UNITED STATES POSTAL SERVICE

Safety Talks

Publication 129

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Transmittal Letter

A. Explanation. Publication 129, *Safety Talks*, is updated with the inclusion of new statistical information and some new safety talks. Safety talks are an important part of your safety program. This publication presents a wide variety of discussion topics, quizzes, and advice — from the Office of Safety and Risk Management, various field offices, the National Safety Council, and other sources — that supervisors can use as basic guidelines for presenting safety talks.

B. Availability

1. **Hard Copy.** Copies of Publication 129 may be ordered from the material distribution centers using Form 7380, *MDC Supply Requisition*, or individual safety talks may be reproduced locally.
2. **Online Copy.** Publication 129 can be accessed on the Postal Service IntraNet from the Policies and Procedures page at *http://blue.usps.gov/cpim* and from the Human Resources page at *http://blue.usps.gov/hrisp*.

C. Comments. Send recommended changes or ideas for new safety talks to:

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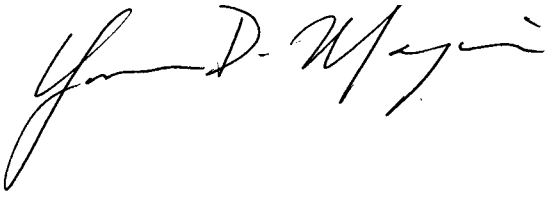

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Introduction

Purpose of This Guide

Safety talks are an important part of your safety awareness program. This publication presents a wide variety of discussion topics, quizzes, and advice from the Office of Safety and Workplace Assistance, various field offices, the National Safety Council, and other sources that supervisors can use as basic guidelines for presenting safety talks.

Your Role as a Supervisor

As a supervisor, you play a very important role in informing and training your employees. A well planned and presented safety talk can provide employees with the specific training, safety information, and motivation they need to perform a job in a safe and professional manner. This guide can assist you in preparing and delivering informative safety talks to your employees.

How to Use This Guide

The basic information contained in this guide is backup material for your use in preparing safety talks. You should add your own examples and illustrations to ensure that the talks are applicable to local conditions. The variety of subjects provide guidance on many topics. Safety quizzes located throughout this guide provide an ideal opportunity for employees to participate in the talks. You can present the questions verbally to the group and then discuss the employees' responses, along with the answers included in the text.

How to Give Safety Talks

Planning Prevents Poor Performance

This modern management proverb should be foremost in every supervisor's mind. The truth of the proverb is particularly apparent when you give your weekly safety talk. Very few speakers have the ability to *ad lib* fluently and effectively. Most of us must plan carefully, well ahead of time, what we intend to say. We must practice *delivering the message*, and we must *set the stage*.

Prepare for the Meeting

1. **Select the subject.** Select the subject of your talk and schedule the meeting at least one week in advance. Your district safety office can help you select talk topics that are of interest and importance to your employees.
2. **Study and practice.** If you use a *canned talk* prepared by someone else, study and practice it so that you can present the material in an enthusiastic and convincing manner without reading it. If you prepare your talk from scratch, plan the talk carefully and check your facts. Remember, a 10-minute safety talk should be just that — 10 minutes, or about 600 words in length.
3. **Schedule space.** Normally, 10-minute safety talks should be given at the work site or in adjacent swing rooms, and seating is not usually required.
4. **Schedule time.** Preferably, schedule talks at the start of the work day, or just before or after a regularly scheduled work break. Select both your space and your time so as to avoid competing with noisy distractions. Rotate the times and days talks are given so that employees on leave or scheduled off will benefit from them too.
5. **Assemble materials.** Assemble all posters, handouts, displays, or demonstration materials that you intend to use to supplement your talk.

Run the Meeting

You are the *leader of the band*. Start the meeting on time and run it in a businesslike way. In particular:

1. **Compliment** — Compliment particularly good work of individuals on the crew.
2. **Organize** — Use your notes to keep your talk organized, but don't read your talk.
3. **Energize** — Be enthusiastic.
4. **Encourage** — Encourage employee participation by inviting comments and opinions.
5. **Focus** — Stay on the subject, and do not permit others to ramble.
6. **Stop** — Close the meeting on time, with an appropriate summary.

7. **Dismiss** — Dismiss your employees to resume their normally scheduled activities. Do not permit the meeting to just die away.

Presentation Tips — How You Look and Sound

In order to improve your effectiveness as a safety discussion leader, follow these simple tips:

1. **Watch your volume.** Speak loudly enough to be heard by everyone.
2. **Use a natural tone of voice**. In normal, everyday conversations, your tone of voice and inflection are constantly changing. Don't fall into the habit of a sing-song, disinterested tone of voice. Try to keep some naturalness in it.
3. **Enunciate clearly**. Speak clearly and don't slur any words. When speaking in front of a group, remember that you have to enunciate a little more clearly (and speak with a little more volume) in order to project your voice to the back of the room. To get this clarity and volume, you may have to speak more slowly than usual.
4. **Breathe.** This is simply a concern for not running out of breath before you finish a sentence. Most of us don't have any trouble in normal conversation. In a speech, however, where a part of the material may be read (although we advise against reading to groups), you should ensure that the material can be read aloud without difficulty.
5. **Pace yourself.** Make sure you don't go too fast or too slowly. The main thing to avoid is droning, a monotonous way of speaking. Rehearse in front of people, if possible. Get some honest, positive criticism.
6. **Pay attention to your phrasing**. This means not hooking all your sentences together with *and* or *uh*. You can get away from a halting delivery by adequate rehearsal.
7. **Relax**. Nervousness is easily communicated to an audience. It makes them nervous. Again, rehearsal, particularly in front of people, is the best cure for this condition.
8. **Be enthusiastic.** Honest enthusiasm for your subject is also highly communicable to your audience. Develop and exhibit a real interest in the safety topic you're talking about. Remember, you're talking to your employees about the safety and health program. Be enthusiastic
9. **Watch your posture**. Try to command a certain amount of attention by the way you stand. This means that you shouldn't slouch, or drape yourself over the lectern, desk, or case. Stand up straight without looking stiff or uncomfortable.
10. **Rehearse**. Rehearse your safety discussion when possible, or when you are nervous or unsure of yourself. Practice makes perfect. Try to avoid reading directly from the discussion guideline. Read it several times before your meeting and memorize the highlights.
11. **Be self-confident.** Don't be overly self-conscious. Remember you probably look and sound better than you think. Take advantage of any interruptions or loud noises by trying to work them into your discussions.

Summary

Remember these points:

1. **Prepare.** Think, write, read, listen, organize, and practice your talks.
2. **Pinpoint.** Don't try to cover too much ground. Concentrate on one main idea.
3. **Personalize.** Bring the subject close to home. Make it personal and meaningful to your listeners.
4. **Picturize.** Create a clear mental picture for your listeners. Use physical objects or visual aids whenever possible.
5. **Prescribe.** Make sure you tell your listeners what to do. Ask for specific action.
6. **Follow up.** Here's an additional word of advice. Make it a point to check your crew during the week following the safety talk to see if they're practicing what you preached. That's the surest way to determine whether your safety talks are effective. Employees who have shown initiative by asking questions or coming up with good ideas should be given a word of praise after the meeting or when you pass their workplace.

Good luck.

What a Supervisor Can Do to Prevent Accidents

General

As supervisor, you are responsible for the safety of employees and the safe condition of the work area. The success of a safety program depends directly upon whether you do a good job of meeting this assigned responsibility.

Supervisor's Safety Responsibilities

1. **Develop proper attitudes.** There is no simple way to develop a proper safety attitude. However, the following two activities will go a long way toward the development of such an attitude:
   a. *Personal Example*. Set the proper example by personal behavior. When a work area or situation calls for personal protective equipment, use the necessary equipment. Needless to say, never act unsafely or in violation of a safety rule or regulation.
   b. *Acceptance.* Convince others to behave safely by carrying out safety responsibilities conscientiously and with conviction.
2. **Orient and train employees.** Train workers so they can perform their work safely. Give special attention to both new employees and employees who have recently been assigned to new jobs.
3. **Detect employee personal difficulties.** Make every reasonable effort to check each worker sometime during the workday. You are responsible, within reasonable limits, for detecting personal difficulties such as illness or disability among workers. When you detect such conditions, take proper action.
4. **Enforce safe practices and regulations**. Enforce safe work procedures. Failure to do so invites an increase in unsafe acts and conditions.
5. **Conduct planned observations.** Conduct planned observations of workers to check compliance with safe work procedures. Whenever you observe unsafe acts, inform the worker immediately and explain why the act was unsafe.
6. **Prevent unsafe conditions.** Many unsafe conditions are the result of what employees do, or fail to do. You should remind employees that they are to look for, correct when possible, and report when necessary such things as poor housekeeping, damaged tools, improperly stored stock, and the existence of improper work methods that could contribute to the occurrence of a work injury.
7. **Conduct planned safety inspections.** Conduct periodic inspections of tools, equipment, and work areas. Such planned inspections are a systematic way of finding physical conditions that could contribute to a work injury.

8. **Correct unsafe conditions.** Take immediate steps to correct unsafe conditions. When an unsafe condition cannot be immediately corrected, take temporary measures to warn employees about the condition. Use a follow-up system to ensure that corrective measures are completed in a timely fashion.
9. **Investigate accidents.** Conduct the accident investigation as soon after the accident as possible. Collect all the facts and opinions regarding the cause of the accident.

2 Health and Weather-Related Safety

Substance Abuse

What Is It?

Substance abuse is a very serious problem that affects the health and safety of our society. Both alcoholism and drug abuse are chronic problems that do not go away with time. Prolonged use of drugs brings about the symptoms of persistent drug and alcohol use, even if the search for drugs and alcohol and their use cause other detrimental health and social consequences in the person's life. Both alcoholism and drug abuse are potentially and frequently fatal.

A primary characteristic of an alcoholic or drug abuser is loss of control. Loss of control means that once an alcoholic or drug abuser starts to drink or consume drugs, he or she is not able to predict how, when, or if he or she will be able to stop.

Each year the costs attributed to substance abuse rise. In 1995, the most recent year for which data is available, the national costs were nearly $276 billion. These costs stem from a loss of productivity and absenteeism at work, increased use of health and welfare services, property damage, crime, and additional medical expenses. The human loss to individuals, families, and communities is incalculable. Between 15 and 17 percent of the labor force has chemical dependency of one form or another.

Of all fatal accidents occurring on the roads today, 50 percent are attributable to alcohol. Over 80 percent of fire deaths, 69 percent of drownings, 60 percent of deaths and injuries from falls, 50 percent of spouse abuse, and 40 percent of child abuse deaths are attributable to alcohol alone. Additionally, an estimated 25 to 40 percent of hospitalizations are linked to substance abuse, while about 109,000 deaths a year are attributable to drugs and alcohol.

Many chemically dependent employees who are coerced into treatment will, in fact, relapse. Nonetheless, at some point in the future, they may seek treatment on their own and be successful.

Intervention with chemically dependent employees in the Postal Service is a process, not an event. Intervention consists of managerial, supervisory, union, family, or self-referral into the Postal Employee Assistance Program (EAP), followed by the identification and attempted reversal of the addiction. When friends, family or co-workers confront the dependent employee with convincing evidence, the employee usually will commit himself or herself to treatment. The time for intervention comes when the earliest signs are evident that indicate an employee's consumption of alcohol or any other drug is becoming a danger to him or her or to others.

Are Alcoholism and Drug Abuse Treatable?

Yes. Both alcoholism and drug abuse are treatable. In fact, proper screening, assessment, and treatment with trained and certified professionals have successfully returned thousands of employees to critical jobs. Employees who think they have a problem should not hesitate to contact the Employee Assistance Program counselor at 1-800-EAP-4-YOU (1-800-327-4968).

How Does Substance Abuse Affect You?

Of all fatal accidents occurring on the roads today, 50 percent are attributable to alcohol. Over 80 percent of all fire deaths, 69 percent of drownings, 60 percent of deaths and injuries from falls, 54 percent of violent crimes, 50 percent of spouse abuse, and 40 percent of child abuse deaths are attributable to alcohol alone. Additionally, an estimated 25 to 40 percent of hospitalizations are linked to substance abuse, while about 109,000 deaths a year are attributable to drugs and alcohol.

In the workplace, between 15 and 17 percent of employees have chemical dependency of one form or another. In fact, drug using employees are 3.6 times more likely to be involved in a workplace accident, are 5 times more likely to file a workers' compensation claim, and are more likely than nondrug using employees to take an unexcused absence. Additionally, these problems can spill over to nonusing employees because they may cover for substance users and take on a larger responsibility of work.

It should come as no surprise that unions and management want you to be better informed about the dangers of alcohol, drugs, and other substance abuse in the work place and at home.

Each of you should have received a copy of the Employee Assistance Program brochure and should have viewed a video presentation explaining the program during your orientation session.

Experts all agree that referral to EAP or a treatment agency leads to positive results. Alcoholism and drug abuse are chronic problems that don't go away with time. Since these problems are progressive, they will only get worse as long as someone continues to drink or abuse drugs. As we know quite well, alcohol and drugs are all too often fatal.

I ask each of you to take the time to look over the literature that was sent to you. It presents a lot of good information to help you better understand the different forms of substance abuse and their effects. The material is written in a simple and direct form. We hope you will share the information in these booklets with your family, including your children. Additional copies can be obtained through your EAP office.

Please keep in mind that possession, use and sale of drugs and other controlled substances are against the law. All law enforcement agencies are stressing the investigation of drug-related crimes. Drug activity in the Postal Service should be reported to your supervisor or to the Inspection Service.

Substance abuse affects your health, safety, and future. If postal employees, the unions, and management all join forces, we can make our post office a safe, enjoyable, and productive place to work.

Should any of you have questions or concerns about drugs or substance abuse in the work place, feel free to contact any supervisor, or your EAP counselor or by calling 1-800-EAP-4-YOU (1-800-327-4968).

Let's fight substance abuse together.

Alcoholism — Problem Drinkers

Many articles have been written on various safety practices used to protect us from personal injury. Today, we are going to discuss the problem drinker, a worker who consumes alcohol to a degree that seriously interferes with his or her job, health, and family.

On the job, problem drinkers pose a threat to themselves and those around them, and are costly to their employers. They generate excessive costs through high absenteeism and sick pay and lowered productivity. If they are fired or cannot function on the job, the company loses the services of an experienced worker. Their drinking can cause friction in work groups, lowered morale and efficiency, bad decisions, poor judgment, waste of supervisors' and fellow workers' time, and a poor public image.

Studies reveal that before the problem, many alcoholics were average or above-average workers; they possessed advancement potential, were friendly and well liked. Because of such traits, supervisors tend to postpone decisive action. Fellow workers and supervisors tend to cover up for any shortcomings.

These alcoholic workers can be any age, race, religion, and of any intelligence, social, or economic level. No matter their background, they can all be rehabilitated. First, the problem has to be identified. Current information must be sought and ethical and confidential safeguards must be carefully observed.

But three factors are most important if the alcoholic's life is to be turned around. Each must accept that he or she has a problem, that the problem can be treated, and each must be motivated to seek treatment. The responsibility to cure the problem and ultimately save the problem drinker's job remains with the employee. If he or she refuses help, and work performance continues to decline, the normal procedure for handling poor performance will apply. However, the Postal Employee Assistance Program (EAP) can provide the proper counseling and guidance and create an atmosphere of understanding for employees who want to deal with their drinking problems and improve their work performance.

Alcoholism

What Is It?

Alcoholism is a disease that includes alcohol craving and continued drinking despite repeated alcohol-related problems. It is a primary disease — that is, it is not caused by some underlying psychological or moral flaw. It is a chronic disease — it does not go away with time. However, it can be controlled. It is a progressive disease — it does not improve as long as one continues to drink. It is a potentially fatal disease if the drinking is not interrupted.

A primary characteristic of alcoholism is loss of control. Once an alcoholic starts to drink, he or she is not able to predict how, when, or if he or she will be able to stop drinking.

There are at least 15.1 million people who are either alcoholics or alcohol abusers in the United States today. One person in ten who drinks at all will become an alcoholic. Children of alcoholics are four times more likely to become alcoholics themselves than children of nonalcoholics. Approximate 25 percent of all people who drink will have problems because of alcohol sometime during their drinking career.

How Is It Treated?

Prior to the advent of Alcoholics Anonymous (AA) in 1935, and of modern treatment programs, most alcoholics were felt to be beyond help by the medical profession. Now, overall recovery rates (2-year abstinence rates) of 57 to 62 percent are not unusual, where treatment, AA, and appropriate counseling are available.

Alcoholism is one of the most treatable illnesses. For most people, recovery is not easy at first, but it is always worth the effort. As a common saying among AA members has it: For an alcoholic, the best day drinking is not as good as the hardest day sober.

How Do You Get Help?

If any of you think that you have a problem with alcohol or drugs, or know someone who does, please contact the Employee Assistance Program counselor at telephone number 1-800-EAP-4-YOU (1-800-327-4968). The counselors are trained professionals and all information will remain confidential. Their sole intent is to help our employees who have problems with drugs or alcohol.

The help is waiting for those who need it. I urge you to use the services of these professionals if you need help.

Sun Can Be Fun, But Dangerous to Some

Sun worshipers and nature lovers traditionally welcome the relief that summer sunshine brings from winter's gray skies. But those warm weather rays may not be good for everyone.

Excessive exposure to the sun can cause burning, drying, wrinkling, and premature aging of the skin. More serious, however, is the damage too much sun can cause to individuals who are susceptible to skin cancer.

For many people, adjusting to summertime sun is simply a matter of gradual exposure and increasing tolerance. About 15 minutes of exposure the first day should be right for most people. You can gradually increase the amount of time you spend in the sun as you build up your tolerance.

When outdoors, use a good sunscreening preparation. Most suntan lotions are rated numerically between 2 and 15, with higher numbered lotions providing greater protection.

These simple precautions can help protect your skin from basic damage by the sun. But the more serious problem of skin cancer requires special attention. In almost all cases, sufferers are advised to minimize their exposure to the sun.

Experts estimate that nearly a million new cases of skin cancer surface each year in the United States. Once associated primarily with those who spend a great deal of time in the sun, such as lifeguards, farmers, and fishermen, the condition today can appear in almost anyone. However, it tends to occur more frequently in people with fair complexions and in those having blue or light-colored eyes.

Skin cancer can take more than 20 years to fully develop, and it can even emerge in people who haven't sunbathed in years. If not treated promptly, the condition can be fatal.

The following lists the three most common types of skin cancer and their symptoms.

- **Basal cell carcinoma**. This form commonly develops on the face or torso and may appear as a pimple or sore. It may or may not bleed. If the condition fails to heal or disappear within a few weeks, contact a physician. Individuals who have had one attack often experience a second within 18 months. This is the most common form of skin cancer, accounting for about 60 percent of the cases. However, it also has the highest cure rate when treated early.
- **Squamous cell carcinoma.** This second most common form of skin cancer usually develops on those parts of the body most frequently exposed to the sun. The cancer forms on the face in 75 percent of these cases and usually appears as a clearly defined reddish area with a crusted scaly center. In 15 percent of the cases the condition appears on the hands. This skin cancer is likely to spread to other body organs if not treated promptly.

- **Melanoma.** Melanoma is the least common of the three skin cancers and is usually considered less related to sun exposure. However, it can also be the most dangerous skin cancer. Of the estimated 6,900 skin cancer deaths each year in the U.S., 75 percent are caused by melanoma. It usually affects existing moles or birthmarks. Any new mole that develops on an adult, or any existing mole or birthmark that changes color, enlarges, develops an irregular outline, becomes more elevated, itches, or bleeds should be considered a sign of possible melanoma. If you notice any of these symptoms, contact your physician immediately. About 90 to 95 percent of the cases can be cured if treated early.

Sunstroke — It Can Be Serious!

Did you ever come close to passing out because of the heat? If you've ever had this experience or seen another person in this condition, you can appreciate the seriousness of sunstroke.

Sunstroke's symptoms give clear warning. First, you experience a severe headache. Your face glows red and your skin is hot and dry. You do not sweat. Your pulse is strong and rapid as your temperature skyrockets to 106 degrees or more. You will usually become unconscious if the case is severe.

Different people are at different risk of sunstroke. No two people have the same physical resistance to heat. Some people wear clothing that is too heavy or tight-fitting for hot days. Sunstroke strikes quickly and can be fatal. About 25 percent of the very severe cases of sunstroke die.

But the effects of sunstroke can be quickly reversed with some first aid knowledge. According to The American Red Cross, "The first aid treatment is to get the victim into the shade and remove the clothing. Lay the patient on his back with head and shoulders somewhat elevated. Apply cold to the head — wet cloths, ice bags, ice — to cool the body. Give no stimulants. Call a doctor at once. Give cool drinks after consciousness returns. If the patient is taken to a hospital in an ambulance, treatment should be continued during transportation."

When temperatures outside rise to 95 degrees or above, our bodies can no longer be cooled by the outside air. The higher the outside temperature, the greater the danger from sunstroke.

Many of us, wanting to get our jobs done as quickly as possible, sometimes neglect certain precautions. Use common sense during hot weather — keep out of the sun's direct rays as much as possible, wear a head covering, dress in lightweight clothing, and avoid alcoholic beverages. Following these simple precautions in hot weather could save your life.

Sunburn

While sunburn may not be as severe as sunstroke or heat exhaustion, it can cause fever and headache and require bed rest. If you try to tan too fast, you may end up with blisters and swollen skin.

Sunburn is a first- to second-degree burn. It results from blood vessels dilating under the surface of the skin. A first-degree burn is reddening of the skin, and a second-degree burn involves blistering. Anything more severe than this may require medical attention.

When you get a sunburn, your skin has been damaged. The injured area should not be exposed to the sun until after it completely heals.

The best way to prevent sunburn is to limit exposure to the sun to 10 to 15 minutes. That's enough time to get a slight sunburn your first time out. If you get a burn, use a commercial preparation that is suitable to your skin type. Oils and medicated preparations help relieve pain, although they do not help the skin's healing process. Medicated creams may cause allergies, so make sure you are not allergic to a cream before using it.

It is possible to get a sunburn on an overcast or rainy day since ultraviolet rays penetrate dark clouds and rain clouds. Sunburn can occur even while driving in your car or staying indoors on a sunny day since ultraviolet rays may reflect off objects onto your skin. Even clothing does not offer complete protection from ultraviolet rays. Fifty percent of the sun's ultraviolet rays can penetrate through a woman's light summer dress, and 20 percent through a man's white shirt.

Use common sense when going out in the sun, and use protective creams and suntan oils. Wear light colored clothing and a hat. Remember, you can become burned very easily your first time out at the beach or pool. Use caution so you won't get "overdone in the sun."

Heatstroke and Heat Exhaustion

Heatstroke and heat exhaustion can occur when you are working in a hot environment, sitting in a hot automobile, or exerting yourself in increased heat and humidity.

Avoiding direct sunlight will not necessarily save you from the ill effect of heat. It's possible to suffer heatstroke even when the air temperature is moderate. Excessive humidity can bring on overheating by interfering with the body's perspiration-evaporation-cooling process, causing the body to sweat excessively and lose salt and water.

Heatstroke occurs when your body can't throw off enough heat to sustain a normal temperature. Symptoms include headache and weakness, and can result in a sudden loss of consciousness.

Heatstroke victims will have hot, red, dry skin with limited sweating; a hard, rapid pulse; and a very high body temperature.

Heatstroke is life threatening. Victims need to be cooled off as soon as possible and receive immediate hospitalization.

While heatstroke is the result when your body becomes too hot, heat exhaustion results when your body looses too much fluid. Symptoms of heat exhaustion include weakness, nausea, anxiety and excessive sweating.

Heat exhaustion victims may appear to have pale, grayish or clammy skin; a weak, slow pulse and low blood pressure; and suffer from faintness.

With heat exhaustion, you also need to move the victim out of the heat. Heat exhaustion victims should keep their heads' down, replace salt and water (but do not take salt tablets) and seek medical attention.

If you experience these early warning signs of either heat stroke or heat exhaustion, you should seek help immediately

When you work in the heat, their are some common-sense considerations that can help you stay healthy and happy. Choose on-the-job clothing suitable for hot summer weather. Cotton is an excellent choice. If possible, wear light-colored clothing that reflects a maximum amount of light.

Remember that heat exhaustion or heat stroke can happen to anyone at any age. Begin adjusting to summer temperatures by taking the heat in small amounts. Let yourself get used to the higher humidity and warmer weather gradually.

Keeping the Body's Temperature in Balance

If your feet are cold, put on your hat. That statement may sound silly, but to those who understand how the human body works it is a simple statement of fact.

Heat Production

The human body is continuously producing heat through the burning of food and must lose heat if it is to maintain a constant temperature. Heat loss must equal heat production.

Generally speaking, the body is heated in two ways. It generates heat by burning food (metabolism), and it absorbs heat from the sun or other heat sources. For the average person, the metabolic rate can range from 70 calories per hour for sleeping, to 524 calories per hour for strenuous work.

Heat Loss

To balance the heat intake, there are five main channels of heat loss. The first three — radiation, conduction, and convection — account for about 80 percent of the total heat loss.

Heat lost by radiation, about 5 percent, is that which reaches the outer layer of clothing. Proper convective insulation will keep the outer layer of clothing cool and the heat inside.

Conduction, the passage of heat out of the body through another object, plays a smaller part in total heat loss, but there are several situations where it may cause discomfort. For example, walking barefoot on a cold floor is one common cause of heat loss by conduction. Others include touching metal railings or collection boxes with bare hands or sitting on the cold ground or in a metal chair in poorly insulated clothing.

The only way to prevent heat loss by conduction is to separate your body from the cold object by a layer of insulation — one which when heated on one side, will stay cool on the other. The best insulation we know of today is air. To use the low conductivity of air, we must wear clothes that prevent it from circulating.

Fortunately, air next to any surface tends to stick to that surface. This effect extends for about 1/8-inch or less and will deaden the air so it can be used for insulation.

For clothing, there is no miracle insulation, but loosely woven fabrics such as thermal material tend to reduce heat loss by convection.

The final two forms of heat loss are sweating, which we can indirectly control, plus vapor lost through breathing, which we cannot control. Even with no sweating, evaporative loss is 20 percent of our total heat loss.

Maintain a Balance

Think of heat production and heat loss as an equation. When heat loss is larger than heat production for any length of time, you become uncomfortably cold. To balance the equation you have two options — either increase heat production to balance heat loss, or cut down the heat loss to match heat production.

Since metabolism and heat absorption stand alone on the heat-production side of the equation, it is easier to consider these first. If you are outside and are cold in the shade, you move into the sun, if there is any available.

Your metabolic rate can be increased considerably. Eating more food supplies fuel for your body to burn. In an arctic environment, humans consume more calories than in a warm climate. Muscular activity, like running or stamping your feet, can also increase your metabolic rate considerably — as much as 75 percent. In fact, if you don't do it yourself, your body will exercise for you by shivering.

Involuntary Adjustments

On the heat-loss side of the equation, your body makes several automatic adjustments. Goose pimples erect body hairs and increase the thickness of still air next to the skin, and blood vessel constriction reduces the blood supply to all areas except the head.

Vaso- (blood vessel) constriction is beyond your control, but its counterpart, vaso-dilation, is one of the best means of keeping your extremities warm and is indirectly within your control. When your metabolism and torso insulation are more than enough to keep your vital organs at the proper temperature, the first place the extra heat goes is to your surface tissues via your circulating blood. Any excess after that will go to your extremities.

If there is still an excess of heat, surface blood vessels will dilate, more blood will circulate, and your body will try to get rid of excess heat by using your body's fingers and toes to disperse heat like a radiator. From here it is only a short step to sweating.

Anything that helps conserve the heat in your torso will force all the excess out of your fingers and toes. This explains why you can sometimes chop wood in bare hands at 10º F. By contrast, it means that boots and mittens will not keep you warm if your torso heat is marginal. Insufficient body heat, along with cool skin temperature at fingers or toes, will trigger the vaso-constriction reaction and shut down the blood supply to your extremities. Once the circulation is shut down, frostbite can quickly follow.

Because the head has such a rich blood supply and no vaso-constriction mechanism, it is the primary way your body dissipates heat. If you want to conserve your body's heat, make sure it isn't lost through your head.

Now you know why you put your hat on if your feet are cold. Make sure you stay warm out there when it's cold.

Frostbite

Frostbite, an injury to superficial tissues caused by freezing, is probably the most common injury resulting from exposure to cold elements. Cold, humidity, and high winds are the main factors involved in frostbite, but many other things contribute to its development, such as contact with wetness or metal, inadequate clothing, age, and one's general health condition.

Understanding Frostbite

- Younger and older persons and individuals with existing health problems are generally more susceptible.
- The temperature, amount of moisture, length of exposure, and the person's physical condition determine the severity of the injury.
- Small areas such as the nose, cheeks, ears, and extremities are most vulnerable.
- As with burns, frostbite is classified by degrees. First degree, the least severe, is freezing without blistering or peeling. Second degree is freezing with blistering and peeling. Third degree, the most severe, is freezing with death of skin and possibly deeper tissues.
- In mild cases of frostbite, the symptoms are generally numbness, prickling, and itching of the affected part. As frostbite develops, the symptoms become more intense.
- Initially the frozen flesh will be hard and white, but later will become red or mottled. Pain may be felt initially, but it will subside. Often there is no pain. Blisters may form and the affected part is intensely cold and numb.

Treating Frostbite

1. **Drink warm fluids.**
2. **Rewarm the frozen part rapidly** by immersing it in warm, not hot, water. If water is not available or practical to use, wrap the affected part gently in a sheet and warm blankets.
3. **Discontinue warming when the affected part becomes flushed.** Thawing will cause tenderness, burning pain, and swelling.
4. **Remove all restrictive clothing, elevate the affected part, and seek medical assistance.**
5. **Don't rub the affected part.**
6. **Don't apply a heat lamp or hot water bottle**.
7. **Don't break the blisters.**
8. **Don't rub the affected part with snow or ice water.**
9. **Don't walk on frostbitten feet after thawing.**
10. **Limit your exposure time in extremely cold conditions.**

Stress — How to Cope With It

Stress Comes From Many Areas of Life

Sometimes it seems that there is just too much stress — stress from sitting in rush hour traffic, from being late for an appointment, from job pressures; stress from worrying about finances or personal relationships; and stress from simply not being able to get away from it all. The list could go on and on. But there's no sense in worrying about stress. The best way to deal with it is to understand how it affects you and learn how you can minimize and cope with it.

The Physical Aspects of Stress

When you are under stress, your body experiences several physical changes. There's a surge of hormones, including adrenalin. Your heart beats faster, your respiration speeds up and your blood pressure rises. These changes are the body's way of preparing us for some sudden physical action.

In the past, these changes were essential for our very survival. They prepared us to hunt food, to fight, even to flee when in danger.

But today, our stress is likely to result from hitting four red lights in a row when all we want to do is get home and unwind. In situations like this, bodily changes don't help. We're all hyped up, but there's no opportunity for physical action to release the tension. Over a period of time, that frequent build-up and subsequent readjustment can take its toll, possibly in the form of headaches, ulcers, or heart problems.

Stress Can Be Positive

Some stress is good, even necessary. It motivates us to try new and challenging things. After all, if there were no stress in our lives, life would be very boring. The trick is to keep the stress in your life at the level that is manageable. While these levels vary for each of us, the following symptoms may be signs of too much stress: headaches, insomnia, nervousness, digestive problems, irritability, tenseness, tiredness, or lack of motivation.

Coping With Stress

Fortunately, there are many ways of coping with stress. You can prepare yourself mentally and physically to deal better with stress when it comes along.

Specifically, you can:

1. **Examine your activities.** Ask yourself what activities or events make you feel tense or frustrated, and then see if you can change or avoid them.
2. **Choose to plan.** Plan your schedule in advance and allow a few extra minutes so you won't have to hurry.

3. **Give yourself time.** Allow time in your life for those activities you most enjoy.
4. **Exercise.** Exercise for 30 minutes three or four times a week. This can eliminate some of those stored tensions.
5. **Pay attention to what you eat and drink.** Eliminate or reduce your consumption of tobacco, caffeine, salt, sugar, and white flour. Increase your consumption of fresh fruits and vegetables, nuts, beans, and whole grain foods.
6. **Sleep.** Get as much sleep as your body needs.
7. **Get help.** If you have a certain problem that is causing you to feel anxious, frustrated, depressed, or worried, get help. Most communities have inexpensive counseling services that are available for your use.
8. **Learn to relax.** Close your eyes, relax and breathe deeply and slowly in a tense situation, or take a break, go for a walk and come back to the situation in a calmer frame of mind.
9. **Put situations in their proper perspectives.** If someone has been insulting or rude to you, ask yourself whether it really matters or affects the things that are truly important to you.

How Not to Do It

Just as there are ways to cope with and alleviate stress, there are certain ways not to cope with it. For example:

1. **Don’t use alcohol or drugs to cope with stress.** While depressants will temporarily relax you and help you escape, the physical strain they put on your body in the long run isn’t worth it.
2. **Don’t repress your feelings, whether they involve fear, anger, frustration, or sorrow.** Find a person with whom or place where these emotions can be released.
3. **Don’t compare yourself with others.** We’re all different, so just be yourself.

3 Preventing Dog Bites

Are You an Unwary Visitor?

Dog-related injuries have traditionally represented a significant number of all postal injuries. With the warmer weather quickly approaching, you can expect to see the family dog romping in the front yard after butterflies, in the backyard after junior's ball, or somewhere in between, in pursuit of the unwary visitor.

Dog Bite Quiz

That unwary visitor just might be a postal employee. Can you recognize a biting situation when you see one? Are you aware of some of the well-intentioned actions that can lead to a dog-related injury? Here are 10 questions that deal with such situations. Answer each one either true or false. Check your answers against those following the quiz.

1. *True or false?* If a dog is sleeping in the side yard, you should quietly slip up to the front door to make the delivery so that you don't disturb the dog.
2. *True or false?* Turning away and quickly retreating from a snarling dog will assure the dog that you mean no harm and will probably prevent a painful bite.
3. *True or false?* A good idea is to always carry dog biscuits with you on the route so that you can befriend the overprotective dog.
4. *True or false?* Many dog bites occur as a result of a dog's instinct to protect the customer's premises.
5. *True or false?* So that you don't leave it "back at the station," you should secure the container of animal repellent to your mail cart or vehicle dashboard.
6. *True or false?* Dogs will attack only when they are threatened or challenged by the carrier.
7. *True or false?* Dogs always make their intentions known by barking or growling before attacking someone.
8. *True or false?* Carriers need not be concerned about being attacked if the family dog is confined behind a closed screen or storm door.
9. *True or false?* It is a good idea to spray each of the larger dogs along your route at least once with animal repellent to let them know they don't stand a chance if they attempt to bite you.
10. *True or false?* Talking softly to a dog while trying to pet him will often make him realize that you are a friend rather than an intruder.

Answers

1. *False.* Dogs are known for their keen senses. You'd more than likely startle him and increase the possibility of an attack. Confronted with this situation, you should make some slight noise such as a soft whistle so that he won't be surprised by your sudden presence.

2. *False.* Turning and running often increases the dog's confidence in himself and offers an opportunity for him to bite you while your back is turned. Besides there is little chance that you will succeed in out-running a determined dog. Standing your ground, looking him square in the eyes, and slowly backing away from a snarling dog will increase your chances of not being bitten.
3. *False*. Too often the dog will readily accept the treat, but still not accept you. You'd do better to win acceptance by talking in a friendly manner and calling him by name if you know it, but in any case keeping a safe distance.
4. *True*. Dogs instinctively recognize their owner's premises as territorial boundaries and attacks can occur as a result of protecting those boundaries. Before entering a customer's property, quickly glance at all the places a dog may be — under parked cars, behind hedges, on the porch, etc.
5. *False.* More frequently an attack by a dog will occur away from your mail cart or vehicle. Consequently, when you need the repellent, it may not be handy. It is advisable to carry the repellent with you.
6. *False.* Dogs need only think they are being threatened or challenged to attack. Sudden movements such as picking up a dropped letter or handing mail to a customer can easily result in an attack. When even the friendliest dog is near, avoid quick movements.
7. *False*. Many dog bites have occurred without previous warning. Don't get caught off guard because a dog doesn't display hostility.
8. *False.* The only thing between you and the dog is the door. All that is necessary is a worn latching device or someone from inside innocently opening the door to get the mail and the dog is loose. Remain alert to these possibilities at all times.
9. *False.* Only attacking dogs should be sprayed with repellent. The element of surprise combined with the action of the spray provide an effective attack inhibitor. Apart from being contrary to regulations, the needless use of the spray may ensure that you'll encounter an angry canine each time he sees you.
10. *False.* Although well-intentioned, this approach continues to be a source of dog bites. An attempt to pet even the friendliest dog is taking an unnecessary risk.

Dog Attacks and Dog Bites — What to Do

Dogs are instinctive protectors of their masters and their property. Uniformed strangers are viewed with suspicion. The closer you get, the nastier the dog is likely to become. Here are some tips to help you keep that nastiness at bay.

1. **Avoid surprise.** The regular carrier should be aware of all bad dogs on his route. He should warn utility and substitute carriers by using a Form 1778, *Dog Warning Card*, and by entering it in the Carrier's Route Book. Managers should verify monthly that cards are maintained.
2. **Keep your eyes and ears open.** Observe steps, porches and hedges for dogs. Don't finger mail in the vicinity of a known bad dog, or while you walk.
3. **When calling on a customer, listen for a dog bark.** Keep knee or foot against a storm or screen door. Ask customer to keep the dog inside until you have left the premises.
4. **Protect yourself.** Your satchel is one of your best defensive items. Keep it between you and the dog. Don't run from a dog. Carefully back away, using caution while backing. Be prepared to use your dog repellent.
5. **Use dog repellent (Halt).** It is very effective against all dogs at close range, 10 feet or less. It must be sprayed in the dog's face. It is a harmless mixture of mineral oil and cayenne pepper. The effects wear off in 10 to 15 minutes. It is approved by veterinarians, the Humane Society, and kennel clubs and is registered by the U.S. Department of Agriculture. It has been known to stop large German Shepherds.
6. **Suspend delivery.** Carriers are not required to serve a house or an area if a dog threatens. Endorse mail "loose dog" and give it to your supervisor.
7. **Report uncontrolled dogs.** For uncontrolled dogs, call the local dog officer or, if further assistance is needed, call the local police.
8. **Don't trust dogs.** Stay away from chained dogs or dogs on a leash. Even supposedly friendly dogs have been known to bite when in the wrong mood or when they feel threatened.

Putting the Bite on Dog Problems

Although the threat of a dog bite is present all year long, warmer weather seems to increase the risk of such an injury since more dogs tend to roam free during the spring and summer months.

Consider some statistics. During Fiscal Year 1998, there were over 2,500 dog bites nationally. The degree of injury ranged from minor to serious.

Reporting Dogs

To minimize the risk of an attack, carriers should report all incidents of dog interference to their supervisor. Officials will contact the dog's owner about the problem. Since postal employees are not required to deliver mail where there's a risk of injury, delivery can and should be suspended by postal management until the threat is removed.

Always inform carrier replacements of any suspensions of service or of any area where they should be watchful for dog interference. Delivery people should always carry a can of dog repellent in an easy-to-reach place.

How Attacks Occur

The following are the six situations in which dog bite incidents most frequently occur.

- *Sneak attacks*. While little can be done to avoid this situation, reporting all instances of dog interference can help minimize your chances of being attacked.
- *Perceived threats by the dog.* Handing mail to a customer while in view of a dog may cause the dog to attack. Dogs are protective of their "territory" and of their owners. Many dogs have been housebroken or punished with a newspaper or magazine. When they see you holding the mail, they may associate the letters with punishment and assume you mean to harm their master.
- *Targets of opportunity.* When the customer opens the door to take the mail, the dog rushes out to attack the carrier.
- *Protecting yourself.* When delivering special delivery letters, packages, etc., you may want to put your foot at the base of doors that open outward to prevent a dog from rushing out. If there is a dog there, insist that the customer put it in another room before opening the door.
- *Mail slot attacks*. When putting mail in door slots, keep your fingers out of the openings. A dog could be on the other side of the door waiting to nip you.
- *Attacks around mailboxes attached to fences.* Be cautious when placing mail in this type of box. Just because a dog is inside the fence is no guarantee that it won't bite you. Dogs can and do jump upon fences and stick their mouths through small openings.

What to Do When Confronted

If you are confronted by a dog:

1. **Don’t turn your back and run**. This will only excite it more. Most dogs will try to attack from the rear, so if it circles around you, move with it and continue to face it.
2. **Place your mail satchel between you and the dog**. This will serve as protection if the dog decides to attack.
3. **Don’t forget to use your dog repellent if necessary.**
4. **Retreat slowly, facing the dog.**

What You Should Know About Dogs

Dogs are usually protective of their masters and their master's property. They often consider letter carriers and other delivery personnel as intruders, even though they may have seen these visitors before.

People who confront dogs in their work must be prepared to meet a different challenge for every dog they meet. Here are a few guidelines to follow:

1. **Observe the area**. As you approach a delivery point, observe the area. Glance at all places a dog could hide, such as under parked cars, behind shrubs, and under porches.
2. **Evaluate the situation**. Is the dog asleep? Barking? Growling? Is the animal large or small?
3. **Avoid showing fear.** A dog is more likely to attack if it knows you are afraid.
4. **Don't startle a dog.** If it is asleep, make a soft sound, such as a quiet whistle, to arouse but not startle the animal. Do this before getting too close, while you still have time to make a getaway if necessary.
5. **Never assume a dog won't bite.** Many bite victims have made this mistake.
6. **Keep your eyes on the dog.** The animal is not as likely to attack while being watched.
7. **Try to make friends**. Speak in a friendly manner, calling the animal by name if you know it. Do not attempt to pet it.
8. **Stand your ground.** If a dog comes toward you, stop and face it. If you have a satchel, use it as a shield while backing away slowly. Step carefully to avoid a fall. Turning and running away is likely to excite the animal and could lead to an attack.
9. **Keep a canister of animal repellent handy**. Use the repellent only if attacked. Defensive sprays, such as "Halt," have an effective range of up to 10 feet. The spray should be directed toward the attacking animal's eyes, nose, and mouth.
10. **Watch your fingers.** Don't push them through mail slots where dogs could be waiting on the other side to nip at them.
11. **Report all instances of animal interference to your supervisor.**
12. **Report all bites.** Make sure you report all bites to your supervisor and to local law and health officials. Deliveries may be suspended to customers who do not, or who will not, restrain their animals.

Does Your Dog Bite?

Few dog owners think their family pets are likely to bite. However, a veterinarian who is in charge of training military security dogs points out a basic fact: Any dog can bite, simply because any dog has teeth. All you have to do is perform the particular activity that will trigger that dog to bite. That activity could simply be delivering your route. Sometimes you have to press a long way. For example, it *may* be difficult to get one of the hound breeds to bite you because they're bred for docility.

What triggers a dog to bite varies, but it almost always involves some threat, real or perceived, to the dog. A dog may bite out of fear of pain. It may view the victim as attacking its owner, threatening its puppies, or invading its territory.

Most normal aggression arises from the dog's sense of territory. A dog stakes out an area it considers its own and then defends it against trespassers. Usually the area is the owner's yard. But dogs will sometimes extend their territory beyond the owner's yard.

A History of Aggression

Bites are rarely isolated incidents. Most often the dog has a history of aggressive behavior that leads to biting. Always be aware that any threatening behavior exhibited by a dog — growling, snapping, snarling, even excessive barking — can mean, "Stay back, you're invading my territory." Dogs that threaten people in any way will eventually bite when circumstances are right. Some of us get lulled into a false sense of security and think that even if a dog shows low-level aggression, such as aggressive barking, it will never bite. This attitude can be the cause of a painful dog bite.

How Not to Be Bitten

Common sense, attention to your surroundings, and these helpful tips will help you to stay on good terms with Fido:

1. **Never approach a strange dog unless it is restrained by its owner.** This is a particularly important rule for people who have dogs. People who have friendly pets often expect a friendly reaction from all dogs. A survey of postal carriers in St. Louis, showed that more carriers who had been bitten owned dogs than those who had not been bitten.
2. **Don't run past a strange dog**. That's particularly true for dogs that are chained up or fenced in. The dog will already be frustrated by being restrained, and your sudden movements may startle it or arouse its instinct to give chase.
3. **Keep your eyes on a dog**. But don't stare directly at it. You won't stare it down; all you will do is antagonize it.
4. **Know the signs of a dog ready to attack.** Are its ears up and forward? Is it staring directly at you? Is the hair on its shoulders standing up? Is it growling and baring its teeth? Is it standing stiff-legged on tiptoe? All these are signs that you may be in trouble.

5. **If a dog threatens, don't scream, wave your arms, or run away.** This signals your panic to the dog. It's not true that dogs can "smell fear." Loud noises or sudden, jerky movements may provoke the dog to attack, and running arouses its instinct to give chase. Instead, stay as calm as possible. If you're carrying a package or satchel, hold it in front of you for protection. In a firm voice, with as much authority you can muster, say "No," "Down," or "Go home." Most pet dogs know at least one of these commands.
6. **If the dog persists, retreat.** Move slowly. Talk in a low, calming tone. Eventually you will reach the boundaries of the dog's territory and it will lose interest.
7. **If the dog leaps at you, don't turn your back**. Even though this will take every ounce of your courage, you can't protect your back. Instead, cover your face and neck with your arms palm-side in. Stand your ground and kick your knee up into the dog's chest. Be quick, so the dog won't have a chance to bite your leg while it's extended. If the dog knocks you down, curl up into the fetal position, still covering your head and neck with your arms. Stay quiet and don't move. Either the dog will lose interest, or someone will come to your rescue. Few dogs will continue to attack motionless quarry.
8. **Avoid packs of dogs**. When running in packs (three or more dogs), even the friendliest Fido can forget its socialization toward humans and follow the leader. If you spot a dog pack, head for cover immediately and notify your supervisor or the police or animal control office. Dog packs can kill.
9. **Deal with the leader of the pack.** If you do encounter a pack of dogs and can't get away, deal with the leader of the pack as you would any threatening dog. The leader is often the largest dog; it is usually a few steps ahead of the others.

If you are bitten in spite of your precautions, immediately wash the wound with plenty of soap and water, if available. Notify your supervisor immediately. Take extra precautions around dogs. No one wants to get bitten by a dog, but you must safeguard against attack.

Some Tips on How to Handle the Dog Days of Summer

Many of us are dog lovers, but few of us are dog experts. No matter how well we think we know an animal, experts point out that the moods of a dog vary. These changes in temperament usually determine how an animal reacts to visitors, even visitors it knows well.

As dogs are primarily territorial in nature, being protective of their owners and their owners' property, circumstances might one day cause the usually friendly animal to view the carrier as an intruder. The dog's immediate reaction is to defend its territory, warding off any potential invader. This means attacking and possibly biting the carrier.

Dog Bite Care

While many bites are not disabling, they do require cleansing and dressing, and they can be painful. If the bite punctures the skin, this usually means the victim should get a tetanus shot as well.

Protective Spray

To help carriers ward off animal attacks, the Postal Service provides a protective spray. The chemical, when used according to instructions, will usually deter an attacking dog. It is not foolproof, however. On a windy day, for instance, the breeze might divert the spray, reducing its effect on the animal. Also, the dog may sneak up from behind, before the carrier has a chance to react.

