

SMALL FALLS ARE A BIG DEAL!

the facts on
preventing falls.



By: Martin
Lesperance

Martin Lesperance “ Small Falls Are A Big Deal... The Facts On Preventing Falls”

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**SMALL FALLS
ARE A BIG DEAL...
THE FACTS ON
PREVENTING FALLS**

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CHAPTER 1

FALLS ARE MORE SERIOUS THAN YOU THINK

We responded to an incident at a drinking establishment, where a 56-year-old man had tripped and fallen face first down four stairs. He landed on his face with enough force that it hyperextended his neck (forced his head violently backward). His neck was broken, his spinal cord severely damaged. He was completely paralyzed from the neck down and was on a ventilator (a machine that did his breathing for him) for the remaining four years of his life. This happened because of a fall down four stairs. After he realized his condition would never improve, he wanted to die. How do I know this? He told me so.

Falls are one of the leading reasons why ambulances are called to workplaces and homes for injury-related calls. I've attended many injuries resulting from falls. Remember the commercial where the woman said, "I've fallen and I can't get up?" This happens thousands of times every day across North America.

In the USA during 2004, approximately 14,500 people died as a result of falls. In Canada it was about one-tenth as many because of the lesser population. In 1998, 16,274 died in the USA as a result of falls. The numbers vary from year to year. Either way, that's a lot of people. Falls are the second leading cause of unintentional death, after motor

vehicle collisions... and they happen to people of all ages. The numbers show that the older you are, the more chances you have of being injured or killed from a fall. There were 7,200,000 visits to hospital emergency departments in 2002 because of falls.



It's important to realize that falls not only kill people, but result in devastating injuries that will affect the person and his or her loved ones for as long as they live. For every person who dies from a fall, there are dozens of people whose lives are dramatically changed because of a fall — changed for the worse — just like the guy in the opening story. One point I will be stressing throughout the book is this: **you don't have to fall from a great height to be seriously hurt.** Yes, small falls can be a big deal.

CHAPTER 2

SLIPS AND TRIPS = FALLS

Have a nice trip?” is a common remark that’s made when someone stumbles. The clever person who makes the comment is using a double meaning for the word “trip.” To make sure everyone is on the same page when we discuss slips and trips, let’s go over what they are.

SLIPS

A slip could be defined as a loss of balance caused by too little friction between your feet and the surface you are walking on. A great example is walking on a tile floor and slipping on some water, or slipping on some ice while walking on a sidewalk.

TRIPS

A trip happens when you lose your balance because your forward, backward or even sideways motion is interrupted when one foot, or both feet, stop suddenly. Tripping on a raised piece of carpet or a curb are good examples. Your foot stops suddenly and the rest of you continues to travel in the same direction you were going. It doesn’t take much to cause a trip. You can trip over something as little as three-eighths of an inch high. Walking along a sidewalk and tripping over a raised crack in the concrete can trip you up. New and unfamiliar shoes have almost tripped me up on more than one occasion.

FALLS

A fall happens when your body moves too far in one direction and your center of gravity is thrown way out of whack. When you fall over, in many cases you hurt more than just your pride.

SAME LEVEL FALLS

Same level falls are more common than falls from a height. It's easy to understand why. We spend more time on the ground than on ladders, scaffolding and other structures. Falls from the same level usually result in less severe injuries than falls from a height, but don't let this fool you or give you a false sense of security. You can still die from a same level fall.

You don't have to fall from a great height to be seriously injured. Dr. Atkins, famous for developing the Atkins diet, died from slipping on an icy sidewalk. He fell, hit his head, and died from a same level fall. Most people have had a same level fall that did not cause serious damage, maybe a bruise or two, but many people are not so lucky.

Every day we encounter hazards that can cause a fall both at work and at home. Most of the time we just don't realize or consider how dangerous these everyday hazards are. I've attended people who have either been very seriously injured or killed by a fall that resulted from a slip or trip from these common causes. Don't take these everyday occurrences lightly!

Here are some situations that can cause a same level fall from tripping:

- Tripping over...
- The curb
- Air hoses at the work site
- Extension cords
- A small bump in the carpet

- A piece of wood or tree root... and the list is endless

What tripping hazards can you think of at your workplace? How about at home?

Here are some situations that can cause a fall from slipping:

- Stepping on an (unsecured) area rug
- Stepping into or out of the bathtub
- Slipping on wet tile or a wet, smooth concrete floor
- Stepping on any kind of oil or grease on the floor
- Stepping on a piece of plastic or rug on the floor
- Walking or running on ice

You might think that to receive a serious injury you have to fall from a great height. This is not true. People have died or received serious injuries from a same level fall. Here's an example of what can happen. This is one of the worst broken legs I have ever seen.

