

WALKING SAFELY IN ICY CONDITIONS

PROGRAM SYNOPSIS:

There's a good chance that all of us will find ourselves walking on icy surfaces at one time or another. Even a small piece of ice can end up becoming the most dangerous piece of ice in the world if you're not careful. Not only do many people die each year when striking their heads on concrete after a slip on ice, but also many other injuries occur, such as dislocated hips, dislocated shoulders and broken ankles. In this program, EMT/Firefighter/Best-Selling Author Martin Lesperance explains how and why walking on icy surfaces is dangerous as well as the proper safety precautions viewers should take when walking on snow and ice.

Topics include the hazards of various icy conditions, techniques for walking on icy surfaces, the importance of choosing the safest route, wearing proper footwear, getting in and out of vehicles safely and coming inside from snowy conditions.

PROGRAM OUTLINE:

WALKING ON ICY SURFACES IS DANGEROUS

- The Khumbu icefall is one of the most dangerous pieces of ice in the world. To climb Mount Everest, the climbers have to work their way through these massive crevasses in the shifting ice. They take the proper safety precautions, but people still die here.
- Now, most of us won't find ourselves in a position like that, but for many of us, a small piece of ice could end up becoming the most dangerous piece of ice in the world to you if you're not careful.
- Doctor Atkins, famous for the Atkins diet, did not die as the result of a heart attack like most people think. He died as the result of a head injury.
- Here's what happened. He was walking along the sidewalk in New York City. The day before, there was a spring snowstorm. As he was walking, he stepped on a patch of ice, his feet shot out from under him and he ended up striking his head on the concrete. He went into a coma and died several days later.
- A lot of people die every year after striking their head on the concrete after they slipped on the ice, but it's not only head injuries. There's dislocated hips, dislocated shoulders, broken ankles and these are all common injuries as a result of someone slipping on the ice.
- I know when I worked as a paramedic, we were always a lot busier in icy conditions than we normally would have been.

VARIOUS ICY CONDITIONS

Freezing Rain

- Freezing rain forms when snowflakes fall through a warmer layer of air. This warm air melts the snow into water droplets. As it continues falling to the ground, it hits a colder layer of air.
- Now, powerlines, trees and sidewalks are below freezing, so when this water hits these objects, it instantly forms a layer of ice on anything it touches.

Hard Packed Snow

- Hard packed snow—now this can happen when there is a lot of pedestrian or vehicle traffic and the snow gets packed down and it becomes very, very slippery.
- Often at intersections, vehicles will spin their tires. This can polish the surface into a very slippery surface. Because this is at an intersection, people tend to cross here. This can become a high risk area for pedestrians.

Freeze Thaw Cycle

- Freeze thaw cycles—when the temperature rises, the snow will melt. Now, we have water on sidewalks, parking lots and everywhere else. Once the sun goes down and the temperature drops, the water and the slush turn to ice.

- Now, we have a serious hazard. Ice could be very, very smooth or it could be rough like when the slush freezes. Either way, it's a big hazard. Walking paths can literally become skating paths.
- At night, the ice can blend into the darkness. This can make spotting, or recognizing, the ice very difficult.
- Depending how much snow has fallen during the winter, the thaw/freeze cycle can last for weeks throughout the spring.

Water Spills

- Water spills at the workplace—you may work with water in the winter or you may work in an area where there's water leaks. Obviously, these puddles of water will freeze when it's cold enough.

WALKING SAFELY ON ICY SURFACES

- How can we prevent slips and falls on icy surfaces? We can do this by several ways, and one way is to think about falling. Now when you're approaching a slippery area, if you think about how slippery it is, how easy it is to fall, and how seriously you could be injured if you did fall, well that brings safety to the front of mind and that's a good thing.
- Don't even think that slipping on the ice could never happen to you because it could even happen to experts, so here's some tips on walking on snowy and icy surfaces.
- First of all, don't walk or step where your eyes haven't already been. That means you're watching where you're going. You're watching where you're placing your feet; you're looking out for uneven surfaces; and, you're watching for those patches of ice and snow.
- Remember, that dry stretch of sidewalk or that sanded area can quickly become an area with absolutely no traction. Conditions can change. Walk slower and take smaller steps. The last thing you want to do is rush when walking on icy surfaces. Rushing will only get you in trouble and rushing will only get you hurt.
- Adjust your stride for the conditions. That means take smaller steps. This helps keep your weight over your feet and it's easier to keep your balance. A shuffling movement with those short steps can help on icy surfaces.
- Also, keep your knees slightly bent. Try walking with your feet at a bit of an angle. You may find this helps you be a little bit more stable.
- Keep your hands out of your pockets and use your arms to help keep your balance. Some people call this "walking like a penguin."
- So if you can, avoid carrying things on icy surfaces but if you must carry things, try to put them in a backpack. It's going to give you a better center of gravity.

