it takes to get the job done	

- b. Never quit no matter what
- c. Be willing to stop or walk away if things become unsafe
- d. Place personal ambitions ahead of personal safety
- 10. When Sharon Wood discovered that several fuel canisters were missing, what did she do?
- a. Insist that she and Dewayne press on towards the summit
- b. She decided to attempt the summit alone
- c. She called for the summit attempt to be called off