A 45 year old woman was walking at a quick pace to answer the door. She had ordered a pizza, and the delivery man was there. As she walked down the hardwood hallway and turned the corner to open the door, she stepped on a small area rug. The rug moved and the woman fell. She heard a loud snap and screamed. The pizza guy opened the door and saw the woman on the floor. Her leg was broken halfway between the knee and the ankle. The lower part of her leg was lying next to the part of her leg that was below the knee. The bottom of her foot was facing 180 degrees from where it should have been. It was an ugly break. There was serious bleeding as the sharp bone ends had broken the skin and cut arteries, nerves and skin. When we transported the woman to the hospital, the orthopedic surgeon wasn't sure he would be able to save the leg. All this from a same level fall.



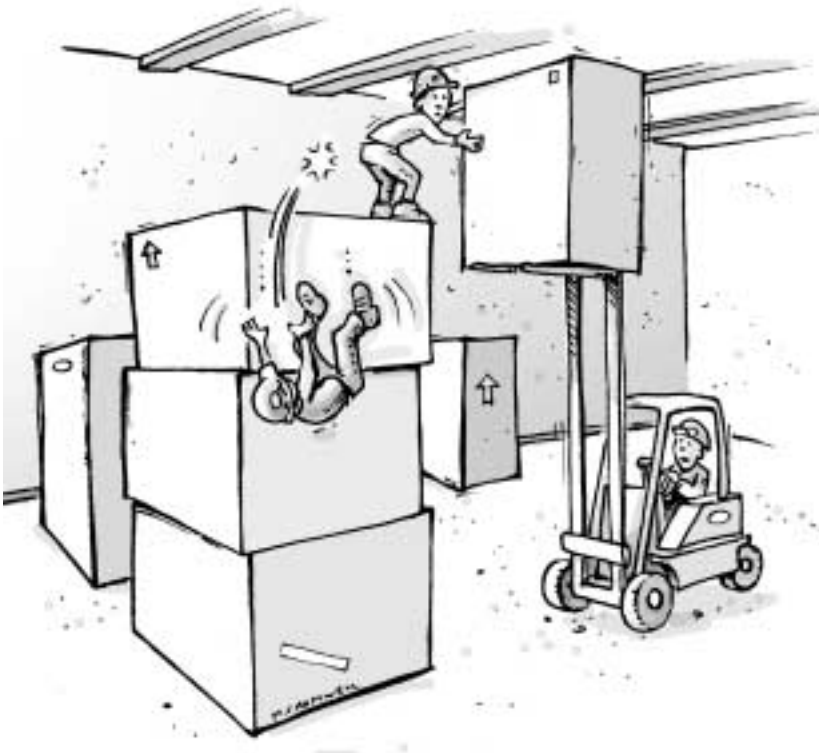
FALLING FROM A HEIGHT

Falls from the same level are bad enough, but add falling from a height — any height — into the equation, and your chances of being injured are increased. As you know, the higher you fall from, the faster you will hit the ground. The faster you hit the ground, the more force will be exerted to your body. The more force exerted to your body, the more serious your injuries will be and the longer it will take you to heal... if you survive.

You may have heard stories of people who have fallen from very high places and survived. Some people have even jumped out of an airplane, wearing a parachute that never opened, and lived to tell about it. This is rare. Don't count on being so lucky. It's amazing how a fall from even a few feet can increase not only the chance of an injury, but also the severity of the injury. Here are just a few examples of places you could fall from:

- Stairs
- Ladders
- Step stools
- A tailgate of a pickup truck, or the cab of a truck as you're stepping out of
- And anything else that could put you up a few feet or hundreds of feet off the ground.

It's easy to realize that if we are up 20 feet (approximately six meters) on a ladder the result of a fall could be disastrous. We don't normally think a fall from a three-foot (1 meter) step stool could be equally disastrous. Remember, when you are working at a height, a little stumble can end up being a fatal fall.



CHAPTER 3

IT'S NOT THE FALL THAT KILLS YOU, IT'S THE SUDDEN STOP

A week before I started writing this chapter, a man fell off a six-foot ladder at work and landed on his head. He died two days later.

Falls not only kill people, they cause severe injuries that can affect people for as long as they live. Most of us don't think about that.

You can die or be seriously injured in various ways from a fall. The fall can be a same level fall, such as slipping in your bathtub, or a higher level fall such as from a ladder or a roof. Both can be deadly. The following are some of the injuries that can happen to you because of a fall.

LANDING ON YOUR HEAD

Landing on your head is especially dangerous, and it doesn't have to be from a great height to cause major damage. If you fall and your head hits the ground first, your skull is going to receive a lot of force. The force will be transmitted to your brain. Blood vessels in and around your brain can rupture, which causes them to bleed. Since the blood won't be able to leak out of your skull (in most cases anyway), pressure will build up in the brain. Surgeons may have to go inside your skull and into your brain to relieve the pressure or stop the

bleeding. Not a nice thought. Landing on your head also increases the risk of spinal cord damage.