CHOOSING THE SAFEST ROUTE

- Walk on areas that are less slippery. If possible, walk on a sidewalk that has already been cleared, sanded, salted or treated with a deicer. In some cases it may be safer to walk on the sidewalk on the other side of the road if it has already been cleared and treated.
- At your workplace, maintenance may have already cleared and sanded the walkways leading from the parking lot to the building. Always stick with these walkways.
- Now, sometimes the sidewalk may be just too icy to safely walk on it, so you may choose to walk off the sidewalk. This could possibly be on the side of the road if it's a quiet, residential street and it's safe to do so.
- If you're going to walk alongside the road, walk on the side of the road so you're facing traffic so you can see what's coming towards you or maybe you could walk off the sidewalk on the grass or the snow. Either way, you have to choose the safest route.

- When going up or down stairs, use a handrail if there is one. You should be using one at all times, but if the stairs are frosty or icy, this is especially important. If you do slip, you have a handrail that can help stabilize you and help prevent a fall down the stairs.
- Some areas may have a handrail along the sidewalk. Use them. Three points of contact is important.
- There may not be a proper handrail, but there may be a fence, a light pole or a vehicle and these can help stabilize you in icy conditions. Move slow and grab onto stable objects if you have to.
- Avoid taking shortcuts where ice and snow removal doesn't occur. We're creatures of habit and most of the time, we'll take a route that we're familiar with, even if it poses extra danger.
- Here's a great example. This little pathway is a shortcut to a small strip mall and a lot of people use it. In the summer and the fall, it's usually in really good condition, but come winter, the snow starts to pile up and it gets deeper and deeper because the snow isn't removed from here.
- So come spring time we have a thick layer of hard packed snow that's been packed down by people walking on it and now it starts to warm up. So it starts to melt and we end up with a very thick, icy covering over the pavement. This is extremely dangerous because we also have a little bit of an incline and many people here have fallen down and they have received quite serious injuries.
- People can easily avoid this route just by walking around, it's only going to take them an extra couple of minutes, but people don't do that. They choose the shortcut. They choose the dangerous route. If you can, avoid icy areas if at all possible.

WEARING PROPER FOOTWEAR

- Wear the proper footwear. Face it, you wouldn't wear high heels, sneakers or sandals on a construction site, so why would you wear inappropriate footwear in snowy and icy conditions?
- Take a look here. I'm climbing a frozen waterfall. Now, without the proper footwear and the proper safety devices, the cramp-ons, the spikes I wear on my boots, this would be impossible, but with the proper footwear and safety devices, I can do things like this.
- You may never end up climbing a frozen waterfall but there's a very good chance you will end up walking on icy surfaces at one time or another. Let's take a look and see how proper footwear and safety devices can make it much safer for you.
- Wearing the proper footwear for icy conditions can make a huge difference. For example, wearing a dress shoe with a smooth leather sole will be totally useless when it comes to icy surfaces, but wearing a light hiking shoe with good rubber soles with tread can make it much safer.
- Remember, if you're walking on pure ice, it's going to be extremely slippery. High heels have no place on snowy and icy surfaces. Wear winter boots and carry your shoes, even for short walks.

SAFETY DEVICES

- There are many different devices you can put on your footwear to help give you better traction and stability. If you are going to be walking on icy surfaces, these devices can help you stay on your feet instead of other parts of your body.
- Choose the model that will best suit your needs, but remember, before entering a building or your vehicle, take them off because they're not designed to be used indoors or while driving.
- Hiking poles can give you a lot more stability when walking on icy surfaces.

GETTING IN AND OUT OF A VEHICLE

- One way a lot of people get hurt every year is getting in and out of their vehicle in icy conditions, because what you're doing is you're putting yourself in a very vulnerable position. You're going to end up standing on one leg on a patch of

ice.

- Now I've seen injuries range from pulled backs, pulled muscles, people actually slipping, falling and becoming paralyzed, people smashing their face on the inside of the vehicle.
- So what we want to do is first of all put our self in the safety mindset, realizing this is potentially dangerous. Slow down, take your time and try to use three points of contact.
- So what I'm going to do is I'm going to open the door: I'm going to grab onto the door; I'm going to grab on to the vehicle, I want to use a stable part of the vehicle. You may feel like you want to use the steering wheel. Only do this if it locks because the piece that you're grabbing onto should be stationary.
- What I'm going to do now is lift up one leg, so I'm standing on one leg on the ice, but I got both hands holding onto the vehicle. I'm going to turn myself in. Lift up. There. I've used three points of contact and I got in quite safely.
- Now to get out of the vehicle, it's going to be the same thing. I open the door. I'm looking where I'm stepping and I'm consciously aware I'm going to be stepping on ice and this could be potentially dangerous.
- I'm going to grab onto the door. I'm going to grab onto the vehicle. Slowly ease myself out, watch where I'm stepping and away I go. Three points of contact going in and out of the vehicle. Use caution so you don't end up like this.
- If you are in a warm vehicle or a warm building, the sole of your footwear is going to get quite warm. Now, as you step out onto the snow or ice, it's going to melt and cause a very thin layer of water. Now, this can make it extremely slippery. So when you're transitioning from a warm area to a cold area, always use extra caution.

