



Clear Creek Baptist Bible College

Worker Safety Guidelines

The document provides guidelines to increase awareness of employee safety and provides guidelines that allow the campus community to help reduce employee injuries. The design of the guidelines is to address safety and loss exposures to Clear Creek Baptist Bible College. It is the goal of the institution to establish guidelines in “loss prevention” and “loss control”.

Definition:

Loss Prevention: is the act of taking proactive measures to prevent or abate an identified risk. This can take the form of improved safety and training programs; implementation of new, less hazardous processes; programs/projects to reduce injuries and property loss; and/or general safety enhancements.

Loss Control: is the act of reducing loss severity by identifying the factors that magnify or prolong a loss and taking proactive measures to lessen the effects of those factors.

The personal safety of each employee at Clear Creek Baptist Bible College is of primary importance. The prevention of work-related injuries and illness is of such consequence that it will be given precedence over operating productivity whenever necessary to protect employees.

We will maintain a safety program based on modern techniques of accident prevention in compliance with Federal, State and Local laws regarding accident prevention and working conditions. To be successful, our program must embody the proper attitudes toward injury prevention on the part of management and employers. It also requires cooperation in all safety matters between each employee and his fellow workers.

Only through such cooperative efforts can a safety record in the best interest of all be established and preserved. Our objectives are to provide a safety program that will keep injuries reduced to a minimum.

Our Safety Program will include:

1. Providing mechanical and physical safeguards to protect employees against hazards.
2. Conducting safety inspections to find and eliminate unsafe working conditions or practices and to comply fully with the safety standards for every job.
3. Training all employees in good safety practices.
4. Requiring personal protective equipment to be worn by employees whenever necessary to protect them against injury.
5. Safety rules which employees are required to follow.
6. Prompt and thorough accident investigations to find out what caused an accident and to correct the problem so that it won't happen again.

The following information provides guidance to general safety practices as it relates to varying job functions as an employee of Clear Creek Baptist Bible College may encounter.

After reading the document each employee must sign and date the document on the last page. This provides accountability to the institution and the employee of basic practices to help reduce workplace accidents and injuries.

Beginning and Ending the School Year Safely

Clear Creek Baptist Bible College employees may encounter potentially hazardous situations when preparing the school and classroom at the beginning of the school year or when cleaning out their schools and classrooms when the school year ends. What can be done to prevent injuries?

Here are a few tips to promote safety:

- Do not use a chair or other object as a ladder. You should never access heights by standing on a chair or other object.
- Carry only what you can safely handle and lift with your legs, not your back.
- Carry loads with both hands and watch where you are going.
- Do not obstruct your vision with the load you are carrying.
- Use carts or dollies to handle heavy materials.
- If you think it is too heavy, it is too heavy. Ask for help.
- Use caution when using cleaning products.
- Wear skid-resistant shoes to prevent slipping.
- Be aware of trip hazards, such as open desk drawers, extension cords, stacked items, etc.

Tips for Hand Hygiene

Hand hygiene (i.e., hand washing or use of alcohol-based hand rubs) has been shown to cease outbreaks in health care facilities, reduce transmission of antimicrobial resistant organisms, (e.g. methicillin resistant staphylococcus aureus) and reduce overall infection rates.

The Centers for Disease Control and Prevention (CDC) has released guidelines to improve hand hygiene in health care settings. As part of these guidelines, the CDC is asking health care facilities to develop and implement a means of measuring compliance with hand hygiene recommendations. Some suggested compliance indicators include periodic monitoring of hand hygiene and feedback to personnel regarding their performance, monitoring the volume of alcohol-based hand rubs used/1000 patient days, monitoring compliance with artificial fingernail policies and conducting an assessment of hand hygiene compliance when infection outbreaks occur.

In addition to traditional hand washing with soap and water, the CDC is recommending the use of alcohol-based hand rubs by health care personnel.

- Alcohol-based hand rubs are fast-acting, cause less skin irritation and significantly reduce the number of microorganisms on skin.
- Alcohol-based hand rubs take less time than traditional hand washing. In an eight-hour shift it is estimated that an ICU nurse may save a full hour by using alcohol-based hand rubs in place of hand washing.
- Note that the volume of hand rubs needed to reduce the amount of bacteria on hands varies by product.
- Hand rubs should be used before and after treatment of each patient.

Health care personnel who care for patients at high risk of acquiring infections, such as patients in intensive care or in transplant units, should avoid wearing artificial nails and should maintain the length of their natural nails at a quarter inch or less.

The use of gloves does not eliminate the need for good hand hygiene in health care settings. Likewise, good hand hygiene does not eliminate the need for gloves. Gloves reduce hand contamination by 70 to 80 percent, prevent cross-contamination and protect patients and health care personnel from infection. Gloves should be changed before and after treatment of each patient.

When evaluating hand hygiene products for use in health care facilities, administrators or product selection committees should consider the relative efficacy of antiseptic agents against various pathogens. They should also consider personnel acceptance of hand hygiene products. Smell, consistency, color and the effect a product has on one's hands are all product characteristics that can affect personnel acceptance and usage.

Heat Safety

Working in a hot environment puts stress on the body's cooling system. When heat is combined with other stresses-like hard physical work, loss of fluids, humidity and fatigue-it may lead to heat-related illness, disability, or even death!

Water is crucial to helping the body adjust to high temperatures. The rate of water intake must equal the increased rate of water loss by perspiration to keep body temperature normal. **When it's hot, drink plenty of water!**

Heat stress hazards

The following are three common conditions that can result from the body overheating:

Heat cramps: Heavy sweating drains the body of salt, which cannot be replaced by simply drinking water. Painful cramps occur in the arms, legs, or stomach while on the job, or later at home. Move to a cool area at once if cramping is experienced. Loosen clothing and drink cool,

lightly-salted water or a commercial fluid replacement beverage. Seek medical aid if the cramps are severe, or don't go away.

