

Company Charged With Pesticide Violation

The New Brunswick Department of the Environment claims that the company applied a pesticide in Carlton County without a permit in violation of the province's *Pesticides Control Act*.

[MF Spraying Inc., Govt. of New Brunswick Press Release]

Teaching Workers to Conduct Better Fire Safety Inspections

Safety Management Tools – Inspections

Teaching Workers to Conduct Better Fire Safety Inspections

Eliminating fire hazards is a central part of any workplace safety program. Among the most basic tasks is to ensure that: exits are free and unobstructed; there are appropriate fire extinguishers on hand; and workers are trained how to use the fire extinguishers in case of fire.

These seem like simple and straightforward requirements. But in operation, they often prove to be anything but. Alarming numbers of citations get issued because employers fail to carry out these tasks; sadly, such breakdowns also lead to fatalities.

The key to avoiding mistakes is to remain vigilant. You must be constantly on the lookout for such problems as obstructed exits and malfunctioning fire extinguishers, so you can discover problems **before** fire breaks out (or an OSHA inspector

finds them for you). Like most employers, you might form your workers into fire safety teams and have them conduct regular inspections. That's a good start. But you also need to ensure those teams know what they're doing. That's a training imperative if you want them to conduct a meaningful inspection.

To meet it, don't simply count on workers to carry out what you teach them during training. Give them procedures and forms to ensure they do. Many safety directors say the key to optimizing the effectiveness of fire safety teams is to create a questionnaire that describes exactly what to check during each inspection. We've created a Model Questionnaire you can use for this purpose. Or, if you already have such a questionnaire, you can use our model as a guide for changes and improvements.

What the Law Requires

OSHA has several standards that address fire safety in the workplace. For example:

The Means of Egress Standard requires employers to ensure that exits are available to escape from fires and other emergencies. Among other things, each exit must be clearly visible and continuously maintained so that it's free of obstructions or impediments.

The Portable Fire Extinguishers Standard sets requirements governing the placement, use, maintenance and testing of portable fire extinguishers to be used by workers. Among other things, portable fire extinguishers must be mounted, located and identified so that they're readily accessible. They must also be fully operable and visually inspected at least once a month. Workers expected to use fire extinguishers must also be trained how to do so.

Benefits of Questionnaire

Forming fire inspection teams is a good way to ensure compliance with these requirements. And providing those teams a questionnaire is a good way to ensure they do their inspections effectively. Our Model Questionnaire helps:

Standardize inspections: Distributing the Questionnaire will ensure that each team is checking for the same things and asking the same questions—the ones you mandate. This results in standardization of inspection results which facilitates analysis of the data. For example, it enables you to compare different departments within a single facility or to monitor the same department on an ongoing basis.

Keep inspections short and focused: Fire inspection duties, although vitally important, also diminish “productive time.” That puts pressure on the safety director to keep fire safety inspections short, sweet and to the point. A well-organized Questionnaire enables team members to do an appropriate inspection and then get back to their regular jobs as quickly as possible.

Identify and correct problems early: A Questionnaire can be tailored to the unique problems of your facility or operations. For example, if your fire exit is near loading docks, you can design the Questionnaire to ensure team members go out of their way to verify any loaded materials aren’t being kept nearby.

Build fire safety awareness: One of the benefits of having fire safety teams conduct inspections is that it builds awareness not just among team members but other workers in areas undergoing inspection. A well-designed Questionnaire can maximize the awareness-building function of inspections by ensuring inspectors cover the right ground.

How to Use Questionnaire

Give the Questionnaire to the team leader and have that person distribute a copy to each team member responsible for inspecting an area of the facility. Once the inspection is over, the team leader should review the Questionnaire and sign it upon verifying that it’s complete.

After inspections, you might want to hold interdepartmental meetings with facility managers to discuss the findings. This is especially true if the inspections unearth major or recurring safety problems. Give the department leaders copies of completed

Questionnaires of inspections in their area and include notes and suggestions for corrections. Appoint somebody to be in charge of corrective actions and set a deadline. Once the deadline passes, do a follow-up inspection to verify corrections have indeed been made.

How to Create Questionnaire

Fire inspection team Questionnaires must be tailored to the configuration, operation and needs of your particular facility. But the essential approach is the same. Like our Model Questionnaire, your form should:

Provide Clear Instructions: The first part of the Questionnaire should explain what you want team members to do. At a minimum, ask them to conduct the inspection, fill out the form and return it to the team leader; then have the team leader review the form and give it to you.

List Inspection Detail: Leave space for the inspection date, team leader's name and signature, inspecting team member and area inspected.

Ask 10 Questions: Next comes the heart of the Questionnaire, the actual things you want inspected. Like ours, your Questionnaire should ask questions about 10 things:

1. Whether all exit doors are clearly marked.
2. Whether all exits and exit routes are unobstructed.
3. Whether there are any doorways that workers might mistake for exits during a fire. Remember the OSHA General Requirements Standard requires you to mark any doorway or passageway that might be mistaken for an exit.
4. Whether workers know where in their work area portable fire extinguishers are located.
5. Whether workers in the area have been trained to use portable fire extinguishers.
6. Whether workers who are supposed to be trained to use portable fire extinguishers really know what they're supposed to be. Ask them to tell you in their own words what

they would do when using the fire extinguisher.

7. Whether all fire extinguishers are where they're supposed to be. If a fire extinguisher has been removed or is missing, you'll need to immediately replace it or provide "alternate equivalent protection".
8. Whether all fire extinguishers appear to be in fully operable condition. Verify there are no signs of corrosion or mechanical damage.
9. The date of the last visual inspection listed on the tag of each portable fire extinguisher. Remember that OSHA requires that fire extinguishers be inspected at least once a month.
10. Whether there are any combustible materials, scraps or debris in the area.

Fire Inspection Team Questionnaire

Instructions: Each of the ABC Company fire inspection teams has been assigned a specific area of the facility to inspect. A team leader has also been designated to serve as the head of each team. That team leader will notify each member of the team of his or her duties including which area to inspect.

Each team member must complete this Questionnaire in conducting the inspection of the area to which he or she has been assigned. After completing the inspection, the team member will ensure that the Questionnaire has been thoroughly filled out and give it to his or her team leader. The team leader will review completed Questionnaires and sign them upon verifying their completeness and accuracy. The team leader will give all signed Questionnaires to the ABC Company Safety Director for evaluation and follow-up.

Inspection Information

Inspection

Date:

Team

Leader:

Inspecting

Team

Member:

Area/Department

Inspected:

Team

Leader

Signature:

1. Are all exit doors in the area clearly marked?

[] Yes No []

If _____ no,

explain: _____

2. Are all exits and exit routes unobstructed?

[] Yes No []

If _____ no,

explain: _____

3. Are there any doorways that could be mistaken for exits?

[] Yes No []

If yes, are they clearly identified as non-exits?

[] Yes No []

If _____ no,

explain: _____

4. Do employees know where in the area portable fire extinguishers are located? (Ask at least five employees and select them randomly.)

[] Yes No []

List _____ employees

asked: _____

5. Are employees in the area trained to use portable fire extinguishers? (Ask at least five employees and select them

randomly.)

[] Yes No []

List _____ employees

asked: _____

6. Can employees in the area who purport to have training explain in their own words how to use portable fire extinguishers? (Ask at least five employees and select them randomly)

[] Yes No []

List _____ employees

asked: _____

7. Have any portable fire extinguishers been removed from the area?

[] Yes No []

If yes, has equivalent protection been provided?

[] Yes No []

Explain: _____

8. Are there any signs of corrosion or mechanical damage to any of the portable fire extinguishers?

[] Yes No []

If yes, describe, including extinguisher(s) location(s): _____

9. What is the last inspection date shown on each fire extinguisher (list each one separately)

10. Are there any combustible materials, scraps or debris in the area?

☐ Yes No ☐

If yes, have employees been instructed to store and/or remove such items in a safe manner?

☐ Yes No ☐

Where Do Occupational Health and Safety Laws Come From?

Train the Trainer – Workplace Safety Laws

Where Do Occupational Health and Safety Laws Come From?

Statutes

Statutes are pieces of legislation enacted by a body of lawmakers called legislators. OSHA and Canadian OHS laws are all examples of statutes. But other statutes affect health and safety, such as environmental and general health laws. Moreover, statutes can be enacted by different governments—federal, state/provincial and municipal.

Regulations

Regulations are detailed rules that are connected to and fill out the specific provisions of a statute. Thus, for example, the OSHA statute establishes the broad duty to safeguard employees against

workplace hazards and the OSHA regulations or standards define the hazards and kinds of measures employers are required to take to prevent them. Unlike statutes which are made by legislators, regulations are created by the government agency that administers the statute, e.g., OSHA in the U.S. or provincial OHS regulators in Canada.

Government Guidelines/Interpretations

Regulatory agencies typically issue interpretation letters or guidelines that explain what the laws mean and what employers and others should do to implement them. Although they technically don't carry the force of law, guidelines are important because they show how the agency interprets the law. Consequently, courts and arbitrators look to government guidance when deciding cases under the law.

Common Law/Court Case

Common law is made by judges, rather than by legislators and regulators. The law gets made one case at a time on the basis of the facts of that case. Each case then serves as precedent; establishing standards and rules for other cases to follow. Of course, since no two cases are ever exactly the same, judges have to extrapolate the old rules to the new facts of the case they're being asked to decide. Thus, the more cases that get ruled on, the more the law grows.

Negligence is the tort everybody has heard of, the one that spawns the most litigation. Negligence law is fairly straightforward: Persons are guilty of negligence if:

- They owe a person (who we'll refer to as a victim) a duty of reasonable care;
- They don't live up to that duty;
- The failure to show reasonable care causes the victim to get hurt; and
- The victim suffers damages.

