

Healthcare Safety Video Loop

This video is the perfect way to introduce new employees to general occupational hazards to which they may be exposed and to re-train experienced workers. Program includes basic safety rules, electrical hazards, powered equipment and machinery, back injury prevention, fire protection and more.

Hospitality Safety Video Loop

This video is the perfect way to introduce new employees to general occupational hazards to which they may be exposed and to re-train experienced workers. Program includes basic safety rules, electrical hazards, powered equipment and machinery, back injury prevention, fire protection and more.

Personal Protective Equipment PPE Video Loop

This video is the perfect way to introduce new employees to general occupational hazards to which they may be exposed and to re-train experienced workers. Program includes basic safety rules, electrical hazards, powered equipment and machinery, back injury prevention, fire protection and more.

Restaurant Safety Video Loop

This video is the perfect way to introduce new employees to general occupational hazards to which they may be exposed and to re-train experienced workers. Program includes basic safety rules, electrical hazards, powered equipment and machinery, back injury prevention, fire protection and more.

Solid Waste Video Loop

This video is the perfect way to introduce new employees to general occupational hazards to which they may be exposed and to re-train experienced workers. Program includes basic safety rules, electrical hazards, powered equipment and machinery, back injury prevention, fire protection and more.

Aviation Safety Video Loop

This video is the perfect way to introduce new employees to general occupational hazards to which they may be exposed and to re-train experienced workers. Program includes basic safety rules, electrical hazards, powered equipment and machinery, back injury prevention, fire protection and more.

DOT Hazmat: Hazardous Materials

This extensive five-part program provides an education of the hazardous materials transport process and introduces the learner to the many references used during that process. References DOT hazmat regulations, Title 49 CFR, Parts 172-173.

Forklift Operator Program

In this comprehensive program, learners will proceed through six lessons on forklift operator safety. These lessons are designed to not only cover the fundamentals of forklift operation, but also the crucial specifics of the task including stability and capacity, load handling, safe driving practices, safety standards, and inspection and maintenance. In addition, learners will also be assigned “retain” courses which are much shorter and meant to quiz the learner on the important points of each lesson. Through this effort, our hope with this program is to help you educate your forklift operators and make them successful, every day.

Forklift Operator Program – Spanish

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Dangers of Bloodborne Pathogens Safety Talk

Safety Talk

WHAT’S AT STAKE?

Bloodborne pathogens are infectious microorganisms in human blood that can cause disease in humans. These pathogens include, but are not limited to, hepatitis B (HBV), hepatitis C (HCV) and human immunodeficiency virus (HIV). Needlesticks and other sharps-related injuries may expose workers to bloodborne pathogens. Workers in many occupations, including first responders, housekeeping personnel in some industries, nurses and other healthcare personnel, all may be at risk for exposure to bloodborne pathogens. Bloodborne pathogens are infectious agents that can cause illness and death.

The hepatitis B virus (HBV) is one of the primary causes of hepatitis, an infection which causes inflammation of the liver.

WHAT’S THE DANGER?

The hepatitis B virus (HBV) is one of the primary causes of hepatitis, an infection which causes inflammation of the liver.
Complications:

- Cirrhosis (scarring) of the liver
- Liver cancer

- Liver failure

Cure: no known cure for the hepatitis B virus. Symptoms of HBV infection include, but are not limited to:

- Loss of appetite
- Fatigue
- Fever
- Nausea, vomiting and/or abdominal pain
- Joint pain
- Jaundice seen in the eyes

Jaundice is a yellowing of the skin or eyes and occurs in the more serious phase of Hepatitis B virus.

Hepatitis B can damage the liver, resulting in decreased liver function.

Even without symptoms, HBV-infected individuals are still infectious to others.

An exposure that might place a worker at risk for HBV, HCV, or HIV infection is defined as:

- A percutaneous injury
- Contact of mucous membrane or non-intact skin with blood, tissue, or other body fluids that are potentially infectious.
- Indirect exposure from contaminated objects is a risk, because hepatitis B virus can remain infectious on environmental surfaces for up to a week (7 days) in the form of dried blood.

This means you must always treat blood, wet or dry, as infectious!

What are the Symptoms of Hepatitis B?

After the virus enters the body, there is an incubation period lasting 1.5 to 6 months (average 4 months) until illness begins. During the acute phase (first 6 months after infection) most persons have no symptoms or might experience a mild illness. Symptoms of acute HBV infection, when present, may include:

- Jaundice (yellowing of the skin and eyes)
- Dark-colored urine, light-colored stools
- Fatigue
- Abdominal pain
- Loss of appetite
- Nausea
- Diarrhea
- Fever

Example

You may be in a hurry and run down a flight of stairs, or walk a corridor while reading instructions. You might slip on a slick surface and suddenly your feet go out from under you. Falls can also be caused by tripping on an obstacle – your feet get caught but your body keeps on going.

HOW TO PROTECT YOURSELF

Workers and employers should take advantage of available engineering controls and work practices to prevent exposure to blood and other body fluids.

If you experienced a needlestick or sharps injury or were exposed to the blood or other body fluid of a patient during the course of your work, **immediately follow these steps:**

- Wash needlesticks and cuts with soap and water
- Flush splashes to the nose, mouth, or skin with water
- Irrigate eyes with clean water, saline, or sterile irrigates
- Report the incident to your supervisor
- Immediately seek medical treatment

The [hepatitis B vaccine](#) offers excellent protection against HBV. The vaccine is safe and highly effective. Vaccination consists of 3 doses of vaccine (shots) over the course of 6 months. Protection lasts for 20 years to life.

The American Academy of Pediatrics recommends that all children should receive hepatitis B vaccine starting at birth. ([AAP Policy](#)).

The CDC recommends hepatitis B vaccine for persons traveling to countries where HBV is common.

- If you have one or more risk factors for hepatitis B infection, you should get a simple HBV blood test. The blood test will determine whether you are:
 - **immune** to hepatitis B; or
 - **susceptible** to hepatitis B and need vaccination; or
 - **infected** with hepatitis B and need further evaluation by a physician
- The basic test for acute HBV infection is called the “Hepatitis B Core IgM Antibody test.” People who have acute hepatitis B show positive IgM antibodies on this test.

After Exposure to Hepatitis B

- Hepatitis B infection can be prevented by getting vaccine and HBIG (hepatitis B immune globulin) soon after coming into contact with the virus.
- Persons who have recently been exposed to HBV should get HBIG and vaccine as soon as possible and preferably within 24 hours, but not more than 2 weeks after the exposure.
- If you have recently been exposed to hepatitis B, you should immediately contact your doctor.

FINAL WORD

Bloodborne pathogens are infectious microorganisms in human blood that cause disease in humans. These are infectious agents that can cause illness and death.

Let's Talk Accident Prevention

Safety Talk

Safety Talk

WHAT'S AT STAKE?

The Occupational Safety and Health Administration, frequently called OSHA for short, has a succinct definition for a workplace accident. It's an "unplanned event that results in personal injury or property damage." OSHA is a government body tasked with helping keep workplaces safe for its employees. An accident, by definition is something that happens unintentionally.

When a workplace accident happens that requires cleanup and sanitization of the worksite, how should it be handled? If you said, "send in the janitorial staff," you would be wrong for several reasons:

1. **Potential bloodborne pathogen exposure.** Blood found at the site of a workplace accident can contain viruses such as hepatitis B and C, HIV, and Methicillin-resistant *Staphylococcus aureus* (MRSA), all of which can infect individuals who come into contact with it.
2. **Violation of health and safety laws.** Any employee with a risk of exposure to blood or biological materials has the right to free hepatitis B vaccinations, bloodborne pathogen and PPE training, and personal protective equipment paid for by their employer. Employers who require workers (including janitorial employees) to clean up after a serious workplace accident could be [in violation](#) of OSHA's health and safety laws.
3. **Inexperienced cleanup.** The blood at the site of a workplace accident can seep into carpet, padding, sub flooring, and walls, and has the potential to infect workers if not properly sanitized. Hiring an experienced bioremediation company will not only ensure that the site is clean, but

will also ensure it is sanitized to [hospital-grade standards](#).

WHAT'S THE DANGER?

Whatever variation of the definition you prefer, workplace accidents can be painful and costly for both employers and employees.

Here are a few types of accidents most commonly reported in the workplace.

Types of Workplace Accidents

1. Overexertion: We do it all the time: pull a bookcase, carry heavy equipment or lift awkward boxes. Injuries from overexertion, such as sprains and strains, are the leading workplace accident out there.
2. Falling: Just like in our opening example, falling presents a significant risk in many work environments. It could be as simple as falling down stairs or tumbling off a roof.
3. Slips and trips: Have you ever seen the image of someone slipping on a banana peel? It's the same idea (probably minus the banana). Slips and trips can be the culprit behind things like muscle strains and other injuries.
4. Falling objects: Whether it's a heavy box of files or a piece of machinery at a construction site, falling objects present a particular risk of head injuries to workers.
5. Repetitive motion: It's a little less obvious, but repetitive motion injuries have an impact on many types of workers, from frequent computer users who struggle with carpal tunnel syndrome to auto mechanics who develop chronic back pain.

HOW TO PROTECT YOURSELF

While there are specific safety requirements for individual industries, which employers need to meet, there are often human errors that fall through the cracks simply because they're overlooked.

Workers and employers rush to complete deadlines and may not pay as close attention as they should. In other cases, there may be hazards that an employer or managers aren't aware of in their workplace.

Put safety at the forefront. Follow this list of concrete tips on how to prevent injuries from happening in the first place.

- **Keep Workspaces Clean**

Most people don't think of cleanliness as a deterrent to accidents but workplace order actually does diminish the chance of injury.

A cluttered, unclean work area is more difficult to efficiently maneuver in and workers are more prone to hazards. Make sure staff adhere to something as simple as running computer cables and cords properly so that they don't create a tripping hazard.

No matter if your work environment is a manufacturing warehouse or an office cubicle, keeping the area clean and well-maintained decreases the chance of accidents.

- **Post Proper Signage**

Employers should post signs reminding employees of proper safety procedures in noticeable places and in spaces where those specific procedures should be practiced.