Heat exhaustion: Inadequate water and salt intake causes the body's cooling system to break down. Symptoms include heavy sweating, cool, moist skin, body temperature over 100.4 degrees, weak pulse, and normal or low blood pressure. The victim is likely to be tired, weak, clumsy, upset, or confused. They will be very thirsty, and will pant or breathe rapidly. Their vision may be blurred. Get medical help immediately! Heat exhaustion can lead to heat stroke. Move the person to a cool, shaded area. Loosen or remove excess clothing. Provide cool, lightly-salted water. Fan and spray the victim with cool water.

Heat stroke: Heat stroke can kill a person quickly! Once the body uses up all its water and salt, sweating ceases. Temperature can rise quickly. The following are symptoms of heat stroke:

- weakness, confusion, distress, strange behavior;
- hot, dry, red skin;
- rapid pulse;
- headache or dizziness;
- In later stages of heat stroke, a victim may pass out and have convulsions.

Seek medical attention immediately if heat stroke is suspected. Until help arrives, move the victim to a cool area and remove excess clothing. Fan and spray them with cool water. Offer sips of water if the victim is conscious.

Heatwave guidelines

The following measures should help prevent the development of heat-related illnesses:

1. Slowdown in hot weather. Your body's temperature regulating system faces a much greater workload when temperature and humidity are high.
2. Heed early warnings of heat stress, such as headache, heavy perspiration, high pulse rate, and shallow breathing. Take a break immediately and get to a cooler location. Watch for heat stress signs among your co-workers.
3. Dress for hot weather. Lightweight, light-colored clothing reflects heat.
4. Drink plenty of water. Don't let yourself "dry out".
5. Increase your salt intake, preferably by adding salt to your food. (Consult your physician if you are on a salt-restricted diet.)
6. Try to get used to warm weather gradually. Take it easy for those first two or three hot days. Your body will have a better chance to adjust if you take it slow.
7. Get out of the heat occasionally. Physical stress increases with time in hot weather. Take breaks in a cool, shady location.

8. Wear a hat and long-sleeved shirt to prevent burning (which we know can increase the risk of skin cancer.)

DO:

- Drink plenty of water.
- Take breaks in a cool, shady area.
- Watch for symptoms of a heat stress, both in yourself and co-workers.

DON'T:

- Ignore symptoms of heat stress.
- Try to get a suntan while working.
- Try to "keep up" with the rest of the crew, even though you feel ill.

Preventing Slips, Trips, and Falls

- According to the U.S. Department of Labor, slips, trips, and falls are the most common occupational accident.
- In 2007, more than 17% of disabling work injuries was caused by falls.
- 15% of all accidental deaths are caused by falls, second only to motor vehicle accidents.
- Many of these falls can be prevented with general safety precautions.
- The two main causes of slips, trips, and falls are environmental conditions and human factors.
- A slip occurs when there is too little traction, or friction, between the shoe and walking surface.
- A trip occurs when a person's foot contacts an object in the way or drops to a lower level unexpectedly, causing the person to be thrown off-balance.
- A fall occurs when a person is too far off-balance.

The main causes of slips and conditions to be aware of include:

- Spills of liquids and other debris such as mud, water, grease oil, sawdust, powders, etc.
- Highly-polished or freshly-waxed floors
- Transitioning from one surface to another, such as walking from a carpeted surface to a smooth surface like tile
- Sloped walking surfaces
- Loose floor tiles, loose or unanchored floor mats, and loose floor covers
- Wet, muddy, or inappropriate foot wear

- Environmental factors such as rain, snow, and frost
- Mounting and dismounting equipment improperly
- Climbing ladders with wet, muddy, or greasy shoes

The main causes of trips and conditions to be aware of include:

- Uncovered cables, wires, or extension cords
- Cluttered walkways
- Open cabinets and desk drawers
- Changes in elevation such as unmarked steps
- Damaged or non-uniform steps and ladders

Other conditions and factors that may contribute to slips, trips, and falls include:

- Poor lighting
- Use of bulky equipment and PPE
- Improper material handling techniques
- Loud noise or distraction
- Medication or drug and alcohol effects

The following safety practices can be utilized to minimize the risk of slips, trips, and falls:

- Modify workspaces and work practices to reduce hazards – avoid distractions!
- Practice good housekeeping
- Keep all floors and walking surfaces clean and free of debris.
- Clean up spills immediately
- Block off contaminated areas
- Use caution signs to warn of a wet floor
- Repair or replace any damaged flooring as necessary
- Cover and secure all cords, wires, and hoses and keep them away from high traffic areas
- Ensure that rugs and floor runners are flat on the floor surface
- Keep all desk and file cabinet drawers closed
- Inspect equipment regularly to identify any fluid leaks
- Wear proper footwear, based upon the job being performed and current environmental conditions
- Ensure that shoes and all ladder rungs are free of debris before climbing ladders

- Avoid talking, reading, and other distracting activities while walking.
- Walk, don't run
- Carry small loads
- Use handrails when ascending or descending stairs
- Use a flashlight while walking in poorly illuminated areas
- Inspect work areas regularly to identify slip, trip, and fall hazards.
- Report all unsafe conditions immediately
- Ensure proper use of ladders

Cell Phone Safety

Cell phones, once a luxury and status symbol, are now a key element of doing business and a major part of our lives. Workers with cell phones may be accessible at any time during the work day. How safe are cell phones when we use them while sitting behind the wheel? The use of cell phones can create hazardous situations.

