Training Solutions, Delivered!

EXPEDITION TO SAFETY

Comprehensive Version

Leader's Guide, Fact Sheets & Quizzes

Item Number: 4741

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 Sheets that in this Leader's Guide to familiarize yourself with the program topic and the training points discussed in the program. The Fact Sheets also include a list of Program Objectives that detail 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 Quizzes included at the end of each of the four sections of this Leader's Guide to be completed by participants at the conclusion of the presentation. Be aware that the pages containing the answers to the quizzes comes *before* the quizzes themselves.

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 Sheets.

c) Play each module 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 quizzes to all of the participants and make sure each one completes them before concluding the training session.

EXPEDITION TO SAFETY
Module 1: CREATE IT
FACT SHEET

LENGTH: 17 MINUTES

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 first module of "Expedition to Safety," entitled "Create It," Jim encourages members of a live audience to become involved in creating a "value-based" safety culture that puts emphasis on individual well being instead of achieving a goal more easily or quickly. Jim's story about his first expedition to Mt. Everest will teach viewers valuable safety lessons about the pitfalls of breakdowns of safety protocols, poor communication, poor decision making and goal-focused leadership.

PROGRAM OBJECTIVES:
After watching the program, the participant will be able to explain the following:
- How success is defined by returning everyone home safely;
- How breakdowns in protocols, poor communication and poor leadership can damage the safety culture and cost lives;
- How goal-focused leadership can dismiss the well being of the individual;
- How confidence and trust can be adversely affected when people's concerns are ignored or dismissed;
- Why achieving a goal by putting others' lives at risk should not be considered a success;
- How everyone can become involved in creating a "value-based" safety culture.

PROGRAM OUTLINE

SUCCESS: RETURNING EVERYONE HOME SAFELY
- "The universe doesn't care about you, what you think, want, feel or believe." This quote comes from the world I have lived in for the last four decades—the world of mountain climbing," says Jim. "What it means to me is that even with our grandest plans and our noblest beliefs; we are really a small piece of matter in a very large universe."
- "And as climbers, if we put ourselves in harm's way with no plan for our safety, we are literally placing our lives at the mercy of the random uncontrolled hazards around us," he adds.
- Not placing your life at the mercy of uncontrolled hazards is important for mountain climbers, and it is equally important for anyone who works in a job with potential hazards around them; in other words, for all of us.
- 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.
- High-altitude mountaineering is defined by hazards, uncertainty and changing conditions, says Jim. "It requires good communication and decision making for teams to perform at a high level and stay safe."
- "This is like many workplaces; hazards, uncertainty and changing conditions require good communication and decision making to keep all workers safe," he concludes.

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.

- "When you climb a mountain like Everest, really when you try to reach any difficult goal, you need to break it into smaller, more manageable segments," Jim says. "In mountaineering, we establish a series of camps at ever-higher altitudes to support and protect the climbers as the mountain is ascended."
- "On this expedition, our first step was to establish our base camp at 17,500 feet and then camp 1 at 19,000 feet," he adds. "We would carry all the supplies and climbing gear we needed from base camp to camp 1."
- 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 Mount 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.
- "Now, I understand that this was a classic example of goal-focused leadership; when leaders decide that reaching a goal is more important than the well being of any individual; when a hazardous condition is left uncorrected so the goal can be more easily or quickly achieved," he adds. "In fact, there were other members of the team that seemed to have this same attitude."
- Jim says a group of them went against Bill's orders and dug Blair's body out and carried him back down to basecamp and then on down to Dughla, where he was cremated in a very moving ceremony.
- "At this point, I was deeply concerned about the leadership and safety of the expedition. Before Blair's cremation, Bill took me aside and asked me what I was thinking and feeling," adds Jim. Jim was happy he asked him for his input so he was very open and honest with him about his concerns. Bill's response to him was shocking. He said, "You know Jim, you will never become a world class climber. You care too much for the Sherpas and you care too much about people."
- "That was an eye-opening moment for me," says Jim. "I was learning firsthand the harm that can be done to team confidence and trust when people are asked for their open and honest comments and they are summarily dismissed or ignored by leadership."
- 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 it is really quite difficult to impress upon them the impact that all of the tragedies and circumstances of that 1982 expedition had upon him. "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

- "All too often I hear of tragic injuries or senseless fatalities that have deeply impacted an organization, its workforce and its leader, so much so that they vow to change the culture so that the fundamental goal is for all workers to return home healthy and whole at the end of each work day. It's too bad it has to happen that way," says Jim.
- "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."
- "Don't blindly continue to perform job functions just because they have 'always been done that way.' Be open to other methods or ideas that may offer a better or safer way to do it," Jim says.
- "Avoid the pitfalls of poor communication," he continues. "Make certain that everyone involved in a task knows the plan and can verify that all hazards are controlled. Never make assumptions about safety."
- Jim encourages the audience to foster a culture that allows workers at all levels of the organization to speak up when they see unsafe acts or unsafe conditions and build trust by listening and giving fair consideration to the comments and concerns expressed by all workers.
- "This is exactly the type of safety culture I would strive to create when I returned to Everest in 1986. A culture I call a "value-based" safety culture. And every aspect of our commitment would be fully tested as we strove to safely overcome the challenges of the world's highest mountain," Jim concludes.