- **Stay up to Date on Vehicle Maintenance**

For employers that provide staff with company vehicles to complete daily tasks, it's imperative that cars are well maintained and serviced on a regular basis.

This may seem obvious but according to [Bankrate](#), the bill for accidents resulting from unperformed vehicle maintenance tops \$2 billion each year.

- **Report Dangers and Accidents**

Most employees know that they should report an actual accident but it's important that employers encourage their staff to bring any foreseeable danger to management's attention.

- **Provide Proper Training**

All staff need to be properly trained for their position. This includes teaching them how to use equipment and follow safety procedures during their course of work.

- **Provide Proper Equipment**

All staff must also be equipped for their specific job. Equipment may vary from safety harnesses to proper gloves and goggles. Under no circumstances should employees perform functions without the proper equipment.

▪ **Avoid Shortcuts**

Many times, accidents happen not because the safety precautions are unknown but because people take short cuts when they're familiar with their job or are in a hurry.

For example, a worker may climb without a safety harness because they only want to complete one small task and gearing up is time consuming.

That can be the difference between a minor injury and a life-threatening catastrophe.

▪ **What to do when an accident has occurred**

When an accident first occurs, the number one thing is to report it immediately. Some employees don't think to report an incident if there isn't serious injury.

In reality, every accident should be reported. An injury that seems minor when it first happens can end up being more serious down the line.

The second reason it's important to report any injury immediately is because it indicates a hazard that should be addressed.

Even if the employee wasn't injured in any serious way, reporting the incident can give the employer information to make a protocol change that will prevent future accidents.

The third reason to report the injury immediately is because there is often a short span of time to report an accident for employees to be eligible for workers' compensation coverage related to

accidents.

Different states have varying mandates on the amount of time that can pass between the time of the accident and reporting an injury.

Workers' Compensation coverage will often cover injuries and all medical bills associated with injuries and may include compensation for time off work during recovery.

In many cases, this coverage will still apply whether the injured employee was at fault in causing the injury or not. Case in point: if the injured employee was not following posted safety requirements he will still often be covered under workers' compensation.

Employers are mandated to have workers' compensation insurance to protect workers from just such injuries. However, these laws also prevent employees from suing the employer in many, but not all, instances.

FINAL WORD

Reporting immediately close calls or near misses paves the way for workplace safety.

Accident Prevention Safety Talk

Safety Talk

WHAT'S AT STAKE?

Workplace accidents are unplanned or uncontrolled events that cause physical harm to workers on the job. Common **workplace accidents** can include falls, slips and trips and even repetitive

motion injuries like carpal tunnel syndrome.

Workplace accidents are no joke. In 2015, the U.S. Bureau of Labor Statistics reported that there were nearly three million nonfatal workplace injuries at private employers in the country. And, that doesn't include the more serious accidents that can cost a person his or her life.

We're going to look more closely at what is meant by **workplace accident**, how **hazards** and **risks** differ, and the consequences of these events on the job.

Hazards are things that can potentially cause damage or health consequences to workers. That means even something as simple as a computer could be considered a hazard; after all, repetitive motion injuries like carpal tunnel come from prolonged computer usage.

Other hazards could be knives, wet floors, even bullying behaviors. Think about hazards as categories. They could be biological (bacteria or animal excrement, for example), chemical, ergonomic (poor workstation setup), physical, emotional (bullying or extreme stress), and safety-related.

WHAT'S THE DANGER?

The workplace can be dangerous, even more so in an industrial environment. Numerous factors can cause accidents, ranging from overexertion to mishandling of hazardous materials. There are also a multitude of variables that can contribute to or influence a workplace incident. Following are eight of the most common causes of accidents in the workplace:

Lifting

Many employees are prone to sprain, strain or tear a muscle by virtue of lifting an object that is too heavy for them to lift on their own. Keep in mind that there is no harm in asking for help with objects that are difficult to lift.

Fatigue

Failing to take a break is another common cause of accidents. In order to recover from grueling manual labor, it is essential that employees take adequate breaks. Not doing so can lead to a slew of physical issues, including atrophy and general exhaustion. The results of either of these can be far more devastating than taking a 10-minute breather.

Dehydration

Not staying hydrated can also bring about disastrous consequences. On exceptionally hot summer days, failing to drink adequate amounts of water can cause heat stroke or cardiac conditions. This can be avoided by simply drinking at least eight glasses of water per day. Management should stress the importance of proper hydration and rest, as it maximizes the efforts of personnel.

Poor Lighting

Inadequate lighting is responsible for a number of accidents each year. This is often overlooked when attempting to prevent accidents in the [warehouse](#) or workplace.

Hazardous Materials

Improper [handling of hazardous materials](#) or not wearing personal protective equipment (PPE) is another common cause of accidents in the workplace. By reading material safety data sheets and providing the appropriate protective attire, many workplace incidents can be avoided.

Acts of Workplace Violence

Sadly, violence among co-workers has become all too common. It is usually brought about by office politics or other sensitive issues. Integrating [conflict resolution](#) and peer mediation can help to reduce the risks of such outbursts.

Trips and Falls

Slick floors and high-traffic corridors can cause a trip or fall. Improper footwear may also contribute to these accidents, which not only can result in injuries but also workman's compensation-

related cases.

Stress

Stress is one of the leading causes of death. It affects the human body in every facet imaginable. Stress can foster negative effects physiologically, emotionally and mentally, as well as debilitate or distract any worker. Therefore, it is essential to encourage a supportive team environment.

HOW TO PROTECT YOURSELF

While accidents in the workplace are common, most are preventable.

Every employer has a legal responsibility to protect their employees. On the other hand, every worker needs to be alert, cautious, and always maintain safety practices. *Both* employees and employers have a responsibility to stay alert to the potential causes of accidents.

Health and safety are the responsibility of everyone in an organization. This may seem tough, but for employers the payoffs are huge: increased productivity of workers, increased bottom line, and greater consumer confidence.

Here are 5 ways that employers can (and should) help prevent accidents at the workplace:

1. Post safety guidelines

Posting safety guidelines is one of the easiest ways to keep your workers safe and aware of safety practices. Post the safety guidelines on your company's walls and boards. Make them visible and easy to read. You should also set a safety program that every employee can follow (including you).

2. Provide proper security equipment

Providing your employees with proper personal protective equipment (PPE) helps to reduce accidents. Equipment such as protective eyewear, safety gloves, and secured shelving units are essential. The equipment makes it easy for employees to handle

bulky and heavy loads and reduces their chances of getting injured.

3. Keep the workplace tidy

A tidy and well-organized working environment will rarely produce accidents. On the other hand, a messy environment is unsafe for you and your employees. For example, unattended water spillage can result in a [slip and fall accident](#). Similarly, if your shelves aren't well secured, they may fall on your employees, resulting in serious injuries such as broken bones or head trauma. Ensuring your workplace is organized and clean all the times can go a long way in preventing accidents.

4. Eliminate shortcuts

Sometimes, shortcuts can be lifesavers, especially on a tight deadline. However, they can also be dangerous and result in a serious injury. Don't allow your employees to use shortcuts when it comes to safety. Instead, it's better they follow the safety guidelines and instructions to do the job right. If they cannot finish a specific job before the day ends, allow them to complete the job the next day. A person's health and safety is always more important than missing a deadline.

5. Conduct emergency drills

Emergency drills are an important tool for ensuring the safety of your staff. Safety drills help employees to learn how to handle emergencies without confusion and uncertainties. For example, in case of a fire, your employees should know how to move in an orderly fashion towards the nearest fire exits. Ensure everybody participates and pays attention to the drills (you included).

Workplace hazards can crop up at any time. While sometimes they may be unavoidable, you can take steps now to protect your employees, yourself and your business from such tragedies. You must ensure safety measures is a priority in your organization so that you and your employees can enjoy good health, job productivity, and satisfaction.

Accidents are unplanned occurrences that result in injuries, illness, death, and loss of property and/or production. While there is no way to completely eliminate accidents, there are certain plans, preparations, and actions that can be taken to reduce them.

Know the Hazards

- Be aware of surroundings. Look around and identify workplace hazards that could cause harm.
- Look for ways to reduce or eliminate hazards, and implement them.
- Report unsafe areas or practices.
- Dress for the weather.
- Use the EHS [Job Hazard Analysis](#) tools to identify hazards associated with job types.

Create a Safe Work Area

- Keep an orderly workplace. Poor housekeeping can cause serious health and safety hazards. The layout of the workplace should have adequate egress routes and be free of debris.
- Inspect vehicles before and after use. DRIVE SAFELY.
- Continually cultivate a safety standard.
- Take breaks and move around regularly throughout the day. Small breaks (standing up and moving around) can make a big difference in combating the dangers of staying in a static position all day long.
- Pay attention to workstation ergonomics.

Use Safe Lifting Techniques

- Follow the following safe lifting practices:
- Lift from a position of power
- Keep the load close
- Use a staggered stance
- Don't twist while lifting
- Training in body mechanics can reduce strain injuries and keep employees safe during lifting and moving.

Personal Protective Equipment

- The proper use of Personal Protective Equipment (PPE) can dramatically reduce the risk of injury. Examples of PPE include gear such as earplugs, hard hats, safety goggles, gloves, air-purifying respirators and safety shoes.

Regular Communication

- Notify supervisors about safety hazards.
- Speak up and be involved in safety planning.
- Continually cultivate a safety standard.

Education and Training

- Ensure everyone has the proper safety training relating to the hazards of the job.
- Take advantage of Environmental Health and Safety [online training](#) programs.
- It is each employee's responsibility to take an active role in maintaining safety.

FINAL WORD

When an accident first occurs, report it immediately no matter how trivial because it indicates a hazard that should be addressed.

Asbestos Safety Talk

Safety Talk

WHAT'S AT STAKE?

What is asbestos?