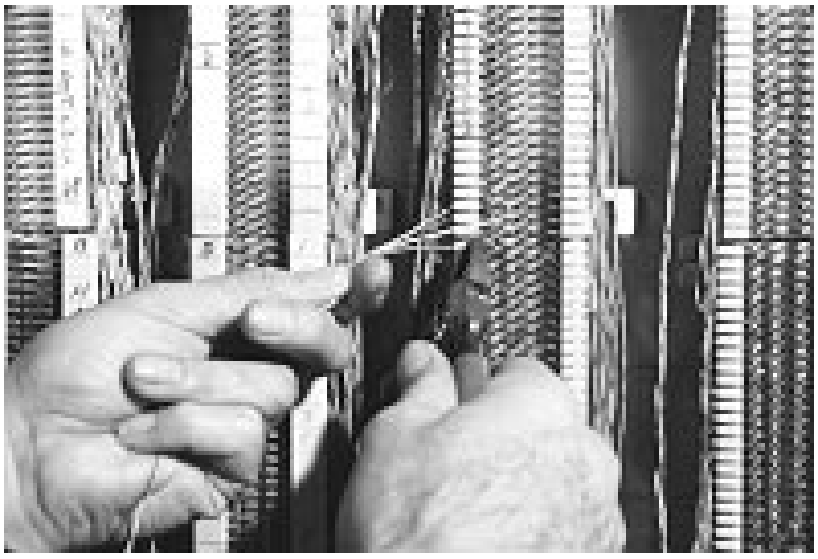
Guidelines for Dealing With Dogs

Here are a few guidelines to follow that could help stem the dog problem:

1. **Observe the area**. As you approach a delivery point, observe the area. Glance at all places a dog could hide, such as under parked cars, behind shrubs, and under porches.
2. **Evaluate the situation**. Is the dog asleep? Barking? Growling? Is the animal large or small?
3. **Avoid showing fear.** A dog is more likely to attack if it knows you are afraid.
4. **Don't startle a dog.** If it is asleep, make a soft sound, such as a quiet whistle, to arouse but not startle the animal. Do this before getting too close, while you still have time to get away if necessary.
5. **Never assume a dog won't bite.** Many bite victims have made this mistake.
6. **Keep your eyes on the dog.** The animal is not as likely to attack while being watched.
7. **Try to make friends**. Speak in a friendly manner, calling the animal by name if you know it. Do not attempt to pet it.

8. **Stand your ground.** If a dog comes toward you, stop and face it. If you have a satchel, use it as a shield while backing away slowly. Step carefully to avoid a fall. Turning and running away is likely to excite the animal and could lead to an attack.
9. **Keep a canister of animal repellent handy**. Use the repellent only if attacked. Defensive sprays, such as “Halt,” have an effective range of up to 10 feet. The spray should be directed toward the attacking animal’s eyes, nose, and mouth.
10. **Watch your fingers.** Don’t push them through mail slots where dogs could be waiting on the other side to nip at them.
11. **Report all instances of animal interference to your supervisor.**
12. **Report all bites.** Make sure you report all bites to your supervisor and to local law and health officials. Deliveries may be suspended to customers who do not, or who will not, restrain their animals.

4 Electrical Safety



Water and Electricity Don't Mix

You may think the worst thing that can happen to you in the bathtub is to slip on a bar of soap and fall. Not so. Every year too many people are electrocuted in bathtubs. Although lamps, heaters, fans, and TVs are the source of the fatal current in some cases, more than half the recorded deaths involved hair dryers.

These deaths underscore the deadly consequences of mixing electricity and water. Yet in our homes and apartments, there are three places where water and electricity must live side by side: the bathroom, the kitchen, and the laundry room.

Most of the plumbing in these rooms is directly connected to the earth. The pipes not only bring water in; they also provide a convenient avenue for stray currents to get to the ground. And it is the nature of electricity to seek a path to the ground.

How People Get Shocked

How do people get shocked, and sometimes killed, in those parts of the home where plumbing and electricity are necessary companions?

Here's a typical scenario: A woman has noticed that she feels a tingle or a slight shock every time she uses her mixer. What she may not know is that the insulation has come off a wire inside the mixer, and the bare wire is touching the outer shell of the appliance. The mixer still beats eggs and whips cream, but not all the current is going to the motor. Some is leaking off to the mixer's shell and looking for a way to get to the ground. But because the woman usually works with dry hands and stands on a dry floor, the current meets high resistance in its effort to reach the ground.

Then comes a hot summer day and the woman, one sweaty hand on the mixer, reaches with the other hand for a water faucet. Now the electricity has a low-resistance path through her body and the plumbing network. The leaking current from the mixer courses up through her hand and arm, out through her other arm and hand to the faucet, and on to the ground. As the current moves through her chest, it disrupts the rhythmic beating of her heart. Her heart goes into fibrillation. Unless medical help is immediate, she will die.

You might think that it would take a large jolt of electricity to upset the heart's rhythm. As a matter of fact, it takes only about one-third of an ampere — barely enough current to light a 60-watt bulb — to kill.

In an actual case, the dangers of electricity near plumbing were vividly demonstrated. A Florida man was drilling a hole in a concrete wall. Gripping the electric drill with his right hand, he grabbed a moist water pipe with his left to brace himself. Unknown to him his drill had an electrical fault, and current surged through his body, sending his heart into fibrillation. He died.

Advances in Electrical Safety

Most accidents involving water and electricity need not occur. They are not acts of God, but the result of human failure. Today's products are safe thanks to manufacturers acting under the triple prodding of their own concern for product safety, pressure from government agencies, and the high cost of product liability. Among the advances in electrical safety have been the three-wire ground system, the use of double insulation, and the introduction of the polarized plug.

How They Work

The third wire in a three-wire electrical system, attached to the body of the tool or appliance, carries off current leakage to the ground. Three-wire cords are usually found on larger home appliances such as refrigerators and washers.

If you purchase a portable power tool, you are more likely to find that the three wires have been replaced in recent models by a double-insulated system that doesn't require a special adapter for older two-hole outlets. Double-insulating isolates all the internal metal parts of the tool from the shell, so power leakage won't energize the outer parts that you may touch.

Polarized plugs work by controlling where electrical current goes first. One blade of a polarized plug is slightly wider than the other. This is inserted into the corresponding wider slot in the outlet, which is the neutral conductor connected to a ground. The narrower blade carries the current to the switch first, to protect you from a shock that could happen if the current were to go first to a more accessible metal part of the appliance. Most houses wired since 1932 have polarized receptacles.

GFCI: The Circuit Sentry

Why, you might ask, hasn't someone invented a device that watches over an electrical appliance and turns off the current if leakage occurs that is capable of injuring someone? Well, there is such a device. It's called a ground fault circuit interrupter, or GFCI for short. GFCIs can be installed in place of standard receptacles.

A GFCI monitors how much electricity goes into the appliance and how much comes out. If there's a leak — a ground fault — and less electricity comes out than went in, the GFCI springs into action and turns off the power within 1/40th of a second. That's 30 times faster than a heart beat.

The GFCI can detect very low leakage levels, far below those that would blow a fuse or trip a circuit breaker, and thus protect a person from fatal shock. The National Electrical Code, adhered to by most municipalities, calls for GFCIs in the bathroom and in certain outside locations.

User Responsibilities

In spite of advances in product design, electrocutions continue to occur. When you purchase an appliance, particularly one that may be used in the

wet areas of your home — the bathroom, kitchen, and laundry — be sure to read the instructions that come with the product. Under the heading *Danger* you will find a series of warnings, most of which relate to water and electricity. Here is a typical example:

To reduce the risk of electrocution:

1. **Do not leave an appliance plugged in after using. Pull the plug.**
2. **Do not use electrical appliances while bathing.**
3. **Do not place or store an appliance where it can fall or be pulled into a tub or sink**.
4. **Do not place or drop an appliance in water or other liquid**.
5. **Do not reach for an appliance that has fallen into water. Unplug immediately**.

Special attention should be given to hair dryers, as they account for 60 percent of bathtub electrocutions. Don't leave them plugged in when not in use. Even with the switch off, a plugged-in hair dryer that falls into a bathtub will electrify the water and is likely to electrocute anyone in the tub. It is especially important to unplug the dryer if there are children in the household. Children should be taught that the hair dryer is not a plaything.

Disconnect Cords at Outlets

In the kitchen, get in the habit of disconnecting appliance cords at wall outlets — not at the appliance. A cord removed from a coffee maker and left plugged into an outlet is energized and could be deadly if it falls into a sink filled with water.

It would be safer if electrical appliances, switches, and current sources were located out of reach of water pipes and faucets. But since kitchen appliances are often used near water, it's a good idea to get in the habit of being one-handed. For example, don't touch the toaster, mixer, or coffee maker with one hand while you turn on the faucet with the other.

In the laundry room, keep spills wiped up. A wet or damp floor greatly increases the chance of electrical injury.

Above all, be wary of a flooded basement. Do not venture into one unless you are positive that the water is not in contact with a source of electricity.

Finally, remember that electricity and water are never safe companions. You can be in serious trouble if you let them meet through your body.

Electricity — Friend or Foe?

Electricity is one of man's greatest friends. We depend on it to do thousands of things: light the dark, heat the cold, and cool off the hot. It turns the motors that run all kinds of machines. But, good friend that it is, it can be dangerous if you don't respect it.

Electrical shock kills about 1,100 people a year in the United States. And many more die in the 140,000 electrical fires that happen every year.

A heavy electrical shock can stun your muscles and nerves and stop your heart and breathing. Even a small shock can upset your heart's natural rhythm and kill you.

Electricity is a flow of electrons in a conductor, most often a wire. Electrical pressure — or voltage — pushes a current of electrons along wires to work for you, like water pressure pushes water through a pipe.

Wiring that runs through the walls and ceiling of a house is divided at the main power supply into branch circuits. Newer 120-volt household circuits usually have three wires — a hot wire that carries the current from the power source to the outlets (it is color-coded, usually black or red, but *never* white), a neutral wire that is usually white, and a green ground wire.

A house will have several circuits, each designed to carry a safe part of the electrical load, and each with its own "watchman" — a fuse or circuit breaker. A lamp cord is just an extension of a circuit.

Electricity is dangerous when you become part of the circuit. If you touch a hot wire (or a conductor connected to it) while you're in contact with the ground, you're "grounded" and the current will take the shortest and easiest path through you back to the earth.

You don't have to be standing on earth to be grounded. You can be grounded if you touch something that is connected to the ground, such as a water faucet, a gas stove, or a laundry tub on a concrete floor.

Electrical fires are caused by overloaded wires or short circuits. Plug too many things into a circuit or extension cord and the wires will overheat. The insulation — the rubber or plastic covering on the wires — can bake and crack. The heat can set fire to things around it, or the exposed wires can cause a short circuit.

Short circuits are accidental disruptions in the normal flow of current caused by two bare wires touching or by the hot wire touching a ground object. Shorts make sparks and heat, and set fire to anything combustible.

Danger Signs

Danger signs for wiring are present when:

- Lights flicker or stay dim when a major appliance goes on.
- A motor slows down.
- A fuse blows or circuit breaker opens.

- A heat emitting appliance, such as a toaster or iron, doesn't heat properly.
- The television picture shrinks.

If any of these signs occur, have a qualified electrician examine the wiring.

Dealing with electrical danger signs in the home or office means keeping in mind these basic safeguards:

1. **Disconnect it**. If anything seems to be wrong with any appliance — or if it gives even the slightest "tingle" of leaking current — disconnect it right away and check with a service person.
2. **Turn it off.** Turn off any appliance that sparks, stalls, or overheats.
3. **Don't touch it.** Never touch plumbing or any metal object and an appliance at the same time.
4. **Keep it dry.** Keep appliances and cords away from water and don't touch a plugged-in appliance with wet hands or if you're standing on a damp surface. Water is one of the best conductors of electricity.
5. **Extinguish it properly**. Never throw water on an electrical fire. Pull out the plug first, then use a fire extinguisher rated Class C (for electrical fires) or a multi-purpose dry chemical extinguisher.

Grounds for Caution

Electricity can kill you. Most people know very little about electricity, even though it is widely used throughout industry and in our homes. We assume that electricity is just there.

We flip a switch and the lights go on or a machine starts up. We change a bulb when it burns out. We take electricity and its many applications for granted because it does so many things for us so easily and dependably.

Let's not put the blame on electricity alone for causing accidents or deaths. We know how electrical accidents occur and how they can be prevented.

Statistics indicate that many people are killed by 115-volt circuits. A shock resulting from contact with only 15 milliamperes of current can kill. At 115 volts, a 5-watt light bulb requires 50 milliamperes of current. Therefore, the amount of current used by a 5-watt light bulb has enough current to kill three human beings.

To protect yourself against the hazards of electricity when handling drills, saws, buffers, sanders, extension cords, or drop lights, learn the basic facts about the causes of shock and electrocution.

For instance, the condition of your body has a great deal to do with your chance of being fatally shocked. If your hands are sweaty, your shoes and socks are moist and damp, or the floor is wet, current can pass more easily through you, and increase the severity of the shock.

When working with electric tools or appliances, remember these five rules of life:

1. **Make sure the ground pin connection is intact before plugging it into any receptacle.**
2. **Use extreme caution when working with portable electric power tools in wet or damp places.** This includes working near tanks and boilers or piping and other ground objects that you may touch, allowing electricity to pass through your body to the ground.
3. **Check for frayed or broken cords.**
4. **Leave electrical repairs to the experts.** If you do get a shock from any equipment you are using at work, report it to your supervisor for repairs.
5. **Use only double-insulated or grounded equipment or equipment approved by a qualified testing laboratory such as Underwriters Laboratory.**

Caution During Electrical Repairs

Some simple electrical repair guidelines will help protect you and make sure the job is done right.

1. **Each circuit is live.** When working with electrical equipment, consider each circuit as “live”; that is, assume there is electrical current flowing through the wires.
2. **Disconnect and lock it out.** Even though the switch is turned off, you must still disconnect and lock out the device from the power source before attempting a repair job.
3. **Use insulated tools and equipment**. When you must work with a “live” circuit, wear tested and approved electrician’s rubber gloves and work with insulated tools. Follow all procedures for that job. Although the gloves might be somewhat uncomfortable, you would, most certainly, prefer a slight discomfort rather than an electrical burn or shock.
4. **Follow National Electrical Code guidelines**. When installing a new circuit, be sure to follow guidelines published in the National Electrical Code. Then get the job inspected by a qualified inspector. Even though you may think you’ve done it right, it’s safest to be absolutely sure.
5. **Don’t jury-rig**. Avoid jury-rigging temporary connections. Even though a line appears to be reasonably safe when first installed, it may become dangerous later. For example, if a connection is not properly insulated or protected from damage, it could short out and cause an injury or electrical fire.
6. **Inspect plugs and connections.** Always inspect plugs and connections before using portable electrical tools to ensure that the ground wire is properly connected. If there is a defect or short circuit in the tool, the ground wire will divert excess current away from the operator and through the ground. It could prevent a serious injury. Examine the grounding prong (the third prong on an electrical plug) to ensure that it is intact with the terminal. If not, this safety device will not function.
7. **Ground power tools.** Always be sure to ground portable power tools that are not double insulated. Double insulation provides an extra layer of protection to prevent shock to the operator in the event of a puncture or breakthrough in the line.
8. **When in doubt, don’t use it**. If you are in doubt about a power tool’s safety, do not use it. Take it to a reliable service center for inspection.

5 Slips, Trips, and Falls

Falls Are No Laughing Matter

Each year falls are among the leading causes of accidental death in this country.

Most of us have taken a spill at one time or another and most likely we remember how it felt. Perhaps only our egos were damaged or maybe we still carry the scars derived from a painful fall.

Unfortunately, we tend to forget the circumstances that led to the fall. It may have happened while getting out of the shower at home or carrying groceries up the front porch steps. Perhaps a carelessly placed mail sack was the cause of a fall at work.

Regardless of the basic cause, contributing factors probably led to the sequence of events that resulted in the accident. By identifying and correcting these factors, we can reduce the potential for falls, both on and off the job.

Falling Quiz

Here are some situations that you may have encountered. How did you react to them? Are they safe or unsafe?

1. *Safe or unsafe?* The portable conveyor in the incoming section is normally plugged into an overhead drop cord. However, the cord has been damaged and, to avoid the danger of electrical shock or fire, the conveyor has been plugged into a wall outlet on the other side of the aisle. The orange extension cord is easy to see and people don't complain about having to watch their step.
2. *Safe or unsafe?* The postal driver has been making the same collection run for 6 months and has found the constant opening and closing of the door on the driver's side time-consuming and tiresome. That won't be the case today. Since the weather is so beautiful, the driver leaves the door open.
3. *Safe or unsafe?* The portable wooden ladder used to reach parcels on the top shelf of the "due case" has been in service for several years and was recently painted to improve its appearance.
4. *Safe or unsafe?* The custodian is using a 5-foot stepladder to reach window ledges that are about 12-feet above the floor.
5. *Safe or unsafe?* The custodian also has a 12-foot straight ladder to get to the exterior windows. When using the ladder, the custodian makes sure that its base is resting a foot and a half out from the wall to give him a steady base and more than the needed height to reach the windows with ease.
6. *Safe or unsafe?* The barking dog up the street has distracted the carrier coming down the steps. No danger is present as long as the carrier watches the dog.
7. *Safe or unsafe?* There is only a sprinkling of powdered snow on the painted steps. It is not a matter of concern for the carrier because the sun is coming out.

8. *Safe or unsafe?* The sudden loss of balance is completely unexpected. As the mail handler falls, he stiffens for the blow of the fall.
9. *Safe or unsafe?* The loading platform has steps at both ends and in the middle. Since no one has been hurt yet, jumping down from the dock is a generally accepted practice.
10. *Safe or unsafe?* The custodial force has just cleaned the lobby floors, posted warning signs, and roped off the wet areas.

Answers

1. *Unsafe.* Get the overhead drop cord repaired. Keep electrical cords off the floor in aisle ways.
2. *Unsafe.* The driver is risking serious injury should he or she fall out of the vehicle. The door on the driver's side must be closed while the vehicle is in motion. Exception: When making frequent curbside box deliveries or stops at intervals of 500 feet or less at speeds of less than 15 mph.
3. *Unsafe.* Painting hides defects. A coat of paint could easily conceal a cracked rung.
4. *Unsafe.* A larger ladder is needed to avoid the temptation of climbing higher than the second tread from the top of the stepladder.
5. *Unsafe.* In setting up a ladder, the base should be one-fourth the ladder length from the vertical plane of the top support. In this instance, three feet — not a foot and a half — would be needed to provide stability.
6. *Unsafe.* While the dog may be several houses away, the distraction could lead to a fall. Full attention is needed when ascending or descending steps.
7. *Unsafe*. Painted surfaces are particularly slippery when coated with water or powdered snow. Painted surfaces require extra care even when dry. A wet sole on a painted surface can cause a slip and fall.
8. *Unsafe.* Avoid stiffening. It may be hard to do, but try to relax when falling. Instead of landing hard and heavy, go loose and roll.
9. *Unsafe.* Use the steps. That's what they are there for.
10. *Safe.* Wet-mopped floor areas should be kept roped off with high visibility marking rope and identified with signs until floors are dry. Keep dry sections open for pedestrian traffic.

Slips, Trips, and Falls

Quiz

You may be heading for a slip, trip, or fall if you don't take heed. Test your own slip, trip, and fall knowledge with the following quiz. Then check the answers that follow.

1. Which of the following is responsible for the greatest number of injuries to postal employees?
   a. Slips, trips, and falls.
   b. Dog bites.
   c. Improper lifting.
   d. Motor vehicle accidents.
2. *True or false?* Materials can be temporarily stored on stairs if they are stacked neatly where anyone using the stairs can see them.
3. *True or false?* When a stepladder is unavailable, it's permissible to stand on a chair with casters if the chair is held steady by a fellow employee.
4. If you cannot step over or go around a slippery patch of ground (covered with ice, snow, wet leaves, etc.), the safe way to cross is to walk slowly and (select one):
   a. Maintain your normal stride.
   b. Shorten your normal stride and slide your feet in a drag and shove fashion.
   c. Lengthen your normal stride and point your toes slightly outward.
5. *True or false?* If Underwriters Laboratory-approved extension cord floor covers or a length of special molded duct are used, electrical extension cords may be placed across walkways where there is pedestrian traffic.
6. Which of the following is not a cause of slips, trips, and falls?
   a. Running in the workroom area.
   b. Climbing or stepping on hand trucks.
   c. Jumping from one level to another, such as off loading docks or from vehicle tailgates.
   d. Keeping to the right when going through double doors.
   e. Preoccupation on the part of employees
7. Small items, most of which can be held in the palm of your hand, are big safety hazards when they're left on the workroom floor. Name five such items.
8. *True or false?* Bottles, tools or other small objects left on the workroom floor should be picked up and placed out of the way on the top of a file cabinet or window sill.
9. *True or false?* Broken glass on the workroom floor should be picked up immediately.

Answers

1. While all of the possibilities combined are responsible for the majority of injuries to postal workers, the number 1 category of injuries is slips, trips, and falls.
2. *False*. Materials should never be stored or placed on stairs.
3. *False*. Never stand on chairs, especially those with casters or those that swivel.
4. If you selected *b,* you're correct. Shorten your normal stride and slide your feet in a drag and shove fashion.
5. *True*. But it's also advisable to post a warning sign.
6. You're correct if you selected *d,* keeping to the right when going through double doors.
7. LA locks, rubber bands, paper clips, pencils, pens, erasers, waste paper, twine or string, small hand tools, beverage containers (bottles, cans, paper cups), coins, gum, cigarette or cigar butts, etc.
8. *False.* Bottles should be picked up and disposed of and tools returned to their proper storage place. Placing objects on the top of file cabinets, window sills, etc., eliminates one safety hazard (slips, trips, and falls), but creates another — being hit by falling objects.
9. *False*. Broken glass should be swept up, not picked up. It should be wrapped in heavy paper and marked plainly, "broken glass," for disposal by clean-up personnel.

Slips Are Dangerous

A fall caused by slipping is serious because it is so unexpected. You have no chance to stop your fall or pick your landing spot.

Actions that lead to slips are also unexpected, and that may be the clue to some of the things you can do to keep from slipping.

We slip when we are walking and suddenly change direction, or when we try to make a quick stop, or when our feet do not get a good bearing on the floor because we are moving too fast.

We must learn to put our feet down firmly as we walk, especially on an inclined surface. And, of course, we should wear shoes with good heels and sole surfaces that grip.

You can walk on slippery ice and not slip if you know that you are on slippery ice. Avoiding a slip and fall depends a great deal on knowing what is under your feet.

Of course, we should do our best to keep floors from becoming slippery. That means good surfaces to start with, and good and frequent cleaning.

The majority of our slips come from the unexpected items that just happen to be on the floor. Water, ice, gobs of grease, patches of oil, pieces of paper, particles of food, and other foreign substances catch us when we are unaware and cause us to slip.

Most of these items get there accidentally. Water, oil, and grease drip from pipes, bearings, or containers. Paper and pieces of scrap fall from loads or get pushed or kicked into areas where they seem harmless. It doesn't happen every day; these things don't reach the floor because somebody wants them there. It is all accidental and infrequent enough so that we are not on the lookout for them. That's what makes them so dangerous

Office Haste

If you ask the average person to name the major cause of highway accidents, he or she will probably answer, “speed.” Although that may not be entirely accurate, we all know that “too fast for conditions” is involved in a great many serious automobile accidents. However, we aren’t going to talk about auto accidents today.

The reason I mention speeding is to point out that undue haste is also a contributing factor in a great many office accidents. Let’s take a look at a few of the reported cases in which office employees have been injured because they were in too much of a hurry.

Office Haste Case Histories

Case History 1 — A woman who was in a hurry to deliver a report to her boss didn’t notice that the lower left drawer of her desk was open. In her haste she tripped over it and fell against a typewriter table. She chipped a bone in her left elbow, bruised her left hip, and lost more than 2 weeks of work.

Case History 2 — A woman who was wearing high heels hurried toward the washstand in the ladies’ room. Somehow one foot struck the other and she fell, striking her nose on the sharp edge of a shelf above the washstand. She sustained a fractured nose, plus facial lacerations.

Case History 3 — A man entered an office building in a hurry and ran for the elevator. In doing so, he turned his ankle. An X-ray examination revealed a fracture of the left ankle and a chipped bone.

Case History 4 — Upon leaving his office, an employee ran across the street to board a bus. It was raining and in his haste to catch the bus, he crossed in the middle of the block. When he reached the high curb, his right foot struck it, causing him to lose his balance and fall to the sidewalk. He suffered contusions and abrasions of the hand, knee, lower leg and ribs and lost 10 workdays.

Make Haste Safely

We all approve of doing things promptly, but certainly not at the expense of injury. When your boss wants a report in a hurry, it is a good idea to get it for him. But it won’t help him a bit if you go flying through the air and land in a heap on the floor.

Slips and falls are responsible for nearly half of all disabling injuries to office workers, according to a survey made in California. The survey found that a large percentage of the people injured in falls were hurrying when the accident happened.

You will notice in the cases we have quoted that unsafe conditions were sometimes involved — an open drawer, a high curb, or a stairway. All these cases, however, have one thing in common; the person injured — was in too much of a hurry.

It is a good thing to keep your work area neat and free of obstacles or stumbling hazards such as wastebaskets, boxes, and dangling telephone cords. But, even if the pathway is clear, don't turn it into a racetrack.

Don't rush through doorways, around corners, through hallways or up and down stairs. No job is so urgent that you can afford to get hurt.

We all admire people who can do a job and move around efficiently, energetically, and promptly. But we lose respect for people who take chances and rush around endangering others as well as themselves. The old saying "haste makes waste" is too often true.

Stairway Safety

Every year in the United States approximately 250,000 persons suffer disabling injuries as a result of falls on stairs. One in every 20 deaths from household hazards is the result of a stairway fall.

Many people fall because they think they have reached the bottom of the steps. But they haven't. The unexpected steps send them lurching off balance. There should be a post, or the end of a railing should be specially shaped, so as to provide a tip-off that the bottom has been reached.

Another method of signaling the end of a stairway is to paint the floor at the bottom a light color that is easy to see because it contrasts with its surroundings.

Maintaining a Safe Stairway

No matter how safely your stairway is constructed, it will be unsafe unless it is carefully maintained. Some fall hazards, such as a loose metal nosing strip, a screw head that has worked up slightly, or a curled edge of linoleum look deceptively innocent.

Throw rugs should never be used at the head of a stairway. If used at the foot, they should have slip-proof backing. Commercial slip-resistant products are available. According to one consumer testing agency, a reinforced foam rubber underlay pad will last longer and give the best protection. Rugs that come with a rubberized backing may lose some of their slip resistance after being washed. Adhesives that can be applied to the back of rugs are available, but they wear off and must be replaced periodically.

Inspect carpeted stairs occasionally for tacks or staples that have worked loose, allowing the carpeting to creep on the tread. Certain kinds of carpeting should be avoided on stairways. Shag with extra long pile or loops may catch on shoes with high heels.

Household items should never be left on stairways "until the next trip" — which often is the wrong kind of trip. The lack of a housekeeping closet often turns an attic or basement stairway into a convenient storage place for brooms, mops, vacuum cleaners and the like.

A single toy or article left on a stairway is dangerous, too. A New Jersey woman who stumbled on her dog's rubber ball struck her head in a fall and was killed.

People can slip as well as trip on stairways. Two factors contribute to slipping — friction characteristics of the floor surface and the footwear of the individual.

Avoid the use of slippery finishes on all hard-surface treads and approaches to a stairway. Wood and concrete steps can be protected by commercial nonslip paints or paint you have mixed with sand. Rubber mats worn smooth greatly increase the possibility of slipping.

Worn carpeting is a slip hazard, too. Extra yardage should be bought when carpeting is laid. Some extra footage can be folded under at the top riser if the pile is short. For the thicker plush and sculptured piles in vogue today, extra yardage can be stored for future joining. When the pile at the edge of the step shows wear, the carpet can be shifted down to expose fresh pile. This will not only provide increased safety but give longer carpet life.

Using Stairways Safely

You should never run on stairs. Take steps one at a time. Never try to go up or down stairs at night without a light on. Be cautious at twilight when natural lighting can be deceptive. Be especially careful when you are fatigued or emotionally upset.

Avoid carrying packages so large that they block your vision. Tread cautiously when carrying something breakable. A Chicago man was fatally injured in a stairway fall when broken glass from the storm window he was carrying cut his throat. Get help when the load is awkward or heavy.

Stairs pose special problems for infants and toddlers. A 5-month-old baby girl scooted her walker to the edge of the basement stairway and fell to the bottom. She died from a fractured skull. Gates at the head and foot of stairways will help solve the small child problem. Don’t allow children to play or run on a stairway.

Use Handrails

Many of the disabling injuries from falls on the job occur on stairs. Statistics show that injuries from these accidents are mostly fractures and strains. But these statistics refer only to falls that keep people from their jobs. There are plenty of other tumbles that cause painful cuts and bruises, but they don't keep the victim away from work.

Falls down stairs take a large toll of lives each year at home as well as on the job. Many of these stairway falls could have been avoided if handrails had been used.

Contrary to the belief of some people, the use of handrails is not a sign of infirmity. It's just good sense. There may be several reasons people hesitate to use handrails. If they have ever used a wooden handrail that was not kept in good repair, they probably have had the painful experience of gathering a handful of splinters. Obviously, handrails should be kept in good repair. Be sure to report any rails that are loose or rough.

Another reason for reluctance to use handrails is that some people feel that they slow their descent. However, when you fall, the awful speed with which you reach the bottom of the stairs makes the added time spent using handrails unimportant.

Using handrails is important to your safety not only when you are going down stairs but also when you go up. A miscalculation of a fraction of an inch when stepping up can send you sprawling with painful results.

If you have ever had any hesitation about using handrails, maybe you've noticed how your hesitation disappears toward the end of the day. That's when tired bodies often look to handrails for support.

Many stairway accidents are caused when people insist on carrying a load that is too much for them to handle, or the load obscures their vision to the extent that they miss a step.

If you must carry objects up or down a stairway, the load should be small enough to allow one hand to be free to hold the railing.

Good lighting is another factor important to safe use of stairways. If a light bulb has burned out in the stairway area, it should be reported or replaced right away. Also, lights that are situated at a bad angle can produce blinding glare that could cause a mishap.

Another important safety factor is good housekeeping. Stairways should be kept clear of trash and other tripping hazards. Stairways aren't storage areas, and any obstructions should be reported to your supervisor or cleared immediately.

Often, stairways are posted with signs urging pedestrians to be cautious and to use handrails. That's good advice to follow.

Safety standards require that any flight of stairs with four or more risers should have a handrail. There's a good reason for this, so don't wait to have a fall to find out what it is. Use handrails.

Work Shoes

First, I should mention that there are really two general designs of nonslip soles and heels. For bad conditions in earth, rock, mud, and snow, the best design is one with a large deep, irregular tread — one with cleats that will not roll on a pebble. A good illustration is the snow tire tread.

However, snow is not a major problem inside our facility. Our problem sometimes is smooth, wet floors. Here, the best choice for safety is a sole and heel with many small grooves. The best example of this kind of sole and heel can be found on a boating-style shoe — a squeegee pattern. This kind of sole is particularly good on quarry tile.

A ripple-pattern sole and heel, while acceptable in most instances, is not slip resistant because of its shape.

A second consideration is the kind of material that the soles and heels are made of. Leather is a poor choice and very slippery. So are soles that are quite hard. Many of the plastic-based sole materials are unsatisfactory on somewhat slick surfaces.

Probably the best, all-around safe sole and heel material is a medium soft rubber. The sole should have a hardness that will deflect very slightly when the shoe and heel strike the floor. If it is too soft, the distortion of the material will cause it to lose its contact with the floor and cause you to fall.

Crepe soles, for instance, are very good on dry floors but are slippery on wet floors, depending upon the hardness of the crepe. Rubber heels are more likely to create surprises on wet surfaces. Neoprene cord heels and soles are very good against slipping on both wet and dry surfaces.

It is very important that soles, and particularly heels, be in good condition and not badly worn on the edges. To help prevent slips and falls, heels should be replaced whenever there are noticeable signs of wear.

Probably the most important factor contributing to injuries from slips and falls is the floor’s general condition — that is, whether holes, crevices, and foreign substances are present.

Rules for Safe Walking

Even with a safe floor that is well maintained and proper footwear, a fall can still occur almost anytime if you don’t observe some minimum rules for safe walking. These include:

1. **Walk, don’t run.**
2. **Be sure to face the direction in which you are walking.**
3. **Watch where you are walking**. Do not read or carry anything that obstructs your vision.

Let’s have a quick safety check. Take a look at the shoes or boots you’re wearing right now. Mine are safe. Are yours? If not, I ask that you wear the proper footwear for the job you’re performing. For many of us, walking is a large part of our livelihood. Don’t let unsafe or inadequate footwear cause you to get hurt.

Winter Walking

This is the time of year when motorists in some parts of the country prepare their vehicles for winter by mounting snow tires, checking batteries, and inspecting foul-weather equipment. Those who travel on foot should also prepare themselves to deal with hazardous weather. Here are some tips to make your winter walk a safe one:

1. **Use proper footwear.** Proper footwear is essential for safe walking on slippery surfaces. Rubbers or boots with a distinct tread or concentric circles on the underside generally work well on ice and snow. The rubber material and cleat-type design provide a gripping action that helps you maintain footing on a slippery surface. Leather-soled shoes or worn down, smooth-soled overshoes are dangerous and in most cases are worse than no overshoes at all. The smooth material usually cannot maintain traction on slippery streets and walkways. The worn tread increases the possibility of a fall.
2. **Do the foul-weather walk.** For greater safety, make sure your walking habits also suit weather conditions. The first step you should take when walking in foul weather is to scan the area ahead of you. Snowy areas often conceal icy patches. Try to avoid these uncertain hazards if possible. If you must walk on slippery or untraveled routes take short steps, sliding your feet in a drag-and-shove fashion. Keep your weight forward and toes pointed outward to help maintain your balance.
3. **Watch where you step.** Avoid wet leaves and mud slicks, as they are also dangerous. Be cautious of powdered snow on painted surfaces, such as steps and porches. The granular substance reduces foot surface contact, making the area slippery and dangerous.
4. **Hang on.** Where possible, use handrails or other stable supports, especially when ascending and descending stairs. Under icy conditions, the best preventive measure is to avoid stairs that have not been cleared. Letter carriers should notify their supervisor of such locations so that the owner can be notified. Mail will be withheld until the condition is corrected.
5. **Don’t finger mail**. Never finger mail while walking in foul weather. Always remain alert and be prepared to react if you do start to fall.
6. **If all else fails, fall down correctly.** If you lose your footing, try to relax. Tensing your body increases the likeliness of injury. If you have a satchel or other soft object, try to use it to cushion your fall. Taking the impact of your falling body on an outstretched hand, elbow or knee concentrates all of the force onto that point and many times results in broken bones.

Remembering the danger of winter walking, the importance of proper footwear, and the ability to fall correctly will help you stay on your feet this winter, both on and off the job.

6 Fire Prevention

Fire Facts

Can fires be prevented? “Sure,” you say. But the strength of your answer depends on how much you know and how much you can do about effective fire prevention. Everybody loses from a bad fire. Postal workers and even customers lose because of delays in delivering the mail.

Now, what are the “fire facts”? First, control depends on a knowledge of the three essentials of all ordinary fires:

- **Fuel** — Something has to burn: paper, wood, oil, solvent, gas, and so on.
- **Heat** — Heat is the temperature necessary to vaporize fuel according to its nature.
- **Oxygen** — Normally at least 15 percent oxygen in the air is required to sustain a flame. The greater the concentration of oxygen, the brighter the blaze and the more rapid the combustion.

Remove only one of these essentials, and a fire can be extinguished by *cooling* (heat control); *smothering* (oxygen control); *or isolating* (fuel control). *Interrupting* the chemical chain reaction also extinguishes certain types of fires.

Fires are classified into four types. Depending on what is burning, each type requires special controls.

- *Class A fires* are fires composed of general combustibles — such as wood, cloth, paper, or rubbish — and are usually controlled by cooling, such as by using water to cool the material.
- *Class B fires* are fueled by flammable liquids — such as gasoline, oil, grease, or paint — and are usually smothered by oxygen control, using foam, carbon dioxide, or dry chemical.
- *Class C fires* are electrical equipment fires and are usually smothered by oxygen control, using carbon dioxide or dry-chemical extinguishers, nonconductors of electricity.
- *Class D fires* occur in combustible metals — such as magnesium, lithium, or sodium — and require special extinguishers and techniques.

Checklist

Here is a checklist of ways in which every worker can help prevent fires:

1. **Know where fire extinguishers are kept, what each is for, and how to use them.**
2. **Maintain a neat, clean work area, and prevent accumulation of rubbish.**
3. **Put oil-soaked and paint-soaked rags in covered metal containers.**
4. **Observe all “No Smoking” signs.**
5. **Keep fire doors, exits, stairs, fire lanes, and fire-fighting equipment clear of obstructions.**

6. **Keep all flammable materials away from furnaces or other sources of ignition.**
7. **Report any fire hazards you see that are beyond your control, especially electrical hazards, which are the source of many fires.**

Fire Safety

Most of you have probably heard a fire siren wailing in the night. It can send chills through you. If you're away from home at the time, the sound may bring on a feeling of concern for the safety of your family. Or you may wonder if there's a fire at the place where you work. In many cases, when the siren sounds, it's too late.

I'd like to talk for a few moments about fire prevention. My remarks will deal with fire safety on the job, but many of the same principles can certainly be applied at home.

Actually, fire safety rules are so commonplace that we may become indifferent to them. This lack of personal interest is responsible for many fires both on the job and at home. When your job goes up in smoke, you lose not only the source of your livelihood, but also the part of you that had been going into your work.

For a moment, let's review the leading causes of industrial fires. Number one on the list is electrical failure or misuses of electrical equipment. Next, listed in order, are friction, flammable substances, open flames, and smoking and matches.

What can we as employees do to combat these hazards? First of all, we can comply with regulations — always obey "No Smoking" signs, dispose of cigarettes and matches by placing them in the proper receptacles, and make sure they are extinguished. We should watch for and report frayed electrical cords and overloaded circuits and dispose of flammable wastes and scrap by placing them in metal containers.

Another important point to remember is to store combustibles in a safe area. You do-it-yourselfers might take note here to check on this at home, too. Combustible materials and fumes from paint, solvents, and other flammables are responsible for many fires both at home and at work. Fumes can reach out a considerable distance and become ignited by a furnace, stove, electrical equipment, or even a lit cigarette.

Don't dispose of flammable liquids by pouring them down the drain. When you burn waste paper, make sure it doesn't contain explosive materials such as aerosol or paint cans.

Industrial fires result not only in economic loss but in much human suffering as well. The following eyewitness account by a Michigan man gives a vivid description of what can happen when a spark ignites dust:

"I went around the south side of the building. A young fellow who had just been hired a month ago was lying on the ground in flames. I pulled off my work shirt and covered him up.

"I saw five other men walking and crawling to the west side of the building. Their clothes were all burning, and they were all partially naked. The only person I really recognized was Alex because he was bigger and stockier than the rest. They were all burned real bad."

That was not intended to be a scare story. But it was a good example of what can occur if we are not aware of the hazards that develop quickly under certain circumstances. Treat fire with respect.

Fire Prevention Week — Fuel for Thought

Each year, the week in which October 9th falls is designated National Fire Prevention Week. This particular week was chosen because it is the week in which the famous Chicago fire occurred in 1871. This by no means implies that we can be less vigilant the rest of the year. Fire prevention is an everyday function that requires everyone's participation. But to participate, a basic knowledge of fire prevention, extinguishing the fire and its control is needed. What do you know about fire safety? Certainly what you don't know could be disastrous.

Quiz

Here are 10 questions. Answer true or false and evaluate yourself:

1. *True or false?* Oxygen, heat, fuel and chain reactions are necessary components of a fire.
2. *True or false?* There are four classifications of fires.
3. *True or false?* Class A fires are those that occur in ordinary combustibles such as paper, wood, and trash.
4. *True or false?* Class B fires are those that involve flammable liquids such as gasoline, oil, and paint.
5. *True or false?* Class C fires occur in or near electrical equipment where nonconducting extinguishing agents must be used.
6. *True or false?* Class D fires occur in combustible metals and can be extinguished using dry compound and specialized techniques.
7. *True or false?* Smoking is not permitted in pouching operations in postal facilities.
8. *True or false?* At home, it is a safe practice to keep the toaster plugged in and covered to keep dust out.
9. *True or false?* When you are mowing your lawn and you run out of gasoline, it is safe to add gasoline immediately to save time.
10. *True or false*? To protect against theft and vandalism, it is safer to store lawn mowers and gasoline containers in the basement.

Answers

1. *True.* When a substance that will burn is heated to a certain temperature, called its "ignition temperature," it will ignite and continue to burn as long as there are fuel, the proper temperature, and a supply of oxygen.
2. *True.* Class A, Class B, Class C, and Class D.
3. *True*. The quenching and cooling effects of water or of solutions containing large percentages of water are used to extinguish this type

of fire. Multipurpose dry chemicals can also be used to provide rapid knockdown of the flames and to retard further combustion.

4. *True.* Generally, regular and multipurpose dry chemicals, carbon dioxide, foam, and halogenated extinguishing agents (Halon 1211 or 1301) are used on fires involving flammable liquids.
5. *True.* Dry chemical and carbon dioxide extinguishing agents are suitable for Class C fires. Water and solutions containing water should not be used on electrical fires.
6. *True.* Normal extinguishing agents generally should not be used on metal fires, as there is a danger of increasing the intensity of the fire.
7. *True*. Smoking is prohibited in postal facilities. Smoke only where authorized.
8. *False*. Unplug the toaster and let it cool before replacing the cover. Even if the toaster is cooled, putting the cover on could engage the “on” switch, causing the cover to ignite if the toaster is plugged in.
9. *False.* Fill up before mowing. This reduces the need to add gas while the mower is hot. A careless spill could be tragic. Let the mower cool.
10. *False.* Even when seemingly empty, mowers and gasoline containers can retain flammable vapors that may leak and be ignited by a source of ignition such as a water heater pilot light.

Flammable and Combustible Liquids

Dangerous liquid fuel, alcohol, and flammable cleaning solvents can be found in most work environments. How do you identify them? *Read the label.* Most products have instructions for use and written warnings. Check the Material Safety Data Sheets for their proper use or contact the supplier or manufacturer.

Know how to safely store and use these materials. Help protect yourself and your property from fire and explosion.

1. **Substitute nonflammable products for dangerous ones when possible.** This goes a long way in helping to reduce or eliminate fire dangers.
2. **Beware of using gasoline, benzene, or other flammables as cleaners.** Less dangerous products are available that will work just as well.
3. **Keep only a minimum supply of flammables and combustibles on hand**. Get rid of what you don’t need.
4. **Store your supply away from the main building when possible.** A small detached shed would be suitable. For on-premise storage, an approved fire-rated room or vented metal storage cabinet is needed. *Do not use* the boiler room, electrical panel room, or air conditioning equipment room
5. **Protect against static electricity buildup when dispensing flammable liquids from drums into metal containers.** Ground all drums, and clip a wire between the drum and container being filled.

6. **Use only testing laboratory approved safety cans for working amounts of flammables.** Plunger cans and bench cans are designed for fire safety in production areas.
7. **Change or dispose of cleaning rags frequently.** Rags soaked with oil, grease, or solvents should be kept in a self-closing metal container designed for this purpose.
8. **Never smoke or use an open flame where flammables or combustibles are being used or stored.**

Caution — Gasoline

You're all familiar with the old story about the guy who couldn't see if his gasoline tank was empty, so he lit a match. . . . You know the rest.

Years ago, when this kind of accident first started taking place, it was considered a pretty stupid thing to do. But even today, after years of tragic experiences and warnings, the same accident in some form or another is still relived many times each year.

Maybe these things bring to mind some unsafe acts you've been involved in when using gasoline. Maybe you thoughtlessly refueled a lawn mower without letting it cool first, or you left gasoline-soaked rags on the floor or piled in a corner. Let's face it, when any of us do these things, we're just pushing our luck.

You're probably aware that it's the gasoline vapors that burn and not the gasoline itself. The vapors, which are heavier than air, can collect in low areas. For this reason, basements, pits, and sumps should be kept well ventilated if gasoline is being used in the area.

Gasoline should be kept only in an approved safety can that should be properly identified as to its contents. Any other flammables should also be marked so you can distinguish between them. Mixing of flammable liquids should be avoided. Never put flammables in a soft drink bottle or food container because they might unknowingly be consumed by someone else.

There are many ways gasoline can be accidentally ignited: open flames and open lights, hot surfaces, sparks resulting from contact of metals, operation of electrical equipment, and discharge of static electricity. Smoking and matches, of course, are also common ignition sources.

Although not as obvious a threat as fire, certain toxic effects may result from inhaling gasoline fumes. In large amounts, the fumes can irritate mucous membranes and can also cause dizziness and headaches.

Basic Safety Rules

Now, let's take a few moments to go over the basic safety rules concerning gasoline.

1. **Don't smoke around gasoline.** There must be no smoking, spark sources, open flames, or open lights in areas where gasoline is used.
2. **Don't clean with gasoline.** Do not use gasoline for cleaning. This applies to cleaning hands, equipment, clothing, paint brushes, and similar substances. A nonflammable or nontoxic solvent should be used instead.
3. **Don't store gasoline improperly**. Gasoline must be kept only in approved containers and clearly labeled.
4. **Don't fill up a running or hot engine.** When fueling equipment, make sure that the engine has stopped and that it's cool.

5. **Don’t do a sloppy job of pouring.** Keep the hose nozzle or can spout in constant contact with the rim of the tank opening. If you spill more than a few drops, flush it away immediately. When filling a container with a small opening, use a funnel to avoid spillage.
6. **Don’t take more than you need.** It’s a good idea to keep only the amount of gasoline that you need during your particular shift at your job site. Any that’s left at the end of the shift should be returned to the designated storage area.
7. **Don’t store gas-soaked rags improperly.** Just as flammables should be kept in the right containers, it is important to place cloth, paper, and other gasoline-soaked wastes in approved metal disposal containers.

Gasoline is important to our way of life. We see its importance in running our automobiles, boats, lawn mowers, and many other things. So let’s keep it working for us, not against us. Treat it with respect, and follow the safety rules we’ve just covered.

Smoke Detectors and Home Fire Action Plans

Home fires are a serious threat to your family's safety. Approximately 3,600 people die and over 200,000 are injured each year by fire in residences. Many home fire injuries and deaths are caused by smoke, not flames.

But a closer look gives an important clue to a way that those frightening numbers can be reduced. Many deaths and injuries occur in fires that happen at night, while the victims are asleep. A reliable way to awaken these sleepers before the smoke becomes unbreathably dense would help more people escape uninjured.

Do I Need a Smoke Detector in My House?

If you're not certain, maybe you share some of the misconceptions that many people have that lead to underestimating the danger of death from nighttime fires.

For example:

- **"The smell of smoke would wake me."**

  It might, if acrid-smelling smoke were the only thing produced by a household fire. Unfortunately, many home fires smolder slowly for hours before they burst into open flames. And while this smoldering combustion is taking place, large quantities of toxic gases, including carbon monoxide, are produced. Carbon monoxide is the same odorless, tasteless, and colorless gas that causes death when people breathe automobile exhausts in a closed garage or from a leak in a car's muffler. If you're awake, you may feel a headache and dizziness, possibly some nausea. If you're asleep when the gas enters your room, you will probably never awaken.

- **"There's usually plenty of time to get out."**

  Possibly, *if* you're awake and *if* you have time to round up the family, and *if* none of them inhaled too much smoke or carbon monoxide before you woke up. The spread of toxic gases long before flames become visible and noisy may not give you enough time.

- **"Fire only happens to other people."**

  This is perhaps the most dangerous idea of all. And it's probably just what all those "other people" thought before their fire occurred.

  One more thing: The law is getting into the act in favor of smoke detectors. Detectors are already required in mobile homes, and many states and municipalities have enacted statutes that require them in new and existing homes and apartments.