EXPEDITION TO SAFETY:
Module 1: CREATE IT

ANSWERS TO THE REVIEW QUIZ

1. c
2. b
3. d
4. c
5. b
6. c
7. c

EXPEDITION TO SAFETY:
Module 1: CREATE IT
REVIEW QUIZ

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

Name_____Date_____

1. Which of the following statements best describes the definition of success?

a. Reaching the top of a mountain
b. Giving 100 percent effort
c. Returning home safely
d. All of the above

2. When faced with hazards and unsafe conditions, it's always best to do things "the way they have always been done."

a. True
b. False

3. Which of the following factors contributed to the climbers being in the icefall during an avalanche?

a. Making decisions under mental and physical duress
b. A leadership culture that discouraged group input
c. Making assumptions
d. All of the above

4. Which of the following best describes being "goal-focused"?

a. Breaking large goals into small milestones
b. Creating procedures to help reach the goal
c Reaching the goal becomes more important than the safety of individuals

5. The safety culture of a group can be damaged when leadership ignores or dismisses the ideas and input of group members.

a. True
b. false

6. After Jim Elzinga and many others left the 1982 expedition, the remaining climbers eventually reached the summit of Mt. Everest. Why does Jim Elzinga refer to this expedition as a failure?

a. Because he quit and did not reach the summit
b. Because the expedition was over budget
c. Because the goal was reached by placing lives at risk

7. Jim Elzinga vowed to return to the mountain with an expedition committed to a value-based safety culture. Which of the following best describes a value-based safety culture?

a. The primary focus is reaching the goal
b. Leadership has sole input for all decision making
c. Safety is the highest value held by team members and leaders

EXPEDITION TO SAFETY
Module 2: EMBRACE IT
FACT SHEET

LENGTH: 15 MINUTES

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 second module of "Expedition to Safety," entitled "Embrace It," Jim encourages members of a live audience to embrace their responsibility for their safety and the safety of their co-workers in order to take their facility's safety standard to a new level. Jim recalls events surrounding his two expeditions to Mt. Everest to teach valuable safety lessons about the relationship between hazard and risk, the consequences of underestimating the potential loss from risks, the four dimensions of risk and using risk assessment to reduce the probability of an incident occurring.

PROGRAM OBJECTIVES:
After watching the program, the participant will be able to explain the following:
- Why everyone has an individual responsibility for his or her own safety:
- How the relationship between hazard and risk works;
- How human nature impacts risk-taking;
- What the four dimensions of risk are and how we must considered when making safety-related choices:
- How we can use risk assessment to stay safe.

PROGRAM OUTLINE

INDIVIDUAL RESPONSIBILITY FOR SAFETY
- "Mountains are neither fair nor unfair, they are just dangerous." This quote comes from one of the most famous mountain climbers in history, Reinhold Messner. "What I think he meant is that the mountain is always dangerous and it is our choice as climbers whether or not we are exposed to those dangers," Jim says. "Therefore, no matter what happens, it is our choice to be there, to take the risk. The mountain itself is neither fair nor unfair; the mountain just is, with no judgment or prejudice."
- "This is a really important lesson for climbers because it means that each climber has an individual responsibility for their safety during a climb. They can't blame the mountain when things go wrong; they can only blame themselves for either not anticipating the danger or not putting the proper measures in place to control the dangers," he adds.
- "This is also an important lesson to remember in the workplace. Each worker has an individual responsibility for their safety in the tasks they perform," continues Jim. "They too must anticipate the dangers and ensure measures are in place to control those dangers in order to stay safe."
- He says that some people try and avoid this responsibility, but his advice to the audience is to embrace it and be thankful for it. "Don't be afraid to analyze the hazards around you and take action to ensure your safety. To do otherwise is to be a risk taker, relying on others or dumb luck to survive."
- "Your workplace, just like the mountains, does contain hazards and these hazards are neither fair nor unfair. Your ability to recognize these hazards and take correct action is the key to staying safe," Jim concludes.

THE RELATIONSHIP BETWEEN HAZARD AND RISK
- "After decades of making literally thousands of safety decisions in the extreme environment of the world's highest mountains, I have learned that staying safe often comes down to individuals making choices and good decisions in the face of uncertainty and danger," says Jim.
- What we are talking about here is managing risk and I want to share with you some simple concepts that can be used daily by individual workers as well as management to prevent injuries," he continues. "These are the same concepts I have been using for decades and I applied them in planning our second expedition to Mt. Everest."

- Jim says in order to prevent injuries we need to understand the relationship between hazard and risk. There are hazards everywhere, all the time. There are hazards in the mountains, there are hazards in the workplace and there are hazards in the home.
- "But risks are different," notes Jim. "Risks involve people and a person becomes 'at risk' only when they are exposed to a hazard. 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, and when that was not completely possible, to limit the sheer number of climbers who were exposed thus eliminating all unnecessary risk," he says.
- "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," adds Jim. "When I say embrace It, I mean take on your workplace safety program as your own—it belongs to you and everyone you work with, not just to management or the company."