Just about anything can be negligence—from failing to signal a turn to leaving a banana peel on a crowded train platform.

Negligence can be committed by individuals or companies. This exposure to liability is a major concern for all companies and the reason they need liability insurance. Of course, a company is really an consolidation of the individuals who work for it. So, when companies are sued for negligence, it's usually because one or more of its managers or employees did something wrong.

Voluntary Standards

Standards by non-governmental organizations like ANSI, NFPA, ILO and CSA are, by definition, voluntary. Thus, while failure to obey an OSHA or OHS rule is grounds for liability, you can't be fined for not following an ANSI standard. Or so you'd think. In fact, failure to follow a voluntary standard can constitute a violation. How? One way is if the standard is adopted into the statute or regulation. Thus, if an OSHA standard says you must provide PPE that conforms to ANSI standards, the standard becomes mandatory.

Another way voluntary standards can become legally binding is when regulators, judges and juries use them to determine if a company did enough to meet its obligations under the law. This can happen when a law sets a general and vague requirement, e.g., that employers act "reasonably" to safeguard against "known risks." Voluntary standards are used to judge what risks are "known" and what steps are "reasonable" to take to guard against it. Thus, courts and regulators might rely on a company's failure to meet a voluntary standard as evidence of its violation of its legal duty.

Industry Standards

Industry standards work according to the same principles as voluntary standards. They're not mandatory to follow; but not living up to them can result in liability. But there are a few differences:

First, while voluntary standards are typically more stringent than legal requirements, industry standards might be more lax. In such a case, employers must obey the regulatory standard. In other words, industry standards supplement but don't replace regulatory standards and following an industry standard is not a defense for

violating a legal requirement.

The other difference between industry and voluntary standards is that the former tend to be less clearly defined. While CSA and ANSI standards are spelled out in black and white, there's often grounds for dispute over what constitutes an industry standard.

Download



Training Lift Teams to Avoid MSIs

Train the Trainer – Ergonomics

Training Lift Teams to Avoid MSIs

A good way to prevent musculoskeletal injuries (MSIs) is to follow the lead of the healthcare industry. After all, healthcare workers suffer MSIs more frequently than any other professional group—with backaches, neck pain and shoulder injuries leading the way. Of course, whether you're lifting patients or pallets, the same technique can help you protect your workers from MSIs. So, let's take a look at how they do it.

The Lift Team's Purpose

A lift team is a group of workers who are specially trained and dedicated to the task of lifting, moving and repositioning patients, including patients who are obese, immobile, or otherwise hard to move.

Lift teams keep healthcare workers from having to perform these tasks and thus have less exposure to ergonomic injuries.

Organizing the Lift Team

Lift teams can be organized in a variety of ways, depending on the size of the facility:

- Larger facilities often organize lift teams by floor or unit. Thus, personnel on the floor are called upon by their colleagues whenever they need help moving or repositioning a patient. The message for assistance is transmitted from the nursing desk.
- Smaller facilities generally organize two or three groups of lift teams that service either the entire facility or specific sections of the facility. In this case, members of the lift team are summoned by an overhead page or by a beeper message.

The key is to have staff trained and ready to assist others in moving patients, and a system in place to summon the team. Because patient lifting and moving may be needed at any time of the day, many facilities have lift teams available around-the-clock.

Training Lift Team Members: Lifting Techniques

Once teams are organized, you must provide team members in proper lifting techniques, including the use of equipment specifically designed to help them do their jobs. It's also wise to provide team members additional training to enhance their ability to help patients and their value to your company. That may include training in:

- CPR;
- Preventing the spread of infectious diseases, including through exposure to blood borne pathogens; and
- Handling the problems that can arise when individuals are unable or unwilling to move on their own.

Training: The Team Concept

You must also educate team members and other members of your staff

about the team's responsibilities. This way you'll get better results from your lift team. Here are some pointers:

1. Identify Potential Users

The first step is to identify who in your facility would use the team. Do some research and compile a list of those in your facility who occasionally need to move or lift patients or other heavy non-human items. In most healthcare facilities, lift teams benefit:

- Nurses
- Transporters
- Radiology technicians
- Physical therapists

2. Conduct a Survey

Once you've completed your list, invite those groups to participate in a survey. The objective is to get employees in your facility thinking about how they would use lift teams and what effect such use might have on their daily work routine. Some questions to healthcare facilities include in their survey, which you can adapt for your own facility:

- How often are patient lifts required on your unit?
- What types of patients are housed in your unit: surgical, elderly, obese, etc.?
- Are you willing/able to participate in a lift team?

3. Promote the Lift Team

Once you collect and analyze the survey information, let everyone in your facility know about this new resource. You can do this by:

- Implementing a public relations campaign to advertise the formation of these teams and the benefits they will bring to your organization;
- Offering education programs to teach employees about the specific duties of the lift teams, the training that team members have received, and what to expect from them.

Conclusion

Hiring employees to work on lift teams costs money. However, the money saved by not paying workers' compensation and sick leave claims will more than balance the cost of new staff. More importantly, there's no price that can be placed on maintaining the health and safety of employees by eliminating ergonomics injuries.

How to Implement a Fleet Safety Program

Safety Management Tools – Transportation

How to Implement a Fleet Safety Program

If your company has vehicles—whether in the hundreds or just a single van or pickup truck—you are at risk. At stake is not just safety and liability for property damage and personal injury, but your company's reputation. After all, even if you don't have an accident, people in your community might think twice about doing business with your company if they see one of your vehicles being driven unsafely. One of the keys to managing these risks is to implement a comprehensive fleet safety program. This requires less effort than you might think.

The Components of a Fleet Safety Program

There are two basic approaches to implementing a program. One is to find a workable model and adapt it to the needs of your organization. Your insurance carrier may have a model you can use.

The alternative is to build your own program from scratch. Whichever route you go, there are some key components your program should contain:

- Driver selection criteria.
- Company expectations of drivers.
- Responsibilities of drivers and supervisors.
- Driver orientation and training.
- Disciplinary action for inappropriate operation of a motor vehicle.

Driver Record Checks

This is a critical portion of the fleet safety program. You must check the driving record of every employee who drives or may drive a company owned or leased motor vehicle. You should conduct driver record checks:

- When checking job application references;
- Before making an offer of employment;
- When a current employee transfers to a driving position;
- When a current position is revised to include driving;
- At least once a year on a regular basis to ensure the ongoing quality of your fleet.

Most state motor vehicle departments will provide driver record checks to employers, for a nominal fee. You may also be able to negotiate with your fleet insurance carrier to do the checks for you as part of your premium costs.

A third option is to spend some extra money to hire an outside company to perform the check. The information provided by such companies is not always as current or accurate as that provided by state motor vehicle departments. Also, since the reports generated by the private company are covered under the Fair Credit Reporting Act (FCRA), employees must sign a disclosure and release form authorizing the check. You don't need FCRA authorization to get this information directly from the state.

Assessing the Results

With a formal fleet safety program, you can use drivers' records to select safe drivers to hire. True, a person may have a good record and still not be a stellar driver, just someone who hasn't been caught yet. But this is usually not the case.

Once you've hired employees, you can use the program to monitor their driving and identify areas for improvement and, if necessary, impose disciplinary action. In either case, here are some suggested criteria for assessing the results of drivers' records checks.

Acceptable: In general, an acceptable candidate may have these moving violations:

- No more than two in the past 12 months;
- No more than three in the past 24 months; or
- No more than four in the past 36 months.

Probationary Status: Candidates may be hired on a probationary status, with their records re-checked every four to six months, if their records show one incident in the past 12 months of:

- Excessive speed;
- An at-fault accident; or
- An accident involving lane, following, sign or signal violations.

Unacceptable: Candidates with two or more of the above violations should not be hired into a position requiring the operation of a motor vehicle. Nor should any candidate whose record shows one or more of the following in the past 12 months:

- Operating under the influence of alcohol/controlled substance
- Fleeing and eluding
- Hit and run
- Leaving the scene of an accident
- Personal injury/fatal at-fault accident
- Reckless driving
- Driving without a license

There are other violations or circumstances that may prevent hiring or place the current employee into a probationary status.

When determining eligibility, remember to consider extenuating circumstances. For example, a temporary suspension for failure to pay forfeiture probably would not affect a candidate's eligibility – but driving on that suspended license might.

One last note about selection criteria: Candidates under 25 years of age should be scrutinized carefully. Restrict drivers in this age group to no more than ten percent of the total number of drivers in your fleet. Drivers younger than 18 years of age should not be hired at all.

Defensive Driving & Other Education

Let's now discuss the second component of a fleet safety program: driver training, orientation, and company expectations. Each driver in your fleet should take a safe driving course within six months of being hired or immediately on the implementation of the fleet safety program. The course can be:

- One of the numerous driving courses available, including the National Safety Council Defensive Driving course;
- A program you develop in-house; or
- A program offered by or through your fleet insurance carrier. Often insurance companies outsource the driver training to other companies that will provide the training in a classroom setting or online.

After initial training, drivers should receive periodic brief refreshers which may include:

- Short discussions
- Memos
- Payroll stuffers
- Newsletter articles

Drivers able to complete a defensive driving course or similar class may be exempt from the initial training, but still should participate in the refreshers. Be sure to document the training

and all refreshers.

Vehicle Orientation

Employees must be familiar with the vehicle(s) they will be operating. The orientation to the vehicle should include any of its unique characteristics and features, such as:

- Anti-lock brakes;
- Remote control mirrors;
- Seatbelt and head restraint adjustments; and
- Anti-theft devices.