- **"Well, just how effective are smoke detectors?"**

  They won't prevent fires, they won't protect your property (especially if you're not home), and they won't put the fire out for you. But they will increase your chances of getting up, getting out, and calling the Fire Department.

How Can We Help Our Smoke Detector Protect Us?

There's more to surviving a home fire than waking up before it's too late. Just-awakened people, including children, are often confused, and may panic in the excitement. The safety of all may depend on knowing instinctively what to do.

Plan and Practice for a Safe Escape

Home fire drills may sound silly, and a serious fire is no fun to talk about, but a little time spent selecting escape routes and practicing what to do if the detector goes off may save lives if fire ever occurs in your home.

1. **Know** — Get to know EDITH: Exit Drills In The Home.
2. **Walk** — Walk through the main escape route several times. Try it in the dark or with eyes closed. Memorize the number of steps between obstacles or turns. If a piece of furniture keeps getting in the way, move it to clear the path.
3. **Plan** — Plan alternate ways of escape from each room. If the main route were blocked by fire or impenetrable smoke, how would each family member get out? If bedroom windows are too high for safe jumping, perhaps you should buy rope or chain escape ladders to keep at a window in each bedroom.
4. **Crawl** — If you must go through a smoke-filled area, crawl on hands and knees, with your head low, to avoid breathing smoke.
5. **Touch** — Before opening an inside door, touch the knob and the top of the door. If either feels hot, don't open the door. Fire on the other side might flash into your room. Use your secondary escape route.
6. **Agree** — Agree on a place to meet outside the home, so you can count noses and be sure everyone is safe. Do not reenter the home — even for pets.
7. **Call** — Don't call the Fire Department from the burning home. Get out safely, then telephone from a neighbor's home or use an alarm box.
8. **Re-enter** — Cautiously go back into the house or apartment only after the firefighters have assured you that the fire is fully extinguished and the structure is sound.

Your smoke detector is one of the most significant improvements in home fire safety ever to occur. But its effectiveness depends on your own efforts to prevent and to escape fires.

We have an emergency action plan here at this postal facility, and so should you at home for the safety of your family and you.

When Using Heat Stoves, Don’t Put Safety on the Back Burner

The high cost of oil and natural gas has prompted many homeowners to seek alternative ways to heat their homes during the fall and winter months. An estimated one million wood and coal burning stoves are bought in this country each year, with more than 12 million stoves already in use.

If you are considering an alternative means of heating your home, here are some suggestions to follow when selecting, installing, using, and maintaining these types of stoves:

1. **Selection** — Only stoves approved by nationally recognized testing agencies such as Underwriters Laboratory (UL) or Factory Mutual (FM) should be used. Look for the comprehensive safety label and instructions that are required on all stoves. If you are thinking of purchasing a used stove, have it inspected by a qualified service person for cracks that could allow deadly carbon monoxide to escape into your home.
2. **Installation** — The stove should be installed by a qualified person. If you must install it yourself, first check with local officials for any applicable fire or building codes, then carefully read and follow the manufacturer’s instructions. Place the unit on a fireproof stove board at least 3 feet from walls to prevent overheating and possible ignition of floors, curtains, or drapes. Only use an all-brick chimney or one certified as a residential type.
3. **Operation** — Make sure you keep a window open slightly to prevent carbon monoxide build-up and to provide enough oxygen for proper combustion of the fire. Keep the stove door closed or use a metal screen while the fire is burning to prevent sparks from flying about the room. Don’t dispose of papers, plastics, or trash by burning them in the stove; never transfer hot ashes in a cardboard box. Instead, place them in a metal container and discard the ashes only after they cool. Never keep the container of hot ashes indoors or in the garage until they have cooled. Always take them outside. Flammable liquids should never be used to start a fire and should never be stored in the same room with the stove. Vapors can travel across the room and ignite on contact with a flame. Be careful not to wear loose or flimsy clothing that could ignite easily.
4. **Maintenance** — Have your stove inspected before each heating season to ensure that all linings and pipes are intact and that the stove is properly cleaned and adjusted. It is also a good practice to clean your stove after three or four cords of wood have been burned. The chimney and connector should also be checked for creosote buildup, cracks, or faulty legs and hinges. Replace any missing or defective parts immediately. It is also a good idea to keep on hand a fire extinguisher suitable for wood or coal fires.

7 Housekeeping and Office Safety

Check Your Housekeeping Knowledge

It is near break time as a postal employee dumps a number two sack, drops the empty sack on the floor and hurries off for the swingroom. In the process, he stumbles over the sack.

Fortunately, the employee wasn't hurt, but it is easy to see that a second or two devoted to housekeeping would have made the workplace safer.

Some employees feel that housekeeping is only for custodial employees to worry about and that they have no housekeeping responsibilities. How do you feel?

Housekeeping Quiz

Take a few minutes to check your housekeeping knowledge. Here are ten work situations in which different practices were used. Some practices may be safe while others may be unsafe.

1. *Safe or unsafe?* The automation mechanic is ending his tour of duty and is securing his tools and straightening up his work area. In the process, he throws an oily rag into a closet with other oily rags.
2. *Safe or unsafe?* It's a warm day and the mail volume is heavy. The distribution clerk places a half empty soft drink bottle on the top of a flat case to keep it from spilling.
3. *Safe or unsafe?* The afternoon dispatch has been made up and is placed in front of the time-clock for pickup by the dispatch driver.
4. *Safe or unsafe?* The custodial employee is wet mopping the floor and warns each employee walking through the area.
5. *Safe or Unsafe?* The letter carrier carries a container of coffee to her desk while waiting for the last dispatch. In the process, she spills some of the coffee but takes time to wipe up the spill.
6. *Safe or unsafe?* The letter carrier is nearly finished for the day and has a long weekend coming up. Then he remembers that he left some paper towels, his empty lunch bag and a soft drink bottle in his truck. He decides to wait until Monday to get them as his leave replacement has not complained about it on past occasions.
7. *Safe or unsafe?* It is a prematurely warm day and the air conditioner is not functioning. The window clerk decides to prop the lobby door open with three empty trays to allow fresh air to enter.
8. *Safe or unsafe?* It has rained for two straight days. Finally the weather clears, but the lobby matting is soaked through and badly wrinkled.
9. *Safe or unsafe?* The employees were justifiably proud of their new post office and were determined to keep it looking good. That's why they placed new paper towels beneath the hot plate and coffee pot each day.

Answers

1. *Unsafe*. Oily rags should be kept in covered metal containers where the supply of oxygen is limited and the fire potential is greatly reduced.
2. *Unsafe.* Soft drink bottles, paper cups and other loose objects should not be placed where they can be easily knocked off. It also detracts from the appearance of the office.
3. *Unsafe.* Personnel using the time clock would have to step over the dispatch pouch. A safer location should be chosen for the placement of the pouch.
4. *Unsafe.* There's nothing wrong with a verbal warning, but additional efforts such as roping off the wet area, using warning signs and leaving a dry area for pedestrian traffic are necessary to provide a greater margin of safety.
5. *Safe.* The employee took time to make certain that no one would slip on the coffee spill and helped keep the workplace neat and safe.
6. *Unsafe.* And not very considerate either. By Monday, the bottle could be broken and more trash left in the truck, making the truck undesirable for others.
7. *Unsafe.* The use of trays as a door stop creates a potential tripping hazard for the public and does nothing to enhance the appearance of the lobby.
8. *Unsafe.* Replacement matting should be used, and the wet and wrinkled matting removed to allow for proper drying.
9. *Unsafe.* Combustibles should not be used for such purposes. The use of hot plates, coffee pots, and other appliances should be strictly controlled not only to ensure neatness but also to protect against fire.

How's Your Eye-Q?

Your *Eye-Q* — the ability to see beyond the obvious — may be very important in promoting safety by eliminating poor housekeeping as a factor in accidents.

The truth is, housekeeping is an important but too often overlooked area of accident prevention because people often ignore those little things that cause problems.

Quiz

Check your *Eye-Q*, and compare your score to those of your fellow workers. Rate yourself as follows: 9–10 correct answers = Excellent; 6–8 = Your awareness isn't the best, but there is hope for you yet; 1–5 = Either you didn't understand the questions, or you were careless in your answers.

1. *Yes or no?* Sam has a pet habit that other postal employees often kid him about — he consistently picks up every paper clip he finds on the floor. Is this habit worth the effort?
2. *Safe or unsafe?* It has been a heavy volume day, and the clerk doesn't want to hold up the works. Since the lock container is full, she decides to put the remaining LA locks on the floor until the last pouches are opened.
3. *Safe or unsafe?* The supervisor often sees paper and other debris in the work area, but he generally doesn't give much thought to housekeeping. After all, each clerk is needed to distribute mail — housekeeping is custodial work. How would you rate the supervisor's attitude?
4. *Safe or unsafe?* As soon as she noticed that it was raining, the manager of retail sales called maintenance and asked that a "wet floor" sign be placed in the lobby.
5. *Yes or no?* The automotive mechanic quickly cleans up spills and disposes of oily rags in the work area. Are the mechanic's efforts proper?
6. *Safe or unsafe?* The custodian empties some trash into the dumpster. A few plastic bands used to wrap magazines fall to the ground, but the custodian ignores them in order to get more work accomplished.
7. *Safe or unsafe?* Carrier Jones places the last parcel on the floor just inside the vestibule, out of the weather. He then goes to his vehicle in order to back it to the loading area.
8. *Safe or unsafe?* Carolyn and Jim eat regularly in the post office cafeteria, but rarely clean their areas after eating as there is a full-time custodian.

Answers

1. *Yes.* Even though a paper clip is a small item, a large accident may occur if a person slips on a clip and falls to the floor. No matter how

small, objects that are not supposed to be on the floor should be picked up.

2. *Unsafe.* An unsuspecting passerby could be in for a serious fall if that person stepped on an LA lock left on the floor. Even though the clerk intends to take care of this problem as soon as she finishes, an accident can quickly happen.
3. *Unsafe*. Definitely an unsafe attitude. The supervisor's concern with productivity could be shattered by slips, trips and falls due to poor housekeeping and reduced efficiency. It's every employee's job to keep the working area clean and free from hazards.
4. *Safe.* Dripping rain gear makes a normally safe floor into a slipping hazard. By cautioning persons in this way, an accident may be avoided by making people aware of the hazard.
5. *Yes.* Slips may occur from automotive fluids, and improper disposal of oily rags would be a definite fire hazard, especially in this work area. The mechanic is making a conscious effort to perform his job safely.
6. *Unsafe.* Accidents have occurred when employees or customers have had their feet entangled in these bands. Get these hazards into proper disposal containers immediately. As an added precaution, cut them to eliminate the loop effect.
7. *Unsafe.* A parcel on the floor is not in a position where it is readily noticed, especially if it is placed just inside the vestibule. Other carriers may trip upon entering or exiting even if the parcel is left there for a short period of time.
8. *Unsafe.* Or unsanitary might be a better word. Insects and rodents are attracted by crumbs and the resultant conditions are not welcomed by anyone. Carolyn and Jim certainly aren't considerate of the others who eat later than they do.

Keep It Clean For Safety's Sake

Now, while many of you are spring cleaning at home, take a look around your work area. What do you see?

What about those paper clips, rubber bands, plastic bands, and other litter lying harmlessly on the floor? Don't believe they're harmless They could cause a painful or even disabling fall to someone walking across the floor, and that someone may be you. Why take chances? Put these hazards in the trash can where they belong.

Are those drawers standing open the ones that you always remember to avoid? What about the next person who walks by; will he know to sidestep that roadblock? Or will he wind up on the the floor with a broken leg?

Those books, boxes, and miscellaneous items stacked on top of the file cabinets or on windowsills — where do they belong? Why not put them in their place before they fall on someone's head or foot?

Don't forget about the chair with the broken leg over there in the corner, or the electrical cords with frayed wires. They represent accidents just waiting to happen. So get them repaired or replaced now. Don't give them a chance to hurt someone seriously.

It's not always the big things that cause accidents; quite often it's the little things we forget to put away or get rid of. So be aware of the need for good housekeeping for the safety of everyone who enters your work area. It takes such a little time to keep your area clean and neat; and if you knew it would prevent one sprained ankle, one broken bone, or one electrical shock, wouldn't it be worth it?

We all work hard here, and we sometimes forget to keep it orderly and clean. I ask all of you to put a little extra effort into making our area a safe place in which to work.

We Are All Maintenance Employees

It is easy to convince ourselves that unsafe things are not unsafe. Consequently, we set for ourselves an innocent looking trap in which we eventually become the victims of our own wishful thinking.

This same attitude can carry over into our work areas. Housekeeping, for example, is not the sole responsibility of custodial personnel. We are all *maintenance* employees in that we have a responsibility for maintaining our own work area, to keep it free of debris, misplaced sacks and containers, defective equipment, missing guards — anything that may be unsafe. Some things require that we report them to someone else for correction, but many of the more common causes of accidents can be eliminated by simply maintaining a clean house — an orderly work place.

Maintenance Quiz

Since we are, in that sense, *maintenance* employees, the following quiz may help us become aware of more ways to improve conditions at our individual worksites. As you answer these questions, think of your own worksites. How do you compare?

1. *True or false?* The employee's immediate supervisor has the total responsibility to provide a safe and healthful work area for employees under his or her supervision.
2. Name as many things as you can that each of us can do to maintain safety and cleanliness in our work areas.
3. What are some work area hazards maintenance personnel would experience that others might not?
4. *Yes or no?* Mary has a pet habit that other postal employees often kid her about — she always picks up every paper clip she finds on the floor. Is this habit worth the effort?
5. Why would an automotive mechanic quickly clean up oil spills and dispose of oily rags in the work area?
6. *Safe or unsafe?* The office staff assists in keeping the office orderly by placing empty returnable soft drink bottles on top of the storage cabinet until there are enough to justify a return trip to the vending machine bottle rack.
7. A carrier's vehicle may not be considered a worksite in the same sense as a workroom environment, but what might the carrier do to maintain it?
8. *Safe or unsafe?* Dock employees have found that leaving crowbars and other manual handling tools on the dock constitute tripping hazards. Accordingly, they have found fire extinguisher equipment a handy place to hang or place unused tools.

Answers

1. *False.* Although the supervisor has the responsibility for conducting an aggressive and effective safety program, the accomplishment of such is not possible without employee involvement.
2. A few of the more common problems we can help to correct include: help maintain good housekeeping, follow smoking regulations, keep aisles free of obstructions, use electric cords properly, report machinery not properly maintained or guarded, and close file drawers and cabinets when not in use.
3. Hazards unique to maintenance operations include: tools left carelessly on the floor and in overhang places, oil and solvent spillage on floors, wood and metal shavings not cleaned up, combustible materials improperly stored, dirty or ineffective personal protective equipment, and broken ladders.
4. *Yes.* Even though a paper clip is a small item, an injury may occur if a person slips and falls. No matter how small, objects that are not supposed to be on the floor should be picked up.
5. Slips may occur from spilled automotive fluids. Improper disposal of oily rags is a definite fire hazard. The mechanic is making a conscious effort to perform his job safely.
6. *Unsafe.* Tops of cabinets should not be used for storage. Soft drink bottles are particularly unstable and can be easily knocked off. If returnable bottles are used, they should always be placed in appropriate racks or cartons when emptied.
7. Aside from checking for vehicle defects, a carrier should make sure the windshield is always clean and the vehicle is kept free of trash.
8. *Unsafe.* We are solving one housekeeping problem and causing another. Nothing should be stored so as to interfere with emergency equipment. When tools are not in use, store them in a designated and secure location.

Keep Offices Accident Free

Most of us recognize that the potential for a serious accident is minimal in office areas when compared to industrial worksites. However, records indicate that accidents can and do occur in office environments. With reasonable care and caution, office accidents can be prevented.

Office Safety Quiz

Consider the following office situations. Is there a potential for an accident here or is the situation reasonably safe?

1. *Safe or unsafe?* The secretary seldom uses the lower file cabinet drawers and keeps only a modest amount of office supplies in them. The top two drawers are where the heavy file work are kept.
2. *Safe or unsafe?* The clerk grasped the file cabinet handle and closed the drawer after removing the needed file.
3. *Safe or unsafe?* The secretary's attention was diverted by the ringing phone. While answering it, she left the lower file drawer open as a reminder that someone was seeking information from it.
4. *Safe or unsafe?* The office staff is rearranging furniture to provide more work space. In the process, three swivel chairs have been lifted out of the way in order to smooth the carpet.
5. *Safe or unsafe?* It's nearly closing time and six envelopes must be licked, sealed, and mailed.
6. *Safe or unsafe?* There are only two electrical outlets in the office, but these are sufficient for two desks. Besides, it is only a mild inconvenience to have to step over the typewriter cord.
7. *Safe or unsafe?* The office coffee pot receives considerable use. Therefore, the staff has placed paper towels beneath it to absorb spills. Additionally, to improve the appearance of the office, the pot is kept in a closet that is convenient to all.
8. *Safe or unsafe?* The office has a continuing need for sharp pencils and an occasional need for scissors. Therefore, everyone keeps a drawer full of supplies so they can reach into the drawer to obtain the needed items.

Answers

1. *Unsafe.* Distribute contents evenly in all file cabinet drawers. Top heavy files can easily tip over when opened.
2. *Safe.* Avoid finger injuries by using handles to open and close doors, drawers, vaults, and safes.
3. *Unsafe.* Keep desk and file cabinet drawers closed when unattended or not in use to prevent others from striking against or tripping over them.
4. *Unsafe.* Avoid lifting swivel chairs unless adequate help is available to ensure the base does not fall off. Where possible, roll the chairs across the floor.

5. *Unsafe.* Careless licking of envelopes can result in a painful tongue laceration. Use a wetting device.
6. *Unsafe.* Arrange furniture in such a way that electrical extension cords are kept out of aisles and do not otherwise pose a tripping hazard. If furniture cannot be rearranged, request installation of additional outlets by qualified maintenance personnel.
7. *Unsafe.* Placement of hot plates, coffee pots, and other electrical appliances in closets minimizes detection should a fire occur. Combustible materials such as the paper towels or items stored in the closet can increase fire potential. The use of portable appliances with heating elements is not allowed, except where officially authorized.
8. *Unsafe.* Keep pencils, knives, scissors, and other sharp or pointed objects in separate containers or compartments where a quick reach in won't result in a laceration or puncture.

Unsafe Offices

How many times have you watched a line worker swaying on top of a telephone pole or a construction worker straddling a steel beam high above, and you've said to yourself, "That's the last job I'd want to have. It's just too dangerous."

Yet, line workers or construction workers may be safer on their jobs than you are in the office. They are aware of the hazards that come with the job and understand why they must use safety procedures. This safety awareness is their best defense against accidents, and they have fewer because of it.

On the other hand, the office worker usually can't see why he or she should be concerned with safety at all. After all, what's so hazardous about rows of desks, phones, and files?

There are plenty of hazards lurking in this supposedly safe office setting. In fact, according to one study, office accidents account for some 40,000 disabling injuries per year in the nation. It is true that office accidents seem less dramatic than those that occur in a manufacturing plant or among construction workers. But they can be just as painful and just as much of a financial setback to the injured worker.

Let's look at some of the causes of office accidents. Slips and falls are the most common kind of accidents, and they account for the most disabling injuries. Be careful when you walk on slippery floors or uneven surfaces, especially with high heels. When you are going up or down stairs, use the handrail.

A chair with casters may roll away from you when you try to sit on it, when you lean back too far, or when you lean forward to pick up something off the floor.

Many slips and falls are the result of sloppy housekeeping. Floors littered with tangled cords, discarded papers, spilled liquids, and small items such as paper clips, aisles cluttered with waste baskets and stools can effectively trip up unsuspecting office workers.

Office machines also cause their share of accidents. A calculator, typewriter or computer that creeps too near the edge of a table while in use should have rubber feet attached to it, or it should be bolted in place. Electric machines should always be unplugged when being cleaned, and they shouldn't be used if any sparking or smoking occurs.

Moving something? If it's too heavy, get help. Many office accidents are caused by straining and overexertion. When carrying supplies to and from the storeroom, be sure that the pile is light enough to handle easily and low enough to see over.

Doors are a source of office accidents, too. People may walk into a glass door unless a conspicuous design is centered on the door about 4-1/2 feet from the floor. Solid wood or metal doors also present hazards. When two people approach solid doors from opposite sides, one of them can be struck when the door opens.

Desks and file cabinets present special hazards. Drawers should have safety stops to prevent the contents as well as the drawer from tumbling onto the user. Close drawers when you're through with them. It's easy to trip over or smash into an open drawer.

When working with the upper drawers of a file cabinet, be sure to open only one at a time to prevent the cabinet from toppling over on top of you.

Finally, there is always the danger of fire if flammable materials are allowed to accumulate in closets or if hot cigarettes and matches are tossed into waste baskets instead of ashtrays.

Look around your office. Those harmless-looking rows of desks, files,and doors can make your job a lot more dangerous than you think. Like the telephone line worker, you can develop a safety consciousness. If you can become aware of office hazards and do something about them, the list of people suffering from disabling office injuries won't include you.

8 Lifting and Handling

Do You Use Safe Lifting Techniques?

Most of you are aware that there is a right and a wrong way to lift something. Maybe you've had some instruction in safe lifting techniques. But since lifting is an everyday activity, perhaps a review of lifting procedures is in order.

There are various types of injuries that can occur from lifting incorrectly. Hernia, an ailment usually associated with lifting, does not generally result from a single effort expended in lifting. It is usually the result of repetitive extreme exertion, especially when done contrary to the structure of the body.

Back strain is a more common type of lifting injury. Like hernia, it results from the overstretching of certain muscles and can be avoided by employing correct lifting techniques.

The first thing that should be done before attempting to lift an object is to size it up. Look it over, and decide if you can handle it alone or if you need help. Get help if there's any doubt in your mind as to whether the load is safely within your capacity.

Also, look over the area where you're going to be carrying the object. Make sure it's clear of obstacles.

Get a good footing close to the load. Place your feet 8 to 12 inches apart. Bend your knees to grasp the load. Keep your back straight. Bend your knees outward and straddle the load. Be sure to get a firm grip. Keep the load close to your body. Then lift gradually by straightening your legs. Lift with your legs, not with your back

Of course, once you've lifted the load, you'll eventually have to set it down. So you bend your legs again, keeping your back straight and following the lifting procedures in reverse. Make sure that your fingers are clear of the pinch points. It is sometimes better to set one corner down first.

When you have someone helping you lift an object, teamwork becomes important. If you're going to be carrying the load to another point, both of you should decide in advance how it is to be handled. Check the route and the clearance. One person should be the leader and be in a position to observe and direct the other. Lifting and lowering should be done in unison. Don't let the load drop without first warning your partner.

You've probably all seen in the old movies on television the hilarious situations you can get into when you start moving a long object around, such as a ladder. Windows are broken and people knocked down. But these things aren't very funny in real life.

Lifting Tips

1. When carrying a long object, make sure you have proper clearance. Both persons should be on the same side of it and in step.
2. After having lifted an object, if you intend to place it on a table or bench, rest it on the edge; then slide the object onto the surface.
3. When lifting from a bench or table, get close to the load.

4. When lifting a load above your waist, first, correctly lift it waist high; then rest it on a firm object for support. Change your grip, and bend your knees to get extra leg muscle into the final effort.
5. Never attempt to change your grip or the position of your load while you're moving. Stop and rest the load on a firm object. Then adjust your grip.
6. Use caution in changing direction while carrying an object. Don't twist your body. This causes many strains. Turn it with changes in foot direction.
7. Always have a clear view over the load.

Your back is a very important part of your body, but it's easy to forget that you have one until you injure it. Then it becomes painfully evident. However, by using these safe lifting steps we've just discussed, your back can be easy to live with for the rest of your life.

Do’s and Don’ts of Lifting

Is lifting part of your routine? If so, then every day you risk injury from strains, sprains, hernias, cuts, and bruises. If you haven’t learned the basics of lifting or if you have forgotten them, take time now. Help protect your precious back.

Do’s of Lifting

1. **Do it the right way.** Before you begin, know the right way to do the job. Check with me if you have any questions about moving a load.
2. **Always size up the load.** Get help for heavy or bulky objects.
3. **Plan your path of travel.** Be wary of stairs and tripping or slipping hazards. Choose the safest route.
4. **Get a good grip.** Be sure you have a safe, firm grip. Check for nails and sharp edges. If the load is wet or slippery, wipe it off.
5. **Lift with your legs,** not your back. Squat down close to the load; keep your back straight; lift slowly with leg muscles that are a lot stronger than your back muscles.
6. **Use the right equipment.** Use material handling equipment whenever possible. Proper use of hand trucks, nutting trucks and containers can save a lot of manual effort.

Don’ts of Lifting

1. **Never lift more than you can easily handle.**
2. **Never lift with a bent back and straight legs.**
3. **Avoid twisting your body when lifting or carrying**. Move your feet to change direction. Don’t twist.
4. **Never lift from an unbalanced position.**
5. **Never carry a load that blocks your view.**

The Acheless Back

Nagging backache gets standup comedians a lot of laughs and sells a lot of pain medication.

But despite the comics, back strains and sprains are not humorous ailments or necessary curses. They are needless and expensive penalties of industrial accidents. Back injuries suffered in workplaces last year ran up a bill for many millions of dollars in workers' compensation claims and caused considerable pain and suffering for the injured.

Detailing the lost work time, the expense, and pain caused by aching backs is easier than explaining how back injuries happen. The sad truth is that most of this lost time is unnecessary because it is caused by ignorance of how best to lift bulky or heavy weights.

The human back is a fragile network of ligaments, discs, and muscles that are easily thrown out of order. The complex design breaks down when the back is repeatedly forced to do things it is not designed to do, thus wearing out its fragile parts.

One sure way to get an aching back is to lift bulky or heavy weights unassisted. The back alone, unsupported, cannot operate like a derrick or a crane boom, and lifting with the back twisted or bent just begs for a pulled muscle or ruptured disc.

Back injuries are easy to get and a long time healing. So back up that lifting with a little extra help and some good lifting techniques.

Learn to squat over the item to be lifted, and face it squarely. Lift with your legs, not with your back

In this position, the leg muscles do the lifting, saving your delicate back. Tilt the item on edge or with its long axis straight up so that the center of the weight is as high as possible above the ground. Next, move up close to the item.

Now you are ready to lift. Still squatting, set feet and legs slightly apart, straighten the back, grasp the load with both arms, and slowly stand up.

One sure way to know the right and wrong way to lift is to practice lifting a few times. The correct way is the easiest with the least strain and awkwardness. The wrong way only brings on self-inflicted pain.

Learn to lift correctly and make it your habit.

Team Lifting

What is team lifting? It is two or more people moving a load together.

When do you use it? When a load is too heavy, too bulky, or too long to be moved by one person.

How Do You Team Lift?

1. **One person gives orders to lift, turn, and set down.** Everyone must lift and move together. Workers should understand what they are to do before they begin.
2. **Lift and lower in the same manner**. Squat down close to the load, get a firm grip, keep your back straight, and lift slowly with leg power. For setting down, reverse the procedure. Take care to keep your fingers and hands from being caught underneath.
3. **Carry the load without sudden starts or stops.** Move slowly and watch where you step.
4. **Avoid stairs whenever possible.** Use an elevator or hoist to move loads to different floor levels.
5. **Keep the load level and the weight evenly distributed**. Be especially careful when you are going up and down inclines.
6. **Walk to match the load.** Carry long, rigid loads with the same shoulder and walk in step (two-person team). However, walking out of step will keep flexible objects from bouncing.
7. **Avoid walking backwards.** If it's necessary, be sure the path is clear, and have someone guide you.

Do Not

1. **Twist your body when lifting or carrying.**
2. **Lift from one knee.**
3. **Change your grip while holding a load.**
4. **Step over objects when you are moving.**

Make lifting safe and easy. Use teamwork.

Manual Handling of Materials

You don't have to be involved in the manual handling of materials for very long to discover that there's a hard way and easy way to do things. Maybe you've also discovered that the easy way isn't always the safe way. Skinned knuckles or pinched fingers are instant reminders that something wasn't done correctly.

For a few moments, let's review some of the precautions that we can take to protect ourselves while handling materials.

First, considerable hand protection can be gained by wearing the proper work gloves. They can prevent many cuts and scratches, and many kinds of gloves give you a better grip. Some work gloves are ventilated for the comfort of the wearer, so there's no good excuse for not wearing them when the occasion calls for it.

Conservation of space is important, but sometimes we tend to pile things too close to a wall or column. Proper clearance at the top and on all sides of piles is necessary for safety and efficiency. When material is piled, it should be in stacks that will stand steady. Sometimes, this means that the materials must be criss-crossed or interleaved with corrugated board. Objects that roll should be chocked. When a pile falls, serious injury to workers and materials can result. Piling too high or in a way that will interfere with lighting or circulation of air should be avoided. Never block a sprinkler head or other fire protection equipment.

Don't be afraid of putting our maintenance crew out of a job by picking up things that you drop on the floor. Tripping and slipping hazards could put both you and the maintenance crew out of work for a long time. Keep tools and other articles in the right bin or drum, and wipe up spills right away.

Let's make our postal installation number one in safety.

9 Personal Protective Equipment

Defense Defense

You've heard the chant "defense" before, encouraging one team to keep its opponent away from the goal. Defense can win or lose a game for a team.

Similarly, defense can make you a winner or a loser in the game of accident prevention. A person's defense in this respect is often the equipment that is available to protect one from injury.

Defensive Quiz

How adept are you at recognizing defenses? Try this quiz and see if you win.

1. Name the relatively simple device that protects hands and fingers from minor cuts, scrapes, blisters, and dirt during manual materials handling.
2. A postal driver is often reminded to use this protective device by signs adhered inside the vehicle or posted near the exit from postal premises.
3. This protective device should be used by a carrier only if attacked by his or her best friend.
4. A new conveyor system will be designed to fit the special needs of the post office. During the design phase, what protective equipment should be planned and installed prior to actual use of the conveyor to prevent accidental contact with moving parts?
5. The postal employee who enjoys woodworking or carpentry as a hobby would readily recognize this protective device found on most power saws.
6. The postal maintenance employee who must hammer metal with another metal object should be able to see the necessity for this piece of protective equipment.
7. This protective device can be used to cool small problems before they become large, hot issues.
8. Other than seat belts, name three safety features that are on motor vehicles.
9. You may have one of these devices in your home to smell danger before it is seen.
10. Other than safety equipment named in the above questions, name five common protective devices in use at your post office or home.

Answers

1. *Gloves.* If you missed this one, you were probably thinking of more complicated protective equipment. Don't forget that common place items serve very useful purposes.
2. *Seat belts.* Buckle up.
3. *Dog repellent.*
4. *Machine guards* — to prevent fingers and other appendages or clothing from being caught in gears or other exposed, moving parts.

5. *Blade guard.*
6. *Goggles or safety glasses.*
7. *Portable fire extinguishers.*
8. *Horns, mirrors, signal lights and flashers, brakes, etc.*
9. *Smoke alarm* is the correct response. How many of you answered, “the dog”?
10. Answers may be numerous, but can include such things as automatic stop switches, lawn mower guards, hard hats, fan guards, fireplace screens, motorcycle helmets, safety cans for flammable liquid, and many more. The point is, even though they may be available, these devices cannot prevent you from being a loser unless you use them.

Do You Take Your Eyes for Granted?

Let's take a quick test. How many basic senses are we endowed with at birth? Is it one. . . two. . . four? I'm sure we all agree that the answer is five, and these five senses are sight, hearing, taste, touch, and smell.

Now, to pose a more serious question. Suppose you were faced with sacrificing four of these five basic senses. Which one would you want to keep? If you agree with most people, you would choose the sense of sight. Yet, on so many occasions, how lightly many people treat this most priceless possession. How many times have you gotten something in your eye and then remembered your eye protection? You only get so many free warnings.

The eye is so much like a camera and yet so much more precious in value. A camera consists primarily of a lens, usually rather expensive. The lens gathers light rays, focuses them, and forms an image on a sensitized film, thus mechanically creating a picture.

The eye, too, has a lens, but it's a lens that's priceless to those of us who value our sight. The eye consists of the retina, cornea, and optic nerves. These parts of the eye coordinate their activities to transmit impulses to the brain. It is these impulses that provide vision, the miracle of color, perception, and the ability to learn. Eighty percent of everything we know enters our brains through our eyes.

It is foolish to take our eyes for granted, but we still neglect them. There was an instance in which a man lost his sight in one eye when a grinding wheel exploded. This man wore a pair of safety goggles at the time of the accident, but unfortunately they were on his forehead.

The ironic part of this story is that the injured person was an ardent camera bug, owned many valuable cameras, and the lens of each was well protected against the slightest scratch or piece of lint by an expensive lens cap. Something that could be judged in dollars and cents was worth protecting, but his own sight was just taken for granted. All it takes is just one instance of forgetfulness, or the excuse that "this job will only take a minute" to lose your precious eyesight.

Medical science today works near-miracles, but we were given just two eyes, and science cannot replace them. Let's keep them and take care of them.

Safe Eyes

While performing some of the jobs in our facility, we have to wear eye protection of some kind. For each of these jobs, a certain kind of eye or face protection is needed. When you learn your job, you must also learn what kind of eye protection you must wear.

But just knowing isn't enough. You know that ultraviolet and infrared radiation from welding can hurt your eyes. There are filter lenses in welder's goggles and helmets that protect you from the radiation.

If you're doing the welding yourself, you aren't likely to forget to wear your helmet. But it's just as important to wear eye protection if you are only helping or are close enough to the area to be exposed to the flash.

If you don't wear a helmet, or if you keep the goggles on your forehead, or if you alter the lenses, you aren't protected.

You know that it takes just one particle from a grinding wheel to ruin your sight. You know that one splash of a corrosive chemical can rob you of your vision permanently. Sometimes we make excuses to ourselves — the glasses fog over and are hard to see through, helmets and hoods are warm and uncomfortable, that wheel won't break, I'll be careful, or the chemicals won't splash.

No one wants to lose his or her eyesight, or have it damaged. No one ever thinks it will happen. But chemicals do splash, and wheels do break. One accident is all that is necessary; the damage is done.

People frequently make other excuses for not wearing their goggles or other eye protection. They say goggles are too heavy. But are they really? Goggles usually weigh only a couple of ounces more than ordinary glasses, but they are many times stronger than ordinary glasses.

People say goggles fog up and they do. But that problem can easily be taken care of.

(Note: Speaker should inform employees what is provided or suggested to take care of this problem.)

Other people complain that goggles get dirty. Of course they do. But when you consider the protection they give, you'll probably agree that the few minutes a day it takes to keep them clean are minutes well spent.

Another reason often given for not wearing goggles is that they sometimes cause headaches. You may need prescription glasses. Have your eyes tested and find out.

Perhaps the worst excuse is that the job will take only a few minutes so it is unnecessary to put goggles on. Perhaps the job does take only a minute, but an accident takes even less time to happen.

So wear your goggles and other eye protection as you have been instructed. Make sure they fit, and fit comfortably.

Besides the special protective equipment, it's a good idea to have your prescription eyeglasses ground in safety glass. Then they'll provide protection for your eyes at all times.

There's one more thing you should always bear in mind when it comes to protecting your eyes: if you get something in your eye, don't try to treat it yourself. Get first aid right away. Don't take your most important sense — the sense of sight — for granted.

Hand Protection

Two of the most intricately designed instruments that we work with are our hands. We probably couldn't use any other devices that can take the abuse our hands take and still turn out precision work.

Like so many things of marvel, some of us have come to take our hands for granted, except when we get our finger pinched in a door or between two objects. Then we remember that our hands are present and that they are sensitive, too.

It might surprise you to know that hand injuries account for almost one-third of the estimated 2 million disabling on-the-job accidents that occur in industry each year. Most of these hand injuries are caused by pinch points — almost 80 percent of them, in fact.

Pinch points have the nasty habit of catching us when we aren't looking or, more appropriately, when we're not paying attention. Pinch points can be avoided by being aware of their existence and then taking proper precautions.

One method of hand protection is to wear approved work gloves when you are handling rough materials or when you are lifting or moving objects. Still other safety measures include taking time to remove or bend down protruding nails, splinters, and sharp edges on materials you're working with.

Of course, machine guards and the special tools given you to perform your job should be used. When you don't lock out machinery that you have to reach into, or when you remove a guard and don't replace it, you're increasing the odds that you'll be injured, and you're not following the proper procedures for that job.

Hand protection isn't anything new. It's been considered important for years. In medieval times, knights wore armored gauntlet gloves. Later, the bare-knuckled prizefighters discovered it was easier on both parties involved if their hands were covered when they squared off. And as the game of baseball developed, the fielders' gloves evolved from a skimpy piece of leather into something with considerably more padding.

Despite any precautions we may take, our hands can receive minor injuries from time to time. I caution you to treat these cuts and scratches right away, because they can develop into something far more serious.

However, a little foresight will go a long way toward keeping the skin on your hands. For instance, if you're moving an object, either on a hand truck or by carrying it, make sure the doorways and aisles are wide enough to move through safely before you start the job. Make sure that you have proper hand clearance, and be equally cautious when you set down your load.

It's advisable to keep your hands free of grease and oil. Slippery hands can get you into trouble, so if you get grease on them, clean them right away.

Most of you married people have probably joked, at one time or the other, that your troubles began when you put on a wedding band. This could actually be the truth as far as accidents are concerned. For your safety's sake, don't wear rings when you're working around machinery. They can catch on machinery and other objects very easily, resulting in a badly cut or broken finger or worse.

10 Machinery, Tools, and Ladders

What You Don't Know About Machinery *Can* Hurt You

In today's society machines are performing more and more tasks that previously were performed by muscle power. The modern mechanized postal facility is no exception.

The use of machinery has become so common that many take it for granted and do not give machinery the respect it deserves. That factor alone can be fatal to the unsuspecting person.

Quiz

Do you work around machinery? Are you familiar with the safe usage of machinery? Here are 10 questions that deal with machinery. Answer each one either true or false. Check your answers against those below. Remember, what you don't know about machinery can hurt you.

1. *True or false?* All starting and stopping devices should be clearly marked and readily accessible at all times.
2. *True or false?* Employees are permitted to ride conveyors.
3. *True or false?* The wearing of loose clothing, neckties, bracelets, or gloves, is not permitted while working around conveyor belts or other moving machinery.
4. *True or false?* All personnel working on or near a conveyor should know the location and operation of all stopping devices.
5. *True or false?* Form 4707, *Out of Order* tags must be attached to any defective equipment or machinery.
6. *True or false?* No employee shall attempt to retrieve fallen, misthrown or caught mail from moving conveyor equipment when there is the possibility of coming into contact with moving machine parts.
7. *True or false?* A "nip point" such as is found on a belt and pulley or a chain and sprocket is a particularly dangerous part of machinery and conveyor systems.
8. *True or false?* Guards should be installed to cover all nip points.
9. *True or false?* Hydraulic hamper dumpers should not be left in a raised or dumping position for prolonged periods of time.
10. *True or false?* Proper loading or feeding of conveyor systems can contribute to a safe operation.

Answers

1. *True.* Quick and unobstructed access is important in case of emergency, as well as during normal operations.
2. *False.* No riding is permitted on conveyors at any time.
3. *True.* Loose clothing, jewelry, neckties, etc., can be grabbed by moving machine parts.

4. *True*. Knowledge of a quick and safe means to stop the conveyor is of extreme importance in emergency situations.
5. *True.* This identifies the equipment or machinery as being out of order. Tagged equipment or machinery is not to be put back into service or operated until repaired or replaced, and found safe to use.
6. *True.* Mail retrieval, equipment maintenance, and adjustments shall be done only when the conveyor power supply is positively locked out or otherwise cut off by a method that places the turning on of power in the sole control of the employee who might be endangered if the conveyor were activated.
7. *True.* Objects or parts of the body may be drawn into nip points and be crushed or mangled.
8. *True.* Guards shall be installed to cover all nip points, gears, chains, sprockets, and drive belts located less than 7 feet from the floor.
9. *True.* This creates a drain on the hydraulic system and also reduces visibility for the operator.
10. *True.* Overloads can weaken the belt and cause friction and jams that lead to mail falling from the belt.

Motor and Engine Maintenance Safety

Internal combustion engines and electric motors cause a lot of injuries every year. They shouldn't. By following a few safe practice rules when working around them, you can help prevent accidents and injuries from these sources.

Workers get caught in moving parts — belts, pulleys, chains, sprockets, gears, and so forth — because they don't shut the machine off and lock it out before adjusting, oiling, or repairing it, or because someone else turns it on while it's being worked on. Not replacing guards after working on machinery may also contribute to accidents.

Sometimes, workers strain themselves trying to play the strong man. They attempt to move or lift heavy parts such as flywheels, cranks, or cylinder heads without getting help or using a hoist. They can also suffer burns from hot water, from coming into contact with hot parts of an engine, or from unsafe use of gasoline.

Most causes of these injuries are obvious. Gasoline motors are a good example: To work safely, one of the first things you must do is to make sure parts can't move when the ignition is turned to the off position. Remove the key before starting to work on the engine.

Electric motors are different. You are exposed not only to moving parts but also to electric current. For complete protection, the switch must be turned off and the disconnect switch locked out. Of course, all electrical equipment should be grounded. Also, use only insulated tools and approved testing devices.

In any case, after you've finished the job and before you start a motor, replace machine guards you took off and make sure no one else is working on the equipment. In this way, you help prevent accidents and injuries by keeping someone from getting caught in moving equipment.

Remember: Use caution and follow procedures when working on engines and electric motors.

Watch Out for Nip and Pinch Points

Any time you risk getting part of your body caught between two moving objects (or one moving object and a stationary object), you are exposed to a pinch point. Of course, we could discuss technical terms applicable to different types of motions — such as shearpoints and in-running nip points — but that wouldn't help you avoid the danger of injury created by pinch points.

Some pinch points are guarded by devices designed to protect you from injury. Many of these kinds of pinch points occur in industrial settings. A brief list of equipment that features such pinch points includes: conveyors, fan belts, and any power press at its point of operation.

On the other hand, many pinch points are unguarded, so your safety in these situations depends entirely on your alertness to potential danger. Examples of unguarded pinch points include file drawers, desk drawers, some handcarts and hand trucks, scissors, staplers, and door hinges. These pinch points are commonly found in almost any place of business and, of course, at home.

What can you do to protect yourself from pinch points? Well, let's begin by talking about guarded pinch points first. The most important thing to remember about these pinch points is that you must *never* remove a guard that the manufacturer has attached to any equipment while the equipment is in use. A guard is there to protect you.

Some people think that if they remove a guard they may increase their productivity. In fact, if you remove a guard, you definitely will increase your chances of sustaining a serious injury — perhaps serious enough to prevent you from ever returning to your work.

If you need to remove a guard to repair or service any machinery with pinch points, always make sure the machinery is locked out, so that it is not only turned off but also impossible for you or anyone else to start it accidentally. Replace the guard *before* you put the machinery back into operation.

No matter how effective a guard device is, you still must protect yourself from pinch points. Don't attempt to operate any machinery when you are ill or too tired to maintain the degree of alertness required for your safety.

Now let's consider unguarded pinch points. These pose other kinds of problems. Sometimes it's easy to overlook an unguarded pinch point, because it doesn't have a protective guard to draw your attention to its potential danger. But this kind of pinch point can do just as much damage.

You may be tempted to take shortcuts with equipment that is unguarded. For example, when you're in a hurry you may shut a file or desk drawer with your hand clenched on the edge of the drawer, instead of on the handle or knob of the drawer. When you slam the drawer your hand will go along with it. You can easily jam your hand between the drawer and the metal or wooden cabinet or desk. The harder you slam, the more severe the injury.

The same logic applies when you close a door. Remember, handles and knobs on drawers and doors are not just ornamental. They are attached for your safety. You can spare yourself a lot of pain, and perhaps save yourself a lot of medical and other expenses, if you close doors and drawers the right way.

Another type of pinch point commonly found in the workplace is one you create yourself. Every time you push a hand truck or handcart without hand guards through a narrow doorway or passageway, you create a potential pinch point that can scrape your knuckles raw or even break a bone.

You should always know the width of the hand truck or handcart you are using. Allow extra room on each side of your hands to safely clear the walls, doorways, and other obstructions past that you must maneuver.

It's also a good idea to wear heavy work gloves when you operate a hand truck or handcart. The gloves will give you a better grip and will help protect your hands from abrasion.

Slow down as you approach the potential pinch point. If you are not sure you can clear a doorway or passageway — *Stop*. Don't proceed until you have checked the opening against the width of your hand truck or handcart.

In general, the less force you use as you approach an unguarded pinch point, the less likely you are to get pinched; if you are pinched, the less severe your injury is likely to be.

Whether you work near guarded or unguarded pinch points, you should learn what they are, where they are, and how to avoid them. It's up to you.

Conveyor Safety

Why Conveyors Are Used

Find a way to cut down on the amount of materials you handle manually, and you've got a good thing going. You can lessen the chances of hurting your back and hands, which are the two most commonly injured parts of the body in on-the-job accidents. In addition, your capacity for work will increase and so will production.

That's why conveyors are widely used. They move materials efficiently and safely. Conveyors are one of the earliest forms of automation. In fact, they've been around so long that we don't really look at them as a form of automation, but as basic machinery for getting the job done.

How to Use Them Safely

Like other equipment we work with, conveyors are safe when used correctly. They are not a means of human transportation or a plaything. They come in many shapes and sizes, and each is designed to do a specific job. So it's not easy to sum up conveyor safety in a few sentences. It goes without saying, however, that you have to use the right kind of conveyor for the job.

Certain safety precautions must be taken even though you don't work directly with conveyors. For instance, don't crawl over or under them. This is pretty elementary safety advice, but there are still many people who have to try it and get injured in the process. Pedestrians should use only approved crossovers.

Never ride a conveyor. We all find it's difficult enough going through life and avoiding injury without trying some foolhardy stunt. So unless your job requires it, stay away from conveyors.

Most companies that manufacture conveyors try to make them safe. If the equipment isn't safe, modifications have to be made. Pinch points and moving parts must be guarded. If a conveyor runs overhead, precautions must be taken to prevent injuries from materials that may fall from above.

If a conveyor runs at head height or is the type that carries material hung from hooks, measures should be taken to prevent persons from being struck, and employees in the area should remain alert to possible danger. Conveyors should be stopped and controls locked out when repairs are being made, and the equipment shouldn't be started again until all is clear.

When you place materials on a conveyor or take them off, pinch points are created because of the movement of the machinery. So watch your hands and stay alert. When putting materials on a conveyor, place them so that they will ride safely.

The fact that conveyors run steadily and smoothly may lull you into a false sense of security when you're around them. Don't fall into this trap. Conveyors can be dangerous. Loose clothing, long unrestrained hair, and other loose jewelry — particularly rings — are dangerous to wear on the job.

Combine them with the presence of a conveyor, and the hazard potential increases quickly.

Regardless of whether you're working with conveyors or any other type of machinery, you must observe basic safety rules. You are also expected to report unsafe conditions or malfunctions to your supervisor. These steps help eliminate hazards and protect you.

Lockout for Safety

Have you ever been working in the basement when someone upstairs turns out the lights? Suddenly you're in total darkness. Your immediate reaction is to yell.

This usually bring the lights back on along with an apology from the person who absent-mindedly flipped the switch.

In this case, there's no harm done. But what if you were checking a machine, and someone flipped a switch that started gears turning, and the gears chewed up your arm?

This type of accident happens all too frequently all over the country. Each time it happens, it points up the fact that shutting off machinery isn't enough; you have to lock out the main disconnect switch and tag it.

Actually, there are several reasons that a machine may continue to run after it apparently has been shut off. The machine can coast or it can cycle by gravity. The switch may also be bypassed by electrical wire, or the machine may continue to operate if air or hydraulic pressure lines have not been bled off. And, of course, if you don't tag and lock out the main disconnect switch, the machine may suddenly go into action at a very bad time for you. Equipment with stored energy potential such as a hydraulic system must be bled down to a zero energy state and locked out.