Asbestos is the name given to a group of naturally occurring minerals that are resistant to heat and corrosion. Asbestos has

been used in products, such as insulation for pipes (steam lines for example), floor tiles, building materials, and in vehicle brakes and clutches. Asbestos includes the mineral fibers chrysotile, amosite, crocidolite, tremolite, anthophyllite, actinolite and any of these materials that have been chemically treated or altered. Heavy exposures tend to occur in the construction industry and in ship repair, particularly during the removal of asbestos materials due to renovation, repairs, or demolition. Workers are also likely to be exposed during the manufacture of asbestos products (such as textiles, friction products, insulation, and other building materials) and during automotive brake and clutch repair work.

What are the hazards of asbestos?

Asbestos is well recognized as a health hazard and its use is now highly regulated by both OSHA and EPA. Asbestos fibers associated with these health risks are too small to be seen with the naked eye. Breathing asbestos fibers can cause a buildup of scar-like tissue in the lungs called asbestosis and result in loss of lung function that often progresses to disability and death. Asbestos also causes cancer of the lung and other diseases such as mesothelioma of the pleura which is a fatal malignant tumor of the membrane lining the cavity of the lung or stomach. Epidemiologic evidence has increasingly shown that all asbestos fiber types, including the most commonly used form of asbestos, chrysotile, causes mesothelioma in humans.[1](#),[2](#),[3](#)

What can be done to reduce the hazards of asbestos?

Worker exposure to asbestos hazards are addressed in specific OSHA standards for the construction industry, general industry and shipyard employment sectors. These standards reduce the risk to workers by requiring that employers provide personal exposure monitoring to assess the risk and hazard awareness training for operations where there is any potential exposure to asbestos. Airborne levels of asbestos are never to exceed legal worker exposure limits. There is no “safe” level of asbestos exposure for any type of asbestos fiber. Asbestos exposures as short in duration as a few days have caused mesothelioma in humans. Every

occupational exposure to asbestos can cause injury or disease; every occupational exposure to asbestos contributes to the risk of getting an asbestos related disease.⁸ Where there is exposure, employers are required to further protect workers by establishing regulated areas, controlling certain work practices and instituting engineering controls to reduce the airborne levels. The employer is required to ensure exposure is reduced by using administrative controls and provide for the wearing of personal protective equipment. Medical monitoring of workers is also required when legal limits and exposure times are exceeded.

You work with chemicals that are hazardous and harmful to your overall – health. But you must be protected from injury or illness along with your co-workers.

The chemical manufacturer or importer prepares Material Safety Data Sheets (MSDS) to enable you to know how to handle chemicals, what protective equipment you need to use and, finally, what to do if something goes wrong.

WHAT'S THE DANGER?

Working with asbestos products causes the release of tiny fibers of the mineral into the air. Once inhaled, these fibers get stuck in the lining of the lungs, causing scarring and inflammation. Eventually, the lungs cells may become so damaged that cancer develops.

One rare type of cancer nearly always linked to asbestos exposure is pleural mesothelioma. Although there is currently no cure, there are several options for [treating mesothelioma](#). Other deadly cancers are linked to asbestos, as well as chronic respiratory illnesses such as asbestosis.

A single massive exposure to asbestos can affect a person quickly, but when a worker is regularly exposed to moderate amounts at contaminated jobsites, noticeable symptoms may not appear until decades later. However, the length of time it takes for disease to manifest has no relation to the severity of the symptoms.

Types of Asbestos

The term asbestos refers to [six fibrous minerals](#) that occur naturally throughout the world.

- Chrysotile
- Tremolite
- Crocidolite
- Amosite
- Anthophyllite

Chrysotile is by far the most widely used type of asbestos. It accounts for approximately 95 percent of asbestos used around the world.

Asbestos fibers are naturally resistant to heat, fire, electricity and chemicals. These properties made it an ideal additive in products to prevent fire and chemical corrosion.

HOW TO PROTECT YOURSELF

OSHA has 3 different sets of standards to protect workers from asbestos depending on the type of workplace. These standards include the general workplace as well as workers in shipyards and construction sites.

These standards protect private workers as well as state and local government workers in the 23 states with federally-approved state OSHA laws. The Environmental Protection Agency (EPA) is responsible for protecting state and local employees who are in states without OSHA-approved occupational safety plan, which may be [exposed to asbestos](#). There are a few states that have OSHA programs for public employees that are not federally-approved but do enforce OSHA standards.

OSHA's standards have established the permissible exposure limit (PEL) of asbestos in the workplace as 0.1 fiber per cubic centimeter of air as an 8-hour time-weighted average (TWA).

Keep in mind, though, that legal does not necessarily equate to safe. There is no known safe level of exposure to asbestos.

The standards also include these protections:

- Assessment of workplaces to determine how much asbestos workers might be exposed to before work begins.
- Periodic monitoring of workplaces to determine if asbestos exposure is above the PEL.
- Signage communicating areas where asbestos work is being performed to prevent contamination.
- Separate lunch and decontamination areas for workers exposed to the PEL with proper hygiene practices to avoid contamination.
- Training for workers who may be exposed at or above the PEL before work begins and yearly after that.
- Medical surveillance, which is industry-dependent. In general, medical examinations must be made available for workers exposed at or above the PEL.
- Records must be kept on asbestos exposure monitoring for at least 30 years. Additionally, medical surveillance records for workers must be saved for the duration of employment and 30 years after.

FINAL WORD

Exposure studies including the anecdotal history reveal volumes about the health effects of asbestos. Keep in mind, there is no known safe level of exposure to asbestos.

Be Safe With Asbestos

Safety Talk

WHAT'S AT STAKE?

Asbestos is a naturally occurring mineral, which was long valued for its strength and heat resistance, making it the material of choice for insulation and fireproofing, until a few decades ago.

To make buildings safer and stronger, builders and engineers added it to the cement underfoot, the ceiling tiles overhead and many other construction materials. It found numerous applications in manufacturing and in the military as well.

Exposure studies reveal a lot about the health effects of asbestos including who may be at risk of developing an asbestos-related disease. These exposure studies focus on specific types of asbestos work. They uncovered how much exposure translates into cases of disease among the workers.

For example, insulators are among the most studied population of asbestos workers because exposure levels were high in this field of work.

Studying asbestos insulators tells us a lot about what can happen when a person is exposed to high levels of asbestos for years.

- A 1990 study published in Annals of the New York Academy of Sciences reported on insulation workers with 20 years of experience. More than 80 percent developed asbestosis and 40 percent died of asbestos-related diseases.

Some exposure studies have evaluated the risk of disease among people who live in a contaminated area. For example, studies have been conducted on [Libby, Montana](#). The town is home to an asbestos-contaminated vermiculite mine that closed in 1990.

- A 2013 study by the National Institute of Environmental Health Sciences found 18 to 20 percent of adult residents in Libby have asbestos-related disease.

WHAT'S THE DANGER?

- year, this is more than the number of people killed on the road.
- Around 20 tradesmen die each week as a result of past exposure
- However, asbestos is not just a problem of the past. It can be present today in any building built or refurbished before the year 2000.

When materials that contain asbestos are disturbed or damaged, fibres are released into the air. When these fibres are inhaled they can cause serious diseases. These diseases will not affect you immediately; they often take a long time to develop, but once diagnosed, it is often too late to do anything. This is why it is important that you protect yourself now.

Asbestos can cause the following fatal and serious diseases:

Mesothelioma

Mesothelioma is a cancer which affects the lining of the lungs (pleura) and the lining surrounding the lower digestive tract (peritoneum). It is almost exclusively related to asbestos exposure and by the time it is diagnosed, it is almost always fatal.

Asbestos-related lung cancer

Asbestos-related lung cancer is the same as (looks the same as) lung cancer caused by smoking and other causes. It is estimated that there is around one lung cancer for every mesothelioma death.

Asbestosis

Asbestosis is a serious scarring condition of the lung that normally occurs after heavy exposure to asbestos over many years. This condition can cause progressive shortness of breath, and in severe cases can be fatal.

Pleural thickening

Pleural thickening is generally a problem that happens after heavy asbestos exposure. The lining of the lung (pleura) thickens and swells. If this gets worse, the lung itself can be squeezed, and can cause shortness of breath and discomfort in the chest.

Types of Asbestos

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- Chrysotile
- Tremolite
- Crocidolite
- Amosite
- Anthophyllite

Chrysotile is by far the most widely used type of asbestos. It accounts for approximately 95 percent of asbestos used around the world.

Asbestos fibers are naturally resistant to heat, fire, electricity and chemicals. These properties made it an ideal additive in products to prevent fire and chemical corrosion.

HOW TO PROTECT YOURSELF

Educate yourself about the risks of asbestos exposure in your line of work, and then make sure your employer has policies and procedures in place to evaluate jobsites and prevent exposure.

It is a requirement that all employees who perform work that could disturb asbestos be able to identify potential asbestos containing material, the health risks associated with exposure, and the necessary precautions to be taken when working around asbestos. Our training course is designed for constructors, employers, supervisors and workers involved in building maintenance, repair, or alteration.

4 easy ways to keep yourself safe while working near asbestos

1. Think asbestos

- Has the site been checked for asbestos?
- Know the materials you are working with – is there a chance they might contain asbestos e.g.
- Roof panels, soundproof panels, heat resistant materials?

Stop work if you think there might be asbestos present in the material you are working with and report it to the site manager.

2. Levels of protection

- You're at a low risk of asbestos exposure if you are working alongside but not disturbing asbestos sheets or products. In this case.
- No protection is needed but you should be made aware that asbestos is present.
- Your employer should have an exposure minimization plan in place.
- You're at a moderate risk of exposure if you're using power tools to cut asbestos product or removing asbestos products that risk breaking. In these situations:
 - PPE and a respirator are needed, with dust extraction measures at the site.
 - Warning signs must be posted around the area to warn of exposure risk.
 - Protective polythene sheeting should be put down.
 - Wet methods of sweeping, mopping, or vacuuming dust must be used.
 - All asbestos containing material must be disposed of dust per regulatory requirements.
 - Asbestos abatement workers have a high level of exposure risk and additional levels of protection and training are required.

3.Clothing and handling considerations are important because asbestos fibers can leave the site on clothing and footwear and be breathed in by family or the public.