Drivers need to remain focused and aware of surroundings, pedestrians and other drivers. Using a cell phone while driving leads to unsafe actions such as:

- Following the vehicle in front of you too closely
- Maintaining improper lane position
- Failing to recognize traffic signals or signs
- Reacting slowly to traffic situations

Drivers using a cell phone are four times more likely than non-cell users to get into accidents. The risk of accident for drivers using a cell phone is as great as for drivers driving while under the influence of alcohol. In fact, cell phone users take three times longer to apply their brakes than drivers under the influence of alcohol. Some studies have even shown that the use of hands-free devices does not improve the level of safety. We should all be aware of the hazards associated with cell phone usage while driving.

Prohibiting the use of cell phones is the only way to keep drivers truly safe from the aforementioned hazards. Follow these safety tips to minimize the chances of injury:

- Pull your vehicle off the road during cell phone use
- If you must use a cell phone while driving, use hands free devices or speaker phones
- Keep conversations short
- Avoid using the cell phone during heavy traffic situations
- Keep extra distance between your car and the car in front of you

Workplace Fire Safety

Help prevent fires at your workplace by following these guidelines:

- Make sure all electrical equipment is protected.
- Store flammable and combustible materials in appropriate containers and away from heat sources.
- Maintain good housekeeping practices.
- Keep all equipment/machinery clean and well-maintained.
- Know where fire alarms are located.
- Keep fire exits clear, well-marked, and unlocked.
- Use caution when welding.
- Dispose of flammable liquids according to state/federal guidelines.

Additionally:

- Never leave open flames unattended.
- Don't take shortcuts with safety procedures.
- Don't overload circuits.
- Never smoke or use flame/sparks in an area where flammables are kept.

The most common workplace fire hazards include:

- Inattention
- Failure to adequately ventilate
- Unsafe storage of materials
- Unprotected or faulty equipment
- Failure to follow safety rules

Building Evacuation Drills

Purpose

- To familiarize staff with fire alarm and evacuation routes
- To evaluate the accounting process for all personnel known to be in the building
- To evaluate staff response to an alarm

Preparation

- Select a convenient time and date
 - Avoid scheduling drills during planned activities that cannot be disrupted, such as conferences, large training classes, etc. Reschedule drills if the weather is unacceptable.
- If necessary, obtain advance permission from the building manager
- Notify Maintenance – inquire about any other emergency systems testing that may conflict with your scheduled drill
- Recruit monitors from other buildings as needed
- Assign tasks to individuals:
 - Sound the alarm
 - Check that rooms are clear
 - Record time for last person out
 - Evaluate the accountability process
 - Stand by remote fire alarm panels which will alarm

Procedure

- Assemble the monitors and discuss the details of the drill
- Initiate the fire alarm system as directed by maintenance and start the stopwatch
- Monitor(s) check that runners do their job and all rooms are clear
- Monitor(s) check that the alarm can be heard in all locations
- Monitor the accountability process and time the last person out
- Monitor at remote fire alarm panel and advise responders that it is a drill
- Observe that no one re-enters the building until authorized
- When the building is checked clear, silence the alarm
- Secure the drill and let staff enter the building

Fire Extinguishers

Types and Applications:

Class A: Will put out fires in ordinary combustibles, such as wood and paper. These types of fires produce glowing embers or char. The numerical rating for this class of fire extinguisher refers to the amount of water the fire extinguisher holds and the amount of fire it will extinguish.

Class B: Should be used on fires involving flammable liquids such as grease, gasoline, oil, etc. The numerical rating for this class of fire extinguisher states the approximate number of square feet of a flammable liquid fire that a non-expert can expect to extinguish.

Class C: Are suitable for use on electrically energized fires or in materials near electrically powered equipment. This class of fire extinguisher does not have a numerical rating. The presence of the letter “C” indicates that the extinguishing agent is non-conductive.

Class D: Are designed for use on flammable metals such as magnesium, zirconium, potassium, and sodium. They are often specific for the type of metal in question. There is no picture designator for Class D extinguishers. These extinguishers generally have no rating nor are they given a multi-purpose rating for use on other types of fires.

Combination: Such as ABC or BC.

Location:

1. Conspicuous and clearly visible.
2. Readily accessible for immediate use.
3. Located along normal paths of travel & exit.
4. Not blocked.
5. Kept in designated locations when not being used.
6. Installed on hangers/brackets.
7. Class A & D extinguishers, travel distance < 75 feet.
8. Class B extinguishers travel distance < 50 feet.
9. Class C extinguishers--no minimum travel distance--locate in areas with electrical distribution equipment.

Inspection & Maintenance:

1. Monthly checks for:
 1. Inspection tag
 2. Anti-tamper seal
 3. Weight or pressure check
 4. Damage or missing parts
 5. Rust or corrosion
2. Maintenance
 1. Remove from service & place a spare in location.
 2. Only trained & certified people may repair or fill extinguishers.

Bad Weather Driving Tips

Tips on handling the common hazards of driving in rain, fog, snow, and ice:

Slippery roads (wet or icy)

- Stay below posted speed limits
- To avoid hydroplaning, try to drive in the tracks of the car in front of you
- Know your vehicle's braking system
- Watch for icy patches on bridges and in the shade
- Increase the distance between you and the car in front of you

Poor Visibility

- Reduce your speed so you can stop in whatever distance you can see ahead. Use your flashers if you're going slowly.
- Use your wipers
- Use low beams when visibility is a problem
- Wear sunglasses when there's glare from snow
- If snow or ice builds up on the windshield, stop and clean it off
- Increase the distance between you and the car in front of you

Rain hazards

- Stay out of puddles, they can hide potholes and flood your brakes. If brakes do become flooded, dry them by driving with the brake pedal down until they start working again.
- If spray from an oncoming vehicle blinds you, grip the wheel firmly, stay off the brake, and be ready to brake when the view clears
- Keep your windshield and windows clear
- Keep your windshield washer reservoir full
- Drive slowly and smoothly on slippery surfaces
- Apply brakes gently

Before you start

- Postpone your trip if necessary if bad weather is forecast
- Don't drive when fatigued
- Keep your car well maintained

Defensive Driving Tips

Let's face it; the roads of the world are a dangerous place. Don't become a casualty in the life-or-death race to get wherever it is you're going - always drive defensively!