Before attempting to adjust or repair a machine, you should wait until it comes to a complete stop. The elevated ram or other mechanisms should be blocked so that they can't operate by gravity. Air and hydraulic pressure lines should be bled. Then lock out the main switch so no live wire can be contacted accidentally. Next, a tag should be attached to the switch, stating your name, department, and the reason for taking the machine out of service.

Naturally, lockout procedures may vary from machine to machine. However, here is a basic sequence for lockout procedures:

1. **Disconnect and tag the main disconnect switch for the entire unit to be worked on.** Padlocks should be used and each worker assigned to the equipment should have his own padlock and key.
2. **Disconnect plugs and cords on portable units**.
3. **Attach your tag, stating your name, department, and reason.**
4. **Bleed air and hydraulic lines, and lock out main valves.**
5. **Perform the necessary adjustment or repair.**
6. **Replace all guards and safety devices, after repairs are completed.**
7. **Remove only your own padlock and tag.** This is important if more than one craftsman is working on a machine.
8. **Restore the power and test run the equipment, when all is clear.** If the repairs aren't satisfactory, the previous lockout steps should be repeated if further work is to be performed.

When it is necessary to jog or make a brief trial run, everyone on the line or equipment should be warned. Make sure that they understand.

It is important to remember that the tag and lockout device should be removed only by the person who originally attached them. After checking the situation thoroughly, the supervisor may remove these devices in case the person who attached them is absent from work.

Many people don't want to take time to go through the safe lockout procedures. Others may hurriedly attempt to make adjustments that they aren't authorized to handle; still others don't shut off machines before making repairs. Sooner or later, people in a hurry are involved in accidents.

Never assume that other people will see you making adjustments and will know that they shouldn't turn on the machine. They may be too absorbed in thinking about their own safety to recognize any danger to you. Don't take chances.

Lockout Basics

The following is a step-by-step lockout procedure (adapted from a National Safety Council slide film):

1. Before any equipment is locked out, there should be agreement as to the specific machine or unit to be taken out of operation.
2. Turn off the point-of-operation controls. (Disconnect switches should never be pulled while under load, because of the possibility of arcing or even explosion.)
3. Turn the main power controls off. (Where high voltages are involved, this is usually the responsibility of an electrician.)
4. After the switch has been opened, the person or persons who will be involved in the job snap their locks on the control lever or on a multiple-lock adapter. At this point, it is good practice to tag the locks. Tags can describe the type of work the lock-user is performing, how long the job will take, and who the supervisor is.
5. Try the disconnect to make sure it cannot be moved to on.
6. Try the machine controls themselves, as a test that the main controls are really off.
7. As employees complete their repair or maintenance work, they remove their own locks and supplemental tags. The person who removes the last lock should first notify the foreman or supervisor that the work is finished and the equipment is ready to go again.

Lockout Don'ts

1. **Pulling fuses is not a substitute for locking out.** A yanked fuse is no guarantee the circuit is dead, and even if it were, there is nothing to stop someone from unthinkingly replacing the fuse.
2. **Locking out one source of power to equipment may not be enough.** Many machines use a combination of power supplies — electric and pneumatic, steam and hydraulic, etc. In such cases, you should be aware of any auxiliary energy sources and ensure that they

have zero energy potential by blocking elevated rams, bleeding hydraulic lines, etc.

3. **Employees should not be expected to guess what controls apply to what machines or to trace piping or wiring to find the correct main controls.** All disconnects and valves should be clearly marked. This is doubly important when controls are remote from the equipment or on master panels containing several controls.
4. **Don't assume that because equipment isn't functioning, it will stay that way.** Intermittently operating equipment such as pumps, blowers, fans, and compressors may seem harmless when dormant. Lock it out.
5. **The job is too small to merit locking out** is perhaps the most difficult mistake to overcome. Yielding to the temptation to bypass lockout procedures because they seem an unimportant nuisance can cost lives. Always lock out machinery when the job calls for it. Protect yourself and your fellow workers from unnecessary risks.

Use the Lockout Procedure

Today, I am going to speak with you about locking out equipment, machinery, and devices before working with them. Many of you know about lockout but, just to be sure, let's review it again. Your safety or the safety of your coworkers could depend on your being familiar with and using lockout.

A machine may continue to run when:

- It coasts.
- Some part turns or cycles by gravity.
- The switch is bypassed by electrical wire.
- Air or hydraulic pressure lines have not been bled off.
- You fail to tag and lock out the main switch.

Safety Procedures

To make a machine safe to adjust or repair, you must shut it off and:

1. **Wait until it stops**.
2. **Block elevated rams or other mechanisms so that they cannot operate by gravity.**
3. **Bleed air and hydraulic pressure lines.**
4. **Lock out the main disconnect switch so no live wiring can be contacted or the machine started accidentally.**
5. **Attach a tag with your name, department, and reason for taking the machine out of service.**

Lockout Procedures

Lockout procedures can vary from plant to plant and from machine to machine. However, here are some basic rules to follow prior to working on machinery.

1. **Disconnect and tag the main disconnect switch of the entire unit to be worked on.**
2. **Padlock the equipment disconnect switch**. Each employee who works on machinery should have his or her own padlock and key.
3. **Disconnect plug and cord of a portable unit and attach your tag with your name, department, and reason**.
4. **Bleed air and hydraulic lines to bring all stored energy components to *zero energy potential.***
5. **Perform necessary adjustment or repair.**
6. **Replace all guards and safety devices.**
7. **Remove your lock and tag only.** If more than one mechanic is working on a machine, this is very important.

8. **Restore power and test run the equipment**, when all is clear. If operation is still unsatisfactory, repeat steps 1 through 7 again.

When it is necessary to jog or make a brief trial run, warn everyone on the line or at the equipment, and be sure they understand.

Lock It Out

You've all heard the old expression about locking the barn door after the horse was stolen. Apparently it's a deep-rooted trait of human nature to wait until it's too late before taking precautions.

Unfortunately, when it comes to locking out equipment for repairs or adjustments, many workers wait until an accident jolts them into realizing how important this simple task is. Unless you are certain that a machine cannot be started, energized, or activated while you are repairing, adjusting, or maintaining it, you are running a grave risk.

When are lock outs needed? The list is endless, but here are some examples:

- While making repairs on electric circuits.
- When cleaning or oiling the movable parts of machinery, particularly if dangerous nip points are involved.
- While clearing blocked or jammed mechanisms.
- In any situation that requires maintenance or repair personnel, electricians, pipefitters, and so forth to work on potentially hazardous equipment.

Lockout methods can also be used to prevent unauthorized use of equipment. Examples include: taking the keys out of vehicle ignition locks, locking off power to equipment such as woodworking power tools, and locking the doors to areas that contain hazards so that unauthorized personnel cannot enter.

How can you be sure no one will accidentally start a machine that has been shut down? On electric-powered equipment, each employee who is repairing or adjusting a machine puts a lock on the switch after it is turned off. Thus, the machine cannot be started until all locks have been removed.

As mentioned, there are numerous situations in which locking out can protect and save lives. Here are two common occurrences to keep in mind:

- When more than one employee operates, repairs, or adjusts a machine, there may be times when they can't see each other. It's much safer for each person to be protected by a lock than to depend on each employee to see that the others are in the clear before start-up.
- If a machine operator leaves the controls to check a part of the machine that is not visible from the control location, he or she needs the protection of a lockout device so that no one else can start the machine.

Lockout procedures can be compromised in a number of ways. You must avoid these pitfalls.

1. **Pulling fuses is not a substitute for locking out.** Removing a fuse is no guarantee the circuit is dead, and even if it is, there's nothing to stop someone from replacing the fuse.

2. **Locking out one source of power to equipment may not be enough.** Many machines use a combination of power supplies — electric, pneumatic, steam and hydraulic. Lock out such auxiliary sources and ensure zero energy potential.
3. **Never assume that the job is too small to merit locking out.** Don't yield to the temptation to bypass lockout procedures because they seem an unimportant nuisance. This can cost lives.

Finally, remember that the existence of locks, lockout devices and multiple-lock adapters does not make a lockout program. They are of no use if they are not properly employed on every appropriate occasion.

Hand Tools — Friend or Foe?

Safety awareness is an important factor in the use of hand tools. Whether it's at home or work, proper selection and use, and maintenance of hand tools make the job easier, safer, and more efficient.

Skilled persons who frequently use hand tools select and treat their tools like friends. They realize that misuse can turn tools into foes capable of causing injury or damage.

Hand Tool Quiz

Most of us at one time or another have used various hand tools without much thought of accident potential. Here are some situations with which you may be familiar. What is the potential for injury or accident? Is the situation safe or unsafe?

1. *Safe or unsafe?* A clerk in the incoming station is using a knife to cut open a bundle of mail. Coworkers are nearby and the clerk is making certain to cut toward the body so that the coworkers are not endangered.
2. *Safe or unsafe?* A mechanic has just completed an adjustment with a screwdriver. To ensure that the screwdriver doesn't get misplaced, he puts it in his pocket.
3. *Safe or unsafe?* The mechanic has just sharpened the chisel and is satisfied with the tool. The chisel is now sharp and ground to a 60 degree angle with the corners of the cutting edge sharply squared.
4. *Safe or unsafe?* The mechanic is wearing eye protection and using compressed air at dead-end pressure of 30 psi, with effective chip guarding to protect against flying particles.
5. *Safe or unsafe?* The chisel is beginning to mushroom. In another few weeks the carpenter will dress the tool.
6. *Safe or unsafe?* The mechanic needed a file, but the one available didn't have a handle. Luckily, a loose fitting handle was available and the job could be completed.
7. *Safe or unsafe?* A sack hook has come loose from a carrier case. The carrier was resourceful enough to borrow a knife and secure the loose screws before the hook came off altogether.
8. *Safe or unsafe?* The vehicle maintenance mechanic is being careful with the vise he is using because it has fallen off the bench before.
9. *Safe or unsafe?* The maintenance crew has nearly completed the job and it's time to end their tour. Fortunately, the worksite is somewhat isolated and they can leave their tools on the duct system where they are out of the way of those who'll be working below.
10. *Safe or unsafe?* The clipboard has been hung on the wall with a nail. Now the operation is being moved and the nail is being pried from the wall with a screwdriver to prevent someone from striking against it.

Answers

1. *Unsafe.* Cut away from the body, but make certain others are at a safe distance.
2. *Unsafe.* Don’t carry edged or pointed tools in pockets.
3. *Unsafe.* After sharpening a chisel, it is often a good practice to round the corners of the cutting edge slightly except on wood chisels. This prevents the corners from breaking off and striking the user or passersby.
4. *Safe.* When compressed air is used for cleaning purposes, effective chip guarding and personal protective equipment are to be used. Compressed air used for cleaning purposes must be reduced to less than 30 psi when dead-ended. Do not use compressed air to clean clothing or parts of the body.
5. *Unsafe.* The chisel should be dressed as soon as it is beginning to mushroom. This will reduce the potential for injury from particles that may chip off.
6. *Unsafe.* A poorly fitted handle makes it difficult for the worker to control the tool. The loose handle could come off unexpectedly and the exposed tang could cause injury.
7. *Unsafe.* Always use the proper tool for the type of work being performed. In this case, a screwdriver should be used. Bring maintenance related items to the attention of your supervisor.
8. *Unsafe.* The vise is used to steady the object being worked upon. If the vise is unsteady, the purpose of using it is negated and the quality of the work could suffer and the worker could be injured by the falling vise. Secure the vise.
9. *Unsafe.* Properly secure tools and equipment to prevent them from falling.
10. *Unsafe.* Although well intended. The proper tool for the job is not a screwdriver. Again, maintenance related items should be brought to the attention of supervisory personnel.

Ladder Safety

It's too bad that safety can't be a magic word like "coho." The coho salmon has certainly captured the interest of fishermen while safety has a tough time getting attention.

There are coho boats, coho hoods, coho rods, even coho ladders. It's the ladders that we'll talk about at this time.

The salmon use fish ladders to get over rapids or small dams in streams during their spawning runs. They're not concerned with safety but are motivated by instinct to leap the water steps.

We humans, many times, approach our ladders in the same manner as fish. We leap carelessly onto the ladder, disregarding its placement or condition.

This procedure is okay for salmon because many of them are on their last trip when they hit the ladders. We could be, too, unless we use proper safety precautions.

Certainly, a very important factor in ladder safety is the correct placement of the ladder. The safest angle at which a straight ladder is placed is easy to determine. The distance from the base of the ladder to the wall should equal one-fourth the distance from the base to the point of support. For example, the ladder should be 1 foot out from the wall for every 4 feet of rise.

Once you've placed your ladder at the correct angle, the safest way to climb it is to face the ladder. The same applies when descending. Hold on with both hands when ascending and descending, and always use at least one hand to hold on with when working from a ladder.

One of the most common unsafe practices on a ladder is overreaching, particularly if you are painting or working on some project that progressively gets farther away from your ladder. We're inclined to tell ourselves, "It's only an inch or two more. I'll just reach a little farther." The next thing we know, we've had a fast trip back to earth.

The only safe way to handle a situation like this is to descend the ladder and move it to the correct spot. Besides, you'll welcome the opportunity to stretch your legs.

Incidentally, falls are responsible for more than 17 percent of all fatal industrial injuries, so taking time to be safe is important.

A firm, level surface on which the ladder is placed is very important. Placing a ladder on a box or another object to increase its height quickly increases your chances of having an accident, and that is very foolish. Always use a ladder that's the correct size.

Unfortunately, you can't escape back-seat drivers, even when you're on a ladder. However, there should be only one person on a ladder at a time. If there is any lengthy conversation or instructions that have to be directed to the person on the ladder, he should descend and carry out the discussion on the ground.

Approximately 3 feet of a straight ladder should extend above the uppermost point to be reached, and you should not stand above the third rung from the top. On a stepladder, never stand above the third highest step, and don't attempt to use a stepladder as a straight ladder. Use the right ladder for the right job.

Common sense plays an important part in ladder safety just as it does in anything you do safely. There are things — such as keeping grease and other foreign substances off ladder rungs and steps, taking one step at a time when climbing, inspecting ladders before using them — that are all common safety sense.

Another thing to remember is that we can't control the actions of others while we're on a ladder. But there are certain things we can do to protect ourselves from their unsafe acts. For instance, if you're working from a ladder near a doorway, lock or barricade the door so someone in a big hurry won't bump your ladder and dump you on the floor.

Metal ladders are used quite often and are fine if used correctly. But when you're using one, make sure that it doesn't come into contact with electric wires or equipment. The same goes for the person using a wooden ladder — don't touch electric wires or equipment. Tie-off the top of the ladder to a nonmovable object or to the building, if it can be done safely. Additionally, make sure that the tops of metal ladders are positioned against surfaces that will not cause them to slide. For example, placing a metal ladder up against a metal gutter or other slippery surface can lead to the ladder sliding and falling. Take the time and additional precautions to do the job safely.

Statistics can be rather cold and impersonal, but approximately 19 percent of all permanent disabilities and 21 percent of all temporary total disabilities in industry are caused by falls, many of them from ladders. We all have a pretty good idea of what can happen in a ladder accident, so let's do everything possible to prevent one.

Ladders

Spring and summer months bring out many needs for a ladder around the house — washing windows, painting trim, or pruning trees. Here are some ways to make sure that what goes up comes down safely. They apply equally to climbs made on the job to replace light bulbs or make repairs, or on work done at home.

Ladder safety depends on three things: selecting the type, size, and construction quality suitable for the work you intend to do; ensuring proper care to keep the ladder in first-class condition; and following certain rules of safe use.

Buying a Ladder

Watch for these problems when buying a ladder:

- Lack of nonslip treads on the steps.
- Insufficient space between rails that restricts separation of the feet for good balance.
- Ladder rails so narrow that they will readily sink into soft ground.
- Upper ends of ladder not covered with nonslip tips to prevent sideways movement.
- Sharp corners, rough ends and edges.
- Ladders that are difficult to pick up and hard to carry and erect.

Get help when you purchase a ladder. Go to a knowledgeable dealer and tell him the kinds of jobs you have in mind, (such as painting, roof repairs, window washing, etc.), whether the ladder is for frequent or occasional use, and whether your house is a low ranch style or a tall traditional one.

Check the ladder over carefully. Look for a U.L. label or other testing and approving organization's seal. If it is made of wood, be sure there are no knots, cracks or decayed areas in the lumber; make sure all parts are fitted together tightly and that the unit, if it is a stepladder, stands squarely on a flat floor with no wobbling.

Look for a stepladder with a sturdy spreader that locks firmly into place when the ladder is fully opened (the only position in which a stepladder should be used.) The ladder should have good bracing so that when you climb it there is no wobble or tendency to twist under a load. The steps should be at least 3 inches wide. They should be firmly attached to the side rails so they can't move and work loose.

Cheap ladders lack many safety features such as extra braces and nonslip devices. The better extension ladders have larger feet to reduce the possibility of their sinking into a soft surface, and the feet have better nonskid soles with greater electrical insulation. Cheap ladders may have unfinished ends and edges with burrs that can cut and scrape your skin. And they may be made of such light-gauge metal that they cannot support your weight adequately.

Caring for Your Ladder

All ladders need careful maintenance. Don't leave them out in the weather where parts can rot, corrode or rust. Never paint a wooden ladder — the opaque coating might mask a crack or the beginning of a serious split. Instead, after thoroughly inspecting a brand-new wood ladder, give it a coating of clear wood preservative followed, if you wish, by clear varnish or lacquer. Some ladder people advocate using nothing except an occasional coating of linseed oil.

Using Your Ladder — Do's and Don'ts

1. Before using any ladder, check it carefully for cracked, bent, or malfunctioning parts.
2. See that locks are firmly attached to rungs before mounting a section ladder.
3. Never test a ladder by loading it in a horizontal position — you might weaken it and cause it to break later while you're using it.
4. Never use a metal ladder near exposed electrical wires or within four feet of open electrical apparatus.
5. Use the 4-to-1 rule when erecting single or multisection ladders — set the bottom 1 foot out from the vertical for every 4 feet of height to the resting point. Thus, a ladder supported at a 20-foot height should be set about 5 feet from the wall. You can judge height by counting rungs, which are about 1 foot apart.
6. The top of an extension ladder should be set against a flat, firm surface. Check the strength of any gutter you intend to set a ladder against. Remember that metal ladders can slide on metal gutters.
7. If you're going to step from the ladder onto a roof, the ladder should extend no less than 3 feet above the eaves.
8. Always face the ladder when going up or down, and go one rung at a time, holding the side rails.
9. If you place a ladder in front of a door, be sure the door is locked.
10. The ladder must have good footing. Don't place it on a muddy or wet surface unless it is especially equipped with skid proof feet.
11. If you should become dizzy or panicky while on a ladder, don't try to climb down hurriedly. Just drape your arms over a convenient rung, hold on, and rest your head against the ladder until the feeling passes.
12. Do not use a stepladder as a straight ladder by leaning it folded against a wall. Use it only as a stepladder, fully opened, with its spreader completely extended and locked down securely. Never climb higher than the second step from the top.

Ladders, like all tools and appliances, must be used with discretion. Used improperly, they can become extremely hazardous.

Portable Ladders — Please Use Them Safely

Portable ladders are a simple and effective means for safe climbing except for one major problem. Workers sometimes find portable ladders so easy to use that they neglect normal precautions and safety rules. They become complacent. The result, too often, is an accident.

Almost all ladder accidents can be avoided by following the three basic rules of ladder safety:

1. No ladder is safe unless it is the right type and right size for the job.
2. No ladder is safe if it is missing rungs, if its rungs or rails are defective, if it is poorly built, or if it is in a weakened condition.
3. No ladder is safe unless the person using it takes common sense precautions.

Using the right type of ladder for a job makes the job safer. For example, don't use a stepladder to do the job of a straight ladder by leaning it against a support.

Heavy construction jobs call for heavy ladders, not light household types. Metal ladders must not be used in the vicinity of exposed electrical circuits or power lines, where they may come in contact.

The right ladder length is important, too — not too long or too short. Stepladders are safest if they're 10 feet or less in length, and they should never be longer than 20 feet. In construction work, extension ladders can be used to reach up to 44 feet. For greater heights, scaffolds should be used. Splicing two ladders together is never safe and should never be attempted.

Always examine a ladder before using it. It is unsafe to use if siderails are cracked or split or if there are sharp edges or splinters on cleats, rungs, or side rails. Check also for missing, broken, or weakened cleats, rungs, or treads.

Don't use painted ladders. The paint may be covering a defect. If a defective ladder cannot be repaired, it should be disposed of. The only sure way to dispose of a ladder is to cut it up in pieces so no one else will use it.

Set the ladder at an angle of about 75 degrees with the floor or ground. The distance from the wall to the foot of the ladder should be about equal to 1/4 of the ladder's total length.

After setting the ladder in place, check it for firm and level footing. To prevent slipping, use a ladder with safety shoes or nonslip points. If this is not practical, secure the ladder firmly by lashing it with rope to a fixed object.

The ordinary straight ladder is not built to support more than one person at a time. When going up or down, always face the ladder and grasp the side rails with both hands.

Never carry tools or materials in your hands when going up or down the ladder. Instead, put them in a sack that hangs from a strap over your shoulder or use a bucket and rope to raise and lower them. Don't allow

others on the ground to throw anything to you; you may lunge to grab it and fall.

Don't lean a ladder against an object that might move, and never lean it against a window sash. If you must work near or on a window, fasten a board securely across the top of the ladder to give a bearing on each side of the window.

Always stay below the top three rungs unless you have a firm handhold or a safety belt. Even then, you should always hold on with one hand while working.

Be sure you keep moving the ladder as needed to reach new areas. Never over reach, push, or pull the ladder while working on it. Never straddle the space between the ladder and another object or try to work in a high wind. Any of these actions could upset you and the ladder.

If you're working in front of a door that opens toward the ladder, the door must be blocked open, locked, or guarded by another employee. If you can't do that, then be sure to rope off the space around the ladder.

Some points to remember:

1. **Always inspect a ladder before using it.**
2. **When going up or down, face the ladder. Take one step at a time. Don't hurry.**
3. **Don't work on a ladder if it's very windy.**
4. **Hold on with at least one hand when working from a ladder.**
5. **Don't overreach or try to reposition the ladder while you're on it. Instead, get down from the ladder and then move it close to your work area.**
6. **Don't work on any of the top three rungs of a ladder unless you have a firm handhold or a safety belt.**
7. **Secure the ladder against slipping before you try to use it.**
8. **Don't ever use a metal ladder near live wires or parts.**
9. **When a ladder is not in use, store it under cover, horizontally, with supports to prevent sagging. Don't let it lie on the ground where heat or dampness may weaken it.**

11 Motor Vehicle Safety

Be a Professional Driver

The people who drive for a living, like our professional postal drivers, are the first to agree that driving can be extremely dangerous on crowded streets and highways.

Inexperience, recklessness, intoxication, and aggressive driving cause much of the total carnage on the country's highways, but they do not explain why so many professional drivers get into trouble.

No matter what the driver's natural ability, formal training, years of experience, and competence behind the wheel, the flood of vehicles competing for space on the roads today is a danger to almost any driver. Even the very best must learn to operate their vehicles with extra precautions:

1. **Expect the unexpected, and be extra wary, alert, and cautious.** Practice the art of defensive driving all the time.
2. **Don't operate an unsafe vehicle until it is repaired**. Proper mechanical maintenance gives another margin of safety.
3. **Regularly check the conditions of battery, tires, brakes, windshield wipers, shock absorbers, and mufflers**. Faults in any of these are easy to spot and should be corrected immediately.
4. **Horns, flasher lights, and other warning devices are vital safety features built into vehicles.** Make sure they operate properly.
5. **Don't make stupid driving mistakes.** Frequent lane changing, tailgating, and cutting out sharply to gain a few yards are driving mistakes sure to bring disaster.
6. **Use your seat belt.** Use that extra safety in your life-saving seat belt. If you don't use it, you may personally discover why vehicle deaths and serious injuries now total more than all the wartime wounded and fatalities since 1776.

Please drive carefully.

A Defense Against Common Vehicle Accidents

Anticipation is the key to defensive driving. Allowances must be made for the lack of skill, inattention, and lack of knowledge on the part of other drivers. Developing professional driving habits such as defensive driving is the best insurance against all driving hazards. One can literally learn to drive in such a way as to stay out of accidents.

Quiz

Check this quiz for defensive driving practices that could significantly reduce the so-called “common” vehicle accidents, on and off the job.

1. Which of the following vehicle accident causes do you think are common in the Postal Service?
   a. Backing.
   b. Failure to yield right of way.
   c. Driving too fast for conditions.
   d. Following too closely.
   e. Improper parking.
   f. All of the above.
2. Is there any time when driving at the posted speed limit may be too fast?
3. When may you exceed a posted speed limit?
4. A good driver is one who drives _____.
5. If you were to apply the *2-Second Rule* to make sure that you have the correct following distance, what would you do?
6. What are four things you should do when approaching an intersection?
7. When approaching an intersection, why would you look first to the left and then to the right?
8. *True or false?* Hitting fixed objects along a roadway can generally be attributed to inattention.
9. Can you name four important things you should do when parking your car to prevent rollaways? List them in order if you can.
10. *True or false?* A good defensive habit for everyone riding in a vehicle is to wear seat belts whenever the vehicle is in motion.
11. *True or false?* Each driver should regularly check his or her vehicle before driving it to make sure the lights, brakes, tires, etc., are in good condition.
12. *True or false?* Failure to yield right-of-way is a major contributor to intersection accidents.
13. Why do sudden showers mean slippery roads?
14. *True or false?* Backing should be done only when absolutely necessary.

Answers

1. *F. All of the above.*
2. *Yes.* Slow down for school zones, bad weather, difficult traffic conditions, obstructions in the road, poor visibility, etc. The basic rule of speed is “Never exceed a speed that is reasonable and proper for existing conditions, even when the law permits a higher speed.”
3. *Never.*
4. *Defensively.*
5. You will have the correct distance no matter what your speed if you stay 2 seconds behind the car in front. It works like this: Watch the vehicle ahead pass some definite point on the highway, such as a tar strip or post to the side. Then, count to yourself *one thousand and one, one thousand and two. . . .* That’s 2 seconds. If you reach the same spot before you finish those words, you are following too closely.
6. The four things to do when approaching an intersection are:
   a. *Check the rear and slow down.*
   b. *Cover the brake with your foot in case you must stop quickly.*
   c. *Look first to the left, then to the right, and then back to the left to scan the scope of intersecting traffic.*
   d. *Obey signals and proceed with caution.*
7. Traffic from the left is closer to you and crosses your path first.
8. *True.*
9. To park your car to protect against rollaways:
   a. Turn front wheels to the curb.
   b. Set the hand parking brake.
   c. Place vehicle in gear if it is manual transmission, or in park position if is is automatic.
   d. Turn off ignition and remove the key.
10. *True.*
11. *True.*
12. *True.*
13. Oil and grime accumulate on the road surface during dry times. Because oil is lighter than water, it surfaces to create ice-like conditions when the road is first wet.
14. *True.*

Do You Remember Your Words?

If you drive, you have surely experienced highway discourtesies of many varieties. Some are annoying, some are frightening, and some can be nightmares. But all are dangerous to some extent and are the results of selfishness and impatience.

For example, consider the driver who fails to stop for a stop sign and instead comes to an abrupt halt past the stop sign. This person's apparent thoughtlessness causes you to take sudden evasive action that will startle anyone behind you. Then there is the driver who fails to honor your signal to make a lane change, or the one who honks for you to move while you wait for a pedestrian to cross the street. One of the most irritating and dangerous hazard occurs when a driver persists in following too closely.

The incidents all have shades of selfishness and impatience that are forerunners to anger. A similar thread is interwoven in all discourteous actions on and off the highways.

Think back to incidents that have happened to you. What were your reactions toward the other driver? Were they reactions of composure? What were your words? Did they reflect patience and unselfishness, or were they words you would rather forget?

We can't control other drivers and keep them from discourteous or dangerous behavior. But what about you as a driver? How do you react? Do you remain calm, or do you get angry?

There is no way of knowing how many of this nation's motor vehicle fatalities were caused by anger. We can only guess that anger had a part in too many.

When we are angry our minds become clouded, reason becomes clouded, and the temptation to reciprocate grows strong. If we fall victim to anger, we invite the danger of an accident and injury to ourselves or someone else.

If those words you remember during your last encounter with highway discourtesy are words you would rather forget, you are undoubtedly an impatient driver. Getting angry over the mistakes of others makes us just as wrong as they are. We have a responsibility to others on the road in addition to the ones with bad driving habits. It is difficult, if not impossible, to be courteous to innocent parties when we allow ourselves to become angry. Courtesy and patience are tantamount to defensive driving and go a long way toward preventing accidents.

Don't let the other driver's problems become your problems. Don't be easily provoked, for if ever there is a time for patience and courtesy, it is while driving.

After you complete each driving assignment, think back on how you handled each dangerous or discourteous situation involving another driver. Do you remember your words. . . with pride?

Stress and Motor Vehicle Accidents

The problem of stress is now recognized as an important factor in human health and behavior. By accelerating the pace of life with everything from supersonic airliners to food processors, technology has subjected men and women to demands on their attention, intellect, and patience never thought of 100 years ago.

Given this constant level of ambient stress, it's no surprise that adding specific, high-intensity stress, like job or family problems, can change behavior patterns behind the wheel. Stress, while seemingly a mental problem, exerts a powerful influence on the body as well.

First, there's a drop in the number of white blood cells and increased production of steroids and adrenaline. This reaction by the pituitary and adrenal glands causes profound changes in the body — raised blood pressure, rapid heartbeat, sweating, and gastrointestinal disturbances — as it attempts to adapt to other stress-provoking conditions.

Also, stress, with the physical reactions it causes, can be quite tiring. And fatigue means less tolerance for the actions of other drivers, along with an unwillingness to do anything extra — such as yielding the right-of-way. This sometimes makes a defensive driver an offensive driver.

All this stress-caused aggression leads to accidents. A university study of case histories found an individual's likelihood of involvement in an accident increases considerably during divorce proceedings, or when the driver is experiencing marriage difficulties, financial troubles, or job problems. The study confirmed that deep emotional depression and heavy anxiety can be significant contributing factors in traffic accidents and fatalities.

What can be done about stress-related accidents? Local government tries its best to control some aspects of traffic safety. It sets speed limits, examines drivers, and safety-checks vehicles. But it can't legislate against bad days at the office. The responsibility for making sure stress does not contribute to accidents rests solely on the shoulders of the individual.

Awareness is the key. Drivers must learn to recognize when emotions are affecting their behavior behind the wheel, and react accordingly. Realizing that "I'm not myself today" can help control the urge to speed, to drive aggressively, and to take the faults and mistakes of other drivers as personal insults.

When stress becomes serious enough to impair concentration — when problems are preoccupying — don't drive at all. Take a bus, a cab, or wait until you feel better, just as you would if you'd had too much to drink.

By being aware of the danger stress poses, recognizing its presence, and acting to control its effect, you'll be able to drive home from that bad day at the office safely — and live to express any pent-up emotions at the local gym or in your backyard. Control yourself before you get behind that wheel and remember that you represent the U.S. Postal Service when driving on the job.

Don’t Be Fooled — Safety Belts Save Lives

When it comes to rationalizing why you shouldn’t bother doing something, the average person thinks up a wide variety of ingenious excuses. And nowhere is this more true than when it comes to safety belts.

Sure, we’ve all heard the following:

- That thousands of people are killed each year in vehicle accidents.
- That motor vehicle accidents are the number one cause of on-the-job fatalities and are the leading cause of death among people 44 and younger.
- That one in 70 babies born today will eventually die in a car crash.
- That traffic accidents cost Americans $50 billion every year.

But about 80 percent of us still don’t wear safety belts. Just off the top of your head, how many excuses have you heard or even used yourself for not wearing them? Two? Five? Ten? The fact is that there are simply too many myths surrounding safety belts.

Let’s take a look at some of these myths and see what the facts really are:

Myth: I know a friend who claims he would have been killed in an accident if he had been wearing a safety belt.

Fact: This is true in some rare instances. But for every one time this happens, hundreds of lives are saved by wearing safety belts. What kind of odds would you bet on?

Myth: I don’t need a safety belt when I’m traveling at low speeds or going on a short trip.

Fact: 80 percent of accidents happen at speeds of 40 mph or less. Fatalities of nonbelted occupants have been recorded at speeds as low as 12 mph. In addition, three out of four fatalities occur within 25 miles of home.

Myth: I’m too uncomfortable and confined when I wear a safety belt. Besides, it wrinkles my clothes.

Fact: Well, simply sitting down wrinkles clothes, too. Seat belts installed in all cars since 1974 are designed to allow you to reach necessary driving controls. They restrict you only in a collision or sudden stop. When reaching for things that will take you away from the steering wheel, it’s safer to pull off the road or ask your passenger for help. You’ll probably find that after a short while, you’ll feel more comfortable and secure wearing a safety belt. In fact, a properly worn safety belt reduce fatigue by helping you maintain proper driving and riding posture.

Myth: I don’t need safety belts. In case of an accident, I’ll brace myself with my arms.

Fact: Would you let a 200-pound friend jump off the roof of your house into your waiting arms? Well, that’s the force of impact you would encounter in a car crash at only 10 mph. Your arms would be about as effective as wet noodles.

Myth: I might be saved if I'm thrown clear of the car in an accident.

Fact: Saved from what? Flying through the windshield? Saved from oncoming traffic when you're too injured to get up and run? Saved from telephone poles, trees, or rough lacerating cement or asphalt surfaces? You know how dangerous motorcycle accidents are, don't you? That's because motorcyclists are "thrown clear" of their vehicles almost every time. The fact is that your chances of being killed are 25 times greater if you are thrown from the car.

Wear Your Seat Belt

There are a lot of reasons why people won't wear seat belts, but there are also a lot of reasons why they should. This includes you, if you don't already wear one.

If you need a good reason to wear your seat belt, how about one of these:

1. It is now the law in a number of states.
2. In an emergency, it holds you in place so you can control the car.
3. In a crash, it keeps you from being thrown out of the car and hitting the pavement where you may be run over by another car or be crushed under your own. It also keeps you from striking interior surfaces that could cause harm.
4. If you're a passenger in the back seat, they keep you from being thrown forward, injuring yourself and the driver or other front seat passengers.
5. Seat belts lessen fatigue. Many people feel more comfortable with the added support seat belts give them.
6. By buckling the seat belt, you are reminding yourself that accidents can happen even to the most careful driver.
7. By wearing your seat belt you set a good example for the rest of your family to follow.
8. You reduce your liability to your passengers — they won't get as injured in the event of a crash.

If you haven't been using the seat belt in your car, take the time to inspect it. Make sure it works properly and is clean. Make it a rule that everyone in your car wear a seat belt.

Don't leave it up to them. Unrestrained passengers not only risk their own lives but also could injure others who are belted in.

Safeguard Children

It's especially important that you safeguard children when they are in the car. Always ensure that children are in approved car seats. Many local governments and hospitals now rent these car seats if you don't want to buy one. Children can be injured in normal driving by a sudden stop or a sharp turn. Small children need special protection. Because of a child's hip structure, a lap belt should not be used until the child is 4 years old and weighs at least 40 pounds. However, if no special restraint is available, it is far safer to use standard belts than to allow the child to ride loose. Don't strap two children into one belt. This makes proper fit impossible.

Holding a child in your arms is not safe either. In a collision, the child will fly out of your arms and be seriously injured. Not all car seats are safe, but there are crash-tested devices on the market. So before buying a car seat or harness, check to make sure it's safe.

Whenever a child is riding with you, remember that the back seat is safer than the front, and the center of the vehicle is safer than the sides.

Remember, too, that seat belts aren't just for long trips. Two-thirds of all accidents occur within 25 miles of home, and half of all fatal accidents occur at speeds under 40 mph.

Don't sit on it — wear it. Seat belts save lives.

The Two-Car Crash

The two-car crash is one of the most frequent kinds of vehicular accidents. It can occur in any of six ways.

1. **A collision with the vehicle ahead**. To avoid such collisions, you must:
   a. *Stay alert.* Expect the driver ahead of you to brake at any time without warning or reason.
   b. *Stay ahead of the situation.* Watch as far ahead as you can. You may see trouble develop in front of the vehicle ahead of you, something that could cause the driver ahead to stop suddenly.
   c. *Stay back.* Don't underestimate your stopping distance. Even with good brakes, it takes a lot of room to stop. Allow at least a 2-second following distance. On wet or icy roads allow yourself an even greater safety margin.
   d. *Start stopping sooner.* When you know you'll have to stop, slow down gradually. Don't wait until the last moment. Delayed braking is dangerous.
2. **A collision with the vehicle behind**. To avoid it, you can take the following defensive steps:
   a. *Stop smoothly.* A gradual stop gives the following driver time to react and space to stop.
   b. *Signal.* Signal your intentions well before you slow or stop. Flash your brake lights, and use hand or turn signals.
   c. *Keep clear.* When someone rides your bumper, slow down and encourage him or her to pass. Even if they don't, you've given both yourself and the driver behind you an extra margin for a gradual stop.
3. **A collision with an approaching vehicle.** The best way to steer clear of this 2-car crash is to:
   a. *Stay right.* Don't crowd the center line. If the oncoming driver crosses it, warn him or her with your horn or lights. Never try to outguess the driver by swerving left.
   b. *Watch out for curves.* The only way to beat the law of centrifugal force is to slow down before entering a curve, then pick up speed as the curve permits. Stay on your own side of the road on right-hand curves, never cut the corner on left-hand ones.
   c. *Let traffic clear.* When making a left turn, wait for a safe opening. Keep your wheels straight ahead so that a car hitting you from the rear won't throw you into opposing traffic. Watch out for hidden vehicles coming around slowed or stopped vehicles facing you.

4. **A collision with a vehicle at an intersection.** When approaching a regulated or unregulated intersection:
   a. *Be prepared.* Never assume that the other driver will yield the right-of-way. Approach each intersection with your foot off the gas pedal and poised over the brake pedal.
   b. *Look both ways.* As you approach an intersection, look first to the left to make sure other traffic is yielding the right-of-way, then to the right. When you are near the intersection, check again for unusual or unsuspected action to either side.
   c. *Don't fight it.* You have the right-of-way only when you can see that it's safe, regardless of stop signs or the law. You can't count on the other driver to always obey the rules.
5. **A collision with a passing vehicle.** Passing is a dangerous maneuver, so when you are being passed you must remember to:
   a. *Help out.* Help the other driver pass and you protect yourself. As you are being passed, check the oncoming traffic. Then slow down if the passing car will need more room to get back in line in front of you.
   b. *Check the rear.* Before you change lanes, check your rear-view mirrors and glance back to make sure your blind spot is clear. Use your turn signals, then move over only when the lane is clear.
   c. *Keep right.* Get into the proper lane well before a turn. When turning right, stay close to the right curb to block anyone from passing on the right. Use your turn signals early.
   d. *Check, then move.* Don't nose out of a parking space to look for oncoming traffic. Take a good look before you move. Wait for a break in traffic, then pull out promptly.
6. **A collision with a vehicle being passed**. Before you move out into the passing lane:
   a. *Be sure.* Know your speed and acceleration, and estimate the speed of the vehicle you're trying to pass and the speed and distance of oncoming vehicles. These are matters of experience and judgment. A good passing rule: when in doubt, don't.
   b. *Check the rear.* Never pull out to pass unless you are sure someone behind you isn't trying to pass you on the same side.
   c. *Give warning.* Sound your horn or flick your lights to alert the driver ahead. Then accelerate and pass quickly.

I have just given you many defensive driving tips for you to follow. These tips will help you avoid becoming involved in accidents — but only if you put them into practice. Please do.

Don’t Be a Tailgater

- “The accident happened when I was attempting to bring my car out of a skid by steering it into the other vehicle.”
- “I consider neither me nor the driver in front of me to blame, but if either was to blame it was the other driver.”
- “We were going about 40 when the driver ahead of me shifted into reverse gear and suddenly backed right into me.”

These are three explanations of rear-end accidents that drivers actually put on claim forms and submitted to their insurance companies. You may smile at them, yet the humor has to be tempered by the fact that there are almost 4 million rear-end crashes every year. Fatalities are rare in rear-enders, but injuries — whiplash is the most common — can be painful and severe.

Perhaps the most frequently heard alibi for a rear-end collision is “my brakes failed.” But accident investigation specialists and law enforcement officers know that the real failure in a rear-ender is the driver, not the brakes. The greatest brakes in the world won’t save a driver who hasn’t allowed a safe interval between his or her vehicle and the one ahead.

Even at the slow speed of 20 mph, a driver needs 40 to 44 feet to stop from the instant danger is first spotted. At 55 mph, 193 to 226 feet are covered in the time it takes a driver to see danger, brake, and come to a stop.

Some drivers think they can maintain a safe following distance just by the “feel” of things. But a feeling can fool. . . and fail.

The 2-Second Rule

There’s a better way. It’s called the 2-second rule. The term comes from the fact that if you stay 2 seconds behind the car in front of you, you will be at a safe following distance no matter what your speed. Here’s how the 2-second rule works:

> *Watch for the vehicle ahead to pass some definite point on or near the highway, such as a tar strip, speed limit sign, telephone pole, culvert — anything stationary and easy to see. Then count to yourself “one thousand and one, one thousand and two.” That’s 2 seconds. If your car passes the designated point before you finish saying those words, you’re following too closely. Immediately ease up on the accelerator and take another count.*

When road and weather conditions aren’t up to par, increase your following distance to 3 or 4 seconds.

There’s an older rule that’s used by some drivers. It’s less accurate than the 2-second rule because it pretty much depends on individual judgment. That rule calls for keeping one vehicle length between you and the vehicle ahead for each 10 miles per hour that you’re traveling on dry roads. For example, you try to maintain a 3-vehicle-length interval if you were going 30 mph. But a driver’s ideas of vehicle length can vary widely.

Here's what a member of the Pennsylvania Department of Transportation does to give himself a little extra following-distance check: "The 2-second rule is an improvement over the vehicle length per 10 mph guide," he says. "I like it, I use it, and I recommend it. But I supplement the 2-second rule with an added guide. If at highway speeds I can read the license plate on the vehicle ahead of me, I'm too close."

A good habit to practice when you're following a vehicle is to look beyond the car ahead of you for things that might cause that driver to brake suddenly — a car pulling out from a side road, a slow-moving vehicle, an animal or a pedestrian in the roadway. This tip-off will give you a little safety cushion because you can begin reducing your speed before the driver ahead reacts to the situation.

How to Avoid Striking Another Vehicle in the Rear

There's no hard-and-fast rule that will keep you out of trouble here, but there are strategies that will decrease your chances of a rear-ender.

1. **Stretch your following distance.** Try to stretch your following distance as far as you can without leaving so much room that another driver would be tempted to cut in ahead of you. It's a neat trick if you can do it.
2. **Stay alert for signs that might tip off what the driver ahead intends to do**. It could be as simple as a turn signal blinking or brake lights lit. Has the vehicle been gradually drifting to the right or left as if the driver were preparing for a turn?
3. **Start stopping sooner.** Slow down and touch your brakes the instant you see a hazard developing that may require you to stop or take evasive action. Failing to do this is known as delayed braking, a sign of poor driving technique. A defensive driver should rarely have to make a panic stop.

How to Avoid Being Struck in the Rear

Avoiding a collision with the vehicle ahead is only part of the rear-ender problem. There's the driver behind you who seems to stick right on your tail mile after mile. Here are four things you can do to avoid being struck in the rear:

1. **Signal your intentions.** Use your directional signals (or arm signals) and brake lights.
2. **Stop smoothly.** If you follow the rule for avoiding a collision with the vehicle ahead, at the same time you will reduce the chance for a collision with the vehicle following.
3. **Keep clear of tailgaters**. Don't let a tailgater rile you. Just slow down. This will help eliminate the hazards by:
    a. Encouraging him to pass you.
    b. Increasing the following distance between your car and the car ahead of you so you won't have to brake suddenly and be hit by the tailgater.

4. **Avoid a rear-end collision when stopped.** Being struck from the rear while stopped in traffic accounts for 70 percent of rear-end collisions. This may happen to you when you are stopped behind a driver who intends to make a left turn. To avoid being struck in the rear while stopped in traffic:
   a. Keep a foot on the brake to activate the brake lights.
   b. Stop at least 10 feet behind the car ahead to prevent any domino effect. A good way to do this is to stop so you can see the rear tires of the vehicle ahead.
   c. Keep lights on at dusk or in rain and snow.

If you practice defensive driving at all times in all situations, the chances are good that you can avoid a rear-end collision.

Look Twice Before Entering Intersections

Intersection accidents are one of the most severe types of vehicle accidents in terms of injuries and property damage. Consider these Postal Service statistics:

- One out of five of our vehicle accidents happened in intersections.
- One out of three of our motor vehicle-related injuries occurred in intersections.
- One dollar out of three spent on repairs was for vehicles involved in intersection accidents.

While these numbers seem impersonal, the accidents involved your coworkers. So let's look at a few intersection situations and the defensive measures used to avoid an accident:

1. **"I just didn't see."** A driver stops at the intersection, checks traffic, proceeds into the intersection, and is involved in a collision. The obvious defensive tactic is to look left and look right before you accelerate. But one more step may avoid an accident. Look left a second time before you pull into the intersection. This last glance to the left is essential because traffic from the left will reach you first when you pull out. Even more important, that vehicle or bicyclist approaching from the left may have been momentarily hidden by a tree, a parked car, or some other obstruction the first time you looked.
2. **"It was an uncontrolled intersection."** Drivers often don't slow down at an uncontrolled intersection — one without stop signs or lights — or simply don't see the approaching cross traffic. The defense in this situation is to be prepared. You should slow down, poise your foot over the brake, scan both sides of the intersection roadway for vehicles, and stop if the approaching vehicle's speed indicates it's not about to slow down or stop. Remember to yield the right-of-way to the vehicle on the right or any time it appears there is any doubt or confusion on the part of the other driver.
3. **"The other guy ran the light (or the stop sign)."** Contrary to what some people believe, a yellow light doesn't mean you should floor the accelerator and make it through the intersection before the light turns red. It means you should slow down and stop if you can do so safely. If you're the first in line at a red light and it changes to green, don't pull into the intersection until you're sure that cross traffic is going to stop. Remember, red lights and stop signs don't stop vehicles, only drivers do.
4. **"The intersection was blocked."** One final word about intersections. Many times during rush hour traffic, even when the light turns green, there's nowhere to go because bumper-to-bumper traffic blocks the intersection. Those other cars pulled into the intersection during their green light, not realizing or caring that the light might change before they made it through. Remember, in rush hour traffic, never enter the intersection until you're sure that you can go straight through without getting trapped in the middle, even if you have a green light.

Intersections Deserve a Second Look

Each year postal vehicles are involved in thousands of accidents, resulting in millions of dollars in property damage. One out of four occur at intersections.

Let's take a look at some of the precautions drivers should take to help avoid accidents when approaching an intersection.

1. **Watch traffic signals.** First, watch for traffic signs and vehicle taillights that signal you to stop. If a traffic light is green, don't assume it will stay green. Be prepared to stop your vehicle safely. Never take the risk of running a yellow light. The few seconds you spend waiting at a red light might mean the difference between life and death. As you approach a red light, brake as early as is practical to allow motorists behind you sufficient time to stop.
2. **Anticipate problems at uncontrolled intersections**. At an uncontrolled intersection — one without stop signs or lights — it's a good idea to anticipate stopping by releasing the gas pedal, placing your foot above the brake, and looking left and right. Remember to yield the right-of-way to the vehicle on the right. If it appears there is doubt or confusion on the part of any other driver, it's always safest to yield.
3. **Use extra caution**. Approximately half of all vehicle accidents involving pedestrians occur at intersections. Many of them are caused by pedestrians darting out unexpectedly. But a good number could be prevented if drivers were more attentive when turning or merging with traffic. As a driver, be extra cautious in rural areas and school zones. Expect the unexpected. Also, be considerate to elderly pedestrians whose vision and hearing may be poor and thus makes them less aware of traffic hazards.
4. **Proceed with care.** Once you have stopped at an intersection, you must then determine whether it is safe to proceed. Before accelerating, scan the roadway in all directions. Look left a second time because a motorist or pedestrian approaching suddenly from the left will reach you first when you pull out. If your vision is obstructed by buildings, shrubbery or parked cars, it may be necessary to edge your vehicle forward into the intersection. Proceed slowly and accelerate only when you are certain that it is safe.