- Protective clothing must include the head and feet, such as lace-free footwear or boot covers.
- A coverall designed to prevent asbestos fibers from getting in with a snug fit to the neck, wrists and ankles should be used.
- PPE should be disposable if possible.
- If not:
 - PPE should ONLY be removed on site.
 - Washing must only be done in laundries specifically set up for handling asbestos-contaminated clothing.

4.Breathe clean air.

- DO NOT USE single use, or disposable respirators during work with asbestos.
- Air purifying masks that filter asbestos fibers out of the air may be suitable in some cases. Remember to change and dispose of filters per manufacturer's instructions.
- In many cases a full-face air supplying respirator is required to provide maximum protection.

The first step in protecting yourself is to understand where asbestos can be found. Such as, floor tiles, fire doors, pipe and boiler wrap, cementing compounds used in plumbing, older shingles and siding, brake linings and clutch pedals.

The next step is to know what operations will cause asbestos fibers to break apart, crumble, or otherwise become airborne. This is when you are in danger of breathing the fibers in. Drilling, grinding, buffing, cutting, sawing, and striking, all have the potential to release asbestos fibers from asbestos-containing materials.

The final step in protecting yourself? If you suspect the presence of asbestos, report it immediately to your supervisor. Only a qualified, licensed contractor should identify, handle, remove, and dispose of asbestos containing material. Isolate the area in the meantime to prevent others from possible exposure.

FINAL WORD

It is imperative that our industries undertake the right engineering and administrative control to identify asbestos laden substances and materials in our society.

Back Safety Safety Talk

Safety Talk

WHAT'S AT STAKE?

Back injuries can be extremely painful and debilitating. According to the US Bureau of Labor Statistics, back injuries account for nearly 20 percent of all injuries and illnesses in the workplace. In fact, only the common cold accounts for more lost work days.

Although there is not a specific regulation for training employees on back safety, the General Duty Clause does require employers to provide employees with a workplace that is “free of recognized hazards,” and given the prevalence of back injuries in the workplace – it’s hard to not see it as a “recognized hazard.”

In fact, a back-safety program is key to dramatically reducing debilitating back injuries on the job.

Disabling back injuries are costly and all too prevalent. That’s why your company needs more than a quick fix approach to battling back pain.

WHAT'S THE DANGER?

- The vast majority of low back pain is mechanical in nature. In many cases, low back pain is associated with spondylosis, a term that refers to the general degeneration of the spine associated with normal wear and tear that occurs in the joints, discs, and bones of the spine as people get older. Some examples of mechanical causes of low back pain include:
 - **Sprains and strains** account for most acute back pain. Sprains are caused by overstretching or tearing ligaments, and strains are tears in tendon or muscle. Both can occur from twisting or lifting something improperly, lifting something too heavy, or overstretching. Such movements may also trigger spasms in back muscles, which can also be painful.

- **Intervertebral disc degeneration** is one of the most common mechanical causes of low back pain, and it occurs when the usually rubbery discs lose integrity as a normal process of aging. In a healthy back, intervertebral discs provide height and allow bending, flexion, and torsion of the lower back. As the discs deteriorate, they lose their cushioning ability.
- **Herniated or ruptured discs** can occur when the intervertebral discs become compressed and bulge outward (herniation) or rupture, causing low back pain.
- **Radiculopathy** is a condition caused by compression, inflammation and/or injury to a spinal nerve root. Pressure on the nerve root results in pain, numbness, or a tingling sensation that travels or radiates to other areas of the body that are served by that nerve. Radiculopathy may occur when spinal stenosis or a herniated or ruptured disc compresses the nerve root.
- **Sciatica** is a form of radiculopathy caused by compression of the sciatic nerve, the large nerve that travels through the buttocks and extends down the back of the leg. This compression causes shock-like or burning low back pain combined with pain through the buttocks and down one leg, occasionally reaching the foot. In the most extreme cases, when the nerve is pinched between the disc and the adjacent bone, the symptoms may involve not only pain, but numbness and muscle weakness in the leg because of interrupted nerve signaling. The condition may also be caused by a tumor or cyst that presses on the sciatic nerve or its roots.
- **Spondylolisthesis** is a condition in which a vertebra of the lower spine slips out of place, pinching the nerves exiting the spinal column.
- **A traumatic injury**, such as from playing sports, car accidents, or a fall can injure tendons, ligaments or muscle resulting in low back pain. Traumatic injury may also cause the spine to become overly compressed,

which in turn can cause an intervertebral disc to rupture or herniate, exerting pressure on any of the nerves rooted to the spinal cord. When spinal nerves become compressed and irritated, back pain and sciatica may result.

- **Spinal stenosis** is a narrowing of the spinal column that puts pressure on the spinal cord and nerves that can cause pain or numbness with walking and over time leads to leg weakness and sensory loss.
- **Skeletal irregularities** include scoliosis, a curvature of the spine that does not usually cause pain until middle age; lordosis, an abnormally accentuated arch in the lower back; and other congenital anomalies of the spine.

Low back pain is rarely related to serious underlying conditions, but when these conditions do occur, they require immediate medical attention. Serious underlying conditions include:

- **Infections** are not a common cause of back pain. However, infections can cause pain when they involve the vertebrae, a condition called osteomyelitis; the intervertebral discs, called discitis; or the sacroiliac joints connecting the lower spine to the pelvis, called sacroiliitis.
- **Tumors** are a relatively rare cause of back pain. Occasionally, tumors begin in the back, but more often they appear in the back as a result of cancer that has spread from elsewhere in the body.
- **Cauda equina syndrome** is a serious but rare complication of a ruptured disc. It occurs when disc material is pushed into the spinal canal and compresses the bundle of lumbar and sacral nerve roots, causing loss of bladder and bowel control. Permanent neurological damage may result if this syndrome is left untreated.
- **Abdominal aortic aneurysms** occur when the large blood vessel that supplies blood to the abdomen, pelvis, and legs becomes abnormally enlarged. Back pain can be a

sign that the aneurysm is becoming larger and that the risk of rupture should be assessed.

- **Kidney stones** can cause sharp pain in the lower back, usually on one side.

Other underlying conditions that predispose people to low back pain include:

- **Inflammatory diseases of the joints** such as arthritis, including osteoarthritis and rheumatoid arthritis as well as spondylitis, an inflammation of the vertebrae, can also cause low back pain. Spondylitis is also called spondylarthritis or spondyloarthropathy.
- **Osteoporosis** is a metabolic bone disease marked by a progressive decrease in bone density and strength, which can lead to painful fractures of the vertebrae.
- **Endometriosis** is the buildup of uterine tissue in places outside the uterus.
- **Fibromyalgia**, a chronic pain syndrome involving widespread muscle pain and fatigue.

HOW TO PROTECT YOURSELF

Recurring back pain resulting from improper body mechanics is often preventable by avoiding movements that jolt or strain the back, maintaining correct posture, and lifting objects properly. Many work-related injuries are caused or aggravated by stressors such as heavy lifting, contact stress (repeated or constant contact between soft body tissue and a hard or sharp object), vibration, repetitive motion, and awkward posture. Using ergonomically designed furniture and equipment to protect the body from injury at home and in the workplace may reduce the risk of back injury.

The use of lumbar supports in the form of wide elastic bands that can be tightened to provide support to the lower back and abdominal muscles to prevent low back pain remains controversial. Such supports are widely used despite a lack of evidence showing that they actually prevent pain. Multiple studies have determined that the use of lumbar supports provides no benefit in terms of the prevention and treatment of back pain. Although there have

been anecdotal case reports of injury reduction among workers using lumbar support belts, many companies that have back belt programs also have training and ergonomic awareness programs. The reported injury reduction may be related to a combination of these or other factors. Furthermore, some caution is advised given that wearing supportive belts may actually lead to or aggravate back pain by causing back muscles to weaken from lack of use.

Following any period of prolonged inactivity, a regimen of low-impact exercises is advised. Speed walking, swimming, or stationary bike riding 30 minutes daily can increase muscle strength and flexibility. Yoga also can help stretch and strengthen muscles and improve posture. Consult a physician for a list of low-impact, age-appropriate exercises that are specifically targeted to strengthening lower back and abdominal muscles.

- Always stretch before exercise or other strenuous physical activity.
- Don't slouch when standing or sitting. The lower back can support a person's weight most easily when the curvature is reduced. When standing, keep your weight balanced on your feet.
- At home or work, make sure work surfaces are at a comfortable height.
- Sit in a chair with good lumbar support and proper position and height for the task. Keep shoulders back. Switch sitting positions often and periodically walk around the office or gently stretch muscles to relieve tension. A pillow or rolled-up towel placed behind the small of the back can provide some lumbar support. During prolonged periods of sitting, elevate feet on a low stool or a stack of books.
- Wear comfortable, low-heeled shoes.
- Sleeping on one's side with the knees drawn up in a fetal position can help open up the joints in the spine and relieve pressure by reducing the curvature of the spine. Always sleep on a firm surface.
- Don't try to lift objects that are too heavy. Lift from the knees, pull the stomach muscles in, and keep the head down

and in line with a straight back. When lifting, keep objects close to the body. Do not twist when lifting.

- Maintain proper nutrition and diet to reduce and prevent excessive weight gain, especially weight around the waistline that taxes lower back muscles. A diet with sufficient daily intake of calcium, phosphorus, and vitamin D helps to promote new bone growth.
- Quit smoking. Smoking reduces blood flow to the lower spine, which can contribute to spinal disc degeneration. Smoking also increases the risk of osteoporosis and impedes healing. Coughing due to heavy smoking also may cause back pain.

FINAL WORD

Back injuries and repetitive strain, injuries, are problems in the workplace. Good planning and safe work practices can help prevent these injuries.

Bloodborne Pathogens Safety Talk

Safety Talk

WHAT'S AT STAKE?

Bloodborne pathogens are infectious microorganisms in human blood that can cause disease in humans. These pathogens include, but are not limited to, hepatitis B (HBV), hepatitis C (HCV) and human immunodeficiency virus (HIV). Needlesticks and other sharps-related injuries may expose workers to bloodborne pathogens. Workers in many occupations, including first responders, housekeeping personnel in some industries, nurses and other healthcare personnel, all may be at risk for exposure to

bloodborne pathogens.