A professor at a college was shoveling snow off the roof of his house. As he was shoveling the snow close to the edge, he fell and landed head first. He received very serious brain damage and was paralyzed from the neck down. This man can no longer talk, walk or even recognize his family.

SPINAL CORD DAMAGE

Your spinal cord is about 18 inches (46 cm) long and starts at your brain and runs down an opening in your spine. The brain sends messages to the muscles in your body. These messages run down your spinal cord and branch off into smaller nerves. If the spinal cord is damaged, the messages from the brain don't reach the muscles they were intended for. When the messages don't reach the muscles, the muscles don't work and the person is paralyzed.

When someone falls and lands on their head, the chances of a broken neck are quite high. If the spinal cord is damaged high in the neck, one of the worst possible conditions may result: quadriplegia. The person is paralyzed from the neck down. This is what happened to the man in the first story of the book. Diving injuries often cause quadriplegia. This happens when a person dives into a body of water that is not deep enough, such as a pond, lake or pool, and they hit their head on the bottom. Tremendous force is exerted on the neck, and the spinal cord can be damaged.

If you break your neck high enough, you may need a ventilator to breathe for you for as long as you live.

Your diaphragm is a muscle sheet found near the bottom of your ribcage that does most of the work for breathing. The nerves that supply it come from high in the neck. If the nerves are damaged because of damaged vertebrae (neck and spine bones), not only will you lose the use of your arms and legs but your diaphragm will not work. You will most likely need a ventilator to breathe. You have probably seen people in this condition. They have a hole in their throat and a tube connected to it. The tube is connected to a machine that does the work of breathing by blowing air into the lungs. This is usually permanent.

Christopher Reeves (the actor who played Superman) died while I was writing this book. He died of cardiac arrest. What most likely caused the cardiac arrest was the horrible infection that was in his body. This infection was caused by a bedsore. People who are confined to wheelchairs or bed for long periods of time can end up with terrible bedsores that can get infected.

People who are on ventilators permanently have a life expectancy of approximately seven years. Christopher Reeves was a remarkable man who handled his injury as well as or better than could be expected. In my opinion, he showed the world that he really was Superman with his attitude. There are many people who have the same kind of injury who do not have the supportive family or nearly the resources he had. Many of these people do not handle their injury nearly as well as Christopher did.

BROKEN BONES

You are not made of rubber. When you fall, bones will break. When bones break they have sharp ends that jab into the muscles and flesh around them. This causes internal bleeding. For example: if you break a femur (thigh bone) the muscles will contract and jab the sharp ends of the bone into your thigh causing it to bleed. Each broken femur can bleed close to a quart or liter of blood or more. Those sharp ends can

also dislodge fat into your bloodstream creating an embolism. Embolisms can kill by lodging in the blood vessels in your brain. This would cause a stroke.



INTERNAL ORGAN DAMAGE

When you fall you accelerate very fast. When you hit the ground you stop very fast. For a split second, your liver, heart and other organs will continue to travel in a downward motion. This puts a lot of force on the organs and because they have tissue connecting them, the tissue stretches and may rip or tear organs, resulting in severe bleeding. A person can bleed to death without seeing one drop of blood externally. These injuries caused from stopping too fast are called deceleration injuries. They can also happen when a motor vehicle hits a tree, a wall or another vehicle.

Your abdomen has many vital organs that can be injured in a fall. One man tripped and fell while he was hunting in the bush. He landed on a broken off stump. The stump ended up injuring his spleen. This man was beginning to bleed to death internally, but fortunately his friend recognized the seriousness of the situation and rushed him to the hospital. It's not only the fall, but what you land on that can be life threatening.

CHAPTER 4

IT'S NOT ONLY THE FALL THAT HURTS... WHAT YOU LAND ON CAN HURT TOO

Warning...this is a horrible story. A man in his thirties was at his mother's house. He had come to attend his father's funeral. After the funeral he was staying a few extra days to be with his Mom. As he was walking in the kitchen, he tripped. He ended up falling forward on the open door of the dishwasher. A big barbecue fork was somehow sticking up. He landed on it with his face. The fork punctured his eye with enough force, it was driven into his brain, killing him. Another fatality from a same level fall.