Remember that most motor vehicle accidents are caused by incorrect judgment on the part of the driver. Taking special precautions at the points where accidents occur most frequently, such as at intersections, will help ensure a safer trip for you and your passengers.

Back Up Only As a Last Resort

What driving situation accounts for the most accidents per mile driven?

If you guessed backing, you're right. Poor backing habits can easily result in accidents since the driver has such a limited view of where the vehicle is going.

Back-Up Quiz

If you use common sense you will help reduce your chances of a backing accident while improving your backing technique. See if you agree or disagree with the following statements:

1. *Agree or disagree?* You should back up only when there is no other way to get the job done.
2. *Agree or disagree?* You should depend on your mirrors to give you complete visibility.
3. *Agree or disagree?* It is best to get help when backing into pedestrian or auto traffic.
4. *Agree or disagree?* Tell your helper to call out signals loud and clear so you will know when and how to back.
5. *Agree or disagree?* There is only one safe backing speed — very fast — so you can get there before someone takes your spot.
6. *Agree or disagree?* Drivers should not practice backing skills. The skills come gradually with time.
7. *Agree or disagree?* Drive forward into dead-end alleys. It is easier and safer to back out into traffic.
8. *Agree or disagree?* Chock your rear wheels at a loading dock even if the pavement or ground is level.

Answers

1. *Agree.* You have a better field of vision while traveling forward. Backing is tricky and dangerous. You take more risks when backing, so don't back up unless you absolutely have to. There are two situations in which you should never back up, regardless of the circumstances:
   a. Never back around a street corner. It is always preferable to drive around the block.
   b. If you overshoot a crosswalk at a red light, you should stay where you are until the light changes, as long as you are not blocking traffic. If you back up, you might hit a pedestrian or another vehicle.
2. *Disagree*. Your mirrors give you only part of the picture. You still have blind spots, and these can be dangerous.
3. *Agree.* Getting help is advisable when it's available. But you have to make the final decision on when to back. A helper can guide you and

act as a traffic cop, but it is your responsibility to know when the coast is clear.

4. *Disagree*. Your helper should always use visible hand signals, not spoken ones, because street noises can drown out a voice. Always make sure your helper understands the signals, too.
5. *Disagree*. Just the opposite is best. Back slowly, very slowly. You have only a short distance to go anyway, and you have to be alert for changing conditions.
6. *Disagree.* It takes practice to develop skill of any kind. There is too much at stake to take the attitude that practice isn't necessary. Remember, backing accidents are almost always preventable — by you.
7. *Disagree.* Back into alleys that don't allow you to drive through or turn around. It is safer than backing into traffic.
8. *Agree.* Play it safe. Chocking the wheels keeps the vehicle from moving. A bump from a forklift truck or other loading equipment can start a vehicle rolling.

Backing Safely

Many motor accidents occur when you are backing a vehicle. The major problem is that there is a blind zone in most vehicles concealing danger from the driver's eyes while the vehicle moves in reverse.

The best defense against this hazard is to avoid backing whenever possible. About the only time a postal driver should have to back a vehicle is when maneuvering up to a post office dock to load or unload mail. Most other driving should be in a forward direction.

Yet, almost all of us occasionally find backing up is necessary. Here are some tips we should follow before putting a vehicle in motion:

1. **Get out and get the picture.** Walk around your vehicle and check where you're going. Inspect the path you will be backing over and examine the top and side clearances. Then get back into your vehicle and start backing before the situation has a chance to change.
2. **Back from the driver's side.** Position is crucial to safe backing. A safe position is one that permits backing from the driver's side.
3. **Back slowly.** Your vehicle steers awkwardly in reverse and can easily get out of control and collide with objects on either side.
4. **Check both sides before backing.** If you have correctly gauged your clearances to the right and top, you can direct most of your attention to the left side of your vehicle when backing. Use your outside mirrors as often as necessary, but don't depend entirely on mirrors. They can be deceptive in accurately judging distance to the rear.
5. **When unsure of distance, stop the backing maneuver and get out and look.**
6. **Use a reliable guide.** Never hesitate to ask someone to help you back. Expert drivers understand and respect the hazards of backing. They use all the help they can get to avoid accidents. Ask a guide or flag man to watch the area into which you will be moving. A guide should stand where he or she can clearly see both you and the area to the rear of your vehicle. Select a reliable person who understands what you need and the signals to be used.

Backing is often associated with parking a vehicle. If you are maneuvering your vehicle into a parking position, remember it is the driver's responsibility to make certain the vehicle is safely parked when leaving it unattended.

To avoid having a parking accident, remember to:

1. **Prevent rollaway accidents.** Set the mechanical brake and turn the wheels toward the curb and chock them, when necessary. Rollaway accidents are preventable and, more times than not, the fault of the operator.
2. **Use warning devices.** Use appropriate flares, flags, or other warning devices to alert other drivers when your vehicle is disabled.

3. **Lock it and take the key**. Lock the vehicle and take the ignition key with you when you go out of your vehicle. Children playfully entering vehicles have caused tragic accidents.
4. **Fasten everything**. Make certain that tailgate, chains, tarps, or doors are securely fastened.

Backing accidents can be prevented. I urge you to do your best as professional drivers to eliminate backing accidents.

Rural Roads Require Extra Attention, Slower Speeds

Most of us have become accustomed to, and even proficient at, driving on our fast-moving interstate highways. We can merge with traffic or change lanes at 55 mph on the smoothly paved, multiple lane roads that make traveling from one city to another relatively easy and safe.

But interstates can't take us everywhere we wish to go. To reach our destinations, we frequently use our state routes, city streets, or rural roads — all of which present different hazards and require different driving skills.

Unfortunately, many drivers aren't familiar with these hazards or skills. Although less than half of all vehicle miles are traveled on rural roads, they account for two out of every three fatal motor vehicle accidents.

Let's take a look at some of these dangerous situations and examine the skills we need to successfully negotiate rural roads.

The first point to consider is the condition of the road. Most rural roads are not as smooth or as well maintained as interstates. Potholes, debris, and low spots that accumulate water may often be present. Rural roads also are narrower than interstates, which means drivers must be more alert to keeping vehicles in their proper lanes.

One dangerous aspect of rural roads is the manner in which they are built. Most rural roads were developed by following property lines along the shortest route from farm to market. Sharp twists, sudden jogs, and curves are the rule, not the exception. To negotiate these hazards, reduce your speed before entering curves. If you do this, the centrifugal force won't pull the car into oncoming traffic in a right curve or push it off the road in a left curve.

Narrow and winding roads are not the only hazards that confront drivers. Country roads don't always leave much room for error along the sides. Unlike interstates with wide-paved shoulders and guard rails or grassy areas, rural roads often have trees and brush growing right up to the edge of the road. That overgrowth often blocks signs, driveways, and the driver's view of approaching traffic at intersections.

Fixed objects also become a major hazard. Telephone and utility poles sturdy enough to suddenly stop a speeding car stand close to the road's edge. And rural mailboxes are at just the right height to go through windshields if a vehicle should happen to swerve off the road. The dangers from those objects are additional reasons why reduced speeds and alertness are critical.

Consider who or what else uses the road — slow-moving farm equipment, animals, and local drivers who may be in no hurry or who drive too fast because they know the roads well.

Most states now require slow-moving farm equipment and other vehicles to prominently display an orange triangular reflector on the back of the vehicle. This sign indicates that the vehicle is traveling less than 25 miles an hour. The sign also warns the driver to slow down or be prepared to pass. When passing, move to the left cautiously, check for oncoming traffic, and check to

the rear for other vehicles trying to pass. Remember, the less time spent in the left lane, the better — 80 percent of fatal head-on collisions occur on rural roads.

Keep a sharp lookout for domestic and wild animals, too. Unbelievable as it may seem, an estimated 120,000 deer are killed annually by motor vehicles. Overall, animal-car collisions cause approximately 100 human deaths and 5,000 injuries every year. So slow down and watch for animal crossing signs.

The possibility of a fatal accident increases sharply at night. Since few country roads are lighted, use the vehicle's high beams for maximum visibility when the weather is clear, remembering to switch to low beams for oncoming traffic. Never leave high beams on in retaliation to an oncoming driver who won't switch down to low beams. Reduce speed, and avoid looking directly into the oncoming light.

With practice, all drivers can acquire the special skills necessary to overcome the unique hazards posed by rural roads. Remember, stay alert, slow down, and stay alive.

Beware of Animal Crossings

It happens so fast, you don't have time to react: from the dense woods at a highway's edge, a deer darts in front of your headlights. You pray for a near miss and hope you don't hear the sickening thud that means you've struck this beautiful creature with the mass of metal that is your car or truck.

This scene is not as rare as you might think. In Pennsylvania, about 28,000 deer are killed by cars or trucks each year. New York reports another 20,000, Michigan 12,000, and Minnesota 6,000. Nationwide, more than 120,000 deer are reported killed.

Those are just the reported accidents. Many drivers do not report collisions if no one is hurt and their vehicles are not badly damaged. Utah found that reports by motorists account for less than half of the deer carcasses found by the road. Many more deer may be injured and wander off into the forest to die unnoticed.

Most important, thousands of people are injured each year in collisions with deer — dozens fatally. The cost of car-deer accidents in the U.S. is about $200 million yearly. The average cost of repairs tops $800.

Deer are attracted to interstate highway median strips, where they can eat the plantings. This puts them close to traffic. Deer are especially active during fall and winter when they are mating and changing foraging habits. With the deer population growing and more highways being built through deer country we can expect an increase in the number of car-deer accidents.

What can be done to prevent these accidents?

1. **If you see a deer warning sign, be alert.** These signs are there because deer have been killed in the area before. Keep your speed down for a while. Don't expect deer to obligingly cross right in front of the sign.
2. **When it's dark out, be on the lookout for bright, glowing eyes.** Also be aware of the traffic around you in case you have to make a sudden stop.
3. **If you see one deer, expect to see another**. Deer tend to travel in groups. If you do see a deer on the road, don't try to drive around it; it may suddenly dodge in front of you. Blow your horn and switch your lights from low to high beams to scare the deer away.
4. **If you do hit a deer, try to get your car and the deer off to the side of the road and contact the local police or highway patrol.**

Use caution around areas that are posted with animal crossing warning signs. Be a defensive driver.

Gear Up for Winter Driving

Does winter driving make you nervous? You can lessen the strain on you and your car by following these tips from the National Safety Council's Committee on Winter Driving Hazards.

To see and to be seen is vital in winter motoring. Danger can come from any direction, so before you start out, clear all the glass of ice and snow — not just peepholes. Operate the heater and defroster a few minutes before you get under way. Keep your headlights clean, too.

Winter road conditions change as fast as winter weather, so be on guard. Anticipate stops and start to slow down well in advance, especially when approaching intersections. They can be unexpectedly slippery because of the polishing effect stopping and starting traffic has on snow and ice.

If you do go into a skid, act quickly, but don't overreact. If your vehicle is equipped with conventional brakes, never jam on the brakes on a slippery surface — you'll only lock your wheels and worsen a skid. Slowly take your foot off the gas and steer in the direction you want the car to go, regaining a grip on the road; then straighten your wheels. Don't apply your brakes until the car is under control. This may require some nerve, but it works.

Use extra caution in warming temperatures or when the sun is out. Ice can be wet at 30ºF and twice as slippery as "dry" ice at zero. Some sections of roadway can be icy when other surfaces are dry — underpasses because of shading, overpasses because of cold air beneath. If you hit an unexpected ice patch, ease up on the gas, hold the wheel steady and roll through.

If you get stuck in snow, you may be able to get out with a rocking motion of your car. Get the snow away from the front tires by turning them back and forth. Use a light pressure on the gas and move the gear selector rhythmically between forward and reverse. Check your owner's manual for warnings on rocking, and be sure to avoid racing the engine or spinning the wheels. You'll only dig in deeper and may cause overheating and transmission failure.

If you prepare your car for winter and take care to follow winter driving rules, chances are you'll enjoy the cold weather season with fewer headaches and motoring problems.

Winter Driving Techniques

Driving always presents hazards regardless of the weather. Winter driving presents conditions that are much different from those at other times of the year. Consequently, you need more knowledge and skill to operate an automobile safely during that time. Here are some tips for safer driving during winter time:

1. **Maintain the car in good mechanical condition.** Your automobile should be in tip-top shape mechanically. The defroster and heater should be working properly. Brakes must be in good working condition and equalized. Windshield wipers should work properly, with blades in good condition.
2. **Check your tires.** Deep treads and good traction are essential for proper control on slippery roads. Snow tires or chains are a must for snow and icy driving conditions. Keep tires inflated to manufacturer's recommended pressure.
3. **Slow down before curves.** Turn the steering wheel slowly and keep constant speed on turns. All vehicles are sensitive to excessive acceleration and speed as well as oversteering on curves.
4. **Do not jam your brakes.** Hard braking on a slippery surface locks the wheels and results in a skid. Short and steady applications of the brakes help maintain steering control when you are slowing or stopping. Start braking sooner on a slippery surface than on a dry surface.
5. **Use your headlights.** Turn on your headlights during periods of poor visibility such as in snow or rain, at dusk, and in darkness. Do not use your parking lights for driving. Parking lights can cause another driver to think you are a greater distance away than you actually are. Keep the headlights clean.
6. **In snow, rain, or fog, adjust your speed to road conditions.** Drive slower during rain, snow, fog, or other conditions of low visibility. Check braking carefully from time to time when the surface may be slippery. Get the feel of the road. Remember that center lines and lane markings are slick when wet. Also, a film from oil and grease drippings exists on the road during early phases of a rain.
7. **Follow at greater distances.** It takes 2 to 12 times as much distance to stop on winter-slick roads. So give the drivers ahead of you more room. Tailgating and following too closely cause those multi-car, chain reaction pileups on slippery roads.
8. **Reduce speed.** Often the safe speed on snow-covered or icy highways is half the posted speed. Avoid sudden changes in direction if the road appears slippery. Make smooth, gradual changes.
9. **Watch out for temperature drops.** These occur on an otherwise clear highway in places where water may collect and freeze before other parts of the highway become icy.

10. **Pay attention to severe weather warnings.** If possible, avoid driving during severe weather conditions or when severe weather warnings are in effect. Accidents and loss of life frequently result. Many people have frozen to death after being stranded during winter storms. If you are enroute when warnings are issued, take refuge as soon as possible.

Winter Driving Brings Special Problems

Winter driving has its own special problems. Temperatures drop, batteries and electrical systems become balky. Deep snow and ice make the going rough. Early darkness, mist, condensation inside windows, slush, and salt on the outside — these all add to driving difficulties.

But winter driving doesn't mean accidents are inevitable. You can get off to a good start by making sure your vehicle is winterized before that first heavy snowfall.

Before you even start off, be sure you can see where you are going by cleaning ice and snow from all windows. "Peephole" drivers have limited visibility and often get involved in accidents. And don't forget to wipe off headlights and taillights. This may seem like unpleasant work, first thing in the morning, but think of the consequences.

While cleaning your windows, run the heater and defroster to prevent sudden fogging while on the road.

To get moving, start slowly and get the feel of the road. Try to avoid any abrupt changes in speed or direction. Leave plenty of room between your vehicle and the vehicle in front. You require all the margin for error possible when road surfaces are unpredictable.

And, of course, be considerate of others and signal well in advance of your intention to turn. Remember, when you drive a postal vehicle you represent the entire Postal Service to the public.

When stopping is necessary, take extra care, especially on icy surfaces. Good drivers anticipate stops and brake well in advance.

A smooth and safe stop is easy — shift to neutral or declutch and gradually apply the brakes, without locking the wheels. If the wheels should lock, ease up on the brakes slightly until they unlock. Slow down well in advance if you have an automatic transmission. Use the low gear when descending hills in bad weather.

Even though the road may appear to be in good condition, be alert for frost and ice on bridges and overpasses and in shady areas. Whenever the temperature is near freezing, frost and ice form on such structures — even when the pavement is clear and dry.

On any medium or long drive, carry a basic winter motoring survival kit in the trunk, including jumper cables, a shovel, a couple of wool blankets or sleeping bags, matches, candles or containers of canned heat, a coffee can (to melt snow for drinking water), plastic garbage bags that act as insulators against the wind if you have to get out of your car, and a flashlight and/or flares.

Don't forget sand, salt, or a couple of pieces of old carpeting to put under the drive wheels in case you're stuck in the snow.

You should not spin your wheels for long periods when stuck. A car with an eight-cylinder engine and automatic transmission, for example, can bring a tire to an explosion point in a very short time. Call a tow truck.

So, take a little extra time and use common sense this winter. Be committed to driving safely.

Winter Driving — Use Extra Caution

When roads are slippery, drivers must look farther ahead so they can anticipate emergencies and avoid the need for sudden maneuvers. It is dangerous when there is sleet, snow, or ice on the road, so reduce your speed on slippery roads.

Most skids are caused by last-second stops and turns on slick pavement. Adjust your speed and take extra care when approaching intersections and traffic signals.

Take extra caution on hills. Brake over the tops of blind hills so you can bring your vehicle to a stop if necessary. When you go downhill, both gravity and loss of traction are working against you, so be careful.

Pretrip inspections are important before driving in bad weather. It is especially necessary to be aware of your brakes. Because of synthetic air lines, drivers of newer trucks with air brakes must take care to protect their air lines in freezing weather. If vehicles are not equipped to automatically expel water and contaminants from the air tanks, the driver must manually drain the air tanks every day.

Professional drivers must be familiar with the equipment they are operating and know about varying axle weights. Drivers must also watch for changes in road surfaces, especially at city limits, and county and state lines.

Do not attempt to drive around or through an area where other vehicles have had trouble with the road conditions because the road may be blocked. When there is no room to pass through, be prepared to stop.

Allow more clearance between your vehicle and other vehicles or fixed objects when maneuvering on bad surfaces. Failure to provide adequate clearance can be dangerous because a pile of snow or an ice rut may throw a vehicle off just enough to cause it to hit a stationary object.

Drivers need to rest before every trip and while enroute. An open window is one of the oldest safety practices because fresh air helps keep drivers alert. It also helps if drivers hear what is going on around their vehicles.

Even though good drivers take all proper precautions, there are still occasions when conditions become too hazardous to proceed. A good driver pulls off the road at the first safe place, notifies the company of the delay, and waits until conditions improve before proceeding.

Winter Driving — Take It Slow

These tips can help you deal with specific winter driving hazards:

1. **Seeing the road.** Scrape or clear all windows before you begin driving. Clear the whole window; don't just settle for a peephole. A good heater-defroster system and effective windshield wipers will help keep the windows clear. If the wiper blades cause streaking, replace them immediately. Check the windshield washer fluid reservoir regularly to be sure a supply is available when needed. Remove the snow from your car's roof and hood before driving. Otherwise, the snow may blow onto the windshield or rear window and momentarily block your vision. Also clean the headlights and turn signals so you can see and be seen. Fog, sleet, and snow can drastically reduce your visibility. If you drive in these adverse conditions, reduce your speed and keep your headlights on low beam. High beams can cause glare and affect your ability to see.
2. **Preparing for trouble.** Keep an emergency kit in the storage compartment of your car. The kit should contain a flashlight, warning flares, scraper with a brush on one end, tow chain or strap, jumper cables, tire chains, shovel, and a bag of rock salt, sand, or cat litter to give you extra traction when you're in a slippery situation. Pieces of carpet also work well.
3. **Getting traction in a skid.** When a skid begins, you need to generate as much traction as possible. The best way to accomplish this is to ease off the accelerator and avoid overusing the brakes. The important technique to remember is to try to catch the skid before it reaches the point where you'll lose control of the vehicle despite any action you may take. The best tip is to keep the front of your car pointed in the direction you want to go. This sounds simple, but lateral skids are common on icy roads. These types of skids are very dangerous because you have no control over the vehicle. If, for example, you want the car to go right, turn the steering wheel to the right, remembering to straighten your wheels when headed correctly. Hold the wheel firmly, but don't make large turns. Instead, use a light touch to correct the swerve. It usually takes only minor adjustments to halt the slide. Once again, the important point to remember is to react as soon as the car begins the skid.
4. **Increasing your following distance.** Allow more time to stop, turn, or maneuver when the road is slick. Normal driving conditions call for at least 2 seconds of travel time between you and the vehicle immediately in front of you. However, in snow or ice this distance should be doubled to provide an adequate safety space. When stopping or slowing down, squeeze the brakes with slow, steady pressure. Just before they lock, ease off until the wheels are rolling easily; then squeeze the pedal once again. Slamming on the brakes will cause you to lose control of the

vehicle and send you into a spin. Safe driving in winter is up to you. As professional drivers, you are as concerned as I am, I know. No one wants to be involved in an accident. I urge you to exercise extra caution when driving today and every day.

Understanding Antilock Brake Systems (ABS)

In recent years the antilock brake system (ABS) has been installed on an increasing number of vehicles, including Postal Service cars and trucks. ABS operates differently from standard vehicle brakes. Operators of ABS-equipped vehicles must understand and use the brakes properly to gain the safety advantage that ABS can offer.

ABS works with the regular or base brakes on your vehicle to keep the brakes from locking up. In vehicles not equipped with ABS, the driver can manually pump the brakes to prevent wheel lockup. In vehicles equipped with ABS, the driver's foot remains firmly on the brake pedal, allowing the ABS to automatically pump the brakes.

When your brakes lock up on wet and slippery roads or during a panic stop, you can lose steering control and your vehicle can skid. Rear wheel ABS prevents wheel lockup so that your vehicle stays in a straight line. If your vehicle has ABS control on all four wheels, you also keep steering control. If you have that steering control, it may be possible to avoid a crash by steering around hazards if a complete stop cannot be accomplished in time.

You should not pump your brakes if the vehicle is equipped with ABS. Just hold your foot firmly on the brake pedal and remember that you can steer. ABS does the pumping for you. It automatically changes the pressure in your car's brake lines to maintain maximum brake performance just short of locking up the wheels.

Keep in mind that ABS is designed to help the driver maintain control of the vehicle during emergency braking situations, not make the car stop more quickly. ABS may shorten stopping distances on wet or slippery roads and many systems will shorten stopping distances on dry roads. On very soft surfaces, such as loose gravel or unpacked snow, ABS may actually lengthen stopping distances. No matter what the driving conditions are, you should still make sure you drive carefully, always keep a safe distance behind the vehicle in front of you, and maintain a speed consistent with the traffic and road conditions.

ABS is speed sensitive, and will not activate at very slow speeds (usually below 10 mph). When you apply the brakes at higher speeds, you may experience a rapid pulsation of the brake pedal, as if the brakes are pushing back at you. Sometimes, the brake pedal height could suddenly drop. Also, the valves in the ABS controller may make a noise that sounds like grinding or buzzing. In some vehicles you may feel a slight vibration. This means the ABS is working. It is important not to take your foot off the brake pedal when you hear noise or feel pulsations, but instead continue to apply firm pressure.

Not all vehicles contain ABS. To find out if your vehicle has ABS:

1. Check the instrument panel for an amber ABS indicator light after you turn on the ignition.
2. Ask your supervisor or VMF manager.

3. When you buy, lease or rent a vehicle, as your dealer or rental car company.
4. Read the owner's manual.

Remember, ABS can help you in an emergency braking situation if you know how to use the system properly. Never operate a vehicle unless you have checked to see if it is equipped with ABS brakes. Understanding your vehicle and its equipment is an important part of making sure that accidents *don't* happen.

Starting, Stopping, and Other Challenges of Winter Driving

One of the first tests of winter is driving to and from work in really bad weather. We all have comments about our latest experience. Complete strangers share conversations on buses and elevators where people normally don't talk.

Some helpful hints for winter driving include keeping a spray can of de-icer outside of the car to use to open a frozen car door, and planning your trips to allow more time to travel in bad weather.

Many cars are left without adequate antifreeze so they freeze. Have your coolant checked for effectiveness — a very simple test at any service station. How is your car battery? The lower the temperature, the less power the battery has. The lower the temperature, the thicker the oil becomes, requiring more power to turn over the motor.

One of the biggest dangers at this time of year is a vehicle moving down the street with a peep hole in the front window. It is irresponsible and dangerous to drive a 2,000-pound vehicle along the street with only a peep hole to see through. Think back in your experiences — how many times have you been able to avoid an accident because you could see what was happening on the sides and the back of your vehicle?

You must be able to *see* to drive safely, so your view cannot be filtered through icy, snow-covered, or steamed-up windows. Scrape or clean off windows thoroughly before starting out. Brush snow off other areas of the vehicle such as the roof so that out on the street, the snow can't blow on either your windshield or back window and block your vision. Clean off your lights and directional signals so you can see and be seen clearly. Don't forget, the person behind you needs to know what you are going to do. Turn signal and brake lights communicate your intentions to pedestrians and other drivers.

Pumping the brakes is no longer considered the most effective technique for today's cars. For cars with either disc or drum brakes, squeeze braking is the best method. Exert a slow, steady pressure until just before the wheels lock. If you feel them start to lock, ease off until your wheels are rolling easily again — locking your wheels takes away power needed to control steering and will probably make the car spin or skid.

The National Safety Council has conducted tests of braking distances on glare ice at 25°F and on loosely-packed snow. The distances traveled after the foot hit the brake were measured for rear-drive vehicles traveling at 20 mph. For the total stopping distance, another 22 feet for reaction time was added.

On Glare Ice With Conventional Brakes

Type of Tire	Stopping Distance
Regular Tires	150 ft
Snow Tires	151 ft
Studded Tire Chains	75 ft
Reinforced Tire Chains	75 ft

On Loosely Packed Snow With Conventional Brakes

Type of Tire	Stopping Distance
Regular Tires	60 ft
Snow Tires	52 ft
Reinforced Tire Chains	38 ft

From the test results, you can see the advantage of traction devices in winter driving.

No matter how you feel when that first snowflake falls or the rain starts to freeze, try not to panic. Attack winter's problems in a reasonable and informed manner and be prepared for adverse conditions. Don't forget, we are going to have summer again — along with some days over 100º.

Driving in Fog

In an automobile passing through fog you get the same effect as an airplane pilot flying through clouds. Weather men call fog a low-down cloud. It's literally that — a patch of super-saturated air that approaches 100 percent humidity — a "patch," incidentally, that may be many miles across or no bigger than a puff of vapor from a tea kettle.

It's the unpredictability of ground fog that makes it a killer. In this day of fast-moving, congested expressway traffic, fog poses its gravest threat to human life.

The greatest havoc caused by fog on high-speed roads is the chain collision — the multiple accident in which vehicles plunge into the white shroud and ram the stopped vehicles ahead, or skid in wild evasive action and are struck by others.

A multicar crash in New York involved 10 vehicles. One New Jersey Turnpike pileup consisted of 19 collisions. In Illinois, Georgia, Florida, and other states the numbers of cars and trucks in a single pileup have ranged from 20 to as high as 50. And a spectacular California crash involved an incredible 234 motor vehicles.

Meteorologists tell us that fog is one of the most difficult of natural phenomena to predict. But we know this: fog is most common in late fall and early winter at a time when the cooler and denser air aloft is able to envelop the damp atmosphere close to the earth and hold it down.

One of the most frightening things that can happen to you as a driver is to run into fog suddenly and unexpectedly. If you have your bright highway headlights on, much of the candlepower is reflected back into your eyes by the millions of water droplets in front of your car. Blinded, you may hit the brake pedal. The pavement in foggy weather is usually wet, and an attempted panic stop can cause you to lose control of your car.

But make no mistake about the importance of slowing down at the first hint of fog. It sometimes gives you warning. If you notice patches in low lying roadside areas or wisps of vapor swirling past your windshield, you've been warned. The fog could suddenly get much thicker, so slow down immediately.

Sometimes there is no warning, and the first encounter is a blinding, white curtain that makes motorists virtually helpless and unable to safeguard themselves or the other drivers on the road. Because of this deadly characteristic, fog is shunned by experienced motorists. Most bus and truck drivers have standing orders from their employers to get off the road in case of fog. Since there's simply no way to drive in it safely, avoiding it where possible and refusing to go on when confronted by it are the only reasonable alternatives.

The chain collision isn't the only fog danger. The driver who persists in traveling half blind runs the risk of striking a pedestrian or another car or truck, a bridge abutment or an other fixed object near the roadway, or he or she may simply run off the road, into a ditch, or over a bluff.

Natural fog alone is bad enough, but when a temperature inversion (cold air above, warmer air close to the ground) traps natural fog and man-made pollutants and blankets an area with smog, it's a worrisome place to be driving a car. New York, Los Angeles, Sydney, Tokyo — name any big city in the world, draw a large circle around it, and you'll describe an area of severe air pollution. When nature tosses in one of those low-down clouds, a driver is in for some double trouble.

The driver who is caught in fog or its city cousin, smog, must decide whether to keep going at some peril with the hope of driving out of it, or to stop and wait for it to lift. This is a driving judgment that must be made by the motorist at the scene. Here are some tips, however, that will help you deal with fog:

1. **Slow down slowly**. Slow down as gradually as possible, keeping in mind the cars that are following you. In braking, flash your brake lights on and off to alert drivers behind you that you are reducing speed.
2. **Switch to low beams.** Switch your headlights to low (city) beam. This will greatly diminish the blinding reflections from your own headlights.
3. **Flick you high beams to warn others.** Occasionally flick your headlights to high beam for a second or two, as a warning to oncoming cars.
4. **Turn on your windshield wipers and defroster fan.**
5. **Get off the road.** If the fog gets heavier, travel more slowly. If visibility drops to near zero, turn on your right turn signal and pull off the road as far from a traffic lane as possible, even beyond the shoulder if terrain permits it. If you are on the shoulder, turn on your four-way emergency flasher and keep your parking lights on. Better yet, turn off at a filling station, farmer's lane, side road, or exit from an expressway to a less heavily traveled road where you can wait in greater safety.
6. **Stay put**. Stay put until you can proceed with good visibility — better late than never

Always stay alert for unexpected patches of fog in low spots, such as river valleys, and be careful when approaching bridges, swamps, and coastal areas. In winter, hilltop roads also can be suddenly enveloped in fog.

On a lonely country road you might be able to pick your way along in a bad fog and eventually arrive home safely. But don't try it on the freeway. There are still too many heavy-footed drivers who never learn that conditions vastly alter prudent speeds, and that you must see danger to avoid it.

Driving in Rain

Summer showers combined with oil drippings on wet streets cause a surface film that, in many instances, is as slippery as ice. With this in mind, you should use extra caution after the road gets wet.

What's so different about driving in rainy weather? Your vehicle won't stop or steer the same on a wet surface as on a dry surface. Visibility is hampered by rain and windshields often get smeared, so wipers must be in good repair. How are your windshield wipers?

Drivers are different, too. They often hurry and are likely to be tense and worried about the possibility of road conditions becoming worse. Driving at a reduced speed is necessary.

Stopping distances are increased on wet or slippery surfaces. A 3- or 4-second following distance should be observed. Plan your stops. Slow down and signal well in advance and be ready for sudden slowing of traffic.

Be prepared to encounter large puddles of standing water that could cause you to momentarily lose control of your car. If the brakes get saturated, you may not be able to stop.

Slow down well in advance before you reach curves in the road. Cornering too fast on slippery roads may cause rear tires to lose traction, and your vehicle may fishtail.

Be aware of the defensive action to take if you should go into a skid. Here are some types of skids you could have the misfortune of experiencing.

- **Front brake lock.** Front brakes grab hold before the rear ones do. You cannot steer. Your car slides straight ahead.
- **All-wheel brake lock**. Front and rear brakes lock. Your car slides in any direction.
- **Rear brake lock.** Rear brakes grab hold before front ones. Your car spins in a half circle and ends up facing backwards.
- **Power slide.** You accelerate too much for road conditions. Your car's rear swings back and forth. If you can, steer in the direction you want the vehicle to go without sudden application of the brake. The best prevention for this is to start out more slowly.
- **Hydroplaning.** On a wet road, at about 35 mph, wheels begin to lose contact with road. This varies with water depth and condition of tire tread. Winds or a slight turn can cause a skid.

You can control a skid by taking your foot off the gas and letting the engine slow down. Take your foot off the brake until you can control steering again. Always turn the steering wheel in the direction you want to go, but gently; don't oversteer.

The best way to prevent an uncontrolled skid is to slow down. If you become involved in an uncontrolled skid, chances are you were driving much too fast to begin with. When it's raining out — slow down.

Disaster Driving

Knowing whether to remain in the car or whether to abandon it during an emergency situation can mean the difference between life and death. After many disasters, search and rescue teams find victims who might have survived if they had known whether to stay in or leave their cars.

Disaster Driving Quiz

The following quiz is intended to test your knowledge of disaster driving strategies.

1. *True or false?* In an earthquake, bring the car to a halt as soon as safely possible and then abandon it.
2. *True or false?* After an earthquake, proceed cautiously, avoiding bridges and other structures that could have been damaged by the quake.
3. *True or false?* Never attempt to drive during a hurricane or until the all-clear is given after a storm.
4. *True or false?* Since most cars can float for a short while, it is safe to try to drive in a flood.
5. *True or false?* If a car stalls in floodwater, get out quickly and move to higher ground.
6. *True or false?* A car is the least safe place to be during a tornado.
7. *True or false?* It is safe to leave children and pets in a parked car in hot weather if the windows are opened a crack.
8. *True or false?* If your car becomes immobilized in a blizzard, attempt to walk to shelter.
9. *True or false?* If a tornado approaches and there are no safe structures nearby, lie flat in a ditch or other ground depression with your arms over your head.
10. *True or false?* Always listen to radio or television for the latest National Weather Service bulletins on severe weather for the area in which you will drive.

Answers

1. *False.* The car's suspension system will shake violently in an earthquake, but it is still a safe place to be.
2. *True.* Also avoid stopping near or under buildings, overpasses, and utility wires.
3. *True.* Learn the best evacuation route *before* a storm forms. Plan to evacuate early and keep a full tank of gas during the hurricane season.
4. *False.* Never attempt to drive through water on a road because the water can be much deeper than it appears. A car can be buoyed by floodwaters and then swept downstream.

5. *True*. The floodwaters could still be rising and the car may be swept away at any moment.
6. *True.* When a tornado warning is issued, do not try to leave the area by car. If you are in a car, leave it and find shelter in a building.
7. *False.* Children and pets can die from heatstroke in a matter of minutes when left in a closed, or nearly closed, car.
8. *False.* Do not attempt to walk from the car unless you can see a definite safe haven at a reasonable distance.
9. *True.* The ditch is still safer than being in the car.
10. *True.* Listen for official information and above all, don't panic

Information supplied by the Federal Emergency Management Agency, Washington, D.C. 20472

Caution — Railroad Crossing

Today I would like to talk to you about railroad crossing accidents. To most people, crossing accidents are something they read about in the paper. It's something that might happen to *the other guy*. Well, that's what the other guy thought, too. The fact is you, the driver, must always exercise caution when approaching any railroad crossing.

Let's look at some common causes of railroad crossing accidents:

- The driver sees the train coming, but misjudges speed and distance. As a result there is a collision at the crossing.
- The motorist races the train to the crossing, and is either struck by the train or runs into the side of it.
- As the train clears a crossing, the motorist immediately starts across the tracks without looking for other trains, and either strikes or is struck by a train running on an adjacent track.
- A motorist, familiar with a crossing, uses little or no caution when coming to the crossing. Most grade crossing accidents involve drivers living within 25 miles of the location of the accident.
- The driver fails to observe and obey the advance railroad warning sign and other crossing warning signs and signals.
- The driver has too much alcohol in his system and is, therefore, incapable of properly driving a motor vehicle.
- The motorist has poor eyesight, hearing, or is otherwise physically or mentally unqualified to drive a motor vehicle.
- The motorist, driving at night or in a location that is not familiar, travels at a speed too fast for conditions. Because he cannot stop in time, he drives in front of or into the side of a train.
- The motorist, driving a car with faulty brakes or other mechanical defects, is unable to stop or start at the proper time, or stalls his car on the crossing.
- The motorist overdrives his headlights or fails to properly regulate his driving speed in darkness or prevailing weather conditions.
- With air conditioning and radio on, a motorist cannot hear approaching trains, and the driver fails to look.
- Driving along and carrying on conversation with passengers in the vehicle, the driver's attention is primarily on the conversation, and he or she ignores signs and whistle warnings.
- Windows of the motorist's car are frosted up or dirty. The driver does not have sufficient visibility to see a train approach and drives into the approaching train.

Facts About Crossing Accidents

The operation of a railroad is greatly complicated by the enormous number of trucks and other vehicles that operate over crossings. The Postal Service and the railroads are very concerned over the loss of life, the unnecessary

suffering from injury, and loss of property that result from crossing accidents. A study of one railroad indicated that in an average year it will experience 445 crossing accidents resulting in 78 deaths and 225 injuries.

In two-thirds of the accidents, the vehicle and train collide due to the driver's failure to heed safety precautions. Only about 60 vehicles — or slightly more than 13 percent — are struck when they become stalled on the track. Surprisingly, two-thirds of all accidents occur during daylight hours.

Railroad crossing signals help, but they aren't fail-safe. There are 334 accidents at crossings protected by the standard crossbuck and, in some cases, state law stop signs. About 61 accidents occur at crossings protected by flashing light signals; 29 accidents occur at crossings protected by flashing lights *and* gates; 17 accidents occur at crossings protected by wigwag signals; and four accidents still occur where a flagman is stationed.

While these figures cover only one railroad, they are consistent with the national average.

Facts About Trains and Signals

Flashing light signals and crossing gates are installed so that they will allow a minimum of 22 seconds from the time a flasher starts until a train reaches the crossing. In the case of crossing gates, 25 seconds is allowed.

While it would be difficult to find the exact stopping distance of a particular train under a particular set of circumstances, the following estimates will represent an average: For passenger trains with 8 cars traveling at 60 mph, the stopping distance is 3,500 feet; at 80 mph, 6,000 feet; at 100 mph, 10,000 feet. For the average 150-car freight train traveling at 30 mph, stopping distance is 3,150 feet; at 50 mph, 7,000 feet; and at 60 mph, 8,500 feet.

While these figures are only approximate, they certainly should convince anyone that it is not possible for a train to stop immediately. You can stop your vehicle a lot faster than a train can stop.

American railroads, law enforcement agencies, and the National Safety Council, as well as numerous other organizations, have worked to reduce these needless crossing accidents. It is anticipated that with the increased enforcement of existing laws and the education of the American motorist, crossing accidents will be reduced.

You as a driver must do your part on and off the job. The answer to grade crossing accident prevention will come when the American motorist does *Stop, Look, and Listen.* Do your part — set the example as a Postal Service vehicle operator.

Do You Use Extra Caution at Railroad Crossings?

In recent years, approximately 42,000 Americans have died in highway traffic accidents annually. Of this number, some 480 have been killed in collisions at highway-rail crossings. Every one of these 480 persons could have been saved if the driver had taken the proper precautions.

Passenger car drivers are involved in 73 percent of these accidents, motor trucks in about 20 percent, and other types of vehicles, the remainder.

Continued failure of the driving public to accept individual responsibility for safety at highway-railroad grade crossings is the primary cause of these accidents.

I urge you to make this a basic driving rule:

> *Watch for the round advance railroad warning sign whenever you drive. When you see it, slow down and be prepared to stop.*

Here are some tips to remember when approaching a railroad crossing.

1. **Obey all traffic laws.** State laws requiring motor vehicles to stop at railroad crossings help protect us only if motorists obey them. While state laws may vary slightly in detail, generally the law provides that it is unlawful for any person to drive an automobile, truck, or other type of motor vehicle upon any railroad track at a public highway or municipal street crossing without taking proper precautions that may require stopping the vehicle not less than 15 feet or more than 50 feet from the nearest track and looking out for trains. Certain motor vehicles, however, must stop at all rail crossings. These include vehicles carrying passengers for hire, such as buses. All school buses carrying children must stop. Trucks carrying explosives or flammable liquids must also stop.
2. **Know the warning signs.** When you see the familiar round, yellow sign with the black “RR,” slow down; you are approaching a railroad grade crossing. The next sign will be a crossbuck railroad-stop sign, standard octagonal red and white stop sign, flasher lights or crossing gates. Develop the habit of doing what the sign indicates. If the sign says stop, don’t do anything less — *stop*. It is your life; don’t gamble with it. Be absolutely positive nothing is approaching. *Stop, Look and Listen.*
3. **Watch that second track.** You have slowed down for the advance warning signs, stopped a safe distance from the tracks, and waited for the freight to pass. Don’t get impatient now. You may dart out just as the caboose passes, right into the path of a fast moving train on another track. Wait for the train to clear a sufficient distance to ensure good visibility. Never move while the flasher lights are still operating. “Look Before You Leap.”
4. **Always pay attention.** You go back and forth across the same track daily, perhaps several times a day. You have lived here all your life and know that trains only run at night or at a particular time every day. What about the special or extra train? You and your family will be just as

dead when hit by an unscheduled train. Death is waiting whenever awareness stops.

5. **Slow down.** The flasher lights are flashing; the gates are coming down. You can beat the train if you hurry. What does it profit you to beat a train one or a hundred times if you ultimately lose once? Some surely lose. On one railroad it was estimated that 30 percent of the grade crossing accidents each year occur at grade crossings protected by flashers and/or gates.
6. **Get out and away from the car.** If your car or truck stalls on a railroad track, get yourself and your passengers out and a safe distance from the car. Always remember, get out. Leave the car, but get out immediately. After you and your passengers are out and reach safety, then, if nothing is in sight, leave someone to look out in each direction, and try to push the car off the tracks or get it started. Be sure the lookouts are where they can see far enough to warn you in advance of an approaching train. If possible, get someone far enough down the track to flag an approaching train from both directions, but don't depend entirely on the train stopping. No car is worth a human life.
7. **Keep going when you must.** If you start over a crossing and the flasher lights start flashing or gates start down, don't freeze. Keep going. It will only take seconds to clear the rails. The gate on the other side will not block you. It is impossible to be trapped by gates. Keep going. If you stop and try to back up, you may kill your engine.
8. **Getting boxed in can be fatal.** Never drive onto a railroad track until you are certain you can drive all the way across. Be sure the traffic ahead of you will not stop and box you in on a track. Wait for the traffic to clear. If you do make the mistake of getting trapped, abandon the vehicle.

I urge all of you to use extra caution when approaching railroad crossings, and to always drive defensively.

Motorcyclists Are People Too

Motorcycles are more numerous on the nation's streets and highways with each passing year. With them comes an added responsibility on the part of the motorist. Half of the accidents that occur involving the automobile driver and the cyclist are the fault of the driver. Here are some tips to remember regarding motorcyclists:

1. **Share the road**. Some drivers perceive the cyclist as an obstacle in the road, someone to go around, and not as a person or a fellow driver. Many motorists think motorcycles require less space on the road than do other vehicles, just because the cycle is smaller. This is not true and is extremely dangerous to the motorcyclist. A cyclist is entitled to a full lane, just as any four-wheeled vehicle is. Do not try to crowd or force the cyclist to the edge of the road. Respect cyclists as fellow drivers.
2. **Keep a sharp lookout.** Most cycle-auto accidents occur because the motorist simply doesn't see the cyclist. Often a cycle is hidden in the car's blind spot. Outside rear-view mirrors are not enough to rely upon. When changing lanes, it is a good policy to take a quick glance over your shoulder. Be alert for the presence of a cyclist on the outer edge of your traffic lane, especially on turns. A cycle often is hidden by another car. Aware of their low visibility, safety-conscious cyclists often keep their single headlight on, even in daytime, to warn you of their presence. Many states now require this practice.
3. **Understand the cyclist's exposure to the elements.** Consider the cyclist as being less protected than you are, and watch his or her driving. They must contend with many more hazards than you do. Be especially cautious when passing a cyclist; the buffeting created by your windstream may cause him or her to wobble and lose control. The inexperienced cyclist should be given a wide berth. You can recognize this cyclist if the motorcycle jerks when the driver is making gear changes, or if the cyclist is hesitant in making decisions in traffic. Always give cyclists plenty of room, and be prepared to stop if something goes wrong.
4. **Properly judge the distance.** Because a cycle is smaller, it may appear to be farther away than it actually is, and it may seem to be moving slower. Always allow yourself more following distance when overtaking one. To judge your following distance, it is a good idea to add an extra second to the 2-second rule of defensive driving: count to "one thousand and three." But this 3-second interval is only for ideal conditions. Add to it for adverse conditions. Give all cyclists plenty of room.
5. **Watch for cycle hazards**. Hazards for the cyclist can entrap the auto driver, too. A cyclist ahead can lose control of the machine when sand, gravel, water or wet leaves are on the pavement. Always be aware of conditions that may cause cyclists to lose control and spill. If the cyclist loses control and spills onto the road in front of you, can you stop? Give them plenty of room and slow down.

Now a word about collisions with bicycles. Many bicycle riders are children who may not know the rules of the road or may have forgotten them. Watch out for bicyclists. Tap your horn and give them plenty of room before you pass. Be particularly watchful for bicyclists at night.

How to Spot a Drunk Driver

Thanks to widespread publicity over the past several years, most of us are aware of the dangers of drinking and driving.

Alcohol is the largest single contributing factor in fatal vehicle accidents. More than half of the traffic deaths are related to alcohol. These startling statistics should be enough to make the careless driver become cautious and the drunk driver to sober up. But, if you need further convincing that drinking and driving don't mix, consider these facts:

- Drivers aged 16-24 are involved in more than a third of the 2 million annual alcohol-related traffic accidents.
- Many of those killed in these senseless accidents have not been drinking, but are the innocent victims of drunk drivers. This fact is perhaps the most alarming because it reminds us that even cautious, alert drivers can be victimized by out-of-control drunk drivers.

Although national, state, and local governments and private organizations have stepped up efforts to eradicate this problem, drunk drivers still travel our roads maiming and killing other motorists, bicyclists, and pedestrians.

To help you spot the driver who may be under the influence of alcohol or drugs, be alert to the following driving behaviors:

- Straddling the center line or lane markings.
- Weaving, swerving, or drifting across lanes.
- Making illegal, unusually abrupt, or wide turns.
- Striking or driving dangerously close to another vehicle or fixed object.
- Driving excessively fast or slow.
- Accelerating or braking rapidly or erratically.
- Stopping without apparent cause or reason.
- Tailgating.
- Driving without headlights at night.
- Responding slowly to or disregarding traffic signals.

If you observe any of these behaviors by another motorist while you are driving, remember, there are some simple steps you can take to protect yourself and your passengers.

1. **Maintain a safe distance.** If a motorist ahead of you appears to be driving erratically, be sure to maintain a safe following distance.
2. **No passing.** Don't try to pass since the driver may swerve into you.
3. **Turn right**. If the driver is behind you, turn right at the next intersection or driveway and let the motorist pass.
4. **Slow down and move to the right.** When an out-of-control driver is approaching you, quickly slow down while moving to the right and come to a stop.
5. **Flash and honk.** Sound your horn or flash your lights if there is time, and avoid a head-on collision at all costs.