Bloodborne HC is designed for training employees in various industrial sites. Many employees encounter situations where infection from blood and other body fluids is a risk factor. This program is an essential employee safety component in this age of AIDS, Hepatitis, and other bloodborne diseases.

Your Employees Will Learn:

- Bloodborne Pathogens, including Hepatitis B and C, and HIV
- Modes of Transmission
- Exposure Situations
- Exposure Control Plans
- What to do if Exposed

The hepatitis C virus is a bloodborne virus: the most common modes of infection are through exposure to small quantities of blood. This may happen through injection drug use, unsafe injection practices, unsafe health care, transfusion of unscreened blood and blood products, and sexual practices that lead to exposure to blood.

The natural course of hepatitis C disease varies from one person to another.

- The first phase of disease is called **acute** hepatitis C and covers the first 6 months after a person is infected. During this phase, most people show no symptoms at all. Among those who do have symptoms, the illness is usually so mild that most don't even recognize that they have liver disease.
- In 15-40% of persons with acute hepatitis C, the immune system successfully fights off the infection, the virus is cleared from the body within 6 months, and the liver heals completely. In everyone else, the immune system cannot clear the virus, and hepatitis C infection persists past 6 months (usually for the rest of the person's life). This persistent state is known as **chronic** hepatitis C.

- In **chronic** hepatitis C, the liver becomes more and more inflamed and scarred over a period of years. However, the speed at which inflammation and scarring take place varies between people. About 1/3 develop severe liver scarring and the liver stops functioning normally (cirrhosis) within 20 years. Another 1/3 take 30 years for cirrhosis to occur. In the remaining 1/3, liver disease progresses slowly and does not become a major problem during their lifetime.

Hepatitis C can be treated and cured. Almost everyone living with HCV can now be cured with a one-pill-a-day regimen in eight-to-twelve weeks. These new medications are generally well-tolerated. In order to access HCV treatment, it is necessary to see your doctor to discuss treatment options. Access to treatment continues to improve as new medication regimens are made available by private health insurers and public health programs like the VA Medical Centers, the AIDS Drug Assistance Program, Medicaid, and MediCal.

How do People Get Hepatitis C?

Hepatitis C virus is found in the blood of people with HCV infection. It enters the body through blood-to-blood contact.

Until reliable blood tests for HCV were developed (around 1992), people usually got hepatitis C from blood products and blood transfusions. Now that blood and blood products are tested for HCV, this is no longer the typical means of infection.

Currently, people usually get hepatitis C by sharing needles for injection drug use. An HCV-infected woman can pass the infection to her baby during birth. It is also possible to get hepatitis C from an infected person through sexual contact, an accidental needlestick with a contaminated needle, or improperly sterilized medical, acupuncture, piercing, or tattooing

.

WHAT'S THE DANGER?

- The hepatitis C virus is a bloodborne virus. It is most

commonly transmitted through:

- injecting drug use through the sharing of injection equipment;
- the reuse or inadequate sterilization of medical equipment, especially syringes and needles in healthcare settings;
- the transfusion of unscreened blood and blood products;
- sexual practices that lead to exposure to blood (for example, among men who have sex with men, particularly those with HIV infection or those taking pre-exposure prophylaxis against HIV infection).

HCV can also be transmitted sexually and can be passed from an infected mother to her baby; however, these modes of transmission are less common.

Hepatitis C is not spread through breast milk, food, water or casual contact such as hugging, kissing and sharing food or drinks with an infected person.

WHO estimates that in 2015, there were 1.75 million new HCV infections in the world (23.7 new HCV infections per 100 000 people).

What are the Symptoms of Hepatitis C?

During the acute phase (first 6 months after infection) most persons have no symptoms or might experience a mild illness. Symptoms of acute HCV infection, when present, may include:

- Jaundice (yellowing of the skin and eyes)
- Dark-colored urine, light-colored stools
- Fatigue
- Abdominal pain
- Loss of appetite
- Nausea
- Diarrhea
- Fever

During the chronic phase (> 6 months after infection)

hepatitis C usually progresses silently, with no symptoms at all during the first 10-20 years. Signs of severe liver scarring (cirrhosis) may include:

- Ascites (accumulation of fluid and swelling of the abdominal cavity)
- Star-shaped vein pattern developing on the swollen belly
- Jaundice
- Itching
- Easy bruising and bleeding

Because symptoms of hepatitis C are usually absent, persons with risk for HCV infection should be tested. The blood test for hepatitis C infection is called the “hepatitis C antibody test.” People who have hepatitis C infection will show positive antibodies on this test. In many cases, it is necessary to confirm a positive hepatitis C antibody test with a more specific test, such as a test for HCV virus RNA.

HOW TO PROTECT YOURSELF

The [hepatitis C](#) virus can be transmitted only through [blood](#). But exposure to tiny amounts of blood is enough to infect you.

How to Prevent the Spread of Hep C

Here are some steps you can take to help prevent becoming infected with hepatitis C.

- **Never share needles.** Intravenous drug users have the highest chance of getting infected with hepatitis C because many share needles. Besides needles, the virus may be present in other equipment used with illicit drugs. Even sharing a straw or dollar bill when snorting cocaine could transmit hepatitis C. Bleeding in the nose frequently happens when taking cocaine this way, and microscopic droplets may enter the straw and be passed on to the next user, even if they can't be seen.
- **Avoid direct exposure to blood or blood products.** If you are a medical worker or health care provider, avoid coming into

direct contact with blood. Any tools that draw blood in the workplace should be thrown out safely or sterilized to prevent [hepatitis C](#) infection.

- **Don't share personal care items.** Many items that we use on a daily basis will occasionally be exposed to blood. Often, people will cut themselves while shaving, or their gums will bleed while brushing their [teeth](#). Even small amounts of blood can infect someone, so it is important not to share items such as [toothbrushes](#), razors, nail and [hair](#) clippers, and scissors. If you already have [hepatitis C](#), make sure you keep your personal items, such as razors and toothbrushes, separate and out of children's reach.
- **Choose tattoo and piercing parlors carefully.** Only use a licensed tattoo and piercing artist who does the right sanitary procedures. A new, disposable needle and ink well should be used for each customer. If in doubt, ask about their disposable products and sanitary procedures before getting a tattoo or piercing.
- **Practice safe sex.** It is rare for hepatitis C to be transmitted through sexual intercourse, but there is a higher chance of getting hepatitis C if you have [HIV](#), another [sexually transmitted disease](#), multiple sex partners, or if you engage in rough sex.

Who is at Risk for Infection?

- People who inject drugs
- Hemodialysis patients
- Recipients of blood transfusions, blood products, or solid organ transplants before 1992
- Infants born to infected mothers
- Health care and public safety workers who may have contact with blood
- People having sex with an infected partner

How is Hepatitis C Infection Prevented?

Unfortunately, there is no vaccine to prevent hepatitis C. To reduce your risk of getting hepatitis C:

- Injection drug use is the most common way people get hepatitis C. Avoid injecting drugs to reduce your risk. If you do inject drugs, use sterile injection equipment. Avoid reusing or sharing.
- Avoid sharing personal care items that might have blood on them (razors, toothbrushes, nail clippers)
- If you are a health care or public safety worker, follow universal blood/body fluid precautions and safely handle needles and other sharps
- Consider the risks if you are thinking about tattooing, body piercing, or acupuncture – are the instruments properly sterilized?
- If you're having sex with more than one partner, use latex condoms correctly and every time to prevent the spread of sexually transmitted diseases, including hepatitis C.

FINAL WORD

There is no vaccine to prevent hepatitis C. But there are common sense steps that people can take to reduce the risk of getting hepatitis C.

Daily Back Safety Safety Talk

Safety Talk

WHAT'S AT STAKE?

Back pain is one of the most common health complaints in the United States and around the world. Back pain affects 8 out of 10 people at some point in their lives. Risks are higher for manufacturing, warehouse, hospitality and trades workers, as well as others with physically demanding jobs.

Back pain is often times not the result of a single event. It is generally the result of multiple stressors on the body from improperly standing, sitting or lifting for a long time. Then suddenly, one simple movement such as bending to pick up the paper in the morning can cause pain.

Signs and symptoms of back pain can include:

- Muscle ache
- Shooting or stabbing pain
- Pain that radiates down your leg
- Pain that worsens with bending, lifting, standing or walking
- Pain that improves with reclining

WHAT'S THE DANGER?

- There are many risk factors for back pain, including aging, genetics, occupational hazards, lifestyle, weight, posture, pregnancy and smoking. With that said, back pain is so prevalent that it can strike even if you have no risk factors at all. **Specific Risk Factors for Back Pain** Patients with one or more of the following factors may be at risk for back pain: **Aging**. Over time, wear and tear on the spine that may result in conditions (e.g., disc degeneration, [spinal stenosis](#)) that produce neck and back pain. This means that people over age 30 or 40 are more at risk for back pain than younger individuals. People age 30 to 60 are more likely to have disc-related disorders, while people over age 60 are more likely to have pain related to [osteoarthritis](#).

Genetics. There is some evidence that certain types of spinal disorders have a genetic component. For example, [degenerative disc disease](#) seems to have an inherited component.

Occupational hazards. Any job that requires repetitive bending and lifting has a high incidence of back injury (e.g., construction worker, nurse). Jobs that require long hours of standing without a break (e.g., barber) or sitting in a chair (e.g., software developer) that does not support the back well also puts the person at greater risk.

Sedentary lifestyle. Lack of regular exercise increases risks for occurrence of [lower back pain](#), and increases the likely severity of the pain.

Excess weight. Being overweight increases stress on the lower back, as well as other joints (e.g. knees) and is a risk factor for certain types of [back pain symptoms](#).

HOW TO PROTECT YOURSELF

Safe lifting procedures and load-carrying techniques are crucial to preventing painful and expensive injuries in the workplace. Unfortunately, most workers do not consistently use back safety practices, at great risk to their personal well-being. Back injuries are often caused by unsafe lifting and carrying of heavy or awkward objects, but are easily prevented. The most common types of job-related back injuries are:

- Strain—overused or overstretched muscles
- Sprain—torn ligaments from sudden movement
- Herniated disk—loss of the spine’s cushioning ability from strain or age

A back-safety program is key to dramatically reducing debilitating back injuries on the job.