What are the chances of this happening again? Very slim. But that doesn't matter to the guy it happened to or his Mom — once is enough. Sometimes we think very seriously about falling (this usually happens when we are high up on a ladder or structure and we are scared to death) but we rarely think about what we would land on if we did fall. There is a big difference between falling on your back from six feet (two meters) into the backyard swimming pool with water in it (as long as you don't hit the edge on the way down) and falling the same height from a ladder in the back-



yard and landing on your back or face on the pedal of your child's bicycle. Big difference. In one case you get wet, while in the other the pedal can smash your spine causing spinal cord damage; break your ribs, potentially causing massive bleeding into your lungs; or cause serious facial damage. Same height of fall, but much different outcomes.

We have to be conscious not only of falling, but also of what we would land on. Landing on a piece of rebar that is sticking up on a construction site would be devastating. Landing on that piece of rebar from a three foot fall (one meter) would be enough force to drive the piece of rebar right through you. Landing on a piece of machinery could smash your bones into several pieces. Landing on anything sharp can increase the chances of being seriously injured. You wouldn't have to fall very far for this to happen. A same level fall could do it. Falling from a three foot ladder and landing on your head on just about any kind of surface could finish you off. Always be aware of what's below you.

Many years ago I attended a farmer who had fallen off his combine during harvest time. He fell only a few feet but landed face first on one of the prongs of the combine that picked up the cut grain stalks. It went in his eye and into his brain. His injury didn't kill him, but he did spend the rest of his life in a nursing home unable to do things we take for granted, like being able to dress ourselves in the morning, go for a walk or have a beer.

Obviously, concrete is not a good thing to land on. It's so hard. You may think you have a hard head... but it's never as hard as concrete. Striking your head on concrete at 2 1/2 mph could fracture your skull.

It's not only the fall but what you land on that hurts.

CHAPTER 5

FALL PREVENTION 101

We've talked about slips, trips and falls. We understand how serious they can be. Now let's talk about preventing them. I'm not going to talk about fall arrest devices and special equipment; that's a whole new subject and there are people who are more qualified than I am to discuss that topic. I will talk about preventing everyday falls around the workplace and at home. We'll start off with some general ideas that are useful for any situation, then we will go into more specific situations such as ladders and stairs.

I think this is about the best piece of advice

I've ever heard to prevent slips, trips and falls:

Never Walk Or Step Where Your Eyes Haven't Already Been.

People get hurt when they don't watch where they are going. This isn't rocket science. If you step blindly you could get yourself into trouble. I'm sure it's happened to you at one time or another. You were not watching where you were going or your mind was somewhere else, and: You didn't see the patch of ice you stepped on that caused your feet to shoot out from under you.

You didn't see the front of the fork of the forklift as you made the corner, and you tripped over it.

You misjudged the last step coming down a flight of stairs and broke your ankle.

You didn't notice the uneven ground surface, which caused you to twist your ankle and fall forwards.

All of these situations can be prevented if you're looking where you're going... and I don't mean just looking, but actually seeing and comprehending what you are looking at.

Not stepping where your eyes haven't already been is a life-prolonging skill. People have died because they didn't notice the end of the curb and stumbled forward off it, falling forward... into an oncoming bus. Not a good situation to find yourself in. This is vitally important when you are climbing up or down ladders, step stools, stairs, scaffolding, trucks, machinery or any other apparatus. Missing a step can cause you to fall. It's as simple as that.



**Always watch where you are stepping and remember,
never step where your eyes haven't been.**

BEING IN A RUSH

When we are in a rush our concentration and thoughts are usually on the task or event we are rushing to or we become very focused on rushing. Face it: when we're rushing, our minds aren't on our safety. They are on rushing.

At these times, it's so easy to slip or trip. Your mind is so focused on the task and you fail to notice the tree root that is sticking up. You fail to notice the puddle of water on the floor or the patch of ice as you take the corner. And before you know it, you're lying on the ground in pain, staring at the bone that's sticking out of your leg.

Being in a rush is a cause for many injuries and fatalities, whether you're rushing while driving a vehicle or cutting the grass. Rushing down a few stairs can have devastating results. If you miss a stair, you could stumble forward and land on your face. Missing a rung on a ladder can cause you to fall, or leaning out too far from the ladder can cause you to lose your balance and come crashing down to the ground with the ladder. Rushing to finish a job or get somewhere fast can have permanent repercussions.

Rushing kills. Take your time and be aware that when you are rushing, your chances of being hurt are greatly increased.

Michael was twenty-nine years old and had a lot going for him. He had a great job, and he was very happy with his family life. One Saturday morning he was going to take his kids to a soccer game, but before he did that, he had one last chore to do around the house. He was going to clean the leaves out from the gutter.