6. **Expect the unexpected.** As you approach an intersection, slow down and expect the unexpected. Drivers under the influence frequently fail to obey posted signs or traffic signals. So look both ways as you near the corner and be ready to take evasive action, especially at night.
7. **Buckle up.** Above all else, make sure your safety belt is securely fastened and your passengers also are buckled up. And take special care that small children are riding in approved child safety seats.

Don’t Let a Drunk Driver Ruin Your Holidays

“Tis the season to be jolly,” but too often it becomes a season full of sadness. The holiday season is supposed to be a time of celebration. It is also a time when we must exercise more caution because of other people’s thoughtless behavior.

Holidays lead to parties. Parties often lead to the use of alcohol, too often too much alcohol. The tragedy is that most often innocent people are the victims of the other person’s abusive drinking. Friends don’t let friends drive drunk.

It is important that motorists know how to recognize the actions of a drunk driver to avoid an accident. You have only a few seconds to react defensively. On any Friday or Saturday night, it is estimated that 10 percent of the drivers on the road are legally intoxicated. The situation becomes even more hazardous during the holiday season.

Alcohol-impaired drivers often try to pass when there is not enough room, change lanes at excessive speeds, or drive down the white center line. The drunk overreacts and overcorrects. Vision is impaired and response time slowed. Since the drunk driver is forgetful, he or she may drive without headlights at night. In most instances the driver does not speed, but travels well below the speed limit, at an inconsistent speed. He or she slows down, then picks up speed, then slows down again. If such a driver is behind you, turn right at the next intersection and let the vehicle pass. If you are following, stop and let the driver move away from you.

Do everything you can to avoid a head-on collision as it is the deadliest of auto accidents. Drive off the right side of the road if you have to do so. If you cannot avoid a head-on collision, stop, flash your lights, and sound your horn if there is time. The action of someone driving under the influence of alcohol is unpredictable.

Above all, drive defensively, and make sure you and your passengers have your seat belts fastened before you start your trip. Keep small children in approved child seat restraints. Drive carefully. Drive defensively.

Keep the holiday season a “season to be jolly.”

School's Open — Defensive Driving Is No Accident

A defensive driver is one who commits no driving errors himself and makes allowances for the lack of skill or improper driving practices of the other person. A defensive driver adjusts his own driving to compensate for unusual weather, and road and traffic conditions and is not tricked into an accident by the unsafe actions of pedestrians and other drivers. By being alert to accident-inducing situations, he or she recognizes the need for preventive action in advance and takes the necessary precaution to prevent the accident. Defensive drivers know when it is necessary to slow down, stop, or yield the right-of-way to avoid an accident.

School bells have once again summoned millions of sleepy-eyed youngsters to their morning classes. For postal drivers, this means more possibilities of unwary young pedestrians wandering into roadways or darting from between cars or hidden places. This is a true test of anyone's defensive driving skills!

And while drivers should be on guard during the hours children normally travel to and from school, they should be just as cautious at other times as well.

In spite of all the school training children receive, and in spite of parental instruction and admonition, children do play and run in the street. More dangerous, perhaps, are those who merely play near the street, leaping out suddenly after a ball or chasing a dog.

We are all familiar with the necessity for care at or near schools or playgrounds, but there are several precautions we should take while driving delivery routes through residential areas or anywhere else. Here are some situations that you should be aware of:

1. Whenever you see a ball rolling in the street, you are likely to see a child following it. Slow down and be prepared to stop quickly.
2. When the ice cream vendor hits the neighborhood, watch for children coming from all directions.
3. Pay attention to the lone child walking along the street. A single youngster is much more likely to be overlooked than several together.
4. Children and others on roller skates, skateboards, or roller blades can roll into the street. They require a driver's extreme alertness.
5. Bicyclists, especially young or novice riders, should be watched carefully and provided plenty of room.
6. Never back up to redeliver a mixed box. Get out of the vehicle and walk back if you can do so safely.
7. Never give mail to children from the vehicle. If children approach the vehicle, get out of the vehicle and ask them to move away. Double check around the entire vehicle before proceeding.

Be alert so that children don't get hurt.

And while we're on the subject, this is a good time to talk about pedestrians in general. Here's a fact every driver and pedestrian should know. While less than three out of every 100 accidents involve a pedestrian, approximately

three out of every ten persons killed in traffic accidents each year are pedestrians. In other words, the severity ratio of these accidents is 10 times the frequency ratio. This emphasizes the pedestrian's disadvantage when matched against a moving mass of steel.

I urge all of you to be extra cautious now that school is open. Let's protect our most precious commodity — our children. Drive defensively at all times and remember that you represent the U.S. Postal Service when you get behind the wheel.

12 Industrial Vehicle Safety

Are You Cautious With Powered Industrial Vehicles?

Inattention around powered industrial vehicles may cause severe injury and substantial property damage. Powered industrial vehicles come in many designs and are used to perform an assortment of tasks ranging from materials handling to sweeping the floor. Probably the most familiar types are forklift trucks and battery-powered tugs, tractors, or tow trucks.

When used properly, they make it easier to do jobs that would otherwise require muscle power. However, the results could be tragic if the equipment is not operated in a safe manner, or if those who work around operations involving powered industrial trucks do not use reasonable caution.

Industrial Vehicle Quiz

Take a few minutes to check your knowledge about powered industrial vehicles. Here are ten work situations in which different practices were used. Some practices may be safe while others are unsafe.

1. *Safe or unsafe?* John is a clerk in the incoming section who has no training on the tug that is used to pull loaded nutting trucks. However, he has used the equipment on occasions when the volume of mail was heavy.
2. *Safe or unsafe?* Bill has been authorized to operate the powered tug for 6 months and has developed a great deal of skill in maneuvering nuttings and railroad platform trucks with the equipment. He has a habit of examining loaded equipment before moving it.
3. *Safe or unsafe?* Bob and Frank are friends who work at a large mail processing facility. Since the facility is so large, Frank occasionally gives Bob a ride on the forks of his lift truck.
4. *Safe or unsafe?* Don is a qualified tug operator who usually works the loading dock. Frequently he grabs a hamper or gurney with his hand, hops on his tug, and pulls the load to the freight elevator.
5. *Safe or unsafe?* Bill uses his fork lift truck to transport empty pallets to a storage area outside the facility. Before exiting, Bill slows down and sounds his horn.
6. *Safe or unsafe?* It's late in the day, mail volume has been heavy, and pedestrians have constantly caused Sally to make abrupt stops with the powered tug. After each stop, she has had to pick sacked mail off the floor and place it back on the nutting she is pulling.
7. *Safe or unsafe?* Mary and Sally are being moved from one work location to another and are walking rather slowly to their assignment. Bill is slowly pulling a train of nuttings with a power tug and has sounded a warning to Mary and Sally. Mary turns and dares Bill to pass.
8. *Safe or unsafe?* Betty has just reported for duty and, in checking the condition of her powered tug, discovers that the motor is overheating. She promptly reports it to her supervisor.

9. *Safe or unsafe?* Bill is pulling a train of nuttings and comes to a point where several empty hampers are blocking his path. Slowly he plows through the hampers letting his powered tug clear the way.

Answers

1. *Unsafe.* The actual use of powered industrial trucks can be no safer than the operator. For this reason, only authorized, properly trained, and licensed persons are to operate industrial trucks.
2. *Safe.* Operators are to be certain that loads are stable and well balanced before moving them.
3. *Unsafe.* Riding the forks can be dangerous. Riders could easily slip or fall, followed by being struck by the moving fork lift truck.
4. *Unsafe.* The use of tow bars or other approved connecting devices would protect the operator's arm, hand, and fingers from possible injury.
5. *Unsafe.* Vehicles are to be brought to a full stop at exits. The horn should be sounded before proceeding.
6. *Unsafe.* Speeds of powered industrial equipment should be limited to a normal walking speed. Frequent abrupt panic stops are an indication that the operator is operating at a speed too great for conditions.
7. *Unsafe.* While pedestrians normally have the right-of-way, Mary's actions are not justified and could result in a "squeeze play" situation with someone getting injured.
8. *Safe.* Operators should check the condition of the equipment. Brakes, steering, and warning devices should be checked. Defects should be reported to the supervisor.
9. *Unsafe.* The tug was designed to pull, not push. Pushing the hampers could result in damage to them or cause them to strike other objects or personnel.

Watch Out for Indoor Traffic

You might be pretty good about obeying the rules for pedestrian safety when you're out in street traffic, but what about when you're at work?

Nutting trucks, hampers, towveyors, powered industrial vehicles, and other load-moving devices are considered traffic, too; traffic that can be just as hazardous as the kind you encounter on the street.

That means you've got to obey rules for pedestrian safety whenever you're in an area where industrial traffic is moving.

What about those rules — are they the same *inside* as they are *outside*? For the most part, they are. But there are differences. That's because some material handling equipment has different operating characteristics from those of regular street vehicles.

First of all, the steering of most industrial powered vehicles is done with the rear wheels, not the front. That means a forklift truck, for example, is going to turn and corner differently from a regular car or truck. You've got to be aware of things like that rear-end swing — and keep yourself safely out of the way.

Forklift trucks are designed to carry and lift loads in front of them. They can create a special hazard around corners because you're likely to encounter the load before you're aware of the truck. You've also got to be alert to the fact that the load itself swings, not just the truck.

Handling a truck in tight places is tricky for the operator, who is not going to have much concentration to spare for pedestrians. Your safety is pretty much up to you.

Never challenge a truck. You'll lose. And don't force a truck — especially a loaded one — to swerve to avoid you. That might cause the load to spill, and it could make the truck tip over.

Being on foot gives you a lot more maneuverability than any truck. You might have the right-of-way, but you also have the responsibility to stay out of the way.

Stay alert at corners and when you cross aisles. *Stop and look* is a good rule inside the building as well as out of it.

Trucks should stay on the right — and so should pedestrians.

Even at your work place, you might have to get out of the way of a truck. If a truck is operating near you, be sure you're well clear of anything that could trap you if the operator makes a mistake. Don't get caught between a truck and a machine you're operating, for example.

Only trained and authorized people should operate industrial trucks. If you're not an operator, keep off. Industrial trucks are not designed to carry passengers. Don't try to hitch a ride, even if the operator is willing. That "no riding" rule applies to walker-type trucks, too.

Stay off forklift mechanisms. Never use the forklift as an elevator — unless you are using a safety platform designed specifically to hold people. Keep your hands away from the mast or chains.

Be aware of fire and explosion hazards in refueling areas. Take the same kind of care when truck batteries are being recharged.

The load a truck carries can be a hazard, too. If a heavy object falls on you, you'll carry the memory, and maybe the scar, for a long time. Be especially careful if you think a truck is overloaded or badly loaded. Reload it if necessary. Even a properly loaded truck can be hazardous. It has no springs or shock absorbers, and a small bump could dislodge or unbalance a load. Never walk or stand under forks or elevated loads. Watch out for sudden stops or turns that could cause a load to tumble.

If the truck is working with a tight overhead clearance, stay well out of the way. Give wide berth to a truck that is working the top load of a high stack.

Forks extend beyond the truck itself, and since they are usually about 4 inches above the floor, they are easily overlooked.

Lift trucks often have to back up with loads. Keep alert when they do.

Some hazards are really driver problems, but you should be aware of them. Watch out for:

- Trucks passing or being pushed or towed.
- Horseplay and stunt driving.
- Parked trucks that block exits and emergency equipment.
- Trucks operating on wet or slippery surfaces.
- Obstructions in the aisles or objects on the floor, loose dock plates, weak storage racks, broken pallets.

When you're walking:

1. **Stop and look at aisle intersections.**
2. **Watch out for rear-end swing.**
3. **Don't hitch rides.**
4. **Keep your eye on the load.**
5. **Never stand or walk under a raised load.**

Like pedestrians and drivers, we must share the road. We must also share some areas within this postal facility with industrial vehicles.

Powered Industrial Trucks

There's no room for amateurs in the field of powered industrial driving. It's a job for pros. Untrained and unauthorized personnel are excluded from this specialized field of driving. Postal employees who operate industrial trucks are trained and licensed professionals.

The mark of professional drivers is that they're cool operators. This applies to drivers on the grand prix racing circuit as well as to semitruck operators and others who make their living behind the wheel. Power truck drivers are the same. They know their jobs, and they know their vehicles. These two factors combine to result in a smooth operation.

But all pros have to avoid becoming too self-satisfied if they want to continue top performances. So let's review some of the things that separate the pros from the amateurs.

One of the safety basics is to drive at a safe speed. This is a speed that is suitable to both the surroundings and the type of load you're carrying. This is a part of driving that's easy to slip up on. When you become accustomed to driving a power truck and can handle it well, excessive speeds can develop. Remember that there are people all around you and you must watch them.

This is one of the most important responsibilities of a power truck operator — safety of pedestrians. They may try your patience at times, but pedestrians really aren't much of a match for you when you're on a truck. You're aware of how much muscle you're handling; pedestrians aren't. Sound your horn to warn them that you're approaching, and look behind you before you back up. Of course, facing the direction you're traveling is a must for all safe drivers.

Blind corners and doorways are critical areas, and they should be treated as "stop streets." Again, sounding your horn in these areas is a good idea.

Much of the safe operation of a power truck depends on the load, so this is a part of your job you can't neglect. Trucks should be loaded only to their rated capacities. An overload can tip the truck. Don't accept a load that isn't stable.

While we're on the subject of loads, always know the load limits of the floor or surface you'll be driving on.

What's overhead is important, too. Know the clearance of overhead fixtures. You have to keep your eyes open because new fixtures may have been added since the last time you traveled through an area.

The forks can cause damage when picking up loads. Always ease into loads. Never butt loads with forks or the truck. Needless to say, don't let anyone walk under the forks.

Another rule for power truck operators is never to accept riders. It's one of the first things that a driver learns when he's assigned a truck. However, in-house hitchhikers continually test your discipline on this rule.

The unauthorized driver rule can be violated without your knowledge if you leave your truck without shutting off the power and removing the keys. The

brakes should also be set and the controls left in neutral. Follow this procedure even if you're going to be gone for only an instant.

For your personal safety, you should check the entire vehicle before starting your work each day. Keep your hands and feet inside the contour of the truck, and never place them between the uprights of the mast.

When it's necessary to park your truck, don't leave it where it blocks a doorway or an aisle or in front of emergency equipment.

It's difficult to cover all points of power truck safety in a few minutes. But in closing, I'll remind you not to smoke while inside postal service facilities and never while refueling or recharging and to always back down inclines and ramps when the vehicle is loaded.

Power truck safety is just one phase of on-the-job safety. But like all the others, it can be accomplished only by working at it each day.

So stay alert, and report any truck operational problems to your supervisor. Together, we can make the operation of powered industrial trucks in this facility safe for pedestrians and operators alike.

Tips for Safe Industrial Truck Operations

Safe Operating Procedures

1. **Check the vehicle.** Check the vehicle at least once each shift to ensure that everything is operating properly — tires, battery, horn, lights, steering mechanism, lift system, fuel system, controller, and brakes. Do not use a vehicle that is in need of repair.
2. **Look where you're going**. Look in the direction of travel, and don't move the vehicle until you see that your path is clear of people or objects.
3. **Watch out when you drive up to people**. Don't drive up to anyone standing in front of a bench or other structure. If the vehicle fails mechanically or you misjudge distance, that person may be trapped between your truck and the structure.
4. **Don't exceed the authorized safe speed.**
5. **Pass only when it's safe to do so**. At intersections, blind spots, or other dangerous locations, don't pass other trucks traveling in the same direction.
6. **Keep your distance.** Maintain a safe distance from other vehicles. For trucks traveling in the same direction, a safe distance would be 3 truck lengths or a 3-second time lapse passing the same point.
7. **Observe all traffic regulations.**
8. **Be seen and be heard**. Slow down and sound the horn at cross aisles and other locations where vision is obstructed.
9. **Keep the load upgrade.** On all grades, operate motorized hand and hand/rider trucks with the load pointing upgrade.
10. **Keep the forks low**. Carry the forks as low as possible consistent with safe operation.
11. **Cross tracks safely.** Cross over railroad tracks diagonally wherever possible. Do not park closer than 8-1/2 feet from the center line of railroad tracks.
12. **Open and close doors properly.** If you are using powered industrial trucks to open and close doors:
    a. Be sure that a device especially designed for this purpose is attached to the truck.
    b. Apply the force to open or close the door parallel to the direction of travel of the door.
    c. Have a full view of the entire door opening operation.
    d. Be sure that you and other employees are clear of the area where the door might fall while being opened.

Loading

1. **Not too much**. Don't load trucks in excess of their rated capacity.
2. **Tie it down.** Don't move a loaded vehicle until the load is secure.

Loads

1. **Make sure you can see.** Carry a load trailing if the load would obstruct forward view if it were carried in front of the vehicle.
2. **Go slowly.** Ascend or descend a grade slowly. If the grade is in excess of 10 percent, drive a loaded truck with load upgrade.
3. **Watch out when you tilt**. Don't tilt a load forward with the load-engaging means elevated except when picking up the load. Don't tilt an elevated load forward unless you are depositing it onto a storage area. When stacking or tiering, tilt a load backward only as much as is necessary to stabilize the load.

Elevators and Docks

1. **Stay off unless authorized.** Don't drive the vehicle onto any elevator unless you are specifically authorized to do so.
2. **Check your weight.** Before entering the elevator, make sure that your vehicle and load will not exceed the capacity of the elevator.
3. **Secure the vehicle.** Once your vehicle is on the elevator, shut the power off and set the brakes.
4. **Check your weight again**. Don't operate a vehicle on floors, sidewalk doors, platforms — or drive onto railroad cars, trucks, or trailers — unless you're sure the structure can safely support a loaded vehicle.

Parking

1. **Shut it off.** When you leave the vehicle and will be 25 feet or more away from it, leave the load engaging means down, bring the mast to the vertical position, shut the power off, curb the wheels (if the vehicle is left on an incline), and set the brakes.
2. **Secure it.** When you leave the vehicle and plan to be within 25 feet of it or within sight of it, lower the load engaging means fully, neutralize the controls, and set the brakes.
3. **Shut off the gas.** Turn off the engine if it is gasoline powered.

Powered Industrial Trucks Versus Pedestrians

As an operator of a powered industrial truck, you must safeguard other employees at all times. This rule is no different from what is required of you as a safe driver when you are operating your own car. Pedestrians, whether they are walking the aisle of the plant or down a city street, are no match for moving steel.

As a matter of fact, as pedestrians, your fellow employees are probably much more aware of the dangers involved in being hit by a car as it drives past them than they are aware of the dangers involved in being hit or crushed by a powered industrial truck as it goes by them at work. If you are driving your truck down a narrow aisle and there is a pedestrian in the aisle who steps to the side to let you by, are you absolutely positive that there is enough clearance for you to get by him or her? Remember, you are responsible for the pedestrian's safety.

Let's not forget what I said at the very beginning of this talk. As an operator of a powered industrial truck, you must safeguard other employees at all times. That responsibility is part of your job.

One survey showed that almost 400 employees in one state were injured in one year when struck by powered industrial trucks.

Let's go over a few safety rules that can help you do your job a little better:

1. Don't let friends drive your truck just to see what it feels like. You are letting them put themselves and other workers in danger if you do.
2. Travel at a safe speed — one that is suitable to the surroundings and the type of load you are carrying. Don't ever become a race driver down the aisles and elsewhere. Take your time and drive safely.
3. If the floors you are driving over are wet and slippery, drive at a slow speed. This is the same as on a highway in your own car. Conditions determine the speed you should use.
4. Slow down and sound your warning device at cross-aisles and other locations where your vision is obstructed by fixed objects. Let others know you are coming.
5. When you are moving loads that block your forward vision, drive the truck with the load trailing. If you can't see where you're going, you're headed for an accident.
6. Watch for pedestrians. Sound your horn to warn them that you are approaching. Don't sneak up and scare them; they may suddenly move into your path.
7. Look behind you before backing up. Something may be there now that wasn't there a few minutes ago.
8. Treat blind corners and doorways as "stop streets." Running these stop signs is just as much a hazard as doing it on a city street.
9. Don't drive your truck up to anyone who is standing in front of a bench or other fixed object. If your brakes fail, it won't be a very pretty sight.

10. Don’t allow people to stand or pass under the elevated portion of your truck, whether it is loaded or empty. If they don’t listen, tell your supervisor.
11. Stunt driving and horseplay are never permitted. This is a workplace, not a playground.

If you follow these rules you should be able to avoid accidents and protect fellow employees. The responsibility for safety belongs to everyone.

13 Miscellaneous Safety

Setting a Good Example

We all know that we learn from each other and profit from each other's good example. Setting a good example is critically important when it comes to safety. We must work safety into our daily routines at home and on the job. When we all work safely, everyone's job is safer, more productive, and more enjoyable.

New employees who have never held a job before, or who have worked for a company with a weak safety program, probably need considerable safety instruction. We train them, but we also know they observe others, seek advice from coworkers, and form important impressions of how we work safely.

When we leave our safety glasses resting on our foreheads rather than in place over our eyes, or when we kick an empty milk carton under a bench rather than pick it up, we're not selling safety. We are saying, "I'm not concerned with safety — yours or mine." Our actions are saying, "I believe in wearing eye protection, but not in protecting my eyes. And I know that trash can cause a tripping accident, but it isn't important enough to make me pick it up."

Sometimes we try to make a good impression, but place our safety at risk in the process. Wearing rings, bracelets, and other ornaments is dangerous around machinery and on jobs in which it's possible for jewelry to catch on objects and cause injury to the wearer. A simple action like dismounting from your postal vehicle can cause your ring to get caught and tear your finger.

Long sleeves, floppy pant legs, and long hair can be hazardous on some jobs, too. So we should always dress for the job. Our images as fashion experts may suffer, but it is way to the more important for us to project an image of safety.

Maybe some of us feel we have already set good examples for safety, but maybe this self-image isn't accurate. Think just for a moment — isn't it strange that we always think about having the nice things happen to us, but when we think about an accident, it's usually in regard to someone else?

Accidents are a reality. They do happen all too frequently. Make your personal safety just as real, and you'll have a good chance of not becoming the other person to whom accidents are always happening.

We also might remember that our children someday will be entering the work force. They, like the newcomer on the job, can benefit from our actions that exemplify safety consciousness.

Most of us try to demonstrate to our kids how to cross streets or how to light matches when they are of age. If, through the years, your kids learn from you how to use a ladder correctly, or that it's a good practice to keep tools in their proper places, or that there's a right way to lift things, you've given them an additional opportunity for the better life the future promises.

Let's all set a good example by putting safety consciousness into action — everyday on and off the job.

Help Wanted

We may pride ourselves in our ability to be independent and self-sufficient, but life is actually a product of teamwork. Family, friends, government, and business take part in our lives and help us accomplish many things.

Accident prevention works in the same manner. On or off the job, more than one person is needed to make safety a reality.

Teamwork Quiz

The following quiz concerns teamwork and its relationship to safety. Try your skill and be a part of our safety awareness effort.

1. The supervisor of distribution operations (SDO) reports a defective conveyor to the maintenance supervisor who, in turn, assigns a mechanic to repair the equipment. These three persons make up three-fourths of the team that corrects the problem. Who is the other team member?
2. *True or false?* The supervisor of a vehicle maintenance facility has the sole responsibility for ensuring that vehicles are safe to operate.
3. A clerk notices a frayed wire on the tying machine, but doesn't report it because he feels that the safety specialist will discover the defect on the next inspection. Is the clerk making the right decision?
4. A city carrier notices that a caution light is not working at an intersection on the route. The carrier reports the problem to a police officer in the next block. Is he doing the right thing?
5. One postal employee's neighbor is the body-builder type — who usually does all his tasks alone. Today he is in terrible shape with a back strain after lifting the lawn mower into the car trunk by himself. How can teamwork prevent this accident?
6. A postmaster visiting another office notices an unmarked and unpadded head hazard protruding from a stairwell. Since this is not the postmaster's office, should she report this hazard?
7. The Rural Route 2 carrier returns to the post office just behind the carrier of Rural Route 3. She notices that one of the brake lights on the other vehicle is out. What should she do?

Answers

1. The fourth team member is the employee who first notices the defect and reports it to the supervisor so that the equipment can be taken out of use until repaired.
2. *False.* Several persons share responsibilities for safe vehicles. Teamwork in vehicle safety often occurs when the driver reports a defect on Form 4565, *Vehicle Repair Tag* and gives it to his supervisor, who then reports the problem to vehicle maintenance.

3. *No.* An electrical shock may not wait until the next inspection. The safety specialists do not work alone. Our team, consisting of all employees, should be constantly alert for hazardous conditions.
4. *Yes.* The police officer can quickly relay the message to the city maintenance division and, if necessary, direct traffic at the intersection until the malfunction is corrected. The carrier is the first part of a team that may prevent an accident.
5. No matter how much strength you have, awkward loads should not be attempted without help. A good neighbor, like the postal employee, is happy to assist.
6. *Yes.* In fact, any person in any location who notices an unsafe condition should become the first member of the team who helps correct the problem.
7. *Tell the other carrier.* Perhaps the other driver is already aware of the problem, but by informing her colleague, the carrier eliminates any doubt and perhaps assists in eliminating a hazard.

Inattention

Why Pay Attention?

Paying attention to potential safety problems reduces the possibility of accidents resulting from inattention. We could eliminate many accidents and injuries if we paid close attention to our task at hand.

Inattention, no matter what the reason, can result in injury and is a direct cause of many accidents.

An Inattention Quiz

Is attention to safety rules a habit you need to develop? See how you score in this quiz:

1. *True or false?* Safety awareness implies safety attention. Inattention is a major cause of accidents.
2. *True or false?* When the need arises to avert danger, inattention retards or prevents successful evasive action.
3. Which of the following factors can be indirectly responsible for inattention?
   a. *Alcohol and drugs.*
   b. *Physical or mental fatigue.*
   c. *Poor eyesight.*
   d. *Daydreaming.*
   e. *Distractions.*
   f. *Emotional upset.*
   g. *All of the above.*
4. *Safe or unsafe?* Carrier Smith was driving an LLV on his route. The letters for his next delivery fell from his hand. He reached down to pick them up so that he would have them ready when he stopped at the box.
5. *True or false?* Attitude has no relationship to inattention.
6. How can a fire result from inattention to *No Smoking* regulations?
7. Name four types of industrial hazards that may be caused through inattention.
8. No job is so routine that something might not come up to cause an accident. The answer to prevention is to pay _____.

Answers

1. *True.* Hazard awareness and being alert to safety needs are basic to accident prevention.
2. *True.* When our minds are not on our work, we lose conscious safety awareness. Our safety reflexes become slower and less responsive.

3. *g.* All are indirect factors of inattention.
4. *Unsafe.* Both hands should remain on the steering wheel and no attempt should be made to retrieve the mail until the vehicle is stopped and under control. Distractions draw our attention away from safety awareness.
5. *False.* Many accidents can be traced to behavioral attitudes such as, “It can’t happen to me,” or, “Seat belts are too uncomfortable to wear.”
6. Inadvertently throwing a cigarette butt into a waste basket or smoking in a restricted area are just two ways a fire can result from inattention to smoking regulations. Perhaps you have suggested others as well.
7. Only a few are mentioned here. You may think of others.
    a. Overloading mail sacks or containers.
    b. Improper lifting.
    c. Dropping string, labels, clips, straps, rubber bands, and other debris on the floor rather than placing trash in proper containers.
    d. Wearing improper clothing or footwear.
    e. Neglecting to use personal protective equipment.
8. Attention to safety awareness as we work contributes to accident prevention.

Safety Is Teamwork

"We're go. Hang tight; we're go."

With these words, Neil Armstrong, commander of the Apollo 11 mission, piloted the lunar module Eagle to a historic touchdown on the chalky gray surface of the moon.

As Americans, there is probably nothing we take more pride in than the Apollo moon shots. The astronauts of Apollo 11 and 12 will be remembered for their remarkable feats as long as there are history books.

But, there is something else the moon shots will be remembered for: they used one of the largest, most complicated safety programs ever launched in the world.

The safe lunar voyage of the astronauts, or their safe return if things didn't go according to plans, was of vital concern to the hundreds of men and women — the technicians, engineers, scientists, and others — who worked behind the scenes to make the launches possible.

The entire Apollo crew worked as a team. All the team members— from the worker on the assembly line who fitted components to the vital retrorocket reentry system to the engineer who designed it, from the doctors who guarded the health of the astronauts to the security men who guarded the gates of NASA — worked together, contributing ideas and helping each other over the rough spots.

Uppermost in each of their minds was the idea that the astronauts had to be safe, regardless of what happened. They had to have a safe lift-off from Cape Canaveral, a safe lunar landing, and a safe return to earth.

Finally, the astronauts were quarantined to protect the public from any bacteria they might have picked up from the moon's surface or in space itself; safety again.

Safety is important to the space program and just as important right here where we work. Nothing less than the future of you and your family is at stake. Your family is counting on you to provide food and shelter. An on-the-job accident could very easily disable you, leaving family security and future plans in the air.

Teamwork is just as important to our own job safety as it was to the safety of the Apollo astronauts. When people work together, participating and exchanging ideas, there's no end to what they may accomplish. Even the sky isn't the limit anymore. The Apollo missions proved that.

Together, you and I can get our own safety program off the ground.

How? By teamwork. Start by giving me any ideas you may have on how things can be made safer around here. Any idea, no matter how insignificant it seems to you, may just prevent a serious accident that could mean the difference between happiness and misery for you or for one of your fellow workers.

If you are one of our seasoned employees, we can use your years of valuable experience to spot potential safety hazards. Look around. Can you see something that has caused an accident or that may cause one now? Report it to me.

Is there a loose railing on the staircase? It could cause a serious fall that might cripple one of us for life. Is there a broken or defective plug on one of the electric tools? Electric shock, even a low voltage one, can be fatal. Poor lighting, broken chairs, sharp edges on furniture, slippery substances on the floor — these are all things that can cause accidents and should be reported to me.

If you are a new employee, you can be a valuable asset to our safety program, too. You may be able to spot something right away that the old pros may overlook as they go about their daily routine. They may be so used to doing things a certain way that they miss potential dangers that are obvious to a new worker — someone with a fresh approach, like you.

In short, it takes teamwork — the kind of joint effort that launched the Apollo mission and returned it safely to earth; the kind of joint effort that effectively improves our safety program.

So whatever your job status, whatever your duties, keep your eyes open for safety hazards, and report them to me. I promise you I will do my best to see that they are corrected.

Let’s Analyze Your Job

There are many kinds of analysts, and their duties are varied. But perhaps the most important analyst in your life is you.

When something is analyzed, each of its parts is given a close examination. Such is the case when a job safety analysis is made. Each step of the job is broken down to pinpoint safety hazards.

Most of us don’t have time to completely analyze our jobs. This is usually an assignment that is given to the safety supervisor, safety manager, or someone with similar responsibilities. However, we should all be aware of potential hazards connected with our jobs. It is awareness that should become second nature to us.

So let’s take a look at some of the elements of a job safety analysis. I’m sure you’ll recognize at least a few of the elements as things that you are already concerned with.

Motions, positions, and actions often result in injuries, and their consideration is significant to safety. People who reach over moving equipment or objects are vulnerable to injuries. Reaching beyond the range of clear vision is also a dangerous practice.

Other items in this category include motion too rapid for conditions, off-balance positions, incorrect posture while lifting or handling objects, and positions that are hazardous in relation to machines or other workers. Maybe you can remember having had a close call, if not an injury, as a result of situations such as these.

Looking into the job safety analysis further, we find that both physical and equipment hazards may be present. Problems around equipment and machinery develop at points of operation or around flywheels, gears, shafts, pulleys, keyways, belts, sprocket chains, and so on.

In addition, other important concerns are the operation of brakes and exhausts. Activities such as feeding, oiling, adjusting, grounding, and otherwise maintaining these systems also have to be observed for possible hazards.

Other hazards include tools that are too long, are too short, are designed poorly, or are in poor repair. And certainly machine guards that do not give adequate protection are perils to your safety.

Faulty layout of work areas may cause hand and foot injuries in material handling operations. Poor work area arrangement can also be responsible for strains from lifting.

Safe housekeeping is important in all kinds of employment. Housekeeping problems often involve waste disposal, tool storage, misplaced objects and materials, leakage, and spillage. Windows, ledges, and storage areas should not be overlooked in examining job hazards, particularly if storage involves flammables.

So you have to plan ahead and think your job through. That's being safety minded.

In addition, a safety-minded person will follow instructions; correct unsafe conditions, if authorized, or report them to the supervisor; avoid horseplay and distracting others; comply with safety rules and safe practices; practice good housekeeping; use the right tool for the job; lift properly; use proper protective equipment; and operate, adjust, or repair equipment only when authorized.

If an accident should occur and you are requested to supply information to help analyze it, or if your job is being analyzed for safety, keep in mind that your cooperation will contribute to your own safety and the success of our overall safety program.

Pay Attention to Platform and Loading Dock Operations

If we let them, industrial problems and vehicle operation problems can combine on docks and platforms — the end result being increased accident potential. The key to avoiding this situation is attentiveness.

Certainly a lack of attentiveness can have severe consequences when you are working around rolling equipment, motor vehicles, raised surfaces, drop holes, chutes, conveyors, and freight elevators — all of which can be found on or around loading docks.

Platform and Loading Dock Quiz

With this in mind, give the following platform- and dock-related situations some thought. Try to determine which are safe and which are potentially unsafe.

1. *Safe or unsafe?* Mailhandlers at the same facility help to conserve space by resting unused dockboards upright against the wall or columns.
2. *Safe or unsafe?* The loading dock is a beehive of activity. Mailhandlers have found that time can be saved by manually pushing an empty nutting truck while pulling another.
3. *Safe or unsafe?* Platform personnel are fortunate in that they have access to “red tagged” equipment. This has proven useful on heavy days when the platform is in need of additional equipment.
4. *Safe or unsafe?* The maintenance section has installed a wheel stop and wainscotting to prevent damage to the platform walls. This allows platform personnel to save time by releasing rolling equipment before it stops.
5. *Safe or unsafe?* It’s monotonous and time-consuming, but platform personnel use dock boards when loading and unloading hampers.
6. *Safe or unsafe?* In the interest of productivity, platform employees have found that time can be saved by concentrating the load over the rear axle of the vehicle being loaded.
7. *Safe or unsafe?* Vehicle operators have an informal understanding with mail handlers that allows them to move the vehicles without having to check the load.
8. *Safe or unsafe?* Platform personnel have developed a system that permits unused equipment and debris to be kept out of the way throughout the tour.
9. *Safe or unsafe?* Dock employees have found that leaving crowbars and other manual handling tools on the dock constitutes a tripping hazard. Accordingly, they have found extinguisher equipment a handy place to hang or place unused tools.

Answers

1. *Unsafe,* unless the upright dock boards are being secured to prevent them from falling or being knocked over.
2. *Unsafe.* Attempting to manually move two nutting trucks at the same time minimizes control and could result in the trailing truck striking the heel of the mail handler.
3. *Unsafe.* This, of course, implies that defective equipment is being used. When defective equipment is found, it should be tagged using Form 4707, *Out of Order*, and repaired. Tags are not to be removed until repairs have been completed. Equipment must not be used while tagged.
4. *Unsafe.* When moving hand trucks or other rolling equipment, make sure the way is clear and do not release hold of the equipment until it has stopped.
5. *Safe.* Dock boards or other approved means such as scissor lifts are to be used for loading and unloading hampers on all vehicles. Dock boards must be strong enough to carry the intended load. This not only makes it easier and safer to load and unload, but also reduces the potential for damage to casters when rolling equipment is dropped to a lower level.
6. *Unsafe.* Weight distribution is essential for safe, efficient vehicle operation. Heavy concentration of loads over the rear axle may cause lightening of weight on the front axle. This can lead to front axle bounce, steering wander, and other control problems for the driver.
7. *Unsafe.* Regardless of who checks the load, it is ultimately the prime responsibility of the vehicle operator to ensure that the vehicle is properly and safely loaded and the doors secured.
8. *Safe.* Although good housekeeping practices may appear time-consuming, they actually are a productive measure that helps to ensure a safe, efficient operation.
9. *Unsafe.* Although well intended, this is not the answer to the housekeeping problem. In emergency situations, people may grab extinguishers only to have crowbars strike them in the face or fall on their toes. When tools are not in use, store them in a designated and secure location.

Carbon Monoxide — The Silent Killer

What Is Carbon Monoxide?

Carbon monoxide is a colorless, odorless, and tasteless gas. It is also nonirritating and therefore gives no warning or indication of its presence. This is why carbon monoxide is called the silent killer.

How Does Carbon Monoxide Kill?

Carbon monoxide asphyxiates or suffocates people by depriving the body of essential oxygen needed to sustain life. This is known as tissue hypoxia.

Oxygen is normally respired into the lungs and is transported to the body tissues and muscles by the red blood cells. These red blood cells have an affinity, or an attraction, for carbon monoxide and absorb carbon monoxide more readily than oxygen. Carbon monoxide in the bloodstream can reduce the amount of available oxygen for vital body functions to dangerously low levels.

Infants and children are particularly susceptible to carbon monoxide poisoning and show signs before adults. Young children should never be left in a car with the engine running. No one should drive a vehicle with a leaky exhaust system or holes in the floor or firewall.

What Are the Sources of Carbon Monoxide?

Carbon monoxide results from the incomplete combustion of fuels. The most widely recognized source of carbon monoxide is the internal combustion engine in motor vehicles.

Other sources of carbon monoxide are home heating units, wood and coal stoves, gas ranges, kerosene heaters, etc. Almost anything that burns fuel and emits products of combustion will produce some carbon monoxide.

The noxious bluish white exhaust fumes and gases you see coming from vehicle exhaust pipes is not carbon monoxide. The smoke is produced by unburned oil and carbon particles and the odor by the present of aldehydes in the exhaust gases.

It is estimated that an automobile's internal combustion engine emits an average of 2.9 pounds of carbon monoxide for each gallon of gasoline burned. Carbon monoxide is lighter than air and tends to rise naturally. However, when vehicles are running indoors or without proper ventilation, the carbon monoxide cannot escape and tends to accumulate.

What Are the Symptoms of Carbon Monoxide Poisoning?

Symptoms vary with the exposure and concentration of carbon monoxide in the bloodstream. An average adult can occasionally tolerate carbon monoxide in a concentration of 100 parts per million (PPM) in air without

suffering any adverse effects. However, a 1-hour exposure to carbon monoxide in a concentration of 1,000 PPM causes the victim to experience a mild headache. A reddish coloration of the skin sometimes begins at this exposure. If this happens, it's time to get to fresh air immediately

A 1-hour exposure to a concentration of 1,300 PPM can cause the skin to turn cherry red and the headache to become throbbing. A 1-hour exposure to a concentration of 2,000 PPM is likely to cause death or irreversible damage to the respiratory and nervous systems of any who survive.

Anyone who feels the effects of carbon monoxide should immediately be moved to fresh air. The administration of oxygen speeds the recovery. Great care must be taken by rescue workers so that they too are not overcome by the carbon monoxide. Rescue teams usually work in at least three-person teams and use supplied air-breathing apparatus.

What Can You Do to Prevent Carbon Monoxide Poisoning?

1. Don't operate vehicles with faulty exhaust systems. Have them repaired.
2. Don't operate vehicles with holes in the floors or firewalls. Have them fixed.
3. Have your home heating system checked by a reputable firm well in advance of the heating season. Ask that maintenance people look at the flue pipe.
4. Never run your auto in a closed garage or other closed area.
5. Always keep a watchful eye on small children in the back of automobiles. Always keep a window slightly open.
6. Never operate charcoal grills indoors or in unvented spaces.
7. Never operate kerosene space heaters indoors without first assuring that there is sufficient "make up" air.

I'm sure you have all heard these warnings before, yet every year we hear of more carbon monoxide poisoning victims. Please be on guard for carbon monoxide sources and be aware of what carbon monoxide can do. Don't become a victim.

Let’s Keep Them Safely Maintained

The neighborhood letter collection box is a warm and familiar sight to most Americans. It symbolizes government in action, the sanctity of the mails, their stamp revenue dollars at work, and the ability to communicate with anyone around the world. There are thousands of collection boxes, parcel lockers, relay boxes, and neighborhood delivery and collection box units (NDCBUs) nationwide. Unfortunately, these boxes have occasionally been involved in incidents involving the public. Although boxes symbolize many things, they can also pose a potential danger when they are not properly placed or anchored. Boxes can become damaged and unanchored when struck by motor vehicles, vandalized, or abused.

As employees, all of us can help our maintenance staff as well as improve our corporate image by looking for and reporting problems with collection and other types of boxes. Delivery and collection personnel must continually observe boxes along their routes for signs of damage, inadequate anchoring, vandalism, or other problems and report them to their supervisors.

We also have a responsibility to ourselves and the public to report hazards. We all use the mails, and from time to time we all pass by collection boxes. The next time you are near a box, take a good look at it. What is the general impression you get from the box? Does it convey a sense of pride in our work, security for the mails, and safety for its users, or does it convey a different message? For many customers, the first impression they get of the Postal Service is when they approach a collection box. Customers do have a choice. Many of our collection box locations have our competitor’s boxes right beside them. What do you see? What do our customers see?

Is the box properly anchored to the sidewalk, floor, or concrete base? Is it stable? Do the anchoring bolts show signs of rusting? Is it located in a convenient and safe area where users won’t be endangered by traffic or other hazards? Is it in good operating condition? Do the hinges operate easily? Are there any sharp or rusted edges?

Report safety hazards to your supervisor using a Form 1767, *Report of Hazard, Unsafe Condition Or Practice*. Normal maintenance and repair items can be reported using a Form 1624, *Delivery and Collection Equipment Work Request*. To initiate work on boxes, your supervisor should complete a Form 4805, *Work Record Sheet*. Always follow up to ensure that the problems have been corrected.

Boxes that are poorly anchored or unstable must be removed or repaired by maintenance personnel promptly. Where anchor bolts are left protruding at locations where boxes have been removed, the bolts must be removed or cut off at surface level to prevent tripping hazards.

Remember, customers *do* have a choice. Let’s start the relationship with our customers on a positive note and keep it that way

Summertime — The Fun-and-Sun Season

As schools close for the summer, the weather warms and the countryside blossoms out, we know the fun-and-sun season has arrived. We know, also, that postal employees and their families will be confronted with additional unexpected hazards.

If you know what these hazards are — both on the job and in your homes — you are more than halfway down the road to avoiding them. “Forewarned is forearmed,” as the saying goes, and the tips on these pages should help.

Summertime Job Safety

Summertime calls for renewed caution on the job. Pleasant days bring the temptation to forget the absolute need to fasten safety belts and close vehicle doors. Spells of daydreaming can quickly result in trips and falls, ramming mail carts into fellow employees, or causing more disastrous accidents on the streets and highways.

National Post Office Cleanup Week is held annually. Clean, uncluttered post offices will go a long way toward minimizing hazards and providing a neat professional environment for customers as part of our health and safety programs.

Summertime also means dog days as pets join their young playmates outdoors and more quickly assume an aggressive attitude to protect property and child. To respond to this, the Postal Service launches its annual dog bite awareness campaign.

During 1997, 2,500 letter carriers suffered injuries from dog bites. Don’t let your guard down against dog attacks. During the summertime campaign, customers should be reminded to take the necessary precautions to ensure letter carriers’ safety with regard to family pets. Customers will also be warned that the Postal Service will seek financial settlements from customers whose pets cause injuries to employees.

On the Job, Dangers Increase

Here are some tips on how to have a more enjoyable summer on the job.

1. **Maintain floors and stairways**. Make certain all walking surfaces are free of tripping hazards such as paper clips, rubber bands, loose tiles, or other protrusions.
2. **Store materials**. Clearly define storage areas in work units. Supplies returned to their proper places will help minimize hazards, prevent fires, and maintain an attractive environment.
3. **Report hazards.** Report unsafe conditions such as overheated machinery, frayed wires, overloaded circuits, or poor ventilation. Remedy the situation yourself if it is something you can handle safely.
4. **Protrusions lead to contusions**. Open files and drawers invite danger when not in use. Virtually every office has employees who have

stumbled over protruding lower drawers or straightened up suddenly to hit their heads on an open upper drawer.

5. **Use proper lifting techniques.** Strains and back injuries that result from improper lifting, twisting, jerking, or overexertion often disable workers. Learn and follow procedures for proper lifting and always get help with heavy or awkward loads.
6. **Have a good safety attitude.** Your attitude about safety on the job is actually a blend of three factors: the responses you have learned to situations at work, your habits, and your "emotional set."

At Home and On Vacation

Summertime fills everyone's head with visions of a favorite campground, golf course, or fishing stream. The trick is not to let daydreaming divert your attention from hazards that face you here and now. Keep your mind on what you are doing.

In the outdoors, the major dangers are from animals and plants, carelessness around fire and water, lack of caution or preparedness when hiking, climbing, and traveling, and insufficient caution when out in the sun.

Here are other tips to help you keep your summer time's safer at home and on vacation:

1. **Be alert and fresh.** With warmer weather there is usually an increase in accidents, partly from inattention and weariness. Share driving, if possible, so all can enjoy the beauty safely. And fasten seat belts.
2. **Watch out for kids and pets**. Small children and their pets will be out along the byways as well as in the cities. Be especially alert when passing homes, farms, playgrounds, and picnic areas.
3. **Take it easy the first day out in the sun.** Don't let it become a burning situation. Use sunglasses and sunscreen lotion. Hazy days can be more dangerous than clear skies because haze has little effect on burn-producing ultraviolet rays.
4. **Brush up your first-aid skills.** Make certain your first aid kit is well stocked to treat minor bites, stings, rashes from poisonous plants, burns, and wounds. Get medical attention for serious injuries, such as poisonous snake bites, and major rashes, burns or wounds. Know if you are allergic to any particular bites or stings.
5. **Buddy up**. The buddy system is a "must" around beaches, lakes, and streams. Never swim, water ski, or go boating alone. Respect your swimming limitations. Along the seashore, beware of the tides and poisonous jellyfish.
6. **Be wary of strange animals.** Give any strange animal a respectable distance, whether it's a bear, deer, or a fellow camper's dog. Keep food out of reach at night and when away from camp. Don't take pets into the wild unless their rabies shots are up to date.

Safety — Customer Injuries

Slippery weather is here. We must *prepare and maintain* a procedure for keeping installation walks clean. Frequent monitoring of lobby entrances is the only way we can ensure safety for our customers.

Customer injuries on postal premises due to slips, trips, or falls are a costly item. Before they are adjudicated and settled you must become involved in many administration decisions. When a customer injury occurs on your premises, it needs your *immediate* attention. In order to be prepared to promptly handle this type of situation, each postmaster and branch manager should instruct all of his or her supervisors and other employees that they must immediately do the following:

1. Provide medical treatment for the injured customer.
2. Record as much information about the customer as is immediately available.
3. Identify any witnesses by name, address, and telephone number.
4. Identify and check the location where the alleged injury occurred.
5. Determine and record the time, temperature, weather conditions, and condition of the location where the fall or injury occurred.
6. Describe the location as to surface condition — such as wet, dry, icy, snow covered, etc.— and whether or not the surface was smooth, was rough, contained broken concrete or heaved portions.
7. Get any statements available from witnesses.
8. Take photographs as soon as possible after the incident.
9. Notify the supervisor or postmaster immediately.
10. Notify the district safety officer as soon as possible.

Slips, trips, falls, and tort claims are costly. First prevent them. But if they occur, take immediate steps to obtain and record as much information as possible.

14 Off-the-Job Safety

On Your Own Time

Safety is important not just to you and your family but to the Postal Service as well. A large part of my job is to help you form a safe attitude — to encourage you to work safely and think about safety all the time. This takes place on the job. But off-the-job safety is important, too.

What you do on your own time is your own business, but we're all part of a team, and it's only natural that we're concerned about each other's welfare, both on and off the job. At work, you're part of a safety network that extends into many areas. There are rules and regulations to follow and supervisors who keep the safety program going.