Although improper lifting, carrying, and moving techniques are the primary cause of back injuries, significant contributing factors are workers who are in poor physical condition and overweight. Encourage your employees to maintain a healthy weight and good muscle tone through stretching exercises and other wellness programs.

You can take steps to avoid and prevent back pain and injuries at work. For example:

Pay attention to posture. When standing, balance your weight evenly on your feet. Don’t slouch. To promote good posture when sitting, choose a chair that supports your spinal curves. Adjust the height of your chair so that your feet rest flat on the floor or on a footrest and your thighs are parallel to the floor. Remove

your wallet or cellphone from your back pocket when sitting to prevent putting extra pressure on your buttocks or lower back.

Lift properly. When lifting and carrying a heavy object, lift with your legs and tighten your core muscles. Hold the object close to your body. Maintain the natural curve of your back. Don't twist when lifting. If an object is too heavy to lift safely, ask someone to help you.

Modify repetitive tasks. Use lifting devices, when available, to help you lift loads. Try to alternate physically demanding tasks with less demanding ones. If you work at a computer, make sure that your monitor, keyboard, mouse and chair are positioned properly. If you frequently talk on the phone and type or write at the same time, place your phone on speaker or use a headset. Avoid unnecessary bending, twisting and reaching. Limit the time you spend carrying heavy briefcases, purses and bags.

Listen to your body. If you must sit for a prolonged period, change your position often. Periodically walk around and gently stretch your muscles to relieve tension.

Back pain can plague your workdays and free time. You're not stuck with it, though. Examine your work environment and address situations that might aggravate your back. Even simple steps to ease back pain are steps in the right direction.

FINAL WORD

It is important to understand the complex bone and ligament structure of the back in the design and operation of workplace culture.

Assured Grounding Safety Talk

Safety Talk

WHAT'S AT STAKE?

The assured equipment grounding conductor program covers all cord sets, receptacles which are not a part of the permanent wiring of the building or structure, and equipment connected by cord and plug which are available for use or used by employees. The requirements which the program must meet are stated in 29 CFR 1926.404(b)(1)(iii), but employers may provide additional tests or procedures. (See Appendix.) OSHA requires that a written description of the employer's assured equipment grounding conductor program, including the specific procedures adopted, be kept at the jobsite. This program should outline the employer's specific procedures for the required equipment inspections, tests, and test schedule. The required tests must be recorded, and the record maintained until replaced by a more current record. The written program description and the recorded tests must be made available, at the jobsite, to OSHA and to any affected employee upon request. The employer is required to designate one or more competent persons to implement the program.

Electrical equipment noted in the assured equipment grounding conductor program must be visually inspected for damage or defects before each day's use. Any damaged or defective equipment must not be used by the employee until repaired.

WHAT'S THE DANGER?

Continued use of damaged electrical equipment (power tools, extension cords, etc) poses an extremely hazardous risk for workers:

- Power tools that have three prongs (hot, neutral and ground) may have the grounding pin missing. This is an extremely hazardous situation because if a short develops in the tool,

the user may become the ground in the system and electricity will travel through him or her.

- Sometimes during use, the third prong, or the grounding pin, may become loose or fall out. No one should be allowed to bypass the grounding pin by bending it out of the way or removing it completely.
- Flat-wire cords are prohibited from use on construction sites because they do not provide the protection that double-insulated cords do.
- Double-insulated tools should be used. This generally means the tool is encased in plastic, which will prevent the user from electrocution if the tool develops a short circuit. If there are any defects, such as insulation missing from a cord or a piece of the protective shell broken from the tool, workers are put at risk for electrocution.

Your workplace probably has countless electrical tools and devices capable of delivering a fatal electrical shock.

That's why it's a good idea to have frequent reminders about electrical safety – like this safety talk.

Here are some practices to help you work more safely around electricity:

- Do not work near electrical equipment or outlets when hands, feet, counters, floors or equipment are wet.
- Consider defective any device that trips a circuit breaker and prohibit its use until inspected.
- Do not use electrical equipment, appliances or wall receptacles that appear to be damaged or in poor repair.

Report all shocks immediately. Even small tingles may indicate trouble and precede major shocks. Do not use the equipment until it has been inspected and repaired. Use a sign-out system for extension cords to help track the number and location of extension cords in use.

Equipment with these characteristics must be considered incorrectly grounded and unsafe:

- Three-wire plugs attached to two-wire cords.
- Grounding prongs that are bent or cut off.
- Ungrounded appliances resting on metal surfaces.
- Extension cords with improper grounding.
- Ungrounded, multiple-plug “spiders” typically found in offices.
- Personal electrical appliances, such as radios, coffeepots, fans, power tools and electric heaters – brought by workers from home – that are not grounded, have frayed cords or show other signs of wear or damage.

Toasters, blenders, hand mixers, fans, refrigerators and radios should be grounded or double-insulated. Items designed for household use should be checked to ensure proper grounding for workplace application.

Why Does OSHA Have an Electrical Standard for Construction?

With the wide use of portable tools on construction sites, the use of flexible cords often becomes necessary. Hazards are created when cords, cord connectors, receptacles, and cord- and plug-connected equipment are improperly used and maintained. Generally, flexible cords are more vulnerable to damage than is fixed wiring. Flexible cords must be connected to devices and to fittings so as to prevent tension at joints and terminal screws. Because a cord is exposed, flexible and unsecured joints and terminals become more vulnerable. Flexible cord conductors are finely stranded for flexibility, but the strands of one conductor may loosen from

under terminal screws and touch another conductor, especially if the cord is subjected to stress or strain.

A flexible cord may be damaged by activities on the job, by door or window edges, by staples or fastenings, by abrasion from adjacent materials, or simply by aging. If the electrical conductors become exposed, there is a danger of shocks, burns, or fire. A frequent hazard on construction site is a cord assembly with improperly connected terminals.

Also, when a cord connector is wet, hazardous leakage can occur to the equipment grounding conductor and to humans who pick up that connector if they also provide a path to ground. Such leakage is not limited to the face of the connector but also develops at any wet portion of it.

When the leakage current of tools is below 1 ampere, and the grounding conductor has a low resistance, no shock should be perceived. However, should the resistance of the equipment grounding conductor increase, the current through the body also will increase. Thus, if the resistance of the equipment grounding conductor is significantly greater than 1 ohm, tools with even small leakages become hazardous.

The Occupational Safety and Health Administration's (OSHA) electrical standard for construction, title 29 *Code of Federal Regulations Part 1926, Subpart K*, contains the requirements for ground fault circuit interrupters (GFCIs) and for assured equipment grounding conductor programs which are included in the Appendix of this booklet. These requirements will help reduce the number of injuries and accidents from electrical hazards. Work disruptions should be minor, and the necessary inspections and maintenance should require little time.

This information is intended to help employers and employees responsible for electrical equipment provide protection against 120-volt electrical hazards on the construction site—the most common being ground fault electrical shock—through the use of GFCIs or through the assured equipment grounding conductor program.

HOW TO PROTECT YOURSELF

The assured grounding program consists of a written program, daily visual inspections and a method to detect a faulty grounding wire in an extension cord or hand tool. The objective is to prevent electrocution by ensuring the grounding wire is electrically continuous from the power tool to the power source. An Assured Grounding Program contains four parts:

- **Worker training: All workers using extension cords and power tools under an Assured Grounding Program must be trained on the program.**
- **Daily visual inspection:** Extension cords and power tools must be checked daily for damage by the persons who will be using them. Any damage found must be repaired before the cord or tool is used. Damaged extension cords and power cords of tools must not be spliced. The cords can either be replaced or shortened to remove the damaged portion.
- **Continuity and polarity testing:** A qualified worker must test every extension cord and power tool for circuit continuity, terminal connection test, and correct polarity. Tests are mandatory before tools are used for the first time, following repairs, and at designated times of the year. A qualified worker is a person who has been authorized by a supervisor and who has received appropriate training.
- **Color-coding extension cords and power tools:** Extension cords and power tools that have been tested must be tagged with a colored band about 4 inches (10 centimeters) from the male plug. Colored electrical tape is suitable for this purpose. A different color is required at the beginning of each quarter in Canada and at the beginning of each quarter and month in the US (see boxes below). These colors are standard for all worksites.

Here's more good advice:

Turn off switches and pull plugs before adjusting or cleaning power equipment such as slicers, grinders and mixers. Equipment being serviced or cleaned should be tagged as "out of service."

When permanently-wired equipment is being serviced by qualified personnel, the electrical power to the equipment must be disconnected and safe lockout procedures must be followed. To prevent someone from unintentionally turning the power on while the unit is being serviced, a lock and a tag should be placed on each disconnecting means used to de-energize the equipment. Each worker should apply his own lock and only the person who applies the lock should remove it.

Electrical repairs must be carried out only by persons who are qualified and authorized to do so. Makeshift repairs of electrical equipment have resulted in many deaths in the workplace. Remember, you are in danger of electrocution if testing and repairs are done incorrectly.

FINAL WORD

The technical aspect of assured grounding program must be advanced and taught to workers by real live demonstrations before workers come into contact with this program in real time.

You Won't Be Frowning With Assured Grounding



Meeting Kit



PPT Presentation

Safety Talk

WHAT'S AT STAKE?

The assured equipment grounding conductor program covers all cord sets, receptacles which are not a part of the permanent wiring of the building or structure, and equipment connected by cord and plug which are available for use or used by employees.

Working with electricity can be dangerous. Engineers, electricians, and other workers deal with electricity directly, including working on overhead lines, electrical installation and circuit assemblies. Others, such as office workers, farmers, and construction workers work with electricity indirectly and may also be exposed to electrical hazards.

Simple mistake results in a tragic accident

A die setter had been electrocuted because someone had wired a 480-volt extension cable incorrectly. He had placed one of the phase conductors on the ground terminal during assembly. This simple mistake ultimately resulted in a tragic accident.