Vehicles with diesel engines also have unique characteristics. You should also point out the location of the SDS binder.

Orientations should be provided to:

- Any employee who's assigned to a different vehicle; and
- All employees whenever new vehicles are added to the fleet.

Company Expectations

Of course, you expect your drivers to handle their vehicles safely. But to be clear, your fleet safety program should outline these expectations. Your drivers should understand that you expect them to:

- **Conduct regular vehicle safety inspections** per department policy, keep the vehicle in good operating condition, and report any mechanical or equipment problems to their supervisor.
- **Practice defensive driving** and courtesy to prevent accidents and traffic violations.
- **Observe all the rules of the road**, including the use of turn signals, yielding the right of way, adhering to speed limits and maintaining safe following distance.
- **Use headlights** (not parking lights) during times of reduced visibility, such as snow, rain, drizzle, fog and twilight.
- **Allow only authorized persons** to operate or ride in vehicles.
- **Never use the vehicles for personal use** (e.g., hauling

furniture, driving children to school, shopping, etc.)

- **Never pick up hitchhikers.**
- **Never leave the vehicle unattended** with the key in the ignition and/or the motor running.
- **Always lock the vehicle** when it is unattended.
- **Use seatbelts** at all times and ensure that passengers do so as well.
- **Report to the supervisor** immediately any moving violations, accidents or changes in license status.
- **Never drive under the influence** of alcohol or drugs. If medication is prescribed, the doctor or pharmacist should confirm that it will not affect the ability to drive. The same is true of over-the-counter medications, such as cold remedies containing antihistamine, which can cause drowsiness.
- **Avoid using a cell phone** while driving. If it is necessary to use the phone, pull safely off the road, make the call, and then safely resume driving. Hands-free devices have limited value in reducing the distractions associated with phone use while driving.
- **Review and be familiar with** the safety data sheets (SDS) provided in the vehicle for all chemicals present including fuel, lubricants, coolant, brake and power steering fluid, windshield washer fluid, transmission fluid, and battery acid along with any de-icing and cleaning products kept in the vehicle.

Supervisor Obligations

Let's discuss the supervisor's obligations in a fleet safety program. Supervisors play an essential role in carrying out a fleet safety program work. For a program to work, supervisors must:

- Ensure employees are familiar with and adhere to all aspects of the fleet safety program.
- Maintain a list of all current drivers and their drivers license numbers.
- Conduct an annual review of all drivers' records.

- Familiarize employees with new vehicles and ensure they understand and are aware of any unique features of the vehicles.
- Investigate accidents involving department vehicles.
- Ensure employees attend all required driver education programs, including refreshers.

Disciplinary and Other Policies

You must have a disciplinary policy to take action against employees who commit violations of the fleet safety program. Where applicable, other policies may have bearing on the situation. These may include policies on:

- Drug and alcohol use
- Motor vehicle accidents, or
- Unacceptable driving records.

You may also want to consider including a provision in your disciplinary policy that requires employees who commit violations to attend a course designed to improve individual driving skills. Of course, this should be only used for violations and employees that don't warrant immediate termination.

Policies Regarding Personal Vehicles

A policy should also address employee use of personal vehicles. Generally, employees should not use their personal vehicles to do company business if there is a motor vehicle available in operating condition that isn't being used. But occasionally, employees may have to use their personal vehicles to perform their duties. To reduce the potential for accidents, injuries and liability, employees should follow the same practices as outlined for the operation of company-owned vehicles. In addition, your program should outline these particulars:

Insurance: Employees who expect to drive their personal vehicles for company business must show they have automobile insurance in force. They should maintain at least the state-mandated minimum liability coverage but should be urged to carry a higher liability level along with collision and comprehensive coverage.

Accidents: In the event of an accident involving an employee's personal vehicle, the employee should:

- Follow their insurance carrier's procedures for reporting the accident and obtaining information;
- File an Incident Report with the supervisor, and
- If injured, file an Employee Injury Report according to the company's policy.

Mileage claims: Your plan should address whether employees are to claim mileage from their federal income taxes or to be reimbursed by the employer at the prevailing IRS rate. Thus deductibles and claims for vehicle damage that are not covered by the employee's insurance policy are the responsibility of the employee. The thought here is that the mileage deduction/allowance is intended to cover most if not all expenses involved in the operation of an automobile. Any exceptions may be considered on a case-by-case basis and should be careful not to set a precedent.

Conclusion

Employees who operate a motor vehicle for your company should be seen not only as a driver but also as a company representative. Therefore, employees must make a conscious effort to drive courteously, maintain alertness and obey all traffic laws and rules of the road. Making sure they do will help your drivers stay safe and enhance the image of your organization.

OSHA Inspection Tip: Take Photos

Photos Make a Difference

They say a picture is worth a thousand words. But some pictures are worth a lot more than that. Like the one that saved a

construction company over \$40,000! The company used a photograph taken by a company representative during the walk around phase of an OSHA inspection, to successfully challenge a \$43,000 citation. The moral: Documenting how OSHA inspectors conduct an inspection, especially during the walk around phase, can help you challenge fines or get them reduced. And while the story involves trenching safety, the advice applies to any hazard or workplace condition.

The Story

The company's safety director says that an OSHA inspector showed up unannounced at one of the company's construction sites. During the walk around, the inspector took measurements of an excavation. He later cited the company for not having the proper supports at the excavation. The company disputed the measurements. A photo taken by a worker, whom the company had previously appointed to be its representative in case of an inspection, clearly showed the inspector was improperly holding the tape measure at an angle when he measured the excavation. As a result, his measurements were completely wrong. The company produced the photo at the subsequent hearing and got all the charges dismissed.

The Moral

This story points out the importance of the walk around phase of OSHA inspections. This is when the inspector walks around your workplace looking for potential hazards. What the inspector sees (and doesn't see) usually determines how extensive the investigation will be, how long it will last, whether you'll be cited and, if so, how much you'll pay. (**Note:** Canadian OHS inspectors engage in a similar process, although it's not referred to as a walk around.)

The walk around is also when mistakes are most likely to occur. Yes, OSHA inspectors do make mistakes, some of which can cost you thousands or even tens of thousands of dollars. To protect yourself you need to catch those mistakes. Your best chance of doing that is to appoint somebody from your company as your representative to accompany the inspector during the walk around and instruct that person to take photos, notes, and measurements.

The Strategy

Section 1903.8 of the OSHA regulations gives you the right to have a representative accompany an OSHA inspector during an inspection. Designate a worker to serve as your representative. Tell representatives what to do so they're prepared for an inspection. There are model instructions you can adapt at the bottom of this page.

Use the notes, photos, and other data the representative gathers during the walk around to challenge citations and get penalties reduced. Among other things, you may be able to use the information to contradict an inspector's testimony during a hearing the way the construction company's safety director in the example above did.

Instructions for OSHA Inspections

Here are written instructions you can add or adapt to your policies and procedures regarding OSHA inspections. Tell your representative to:

- Make a complete and accurate record of everything the inspector does during the walk around;
 - Take notes of everything the inspector says, including all questions asked and how they were answered;
 - Take all the same measurements, photographs, tape recordings, and videos the inspector does; and
 - Photograph and/or videotape the inspector taking photos, measurements, etc. *Example:* If the inspector takes a photo of a blocked fire exit, the representative should also photograph the exit. If the exit is cleared five minutes later, the representative should photograph it again to document that you fixed the problem while the inspector was still at your facility.
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Workplace Stress – Getting Management to Take It Seriously

Safety Management Tools – Workplace Stress

Getting Management to Take It Seriously

Work-related stress has been around for as long as workplaces themselves. But recognition of stress as an occupational hazard is a product of modern times. Unfortunately, not all companies have gotten the message. That leaves it to safety directors and supervisors to persuade management that stress really is a problem to take seriously. The best way to do that is to relate the problem to dollars.

Here's how to educate your company's "biggs" to the dangers of workplace stress and gain their support for programs to combat it. There's also a Model Worksheet below you can use to calculate the financial impact of stress on your company.

The Business Case for Preventing Workplace Stress

The case is a simple one: Workplace stress hurts profits because it increases absences and cuts productivity. 'Want some good hard data that you can use to make this point? According to a press release from the World Congress on Health and Safety at Work, of the 40.2 million working days annually lost by businesses worldwide, 13.4 million are from stress, anxiety, and depression, the representatives found.

To put these numbers into perspective for your CEO or CFO, relate stress to more "familiar" hazards. According to one of the delegates, "in the U.S. alone, stress is creating a workplace hazard every bit as damaging as chemical and biological hazards."

Demonstrating the Hidden Costs of Stress

These statistics should help you capture management's attention. But you'll probably need to drill deeper to make your case. To persuade management to invest company resources, you must clearly explain exactly how workplace stress hurts the business. This is tricky because stress isn't a line item cost listed on the typical profit and loss statement. It's a bundle of hidden costs. There are five elements in this bundle that you should point to:

1. Higher Injury & Illness Rates

The more stress workers experience at work, the more likely they are to engage in unsafe behavior. The result is more incidents involving personal injury and/or damage to equipment and machinery. The link between stress and incidents isn't just a matter of common sense; it's well documented. If you want a good study to cite, see F. Gordon & D. Risley (1999) "The costs to Britain of workplace accidents and work-related ill health in 1995/96, Second Edition," HSE Books, London; and P. Dorman (2000), The Economics of Safety, Health and Well-being at Work: An Overview, International Labour Organization, Geneva.

2. Increased Absenteeism

Studies confirm that workers under stress are more apt to call in absent—either because they're genuinely ill or they're feigning illness to avoid having to go to work.

3. Higher Turnover

Stress at work also causes people to leave the company. In addition to losing good people, companies incur high administrative costs in seeking replacements. And, replacement costs tend to rise to the extent that the company gains a reputation for being a stressful place to work.