But off the job, you're on your own. You can leave safety glasses off when you're remodeling the kitchen, and you can balance a ladder on a box when you're painting the peaks on your house. You probably won't hear a word out of anyone.

However, it would take a pretty foolish person to deliberately leave safety at work. Still, there are times when some of us get a little careless.

To some degree, most of us are do-it-yourselfers around the home. This is where a lot of people are injured. You have to be careful when using ladders. Make sure your ladder is safe before you climb it and don't overreach or climb too high.

When using tools, pick the right tool for the job. If a tool is in poor condition, don't use it. Many of you have power tools. You should be sure that they're properly grounded with a three-pronged plug or double insulation. And stay off wet surfaces when using electric power tools.

The highways are prime areas of concern for safety away from work. I won't attempt to go into all the aspects of traffic safety. They're emphasized almost everywhere. But I certainly caution you to take it easy on the road. Be patient getting out of the parking lot and always watch the other driver.

The weather is something we can't do much about. Yet it affects our safety, so we have to take precautions. If it snows, don't overexert yourself when shoveling. A shovelful of snow weighs more than you may think. And don't work too long in the hot sun in the summer. This can catch up with you fast, particularly if you've worked hard all week at your regular job.

Off-the-job safety should really be second nature if you practice it in earnest at work. So keep an eye out for hazards whether you're on the golf course, in your boat, or driving your snowmobile.

National statistics show that accidents away from work account for 70 percent of all deaths and 55 percent of all injuries to workers. The toll in suffering and the loss of workers is high away from the job.

You are all valuable members of your families and of the Postal Service. Your contributions would be difficult to replace if you were injured either on or off the job. Add to this the fact that you're priceless to your family, and it's easy to see why safety efforts are necessary.

Keep in Shape, But Exercise Safely

More than ever, people are participating in sports and fitness activities to get in shape and stay that way. The most common activities include jogging, bicycle riding, aerobic exercises, tennis, and racquetball.

But many people have turned to workouts using stationary weight-resistance equipment to tone the body's muscles. In fact, using exercise machines is now among the most popular fitness methods for both men and women. Many health clubs that provide this equipment are finding that their training rooms are getting more of a workout than their racquetball courts.

In addition, sales of exercise equipment for home use are booming as people continue to become aware that physical fitness can lead to good health. These machines generally include stationary bicycles, rowing machines, and weight-resistance apparatus for the arms and legs. All can be adjusted to the user's level of fitness.

Before using exercise machines at home or in a health club, talk to your physician and find out if such a program would be beneficial. This is especially important for people over 30 and for anyone with a cardiovascular disease, diabetes, hypoglycemia, or any other physical condition requiring the monitoring of blood pressure or blood sugar levels. Similarly, those with arthritis or bad backs should talk to their doctors to determine whether they can safely use these machines.

People embarking on any exercise program should start slowly and build up gradually. With exercise equipment, this means beginning with small amounts of weight or resistance and a minimum number of repetitions (repeating the same exercise). Increase weight or resistance in small increments and do so only after building up to the maximum number of recommended repetitions.

Many people who use exercise machines mistakenly believe the devices are completely safe. That belief, unfortunately, has caused a lot of injuries. Most were caused by people attempting to lift more than they could handle.

It also is important to sit or lie in the proper position and to use any belts intended for use with the exercises. Take care to follow the equipment manufacturer's instructions on how to perform certain lifts. That information is there for your protection.

When shopping for home equipment, look for sturdy construction and smooth edges. The equipment also should be easy to adjust for any family members who use it.

Remember, whether you join a health club or begin working out at home, start slowly and build up gradually. Overdoing it at the start is a certain way to strain muscles or cause injury.

Jogging

The arrival of spring and its warm weather brings with it an explosion of huffing and puffing joggers who have been soaking up the good life all winter.

A short-sighted concern for physical fitness may result in overdoing it. By heeding the following advice, you can enjoy the benefits of jogging.

How to Start

The neat thing about jogging is that it's free. You provide the willpower and go-power.

Jogging is a bit more than a walk. Depending upon your fitness, it can take from 7 to 15 minutes to jog a mile. Your body will tell you how long to run and how often. Jog at a comfortable pace and stop before fatigue sets in. The pace should be no faster than that at which you can carry on a conversation. If you find you're out of breath and can't talk, stop and walk. Until jogging can be done continually and in comfort, alternate jogging and walking.

You should be concerned with the time spent jogging, not the distance covered or minutes per mile. The goal should be whatever you are comfortable with four times a week. This is a goal within the reach of nearly everyone, and the experts say it's enough to make you fit and keep you that way.

Before beginning a jogging program, tell your doctor what you intend to do. Have a medical examination that includes heart and lungs, as well as a stress test, such as running on a treadmill while being given an electrocardiogram to determine fitness level. This is particularly important if you're over 35.

During jogging, the muscles used don't get a full contraction or extension. The leg is never fully straightened or fully bent. Jogging tends to strengthen the muscles along the back of your body, such as the calf and hamstring. Almost every low-back pain sufferer has weak stomach muscles that can lead to pain and injury in the feet, knees, and lower back. It is, therefore, important to establish a program that provides for stretching and strengthening the six main muscle groups: back, shoulders, chest, arms, legs, and stomach. The muscles along the back of the body, such as the calf and hamstring, need stretching. The muscles along the front of the body, such as the quadriceps and abdomen, tend to remain loose and underdeveloped. They need strengthening.

Each jog should be preceded and followed by a series of exercises to accomplish the above. Stretching should be a long, slow, gentle process that allows the muscle to extend without pain or injury. A "good" stretch should last a minimum of 30 to 60 seconds.

Proper Clothing

In hot weather, run in light clothing and wear a brimmed hat that shades your face. Run at the coolest times of the day. Learn to recognize the symptoms of

both heat exhaustion and heatstroke. Fluid loss can lead to a rise in internal temperature and, when your temperature climbs too high, can result in either heat exhaustion or heatstroke.

Liquid intake should be a primary concern to a jogger immediately before, during, and after running. Fluid lost through sweating limits your tolerance for prolonged exercise in hot weather.

In summer, a pound of fluid may drain away from the body in as little as two miles. Most runners drink only plain water. An important thing is to drink some type of fluid during exercise so your body water levels will be maintained.

Injuries

Joggers are not injury-free. Injuries to the lower back, leg, or foot and to the joints of the ankle and hip, and even broken bones in the leg and foot are reported. These are often caused by poor foot placement and usually can be avoided or prevented. When you jog, you land on your heel, come down on the outside part of your foot, and then roll your foot so that all your weight shifts to the inside of your foot.

Good shoes have ample padding for forefoot and heel, a flared heel to offer stability, and arch support, with the foot locked in the shoe by a stiff Achilles counter, a tight collar, and a good saddle. If painful injuries persist, you may need to see a sports podiatrist for special shoe inserts called orthotics. Exercises to strengthen the quadriceps or anterior thigh muscles may also help.

One problem common to all joggers is the “stitch.” This is a catchall phrase for pains sharp enough to stop you. They can hit anywhere between the hips and shoulders, but the true “stitch” is a sharp pain in the lower rib cage. Learn to “belly breathe.” This means you make the belly go out when breathing in, and go in breathing out — just the opposite of the way most of us normally breathe.

If you get sore, as beginners surely will, ease up, but don’t give up. Reduce your training. Apply cool packs to injuries, and if pain or swelling persists, of course, see your doctor.

Are You Prepared for a Safe Vacation?

Each year thousands of vacationing Americans are injured or killed as a result of accidents. Some were postal employees who had worked hard and were looking forward to a leisurely and enjoyable vacation.

Unquestionably, the failure to plan ahead is a factor in many vacation accidents.

Vacation Quiz

Let's look at 10 vacation situations in which different conditions and practices exist. Some are unsafe while others are safe. What's your opinion?

1. *Safe or unsafe?* John is a window clerk who gets modest exercise when off duty. He's looking forward to a week of tennis, horseback riding, golfing, bicycling, and swimming at the seashore.
2. *Safe or unsafe?* Normally, the trip to the shore is about a 5-hour drive and check-in time is 11:00 a.m. John made the trip several years before and feels he knows the route. Therefore, he decides to allow four hours of travel time and still arrive in time to check in promptly to take full advantage of his vacation time.
3. *Safe or unsafe?* John's wife is looking forward to getting a good healthy suntan. The way she figures it, only 2 days will be devoted to lying on the beach. Fortunately, the long range forecast calls for sunny and hot weather.
4. *Safe or unsafe?* John has selected a portion of the beach that is protected by lifeguards and offers an excellent view of the children, who are wading near the shore line.
5. *Safe or unsafe?* Mary, a coworker of John's, has chosen the mountains for her vacation and plans to cook out for most of the meals. The site she and her husband have selected offers sufficient space between their tent and portable stove.
6. *Safe or unsafe?* Mary and the family love to play games. The first night, in the comfort of their tent, they play cards by candlelight.
7. *Safe or unsafe?* Jim is a letter carrier and has been looking forward to a 2-week trip using the family car. Before the trip he makes certain his car is in good shape for the long trip. The cooling system, brakes, belts, and tires are checked, as they are most likely to contribute to a breakdown during heavy driving.
8. *Safe or unsafe?* Jim has been a letter carrier for 6 years and loves the job because it allows him to be outdoors. Being an outdoor man, he takes his son fishing each year. To be on the safe side, Jim insists on throwing a life jacket in his boat every time they go out on the lake.
9. *Safe or unsafe?* John's two sons enjoy surfing. John has purchased a new surf mat for the older boy, as the old mat has sprung a steady leak. John is sure the old mat is still good enough for his younger son.

10. *Safe or unsafe?* John's father, a retired employee, enjoys the surf also but uses a less populated portion of the beach and surfs near the jetty for safety.

Answers

1. *Unsafe.* If any kind of physical activity is planned, don't try to overdo it.
2. *Unsafe.* Allowances for the normal travel time should be expanded rather than lessened. It has been a while since John last traveled the route. Therefore, traffic and road conditions may have changed. Detours, road repairs, and weather conditions also cause delay.
3. *Unsafe.* Take it easy in the sun. Don't try to tan too quickly, as severe sunburn could occur. Remember, even on a hazy day, sunburn can occur.
4. *Safe.* Stick to beaches protected by lifeguards and keep a close watch on youngsters who may wade too far out trying to retrieve a water toy.
5. *Safe.* Keep your stove or fire well away from your tent and other combustibles.
6. *Unsafe.* Candles and mantle lanterns are dangerous near combustibles. Use battery lights inside tents.
7. *Safe.* Getting the car ready is one of the most important steps for a safely planned vacation.
8. *Unsafe.* Boats need a flotation device for everyone on board. It is wise to put life jackets on before going out, as you may not have time to put them on in an emergency.
9. *Unsafe.* Flotation devices, including water toys and surf mats, should be kept in top condition. If the equipment has become unreliable, get rid of it before a tragedy occurs.
10. *Unsafe.* Never swim or surf alone. Stay away from pilings and jetties, as the heavy surf can throw you against them.

Thriller — Or Killer?

Prime vacation time. All sorts of activities — the pool, the lake, the mountains, the beaches.

But play time for postal people can be a time of tragedy too. Thousands of vacationers and others enjoying time off are seriously injured or killed each year because they let the pursuit of play come before safety.

Can you recognize hazards and distinguish between safe and unsafe situations?

Vacation Quiz

Try this quiz to start you thinking safety for your vacation.

1. It is a nice day, the children are playing in the yard, and Susan decides to mow the grass so her husband, Chuck, will not have this chore to do. He will be tired after delivering mail all day and, besides, he can save his energy for packing the car later. It is near noon, so Susan puts on shorts and goes barefooted so she can beat the heat. What hazard(s) do you see in Susan's action?
2. *Safe or unsafe?* "What do we need all this stuff for?" muses Chuck as he surveys the job of packing. He decides to pile up several bags and boxes since he does not want to go up and down stairs any more than he has to.
3. *Wise or foolish?* It's a 10-hour drive to the cottage, and Chuck has been thinking of driving the complete distance after completing his route on Friday. He decides instead to drive part of the way, stay in a motel, and continue the journey in the morning.
4. The surf is fairly calm, so Susan figures she can let the children play by themselves in the water. She tells them not to go in over waist deep and then begins to talk with Chuck and some other people on the beach. What is the hazard here?
5. *Wise or foolish?* Martha likes to leave her job as a clerk behind and enjoy time off camping at the lake with her family. The children want to play in the woods while Martha and Fred are setting up camp. Martha says "no."
6. *Safe or unsafe?* Fred has become quite hot while setting up camp. He sights a small ledge near the lake and decides to dive from it into the water.
7. *Safe or unsafe?* Fred decides to go fishing later in the afternoon, even though he hears thunder and sees some clouds in the distance. He saw several boats near the middle of the lake earlier and figures to try his luck there.

Answers

1. *Susan has made several mistakes, and you are on the ball if you got them all*. First, shoes and long slacks are proper attire when operating

power equipment. Second, the hottest part of the day is a poor time to cut the grass. Third, never cut grass with children playing in the yard. Objects such as toys may be hit and become deadly missiles.

2. *Unsafe.* Chuck could cost himself more time than he saves. By carrying too much, he is risking a strain, a fall, or dropping part of the load.
3. *Wise.* Too much driving after a day at work is asking for trouble. It is better to arrive refreshed the next morning than to risk fatigue and night driving for that length of time.
4. The surf may be calm and smooth, but the bottom may not. A child can be waist deep on one step and over his head on the next. A parent who is busy with conversation is not watching children properly. Preferably, an adult should accompany the children. Even if they swim well, children are no match for undertows and other currents.
5. *Wise.* The woods may have many hazards — snakes, insects, pits, ledges, and poison oak, to name a few.
6. *Definitely unsafe.* Never dive into water unless you know what obstacles are under the surface and how deep the water is. Serious injury or death can result from an act such as Fred is considering.
7. *Unsafe.* A person in a boat in the middle of a lake is a prime target for lightning. Watch the weather, and don't take unnecessary chances. Get to shore.

Vacation Preparedness

Traditionally, the Memorial Day weekend marks the beginning of summer vacations. Most postal employees and their families are now making plans for summertime fun and relaxation. Here are a few tips to help make the most of vacation whether at home or on a trip.

1. **Plan ahead.** Now's the time to brush up on defensive driving, first aid, boating, and swimming. Check your community for classes. If you're planning a trip by car, have needed car repairs made well in advance. Any physical activities in your schedule? Tune up your body, too, to avoid sore and strained muscles that could spoil your vacation. Restock your first aid kit.
2. **Guard against the heat.** Heatstroke and heat exhaustion can be dangerous. Drink lots of liquids. Avoid overexposure to the sun. Don't overdo it — take a break from work or play.
3. **Watch the weather**. When a thunderstorm threatens, take precautions against lightning. Avoid trees, utility poles, and other tall ungrounded objects. If you're boating, get to shore.
4. **Look out for insects**. Summer brings with it the danger of insect bites and stings. With Rocky Mountain spotted fever and Lyme disease in the news lately, it's especially important to protect against the carriers of these diseases. Ticks and chiggers infest ground foliage. At home, keep vegetation cut back. When camping, avoid areas of ground growth both at campsites and along hiking trails. Check clothing and exposed skin frequently when outdoors.
5. **Treat insect bites immediately**. Attached ticks should be removed immediately by pulling gently with fingers, forceps, or tweezers (be careful not to crush the tick). Treat the bite with antiseptic. Report any unusual symptoms to your doctor.
6. **Eliminate insect nests.** At home, look for insect nests in attics, sheds, and eaves. Destroy them at once. Use inspect repellents to protect from mosquitos.
7. **Ensure safe boating**. Wear personal flotation devices at all times. You may not have time to put one on if you need it in a hurry. Know your craft and be prepared to handle it in a squall or storm. Learn the local laws and customs concerned with boating. Investigate local sources of information on reefs, tides, buoys, etc.
8. **Enjoy outdoor cooking**. But remember to keep fires, stoves, grills, and candles away from tents, furniture, children, pets, and combustibles. Always use mitts and long-handled utensils.
9. **Make home repairs safely**. Extra care is needed when using a ladder, both indoors and out. Set it firmly and move it often; don't lean out to reach a spot. Don't forget your safety glasses and a good pair of shoes; they're just as important at home as at work.

Swimming Safety

Swimming is a refreshing way to spend hot summer days and evenings. But no one should enter the water without thinking of safety. Otherwise a pleasant experience could turn into tragedy.

This was the case in Denver despite a rescue attempt by a postal employee. Hearing a woman call that a man was drowning, a letter carrier, who was a former water safety and first aid instructor, dropped her mail bag and dove into the apartment house pool. She pulled the man from the bottom of the pool and began mouth-to-mouth resuscitation. Unfortunately, she had arrived too late to revive him.

Basic Rules of Water Safety

Everyone should know the basic rules of water safety before going into the water because even good swimmers can drown. The points to remember are:

1. **Never swim alone.** Make sure that someone nearby can help in an emergency.
2. **Swim in a safe bathing place.** Preferably swim in a place supervised by lifeguards.
3. **Beware of unfamiliar areas.** They may have treacherous tides, currents, deep holes, debris, or other hazards.
4. **Don’t swim when overheated or overtired or immediately after eating.**
5. **Don’t overestimate your ability.** Remember that it’s hard to accurately judge distance when you’re in the water.
6. **Buddy up.** If you are going to swim a long distance in open water, have someone with you.
7. **Look before you dive**. Before diving, make sure the water is deep enough and check for hidden objects.
8. **Stay away from dams.** Never swim or boat near “low head” dams. They have very dangerous undercurrents.

Since many drownings occur near shore, you could help prevent a tragedy by staying alert when you are on land. If a swimmer is in trouble near a dock or the side of a pool, lie down and extend a hand or foot; or extend a towel, shirt, or pole; or throw a ring buoy or line and pull the person to safety. If the person is too far from shore, wade into chest-deep water and extend a board, plank, or similar object to help the swimmer float while you get more help.

Someone who cannot swim should not attempt a rescue in water more than chin deep. Both rescuer and swimmer are likely to drown. Only someone trained in lifesaving techniques should attempt a swimming rescue.

If you are not a good swimmer and see someone in danger, shout for help. If there is no lifeguard or anyone else in sight, look for an improvised flotation aid to help the person. Do you have a canoe paddle, a gallon vacuum jug, an

ice chest with a clamp-on lid, or a spare tire in your trunk that you can throw to the swimmer?

Once the victim is on shore, start rescue breathing at once if he or she is not breathing. It is a dangerous waste of time to attempt removing water from the lungs before commencing rescue breathing.

Normal breathing usually starts within 15 minutes after rescue breathing begins, but if it doesn't, continue rescue breathing until professional help arrives.

Many widely believed myths about water may actually be health or safety hazards. For instance, many believe a swim in cold water will refresh and stimulate you. This is false. Cold water quickly saps your strength. Far from stimulating you, it shocks your system. Blood vessels constrict, your body loses heat, and you can develop an oxygen deficiency that could cause you to lose consciousness and drown.

Another myth is the value of taking several long, deep breaths before swimming under water. In fact, overbreathing can reduce the body's supply of carbon dioxide, the main trigger in creating the urge to breathe. When a swimmer's store of carbon dioxide is depleted, the urge to breathe can be delayed beyond the point at which the oxygen in the lungs is sufficient to keep the swimmer conscious.

Myths, overconfidence, and carelessness contribute to about 5,000 drownings that occur each year.

Floods

Floods and flash floods occur many times each year. Some floods are seasonal, as when winter or spring rains and melting snows drain down narrow tributaries and fill river basins with too much water too quickly.

Others are sudden, the result of heavy precipitation. These are flash floods, raging torrents that rip through river beds after heavy rains, surging over river banks, sweeping away everything in their paths.

While flooding is more likely to occur along rivers and streambeds, no area of the United States is completely free from threats of floods.

On average, some 80,000 Americans are driven from their homes, 90 persons are killed, and more than $450 million worth of property is damaged or destroyed each year.

Precautions

Those who live or work in flood-prone areas should take several precautions to be prepared for a flood:

1. **Keep materials on hand,** like sandbags, plywood, plastic sheeting and lumber.
2. **Install check valves** in building sewer traps to prevent water from backing up in sewer drains.
3. **Keep first aid supplies on hand.**
4. **Keep a stock of food on hand** that requires little cooking and no refrigeration in case of electrical interruptions.
5. **Keep emergency gear in good working order,** such as a portable radio, emergency cooking equipment, lights, flashlights, etc.
6. **Know the elevation of your property and the quickest route to a safer location.**

The National Weather Service's River Forecast Centers monitor the meteorological and hydrological conditions affecting rivers and water supply. They are responsible for issuing flash flood watches and warnings through local news media.

When a Flood Watch Is Issued

1. Listen to area radio and television stations for reports of flooding in progress and for possible flash flood warnings from the National Weather Service and public safety agencies.
2. Be prepared to move to high ground at a moment's notice.
3. If you are on the road, watch for flooding. Stay away from highway dips, bridges, and low areas.
4. Watch for signs of heavy rainfall.

When a Flood Warning Is Issued

1. Store drinking water in clean bathtubs and in various containers. Water service may be interrupted.
2. If forced to leave your home and if time permits, move only essential items to safe ground.
3. Move to a safe area before access is cut off by flood water.

During a Flood

1. Avoid areas subject to sudden flooding.
2. Do not attempt to cross a flowing stream where water is above your knees.
3. Do not attempt to drive over a flooded road; you can be stranded and trapped.
4. If you are driving, don't try to cross areas of unknown depth. If your vehicle stalls in deep water, abandon it immediately and seek higher ground. Rapidly rising water may sweep the vehicle and its occupants away. Many deaths have been caused by attempts to move stalled vehicles.
5. Be especially cautious at night, when it is harder to recognize flood dangers.
6. When you are out of immediate danger, tune in area radio or television stations for additional information as conditions change and new reports are received.

After the Flood

1. Do not use fresh food that has come in contact with flood waters.
2. Have drinking water tested for potability. Wells should be pumped out and the water tested before drinking.
3. If necessary, seek medical care at the nearest hospital. Food, clothing, shelter, and first aid are available at Red Cross shelters.
4. Do not visit disaster areas. Your presence might hamper rescue and other emergency operations.
5. Do not handle live electrical equipment in wet areas. Electrical equipment should be checked out and dried before returning to service.
6. Use flashlights, not open flames, lanterns or torches, to examine buildings; flammables may be inside.
7. Report downed utility lines to appropriate authorities.

Lightning

Lightning, sometimes called “the underrated killer,” ranks as a greater danger to the average person than tornados, floods, or hurricanes. About 1,000 people are struck directly by lightning in the U.S. each year. Another 1,000 are injured indirectly when lightning strikes objects or the earth around them.

Lightning is the same electricity that lights your lamps, but in tremendous voltages. A lightning bolt contains several hundred million volts at 30,000 or more amperes. That’s more power than is generated by all the electrical plants in the U.S. combined. It’s enough raw energy — in a three-quarter-inch thick, mile-long stroke — to lift the Queen Elizabeth II more than 8 feet out of the water.

This energy is created when a storm is developing and severe air turbulence separates ions in the clouds into positive and negative particles. The separated masses of opposing charges act as magnets to pull toward each other in an effort to reunite the ions. Thus, lightning can precede rain and strike from a virtually clear sky.

If you or your home is in the path of these two charges when they become strong enough to connect, the lightning may go through you or your home as a conductor to the ground. The interaction of the positive and negative ion particles is a continuing process in the thunderstorm.

While it may be interesting to watch a thunderstorm from your front door or a window in your home, it is not safe. Stay away from doors, windows, fireplaces, radiators, stoves, metal pipes, sinks, and plug-in electrical appliances such as hair dryers and electric razors.

Remain indoors if possible, even if you must leave car windows down and the laundry on the clothes line. Avoid taking a bath, doing the dishes, or having any contact with plumbing. Since lightning can strike telephone wires, use the telephone only if absolutely necessary.

Water is an excellent conductor of electricity, so don’t wade, swim, or go boating in a thunderstorm. If you are caught out in the open water in a boat when a storm is building, attempt to get to shore. If you can’t, stay low in the boat.

Flagpoles, towers, and metal fences are prime targets for lightning strikes. Any tall, slender object is a good conductor. Golf clubs and fishing rods are prime conductors. Golfers wearing cleated golf shoes make especially good lightning rods of themselves.

In a wide, open area such as a field, where there is no protection, your best defense is to drop to your knees and place your hands on your knees. Never lie flat on the ground. If you should feel a tingling sensation in your skin, drop to your knees immediately. This posture minimizes your height.

The best first aid for a lightening-strike victim who is unconscious or not breathing is cardiopulmonary resuscitation administered by someone trained in the skill. Resuscitation must begin within 4 to 6 minutes or less to prevent irreversible damage to the brain. Those unconscious but breathing will

probably recover spontaneously. However, they should also get medical attention, since there may be hidden effects.

If you must be outside and need to find shelter, try to find a building protected by a lightning system. A large, unprotected building offers a degree of safety if you stay away from plumbing, wiring and appliances. Closed automobiles provide a protective nongrounded metal shell for safety. When you can't find one of these shelters, a ravine or valley will offer some protection.

The best thing to do is to avoid lightning storms by staying indoors if possible.

Tornados

Now that it's spring we can forget about the hazards that winter brings and worry about the ones that come with warm weather. Tornados, for example.

These unwelcome visitors seem to follow the sun. They tend to migrate across the country as the weather warms up. While a tornado can occur any day of the year, the freakish weather becomes more common in certain months. The peak season along the Gulf Coast is normally January through March. The area encompassing the Ohio Valley through the Central Plains is particularly tornado-prone March through June. The North Plains and Northeast are prime target areas during July and August.

Every state in the U.S. has experienced at least one tornado during the most recent 20-year reporting period. Hardest hit were Texas, Oklahoma, Indiana, Kansas, Nebraska and Missouri. Rhode Island got the fewest. On average, 700 tornados are reported each year in this country.

To deal with the threat, the National Weather Service has established a system of alerts. Its "Tornado Watch" means that weather conditions make tornado development possible, and you should be on guard for further reports. A "Tornado Warning" means that a tornado has actually been spotted and you should take shelter immediately.

Most deaths and injuries in a tornado situation are caused by flying debris, and when a twister is approaching, immediate action may save your life.

1. Remember to get away from windows, doors and outside walls, and to protect your head.
2. In homes or small buildings, go to the basement or to the interior part of the lowest level. Closets, bathrooms, or interior halls offer the most protection. Get under something sturdy.
3. In shopping centers, go to a designated shelter. Do not go to your car.
4. In high rise buildings, go to interior small rooms or hallways.
5. In open country, move from the tornado's path at a right angle. If you don't have time to escape, lie flat in the nearest ditch, ravine, or culvert with hands shielding your head.
6. If you're in a mobile home or in your car, get out. Either head for a substantial structure or lie flat as discussed above.

Responsible postal officials in areas where tornados are a threat should develop precautionary instructions and designate locations offering the greatest protection.

Do You Throw Caution to the Wind During the Holiday Season?

For many Americans, no time of year has more meaning than the month of December. Certainly postal employees know what December means. To many of us, it means increased social, family, and work activities. It also means that special care and thought must be given to avoid becoming a tragic holiday accident statistic.

Holiday Quiz

Now take time to think about a few situations you may encounter during the holiday season. Some may be safe, others unsafe. What do you think?

1. *Safe or unsafe?* James and his wife, Phyllis, are window clerks in a suburban post office. They enjoy decorating their house during the holiday season and have decided to place their Christmas tree in front of a window for all to see. To eliminate a tripping hazard and hide the unsightly electrical cord, they have run the cord under the carpet.
2. *Safe or unsafe?* James and Phyllis look forward to skating on the community pond at this time of year. Fortunately, the pond has started to freeze. By tomorrow, it will be solid enough to skate on as long as they stay near the edge.
3. *Safe or unsafe?* John, a mail handler in the same office, sets up an electrical train each holiday season. He's lucky this year because only a small amount of wiring is brittle and he can set up the train layout without repairs. Also, for the first time in years, he doesn't need to buy new track.
4. *Safe or unsafe?* John has chosen a spot in front of the sliding glass door in his recreation room for the train layout. This way it won't interfere with the room arrangement.
5. *Safe or unsafe?* John has a tough decision to make in selecting the family Christmas tree. He sees several he likes with fair shapes, good coloration, and pliable needles. But they have a sticky substance at the butt. He decides on one with a perfect shape, but without those other characteristics.
6. *Safe or unsafe?* James and Phyllis purchased a tree with all the good characteristics of freshness. They have decided to leave the tree in their living room until the second week in January because they are having out-of-town company that week.
7. *Safe or unsafe?* There's nothing like a roaring fire in the fireplace. John uses his fireplace to burn discarded gift wrappings and greenery. This makes for a neater home.
8. *Safe or unsafe?* It's been a tiring day at work, with high mail volume. A light snow has fallen causing the streets and sidewalks to get slippery. James and Phyllis walk to their car, start it up, turn on the windshield wipers to clear the snow and drive off to a dinner engagement.

9. *Safe or unsafe?* Upon being notified, a customer has come into the post office to pick up a parcel. By standing on a carrier stool, James can get the parcel from the shelf without moving some heavy parcels that otherwise would be in the way.
10. *Safe or unsafe?* The dispatch driver is on the lot to pick up the last dispatch for the day. He's impatient to get going, but cannot get to the loading dock without a guide to assist in backing. John volunteers. He situates himself between the dock and postal vehicle so the driver can safely avoid the vehicles on both sides while backing the truck into place.

Answers

1. *Unsafe.* The carpet may hide wiring defects and provide fuel to feed a fire caused by defective or overloaded wiring. Cords should be kept away from heat sources and out of traffic areas. Do not run them under rugs or carpets.
2. *Unsafe.* They're rushing the season if only the edge of the pond is frozen. Don't take a chance on frozen ponds or lakes. The skating rink would be a wiser choice. Outdoor skating can be fun, but each year many people fall through ice they think is safe.
3. *Unsafe.* Inspect all equipment, including the wiring. When insulation on wiring is brittle, the potential for a short circuit, electrical shock, or fire is high. Replace all worn or brittle wiring.
4. *Unsafe.* Never obstruct exit routes with holiday decorations. You never know when you may need to get out in a hurry.
5. *Unsafe.* Pliable needles, twigs that don't fall off when bounced or shaken, tree butts that are sticky with resin, and good coloration usually indicate freshness. Don't sacrifice safety for a dried out tree with a perfect shape.
6. *Unsafe.* This would mean leaving the tree up for three weeks. It's unlikely that a tree will retain sufficient moisture over this period to resist fire. A tree that has lost 20 percent of its normal moisture is match-ignitable. A 7-foot pine can burn completely within a half minute.
7. *Unsafe.* The heat and draft can cause wrappings and lightweight combustibles to go up the flue, possibly causing blockage. Green soft woods can leave a sticky tar inside the flue that can ignite into a chimney fire.
8. *Unsafe.* What about the other windows, outside mirrors, and head and taillights? Snow should be removed from them as well.
9. *Unsafe.* The stool was not intended as a step ladder. Haste leads to falls.
10. *Unsafe.* John has placed himself in a precarious spot between a fixed object (the dock) and a backing vehicle with an impatient driver. Parked vehicles on both sides compound the problem. Guides should position themselves where their safety is not in jeopardy.

Selecting a Safe Christmas Tree

Selecting the right Christmas tree could mean a safe holiday for you and your family.

A tree that has lost 20 percent of its normal moisture content is match-ignitable and continues to dry out, even when standing in water. However, trees can retain sufficient moisture to resist fire if placed in water while they still have 85–90 percent of their normal moisture content.

The best way to ensure a fresh tree is to cut your own; however, precut trees purchased from sales lots may provide comparable freshness if selected carefully.

Unfortunately, there is no immediate way to judge freshness. A bright, healthy color normally suggests freshness, but some merchants spray trees to enhance the color. Pliable needles and twigs that don't fall off when the tree is shaken or bounced usually indicate freshness. Also, a tree butt sticky with resin is another indicator of a fresh tree.

Once you select your tree, cut approximately one inch from the bottom to make water absorption easier. Stand the tree in a bucket of water in a cool room, garage, or sheltered outdoor area until you are ready to decorate it.

If you store the tree 1 week or longer, saw off another inch from the tree butt.

A good stand that has a sufficient water reservoir and holds the tree erect is essential.

The amount of water a tree requires varies according to the tree type, size, room temperature, and humidity. A 6- to 7-foot tree in an average room may take a quart or more of water a day.

Don't stand the tree in a location that blocks an exit, just in case a fire does break out. Avoid radiators, fireplaces, heating vents, and other heat sources that could dry out the tree. Inspect decorative lighting and use only certified testing laboratory approved electrical displays to ensure safety. Markings such as UL are usually found on the storage box or cord. Mount lights according to the manufacturer's instructions.

Don't leave the tree on display too long. Even the freshest tree will dry out and become a fire hazard.

Never use real candles or open flames around trees or decorations. Although they are pretty, they have caused serious fires. Never try to burn a tree in a fireplace; the dry needles burn very rapidly and the fire may get out of control.

Use caution this season to make it bright.

15 Crime Prevention Tips

Bombs in the Mail

The likelihood of you ever handling a bomb is extremely remote. There are approximately 16 explosive devices per *190 billion* pieces of mail.

To reduce the chances of ever becoming involved with a mail bomb, however, you should become familiar with the known characteristics of mail bombs and the proper procedures to follow if you *suspect* one has been discovered.

Please keep in mind that bombs can be enclosed in either a parcel or an envelope. The outward appearance is limited only by the imagination of the sender. However, mail bombs have exhibited some unique characteristics that may assist you in identifying a suspect mailing.

- Mail bombs may have an excessive amount of postage stamps affixed.
- Letter bombs may feel rigid or appear uneven or lopsided.
- Parcel bombs may be unprofessionally wrapped, with several combinations of tape used to secure the package. They may be endorsed *Fragile — Handle With Care* or *Rush — Do Not Delay*.
- Mail bombs may bear restricted endorsements, such as *Personal* or *Private*.
- Mail bombs may be addressed in distorted handwriting, or the name and address may be prepared with homemade labels or cut-and-paste lettering.
- Mail bombs may have protruding wires, be wrapped in aluminum foil, possess visible oil stains, or emit a peculiar odor.

Of course, the existence of any one or a combination of these characteristics does not necessarily indicate a bomb is in the mail. If you suspect a bomb is in the mail, or is about to be placed in the mail, then you should act accordingly.

If You Suspect a Mail Bomb

1. Isolate the mailing and evacuate the immediate area.
2. Immediately contact your supervisor who, in turn, will contact the local police department and postal inspector.
3. If possible, open windows in the immediate area to assist in venting potential explosive gases.
4. If the article is being presented for mailing, do not accept it until you're satisfied it is not an explosive device.

Remember: If you have any reason to believe a letter or parcel is suspicious, do not take a chance or worry about possible embarrassment if the item turns out to be harmless. Contact your supervisor and postal inspectors immediately.

Mail Order — Will You Be a Victim?

Before ordering that miracle product that sounds so good in that advertisement, stop and look at these ten tips for mail order purchases:

1. **Examine each offer carefully.** Beware of exaggerated claims on products or prices. If the claims relate to health or physical appearance, consult your family doctor about the value of the product. Be wary of a scientific discovery claim by an unknown company.
2. **Check before ordering.** If you have any doubts about the offer or the company. Call the Better Business Bureau and Chamber of Commerce in the city in which the business is located, or consult your state or local consumer protection office.
3. **Do not rely on a picture of the item.** Note the description, size, weight, color, and contents. Completely describe in the order the article or service you are purchasing.
4. **Look for a company's policy on returns.** If it isn't stated, ask for it.
5. **Include explicit instructions, itemizing individual purchases by product number and price.**
6. **If a substitute product is an acceptable alternative, say so.** Indicate the alternative that is acceptable in a short note, including any restrictions on additional cost or desired features.
7. **Be sure to enclose shipping, handling, or tax charges with the order.**
8. **Do not send cash with the order.** Pay only by check, money order, or credit card. Include your address on your check or money order in case the order and payment are separated.
9. **Keep a record of the order.** Include the name and address of the company and the date sent.
10. **Order holiday gifts well in advance to avoid heavy seasonal mail volume.** Specify where each gift should be sent. Clearly indicate the recipient's name and how the gift card should be signed.

The fact that a product is advertised in a responsible newspaper or magazine does not mean the publishers have verified the advertiser's claim.

Similarly, the fact that products are offered for sale by mail does not mean the Postal Service has verified the advertiser's claims. A good maxim to follow in mail order purchases is, "If it sounds too good to be true, it probably is."

Don't become a victim of mail fraud.

Themes and Schemes of Mail Fraud

We of the Postal Service want to help our customers get our best service. We are determined to deliver mail accurately and on time, and to help our customers use our wide range of services to their best advantage. We can all save time, money, or both when we shop through the Postal Service.

How can you get the best deal when you shop through the Postal Service — when you shop by mail? Or, at least, how can you avoid getting the worst deal? Mail fraud victimizes hundreds of thousands of people each year.

Mail fraud is a scheme to get money or anything of value from you by offering a product, service, or investment opportunity by mail that does not live up to its claims. It's an attractive scheme to get your money or valuables. None of us would fall for fraud if it looked like fraud, right? Most of the time, mail fraud looks like something else — an exceptionally good deal, an outstanding business opportunity, a gift, or a chance to make a quick buck without too much effort.

More and more Americans are shopping by mail and benefiting from the many good products offered by reputable companies. But every year, con artists collect millions of dollars through mail fraud and its representation schemes. They offer unbelievably good deals that sound too good to be true — and are.

These thieves are vastly outnumbered by reputable, honest mail-order dealers. But we need to learn to recognize the bad guys.

Mail fraud artists paint rosy pictures for the people they rob. But if we look closely we'll see certain patterns appear again and again. Examining some of the themes and schemes of mail fraud will help us understand some of the patterns of the trade. If we each become more aware, we can protect ourselves and, perhaps, advise a few friends and customers along the way.

The millions of dollars lost annually through mail fraud schemes fully justifies stringent penalties for these criminal and civil offenses. Yet worse harm than mere loss of money results when some of the prime victims of mail fraud artists — chronically ill people — suffer additional damage by putting their faith in fakers. These victims may place their confidence and, of course, their money, in quack claims to cure arthritis, leukemia, cancer, herpes, and even AIDS. There are bogus remedies for baldness, cellulite, and even body measurements perceived to be less than ideal by the owner of the body in question. Some so-called super cures may allege to treat several problems at once. Victims may neglect legitimate medical treatment or lose their time, money, and good health in the pursuit of useless, costly, or even harmful programs or medicines.

It is not only the desperate who can be tricked by these schemes, however. Business owners, television station managers, and even certified public accountants have fallen for mail fraud schemes that are often cleverly constructed and difficult to detect. It is embarrassing to admit we've fallen for a phony offer, but consumer complaints are the basis for most cases studied by the Inspection Service.

For example, there was the Super-Reducing Slim Skin that promised users they would lose 14 inches in 25 minutes. Here's how it's supposed to work. You put on the one-size-fits-all item, exercise vigorously for 10 minutes, then relax for 15 minutes. Next you take your trusty vacuum cleaner, the same one you sweep up dust and dirt with, attach it to the leg of your Slim Skin outfit, turn on the vacuum, and just suck 14 inches out of the suit and off your body. Does this sound too good to be true?

It didn't sound too good to be true to more than 50,000 people who purchased Slim Skins at $14.95, according to a Chicago postal inspector. While these people didn't lose weight fast, they quickly lost $14.95. And, as is often the case in mail fraud schemes involving personal appearance, many victims were too embarrassed to report their experience to us. They shouldn't have been. It's happened to a lot of people — too many.

No matter what our economic or educational background is, our age or our gender, there is a mail fraud scheme that promises to meet our wants. There are distributorship frauds; phony job opportunities; medical schemes; unsolicited gifts you might feel obligated to pay too much for; investment and home improvement frauds; and insurance, charity, and work-at-home schemes. There are chain letter and land frauds.

Mail-order shopping can be a big convenience for you. Fortunately, most mail-order advertisers are honest. Still, the Postal Service wants to protect all of us from those who discredit the mail-order industry by stealing. Be alert for mail-order schemes and avoid falling for deceptively attractive offers. Let's help ourselves and our customers get the best from the Postal Service.

How Not to Get Conned

How many times have you heard, “It’s a chance of a lifetime” or “It’s the best offer you’ll ever have.” How many times have you been offered a no-questions-asked free gift? Nobody would fall for fraud if it looked like fraud, right? So, most of the time, it looks like something else — a good deal, a business opportunity for a fast buck, or a free gift.

Fraud works because people don’t recognize it until it’s too late. To stop fraud, you’ve got to know it when you see it. First, know your con. Fraud includes many different activities. A con game is fraud. A crook tricks a victim into handing over some money and then takes off with the cash. Shady or dishonest business practices are frauds. They convince consumers to pay more money than a product or service is worth. Phony investment deals or fake business opportunities are frauds. They take advantage of a person’s desire to make money.

Here are some good rules to follow all the time whether or not you suspect fraud:

1. **Don’t believe “something for nothing” offers.** You get what you pay for.
2. **Be suspicious of high-pressure sales efforts.**
3. **Ask for identification.** Check out both the individual and the organization.
4. **Get several estimates.** Compare services, prices, and credit offers.
5. **Get agreements in writing.** Insist that agreements are in plain English, not legalese.
6. **Read all contracts and agreements before signing.** Have a lawyer examine all major contracts.
7. **Check the firm’s reputation.** Call your Consumer Affairs Office or local Better Business Bureau.
8. **Pay by check, never with cash.**
9. **Pay installments.** Arrange to pay one-third at the beginning of the job, one-third when the job is nearly completed, and one-third after the job is done.

Fraud artists frequently rely on the same old tricks. You’ll find that you may already be familiar with some of them. These are some of the more common frauds:

- **Repair frauds —** Repair frauds are simple to execute but difficult to detect. Some crooked repair people don’t fix the problem, but they charge you anyway. Some use inferior parts. Others charge you for work that you didn’t expect. Some will repair one thing, but make sure that something else will go wrong soon. If you know for sure what the problem is, don’t tell the mechanic. See if their recommendations agree with your diagnosis.
- **Home improvement fraud —** Watch out if somebody offers to do repairs for an unusually low price, or if a firm offers to make a free

inspection, or if the workers say that they just happen to be in your neighborhood and notice your house needs some work done. These are the favorite tricks of dishonest home repair firms. Check identification of all inspectors.

- **Business opportunity fraud —** Some work-at-home ventures are honest. However, most require that the finished product meet certain standards of quality before the company will buy them. Few products actually meet those standards. Ask for a list of other participants. Contact them before you sign up.
- **Charity fraud —** Charity fraud does a lot of harm. The swindler takes advantage of people's good nature and takes their cash — money that was meant for people in need. You can make sure that the money does get into the right hands. Give to charities that you know; check out the ones you've never heard of. Check with the National Charities Information Bureau (212) 929-6300. They can tell you whether the organization is a legitimate charity.

Other frauds include those involving investments, door-to-door sales, self-improvement, medical and health, and bait and switch schemes. When they're conducted by mail, they all become mail fraud.

If you think you've been conned, contact the police, your local district attorney's office, and the local Better Business Bureau. Contact the Postal Inspection Service if you suspect mail fraud.

Avoiding Swindles

Con games — swindles. Most of us think we would be the last people in the world to be tricked into handing over our hard-earned money for deals that in retrospect are obviously phony.

But confidence artists are experts in human psychology and behavior. They know how to win over your confidence with their smooth talking and self-assured manner. Unless you are careful, you may find yourself turning over cash or buying worthless merchandise. You won't be able to recognize a con by the way he or she looks, but you can be on the lookout for some of their "pitches."

If you are offered a deal that sounds too good to be true, chances are that's just the case — it is too good to be true. It's a rip-off.

If you are asked for cash to close the deal, be cautious. Why won't a check do? Investigate before you lose your money.

Home Improvement Scams

There are two popular home improvement scams:

- A contractor stops by your home, tells you there is something seriously wrong with your roof, gutters, etc. If you sign a contract right away you will get a 50-percent discount and a money-back guarantee. The deal sounds too good to pass up so you pay and get your contract. Shortly after the work is done, you may find that the repair breaks down. Then when you read your contract, you find in fine print that the contract guaranteed only that the job would be done, but not that it would last.
- A contractor stops by your house and tells you that he or she is new in the neighborhood. The contractor says he will resurface your driveway at cost if you allow an ad for the contractor's firm on your lawn or house saying the contractor's company did the job. He tells you all that's needed is some cash in advance for materials. If you give the contractor the cash you can be sure this is the last you will ever see of your money or the contractor.

Phony Bank Examiner

Another popular con is the phony bank examiner. In this "game," someone calls telling you he or she is a bank examiner. The individual asks you to withdraw a large sum of money from your bank account so he can secretly check the honesty of a bank employee who he believes is stealing money from the bank. The phony bank examiner meets you and shows you fake identification, if you request it. If you withdraw the money and give it to the phony bank examiner, the phony will even give you a receipt for it and tell you that you will get your money back just as soon as the teller is caught. Of course, you never see your money again. There is no reason for anyone to ask you to withdraw money from a bank for a "special purpose." If someone does call or approaches you asking that you withdraw money from the bank, be sure to report it to the local police and to your bank manager.

Mail Frauds

Mail frauds should be easy to recognize because the same frauds have been perpetrated over and over again. Unfortunately, most of us would like to believe the claims that we can make instant profits with little investment in a mail order business, or that we can buy secret remedies to cure our health problems. Because of this we shell out our money without ever realizing we have been had. In fact, some mail frauds are so good that the victims swear, even after they have been defrauded, that they are happy with the product, information, or remedy they received in the mail.

There are dozens of swindles perpetrated by professional con artists, each with dozens of variations. The best way to recognize you may be dealing with a con artist is to listen or look for these words in his or her conversation or ads:

> *Cash, Home Improvement, Secret Investment Plans, Get Rich Quick, Something for Nothing*, or *Contests* (not backed by reputable firms).

If you read or hear these words from someone you are thinking of doing business with, back away and tell the person you would like to take a while to think about the plan. This will give you time to check the plan with the Better Business Bureau or your district attorney. Most importantly, if you are victimized by a con artist, report it to the proper authorities and be willing to testify in court. This is the only way to put the con out of business.

How to Crimeproof Your Home

Each year, more than 6 million burglaries are committed in houses and apartments. Why so many? There are three reasons. It's profitable — victims lose more than $1 billion a year to burglars. It's easy — thieves often enter through an unlocked door or window, or by using a key. It's safe — burglars are seldom caught.

But what can you do to make it harder for crooks? Outside of your home, you can start by trimming back large bushes that burglars can hide behind. Make the doors and windows visible to neighbors. Don't leave ladders and tools lying about that could be used to enter your home. Install lighting on porches, in yards, and at all entrances to your home and garage. Also install large, reflective house numbers so that police can find your home quickly.

Now, take a look at your doors and windows. Is it a solid wood or metal door? Does it fit well in the frame? Could it be pried open easily? Is the lock solid, and does it provide good protection? Are the door hinges on the outside where the pins could be removed?

Burglars look for sliding glass doors because they are easy to open. Determined thieves may lift the door off its tracks. To prevent this, adjust the rollers at the top and bottom so that the door operates smoothly but cannot be lifted out of the track. Also, a bar can be placed along the track to prevent the door from being slid open if the lock were to fail.

Many burglars will use a key to gain entry to your home. Be careful to whom you give keys. Don't let them fall into the wrong hands. Never carry identification tags on your key ring or holder. When you move into a new home or apartment, have the locks changed or rekeyed. Make a list of everyone who has a key to your house. Every so often, check to be sure they haven't lost those keys. Don't ever hide a key outside your house. Burglars know all of the hiding places.