Both NFPA 70E and OSHA recognize the dangers associated with temporary power cables. Therefore, employers who use extension cables energized above 125 volts, are required to institute an AEGC or use a GFCI to prevent accidents like the one I have just described.

WHAT'S THE DANGER?

Places of work generally have power nominally supplied at 230 volt (single phase) and 400 volts (3 phase) although some larger

workplaces will receive electricity at a higher supply voltage. The information below relates to workplaces using 230- and 400-volt supplies.

The main hazards with electricity are:

- contact with live parts causing shock and burns
- faults which could cause fires;
- fire or explosion where electricity could be the source of ignition in a potentially flammable or explosive atmosphere, e.g. in a spray paint booth.

The risk of injury from electricity is strongly linked to where and how it is used and there is greater risk in wet and/or damp conditions.

It is the level of voltage the body is exposed to and the resistance to flow of electrical current offered by the body that determines the impact of exposure to electricity. The following factors determine the severity of the effect electric shock has on your body:

- The level of voltage
- The amount of body resistance you have to the current flow
- The path the current takes through your body
- The length of time the current flows through your body

If a worker has come into contact with electricity the worker may not be able to remove themselves from the electrical source. The human body is a good conductor of electricity. If you touch a person while they are in contact with the electrical source, the electricity will flow through your body causing electrical shock. Firstly, attempt to turn off the source of the electricity (disconnect). If the electrical source cannot readily and safely be turned off, use a non-conducting object, such as a fiberglass object or a wooden pole, to remove the person from the electrical source.

HOW TO PROTECT YOURSELF

If an Assured Equipment Grounding Conductor Program (AEGCP) is used in place of ground-fault circuit interrupters (GFCIs) for ground-fault protection, the following minimum requirements apply, though additional tests or procedures are encouraged:

- Keep a written description of the program at the jobsite. Outline specific procedures for the required equipment inspections, tests, and test schedule, and make them available to OSHA and to affected persons upon demand.
- Designate one or more competent persons to implement the program. OSHA defines a *competent person* as someone who is a) qualified to identify hazards, and b) authorized to take prompt corrective measures.
- Visually inspect all cord sets, attachment caps, plugs and receptacles, and any equipment connected by cord and plug, *before use each day*. If you see any external damage, such as deformed or missing pins, damaged insulation, etc., or discover internal damage, take the equipment out of use until it is repaired.
- Perform two OSHA-required tests on all electrical equipment: a [continuity test](#), and a [terminal connection test](#). Tests are required:
 - Before first use.
 - After any repairs, and before placing back in service.
 - After suspected damage, and before returning to use.
- Every 3 months [*for exceptions see, [29 CFR 1926.404\(b\)\(1\)\(iii\)\(E\)\(4\)](#)*].
- Maintain a written record of the required tests, identifying all equipment that passed the test and the last date it was tested (or the testing interval). Like the program description, make it available to OSHA inspectors and affected persons upon demand.

How you can protect your workers

All companies need to follow OSHA [ground-fault protection](#) rules and regulations that are deemed necessary for employee safety and health. Therefore, it is imperative that you provide either (i) GFCIs on the job sites for receptacle outlets in use and not as a

part of the permanent wiring of the building or (ii) have a scheduled and recorded assured equipment grounding conductor program on construction sites which covers all cord sets, receptacles which are not part of the permanent wiring of the building or structure, and equipment connected by cord and plug which are available for use or used by the employees.

You must provide the approved GFCIs for all 120-volt, single-phase, 15- and 20-ampere receptacle outlets on construction sites that are not a part of the permanent wiring of the building or structure and that are in use by employees. If there is any receptacle that is installed as a part of the permanent wiring of the building, then you must provide GFCI protection.

Electrocution remains the fourth leading cause of work-related death for construction workers, with one worker electrocuted on the job every day in the US. Although OHS professionals are not necessarily skilled electricians, OSHA provides an online [guide to electrical safety for non-electricians](#) that describes scenarios in which equipment like GFCIs are essential – for saving lives.

FINAL WORD

The objective of the assured grounding program is to prevent electrocution by ensuring the grounding wire is electrically continuous from the power tool to the power source.

Slips, Trips and Falls Safety Talk

WHAT'S AT STAKE?

You can slip, trip and fall in all kinds of workplaces, from offices to construction sites. Falls are the leading cause of injuries in North American workplaces.

What Percentage of Workplace Accidents are Caused by Slips, Trips, and Falls?

More than 25% of all injuries sustained across all industries are caused by slips, trips, and falls. Of these slips, trips, and falls, 16% of all workplace accidents involved falls on the ground level. Unfortunately, more than 5% of workplace accidents resulted from a fall between two or more stories.

It is also interesting to note the statistic related to slips and trips without falls. More than 3% of all workplace accidents that resulted in time away from work were caused by slips and trips without a fall.

Here are some other statistics related to slips, trips, and falls while on the job:

- 57% of deaths from ladders occur in the construction industry.
- 43% of deaths from slips, trips, and falls occur in the construction industry.
- 20% of falls on the same level are due to trips and 13% are due to slips.
- 11% of falls to a lower level happen when someone falls through a surface or existing opening.

MATERIALS FOR YOUR SAFETY MEETING

[ATTENDEE PACKET](#)

“Handout” includes discussion points and follow-up quiz.

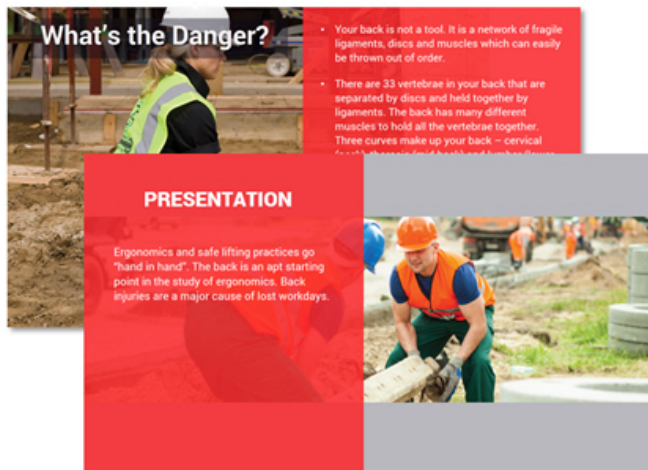
[FACILITATOR GUIDE](#)

“For Leaders” with talking points, checklist and quiz answers.



PRESENTATION

Ready to present to your team or provide for independent-study.



HELPFUL READING

WHAT'S THE DANGER?

Most workplace falls which cause injury or death are falls from the same level, not from heights. And remember the big picture. Failure to reduce and eliminate slips, trips erodes the bottom line of business and impacts quality of life of workers.

Example

You may be in a hurry and run down a flight of stairs, or walk a corridor while reading instructions. You might slip on a slick surface and suddenly your feet go out from under you. Falls can also be caused by tripping on an obstacle – your feet get caught

but your body keeps on going.

HOW TO PROTECT YOURSELF

Wear appropriate clothing

Wear boots or shoes that have skid – resistant soles and are free from oil and grease. When working on slippery surfaces or in icy weather, wear non-slip soles. Be aware that overly long, loose pant cuffs are a tripping hazard.

Clear paths

If you see something in an aisle such as litter or extension cords, move or report them. Also watch for loose or torn carpeting, mats or runners. Don't store things on or near stairways. Watch out for unexpected hazards such as unguarded floor openings. Report them immediately so they can be correctly covered and guarded.

Respect slickness

Obey signs such as "Caution: Wet Floor." Clean up spills immediately. When you come indoors from rain or snow, your wet footwear slides more easily. Newly waxed and high gloss floors are also hazards. On slippery or rough surfaces, take small steps and walk slowly.

Walk safely

Keep your head up. Don't run down a hallway. Never engage in horseplay. Use stairways' handrails. When carrying a load, make sure you can see over or around it. On slick surfaces keep your hands at your side for balance and take caution, short steps. Don't run.

Use office smarts

Don't tip back in a chair. Chairs should have five legs to prevent tipping. Keep drawers of desks, cupboards and filing cabinets closed.

Elevate wisely

Don't stand on makeshift platforms such as a chair on top of a desk. Instead, correctly use a stepstool, ladder or scaffold.

Take care when working at heights

Be sure to use the required fall protection equipment and all safe procedures when working at heights. Many falls from heights are actually caused by tripping or slipping.

Shed some light on it

Poor lighting can camouflage hazards, so replace fixtures or bulbs that don't work. In areas where no fixtures are installed, make sure obstacles have been removed. Turn on lights before entering an area.

Practice stair care

There's always a potential for trips and falls on stairways that are too steep or not steep enough. Always walk up and down stairs slowly, one step at the time. Sound too caution? Numerous workers have been injured on stairways by going too fast or by skipping steps. And if you must carry a load on stairs, make sure the load doesn't block your vision, and try to keep one hand free to hold the railing.

Personal regimen

Get enough rest and sleep. Exercise regularly. Eat nutritious well-balanced diet and include vitamin C. More alert, physically and mentally fit workers are better equipped to handle safety challenges like slips, trips and falls in a successful way.

Good housekeeping and clean up tips:

- Wipe up grease, water and other slick substances as soon as they are discovered. Cover icy and greasy spots with sand, dirt or other absorbent material.
- If repair or maintenance work is being done, keep equipment and the surrounding area free of scraps and debris.
- Secure loose or light material to prevent it from blowing away in the wind and, as with any other aspect of rig operation, don't let material fall from any level.
- Inspect your work area and machinery or tools before you start work.

FINAL WORD

Slips, trips and falls are serious hazards that can cause serious injuries. Follow these steps to keep your feet on firm ground!

TIPS TO PREVENT

SLIPS, TRIPS, AND FALLS IN THE WORKPLACE

25% of all workplace injuries are sustained because of **slips, trips, and falls**. Ensure your employees remain **injury-free and safe** on your job site.



STATISTICS ON SLIPS, TRIPS, AND FALLS



In 2017, private industry experienced **882,000+ occupational injuries and illnesses** resulting in days away from work.