Drive At An Appropriate Speed, Not Warp Nine

Obviously, if you need to shave 25 minutes off a 35 minute commute, the speed limit is out of the question. Plan ahead and allow enough time to get where you are going at the speed limit posted!

Traffic Signs, What Traffic Signs?

Many drivers think those pesky message boards along the side of the road that say things like "Stop" and "Yield" don't apply to them. They are the offensive drivers, the ones to watch out for! Those signs are there for a reason so pay attention.

Traffic Lights – No, this not a Drag Race

Don't worry if the guy in the car next to you gets through the intersection before you. If your car is slower than his, wait for the light to turn green. Don't invite trouble by trying to run a race!

The Turn Signal – Don't Keep 'em Guessing

Use your turn signal every time you are making a turn. Don't leave one blinker on at all times whether you're turning or not.

SUV Good, Humvee Better, Monster Truck Best

The size of your vehicle should not matter on the road. The rules of the road apply to everyone. Don't think that having four-wheel-drive is a license to completely ignore weather and road conditions. Remember you really need to be able to stop, or see, even if you have a bigger bumper than the vehicle in front of you.

Don't Park Like You Own The Place

Don't park in such a way as to take up three or four parking stalls. On the other side, remember to watch swinging those doors open when you park in close quarters.

Don't Misuse Travel Time

Travel time should be used for just that....travel. Don't try to hold a business meeting, have lunch, change your clothes, or take a nap while driving non-stop to the airport. Women have misused this long before technology stepped in by believing that it's much more efficient to put make-up on in route, using the rear view mirror as it was plainly designed to be used.

DON'T DRIVE UNDER THE INFLUENCE OF ALCOHOL OR DRUGS!

Fighting Driver Fatigue

Driver fatigue is a factor in many motor vehicle accidents. A study of more than 200 accidents by the Federal Highway Administration's Bureau of Motor Carrier Safety concluded that as driving time increases, driver performance deteriorates, driver alertness decreases and accident probability increases.

Extreme fatigue can affect a driver in many ways. It causes drowsiness, which can, at any moment, turn into total unconsciousness. Fatigue may also produce a mental state that will deceive drivers into believing that they are capable of driving safely. Fatigue also hampers the driver's ability to correctly judge distances, speed and driving conditions.

Fatigue can cause drivers to imagine conditions that do not exist. A reaction to an imaginary condition has caused many serious accidents. You should be aware of the signs of fatigue so you can take measures to counteract them. While alert, drivers usually sit relatively quiet in their seat. As drivers begin to tire, however, they often become restless, squirming, stretching and rubbing their eyes. You can experience short lapses of attention, lapses that can cause a serious accident.

As drivers tire, they pay less attention to the instrument panel and to the side mirrors. The tired driver will stare fixedly ahead, as if in a trance. Driving patterns will change. There can be irregular or erratic speed changes, weaving back and forth, and finally, crossing the center line or driving off the road entirely. A fatigued driver is a hazard to themselves as well as everyone else on the road.

Some of the precautions a driver can take to combat fatigue are:

1. Do not operate a vehicle beyond the Bureau of Motor Carrier Safety limitation on driving time.
2. Make frequent rest stops. Any activity that substitutes a different physical act for the monotony of driving helps to refresh the driver.
3. If available, drink coffee or water as they may sharpen your senses.
4. Do not take drugs! Certain commonly-used drugs may increase alertness and efficiency for a short period, but may often be followed by headaches, dizziness, agitation, irritability, decreased concentration or hallucinations.
5. Fatigue sometimes comes on very quickly. Drivers should get off the road before they fall asleep—instead of afterwards. A driver who can barely stay awake should pull well off the road and take an extended rest break.

Seat Belts Save

Buckle-Up—It's the LAW

Don't let these excuses keep you from buckling up:

The belts are uncomfortable:

New safety belt designs allow for total freedom of motion while driving.

It's better to be thrown from a car than trapped in it:

Three out of four people who are thrown from their vehicle die. Being thrown around inside the car can kill or injure as well.

I only drive around town-I'm not at risk:

Most accidents happen within seven miles of home and 80 percent of all serious injuries and deaths happen at less than 40 MPH.

I'm a good driver. I won't get in an accident:

Weather, road conditions, and other drivers can cause crashes as well.

There's no good excuse for not wearing a safety belt—it's the LAW! Buckle up to protect yourself and your loved ones.