Windows are another obvious target. Keep them locked — especially basement and first story windows. Many standard windows have a small thumbturn lock in the center. They can be pried open or easily reached through a broken pane. Hardware stores have special key locks for windows, but an easy, inexpensive method to secure your windows is to drill a hole at an angle through the top frame of the lower window partially into the frame of the upper window. Then insert a nail or an eyebolt. The window can't be opened until you remove the nail or bolt.

Some more elaborate methods of protecting your home include installing grates or grills on windows and doors, a burglar alarm that sounds a bell or siren outside of your home and at the local police station, or an automatic dialing alarm on your telephone.

Don't invite trouble. Be cautious about letting people know your daily routine or vacation plans. Be wary of crank telephone calls, surveys, or wrong numbers. Burglars use these methods to case your home. Tell your children and baby-sitters never to give any information to strangers over the telephone.

If you go on vacation, remember that an empty house is a tempting target for a burglar. Keep in mind these simple tips to help safeguard your home in your absence:

1. Before you go away, inform your local police department. Give them the license tag numbers of cars parked at the house or those that will be there while you are gone. Be sure to tell them the dates you will be away, and who will be contacted in an emergency.
2. Stop all deliveries of mail and newspapers or have a neighbor or friend pick them up for you.
3. Have someone mow your lawn, shovel snow, or rake leaves to give your home a lived-in look.
4. Plug in timers to turn lights and a radio on and off.
5. Hide garbage cans in the basement or a storage shed.
6. Ask a neighbor to park occasionally in your driveway.
7. Leave your blinds, shades, and curtains in a normal position.

If, when you return, the door is broken open or you confront a burglar, go to a neighbor’s house and call the police immediately. A delay of 5 minutes can mean the difference between catching the criminal or not. Wait outside for the police to arrive. After a burglary, don’t touch anything before calling the police.

Prevent Burglary at Your Home

Burglaries account for about one-fourth of all crimes in the United States. One burglary attempt takes place every 10 seconds. And, on average, $475 worth of goods is taken from each burglarized home. Of course, these are only statistics. There is no way to tell whether or when your home will be burglarized, or how great your loss might be.

You can greatly reduce your chances of becoming a burglary victim by taking some sensible, inexpensive precautions. You see, most burglars are opportunistic amateurs who thrive on those of us who make it easy for them to enter, steal, and escape. Anyone who makes it difficult for the burglar is likely to be left alone. Here are some things you can do to eliminate an easy burglary opportunity at your house.

1. Install lights at all entry points to eliminate dark areas in which burglars can work unnoticed.
2. Trim trees and bushes so your doors and windows can be observed by neighbors and police patrols.
3. Equip your doors with 1-inch-throw deadbolt locks.
4. Lock your doors whenever you leave the house — even if you will only be gone a few minutes.
5. Lock your windows with key-operated auxiliary locks. You can also, and less expensively, pin your windows shut by drilling through the sash into the frame and inserting nails in the holes.
6. Patio doors should be secured with a strip of wood placed in the bottom track to prevent sliding and screws placed in the top track to prevent the door from being lifted out.
7. Use large, visible house numbers so that police can quickly locate your house in an emergency.
8. If you are going on vacation, make sure your home has a lived-in look. Buy several electric timers to turn lights and radios on and off in your home, following the same pattern as you would if you were at home.
9. Stop all newspapers and mail deliveries so they don't pile up on your doorstep and tip off burglars to your absence. In the summer, if you are going on an extended vacation, ask a neighbor to mow your lawn. In the winter, ask your neighbor to shovel your walk when it snows.
10. Be a good neighbor in return. Watch your neighbor's house for any suspicious activity. If suspicious activity occurs, call the police. If your neighbor is home, be sure to call him or her also.
11. Don't keep excess cash and jewelry or other gold and silver items around your home. These items belong in a safe deposit box.
12. Ask your local law enforcement department about Operation Identification. They will provide you with an identifying number to engrave on all valuables that you keep at home, making them easier to trace in case they are stolen. Place stickers on your window alerting potential thieves that you participate in Operation Identification. This may serve as a deterrent.

Protect Your Post Office Against Burglary

Burglary is often a crime of opportunity. Burglars aim for the easiest targets, but most will give up if they can't get in within a few minutes. Let's make it hard for post office burglars. By following some tips, we can make their work difficult, risky, and unprofitable.

Before Closing

1. Put all surplus cash in the bank.
2. Put all remaining cash, food coupons, stamp stock, and money order forms in security containers, vaults, and burglar-proof chests.
3. Never store cash or accountable paper in service counter drawers. They can be pried open easily by burglars.
4. Be sure that safes and vaults are fully locked.
5. Do not hide combinations to safes in the offices.
6. If vault doors or safes can be seen from the street, leave enough light burning to light these areas only if the local patrolling law enforcement agency requests that this be done.
7. Set the alarm.
8. Make sure all doors and windows are locked when you leave.

If a Burglar Gets In

If you come to work and suspect that your post office has been burglarized:

1. Don't go in. The burglar may still be inside.
2. Immediately call police and postal inspectors and wait for them to arrive.
3. Stay a safe distance away, but close enough that you can see if anyone leaves.
4. Write down any descriptions, license numbers, or other information. Do not attempt to apprehend the burglar.

If a burglary is not obvious to you until after you have entered the post office:

1. Don't touch anything.
2. Immediately call police and postal inspectors.
3. Protect the crime scene. Lock doors if necessary to keep others away.

Protect Yourself in Your Home

What does $475 mean to you? A paycheck? A vacation? To a burglar, it's the average value of a single haul — the TV, stereo, or tools that are stolen.

It doesn't take much to outsmart most burglars. They're usually not professionals. Most often they're kids taking advantage of an easy mark. So easy, in fact, that often they can go right in through an unlocked door or window. No wonder there's a burglary every 10 seconds

Want to stop the clock on burglars? A good first step is to *always* lock your doors, even when you're going out for just a minute. Remember these simple tips, too:

1. **Check your locks**. They should be deadbolts with a strong metal bar extending 1 inch into the door frame.
2. **Reinforce windows.** Put nails in window frames so the windows can't be opened more than a few inches until you take the nails out.
3. **Secure sliding glass doors.** Try this simple safeguard for sliding glass doors: when you close and lock the door, put a small wooden beam or broom handle in the door track. Even if the lock is jimmied, the door will be hard to open.
4. **Make your home looked lived in.** Make sure your home always looks lived in, especially when you're not there. Stop the delivery of newspapers and mail, or ask a neighbor to collect them so things won't pile up outside your door. Use automatic timers to control lights and radios. You can buy timers at hardware or department stores. Set them so lights go on in different rooms at different times.

Preventing Auto Theft

In 1997, more than 1.3 million vehicles were stolen in the United States — about one vehicle every 30 seconds.

Car thieves, like home burglars, generally have an easy time of it. Their thievery is made simple by car owners who obligingly leave doors unlocked (in four out of five cases of auto theft) or who leave keys in the ignition (in one out of five cases).

Precautions

Though professional car thieves have entered the field in increasing numbers, most cars are still taken by amateurs who can be stopped fairly easily. You can greatly increase your protection against this type of crime by taking the following sensible precautions.

1. **Never leave your keys in an unattended car.** Even when you are running a quick errand, take your keys and lock your car.
2. **Protect your key numbers.** Potential car thieves often note identification numbers printed on ignition keys. They can obtain duplicate keys from car dealers by posing as the car's owner and presenting the key number. Car dealers or locksmiths can punch out these numbers from your keys, eliminating the problem. Before having this done, however, record these numbers in a safe place in case you need duplicates.
3. **Never attach a tag with your name and address to a key ring.** If the keys are lost or stolen, the tag will lead the thief directly to your car — and your home. Also, leave only the ignition key with a parking attendant. A dishonest parking lot attendant may have house keys duplicated and sell them, along with your name and address, for a tidy sum.
4. **Avoid leaving an auto unattended in public parking lots for an extended period of time.** A car is five times more likely to be stolen from an unattended lot than from the street or an attended lot.
5. **At night, park in well-lighted areas with pedestrian traffic.** Auto thieves don't like working in spots where they are clearly visible.
6. **Make it tough to tow your car.** Whenever possible, turn wheels sharply toward the curb when parking. This makes it extra difficult for thieves to tow your car.
7. **Lock all doors and roll up windows.** Be sure vent windows, a favorite means of entry for thieves, are also shut tight.
8. **Remove all valuables**. When you park the car, remove your CB, tape deck, portable phone, or other valuable possessions from the seat. These items tempt thieves and should be locked in the trunk. If possible, also remove the CB antenna and stow it in the trunk.
9. **Engrave your valuables.** With an electric engraver, etch your social security or operator's license number on CBs, tape decks, and similar items. Consider engraving the same number in several places under

the hood, on car doors, trunk lid, or other conspicuous places so that a positive identification can be made of your vehicle if it is recovered after theft.

10. **Record your vehicle identification number** (located on a small metal plate on the dashboard) and store it in a safe place.
11. **Never leave the automobile registration or your driver's license inside the car.** Carry these items in your wallet. If you don't, thieves will be able to produce legitimate documents when stopped by police.
12. **Consider the purchase and installation of security devices**, such as:
    a. Interior hood lock and release.
    b. A second ignition switch or "kill switch" that prevents electrical current from reaching the coil or distributor.
    c. A fuel switch that prevents fuel from reaching the carburetor.
    d. A locking gas cap.
    e. An alarm device that will activate a siren, horn, or lights — or all three — to frighten the thief away before he or she is able to steal your car.

Security While Traveling

You are probably more vulnerable than you know to theft, robbery, or even assault while you are traveling away from home. You can, however, substantially reduce your chances of becoming a crime victim while traveling by taking a few sensible precautions.

1. **Never carry large amounts of cash.** Plan on using your automatic teller machine (ATM) card to withdraw only the amount of cash you need whenever feasible. Or, before starting that trip, estimate your expenses and purchases and carry a number of traveler's checks. Most stores, restaurants and motels take traveler's checks. If you lose your traveler's checks, they can be replaced. Cash cannot. Record traveler's check numbers and keep them in a safe place.
2. **Carry credit or ATM cards.** Record their numbers and leave the record in a safe place, apart from your luggage and/or with someone you can contact easily. You will need these numbers to report loss or theft, and to have the cards replaced.
3. **Leave unnecessary valuable items at home.**
4. **Make sure your suitcases are permanently identified with your name and address, and that they have locking devices.**
5. **Check your homeowners' insurance.** Determine what coverage your insurance provides while you are traveling or staying in a hotel or motel.
6. **Clean out the car.** If you are traveling by automobile, empty the trunk of unnecessary items. Never leave anything valuable in the car — such as CB radios or car phones — unless they are stored in the locked trunk or covered storage well.
7. **Give attendants only the ignition key.** If you turn your car over to a parking attendant or service station, leave only the ignition key. Never leave the trunk key or house keys. Make sure your house keys don't have your name or address on them.
8. **Check your escape routes in hotels.** When you stop at a hotel or motel you should determine the most direct route to and from your room, and the most direct route to fire escapes, elevators, and the nearest hall phone. Lingering in hallways or other isolated areas is an invitation for assault.
9. **Be security conscious in hotel rooms.** When in your room, use all auxiliary locking devices on doors and windows. Don't rely only on chains only as a deterrent. Use the door viewer to identify anyone requesting entry before you open the door. Open the door only if you are certain the person has legitimate reason to enter your room. If in doubt, call the hotel or motel office.
10. **Safeguard your valuables in hotel rooms.** Once you are safely in your room, unpack and place belongings in the closet and dresser. Lock and stow empty suitcases so they can't be used to carry property out of your room. Take your valuables and place them in the hotel or motel safe.

11. **Be cautious in hallways and parking lots.** Be alert in the hallways, elevators, and parking lots. Report anyone who appears suspicious to the hotel or motel security people.
12. **Practice common sense on elevators.** When you are by yourself, don't enter an elevator with anyone who arouses your suspicions. If someone you are not sure about gets on the elevator with you, wait to signal your destination until they get off, even if that means riding all the way back to the lobby. Stand close to the control panel so you can reach the emergency alarm if necessary.
13. **Watch around your car.** Have a friend or the hotel or motel security person walk with you to your car if it is parked in a dark area. You can drop the person back at the main entrance.

By following these tips, you can increase the likelihood of having a safe trip. Always remember that common sense and caution can help confound crooks and make your travel safe and leisurely.

Preventing Personal Assault

Although most crimes are against property rather than against people, a substantial number of crimes involve robbery, purse snatching, or other forms of physical or sexual assault. In order to reduce your chances of becoming a victim of crimes against your person, you must be cautious in your home, in your car, and on the street.

What can you do to decrease your chances of being assaulted, short of locking yourself in the house and not allowing anybody to enter? You can do several things that don't cost money, are effective, and can be learned and practiced by everyone.

1. **Put your money away.** A conspicuous display of cash, or a bulging wallet in your back pocket, can make you a target.
2. **Hold on tight.** Don't make yourself a target by dangling your purse from your wrist. If you do carry a purse, hold it tightly. If you are only holding onto it with one finger, the chances are a crook will be holding onto it with five fingers.
3. **Walk wisely**. While walking on the street, be wise. Stay out of high-crime areas and stick to well-lighted and well-traveled parts of town. Avoid walking by doorways, shrubbery, and any other dark places where someone might hide. If you think you are being followed, don't go directly home. Immediately head toward the closest well-lighted area. Try to find a store or gas station that is open. Whenever you must walk outside at night, try to take a friend with you. Always act as if you know where you are going or as if you are meeting someone. This may serve as a deterrent.
4. **Put the gun away.** Never carry a weapon. It can easily be turned against you.
5. **Check out your car**. While driving, keep doors locked and windows rolled up. Check your car for uninvited passengers before you get into it. Always park it in well-lighted areas. Never park next to vans. Never pick up hitchhikers.
6. **Be wary when your car breaks down.** If your car breaks down, pull over to the side of the road. Put your hood up, turn on the flashers, and tie a cloth to the antenna. Then get in the car, lock the doors, roll up the windows, and turn the engine off. When someone stops, roll your window down just enough to ask them to phone for help.
7. **Always lock your doors.** Most people lock their doors when they leave home, but it is just as important to lock them when you are at home. The best locks in the world won't do any good if they are not used. Install a peephole in your door and check the identity of all callers, including repairmen, deliverymen, or salespersons. Don't let strangers in to use the phone. Offer to make the call for them.
8. **Don't give out information over the phone.** Do not give your name or address to any caller and never tell anybody you're home alone. Children and baby-sitters should be instructed not to give out information either.

9. **Be cautious of the laundry room.** If you live in an apartment house, don't go to the laundry room alone.
10. **Be cautious in revealing your identity.** If you are a woman, list only your initial and your last name on the mail box and in the telephone directory.

Attacks and Personal Safety

The safety and sanctity of the mail should be every postal employee's concern. However, if confronted with a potential injury by a robber or assailant, then clerks, carriers, drivers, and all other postal employees should make personal safety the primary concern.

The Postal Inspection Service uses every investigative means available to identify, apprehend, and prosecute offenders who jeopardize the safety of on-duty postal employees. Aggressive attention by the Postal Inspection Service has helped reduce the number of such offenses.

If you are the victim of a holdup, the Inspection Service suggests you follow this advice to protect yourself and to aid investigators in catching the offenders:

1. **Comply with the robber's demands.** Do not endanger yourself by resisting or physically attacking the aggressor. Assume that any gun used in a robbery is loaded.
2. **Do not anger or harass the attacker.** Often, robbers are under the influence of drugs and are not rational. Take no unnecessary risks.
3. **If the robber presents a holdup note or other written instructions, try to keep it.** Such evidence often provides key information to investigators. Handle the note as little as possible to avoid damaging the evidence.
4. **Report a robbery as soon as possible.** Report such an incident as soon as possible to the nearest postal inspector or inspector-in-charge and to the local law enforcement agency.

While you should not jeopardize your safety, there are several things you can do to help investigators track down the offender. The most important is making mental notes of key information that could help law enforcement officials identify the robber.

1. **Clothing**. Note the color, style, and condition of hat, shirt, tie, scarf, coat, jacket, gloves, trousers, skirt, and shoes. Look also for brand names.
2. **Physical characteristics.** Pay attention to hair color, whether hair is thick or thin, straight or curly, and the part and style or combing. What color are the eyes, and are they close set or far apart, small or large? Is the nose small or large? Is the mouth small, large, broad or narrow? Is the chin square, broad, long, or narrow? Is the complexion light, dark, ruddy, or pale? Remember to note race, sex, age, height, weight, mustache, beard, or sideburns. Does the robber have a slight, medium, or heavy build? Is the robber wearing jewelry or glasses?
3. **Identifying marks.** Are there any such marks — scars or tattoos?
4. **Vehicle.** If a vehicle is used, note the make, model, color, and license number.
5. **Weapons.** If a weapon or other equipment is used, is it an automatic, revolver, rifle, or shotgun?

6. **Other identifying features.** What about accent, manner of walk, names or phrases said that could assist investigators?

The mail is very important, ***but safeguarding your personal safety is the most important thing to remember when you are being attacked or robbed!***

Protect Yourself Against Rape

Rape — it's a terrifying thought. So lots of women don't think about it. But there are some things you ought to know:

- Rape happens to women of all ages, from all walks of life.
- It's planned.

Rapes aren't the result of "uncontrolled passion." The rapist isn't after sex. Most have normal sexual relations available to them. Instead, the rapist uses sex as a violent way to express his anger.

Tips

Chances are you'll never have to learn firsthand about rape. To make this even less likely, keep these tips in mind.

1. **Make your home secure.** Most people think that rapes occur only in dark alleys. But about one-third of all rapes occur in the victim's own home. So practice good home security. Don't let that stranger or repairman into your place without making sure that he is who he says he is.
2. **Watch where you go**. When you're outside, there are places where rapists may hide — poorly lit streets, doorways, or even in passing cars. Stay away from them. If you can, go out with a friend.
3. **Check your car.** Some people forget that crime can happen in their cars, too. That's where a lot of rapes are committed. Check your car before you get in, and lock the doors when you drive. Avoid parking near or around vans. Most important — don't pick up strangers or get into a stranger's car.

If You Are a Victim of Rape

1. **Get help.** Call the police immediately. Call a friend.
2. **Don't destroy possible evidence.** Don't bathe, douche, or wash your clothes.
3. **Go to the hospital as soon as possible**. They'll treat your injuries and check you for sexually transmitted diseases.
4. **Call your local rape crisis center.** They will give you important information and emotional support. You can find their number in the telephone directory.

Many women's groups sponsor rape information programs. See if you can attend one or ask a local group to sponsor one.

Arson — How Not to Get Burned

The impact of arson can be shattering. Even if no one is killed, people may lose homes and possessions and suffer a terrifying experience.

Many arson fires are set by vandals or by people who are getting even with someone — not by professional “torches.” Many vandalism fires are set by teenagers who cruise through a neighborhood and indiscriminately set fires. These kids get a kick out of destroying property or like the excitement of the fire and the fire engines. Arson for revenge may follow a quarrel, a bitter argument between lovers, or the firing of an employee who vows to get back at the company.

Preventive Measures

What can you do to prevent arson, to protect your property and your neighbors?

1. **Lock up flammables**. Put away or dispose of materials that could be used to start fires. Store cans of gasoline or other flammable liquids under lock and key.
2. **Clean up trash.** Clean up piles of rubbish — old rags, boards, newspapers, etc. — that could be used to set fires.
3. **Keep your property well lighted**. Arson fires are often set under cover of darkness.
4. **Install smoke detectors in your house.**

Reporting

Inform the authorities:

1. If you see someone suspicious in your neighborhood, report it to the police.
2. If you have any information about a suspicious fire, report it to the arson unit or the police immediately.

As a neighbor:

1. Report abandoned buildings that are easy targets for arsonists.
2. If suspicious-looking people are seen using vacant buildings, notify the arson unit or police.
3. Organize an arson prevention and detection program in your neighborhood.
4. Support your local fire department and arson unit.
5. Encourage community leaders to support adoption of fire safety education in the schools and media campaigns to heighten public awareness.
6. Establish an arson hotline to report suspicious activity or persons in your neighborhood.

These are just a few things you can do to put a stop to arson. Arson often leaves devastating results to your home and possessions — but these fires can also kill loved ones. Let's put such fires out cold.

16 Hazardous Materials Handling

What Are Hazardous Materials?

Postal regulations divide hazardous materials into 16 commonly used classifications. Following is a summary of the conditions under which many hazardous materials may be accepted for mailing.

Classification	Example	Domestic Transportation and Maximum Amount That is Mailable
Explosives	Fireworks	Nonmailable (S, A)
Flammable liquids — flashpoint 21–140°F	Cigarette lighter fluid	1 qt. metal; 1 pt. other (S) Nonmailable (A)
Combustible liquids — flashpoint 141–200°F	Kerosene	1 gal. (S, A)
Flammable solids	Highway flares	25 lbs. (S) Safety matches only* (A)
Oxidizers	Bleach	1 pt. liquid, 25 lb. solid (S) When specifically permitted** (A)
Corrosive liquids	Acid solutions	1 pt. 15% solution or less (S) When specifically permitted** (A)
Corrosive solids	Acid solids	25 lbs. (S) When specifically permitted** (A)
Flammable compressed gas	Aerosol paint	27.7 oz. (S) Nonmailable (A)
Nonflammable compressed gas	Freon	27.7 oz. (S, A)
Poisons, Class A	Phosgene	Nonmailable (S, A)
Poisons, Class B*	Arsenic	8 oz. (S) 8 oz.** (A)
Carcinogens	Benzidine	8 oz. (S) 8 oz.** (A)
Etiologic agents	Biological materials	4 liters (S) 50 milliliters** (A)
Radioactive material	Radium	Transportation standards in revision.
Irritating materials	Tear gas	Nonmailable (S, A)
Carbon dioxide	Dry ice	Mailable (S); Mailable with specific marking*** (A)

(S) = Surface

(A) = Air

* Only mailings between specified senders and addresses are acceptable.

** With shipper's certificate as qualified by PUB 52.

*** Shipper's certificate not required for air transportation when 5 lbs. or under or when it is used as a refrigerant for materials used for diagnostic or treatment purposes.

Material Safety Data Sheets — Your Key to Chemical Safety

Living in the modern world, we are all aware that the use of chemicals offers convenience and progress at home and at work. Naturally, we want to avoid dangerous overexposure to chemicals, especially on the job. Such exposure is possible, even though our work is not in a chemical or manufacturing industry.

The Postal Service's Hazard Communications, or HazCom, Program, was created to protect your health and safety. Three important elements are at the heart of the HazCom Program: warning labels on containers, training on the safe use and handling of chemicals, and the Material Safety Data Sheet (MSDS).

Know What's on an MSDS

An MSDS is a printed page that gives you all the critical information you need about how to use, transport, and store chemicals in order to protect yourself, as well as what to do in case of emergencies or overexposure. The information on an MSDS includes:

- The chemical's name or names.
- Name, address, and phone number of the manufacturer.
- List of the chemical's ingredients.
- Permissible exposure limits (PEL) or threshold limit value (TLV).
- What conditions or other substances will cause the chemical to catch fire, explode, melt, or turn into a dangerous gas.
- How the chemical usually looks and smells.
- How to put out a fire involving the chemical.
- What to do if the chemical spills or leaks.
- How to prevent dangerous exposure.
- Health hazards, such as "skin irritant" or "cancer-causing."
- Symptoms of overexposure.
- What to do if you are overexposed to the chemical.
- When the MSDS was prepared.

The information for each chemical's MSDS is put together by the manufacturer for that chemical. The sheets often look different from each other, but they always provide the same information.

Know Where the MSDS Is Kept

MSDSs are readily accessible in (state where the MSDSs are kept in your facility). You should always read the MSDS *before* you begin a job using a chemical. Even if you've used the chemical before, the manufacturer may have changed its formula, which may change the steps you should take to

protect yourself. Taking proper precautions listed on the MSDS, such as wearing personal protective equipment, can prevent illnesses.

If you don’t understand something on the MSDS, or have questions about HazCom, ask me and I’ll find out the answer for you. Remember, HazCom works best when you are fully informed and involved.

Reading Material Safety Data Sheets

The Material Safety Data Sheet, or MSDS, is written information that can help protect you from overexposure to chemicals you find on the job. The MSDS is part of the Postal Service's Hazard Communications Program. Each company that manufactures chemicals can design its own MSDS form. The form sections may be in different order, but the basic kinds of information on any MSDS will be the same. Here's a breakdown of those sections and the information they contain.

- *Chemical Name* lists the identity of the substance (the name on the label), the date the MSDS was prepared, the name and address of the manufacturer, and usually a phone number for emergencies and more information.
- *Hazardous Ingredients and Chemical Identity* includes the names of substances in the chemical that might be dangerous, and safe exposure limits, such as the permissible exposure limit (PEL), set by the Occupational Safety and Health Administration, or the threshold limit value (TLV). This section also lists common names for the chemical.
- *Physical Characteristics* describes many physical qualities of the chemical, and lets you know what's usual or safe. For example, it states how the chemical looks and smells; what the boiling and melting temperatures are (important in case a chemical might become a gas you could breathe); what the evaporation rate is, listed as *percent volatile;* how easily the chemical dissolves; and how heavy it is (this tells you if it will sink, float, or dissolve in water).
- *Fire and Explosion Data* tells you the lowest temperature at which the chemical could catch fire — the flash point. This section also lets you know if the chemical is flammable (catches fire below 100°F) or combustible (catches fire above 100°F). It also lists the best ways to put out a fire involving the chemical.
- *Reactivity* describes what happens if this chemical comes in contact with air, water, or other chemicals. It describes conditions (like heat) or materials (like water) that can cause the chemical to react by burning, exploding, or releasing dangerous vapors. The chemical is called *unstable* or *incompatible* with these conditions or substances.
- *Health Hazards* lists the ways the chemical might contact your body, like splashing on your skin or being breathed in as a vapor, as well as possible symptoms of overexposure. This section tells you if overexposure might make existing medical conditions worse and describes emergency first aid procedures.
- *Usage, Handling, and Storage* describes how to clean up an accidental spill, leak, or release. It also describes any special procedures that must be followed during the cleanup. This section also explains how to handle, store, and dispose of chemicals safely. Remember, if there is an accident, notify your supervisor immediately, and take care of it

yourself only if you are trained to do so and are wearing the proper equipment.

- *Special Protection and Precautions* explains special personal protective equipment and other equipment to use when working with the chemical, any additional health or safety information, signs that should be posted, and other information not covered in other sections.

Chemical Warning Labels

From corrosive industrial cleaners to toner in the office copier, hazardous materials are common in every workplace. The Postal Service's Hazard Communication Program was created to protect you from overexposure to chemicals. The three most important parts of our HazCom program are training on the safe use and handling of chemicals, Material Safety Data Sheets (MSDSs), and chemical warning labels.

The Purpose of Labeling

The warning label provides important information about a chemical and is attached to the container. Only the warning label will tell you exactly which chemical is inside the container it is attached to.

Label Information

The most important information on the label is a single word indicating how hazardous the chemical is. *Danger* means it is the most hazardous kind of chemical. *Warning* is somewhat less hazardous, and *Caution* is the least dangerous. But even chemicals labeled *Caution* can be harmful to your health if you do not follow proper procedures.

Labels must list basic information, such as the chemical's name; whether or not it's flammable; the name, address, and phone number of the manufacturer or distributor; a list of the chemical's ingredients; and target organs that could be affected by the chemical. Other listed information includes:

- How reactive the chemical is. That is, when it will catch fire, explode, or become a dangerous gas.
- If the chemical is radioactive.
- What kind of fire extinguisher to use in case of fire.
- What protective equipment you should wear when using the chemical.
- What procedures for use, handling, storage, and disposal.
- What first aid to administer.
- How to handle spills and leaks.

Torn or Missing Labels

The most dangerous chemical is one without a label. Never handle a chemical until you know what it is. If a label is missing, tell your supervisor.

If a label is torn or damaged, it can lead to serious consequences. The one piece of information you need to protect yourself may be torn off or illegible.

To Read Warning Labels

Always read the label *before* you begin a job using a potentially hazardous chemical. Even if you've used the chemical before, the manufacturer may

have changed the formula or concentration. If you have more questions, read the Material Safety Data Sheet — it provides valuable information, often in greater detail than the warning label. The manufacturer is required to supply the MSDS upon request. Remember, if you make it a habit to read *all* labels, you'll be confident that your health and safety are protected.

Working With Solvents — Recognizing and Preventing Hazards

Even if you've worked with degreasers and other solvents for a long time, practicing safe handling procedures is always important. Even common solvents like degreasers and paint thinners can be hazardous when you breathe their vapors, splash them on your skin, or store them near heat.

Safe Storage

Follow these simple storage procedures to reduce the possibility of danger from leaks, fires, and explosions:

1. Read the Material Safety Data Sheet (MSDS) and container label on all solvents in question. Find out flash points (the temperature at which they catch fire) and volatility (how quickly they evaporate).
2. Use the personal protective equipment recommended on the MSDS.
3. Store all solvents in temperature-controlled environments, out of direct sunlight.
4. Store flammable solvents, if possible, where special ventilation and electrical systems minimize the possibility of accidental fire or explosion.
5. Store flammable solvents in tightly closed safety containers.
6. Dispense solvents from safety-approved nozzles and dispensers only.
7. Store solvents away from oxidizers (any substance that causes fires easily).
8. Check storage containers regularly to make sure the spouts, caps, and containers are in good working order and don't leak.
9. Replace damaged container parts, such as flame arrester screens, immediately.
10. Never smoke around storage or dispensing containers for solvents.
11. Don't carry lighters, matches, or sparking devices when handling solvents.
12. Know the location of spill control stations and materials, eyewash stations, and safety showers.

Safe Disposal

Follow these general rules for safe disposal of solvents:

1. Know whether contaminated clothing, personal protective equipment, rags, and other materials should be decontaminated, cleaned, or disposed of. Dispose of waste in tightly covered safety containers.
2. Always pour flammable solvents into approved containers, never into the sewer, storm drain, or garbage, or on to the ground.

3. Never smoke around disposal sites or containers.

The Postal Service is your partner in keeping you safe from hazardous exposure to chemicals such as solvents. By following the procedures described, you'll make sure you're doing all you can to ensure everyone's health and safety.

Emergencies Involving Solvents — Quick Responses Save Lives

Solvents are chemicals that dissolve other substances. They are found throughout industry and include such common chemicals as paint thinners, degreasers, and industrial cleaners. If you are careful, you may never be involved in a solvent emergency. But solvents can spill or leak, and the vapors can catch fire or explode. If you know what to do during an emergency, you can protect yourself and others, perhaps even saving your own or a coworker's life.

1. **If solvent emergencies arise.** The more quickly you respond during a solvent emergency, the less likelihood there will be of serious damage to people and property. You'll always be ready if you know our emergency plans. Before handling solvents, read all Material Safety Data Sheets (MSDSs) and warning labels that list emergency procedures. Handle an emergency yourself only if it is small and you are trained to do so. If it is a fire, make sure to use the right kind of extinguisher. Evacuate the area as quickly as possible as you let others know about the emergency. Notify your supervisor and the appropriately trained persons immediately. Do not reenter the emergency area unless you have personal protective equipment (PPE) and have been properly trained. If your clothing becomes contaminated, remove it immediately. Decontaminate, wash, or dispose of it. If there is a *medical emergency,* the injured person should receive first aid and see a doctor as soon as possible.
2. **If solvents are inhaled or swallowed.** If you inhale solvent vapors, your symptoms may include headache, dizziness, nausea, vomiting, or difficulty in breathing. Get to fresh air immediately. Ask a coworker to get medical attention for you. If you swallow a solvent, ask your coworker to get medical attention immediately, and to call the local Poison Control Center. Do not eat or drink anything unless it says to on the solvent's label or you are told to do so by a medical professional.
3. **If solvents get in your eyes.** If you get a solvent in your eye, go to the nearest eyewash station. If no eyewash station is available, use any low-pressure clean water source. Remove contact lenses that can trap or absorb the solvent. Flush the affected eye for 15 to 20 minutes, letting water run from the inside to the outside of the eye. Keep the injured eye turned downward to prevent the solvent from running into the other eye. Do not apply neutralizers or ointment to the eye.
4. **If solvents get on your skin.** If you get a solvent on your skin, rinse *(don't scrub)* the affected area for 15 to 20 minutes. Use a faucet, hose, or other available clean water source. If the solvent is dry, brush it off before you begin to rinse. Remove any contaminated clothing as you wash. Do not put the clothing back on until it has been decontaminated. If possible, after rinsing, cover the burn with a sterile dressing. Do not apply burn ointments or neutralizing solutions.

5. **If the solvent emergency is over.** Symptoms of solvent exposure may appear immediately, or they may not be noticeable until some time later. If you've been involved in a solvent emergency, remain under medical observation until your doctor feels it is safe to release you.

Handling Corrosives

Even if you've worked with corrosives before, you may not know all the different kinds of hazards they represent. You'll find corrosives — which are harsh substances, usually acids or bases — in such processes as industrial cleaning and battery charging.

Store Corrosives Safely

Take the time to follow these safe storage suggestions and you'll help avoid many corrosive hazards:

1. Read the Material Safety Data Sheet (MSDS) and container warning label for the corrosive you're handling. Use personal protective equipment and procedures listed on the MSDS. Never take shortcuts with corrosives. It isn't worth it
2. Acids and bases are an explosive combination, so store them separately. You'll protect yourself and coworkers from fires and dangerous gas leaks, too. If you're not sure whether the substance is acid or base, read the label or MSDS.
3. Store corrosives in tightly closed approved containers separate from flammable and combustible liquids. Dispense them only from approved nozzles and dispensers. Store large drums and containers below eye level whenever possible to avoid splashing your face or eyes.
4. Check storage containers regularly to make sure that there are no leaks, and that caps and spouts are in good working order.
5. Don't smoke around corrosives. Don't carry lighters, matches, or sparking devices when you're handling corrosives.
6. Know the location of spill control stations and materials, eyewash stations, and safety showers, and sources of fresh air. A quick response can make a life-or-death difference.

Dispose of Corrosives Properly

The Postal Service has carefully planned disposal procedures. If you don't understand them, ask your supervisor. After all, your health and safety are at stake.

1. Know whether contaminated clothing, personal protective equipment, rags, and other materials should be decontaminated, cleaned, or disposed of. Dispose of waste in tightly covered safety containers.
2. Always pour liquid corrosives into approved containers, never into the drain, sewer, garbage, or onto the ground.
3. Know the location of eyewash stations, safety showers, fresh air, and spill control stations and materials. They could save someone's vision, lungs, or even life.
4. Never smoke around disposal sites or containers.

The Postal Service has established safety policies and procedures to protect you from overexposure to corrosives. Be sure to use these guidelines, and your own common sense, for maximum protection.

Emergencies Involving Corrosives

Corrosives are found in processes like industrial cleaning and battery charging. These harsh acids and bases can explode, cause fires, or harm the human body very quickly. Your fast response to an emergency can mean the difference between a slight skin irritation and a blistering burn, or even between life and death.

1. **Be smart ahead of time**. Start now by learning the Postal Service's emergency procedures. Then, *before* you handle, store, or dispose of a corrosive, read the Material Safety Data Sheet (MSDS) and warning label to learn about the most effective emergency procedures. Handle a spill, leak, fire or other emergency yourself only if it is small *and* you are trained to do so. Untrained personnel can make the situation more dangerous. Evacuate the area as quickly as possible as you let others know about the emergency. Notify your supervisor or an appropriately trained person immediately. If a corrosive gets on your clothes, keep your gloves on while you remove the clothes immediately. Follow postal procedures for cleaning or disposing of the clothes.
2. **Remember water and air are usually the best medicine.** For most medical emergencies involving corrosives, the first treatment should be water (for skin and eyes) or fresh air (for inhalation). But, since corrosives are so harsh, immediate treatment by medical professionals is always critical.
3. **If a corrosive gets in your eyes, go directly to the nearest eyewash station.** If none is nearby, use any low-pressure clean water source, such as a hose. Remove contact lenses that can absorb or trap the corrosive. Flush your eyes for 15 to 20 minutes, letting the water run from the inside to the outside of the eyes. Do not apply neutralizers or ointments, which can make potential damage worse. You may need to restrain someone who has corrosives in the eyes in order to administer first aid. Immediately *after* flushing, get the person to a medical professional for further treatment.
4. **If a corrosive gets on your skin, rinse *(don't scrub)* the affected area for 15 to 20 minutes.** If you are not near a safety shower, use a faucet, hose, or any clean water source. Remove any contaminated clothing and, if necessary, dispose of it. Do not put clothing back on until it has been decontaminated or cleaned. Do not apply burn ointment or neutralizing solutions. If possible, after rinsing, cover the burn with a sterile dressing. Then get the injured person to a medical professional immediately.
5. **If you inhale corrosive vapors, get to fresh air immediately.** The symptoms can range from light throat irritation to serious difficulty breathing. Ask a coworker to get medical attention for you right away.
6. **If you swallow a corrosive, ask a coworker to get medical assistance immediately and to call the local Poison Control Center.** Don't eat or drink anything unless it says to on the corrosive's label or MSDS or if a medical professional tells you to.

7. **After the emergency is over.** Corrosives do much of their damage quickly, but some symptoms may not appear immediately. If you've been in an emergency involving corrosives, stay under medical observation until your doctor releases you.

Your best protection against corrosives is your common sense. Take the time to do the job right and think through all procedures carefully. Always use the appropriate personal protective equipment recommended for the corrosives you are handling.

17 Safety and Health Quizzes

Motor Vehicles

Questions

1. What do red flashing lights on school buses mean?
2. How far must you park from a fire hydrant?
3. If two drivers meet on a hill where the road is too narrow to pass, who backs up to let the other pass?
4. If two cars meet at an intersection, who has the right-of-way?
5. When being passed by another vehicle, what should you do?
   a. Slow down.
   b. Speed up.
   c. Maintain your speed.
6. When driving in fog what should you use?
   a. High beams.
   b. Low beams.
   c. Parking lights.
7. Alcohol is a factor in what percentage of highway deaths?
8. *True or false?* Fatal accidents are more likely to occur in urban areas rather than in rural areas.
9. What is the most common physical condition that lowers a driver's awareness?
10. What is the most dangerous place to carry a small child?
    a. Unbelted in the front seat.
    b. In your lap.
    c. Unbelted in the back seat.
11. There are three lanes going in the same direction. Which one is safest?
12. *True or false?* Smokers have fewer car crashes than nonsmokers.
13. *True or false?* Driving with headlights on during the day is a dangerous nuisance to oncoming traffic.
14. To pass another vehicle, how much faster should you be traveling?
15. What is the best way to stop a vehicle in snow?
    a. Turn off the ignition.
    b. Open the door and drag your foot.
    c. Pump brakes gently.
16. A road is most slippery after a heavy rain or just as the rain begins?
17. What percentage of accidents occur within 5 miles of home?
    a. 43 percent.
    b. 56 percent.
    c. 69 percent.

18. What is the most dangerous day of the week to drive?
19. When someone is tailgating you, what should you do?
    a. Slam on the brakes to scare him.
    b. Speed up to leave him in the dust.
    c. Stop in a safe place and let him or her pass.
20. When the light turns green, what should you do?
21. What does the color red on traffic signs indicate?
    a. Entering a hunting zone.
    b. Detour.
    c. Stop or prohibited area.
22. When parking uphill, how should you set the front wheels?
23. In which gear should you leave a stick shift vehicle when parked facing downhill?

Answers

1. Stop. Do not pass. Children loading or unloading.
2. A minimum of 15 feet.
3. The driver going downhill.
4. The car on the right.
5. c. Maintain your speed.
6. b. Low beams.
7. About 40 to 50 percent.
8. *False.* About two-thirds of motor vehicle deaths nationwide occur in rural areas.
9. Fatigue.
10. b. In your lap.
11. The center lane.
12. *False.*
13. *False*. Headlights increase visibility for oncoming traffic.
14. At least 15 mph faster than the vehicle being passed.
15. c. Pump the brakes gently.
16. When the rain begins.
17. c. 69 percent.
18. Saturday. It accounts for 20 percent of all deaths on the highway.
19. c. Stop in a safe place and let him or her pass.
20. Wait several seconds, look both ways, then proceed.
21. c. Stop or prohibited area.
22. Turn the front wheel to the curb to prevent rolling into the street.
23. Reverse.

Occupational Safety and Health

Questions

1. According to OSHA regulations, what part of a step ladder should you never stand on?
2. What is the correct safe angle for an extension ladder?
3. When using a ladder on smooth concrete floors, what precaution should you take?
4. What size step ladder is needed when you need to stand on the fourth step?
5. Name two safety measures to secure a truck while unloading.
6. What two factors are considered when deciding how to mount a fire extinguisher?
7. What does OSHA stand for?
8. When using a hammer, what should you never do?
   a. Hit another hammer.
   b. Smash walnuts.
   c. Hammer nails over your head.
9. What is the purpose of machine guarding?
   a. To prevent theft.
   b. To prevent machine damage.
   c. To prevent operator injury.
10. According to OSHA, the minimum height of letters in exit signs is:
    a. 3 inches.
    b. 6 inches.
    c. 0 inches.
11. What may happen if you open the two top drawers of a file cabinet?
12. How are oily rags stored?
    a. Thoroughly dry in a commercial dryer.
    b. In an open ventilated container.
    c. In a covered metal container.
13. When is a cutting tool safer?
    a. When it is sharp.
    b. When it is slightly blunt.
    c. When you apply more pressure.
14. What is the most important thing to remember about the cord when working with power hand tools?
15. Name two materials electrician’s ladders can be made of.
16. What is the safest way to use a step ladder on soft ground?
17. When refueling your vehicle, what should you do to prevent a fire?

18. What is a common cause of spontaneous combustion?
19. What type of fire extinguishers does the Postal Service install in the work room?
20. Where is the nearest fire exit from where you are sitting?
21. What are the four types or classes of fires?
22. What should you bend when lifting a heavy object?
    a. Knees.
    b. Back.
    c. Arms.

Answers

1. The top step.
2. One foot out for each four feet high.
3. Use a second person to hold the ladder and ensure the ladder has nonskid feet.
4. A six-foot ladder.
5. Set the parking brake and chock the rear wheels.
6. Visibility and accessibility.
7. Occupational Safety and Health Administration.
8. a. Hit another hammer.
9. c. To prevent operator injury.
10. b. 6 inches.
11. The cabinet may tip over.
12. c. In a covered metal container.
13. a. When it is sharp.
14. To make sure it is properly grounded and not frayed.
15. Wood or fiberglass.
16. Place it on a board large enough to span all four legs.
17. Turn off the engine.
18. Oily rags.
19. Primarily ABC, multi-purpose, dry chemical, 10-pound extinguishers.
20. See if you know it.
21. The four classes of fires are:
    Class A — Ordinary combustibles leaving an ash.
    Class B — Flammable liquids.
    Class C — Electrical.
    Class D — Metal.
22. a. Knees.

Family and Home

Questions

1. What caused the Great Chicago Fire?
2. *True or false?* Most fatal falls in the home occur from a height of three feet or more.
3. In the event of a fire at home, what three things should every family member know?
4. In what kind of container should gasoline be stored in and around the home?
5. What type of fire extinguisher is best suited for use around the home?
6. What are the three most important items to have by the fireplace?
7. What happens when you use water to extinguish a grease fire?
8. Name the two effective steps to extinguish a grease fire in a cooking pan?
9. What is the most effective way to detect a fire in the home?
10. What is the correct way to remove an electrical plug from the wall?
11. What do you do with a frayed cord?
12. What is the third prong on an electrical plug used for?
13. What is the safest way to store an unused refrigerator?
14. What is the biggest safety hazard to children in the home?
15. What time of the day are child-poisoning accidents most likely to occur?
    a. Early afternoon.
    b. Middle of the night.
    c. Late afternoon.
16. What is the best way to prevent children from drowning?
17. When is it okay for a child to swim alone?
18. What books should you keep away from your children?
19. What should you do with a swollen can of food?
20. Which is the most dangerous room in the house?
21. What is the best way to prevent skin rash when using home solvents?
22. *True or false?* Burns are the major cause of home-related accidents.
23. What helps to prevent a person from walking into a sliding glass door?
24. How should household cleaning materials be stored?
25. In a fire, how can you tell if a door is safe to open?
26. What is the first step for removing toast stuck in the toaster?
27. What is the maximum number of electrical cords that may be safely plugged into a normal duplex home outlet?

Answers

1. Mrs. O'Leary's cow allegedly kicked over the lantern.
2. *False.* Two-thirds of fatal falls in the home occur at floor level.
3. Where fire extinguishers are, what routes of escape are available, and how to crawl on the floor if smoke is present.
4. In a clearly labeled, UL- or FM-listed safety can.
5. ABC, multi-purpose fire extinguishers.
6. Screen, fire extinguisher, and a metal ash bucket.
7. It spreads the fire by splattering.
8. Cover the pan and turn off the heat.
9. Use smoke detectors.
10. Grasp the plug and pull straight out.
11. Throw it away and replace it.
12. Grounding.
13. Take the door off.
14. Poisons, such as household chemicals and drugs, that are within a child's reach.
15. c. Late afternoon.
16. Teach them to swim, wear life preservers, and never swim alone.
17. Never.
18. Matchbooks.
19. Throw it away.
20. The kitchen.
21. Wear protective gloves.
22. *False*. Falls are.
23. Apply large visible decals.
24. In clearly marked containers, inaccessible to children.
25. Feel the door or doorknob for heat.
26. Disconnect the electrical plug.
27. No more than two.

Sports and Recreation

Questions

1. Can you get a sunburn on both a sunny and a cloudy day?
2. Why wear sunglasses when skiing?
3. During what four hours is it most dangerous to be in the sun?
4. What insect transmits Rocky Mountain Spotted Fever?
5. To prevent injury, when should joggers stretch?
6. What is the most important safety equipment for racquetball?
7. What is the leading cause of injuries for runners?
   a. Improper shoes.
   b. Overexertion.
   c. Sidewalk cracks.
8. What piece of safety equipment is most important for bicycling?
9. From which side should you always mount a horse?
10. When camping, why should you not sleep with food in your pocket?
11. When ice skating, is it better to wear one or two pairs of socks?
12. What is the maximum depth of scuba diving without decompression techniques?
13. What flammable liquid should never be used to start a barbecue?
14. What should you assume when picking up any firearm?
15. What is the safest color to wear when hunting?
    a. Camouflage.
    b. Hunter green.
    c. Orange.
16. What is the most important safety device on any boat?
17. What color of sunglass lenses best protects against the sun's rays?
18. What disease can be caused by overexposure to the sun?
19. In what sport can a person suffer from nitrogen narcosis?
20. What does Smokey the Bear always say?
21. What type of tennis racket helps prevent "tennis elbow"?
22. What are the three things you should do to extinguish a campfire?
23. Does a fire burn faster uphill or downhill?
24. What three colors are most easily seen on motorcyclists?
25. Name five important things to check on a vehicle towing a trailer.

Answers

1. Yes.
2. To protect against snowblindness from harmful glare and UV rays.

3. Between 10 a.m. and 2 p.m.
4. The tick.
5. Before and after running.
6. Eye protection.
7. b. Overexertion, too far or too fast.
8. Protective head gear.
9. The left side.
10. You may get a surprise “bear hug.”
11. One pair of socks.
12. Between 100 and 150 feet.
13. Gasoline.
14. That it is loaded.
15. c. Orange.
16. Approved life jackets for each occupant.
17. Gray.
18. Skin cancer.
19. Scuba diving.
20. “Only you can prevent forest fires.”
21. A graphite racket.
22. Douse it, scatter it, and smother it.
23. Uphill.
24. Yellow, orange and red.
25. Hitch, safety chains, lights, mirrors, and tire pressure.

18 Local Safety and Health Program

Note: Insert any local safety and health policies, rules, regulations, guidelines, and additional safety information.