He took his ladder and went to the edge of the house, climbed it and scooped out the leaves. He came down and moved the ladder over, climbed back up it and scooped out some more leaves. He repeated this process for the length of the house. At the last few feet of the gutter, he paused and hesitated. Deep down he knew he should come down the ladder and move it over in order to finish the job in a safe manner, but he decided against it. He decided to take a little bit of a risk and save some time. After all, he was in a rush to finish so he could get the kids to the game. He leaned over to clean the last couple of feet of the gutter. He lost his balance. The ladder tipped over, and he came crashing down to the ground. When he landed, he landed on his back, on top of a little wooden fence that he and his wife had placed around a flower bed earlier that summer. He landed with enough force that the wood from the fence shattered a vertebrae which in turn drove those sharp bony chips into his spinal cord which is the consistency of jello. His spinal cord was severely damaged. He is now paralyzed from mid chest down to his toes.

Remember, rushing can have serious consequences!

GOOD HOUSEKEEPING

There is something to be said about good housekeeping. It not only makes you look organized and efficient, but more importantly, it prevents injuries. It's easy to let a work area get untidy and have things lying around on the floor. It's easy to forget about the small puddle of oil or water on the floor. It's easy to leave a pair of shoes or a pile of books on the stairs at home. It's easy to slip, trip and fall from any of these hazards.

Mothers across North America have been telling their kids to pick up after themselves. I think the main reason was to keep the house clean. Little did they know that at the same time, they were teaching their kids (who now may be adults, just like you) a valuable safety lesson. It's easier to hear it from your Mom than from your boss, but the message is the same and just as important.

Keep your work and travel areas clean and spill free.



I don't know if you ever have, but I have come close to falling after I stepped on a slippery piece of material such as a piece of plastic that was on the floor or rug. Maybe it was something from your child's school project, a piece of plastic left over from the dry-cleaning, or a plastic garbage bag. A simple plastic bag on the ground can change the amount of traction you have and can cause you to slip and fall.

I attended to a man who had been building a garage. He had climbed the ladder onto the garage roof to nail shingles in place. The roof was about nine feet high. As he stepped from the ladder onto the roof with his right foot, he stepped on some plastic that was on the roof. His foot slipped and he fell feet first onto the ground. When he landed, he heard a loud crack. When we arrived with the ambulance, his leg had a new bend to it. About three inches below the knee, his leg was bent at a 90 degree angle. It was a very nasty break. This shows how easily a fall can happen.

Six months later he stopped in at the firehouse. He was walking with a cane and had a severe limp. He doubted he would ever go back to the job he once had. He was still in a lot of pain, and not doing very well physically or mentally.

LADDERS

Here are a few basic safety tips concerning ladders. This is not a complete list.

- Follow the manufacturer's directions. There is important safety information on the sides of ladders when you purchase them. That information is there for a reason.
- Use a ladder that is suitable for the job. Don't use a four foot ladder for an eight foot job, and make sure the ladder is in good shape.
- When climbing up or down ladders always maintain three points of contact with the ladder. i.e., two feet and one hand.

- Don't try to shift or "walk" the ladder when you're on it. This may be tempting if you have to move a very short distance. Don't do it. It isn't worth the risk!
- Avoid overreaching to do the work. Get down and move the ladder over.
- Face the ladder when going up or down. And one last point — if you are uncomfortable at heights, it may be a wise choice to hire someone to do the job for you.

Once again these are just a few tips. Get as much safety information as you can before using a ladder.

STAIRS

We use stairs every day. It's one of those things we take for granted, but please remember: a fall down a flight of stairs or even a few stairs can end up being a life changing experience. Here are a few tips to remember:

- Keep the stairs in good repair, and make sure the stairway is well lit. Replace burned out bulbs quickly.
- Handrails can prevent falls by helping you keep your balance, use them. Make sure the handrail is secured properly. Will it hold your weight if you ever have to use it to prevent a fall?
- Good housekeeping rules apply for stairs. Keep books, shoes, toys and anything else off the stairs.
- Keep all carpets and plastic runners secure at all times. If a tack that was securing a runner comes out, the runner can slide and cause a fall.
- You have to be able to see the stairs to use them safely. Don't carry objects that will block your vision.

And one last thing — don't run when using the stairs. Take your time.

CHAPTER 6

SNOW AND ICE

ICE

Many of us live in areas where we encounter snow and episodes of freezing rain. Some of us may have to deal with full-blown ice storms. Freezing rain is common in most parts of North America, and it can even hit the southern states. When it occurs, the chances of slips and falls are greatly increased. I know that we have an increase in ambulance calls for injuries caused by falls when there's freezing rain. Broken hips, ankles, wrists, as well as head injuries, are the order of the day.

It's not always freezing rain that is the culprit. In many areas during springtime, the snow on the ground melts during the day, causing puddles and little streams to run. As night approaches, the temperature cools and these puddles freeze, creating potentially dangerous areas.