Winter Driving Tactics

- One of the most terrifying experiences in winter driving is the skid. If a skid happens at high speed, the result can be a disastrous crash. It is imperative that you slow down at the first sign of a slick roadway. Most skids can be avoided by adjusting to the conditions, and it is possible to recover from skids if you know how.
- As skids are likely on curves and turns, slow down prior to entering a curve or turn and apply power slightly into the curve. Steering should be steady with no abrupt change in direction and, especially, no abrupt braking.
- Plan ahead for lane changes. Check your mirrors, check your blind spots and signal to traffic your intentions to change lanes. Then swing over in a long, gradual change. Make the move with the smallest possible steering change and with a light foot on the gas pedal.
- If you go into a skid, remember two cardinal rules—don't steer against the skid and don't hit the brakes. Instead, steer in the direction the vehicle is sliding until you feel recovery of traction, then slowly straighten the wheels and keep rolling.
- If braking is necessary before rolling traction is recovered, apply the brake pedal carefully so as not to lock the wheels and intensify the skid.
- The careful driver is constantly on the lookout for areas that might induce skidding, such as unexpected ice patches or piles of wet leaves, often found in shady areas or on overpasses. Keep in mind that wet ice, warmed by the sun, is more treacherous than "cold" ice.
- Above all, the expert driver knows that a safe stop on icy or snow-packed roads is a tricky maneuver that requires skill and good judgment. First of all, anticipate stops. Slow down gradually, well ahead of intersections, conscious of the fact that approaches to stopping places are apt to be polished and slick because of stopping and starting traffic.
- Because accidents are common in winter, a careful driver makes a double allowance for the sake of safety. First, drive on slippery roads at reduced speed. Secondly, increase following distance behind the vehicle ahead. This gives an extra space cushion for safe stopping in case there is trouble.
- Traction, as every driver probably knows, may be the difference between winter and summer driving. Drivers should learn how to get the best possible traction when the roadway is slippery.

- When you drive into deep snow, you may find that stepping on the gas only provides a spinning of the wheels, with little, if any, forward movement. In such cases, one should avoid over-powering. A light foot on the gas pedal and a high gear is preferable.
- If you get stuck in deep snow, you may only spin your wheels in trying to get out. Sometimes it helps to twist the steering wheel back and forth to push away snow in front, and then try again—lightly. A sprinkling of sand or light gravel in front of drive wheels, or a traction mat of wire mesh or a strip of carpet may be necessary.
- Braking distance depends directly upon the contact a vehicle's tires make with the surface of the road. Your tires should have good tread surfaces. There will be times that snow tires, and even chains, may be best to help keep your vehicle under control during those blustery winter storms.

Downed Tree Removal

When storms occur, downed trees can block public roads and damage power lines. Emergency crews are often sent out to clear downed trees and may face potential hazards including:

- Electrocution by contacting downed energized lines or contacting broken tree limbs in contact with fallen lines.
- Falls from trees.
- Being struck or crushed by falling tree limbs or ice.
- Being injured by emergency equipment such as chain saws and chippers.

Proper PPE including gloves, chaps, foot protection, eye protection, fall protection, hearing protection and head protection should be worn by workers using chainsaws and chippers to clear downed trees.

Only appropriate power equipment that is built to be used outdoors and in wet conditions should be used. All saws, chippers, and other tools should be used properly and according to their intended application. It is important that all equipment is well-maintained and functioning correctly in order for use. In addition, all equipment should have proper guarding, working controls, and other safety features as installed by the manufacturer.

Identifying Workplace Hazards

A hazard is anything that could cause an accident or incident. Risks are everywhere and inherent in many workplaces. Problems exist when the risk becomes an actual hazard. This happens when an employee becomes exposed to a risk in a way that creates a hazard. A successful safety management program depends on spotting these hazards early, evaluating the risk and removing or controlling hazards before they are harmful.

Identifying all hazards and potential hazards at a workplace requires planning and commitment from management and the workforce.

Four basic types of workplace hazards exist: chemical, physical, biological and ergonomic.

Chemical Hazards

Chemical hazards result from chemicals that can enter the body through inhalation, skin contact, absorption, injection or ingestion. Therefore, preventing a chemical hazard incident can be achieved by controlling routes of entry into the body. Examples of this would be proper use of Personal Protective Equipment or system modification such as the use of fume hoods.

Physical Hazards

Physical hazards are conditions which exist which can result in damage to the body itself. Hazards such as excessive noise levels, vibration from tools, radiation sources, slips and falls from poor housekeeping, and exposure to temperature extremes can often have immediate and cumulative health effects. Physical hazards must be identified and addressed to ensure a safe work environment.

Biological Hazards

Biological hazards result when a living organism or its properties causes an adverse response in humans. Biological hazards in the workplace come from agents such as infectious microorganisms, allergens and toxins. Health care institutions are often at the highest risk for biological hazards such as blood-borne pathogens and tuberculosis. However, even an office building can have biological hazards such as mold or building-related illness.

Ergonomic Hazards

Ergonomic hazards generally exist when there is a mismatch between a worker's physical capacity and the design of a work area, equipment or tools; or the physical demands of a job. Repetition, exertion, awkward posture and vibration may cause physical injury. The solution requires fitting the job and the tools to do the job, to the worker.

Lightning Safety

Thunderstorms that produce lightning are most likely to develop on hot, humid days. These storms can be very dangerous, especially if a person is outdoors without proper protection. If lightning is seen, protective action should be taken immediately.

Five Ways Lightning Can Severely Injure Or Kill

- **Direct Strike** – usually results in cardiac arrest and/or stoppage of breathing.
- **Side Flash** – occurs when a person is another route for the current to reach the ground. Death can result if the current passes through the heart or head.
- **Step Voltage** – spreads out through the ground from a struck pole or tree.
- **Conducted Current** – from poorly grounded electric power pole, through the wiring system. Can range from mild tingling shock to a massive current.

- **Secondary Effects** – can be from fires, fallen trees, etc., that occur as the result of a lightning strike.

Protection During Storms

- Seek shelter inside a building, car, or truck and close all windows and doors.
- Turn off all electrical appliances and unplug them if possible.