4. Premature Retirement

Stress causes older and more senior workers to retire before they're ready. Result: High replacement costs and in many cases lump sum and pension payments.

5. Reduced Productivity

Workplace stress harms workers' productivity and performance. The effect of stress on productivity is hard to measure; but it is real.

Conclusion

There's nothing mystical about workplace stress. It can be managed. For example, Employee Assistance Programs have proven very effective at reducing stress on the job. But these solutions cost money. And time. The only way to secure the necessary resources is to persuade your CEO that workplace stress poses a serious threat to your workers and your company's bottom line.

HOW TO CALCULATE THE COST OF WORK-RELATED STRESS: TURNOVER COSTS

Use this worksheet to calculate how much turnover caused by workplace stress cost your business last year.

STEP 1: CALCULATE EMPLOYEE TURNOVER COST

(Number of employees lost in the last year: _____) X
(Average Salary/Benefits Package Layout: Put Average
Salary/Benefits right on top of each other]) X 150 percent =

* Total stress-related employee turnover cost \$ _____

STEP 2: CALCULATE SUPERVISOR TURNOVER COST

(Number of supervisors and middle managers lost in the last year:
_____) X (Average Salary/Benefits Package Layout: Put
Average Salary/Benefits right on top of each other]) X 200 percent
=

* Total stress-related supervisor turnover cost \$ _____

STEP 3: CALCULATE SR. MANAGER TURNOVER COST

(Number of senior managers lost in the last year:
_____) X (Average Salary/Benefits Package Layout: Put
Average Salary/Benefits right on top of each other]) X 250 percent
=

* Total stress-related senior manager turnover cost \$ _____

STEP 4: CALCULATE TOTAL TURNOVER COST

Add up the totals from Steps 1, 2 and 3 above:

* Total turnover cost \$ _____

STEP 5: CALCULATE PERCENTAGE OF TURNOVER COST DUE TO STRESS

Total turnover costs (from Step 4) X 0.4

* Total stress-related turnover cost \$ _____

Close Calls – Your ‘Free Shot’ to Fix a Safety Problem

Safety Management Tools – Close Calls – Your ‘Free Shot’ to Fix a Safety Problem

Close Calls Demand Your Attention

Close only counts in horseshoes and hand grenades, right? You’ve probably heard that old saying. Maybe close **doesn’t count for most people**. *But if you’re a supervisor or a safety director in charge of getting supervisors to implement your company’s health and safety program, a close call can be a life saver. The **close*** trainers need to be on top of is the “close call” or near miss. Let’s talk about why it’s so important to safety and you can do to use close calls to improve health and safety performance.

The Significance of a Near Miss

Safety directors, supervisors and others in charge of creating and implementing the company’s safety program do their best to prevent illness and injury. But good intentions and earnest effort aren’t enough. All of us make mistakes. There’s no such thing as a

perfect human being. The corollary to this principle is that there's no such thing as a perfect safety program.

The second corollary is that every safety program has some flaw somewhere. The important thing is to figure out where the flaws are and fix them. The crucial question: Will you discover the flaws in your own program before somebody gets hurt? Or will it take injury or illness to bring them to light?

The answer to that question depends in large part to how you respond to close calls.

Not all incidents injure people and damage property. Close calls are the incidents where nobody or nothing gets hurt. It could be anything from someone walking in an aisle and almost getting hit by an opening door to a screwdriver being dropped to the floor by the maintenance guy working on a ladder and narrowly missing the skull of a maintenance worker below. A close call is thus a "free shot" to identify and fix problems in a safety program before they do actual harm.

Why We Don't Take Advantage of Near Misses

Close calls happen all the time. Unfortunately, companies don't always use them to identify and fix the flaws in their safety program. Why not? The problem is that close calls are the Rodney Dangerfield of the safety world. "They get no respect."

One of the reasons for this lack of respect is the tendency to confuse compliance for safety. For example, OSHA/OHS recordkeeping regulations require us to record and report all occupational injuries and illnesses in the workplace. But the recordkeeping requirements don't cover close calls. And if we don't have to report those close calls that we see happen everywhere, we tend not to pay them any attention. No harm, no foul.

So, let's say a worker almost gets hit by a falling box. The safety director might take the following view: "Wow, that was a close one! Thankfully, there was no injury, no first aid, no lost or restricted time. I almost had a boatload of paperwork,

investigation, corrective action and training to do on that one.”

Respect the Close Call

Of course, that is a terrible mistake. Neglect of close calls is a missed opportunity for prevention and a recipe for future accidents. The fact nobody got hurt or no machinery got damaged was an accident. What’s important to realize is that something went wrong and it could go wrong again. You need to fix the problem because the next time you might not be so lucky. And you need to be grateful the close call happened because it gave you the chance to prevent an injury.

Take Action to Prevent Future Incidents

You may say there’s no way to address close calls since you don’t know when they occur. After all, you can’t be everywhere to see them happen. And you can’t necessarily count on workers to report them.

Not knowing about close calls is a real problem. It would be naive to believe all close calls that happen on the shop floor will get recognized and reported. But there are steps you can take to make it more likely for close calls to get reported. Establishing a safety conscious attitude throughout the company and explaining the importance of close calls will go a long way toward getting people on the floor to recognize and report them.

Of course, that’s easier said than done and that for many of us this may be the biggest challenge in establishing an effective safety program. This is especially true if your plant has that sports locker room code of “what happens in the shop stays in the shop.” But this is where the safety director and supervisors can really make a difference. You can change that mentality. So, there’s your challenge: Go out and create that work environment atmosphere that has workers thinking safety every day, be visible, accessible, active and relentless; listen to your workers and use everyone as a resource.

Conclusion

The next time you get a call from one of your supervisors, foremen, lead persons, or operators asking you to come and look at a potential problem, don't think – great, here comes a load of \$*#^\$%#@!! paperwork. Instead, think– hey, my safety program is working. They're telling me about a problem and giving me a chance to fix it before it does real damage. If they're doing something right, I must be doing something right. And, if we're all doing something right, we must be on our way to a safer and healthier workplace.

Asphalt Company Charged for Clean Environment Act Violations

Asphalt Company Charged for Clean Environment Act Violations for installing a 2,000-litre petroleum product storage system without site approval. The government also claims that the business performing the installation wasn't legally authorized to perform such work.

[McAsphalt Industries Ltd., Govt. News Release]

Bakery Cited for Alleged Willful, Serious Violations and

Issued \$104,000 in Proposed Penalties

OSHA conducted an inspection of a bakery after receiving a complaint about possible amputation hazards. The company has been cited for willful failure to utilize lockout/tagout procedures, along with eight other serious violations including alleged failure to provide appropriate PPE, failure to guard moving parts of machinery, failure to utilize safe electrical work practices, and failure to provide adequate training.

[*Interstate Brands Corp., Columbus, OH*. Release number 08-1318-CHI, Sept. 19, 2008]

BC McDonalds Outlet Fined for Multiple Violations

WorkSafeBC issues \$39,000 OHS fines to BC, McDonalds restaurant for multiple health and safety violations.

WorkSafeBC has fined a Mission, BC, McDonalds Restaurants of Canada Ltd. outlet \$39,000 for multiple violations of the Occupational Health and Safety Regulation and the Workers Compensation Act.

An inspection uncovered the following health and safety shortcomings:

- Failure to post first aid procedures conspicuously or indeed at all.
- Failure to conduct workplace inspections at intervals that would prevent the development of unsafe working conditions.
- Failure to provide new and young workers with orientation

and training related to health and safety.

- The lack of an exposure control plan, which meant that workers were required to clean up hazardous materials such as condoms, needles, blood, urine and feces without adequate PPE or safe work procedures.

“Overall, the firm failed to provide its workers with the information, instruction, training and supervision needed to ensure their health and safety,” says WorkSafeBC. “These were all repeated violations.”

Brewery Cited for 10 Alleged Safety and Health Violations

OSHA launched an investigation after an employee died and two other workers were injured in separate incidents a few weeks apart. The company was cited for one willful and nine alleged serious violations relating to electrical hazards. The willful citation alleges failure to ensure the use of appropriate electrical protective equipment when employees were working on or near energized electrical parts. According to OSHA, workplace conditions contributed to two employees being burned by an electrical arc flash April 9 and adequate safety measures were not in place to protect against electrical hazards at the time of the worker's death on Feb. 2, 2009. OSHA has issued \$128,500 in proposed fines.

[MillerCoors LLC, Golden, CO, July 10, 2009]

Bridge Painting Company Cited for Alleged Willful, Serious Violations Issued \$225,000 in Proposed Penalties

An investigation opened in July 2008 resulted in citations alleging failure to have proper carbon monoxide monitoring devices, failure to provide personal protective clothing and ensure that workers used it, and failure to provide required hygiene facilities and ensure that workers conducted required hygiene practices after possible exposure to lead and other hazardous materials. Other alleged infractions include failure to provide US Coast Guard-approved life jackets and to have a lifesaving skiff immediately available at locations where employees were working over or adjacent to water. Other citations were issued for alleged failure to provide proper fall protection and equipment for employees working on scaffolding, failure to maintain a safety and health program, failure to provide a required training program prior to employees being exposed to lead and failure to have a competent person conduct regular inspections of the jobsite.

[*Certified Painting Co. Inc., Alsip, IL*. Release number 09-73-CHI, Jan. 29, 2009].