THE IMPACT OF HUMAN NATURE ON RISK-TAKING

- "In reflecting back to the tragic events of the 1982 expedition, I realized that the sheer size of the expedition, over 25 climbers and 40 Sherpas, exposed a large number of people to the hazards of the mountain," Jim says. "To reduce this exposure, I decided that our return expedition must be much smaller."
- To keep the number of climbers small, they decided not to hire any of the indigenous Sherpas to help carry loads. They would carry all the loads ourselves. They also decided not to use supplemental oxygen and only carried a minimal number of oxygen tanks, reserving them only for the climbers in their final attempt to reach the summit or for a medical emergency. Because this new approach to climbing required fewer people and fewer supplies, they started calling this new expedition Everest Light.
- "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.

THE FIRST DIMENSION OF RISK: Probability

- "As a climber who wants to stay alive I am passionate about understanding risk and perhaps I study risk a little more than the average person. In doing so I have come to understand that there are four dimensions of risk that should be well understood when making safety-related choices and decisions. These dimensions are probability, consequence, vulnerability and exposure," says Jim.

- "The first dimension of risk is probability. Probability is a measure of chance," he continues. "To stay safe we must always try to assess the likelihood of a hazardous event occurring so we can decide if we need to take action."
- Jim says that in studying various incidents, he has learned that many people make an incorrect assessment of probability because they make false assumptions about certainty, such as "I'm certain the power is off on this machine" or "I'm certain this ice will hold me" or "I'm certain my ladder won't fall over."
- "In my experience, in the mountains, in the workplace or at home, you just can't assume that kind of certainty; you have to take some type of action to bring the probability close to zero," he adds. "This is why here in the workplace, certain procedures and permits are required before certain types of work are performed. Following each step of the required safety procedure brings the probability of an incident close to zero."
- "On the mountain, we may construct a snow profile to help us determine the stability of the slope, to give us a measure of avalanche hazard. At home or at work you may have someone hold your ladder or you might tie it off to ensure three-point contact. It's up to you to embrace your responsibility and take action to reduce the probability of injury," Jim says.

THE SECOND DIMENSION OF RISK: Consequence

- Jim says the second dimension of risk is consequence. Consequence can be defined as the possible outcome of the risk. "For example, when climbers pass through the Khumbu icefall on their way up Mt. Everest, if the ice shifts or an avalanche strikes, the consequence is often death. Now that is consequence with a capital C!"
- "The measures we choose to take to protect ourselves are determined by our estimate of the consequences of the risk. For example, we all know that the consequences of a car crash can be severe, so we probably all agree that we should reduce our chances of crashing by not running red lights and not driving without seatbelts or while impaired or distracted," he adds.
- "One common mistake people make is underestimating the severity of the consequence of risk taking," notes Jim. "For example, a simple little trip and fall can cause serious injury or even death; yet, every day employees take this risk by running through the workplace or by not paying attention to where they are going. They have failed to consider the consequence of their risk taking."
- "So another tip I'll give you to stay safe is to take a moment to consider the consequences of risk and then take some type of action to protect yourself," says Jim.

THE THIRD DIMENSION OF RISK: Vulnerability

- According to Jim, the third dimension of risk is vulnerability. Vulnerability is the susceptibility of a person to the consequence of risk. For example, some extreme rock climbers climb without ropes or harnesses. If a climber without ropes or harnesses were to fall he would hit the ground and likely die. This type of climber is extremely vulnerable to the consequences of falling.
- "So, to climb mountains more safely, we use industry-approved ropes and equipment to secure ourselves securely to the mountain and reduce our climbers' vulnerability to the consequences of falling," he adds. "This system of ropes and anchors allows climbers to move up and down the
mountain safely."
- "The safety lesson here is that there are countless measures each of you can take to reduce your vulnerability. Seat belts, bicycle helmets, life jackets and protective equipment are just a few common examples," says Jim.

THE FOURTH DIMENSION OF RISK: Exposure

- "The last dimension of risk is exposure. Exposure is like the volume control on risk," Jim says. "You can dial your risk up or dial it down by changing your degree of exposure to a hazard."
- "For example, on the mountain, one way we can reduce our exposure is by choosing our route with care, avoiding any overhanging ice or avalanche-prone slopes," he notes.
- Jim says that in the workplace, just like a well-planned route up the mountain, workers' exposure to hazards can be reduced by well-designed work areas, clear travel paths and various types of guarding which will keep workers separated from hazards.
- "Away from work each of us must make an honest assessment of hazards and take steps to reduce our exposure," Jim continues. "In many cases, your only option to stay safe is to walk away from an unsafe situation."