If Stranded Outside

- Stay away from tall, isolated objects such as trees, poles, clotheslines, etc.
- Avoid metal objects such as pipes, chain link fences, electric fences, etc.
- Drop objects that may conduct electricity such as pitch forks, rakes, hoes, etc.
- Standing under a group of trees that are shorter than others in the area is better than standing out in the open.
- Seek low ground such as ditches or gullies.
- Make your body low to the ground but do not lie flat. Curl into a fetal position or get on your knees and lay your body forward.
- If you are in a group of people, spread out.
- Stay clear of downed power lines and report them to police immediately.
- It is estimated that nearly 1,800 thunderstorms are occurring at any moment around the world. Most of us are so use to thunderstorms that we rarely consider them major threats.

Yet, they actually do significant damage. Consider the following:

- More people are killed on an annual basis from lightning strikes than from tornadoes.
- Electronic equipment, such as computers, telephones, fax machines, and electronic sound equipment can suffer severe damage from power surges.
- Water leaks create all kinds of problems from stains on ceilings to damaged insulation and carpeting.
- Wood can rot due to moisture buildup.
- Strong winds can cause limbs to fall from trees hitting cars, people, and buildings.
- Shingles can fly off roofs, contributing to water leaks.
- Hail can damage roofs and vehicles.
- Flash floods are also possible.
- And all of this normally occurs in a span of about 10-20 minutes. The good news is that with minimal effort, you can take steps to reduce, and, in some cases, eliminate these problems.

How to Minimize Damage from Thunderstorms

- Thunderstorms can occur quickly without warning. Others can be seen approaching. Danger signs for thunder storms include dark, towering, or threatening clouds and distant thunder and lightning. To estimate the distance in miles to a flash of lightning, count the seconds between the lightning and the thunder and divide by five.
- If a thunderstorm watch is issued, school leaders should be prepared to respond. A thunderstorm warning indicates a need to remain in a safe place. A severe thunderstorm can spawn a tornado.
- Precautions Before a Thunderstorm Occurs
- Some steps that schools can take prior to severe thunderstorms include the following:
- Install lightning rods in new buildings. Have older buildings inspected to determine if a lightning rod should be installed.
- Routinely trim dead branches off trees. Strong winds can cause branches to fall and do considerable damage.
- Secure outdoor objects that can blow in strong winds.
- Keep a battery-powered radio available in the school office with extra batteries.
- Obtain a NOAA weather/all hazards radio to alert you with immediate information on approaching severe weather.
- Have a professional electrician install a commercial surge protector at your circuit board to protect sensitive electrical equipment such as computers, telephones, copy machines, fax machines, and sound equipment. Make sure that electrical circuits are properly grounded.
- Clean the gutters every spring and fall. Make sure they are clear of leaves, twigs, and other debris that can cause drainage problems.
- Precautions During a Thunderstorm
- If a thunderstorm occurs, instruct staff members to take the following precautions:
- Do not handle electrical equipment or a telephone when lightning is striking. The lightning can follow the wire.
- Turn off electrical appliances such as air conditioners. Power surges from lightning can overload the compressors.
- Avoid water faucets and sinks because metal pipes can transmit electricity.
- Students in gym classes should not take showers during thunderstorms.
- If lightning or thunder occurs, those who are outdoors, such as ground's keepers or children participating in athletic events should come inside. It does not need to be raining for lightning to strike. It may occur as far away as 10 miles from any rainfall. Rubber-soled shoes and rubber tires provide no protection from lightning.
- Use the following safety precautions if you are caught with a group outdoors during a thunderstorm:
- Attempt to get into a building or car.
- If no structure is available, get to an open space and squat as close to the ground as possible.
- If in a woods, find an area protected by a low clump of trees; never stand underneath a single large tree in the open.

- Be alert of the potential for flooding in low-lying areas.
- Avoid tall structures such as towers, tall trees, fences, telephone lines, or power lines.
- Stay away from natural lightning rods such as gold clubs, tractors, fishing rods, bicycles, or camping equipment.
- Stay away from rivers, lakes, or other bodies of water.
- If you are isolated in a level field or prairie and you feel your skin tingle or your hair stand on end (which indicates that lightning is about to strike), bend forward, putting your hands on your knees. A position with feet together and crouching while removing all metal objects is recommended. Do not lie flat on the ground. Rather, minimize your contact with the ground.
- If you are driving, pull safely to the shoulder of the road away from any trees. Stay inside the car and turn on the emergency flashers until it is clear to drive.
- Checking for Damage Following a Storm
- Once the thunderstorm is over, check for damage; and respond to problems quickly in order to protect against further damage.
- Look for loose or hanging limbs from trees.
- Do a visual inspection of the roof for loose or missing shingles.
- Check trouble spots for leaks around windows or ceilings.
- Remove any debris or obstacles that create tripping hazards from sidewalks, parking lots, and outdoor stairs.
- Since thunderstorms are so common, often we fail to recognize the serious damage they can cause. While it takes little effort to implement a storm protection policy, the benefits can be enormous. Why not take action now to prevent these problems?

Avoiding Brake Failure

Accidents due to brake failure are tragic and often fatal. They occur due to a variety of reasons. There are two basic categories of brake failure:

- *Static* - Static failures occur when a vehicle is parked. An example of static failure is a parking brake not properly set, causing a vehicle to roll out of control.
- *Dynamic* – Dynamic failures occur when vehicle operators lose control of mobile equipment.

Suggestions to Avoid Brake Failure

- Maintain mobile equipment brake systems in accordance with the original equipment manufacturer's specifications.
- Do not exceed original equipment manufacturer's load limits.
- Conduct regularly scheduled brake system examinations.

- Test mobile equipment brake systems before the equipment is placed into service to insure that the brakes are operational and capable of stopping the equipment.
- Do not leave mobile equipment unattended without placing the controls in the park position and engaging the parking brake.
- Chock or turn into a bank the wheels of mobile equipment when parked on a grade.
- Maintain roadways to insure safe travel.
- Operate mobile equipment at speeds compatible with road and weather conditions.
- Post signs advising equipment operators of road hazards and safe speeds.
- Operate equipment in lower gears to correspond with the particular grade.
- Provide and wear seat belts whenever mobile equipment is being operated.