COMING INSIDE FROM SNOWY CONDITIONS

- We often go from a snowy outside into a building. What we're doing is we're transitioning from one walking surface to another. Often, the floor inside is tile or smooth concrete. Combine this with even a small amount of water and you have a very slippery situation.
- So, before entry, take the time to knock the snow off your shoes. If there is a mat inside, take advantage of it; wipe your feet again. Try to get the soles of your footwear as dry as possible.
- If there's a wet floor sign, pay attention to it, because it's there for a reason. This isn't only a good safety practice. It's a good business practice because it's going to protect you, your employees and your customers.
- It's not only sidewalks. Any area you walk on can be icy. Stairs and decks are good examples of surfaces that can become slippery because of frost and ice.

POINTS TO REMEMBER

- So here's a few quick points to remember. A light dusting of snow can hide danger. After a light snowfall, things can look beautiful. Remember though, a light dusting of snow can hide an icy patch and it won't take much to end up in an embarrassing, painful and possibly fatal situation.
- Avoid walking on snowbanks. It's easy to slip and trip, and if you do fall, you could end up rolling right into oncoming traffic.

SUMMARY OF KEY POINTS

- Think about falling and the injuries that can result if you do fall.
- Use caution while walking at all times.
- Suspect that you may be walking on ice.
- Take extra safety precautions. Slow down and take shorter steps.

- Wear the proper footwear.
- Use caution when getting in and out of your vehicle.
- Be careful when you're transitioning from one walking surface to another.
- Use safety devices.
- Most of all, develop the safety mindset and think about your safety at all times and always think and be safe.

PREPARE FOR THE SAFETY MEETING

Review each section of this Leader's Guide as well as the program. Here are a few suggestions for using the program:

Make everyone aware of the importance the company places on health and safety and how each person must be an active member of the safety team.

Introduce the program. Play it without interruption. Review the program content by presenting the information in the program outline.

Copy the review questions included in this Leader's Guide and ask each participant to complete them.

Make an attendance record and have each participant sign the form. Maintain the attendance record and each participant's test paper as written documentation of the training performed.

Here are some suggestions for preparing your video equipment and the room or area you use:

Check the room or area for quietness, adequate ventilation and temperature, lighting and unobstructed access.

Check the seating arrangement and the audiovisual equipment to ensure that all participants will be able to see and hear the program.

CONDUCTING THE PRESENTATION

Begin the meeting by welcoming the participants. Introduce yourself and give each person the opportunity to become acquainted if there are new people joining the training session.

Explain that the primary purpose of the program is to explain how and why walking on icy surfaces is dangerous as well as the proper safety precautions viewers should take when walking on snow and ice.

Introduce the program. Play it without interruption. Review the program content by presenting the information in the program outline.

Lead discussions about the icy conditions that can exist in your region and how employees can walk safely on and around them both on and off the job.

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

- Why walking on icy surfaces is so dangerous;
- What hazards are caused by various icy conditions;
- What techniques to use to walk safely on icy surfaces;
- Why it is important to always choose the safest route;
- Why proper footwear should be worn for icy conditions;
- How to safely get in and out of a vehicle in icy conditions.

WALKING SAFELY IN ICY CONDITIONS
REVIEW QUIZ

Name _____ **Date** _____

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

1. Even a small piece of ice can be very dangerous if you're not careful.
 - a. True
 - b. False

2. Doctor Atkins, famous for the Atkins diet, died as a result of a heart attack.
 - a. True
 - b. False

3. Freezing rain forms when snowflakes fall through a warmer layer of air.
 - a. True
 - b. False

4. The last thing you want to do is rush when walking on icy surfaces.
 - a. True
 - b. False

5. When walking on icy surfaces, you should keep your hands in your pockets to help maintain your balance.
 - a. True
 - b. False

6. You should avoid taking shortcuts where ice and snow removal doesn't occur.
 - a. True
 - b. False

7. If you're walking alongside a road, you should walk on the side so you're facing traffic.
 - a. True
 - b. False

8. Wearing the proper footwear makes little or no difference when walking on icy conditions.
 - a. True
 - b. False

9. You should only grab onto the steering wheel if it locks when getting into a vehicle in icy conditions.
 - a. True
 - b. False

10. You should maintain three points of contact when getting in and out of a vehicle.
 - a. True
 - b. False

ANSWERS TO THE REVIEW QUESTIONS

1. a

2. b

3. a

4. a

5. b

6. a

7. a

8. b

9. a

10. a