USING RISK ASSESSMENT TO STAY SAFE

- "Your organization is constantly using these four dimensions of risk to help keep you safe. They focus the safety effort on tasks with the most severe consequences," says Jim. "They have developed safe work procedures to reduce the probability of an incident occurring. They provide protective equipment to reduce vulnerability and have designed work areas and guarding to separate employees from exposure to hazards."
- "In your workplace, all of this has been done for you," he adds "To stay safe at work, all you have to do is abide by the safety policies put into place."
- "As for me and our Everest Light expedition, 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."
- "In the icefall, the probability of an incident occurring is very high. The consequences of an incident are catastrophic. Our vulnerability could not be reduced since there is just no protection that will save you from an avalanche or shifting tons of ice. And finally, our exposure to the hazard could not be eliminated if we returned to that route," Jim explains.
- "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."
- "When our plan became public, the various climbing magazines and experts only gave us a 17 percent chance of success," continues Jim. "This was because we were not using supplemental oxygen and the new route was much more technically challenging than any previous routes. Of course, they were defining success as reaching the summit, but we were defining success as bringing everyone home alive."
- "Having applied our knowledge of the four dimensions of risk: probability, consequence, exposure and vulnerability, I was confident that our smaller team in which every member embraced his or her responsibility for their own and everyone else's safety and our new route gave us the best chance to do that and also gave us our best chance to summit the highest mountain in the world," he adds.
- "And you can have the same confidence that you and your fellow workers will go home safely at the end of the day, if these same tools are applied to understanding the risks in your workplace," Jim concludes.

EXPEDITION TO SAFETY
Module 2: EMBRACE IT

ANSWERS TO THE REVIEW QUIZ

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

EXPEDITION TO SAFETY
Module 2: EMBRACE IT
REVIEW QUIZ

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

Name_____Date_____

1. In order to stay safe, workers must anticipate dangers and ensure measures are in place to control those dangers.

a. True
b. False

2. What does Jim recommend each worker do regarding their individual responsibility for their own safety?

a. Avoid it
b. Embrace it
c. Consider it
d. Share it

3. When is a person considered to be "at risk"?

a. Anytime a hazard exists
b. When a person is doing work
c. When a person is in proximity to a hazard
d. When a person is exposed to a hazard

4. Separating workers from exposure to hazards is a way to reduce risk.

a. True
b. False

5. To what does Jim Elzinga attribute a person's willingness to take extreme risks?

a. Unforeseeable circumstances
b. Bad habits and poor training
c. A skewed perspective of risk and reward
d. Succumbing to peer pressure

6. Which of the following will reduce the probability of an incident occurring?

a. Work faster to reduce exposure
b. Follow all steps of safe work procedures
c. Only work during first shift

7. Which of the following best describes the second dimension of risk, consequence?

a. The reason a risk is taken
b. The possible outcome of risk
c. The reward of risk-taking
d. The frequency a risk is taken

8. According to Jim Elzinga, one common mistake people make is underestimating the severity of the consequence of risk-taking.

a. True
b. False

9. Vulnerability is the susceptibility of a person to the consequence of risk. Which of the following can reduce a person's vulnerability?

a. Safety ropes and harnesses
b. Seatbelts
c. PPE
d. Helmets
e. All the above

EXPEDITION TO SAFETY
Module 3: BELIEVE IT
FACT SHEET

LENGTH: 18 MINUTES

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 in the beyond. In this third module of "Expedition to Safety," entitled "Believe It," Jim convinces members of a live audience that the goal of workplace with zero injuries can be realized when each individual worker has 100 percent belief that his or her efforts will help achieve the overall goal. Jim recounts events that occurred during his second expedition to Mt. Everest to teach important safety lessons about focusing on smaller milestones to reach the larger goal, how individuals can embrace their roles and contribute to helping reach an overall goal, why setbacks shouldn't interfere with the core value of safety and why people performing jobs should be involved in determining the best way to do them.

PROGRAM OBJECTIVES:
After watching the program, the participant will be able to explain the following:
- How the sum of individual efforts can achieve challenging goals;
- How focusing on measurable milestones can help achieve a larger goal;
- How individuals can embrace his or her role in helping to reach the overall goal;
- Why people must believe 100 percent that their individual effort is helping to achieve the larger goal;
- What things everyone can do to contribute towards the larger goal;
- Why costs, schedule or setbacks must not interfere with the core value of safety;
- Why team members doing specific jobs must have input in developing safety procedures.

PROGRAM OUTLINE

THE SUM OF INDIVIDUAL EFFORTS CAN ACHIEVE CHALLENGING GOALS
- "The best way to climb a very tall mountain is one step at a time." Jim says that what this quote means to him is that every challenging goal or journey is made up of individual steps. "No one step is more important or valuable than any other and it takes the sum total of all of the steps to reach that seemingly impossible goal."
- "This idea is critical for high-altitude mountain climbers because each individual climber is asked to perform exhausting tasks in an effort to support the expedition as a whole," adds Jim. "When performing these tasks, the summit is usually not even in sight, but each climber has 100 percent belief that their individual efforts are laying the foundation for achieving the overall goal of reaching the summit and returning safely."
- "Your organization also strives to achieve challenging goals, one of which is to reach the pinnacle of safety excellence by creating and maintaining a safety culture in which no injuries occur," he continues. "Creating a workplace with zero injuries may seem impossible to some, but just like climbing the tallest mountain, your workplace safety goal can be achieved when each individual worker has 100 percent belief that their efforts will help achieve the overall goal."
- Jim says he wants to share with the audience some lessons from his team's attempt to safely reach the summit of Mt. Everest in our Everest Light expedition in 1986. In the process, he says he will explain some key points for audience members to remember while they help their own organization reach its goals, especially the goal of creating a world class safety culture with zero injuries.