Fact Sheet: 15-Passenger Vans Pose Safety Risk

This material is for informational purposes only. It is not intended to give specific legal or risk management advice, nor are any suggested checklists or actions plans intended to include or address all possible risk management exposures or solutions. You are encouraged to retain your own expert consultants and legal advisors in order to develop a risk management plan specific to your own activities.

Federal studies, recently passed laws, and the all-too-frequent word of fatal accidents are causing concern about the use of 15-passenger vans by schools, churches, and businesses. Consider these recent newspaper headlines:

"Big Loads in Big Vans Carry Big Rollover Risk"

"Seven Killed, Three Hurt When Church Van Flips in California"

"Church Van Rolls Off Roadway"

In April 2001, the National Highway Traffic and Safety Administration (NHTSA) issued a study of more than 2,000 of the popular 15-passenger vans that showed the following relationship between load and probability of a rollover:

Fewer than 10 passengers: 12.7% may rollover.

Ten and more passengers: 35.4% may rollover.

Sixteen and more passengers: 70% may rollover.

By comparison, passenger cars have a rollover risk of less than 10%. Combine the increased rollover potential with the lack of seatbelt use, poor driver selection, passenger misconduct, and the lack of side impact protection, and the risks of fatality and serious injury when involved in a van accident are great.

It is unclear how widespread changes will be as a result of this study. The Federal government seems to be serious about their enforcement. In mid-1997, NHTSA took legal action against six automobile dealers it alleges knowingly violated the law by selling vans to school clients for student transportation use.

More pressure is being put on states to conform to the federal law and pass state laws regarding use of the vans. The families of accident victims are applying much of this pressure. Much like the issue several years ago on the use of pre-1977 manufactured school buses, more insurance companies are re-thinking their coverage of organizations that utilize these vans.

Policyholders should expect more information, reports, and possible changes or more stringent requirements attached to their coverage. In the interim, organizations that currently own 15-passenger vans should adopt several key safety practices:

- In order of priority, require drivers to have
 1. A Commercial Driver's License (CDL) OR
 2. Pass a defensive driving course to operate a 15-passenger van. The course must meet the following minimum requirements: **Note:** Internet-based programs are acceptable.
 3. Four (4) hours of instruction time.
 4. Testing with written results.
 5. Driver certification. .
- Carefully screen all drivers.
- Do pre- and post-trip inspections of the vehicle.
- Communicate safe procedures to all occupants.
- Require seatbelt use by all passengers.
- Have safety items on board the vehicle (cell phone, first-aid kit, fire extinguisher).
- Specifically to prevent rollovers, organizations should
 1. Buy high quality tires.
 2. Keep the gas tank as full as possible.
 3. Drive conservatively.
 4. Fill the front seats first.
 5. Never load items on the roof.

It is the responsibility of every organization to ensure the safety of the passengers it transports. Reducing the possibility of crashes and injury should be foremost in the minds of every organization.

SCHOOL LOCKDOWN PROCEDURES

One type of emergency that schools may face is a threat posed by an intruder or emergency situation outside the school that prevents the evacuation of students from the building. In these situations, schools should be prepared to take steps to isolate students, teachers and staff from danger by instituting a school lockdown.

A school lockdown can serve several functions during an emergency, including the following:

- Removing students and teachers from the threat;
- Isolating the dangerous situation from much of the school;
- Allowing for an accurate accounting of students within each room; and
- Depending on the situation, facilitating an organized evacuation away from the dangerous area.

In general, there are two main lockdown situations:

1. **Lockdown with warning:** The threat is outside the school building.
2. **Lockdown with intruder:** The threat or intruder is inside the school building.

1. Suggested Lockdown with Warning Procedures

The following procedures should be followed when the threat is *outside* of the school building:

- Building administrator orders and announces “lockdown with warning.” Be direct. DO NOT USE CODES. This announcement should be repeated several times.

Important:

- Special attention should be paid to classes that are outside of the school building, such as playgrounds and ball fields.
- All persons must be notified of the lockdown announcement. (ONE CALL NOW)
- An alternate lockdown location must be identified. This location can be indoors or outdoors (if students can be safely hidden).
- Lock exterior doors.
 1. Clear hallways, restrooms, and other rooms that cannot be secured.
 2. Secure and cover classroom windows.
 3. Move all persons away from the windows.
 4. Take attendance of students in each classroom.
 5. Teachers should prepare a list of missing and extra students in the room.

6. Teachers should take this list with them once they are directed to leave the classroom.
7. Control all movement, but continue classes. Disable bells. Move on announcement only.
8. Once the threat has subsided, the building administrator announces “all clear.”

2. Suggested Lockdown with Intruder Procedures

The following procedures should be followed when the threat or intruder is *inside* of the school building:

- Building administrator orders and announces “lockdown with intruder.” Be direct. **DO NOT USE CODES**. This announcement should be repeated several times.
- Immediately direct all students, staff, and visitors into the nearest classroom or secured space.
- Classes that are outside of the building **SHOULD NOT** enter the building.
- Move outside classes to the primary evacuation site.
- Lock classroom doors.
- **DO NOT** lock exterior doors.
- Move people away from the windows and doors. Keep all students sitting on the floor, and turn off the lights.
- Take attendance of students in each classroom.
- Teachers should prepare a list of missing and extra students in the room.
- Teachers should prepare to take this list with them once they are directed to leave the classroom.
- **DO NOT** respond to anyone at the door until “all clear” is announced.
- Keep out of sight.
- Be prepared to ignore any fire alarm activation, as the school will not be evacuated using this method.
- When or if students are moved out of the classroom, assist them in moving as quietly and quickly as possible.
- When the threat is over/the intruder has left the building, the building administrator announces “all clear.”