Five Facts on Falls

Odds of winning the lottery 1 in 135,145,920 (multi-state, mega-millions jackpot)

Your lifetime odds of dying as the result of a fall: 1 in 184 (National Safety Council Odds of Dying)

1. The 5 major risk factors for falls are poor housekeeping, poor workplace layout, inappropriate footwear, slippery surfaces as a result of spills, and slippery surfaces related to poor weather.
 2. In Canada about 15 percent of all lost-time worker injuries are related to falls. (Pulp and Paper Health and Safety Association)
 3. About 37 percent of workplace injuries in the US are related to slips, trips and falls. (Occupational Safety and Health Administration).
 4. The majority of falls (60 percent) occur on the same level. (Canadian Centre for Occupational Health and Safety)
 5. In 2008 throughout the US, 84 workers died as a result of same level falls. (Bureau of Labor Statistics)
-

Six Facts on Fires

Odds of winning the lottery: 1 in 135,145,920 (multi-state mega millions jackpot)

Lifetime odds of dying in a fire because of exposure to smoke, fire or flames: 1 in 1,167 (source: National Safety Council Odds of Dying)

1. Replace the batteries in smoke detectors on at least one occasion per year.
2. The two months that account for the most fire deaths in the US are December and January.
3. Three things that can save lives on the job and at home include finding and practicing two routes to escape a fire, installing smoke alarms and installing fire extinguishers and teaching workers and families how to use them.
4. In Canada there are eight fire deaths per week on average.
5. Smoke alarms should be replaced every 10 years.

6. In 2006, the number of Americans unintentionally losing their lives to fire, flames and smoke totaled 2,800.
-

Six Facts on Hispanic Workers

Odds of winning the lottery: 1 in 135,145,920 (multi-state, mega-millions jackpot)

Odds of a worker killed on the job being Hispanic: 1 in 8 (Source: American Society of Safety Engineers)

1. For every 100,000 Hispanic workers, there are 5 occupational fatalities.
 2. Construction incidents account for 34 percent of Hispanic worker fatalities.
 3. Of all occupational fatalities in Texas, 40 percent involve Hispanic workers.
 4. Of all Hispanic worker fatalities, 67 percent involve foreign-born workers.
 5. Between 1995 and 2002, 77 Hispanic youths died on farms throughout the US.
 6. 95 percent of Hispanics killed on the job are men.
-

Six Facts on Hornets and Bees

Odds of winning the lottery: 1 in 135,145,920 (multi-state, mega-millions jackpot)

Lifetime odds of dying from contact with hornets, wasps or bees 1 in 56,789. (Source: Odds of Dying (2003), National Safety Council)

1. Between four and five million people are bitten by dogs every year in the US. (Source: dogbitelaw.com)

2. Five Canadians died as a result of bear attacks in 2005, with three of those fatalities involving black bears and two involving brown bears. (Source: Southeastern Outdoors)
 3. About 8,000 venomous snake attacks occur each year in the US, with about 15 people dying as a result. (Source: US Centers for Disease Control and Prevention)
 4. Between 15 and 20 people die each year across the US as a result of dog bites. (Source: dogbitelaw.com)
 5. According to the US Postal Service, 3,300 letter carriers were bitten by dogs on the job in 2005.
 6. Thirty-six cougar attacks were documented across North America between 1991 and 1999. Seven people died in those attacks. (Source: Calgary Herald)"
-

Six Facts on Machine Related Accidents

Odds of winning the lottery: 1 in 135,145,920 (multi-state, mega-millions jackpot)

Lifetime odds of dying as a result of contact with machinery: 1 in 4,742.

1. The top 4 industries for machinery-related injury are agriculture, mining, manufacturing and construction.
2. On average, 7 workdays are lost as a result of each machine-related workplace injury.
3. Tractors account for 44 percent of machine-related deaths.
4. Of the injuries involving incidents with mechanical power presses, 49 percent result in amputations.
5. Private sector lost-time injuries caused by machinery in 2002 numbered 92,560 across the US.
6. Canadian worker fatalities involving machine-related incidents totaled 223 between 2002 and 2006.

Shiftwork Training Challenges

Many employers, such as manufacturing plants, utilities and healthcare facilities, operate 24 hours a day, seven days a week. So their workers must work shifts, some of which are overnight. Workers may also be scheduled to work a night shift one week and then a day shift the next. Shiftwork takes its toll. It throws off workers' "circadian rhythm" or natural body clock, making it hard for them to sleep when they're off duty. Shiftworkers are also prone to develop certain kinds of illnesses and because they're often fatigued, they're more vulnerable to safety incidents.

The Impact of Shiftwork on Safety & Company Performance

Shiftworkers face considerable challenges. Their morale is often low. Their family and social lives may suffer because of their irregular hours, which contributes to their stress. The quantity and quality of shift workers' sleep is also typically low. So it's no surprise that sleep disorders, such as obstructive sleep apnea, are commonplace among shiftworkers. Shiftwork has also been associated with an increased risk of:

- Cardiovascular disease;
- Gastrointestinal disorders;
- Obesity; and
- Diabetes.

And the increased prevalence of such health problems often results in shiftworkers' increased use of medication, which can adversely affect their job performance.

How exactly do these problems impact employers? The medical ailments that shiftwork causes or contributes to all have an erosive impact on workers' productivity. And workers with such ailments utilize health services and drugs at a high rate and so drive up the company's health insurance costs.

How bad is the problem? Shiftwork costs U.S. companies approximately \$206 billion a year, or about \$8,600 per shiftworker per year (based on 24 million shiftworkers). Shiftwork drives up employers' costs by increasing:

- Absenteeism;
- Turnover;
- Medical care;
- Safety incidents; and
- Production errors.

Training Shiftworkers

The good news is that workers can be trained to cope better with the rigors of shiftwork. A study by Circadian Technologies, an international consulting firm that specializes in shiftwork issues, shows that giving workers shiftwork lifestyle training can reduce safety incidents, absenteeism and turnover—all of which cost the company money. In addition to saving money, shiftwork lifestyle training can also enhance revenues in the form of improved morale and productivity.

The study focused on a group of heavy equipment operators that worked shifts for a major surface mining company in the U.S. To establish a pre-training baseline, the shiftworkers filled out sleep/wake logs for a 28-day shift cycle. They also completed diagnostic surveys about their:

- Sleep habits;
- Lifestyle;
- Family/home life;
- Fatigue and alertness; and
- Health and safety.

The shiftworkers and their spouses or partners then attended the “Managing a Shiftwork Lifestyle” training workshop. (Because shiftwork impacts workers' families, involving family members in the training maximizes its benefits.) The workshop consisted of small groups of shiftworkers. Expert trainers delivered the training in a single four-hour session. During the session, they gave shiftworkers and their family members practical information

on the special issues associated with shiftwork, including such topics as:

- Eating more nutritiously;
- Managing fatigue and alertness levels;
- Getting more and better quality sleep;
- Using naps effectively; and
- Balancing work and home life.

The sessions were interactive so shiftworkers could raise particular problem areas and share tips with each other. About six weeks after attending the workshop, 74% of the original shiftworkers filled out an additional month of sleep/wake logs and 68% of the original group completed a post-training survey.

The Study's Results

The researchers compared the operators' pre- and post-training information in the following areas:

Overall health. Before attending the workshop, 77% of the shiftworkers felt that their overall health would improve with a different schedule, as compared to 59% after the workshop. This finding could be the result of the shiftworkers' better understanding of how their own personal circadian rhythms are affected by their current schedules. It could also reflect the fact that a high percentage of shiftworkers was more aware of good nutrition and was incorporating healthy eating habits into their lifestyles.

The surveys included a series of scientifically validated instruments to evaluate health status, including a gastrointestinal index. The post-training improvement in this index was quite dramatic—dropping from a score of 17.9 to 13.6. Because heartburn, indigestion and other types of gastrointestinal problems were frequent complaints for the shiftworkers, this result was very favorable. And the reduction in gastrointestinal score could represent a significant reduction in medical costs for the company. (The study didn't analyze the company's costs pre- and post-training.)

Use of caffeine. The study looked at the shiftworkers' caffeine use as high caffeine use is related to an increased frequency of both gastrointestinal disorders and sleep disorders. Excessive caffeine use—defined as drinking more than four 12 oz. servings of a caffeinated beverage in a 24-hour period—decreased from 24% of the shiftworkers to 16% during off-duty hours. The decrease in excessive caffeine use during night shifts was even more impressive: such use decreased from 32% of the shiftworkers to only 8%. And this reduction could result in significant improvements in the shiftworkers' health.

Sleep habits. Overall, the shiftworkers' sleep habits improved significantly. More than 54% of the shiftworkers indicated that they'd made some changes to their sleeping environment to enhance their ability to fall asleep and stay asleep, especially during the day. Those changes seem to have paid off. The average amount of sleep shiftworkers got during the day (when working night shifts) increased a full hour from 4.8 hours to 5.8 hours (a 21% increase). In addition, 67% of the shiftworkers reported getting more than five hours of daytime sleep while working nights, compared to 45% before the workshop. Also, after the training, only 67% reported staying awake for more than 18 hours in the prior week, compared to 82% before the training. And improved sleep and reduced fatigue directly correlate with improved alertness, safety and performance.

Management of work/family balance. After attending the workshop, shiftworkers were better able to balance work and their family lives. For example, before the training, 41% found it "very" or "often" difficult to fulfill their domestic responsibilities; after the training, only 23% felt that way. Also, 46% reported difficulty finding adequate time for entertainment and recreational activities, compared to only 23% after the workshop. These results can be attributed to the shiftworkers' having a better overall management of work and family issues.

Overall, the workshop was well received by both the shiftworkers and management. The shiftworkers felt better and were more alert after attending the workshop. And management described the program

as “a very positive breakthrough.”