THE CHALLENGES OF CLIMBING MT. EVEREST
- "There are some pretty daunting challenges that must be overcome to climb a mountain this high. First is the lack of oxygen at high altitude," says Jim.
- He adds that the human body is not designed to operate well without adequate oxygen and even the most basic task such as climbing uphill with a small load places enormous demands on the body. "Mental functions like concentration and decision making are also impaired."

• "This level of exertion requires a climber to drink about five liters of water each day, which is another challenge," notes Jim. "You have to gather 25 liters of snow and melt it over a small stove in order to get five liters of water."
• "Then there is the ultraviolet radiation exposure. At high altitude, the sun's UV rays are more intense causing sunburn and snowblindness," he continues. "Because snow reflects the UV rays any exposed areas can become blistered. Even the inside of your mouth can become painfully burned if not covered by a protective mask."
• Jim says the weather can also change extremely fast and can be deadly, with 100 mile per hour winds, frigid temperatures and huge amounts of new snow. "When weather like that moves in, all climbing has to stop and if possible, all climbers must retreat down to lower elevations, giving back hard earned ground to the mountain."

THE IMPORTANCE OF MEASUREABLE MILESTONES IN ACHIEVING A LARGER GOAL

• "On our Everest Light expedition, all of the challenges of the mountain were on our minds when we first settled into our base camp at 17,500 feet. Looking up at the summit from here was very daunting," says Jim.
• "It seemed much different in person than when we were back at home, planning the expedition," he adds. "Doubt started creeping in. Climbers
came to me saying it wasn't possible without the Sherpas or without supplemental oxygen. The summit seemed unattainable."
• "So we sat down as a team and talked about this and realized that many people were focusing on the summit, which was the wrong focus at the start of the expedition," Jim continues. "Looking up to the summit distracted us from the vital smaller, individual steps needed to climb the mountain."
• "Here in your workplace, doubt can also creep in if people become overwhelmed, unable to believe in the end goal of reaching zero injuries. It's far better for each person to focus on performing his or her individual job safely as part of the overall effort to reach the goal." Jim says.
• He explains that back at base camp, they refocused on smaller, individual steps, which for them was establishing each camp and the routes between them. They viewed each new camp as a milestone to be celebrated. This helped them maintain our focus and prevented them from being overwhelmed and wanting to give up before they had even started.
• "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. "We decided to not even think about the summit until we established camp 5".
• "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."
• "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."

JANE FEARING: Example of 100 Percent Belief in Individual Role

• Jim continues his presentation by telling a story about Jane Fearing. Jane had volunteered to come on the expedition as their chef. She certainly had the qualifications for it; she was a chef at one of the largest heli-ski operations in the world.
• "Jane cooked us wonderful meals at base camp, but after a few weeks there wasn't a whole lot for Jane to do because most of the climbers were now operating out of camp 2 and our plan was for the main kitchen to remain at base camp," says Jim.

- Jane went up to Jim one day and said, "You know Jim, I think I can be more value to the expedition if we move my kitchen to camp 2." The first thing he said was "No, that's not the plan." She didn't give up and she said, "No, no Jim I've thought this through. If you guys dig a hole 10 feet into the glacier and put a tarp over the top of it, I'll be able to cook for all the climbers up at camp 2, up at 20,000 feet."
- "With that, I came around and agreed to give it a try, and we did. So what you're looking at here is Jane's kitchen up at 20,000 feet on the north side of Mt. Everest with temperatures as cold as -40 degrees," says Jim. "And you can see the tiny little stoves she had to use. But with those little stoves she would make these amazing things. The very first day she was up there, she made us fresh bread. A couple of days later, we had freshly made cinnamon rolls and even pizza on several occasions."
- Now, for those of you who have never climbed Mt. Everest, I can tell you that having fresh bread, cinnamon rolls and pizza at 20,000 feet is not something you hear about too often," he continues. But what impressed me even more was the freshly grown bean sprouts she served. And I just couldn't figure this one out. I had no idea how you could grow bean sprouts in those conditions."
- Jim says to give the audience an idea of Jane's innovation and determination what she did was she brought up some large thermoses and preheated them and put the beans inside the thermoses. Then she slept at night with those thermoses inside her sleeping bag to keep them warm so those seeds could sprout.

A LESSON FOR LEADERS & MANAGERS: Good Ideas Come from Everywhere

- "Jane is a prime example of an individual who had 100 percent belief that her efforts would help us reach our goal, but as the team's leader I almost deprived us of her contribution. I had to overcome my first instinct to simply say no to a different idea, and be willing to truly listen and fairly evaluate the changes she was suggesting. That's a good lesson for all leaders and managers. Good ideas come from everywhere, so when people speak up you need to listen with an open mind," Jim concludes.

DAN GRIFFITH: Example of 100 Percent Belief in Individual Effort

- Next, Jim talks about the impressive example of individual effort that was demonstrated by Dan Griffith. Dan was one of the prime candidates for reaching the summit; but unfortunately, he discovered, as the expedition progressed, that he wasn't adapting well to altitude, which confined him to the lower camps on the mountain.
- "By this time, it was apparent that supplies were not getting up to camp 2 fast enough to support the lead climbers who were establishing the route up to the higher camps," says Jim.
- "Rather than sit around and feel sorry for himself, Dan saw a need he could fill and jumped in to fill it," he adds. "Every day, he placed himself at camp 1 and every day Dan would pick up a load weighing between 30 and 50 pounds and climb with it roughly 10 kilometers, over six miles, to reach camp 2, drop the load, turn around, climb back down to camp 1, pick up another load and do it all over again."
- Jim says that all told, Dan did over 30 consecutive carries, climbing 400 miles up and back. At that altitude, and with no supplemental oxygen, this was just a tremendous feat of perseverance and endurance. Dan did this because he believed 100 percent that his individual effort would help us reach our goal.