SPECIAL CONSIDERATIONS

Suggested Lockdown Prior to School Starting Procedures

- Staff gathers all students in the hallways into their classrooms or other rooms.
- Preschool activities leaders gather students and report attendance.
- Administration and custodial staff check the hallways and exterior of the building.
- Administration posts an individual at the drop-off location, alerting parents and children.
- Staff takes attendance of students in their room.

- At “all clear,” students report to their homeroom or first class to take attendance.

Suggested Lockdown during Passing Periods Procedures

- Staff gathers all students in the hallways into their classrooms or other rooms.
- Administration and custodial staff check the hallways and exterior of the building.
- Staff takes attendance of students in their room.
- At “all clear,” students report to homeroom or next class in order to obtain 100 percent attendance.

Suggested Lockdown During After School Activities Procedures

- Event leaders gather students and take attendance.
- Administration or custodial staff checks the hallways and other rooms.

Note: Please note that some threats, such as a confirmed fire or intruder within a classroom, may override lockdown procedures. Also, lockdowns may be initiated in non-threatening circumstances to keep people away from areas where there may be a medical emergency or other disturbance.

Job Hazard Analysis Checklist

1. Examine the equipment and the conditions of the area where the job task is performed:

	Yes	No
• Are tools, machines, and equipment in good repair?	<input type="checkbox"/>	<input type="checkbox"/>
• Are machines guards in place and operating properly?	<input type="checkbox"/>	<input type="checkbox"/>
• Are fire alarms and portable extinguishers readily available?	<input type="checkbox"/>	<input type="checkbox"/>
• Is personal protective equipment (PPE) available, properly maintained, and properly used?	<input type="checkbox"/>	<input type="checkbox"/>
• Are emergency exits clearly marked and accessible?	<input type="checkbox"/>	<input type="checkbox"/>
• Is lighting adequate?	<input type="checkbox"/>	<input type="checkbox"/>
• Is the area adequately ventilated?	<input type="checkbox"/>	<input type="checkbox"/>
• Do noise levels allow clear communication?	<input type="checkbox"/>	<input type="checkbox"/>
• Are any live electrical wires exposed?	<input type="checkbox"/>	<input type="checkbox"/>
• Do materials left on the floor present trip hazards?	<input type="checkbox"/>	<input type="checkbox"/>

2. List specific job steps and identify potential performance hazards:

- Describe each step in the process to complete this job from start to finish. Including:
 - Job setup
 - Conditions, use, and safety of equipment & machinery
 - Inspection and use of PPE
- Identify any risk of injury from machine parts or exposures.
- Detail actual steps followed to identify any movements of physical positions that could create hazards or risk.
- Note procedures to follow when shutting down equipment.
- Include storage, organization, and placement of parts, tools, etc.
- Identify hazards (dust, chemicals, heat, excessive noise, etc.) created by the job.

3. Identify solutions to hazards:

- Immediately remedy obvious problems such as missing machine guards.
- Identify equipment that could help reduce hazards.
- Make physical changes necessary to reduce hazards (improve lighting, ventilation, etc.).
- Find ways to eliminate, combine, or rearrange job steps to reduce hazards.
- Describe new job procedures to follow after changes are made.

These recommendations were developed using generally accepted safety standards. Compliance with these recommendations is not a guarantee that you will be in conformance with any safety regulations nor does it ensure the absolute safety of your occupation or place of business. Safety and health remain your responsibility.

EMPLOYEES RETURNING TO WORK AFTER PERSONAL INJURIES OR ILLNESS

When an employee involved in an accident which results in personal injury is treated by a doctor or receives medical attention (such as in an emergency room at a hospital), or is absent for a period of three (3) consecutive days or more due to a personal illness, before he will be allowed to return to work, he must call or report to immediate supervisor and have a written release from his personal doctor with the following:

1. Dated under Doctor's care.
2. Reason (diagnosis) and treatment
3. That employee is physically able to return to work. If the supervisor has any doubts of the employee's ability to return to work, arrangements will be made to have the employee examined by a company approved Doctor/Clinic.

SAFETY INDOCTRINATION OF NEW EMPLOYEES

On the day that a new employee is to be signed up for employment, he/she will review the company safety manual on:

1. Company first aid.
2. How to return to work after a personal illness or injury.
3. How to report fires and emergencies.
4. Company safety rules.
5. Personal protective equipment.
6. Housekeeping.

During the first day in the department, the following items shall be covered with the new employee.

1. Departmental safety rules.
2. Departmental safety meeting.
3. How to report fires and emergencies.

When the employee has been given the above safety instruction, the Employee Safety Instruction form will be filled out and returned to the Personnel Department.

EMPLOYEE'S SAFETY MANUAL ACKNOWLEDGMENT

(LAST NAME) (FIRST NAME) (MIDDLE INITIAL)

1. Report at once to your supervisor all injuries no matter how slight.
2. Be thoughtful and orderly in your conduct. Many injuries are the result of "horseplay" and fooling around.
3. Always use the safety devices which are provided by the company for your protection.
4. Report to your supervisor any conditions or practices which appear to be unsafe.
5. Employees should, at all times, do everything possible to avoid getting hurt, and avoid injuring any other employee.
6. Be safety conscious and give your supervisor any suggestions you have for improving safety measures or devices.

I have (read) or (had explained to me) and will observe the SAFETY INSTRUCTIONS set forth above.

Signature: _____ Date: ____/____/____

I have reviewed these instructions with the employee and outlined the safe practices to be followed on the work assigned.

Signature: _____ Date: ____/____/____