Meaning of the Results

What do these results mean for your company? The study’s results demonstrate that shiftwork lifestyle training can improve shiftworkers’ ability to handle and manage the problems that shiftwork can create and thus improve their overall health, sleep habits and job performance. Improving these aspects of workers’ lives isn’t just a “nice thing to do.” It enables a company to realize real savings. Data on the mining company’s costs pre- and post-training wasn’t available. But Circadian surveyed 550 managers from companies that used shiftworkers. It found that companies that provided training for shiftworkers:

- Had better worker morale;
- Had fewer severe or moderate fatigue issues;
- Had lower levels of turnover and absenteeism, especially if workers’ families were included in the training; and
- Most notably, had significantly lower turnover costs, such as the cost of recruiting, hiring and training new workers, and costs related to absenteeism, such as the additional pay for a replacement worker while a shiftworker is absent.

Costs saved included:

- Cost of shiftwork lifestyle training: between \$50 and \$150 per worker (depending on the number of workers in each training session);
- Reduced turnover costs: annual savings of \$952 per worker; and
- Reduced absenteeism costs: annual savings of \$940 per worker.

So given the savings in absenteeism, turnover and other performance areas, it’s clear that shiftwork lifestyle training is extremely cost effective.

Conclusion

The study shows that if a company can improve the quality of life

of its shiftworkers and help them better manage the challenges posed by shiftwork, it can reduce absenteeism, turnover, safety incidents and workers' compensation claims. You should be able to use this study to convince management that investing in a lifestyle training program for shiftworkers will pay off.

Skin Protection An Athlete's Guide

What do marathon runners and healthcare workers have in common? How about football players and truck drivers? **Hint:** It has to do with something we observe in November. And it's not Thanksgiving.

Give up? November is National Healthy Skin Month in the United States. To help you bring home the "fluffy" topic of skin care to your workers, this article offers an athlete's approach.

Skin Health & Athletic Performance

Everybody knows that athletes must be in tip top physical health to succeed. But there's more to it than just bones and muscles. Skin health is also an important factor in athletic performance. We've all heard about strains, tears, sprains and fractures. But what about allergic reactions to earplugs or goggles? Or skin problems like acne mechanica and fungal infections from skin-to-skin contact? Yes, these things do happen. And while they don't get as much attention as other forms of injury, these topical problems can be just as damaging to an athlete's career.

What it means is that even the best conditioned athletes need to baby their skin. And what's true of athletes applies equally to your own workers. No matter what industry you're in, you should teach your workers about the need to care for their skin and help them do so by emulating the lessons of the athlete's skin care regimen. Here are three common skin ailments that can harm the

athlete and the worker and how to guard against them.

1. Blisters

Blisters can trip-up the most dedicated of marathon runners or slam dunk the most agile of basketball players. They're a problem in the workplace, too. Although not officially considered an occupational injury, some surveys suggest that two-thirds of workers have foot problems. And anything that causes discomfort is bound to make a worker less alert and thus more prone to accident.

Causes:

- Heat
- Moisture
- Shoes that don't fit
- Movement that creates friction on the skin

Athlete's Tips:

- Lubricate feet, hands and other blister-prone areas with petroleum jelly and lotions
- Keep feet, hands, etc. dry and cool with antiperspirants and drying powders
- Decrease friction by wearing shoes that fit, clean moisture-absorbing synthetic socks and socks that fit.

2. Acne Mechanica

Skin that is exposed to heat or that experiences constant friction or pressure may develop acne mechanica, a form of acne. Football players may develop acne mechanica from their shoulder pads; truck drivers may develop it in their backs.

Causes:

Acne mechanica may develop on skin covered by:

- Helmets
- Tight uniforms
- Headbands
- Belts or straps
- Face masks

Athlete's Tips:

- Wear moisture-absorbing clothing beneath gear
- Shower immediately after removing gear

3. Allergic Contact Dermatitis

A condition officially known as allergic contact dermatitis afflicts athletes and workers in many industries. It's marked by red, itchy blister patches on the skin produced as the result of contact with an allergenic substance. Over time, the substance wears down the skin's protective outer layer, making its way to the natural skin proteins. When the immune system responds, it releases a chemical that causes itching, pain, redness, swelling and blisters. Some swimmers experience contact dermatitis in reaction to the rubber components of earplugs, bathing caps or goggles. It's also fairly common among coal miners, agriculture workers and healthcare workers.

Causes:

- Hot workplaces
- Dry air
- Friction on the skin
- Substances such as acids, alkalis, mineral oils, solvents, bleaches, glues, pollen, wood dusts, nickel, some types of vegetables and fruits and even antibiotics

Athlete's Tips:

- Avoid contact with the allergen (determined by a patch test)
- Apply ice or soak it in cold water
- Apply anti-itch lotion or spray
- Keep affected area clean, but avoid harsh soaps and detergents and harsh scrubbers, such as pumice, that may dry out the skin
- Dry skin completely with clean paper towels or hot air dryers and replenish your skin's oils with a good hand cream
- Change into clean clothes at the end of the workout – or work

Conclusion

Smart athletes understand the health risks of their sport and the protections and procedures necessary to guard against it. This includes not just injury to bone and muscle but also skin. Your workers would do well to take a page out of the athlete's book. And you should help them do so.

First you need to educate workers about the importance of skin protection. Then you need to make them aware of the various things they can do to protect themselves such as reading the material safety data sheets for products they handle and by wearing appropriate gloves, aprons, footwear, leggings, face shields and coveralls when working with irritants. Last but not least, you need to teach them to recognize and immediately any signs of skin irritation.

Environmental Safety Spill Reporting and Response

Workers at a farm coop accidentally drop a pallet containing a toxic cleaning agent, crushing two containers and causing a spill. Workers dilute the spilled solution with water and flush the contaminated water down a storm drain.

Workers at a farm coop accidentally drop a pallet containing a toxic cleaning agent, crushing two containers and causing a spill. Workers dilute the spilled solution with water and flush the contaminated water down a storm drain. Nobody tells management of the incident. A few days later, a government biologist notices dead fish floating in the creek where the storm drain discharges. He goes to the plant and asks the manager about the spill. The manager says he doesn't know anything about it. And he's telling the truth. But after the biologist leaves, the manager does a

little checking and learns what happened. The workers involved reassure the manager that “they took care of” the spill. But, of course, they’ve done anything but. The company reports the spill belatedly and is fined not just for failure to report but for not training its workers how to respond to spills properly [R. v. Agrifoods International Co-operative Ltd.].

The spill in Agrifoods is the kind of incident that can happen anywhere, at any time to any company. And when it does, a prompt and effective response by workers is crucial to contain the damage and ensure compliance with reporting requirements. Yet, lawyers say that few companies do a good job of preparing workers in spill response. “It’s not that they don’t try,” says one lawyer. “It’s that spill response planning tends to be patchy and ineffective.” For example, the employer in Agrifoods did train workers to use water to dilute spilled chemicals. But it forgot to tell them to keep diluted chemical out of drains, sewers and surface waters and to report all spills immediately to management. The company paid dearly for these oversights.

This article will tell you how to create effective spill response and containment procedures for your workers. There’s also a Model Policy on page x and a Spill Report Form on page x that you can adapt and use as part of your own spill response contingency plan.

What the Law Requires

Environmental laws require organizations to take response measures to reduce potential harm caused by hazardous spills. Smaller spills generally require containment, clean up and disposal. Larger spills may require the help of government and/or private spill remediation contractors.

Many states and Canadian provinces also require a spill contingency plan setting methods for containing different kinds of spills that are reasonably foreseeable at the site. Organizations might also have to file the plan with the government, depending on the kind of operations it conducts.

Why You Need a Spill Response Plan & Policy

Just about any organization that uses, stores or handles hazardous substances should create a contingency plan even if the law doesn't specifically require it to. Explanation: Lawyers say that preparing a contingency plan represents an informal benchmark or "best practice" of environmental management. Consequently, judges, prosecutors and regulatory officials are likely to consider the existence of a plan a crucial factor in determining if a company's spill response meets the standards of due diligence, even if creating such a plan isn't mandated by a specific environmental regulation. "We recommend anyone who stores any quantity of contaminants prepare a plan," says one government official.

A key element of a contingency plan is an organizational policy and set of procedures telling workers how to react to spills. A spill response plan:

- Helps you contain the harmful effects of spills to health and the environment;
- Makes it easier to investigate and gather the information you need to document the spill and its impact under environmental regulations; and
- Tells workers how to report spills properly and in a timely manner and thus heads off incidents like the one in the Agrifoods case.

What to Include in Your Policy

Policies will vary depending on your operations, the hazardous substances you handle, the laws of your province, etc. But lawyers say that all policies should include some basic provisions:

Purpose Clause: Tell workers that prompt response and reporting of spills isn't just a legal requirement but a vital matter affecting public health and the environment [Model Policy, Sec. I].

Spill Response Procedures: List steps workers should take in response to a spill [Model Policy, Sec. II(a)].

Cover both minor and major spills. "Minor spills typically involve a known substance that doesn't threaten the safety of the environment or other people," explains an Ontario lawyer. Many

organizations let workers clean these spills themselves, provided they receive adequate cleanup training. Major spills that threaten health or environmental damage say should be handled by a specialized cleanup crew [Model Policy, Sec. II(c)].

Additional actions your policy should require for all spills include:

- Warning others about hazards associated with the spilled substance;
- Helping others that may have been contaminated;
- Controlling potential ignition sources if the spill involves flammable materials;
- Activating the fire alarm if the spill poses an immediate health threat; and
- Evacuating the area, if necessary.

[Model Policy, Sec. II(b)].