25% of all injuries sustained across all industries are caused by **slips, trips, and falls**.



11% of falls to a lower level happen when someone **falls through a surface or existing opening**.

60% of construction fatalities are caused by the **fatal four**: falls, struck by object, electrocutions, or caught in or between machinery.

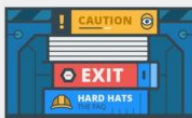


17% of deaths from falling are from a height **3 stories or higher**.

29% of injuries sustained by **plumbing and HVAC contractors** were due to slips, trips, and falls.



6 TIPS TO PREVENT WORKPLACE INJURIES



Awareness and Education
Provide resources to educate workers of known risks and ways to reduce their chances of injury and illness.



Dress Code
Enforce proper attire to be worn at all times including slip resistant shoes, hard hats, back braces, and more.



Safety Hazard Signage
Clearly mark spills, emergency exits, exposed wires, and other workplace hazards.



Accident Management
Contain spills and manage accidents quickly and thoroughly to prevent slips, trips, and falls.



Job Site Ventilation
Ensure the workplace is properly ventilated especially when active materials are circulating.



Proper Lighting
Make sure the job site or workplace is well lit and visible.

Noise Safety Checklist

PREAMBLE

NOISE INDUCED HEARING LOSS

Many tools, equipment, and processes in the workplace generate high levels of noise that will have a negative effect on the hearing of the exposed workers. Short loud bursts of noise such as explosions or gun shots can damage our ears in a short time of being exposed. Less hazardous noise such as woodworking equipment, heavy equipment, and machinery can lead to damage over an extended amount of time being exposed to the noise.

It's hard to believe that noise can cause permanent damage to your hearing – but it can. It's important to protect yourself against noise hazards.

It is recognized now, that Hearing Loss has a dramatic impact in our economy borne out by statistics.

The steps to eliminate the negative effects of hearing loss, economically and personally, is done through **Disclosure of Hearing Loss, Workplace Accommodations and Managing Hearing Loss in the Workplace.**

Hearing is precious to us. Once we diminish or lose our hearing we can never fully recover it. Both on the job and at home there are many sources of **noise** which can damage our hearing. These sounds can damage sensitive structures in the inner ear and cause noise-induced hearing loss (NIHL). Approximately 26 million Americans have some type of noise-induced hearing loss. According to the CDC, over 22 million workers are exposed to hazardous noise levels at work each year. Occupational hearing loss is one of the most common workplace injuries today in the United States.

Outdoor-Animal Hazards Safety Checklist

PREAMBLE

There are a host of problems for workers who work outside and in proximity to all sorts of animals. Some of these animals from spiders, snakes, lions are dangerous and capable of killing workers.

Protections, precautions and procedures must be in place to safeguard employees working amidst animals.

Protecting Outdoor Workers from Insects & Wild Animals

Workers who work outside in industries such as construction, mining, forestry, landscaping and park management face safety hazards that indoor workers don't face. For example, outdoor workers are exposed to hazardous insects, such as ticks, and they may be vulnerable to attacks by wild animals, such as bears and wolves. Although insects and wild animals are part of nature, employers still have a duty to protect workers from them when they pose safety risks.

Hazards to Outdoor Workers

Outdoor workers are exposed to many types of hazards that depend on their type of work, geographic region, season, and duration of time they are outside. Employers should train outdoor workers about their workplace hazards, including hazard identification and recommendations for preventing and controlling their exposures.

The first occupation that comes to many peoples' minds when

discussing dog bites on the job is postal carriers. Other occupations that are at higher risk of dog bites are cable installers, police officers, package deliverers, and meter readers. With the sheer number of dogs in the US, there are many other occupations exposed to potential dog attacks. It is important to take into consideration the hazards dogs can pose both on and off the job.

Injuries – Dog Attacks

Dog attacks can be as minor as a small single bite to as serious as death. It is estimated that there is 20 to 30 fatalities due to dog attacks every year in the United States. Dogs also carry many bacteria that can be passed on to a human from a bite. [The CDC reports](#) that a dog's mouths can carry over 60 types of bacteria and approximately 18% of all dog bites gets infected. While rabies is a common disease, dogs can also carry Pasteurella, MRSA, and Tetanus.

Summary

[According to the ASPCA,](#) there are 70 to 80 million dogs as pets in the United States. It is estimated that over 40% of all households have at least one dog. Because of these numbers, the chance of coming into contact with an aggressive dog at some point over your life time is high. Be cautious when around dogs you do not know and especially protect small children from dogs that can potentially attack.

Most safety hazards involve inanimate objects, chemicals or conditions, such as extreme heat. But living creatures can also pose a threat to workers, particularly when they work outside.

Overhead Hazards Safety Checklist

PREAMBLE

The focus for all objects at heights should always be on preventing objects from falling rather than a catching object, or on limiting the damage after they fall.

Fewer than 25% of construction workers think that all accidents are preventable. What is clearer that workers often view themselves as victims of accidents and not as the cause of accidents.

Expect workers at height to wear a fall protection harness and be tied off because we're trying to prevent people from falling.

But we need to stop things from falling in the same way we have worked diligently towards preventing people from falling.

To determine what kind of force an object falling from a certain height generates, calculations can be done around the physics of gravity. For example, an eight-pound wrench dropped 200 feet would hit with a force of 2,833 pounds per square inch – the equivalent of a small car hitting a one-square-inch area.

Most organizations have deployed a fall protection program for workers but have not deployed a drop prevention program for tools and equipment. Expanding a fall protection program to include tools and equipment is far easier for companies and employees than creating a new program for drop prevention.

The difference between a fall protection program for humans and

fall protection program for tools is only a matter of perspective: The first saves you; the second saves others.

While the most obvious person at risk when objects are dropped is the one underneath, the worker using the tool also can be at risk, as his knee-jerk reaction may be to catch or go after the falling object, which could cause him/her to lose balance and fall.

People are not designed to work at height. That's why they wear a fall protection harness. Tools are not designed for use at height either. That's why we also need to provide a fall protection harness and connection point for tools – so they easily can be tied off.

A harness for a person acts as the primary component of a personal fall protection system. However, for tools, we typically rely on secondary, passive systems, such as debris nets. We rarely deploy a primary system for tools and equipment.

Countless companies in the manufacturing and construction industries rely on overhead cranes to lift and transport materials. When installed and used properly, these systems make operations easier and safer. But, overhead crane accidents cause severe injuries and fatalities every year. Preventing these disasters requires workers to recognize certain hazards that occur during operation and follow safety procedures to avoid them.

There are multiple hazards that can arise regarding cranes in general. Many accidents involve large lift systems like tower cranes and mobile cranes. But hazards do exist with all types of cranes—including overhead cranes—and in all facets of crane operation. (Overhead cranes are defined by [OSHA 1910.179\(a\)\(8\)](#) as a crane with a movable bridge carrying a movable or fixed hoisting mechanism, and traveling on an overhead fixed runway structure.)

Analysis of overhead crane accidents reveals three common safety hazards that every company using overhead lift systems should be aware of to keep their workers safe. It's important to be familiar with these hazards and learn to recognize them in the workplace in order to avoid them. The three most common hazards involving

overhead cranes include **electrical hazards, overloading, and materials falling/slipping from overhead hoists.**

One commonality that all three hazards share is the qualifications of crane operators. It is the responsibility of the crane owner and job supervisor to ensure that crane operators are competent and qualified to do the job.

Download to read more...

Patient Lifting Safety Checklist

PREAMBLE

Patient handling is the top cause of injury among care workers. Care workers who move people are at significant risk of sprains and strain injuries. Physically dependent people need to be assessed, taking into account the task being performed and the space in which the work will take place. Controlling the risk involves providing appropriate mechanical equipment, and training workers on safe work procedures and use of equipment.

This information must be clearly communicated to all staff that may care for the client including staff that may be filling in for workers that are ill or on vacation.

Appropriate symbols and codes can communicate whether the client is capable of an unassisted transfer, can bear his or her weight on at least one leg during an assisted transfer, or requires a mechanical lift.

The ability of the client to communicate with the caregiver to either identify physical limitations or to aid in the transfer will also determine the need for a mechanical lift.

PPE-Eyes Safety Checklist

PREAMBLE

There are important steps that industry can take to protect the eyes of its workers.

The first step is to assess work areas for accidents that can be caused by impact, heat, chemicals, dust, glare and optical radiation. The second is to have a good, sound safety program in place that mandates that 100 percent of employees, managers and visitors follow eye safety rules.

Each day about 2000 U.S. workers sustain a job-related eye injury that requires medical treatment. About one third of the injuries are treated in hospital emergency departments, and more than 100 of these injuries result in one or more days away from work.

Eye Injuries Happen to Workers

- **Striking or scraping:** The majority of eye injuries result from small particles or objects striking or scraping the eye, such as: dust, cement chips, metal slivers, and wood chips. These materials are often ejected by tools, windblown, or fall from above a worker. Large objects may also strike the eye or face, or a worker may run into an object causing blunt-force trauma to the eyeball or eye socket.
- **Penetration:** Objects like nails, staples, or slivers of wood or metal can go through the eyeball and result in a permanent loss of vision.
- **Chemical and thermal burns:** Industrial chemicals or cleaning products are common causes of chemical burns to one or both

eyes. Thermal burns to the eye also occur, often among welders. These burns routinely damage workers' eyes and surrounding tissue.

Workers Acquire Eye Diseases

Eye diseases are often transmitted through the mucous membranes of the eye as a result of direct exposure to things like blood splashes, and droplets from coughing or sneezing or from touching the eyes with a contaminated finger or object. Eye diseases can result in minor reddening or soreness of the eye or in a life threatening disease such as HIV, hepatitis B virus, or avian influenza.

Eyes are always at risk of exposure to different hazards that may include contact with dust, metal particles, debris, glass particles, gas, chemicals, blood borne pathogens and thermal hazards. Exposure to these hazards may lead to the development of adverse illness that affect eyesight which can include eyeball lacerations, affectations to the cornea such as corneal abrasions, conjunctivitis, and burns. Eye protection is vital to provide an appropriate response and assure health and safety of emergency response and recovery workers.

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