Some of us have no choice but to work in these conditions. Hydro employees are at their busiest during and shortly after ice storms. Letter carriers just can't stay home from work for a few days until the ice is gone — the mail must get through. People still have to go to work, and many of us work outside. Even if you don't work outside, you still have to walk to and from your vehicle and from the parking lot into your worksite. You still go up and down stairs, and you walk on sidewalks that may be coated with a layer of ice.

We attended a 31-year-old man who had been going out with his family to visit some friends. His wife and young children were already in the car. There had been some freezing rain earlier that evening. As he stepped out onto the front stairs of the house, his feet shot out from under him and he fell. The back of his head hit the concrete very hard. He was deeply unconscious when we arrived and remained that way. He received a very serious brain injury and cannot function in a normal capacity. He cannot work, and needs constant care. He cannot recognize his wife and children.

Many people have ended up in a similar condition because of a fall like this. As I mentioned earlier, Dr. Atkins from the famous Atkins diet died as a result of hitting his head when he slipped on some ice on the sidewalk. These injuries happen more often than you could ever imagine. They usually don't make the newspapers unless the person is famous, but they happen every day. To help you avoid ending up in the same kind of situation, here are a few ideas to keep in mind:

REALIZE THAT WALKING ON ICE IS DANGEROUS

If there is a layer of ice on the steps and sidewalks and you do have to go outside, realize this is potentially dangerous. Increasing your level of awareness of the potential danger can help you make safer choices.

IF YOU DON'T HAVE TO GO OUT... DON'T

If you don't have to go outside for anything important, don't. This is especially good advice for the elderly who don't have to go to work. Stay at home, read a book or watch television. Skip your daily walks on days like these.

DON'T RUSH

Take your time. Don't rush, and take short steps. Being in a hurry is a sure way to get yourself into trouble. Taking those long, graceful strides might be good for perfect conditions, but on ice they can cause your foot to slide out from under you causing you to fall heavily or, in some cases, to do a very ungraceful version of the splits that's sure to stretch every muscle, ligament and tendon you have way beyond its normal range, causing you not only extreme pain but the need to use a walker for the weeks to come.

Some people suggest walking with your feet at a slight angle outwards when walking on ice. I'm not sure why this works, but I know I do it automatically when walking on ice. If it's good enough for penguins, it's good enough for me.

TRY TO WALK ON AREAS THAT HAVE ALREADY BEEN SANDED OR SALTED

Don't take shortcuts off the sanded and salted areas. Keep a bag of sand or salt in your house if freezing rain is expected. This way you won't have to walk down stairs and the sidewalk to the garage to get it.

At the worksite, or anywhere else for that matter, walk on areas that have already been sanded or salted. Many worksites sand the main walkways as soon as they get slippery. Stay on the beaten path and tread carefully.



HOLD ONTO SOMETHING

If you are traveling up or down stairs, use the handrail. This simple procedure can save your life. Holding onto a fence, wall, parked vehicle or any other stable object can give you that extra stability.

We attended a man approximately 45 years of age. It was spring-time. The snow melted during the day and formed puddles of water that would freeze at night when the temperature dropped.

One evening, the man was walking out to his car when he slipped on the ice. His feet shot out from him in a forward direction. He landed very hard on his back. He was not able to move his legs. He screamed for help for quite awhile until someone heard him. The

ambulance was called and we treated and transported him to the hospital. Fortunately for him, the spinal injury wasn't permanent. The swelling around his spinal cord went down in a few days and he regained the use of his legs, but he did fracture a couple of vertebrae. He would have been off work and immobile for quite awhile after his injury.

He wasn't lucky he fell, but he was lucky there wasn't permanent paralysis.

SPECIAL DEVICES FOR YOUR FEET

Many manufacturers offer devices that you can put over your shoes that will greatly increase your traction. These are valuable safety devices you can use to aid in traction while walking on icy areas. Consider purchasing a set for yourself.

Ice on the sidewalks or roads may be especially hard to detect at night. Use caution. Don't rush. Always watch where you are stepping.

One other piece of advice is to clear your sidewalks of snow and ice as soon as you can. This isn't only for your own safety, but for the safety of your family members and anyone else who will be coming up your walk.

SNOW

Many of us live and work in areas where we get snow ranging from light dustings to serious blizzards. We have to be cautious when it snows because a few inches of snow can give the ground a nice smooth, safe appearance. Underneath the snow can be depressions,

actual holes in the ground, pipes, 4x4 pieces of wood, big rocks and numerous other objects that are just waiting for you to step on and snap your ankle. Snow also hides ice. Often you find yourself stepping on a seemingly safe stretch of snow-covered sidewalk only to find that the snow was hiding a patch of smooth, polished ice.