Reporting Requirements: “Every company should have at least one point person who is responsible for handling a spill, no matter how small it is” says a BC environmental lawyer. Tell your workers who that contact is. This person should make sure that the spill is contained and cleaned up properly and be responsible for notifying the authorities and handling media inquiries, if necessary. Other people who should be notified include the company president, department managers and others directly affected by the spill.

Pointer: The law requires the reporting of spills that could harm the environment. But the laws vary as to which spills must be reported and to whom. Check the laws of your state and province and make sure your policy requires your spill response coordinator or another employee to notify the proper authorities. [Model Policy, Sec. III].

Spill Report Form: Some states and provinces require organizations to complete a spill report form for every spill that occurs on their property. Saskatchewan even gives you a model reporting form. Requiring your workers to complete a spill report form is a

good idea even if your organization isn't located in a jurisdiction that requires one. "You need to have a record of the incident and how the spill was contained," explains a lawyer [Model Policy, Sec. IV].

Conclusion

Improper spill response is one of the few environmental violations that are easy to avoid. But to do it you must document and implement your spill response and reporting procedures. With prosecutions on the rise, this is a task no company can afford to ignore.

SHOW YOUR LAWYER

1. v. Agrifoods International Co-operative Ltd., [1993] B.C.J. No. 2320, Oct. 8, 1993].

MODEL POLICY

Here's a Spill Response and Reporting Policy and Form that you can use to ensure that your employees report and respond to spills appropriately. Be sure to adapt it to meet the needs of your company and the requirements of your province before using it at your organization.

Spill Response and Reporting Policy

1. **PURPOSE.** Federal and provincial laws require ABC Company and its employees to respond to environmental spills immediately and, if necessary, report them to the proper authorities. Failure to comply with these laws could result in significant harm to the environment and ABC Company's employees, as well as stiff governmental penalties, including jail time.

ABC Company ("Company") is adopting this spill response and reporting policy to ensure the safety of the environment,

employees, and other persons affected by a spill, as well as to describe the procedures that all employees must follow in the event of any unexpected release of any contaminant into the workplace or surrounding environment.

1. SPILL RESPONSE PROCEDURES

1. **Spill Response Coordinator.** Company has identified a Spill Response Coordinator (insert name of person in charge of handling spills) and backup (insert name of backup response coordinator) who shall be responsible for ensuring that spills are contained, cleaned up, and reported properly and for handling media inquiries.
2. **Notification and Safety.** Employees with knowledge of a spill must notify the Spill Response Coordinator about all unanticipated spills at Company's facility or off-site locations, no matter how small. Additionally, they must also notify all people in the immediate area about the spill and warn them about any hazards associated with the spilled product.

To the extent they can do so without jeopardizing their own safety, employees must also:

1. Attend to any persons that may have been contaminated, removing contaminated clothing and applying first aid where appropriate.
 2. Control sources of ignition if the spill contains flammable material.
 3. Activate the fire alarm, if the spill poses an immediate health threat.
 4. Evacuate the immediate area, closing doors to the affected area on the way out.
2. **Spill Clean Up.** Employees should be familiar with the information on the Material Safety Data Sheets for the materials they normally work with and should understand the hazards associated with each of those materials. It shall be the responsibility of each department supervisor to ensure

that sufficient quantities and appropriate types of spill control materials and protective equipment, as prescribed in each relevant MSDS, are available and readily accessible to contain and clean up spills.

Minor Spills: After notifying a supervisor and the Spill Response Coordinator of a spill, an employee may clean up a minor spill, provided that the employee has been trained on proper cleanup procedures.

A minor spill is defined as a spill that: (1) is of a known material and quantity, (2) does not pose a significant safety or health hazard to employees or others in the immediate vicinity, (3) does not pose a significant threat to the environment, and (4) does not have the potential to become an emergency within a short time frame.

Typical clean up procedures for minor spills include:

1. Wear appropriate protective equipment and avoid breathing harmful vapours.
2. Use appropriate spill control material to contain and absorb the spill in conformance with MSDS requirements. In most instances, loose spill control material should be distributed over the entire spill area, working from the outside and circling to the center. This reduces the chance of splashing or spreading of the spill. DO NOT ALLOW SPILLED MATERIAL TO ENTER FLOOR OR SINK DRAINS.
3. For spills of acids and bases, use a brush or scoop (spark-resistant if the spill involves flammable material) to place materials in an appropriate container. Store the container in a secure ventilated area and contact the Spill Response Coordinator for disposal instructions.
4. Decontaminate the surface where the spill occurred before allowing normal work activities to resume in the area.

Major Spills: All spills that are not minor must be cleaned up under the direct supervision of the Spill Response Coordinator

III. REPORTING REQUIREMENTS. If a contaminant is spilled in a greater quantity than that identified in British Columbia's Spill Reporting Regulations Schedule (a copy of which is attached), the Spill Response Coordinator shall immediately notify the following persons:

1. State/Provincial Emergency Program
2. Company president
3. Relevant department managers
4. All other persons who may be directly affected by the spill

1. **SPILL REPORT FORM.** The Spill Response Coordinator shall also be responsible for ensuring the completion of a Spill Report Form, a copy of which is attached. In the case of minor spills, the form may be completed by the employee responsible for cleaning up the spill.

[Attach copy of provincial spill reporting regulations]

SPILL REPORT FORM

This form is to be completed by the Spill Response Coordinator or the employee(s) responsible for cleaning up an unanticipated minor spill. Once completed, this form must be forwarded to the Spill Response Coordinator, if that person does not already have a copy, and Company's President. Additionally, the Spill Response Coordinator may forward this form to the proper governmental authorities as required by law.

Name and contact number of person completing report: _____

Date of spill: _____

Time and duration of

spill: _____

Identify whether spill occurred in:

Air Land Water Building or room

Description of area and/or property impacted by spill: _____

Description of incident: _____

Product(s) and quantities involved in spill: _____

Name of product owner: _____

—

Weather conditions at the time of spill and during response phase: _____

Identify all parties and individuals exposed to the spill or involved in the spill response. _____

Were there any health treatments or tests conducted on any of the above-named individuals?

If yes, please provide a description of each test, on whom it was performed, and the test results.

What methods were used to contain the spill?

What clean-up techniques were used?

Please describe the methods used to dispose of the spilled product.

What are the short and long term impacts of this occurrence? _____

What measures should be implemented to prevent any recurrence of this _____ kind _____ of spill? _____

Identify all individuals notified about the spill. _____

Safety Communication: Staging a Phoney Death to Prevent a Real One

Talking to your workers about safety isn't always enough to prevent illness and injury. You must also ensure that workers talk to each other when they're on the job. After all, if workers don't look out for their co-workers, who will? Unfortunately, many companies have a hard time impressing their workers that the need

to communicate is real. Here's a dramatic and proven technique you can use to shatter complacency and get workers talking to each other.

Staging a Fatality

The technique was recommended by a supervisor at a manufacturing company with a wonderful (and puzzling) record of no OSHA recordable injuries for three years. It's a small company of about 75 people. The floor crew has a penchant for hard-headedness and complacency brought about by the long track record of no serious accidents. They didn't have a safety program before the supervisor came, and the unspoken prevailing outlook was: "We didn't need all this before. Why do we need one now?"

The supervisor had a hard time breaking through the self-satisfaction. He knew the law of averages was going to catch up to them sooner or later. He felt like he had to do something before the inevitable serious injury or death occurred.

One day, while he saw an inexperienced employee stacking materials in a dangerous way. A veteran co-worker was right at his side. But he was eating his lunch and didn't offer a word to the rookie. The supervisor thought to himself: "Workers should be talking to each other. This lunacy won't stop until someone gets killed!"

Then he had an idea. If a fatality was needed to wake them up, he would go ahead and stage one. His strategy was to "kill" someone in simulation before the real thing struck.

Setting the Scene

At the next weekly safety meeting, the supervisor selected Joe, one of the workers. He deliberately chose Joe because he's one of the more well-liked and friendly persons. So his "death" would cause genuine sorrow.

The supervisor told Joe to lie down on the break room floor and used a large piece of white chalk to draw one of those infamous police "chalk line" around him. It was fun for the guys. Later, though, the laughter died as the seriousness of the situation

began to set in. The supervisor directed Joe to move to the very back of the room, so he was no longer in plain view. Then he spoke exactly as if Joe had just died.

Announcing Joe's Death

He restarted the meeting as if he had just called everyone together, acting as if he was seriously shaken and upset. The supervisor informed the crew that Joe had just fallen 40 feet from a scaffold in the yard. In a slightly shaking voice, he told them that Joe was wearing no fall protection and no hardhat and that none of his co-workers spoke to him about it. He told them the ambulance had just left the building, but that Joe was not expected to make it.

The supervisor then fast-forwarded the clock and read aloud the detailed "accident report," which he'd pre-written. The accident report ended with "Joe did not die at the scene, but held on for two weeks before succumbing to internal injuries. He never regained consciousness."

The Effects of Joe's 'Death'

Next, the supervisor walked the crew through the steps of what would happen next. He did this in great detail and ensured realism. He talked about Joe's family going bankrupt from medical bills not covered by workers' comp; the foreclosure and subsequent loss of his families' home; the repossession of the family car. This was followed by OSHA investigations, fines, civil suits by Joe's family against the company, the closure of the shop (bankruptcy brought on by the canceling several large contracts and the inability to get others due to our "new" safety record. civil suits and OSHA fines, etc. etc.) He touched on two of Joe's workplace friends who began to suffer the effects depression. One friend, unable to cope with his new job, quit and moved away. Another friend began drinking heavily and eventually lost his job due to alcoholism.

His talk went on to a realistic-looking "Obituary" that he had written, detailing the family he had left behind—mother, father,

sisters, brothers, wife and young children. He passed copies of these out, as if they were newspaper clippings.