WORKERS MUST ALSO BELIEVE 100 PERCENT IN THEIR INDIVIDUAL EFFORT TOWARDS ACHIEVING THE GOAL

- "What kind of individual effort are you giving?" Jim asks. "For your organization to reach the pinnacle of safety and achieve a culture where zero injures are possible, each of you must believe 100 percent that your individual effort is helping to achieve the overall goal of keeping all workers safe and injury free."
- "Now lucky for you, you don't have to run a kitchen from a hole carved out of ice at 20,000 feet and you don't have to carry a 50-pound load for six miles with no oxygen," Jim notes.
- All you have to do is believe 100 percent and act on that belief.
- All you have to do is follow your training every time you do your job.
- All you have to do is follow the proper safety procedures every time you do your job.
- All you have to do is wear your protective equipment every time you do your job.
- Doing these things is your individual contribution towards the larger goal.
- "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.

COSTS, SCHEDULE OR SETBACKS MUST NOT INTERERE WITH THE CORE VALUE OF SAFETY

- Jim says it's not always easy and there will always be setbacks. "For us up on Mt. Everest, the weather started to turn bad about halfway through the expedition and we started to get frequent storms, which dropped a lot of new snow onto the slopes above."
- "Because of the avalanche hazard, we had to call for an evacuation of the mountain and give up our hard earned progress and retreat back to base camp," explains Jim. "This was hugely demoralizing for our entire team and the best way I can describe the impact that had on us would be like you stopping your entire production line or process because of an extremely unsafe condition that couldn't be controlled."
- "Something like that has a huge impact on progress, time schedules and cost, but remember none of those things are the main goal," he adds. "None of those things are the core value of what the effort is all about. The core value is safety. For you guys here in this room, it's making sure everybody comes home at the end of each workday; for us up on Mt. Everest, it was making sure that all of us made it off the mountain alive."
- So despite what it meant for their progress towards the summit, they brought everyone down to base camp and waited for the weather and avalanche danger to clear up before they went back up on the mountain.
- "We took advantage of the down time by hanging out on what we called the 'world's highest outdoor patio' at 17,500 feet," Jim says. "We spent time discussing what was working for us, and what wasn't working for us, and reminding each other of what we were doing, how we were going to stay safe and soliciting each other's input."
- "Sometimes employees at workplaces I have visited get frustrated at the frequency of safety meetings, required training or peer-to-peer observations and endless safety discussions, but you have to remember that this type interaction is critical to create a team working towards a common goal rather than having a bunch of individuals with different goals and agendas," says Jim.

TEAM MEMBERS MUST HAVE INPUT DEVELOPING IN SAFETY PROCEDURES

- Jim says that when you go to climb a mountain like Mt. Everest, you are climbing through a window of weather, which in their case was between the ending of winter and the onset of the monsoon season. "Because of the weather delays, the monsoon season was almost upon us and we were running out of time to reach the summit."
- Their proposed route was to climb the rock face of the west ridge. "But the going was very, very slow because the climbing was so technically difficult. We crunched some numbers on our progress rate and weather history and determined that we were not going to make it before the monsoons hit," Jim explains.
- "But out on the north face, we knew there were snow slopes. And as long as the snow slopes didn't present an avalanche danger, we knew we could establish a route up the snow slopes of the north face much faster than scaling the rock face of the west ridge," he adds. "So we debated changing our route. Changing the planned route in mid-climb is not a decision to be made lightly and I would not allow it to be changed without the input and approval from all the climbers first."
- This is because you can't ask team members to have 100 percent belief if they are not given a chance to influence the direction the team will take, according to Jim. "Just like here at your workplace, you can't just dictate safe work practices and job procedures from high up on the corporate mountain top and expect the workers to instantly believe that those procedures are the best and safest they can be."
- "The people who are doing the job need to be involved in determining the best way to do the job. Only then will the belief and commitment to following the procedures truly be created," he adds.
- "After some difficult discussion, the whole team agreed on the new route, which gave us just enough time to make one final push up the mountain before the start of monsoon season," Jim continues.
- "So after three years of planning and the combined efforts of all the individual team members who created, embraced and believed in the plan, we were ready go for the summit of the highest mountain in the world, and we would do it one step at a time," he concludes.