When walking in snowy areas, try to walk on the sidewalks that are already shoveled. If you must walk in uneven areas such as in the bush or construction areas, use caution. Don't rush. Step carefully and always remember that there could be something under the snow waiting to trip you up or twist an ankle. And always make sure your boots are done up properly.



CHAPTER 7

YOUR BOOTS ARE MADE FOR WALKING... SAFELY

Wearing properly laced up work boots with good soles may be one of the best ways to prevent falls and reduce the chance of a twisted or broken ankle. Most people take their work boots or safety shoes for granted as just something they put on their feet. A lot of thought and work goes into the design of safety footwear.

For example, the soles of one type of boot or shoe may work well for certain types of surfaces. Some soles are resistant to oil or certain chemicals while others are not. Soles that give good traction on smooth cement floors may not be so great on other surfaces. Smooth soles that give good traction on concrete may be very slippery on snow or ice. This is why your employer may want you to use certain types of soles or boots at your workplace.

The soles of the safety shoes I wear at the firehouse are great for some surfaces, but if I go outside with them when it's very cold, say minus 10 degrees, the soles harden and become extremely slippery. Trying to carry a patient on a stretcher is dangerous because of the poor traction. Obviously, we don't wear those shoes in sub-zero conditions.

LACE UP YOUR BOOTS

This is one of the best and easiest ways to prevent a broken or sprained ankle. It's so simple I shouldn't even have to mention it, but I will. Do up the laces of your boots! I've dealt with several broken



ankles that could have been prevented. These people were in severe pain with their broken ankles that were going to keep them off their feet and away from work for many weeks. In these cases I often asked the injured person if they had their work boots done up to the top when the injury happened. In most cases the answer was no.

Work boots and heavy hiking boots go up past the ankle for a good reason. They support your ankle when it starts to twist, preventing it from twisting more. This helps prevent sprains and fractures. In order for the boot to give you this kind of protection, the laces have to be done up properly. They have to be done to the top and tied firmly in order to give you this support. This simple piece of advice can save you from ending up in the hospital or even protect you from a life threatening situation. Being out in the bush miles from help with a broken leg or ankle is no joke.

Another good reason for lacing up your shoes and boots is that it reduces your chances of tripping over them or having them snag on something that can result in a fall. We've all done it at one time or another. We tell our kids to keep their laces done up so they won't trip. Remember to do the same.

CHAPTER 8

SITUATIONAL AWARENESS

A man was going to take a picture of his family at a lookout point along the highway in a national park. He lined the family up and started to back up to get the shot. The man hopped a fence so he could get a better picture and continued to back up. He went too far and fell down a steep embankment, sustaining injuries that would keep him off work for at least a couple of weeks. I'm sure he will remember that picture for a very long time.

At times, it's easy to become so focused on the task at hand that you become oblivious to everything around you, including your own safety. You lose awareness of the whole situation. Safety depends on being aware of the big picture. Fighter pilots have a name for this: they call it situational awareness, or SA. Without it, they can get into trouble.

Here's what I mean. Pilots may become so focused on the task at hand, such as concentrating on locking their bomb site on a target, that they fail to realize there is a missile approaching them. Or they may be concentrating so hard on following their leader's wingtip to keep that perfect formation that they don't realize they are coming too close to the ground and are in extreme danger.

Few of us are in a position to fly a fighter jet, but that doesn't mean

we won't be injured by losing our situational awareness. Here's how some of these injuries happen:

Mechanics will walk into grease pits even though they have been working in the same building for ten years and knew it was there.

People will concentrate so hard when painting the last few inches of the gutter that they will reach too far and fall off the ladder.

While giving a speech, people get so involved with gesturing and moving about that they will walk right off the stage. (I'm glad I've never done it in one of my safety presentations. It would look bad.)

By maintaining an awareness of where you are and what is around you, you can help yourself avoid falling and being injured or possibly killed.



CHAPTER 9

CONDITIONS CHANGE

Here is one last piece of advice I want to remind you of: conditions can and do change. The wet parking lot you walked across in the morning to get to the plant may have turned to ice by the time you are walking back to your vehicle after your shift. The nice, dry, dirt path you walked on in the morning is now wet, slimy and slippery after the recent downpour. The clear aisle at the workplace now has an extension cord running across it that wasn't there twenty minutes ago. Conditions can change almost instantly.

It's not only weather conditions that change. Floor and walking surfaces can change, too. I think we all have walked from one kind of surface to another and almost ended up on the floor with a hard thump. This may have happened when you came in from outside and your shoes were wet and you stepped onto a tile or smooth concrete floor. It may have happened when you walked on a floor that was being washed.

Always be aware of the changing conditions. Keep your eyes open, watch where you are going and remember, never walk or step where your eyes haven't already been.

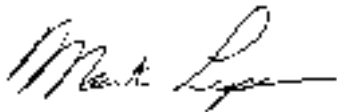
EPILOGUE

We have talked about several ideas and ways to prevent falls. Talking about preventing falls doesn't prevent falls. We have to take action. Without taking action on the information we read, watch or hear, nothing will happen. We will be in the same situation we were in before we took in the information.

I want you to remember what you read in this book, and implement the information and tips at home, at work and at play. Simple falls can be devastating, not only to you but also to your family. The pain of an injury is just the start of the problems that are to follow. I've known people who have lost their homes, jobs, and businesses as a result of an injury from a fall. I know people who have gone through divorces and gone into deep depression and tried to get out of the depression with alcohol and drugs, all as a result of a fall. And I know of one person who chose to take his own life as a result of a serious injury caused by a fall. All of these people had one thing in common: each of their falls could have been prevented.

Don't let a fall hurt you and your family. Watch where you are going and be careful... and remember, never walk or step where your eyes haven't already been.

Take care,

A handwritten signature in black ink, appearing to read "Martin Lesperance". The signature is fluid and cursive, with a long horizontal stroke at the end.

Martin Lesperance

2005

ABOUT THE AUTHOR

While still employed in emergency services as a firefighter/EMR, Martin Lesperance leads an energetic life as a firefighter, speaker, author and father.

Martin has authored several books including *Kids for Keeps: Preventing Injuries to Children, I Won't be into Work Today – Preventing Injuries at Home, Work and Play* and *What Do You Mean I'm Stressed – Recognizing And Managing Your Stress and Safety Tips That Can Save Your Butt*.

Martin has spoken to organizations across North America including Huntsman Corporation, New Mexico Mutual Casualty Company and Los Alamos National Laboratory, and the Illinois National Guard to name a few. His humor and twenty-two plus years experience as a firefighter makes Martin very popular speaker. He has also starred in several safety videos.

Martin is the father of two young girls. He also enjoys hiking, kayaking, and skiing. As an interesting side note, and among his energetic accomplishments, he was a silver medallist in Amateur Boxing at the 1971 Canada Winter Games. He also competed in the World Fire Fighter Games in the Toughest Fire Fighter Alive competition.

**To book Martin to speak for your next safety meeting
or conference call him at 1-888-278-8964 or (403) 225-2011**

“You not only shared some incredibly important and lifesaving tips but you delivered them in a manner that made our employees feel a deep sense of value...our employees are still discussing your stories and expressed they have changed their behaviors as a result of what you shared.”

Mike Morrow & Art Prophet, IAM/Boeing Health & Safety Institute

**For free safety articles, visit his
website at www.safety-speaker.com**

SMALL FALLS ARE A BIG DEAL THE VIDEO

Show Your Employees You Don't Have To Fall From Something High To Be Seriously Injured or Killed!

During his 22 years as a firefighter, paramedic and EMT, Martin Lesperance has witnessed the tragic results from countless slips, trips and falls. In this motivational program, he recalls stories of the slips, trips and falls he has attended, the seriousness of the injuries, and how falls can be prevented.

TOPICS INCLUDE:

- Small Falls Can be Deadly
- Importance of Wearing Proper Footwear
- Awareness of Changing Surface Conditions
- Recognizing and Correcting Fall Hazards
- Good Housekeeping and Smart Storage Habits
- Hazards of Climbing to Higher Levels

This 19 minute video can save your employees from being injured in a fall.

**To preview a video for your company,
call ERI-Safety Videos at
1-800-311-1143
or visit their website at www.eri-safety.com**

Visit Martin's website for free articles on safety and further information on his books and speaking services at www.safety-speaker.com

Don't Let a Slip, Trip or Fall Ruin or End Your Life!

After dealing with hundreds of life altering injuries and many fatalities that have resulted from falls, Martin Lesperance passes along vital safety information in an entertaining way that will help you, your family and co-workers understand that you don't have to fall from a great height to be seriously injured or killed, and that falls can be prevented.

In this book you will learn:

- That same level falls can kill;
- How a fighter pilot skill can help prevent you from getting hurt in a fall;
- What happens to your body when you do hit the ground from a fall;
- That a fall doesn't have to be spectacular to seriously injure a person;
- How to keep your mind programmed on preventing a slip, trip or fall and...
- One of the best ways to prevent a broken ankle.

MARTIN LESPERANCE has been involved in Emergency Services for more than 23 years as a fire-fighter, paramedic and EMT. He is the author of several books on injury prevention and speaks to corporations across North America on safety. His humorous approach makes him an in-demand speaker. Some of his clients include Boeing, Los Alamos National Laboratory, Illinois National Guard, CN Rail and many more. For further information on safety or Martin's videos or speaking services, visit his website at www.safety-speaker.com.