EXPEDITION TO SAFETY
Module 3: BELIEVE IT

ANSWERS TO THE REVIEW QUIZ

1. b
2. b
3. d
4. b
5. b
6. a
7. b

EXPEDITION TO SAFETY
Module 3: BELIEVE IT
REVIEW QUIZ

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

Name_____Date_____

1. To create a workplace with zero injuries, all workers must remain focused on the end goal at all times.

a. True
b. False

2. What does Jim Elzinga encourage workers and organizations to do to prevent being overwhelmed by a large goal?

a. Don't discuss the larger goal publicly
b. Focus on smaller and measurable milestones
c. Remind everyone that goals are management's responsibility
d. Decide not to strive for challenging goals

3. Jim Elzinga described in detail the extraordinary efforts of Jane Fearing and Dan Griffiths. What did each of these expedition team members have in common?

a. They had no chance to reach the summit
b. They used their individual skills to help the overall effort
c. They believed 100 percent that their efforts would help reach the goal
d. All of the above

4. Which of the following is NOT one of the individual contributions a worker can make toward reaching the larger safety goal?

a. Follow their training
b. Work as fast as possible
c. Follow safety procedures
d. Wear PPE

5. Safety is important, but the core value of any organization must be meeting time schedules and controlling costs.

a. True
b. False

6. Safety meetings, observations and training help create a team working towards a common goal.

a. True
b. False

7. Why did Jim Elzinga insist that all climbers give input and approval before changing the final route to the summit?

a. Because he was unsure of the decision
b. Team members must have input to have 100 percent belief in the plan
c. He wanted to be able to avoid blame for failure
d. All of the above

EXPEDITION TO SAFETY
Module 4: LIVE IT
FACT SHEET

LENGTH: 18 MINUTES

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 in the beyond. In this fourth module of "Expedition to Safety," entitled "Live It," Jim stresses to members of a live audience that in addition to simply saying or agreeing with being committed to doing something the safest way, you have to "live it" by resisting the temptation to take shortcuts and making often difficult choices and decisions. Jim recalls actual events from his second expedition to Mt. Everest to illustrate how hard some of the decisions may be, but by "living it," all of his team members went home from the expedition safe and sound just like workers can when they always "live it" on the job. He also discusses the importance of speaking up when witnessing someone about to make a mistake and passing down the safety culture from one generation to the next.

PROGRAM OBJECTIVES:
After watching the program, the participant will be able to explain the following:
- Why we must be able to stop and walk away from the work when unsafe conditions develop while performing our jobs;
- Why all team members must contribute to achieve success;
- How staying safe sometimes requires hard choices;
- Why safety decision making is so important;
- How we must always make the right decision even when others whose judgment may be clouded try to convince us to make the wrong decision;
- Why it is important to pass the safety culture down from one generation to the next.

PROGRAM OUTLINE

'LIVING IT' MEANS WALKING AWAY FROM AN UNSAFE SITUATION
- "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."
- Jim says he has learned that being committed to returning home safely is not done by simply saying it or agreeing with it; you really have to live it through choices or decisions you make. "I'm going to share with you some of the hard choices we had to make during our final attempt to reach the summit of Mt. Everest and discuss similar choices you may have to make in order to 'live it' here in your workplace."

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 first attempt and I promised the other two, Barry Blanchard and Albi Sole, that we would do our best to support them on a second attempt."

• "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 lt' 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.
• "That's exactly what we had done and our climbers had safely reached the pinnacle of the world's tallest mountain, but now they needed to get back down safely and to do that they would have to climb through the night," he concludes.

STAYING SAFE SOMETIMES REQUIRES HARD CHOICES

• Jim says that as they descended, the full moon rose up on the north side of the mountain and it was like a giant spotlight shining on them. Everything was going well until they reached 27,000 feet. Then Dwayne's one bottle of oxygen ran out.
• "At this high altitude, without supplemental oxygen, it is extremely exhausting to climb or descend," he notes. "In addition, without oxygen, it is really hard for the body to keep warm. Dwayne's hands and feet were literally freezing and he had to stop frequently to rest and warm them up again."
• Sharon had no choice but to leave Dwayne and continue her descent, according to Jim. "It's a very difficult decision for one climber to leave another, but it was the right thing to do. If Sharon had stayed with Dwayne, she would have run out of oxygen also and placed herself at risk. This is an extreme example of "living it;" Sharon made the hard decision to keep herself safe.

• "You may think that you will never have to make a decision like this, but there are many workplace fatalities involving confined space entry, hydrogen sulfide or fire where workers rush in to help a fallen co-worker and needlessly become a second fatality, he adds.
• "Sharon finally arrived back at camp 6 at 2 in the morning, 17 hours after first setting out," says Jim. "About an hour later, Dwayne finally made it back into camp. They were both extremely cold, exhausted and dehydrated. Their first priority was to get the stove going to melt some water."

WHEN THINGS GO WRONG, HAVING A SAFETY PLAN HELPS DWAYNE & SHARON STAY SAFE

• "Here is an example of how quickly things can go wrong," he continues. "When Dwayne tried to light the stove using their only fuel cylinder, it blew up! And not only did it destroy the fuel cylinder, it also blew a hole in their tent."
• "So now they would have to go all night with no water and a hole in the side of their tent with outside temperatures dropping to -40 degrees. In their exhausted condition, I am not sure they would have been able to survive the trek back down to camp 5 unassisted. This is precisely why our safety plan to maintain support climbers at camps 4 and 5 was so important," adds Jim.

THE IMPORTANCE OF SAFETY DECISION MAKING

• One of those climbers, Laurie, set out from Camp 5 to bring them some hot liquid and help them descend.
• In a video Laurie recorded upon reaching Dwayne and Sharon, Dwayne says, "Since we made the right decisions to start with, it was a piece of cake." Jim says it "certainly wasn't a piece of cake, but he is right about the importance of decision making."
• "In our case, we had been making key decisions for the expedition for over three years," Jim adds. "We had made thousands of decisions and each one was made in light of the overarching goal of returning all of our climbers safely from Mt. Everest."
• "And guess what? That is exactly what your organization is trying to accomplish with its safety effort," he continues. "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."

ENFORCING THE SAFETY RULES IS AN EXAMPLE OF 'LIVING IT'

• Jim says making the right decisions is important and for them up on the mountain, there were still decisions to be made and one of them would turn out to be the hardest decision of his life.
• "Sharon and Dwayne, assisted by Laurie and Dan, safely made their way down the mountain," he says. "Now, I had to make good on my promise to Barry and Albi, the other two climbers who had been candidates to go for the summit. I had told them that if we had the resources and if the weather was still holding good for us, then we would support them on a second summit attempt."
• "Barry and Albi began their ascent up the mountain and made it up to camp 4 while I attempted to organize the support climbers and necessary supplies," he adds. "But unfortunately, at this point in the expedition we had already spent 76 days on the mountain, many of these at extremely high
altitudes. All of the other climbers were mentally and physically exhausted. Nobody had anything left to give. Nobody could make it up to camp 5 to support Barry and Albi's bid for the summit."
• Jim says that night he had to make what was for him the most difficult decision of the whole three years he was leader of this expedition. He had to ask them to come back down.
• "It did not go over well. Over a two-hour period, they tried to convince me why I should give them my blessing to go forward. 'They were so close, they could taste it.' 'They were well-rested.' 'They were experienced.' But none of their excuses could make up for the fact that the safety plan called for support climbers at camp 5 and they didn't have any," Jim explains.
• "They were being severely tempted by the summit and their judgment was a little off because of it," continues Jim. "They were experiencing that invisible force I talked about earlier, the one that pulls you on towards the summit, even when it's not safe to keep going."
• This is the same force that tempts workers of all types to make poor decisions, take risky chances or seek out shortcuts, according to Jim.

- "In the end, all I could do was stick to my guns and keep saying no," he adds. "It was very, very difficult and towards the end of that two hours I was quite upset and so were they."
- "Barry eventually came on the radio and said, 'You know Jim, I don't agree with your decision, but I love you anyways, I'm coming down'. He then took that radio and out of frustration he threw it off the side of the mountain. He came down that night and Albi came down the following morning," says Jim.
- "Now, managers and supervisors, I'm talking to you. You also have to stick to your guns. You can't let your workers talk you out of enforcing the safety rules," stresses Jim. "You can't look the other way here and there to make friends or to avoid a confrontation. If you do that, you will undermine the safety culture. Stick to your guns and enforce the rules. That's 'living it.'"
- Speaking to the entire audience again, Jim says it's not just supervisors who must enforce the safety rules it's all of us. "You also have to be willing to help a co-worker stay safe by stopping them from making a mistake. You have to have each other's back. You have to be willing to speak up and stand your ground for safety. That's 'living it.'"

PASSING DOWN THE SAFETY CULTURE FROM ONE GENERATION TO THE NEXT

- "When Barry and Albi came down, our Everest Expedition was over 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.
- "We had reached the pinnacle of Mt. Everest. 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. Everyone is 'living it.' 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.
- Jim concludes the presentation by thanking the audience and saying, "Please, for your own sake, for your families, for each other, remember the four strategies for creating a safety culture: create it, embrace it, believe it, live it."

EXPEDITION TO SAFETY
Module 4: LIVE IT

ANSWERS TO THE REVIEW QUIZ

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

EXPEDITION TO SAFETY
Module 4: LIVE IT
REVIEW QUIZ

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

Name_____Date_____

1. In order to remain safe, workers must resist the temptation to perform a job in the quickest or easiest way and instead perform their job in the safest way.

a. True
b. False

2. Which of the following best describes the concept of "Living It"?

a. 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

3. 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

4. What does Jim Elzinga say workers should do when unsafe conditions develop?

a. Stop work until the unsafe conditions are corrected
b. Work more carefully
c. Keep your eye on your co-workers
d. Press on and be willing to take the risk

5. When Sharon and Dwayne reached the summit of Mt. Everest, why did the other team members also celebrate?

a. Because they could finally go home
b. Because they knew that they could also reach the summit,
c. Because each of them had contributed to the effort

6. During the decent from the summit, Sharon had to leave Dwayne behind in an effort to protect herself. In the workplace, there are no scenarios that would require a worker to leave another worker in order to stay safe.

a. True
b. False

7. Jim Elzinga says that the cumulative result of all individual safety decisions becomes your organization's _____.

a. Four dimensions of risk
b. Hazard assessment
c. Safety culture
d. Risk modifier

8. What excuse did Barry and Albi give for pressing on towards the summit without support climbers in place?

a. They were experienced
b. They were well-rested
c. They were so close they could taste it
d. All of the above

9. Jim Elzinga encourages managers and supervisors to bend the safety rules from time to time to build team morale and make friends.

a. True
b. False