Hitting Home

By this time, half the crowd was simply staring at the chalk outline. The supervisor could tell they were thinking hard. The circumstances were right out of their work environment, and he was making them face it without much need for imagination.

He finished by going around the room and looking people in the eye individually. He told them in a seriously hushed tone that Joe was dead. Now it was up to someone in the company to drive out to Joe's house and inform his expectant wife and his two children.

The supervisor asked several of them individually (I picked the hard-shell guys): "Will you do that for us? Will you tell her for us that we're sorry? Your husband's dead? You could tell her that we know we've always done things we shouldn't, but ... [here he managed to make my voice crack] ... today was just a bad day."

When the meeting broke up, everyone was quiet. A week later, the chalk line was still on the break room floor, a silent reminder.

Conclusion

It may not have been a cheery and upbeat safety meeting, but it was unusual. And it really got workers' attention when other methods had failed. Soon thereafter, the supervisor felt the attitudes shift a little and noticed that workers were making a point to communicate with each other. The corner had been turned.

Sample Notes for Chalk Line Safety Meeting

03 December 2009, welder needed to weld two fittings on top of tank.

[Worker name] falls from top of tank, sustains head injury, broken collar bone

Police called, 9-11 called

OSHA called for report

Shop closed for the day, police question everyone

[*Worker name*]'s family is informed

[*Owner name*] calls his lawyer. [*Safety rep name*] calls his lawyer

Shop reopens temporarily

Doctors operate to stem internal pressure on [*Worker name*]'s brain

OSHA brings an investigation team for accident.

OSHA begins inspecting entire business. Shop closed same day.

Workers laid off until further notice.

[*Worker name*] passes away

OSHA establishes responsibility of [*Owner name*], [*Manager name*] and [*Safety Rep name*].

[*Manager name*] calls lawyer

Case taken to Grand Jury. [*Manager name*] and [*Safety Rep name*] indicted for direct responsibility

[*Worker name*]'s family announces civil suit against the company

OSHA directs fines to [*Owner name*] as company owner \$100,000 for incident

OSHA directs personal fine of \$20,000 against manager [*Manager name*] and Safety Representative [*Safety Rep name*]

[*Safety Rep name*] is forced to sell family home to pay court costs and OSHA fines

[*Manager name*] and [*Safety Rep name*] found guilty at trial, given three years terms

Company announces bankruptcy

[*Owner name*] loses civil suit, fined three million dollars (more than asked for)

[*Owner name*] declares personal bankruptcy

Medical costs absorb half of the court award of two million

One co-worker suffers depression, becomes unemployable

Another co-worker turns to alcoholism

All workers suffer financial trouble from shop closure, some lose cars, one even loses a house

Sample Obituary for Chalk Line Safety Meeting

[*Your Town*] Reporter Obituaries

December 13, 2009

[*Worker name*] Dies in Workplace Accident

[*Worker name*], a lifetime resident of [*your town*], died Friday night, December 14th, 2009 at [*your town*] Memorial Hospital. He died of injuries sustained in an industrial accident at his place of work. He was just 30 years of age.

[*Worker name*]'s family wishes to give a special thank you to the nurses at [*your town*] Memorial Hospital for their loving and gentle care during his last days and hours.

Visitation will be Sunday, December 23, 2009 at Ellis Funeral Home between the hours of 3:00 P.M. and 5:00 P.M.

Funeral services have been scheduled for 3:30 P.M. Monday, December 24, 2009 at [*local church*]. Interment will follow at Resthaven Memorial Park. Arrangements are under the direction of Ellis Funeral Home. In lieu of flowers, memorials may be directed to the [*local charity*] at Box 123, [*your town*], [*your state/province*].

Born in [your town], [your state/province] on August 4, 1977, [Worker's first name]'s. parents were [man and woman's name plus worker's surname]. [Worker name] was known as very kind, loving and understanding man, who loved spending time with his family. He is remembered as a jovial man, who loved to laugh. He loved sports, particularly boxing and football. He was a member of [local church] since childhood.

[Worker name] received his education at [your town] High School. He married [worker's spouse's name] in 1999, and is survived by his wife and two children, [boy's name] eight years old and [girl's name] three years old.

Sample News Articles for Chalk Line Safety Meeting

[Your town] Reporter Telegram

24 December 2009

Supervisors jailed three years for killing worker in work platform collapse

By [local reporter]

Calling the collapse of an illegally constructed platform that killed a young welder a "tragic certainty" rather than an accident, a [your state/province] State judge yesterday sentenced the men responsible for the deaths to at least three years in prison for negligent manslaughter.

State Supreme Court Justice [surname] said she imposed the sentence on [Safety Rep name], [age], of [your town] and [Manager name], [age], of [your town], to reflect "the magnitude of the tragedy" and as a deterrent. "This sentence will, I trust, serve as a warning to others who, in pursuit of their own economic interests, care to be cavalier about the lives of others," the judge said.

The laborer killed was working atop a forty-foot tall storage tank at [your company] in [your town] on December 13 when a hastily

fabricated work platform broke apart and collapsed. The platform, used to reach several fittings at the top of new tanks, was jury-rigged to a cherry picker. Welds made on improperly designed hand rails broke, sending [worker name] plummeting to the ground.

According to company attorneys, [manager name] was found responsible for directing the use of the device. [Safety rep name] was found responsible for failure to enforce the use of required safety devices, such as fall protection equipment that could have saved the worker. Tragically, [worker name] sustained fatal head injuries when he struck the ground, mere feet from an unused fall harness.

During the trial, [worker's spouse], 28, the widow of the killed worker told the judge that her husband had worked on the scaffold despite his fear of it. "He used to tell me in the afternoons when he arrived that he was afraid of going up there," said [worker's spouse], the mother of his two children. "But he had to do it in order to support the children ... and pay the rent."

According to witnesses, [manager name] designed the platform as a sketch on the back of a billing form. Despite not being a licensed engineer, as OSHA requires for the design of human-lift equipment, [manager name] instructed two welders in the shop to build the scaffold. Both men were relatively inexperienced at welding, and it was determined that they used inappropriate rods to make welds that later broke.

Before use, [manager name] never determined how much weight the scaffold could bear. Employees strapped the platform to the basket of a "cherry picker" style manlift for use. An OSHA representative commented following the accident investigation that employees had exceeded the weight it could carry by more than 300 percent.

"The collapse of this scaffold, designed and built by [your company], was not a tragic accident," the OSHA inspector said. "Rather, it was a tragic certainty."

[Manager name], who pleaded guilty in to second-degree manslaughter, faced 3 to 15 years in prison if convicted at trial.

At the time, he admitted he was aware the scaffolding was dangerous. “I am deeply sorry for [worker’s name] family. I wish I had it to do over again.” he said yesterday, reading from a statement. [Safety rep name] commented through his attorney that he regretted not doing more to enforce federal regulations.

Judge [surname] said the case had given her an education in how “astonishingly ineffectual” the federal government has been in protecting workers’ lives. The judge pointed out that the Occupational Safety and Health Administration penalties amount to a slap on the wrist.

OSHA has leveled an initial 100,000 dollar fine to owner [owner name] in connection to the incident. The company has currently shut down operations until further notice, as the company scrambles to mediate another estimated \$850,000 dollars in unrelated OSHA infraction penalties. Seventy workers are unemployed. It’s speculated the factory may not reopen and may file bankruptcy following an announced two million dollar wrongful death civil suit, brought against the company last week by the slain worker’s family.

Yesterday, the tragedy was still all too fresh for [worker’s spouse’s name]. “I’m an expectant mother left with an eight-year-old and a three-year-old. It’s Christmas time. It’s horrifying to think he isn’t here. I don’t know how we’ll make it. My husband was a good man, a good husband and a good father. All he wanted to do was make a living for us.”

Teaching Fall Protection – How to Make an Impact

Train the Trainer – PPE

Teaching Fall Protection – How to Make an Impact

Fall protection is a complex subject. It takes hours, if not days, just to come to grips with the regulatory requirements. And the regulations represent only a minimum standard. As safety professionals, we should be concerned with not just meeting the regulations but going beyond them. That might involve implementing voluntary standards from organizations such as ANSI and CSA. And, of course, we must also consider the recommendations of the PPE and equipment manufacturers.

When you teach fall protection, regulatory requirements are one of the things to cover. But also try to present a more holistic view—to put the fall protection issue into perspective in a way that is meaningful to the workers. Here's an approach you can use.

Start with the Facts

When training workers, your goal should be to make sure they know how to assess the risks associated with their job. You don't want employees to follow safety training only during the 30 minutes that you're there. You want them to do it all the time because it's the safe thing to do. To get this result, you have to impress upon the crew the seriousness of falls. Fall protection is not a topic to be sugar-coated. Start your training sessions with these facts:

- Falls are the greatest cause of fatalities in construction;
- 50% of falls over 11 feet result in fatalities. (Since this is an average, some falls under 11 feet are also fatal.); and
- It takes just one second to fall 16 feet.

You can deliver this last statistic as a pop quiz: "How long does it take to fall 16 feet?" Pause a few seconds, then snap your fingers with the response. "That's it—one second!"

Debunk the Myths

After delivering the statistics, remove the mental safety net many workers rely on. Tell the class: "If you go over the edge, that's it, you are gone! Your buddy may feel sorry for you, but he is not going to be able to grab you to pull you back."

Of course, there's always someone who thinks they will catch something on the way down. But talk with workers who have fallen with no fall protection (including through scaffolding). Odds are not one of them said they were able to grab something to stop the fall. All they did was beat themselves up on the way down.

To emphasize the point, stand with one arm straight out from your shoulder, and ask what would happen if you fell from 100 feet and grabbed something halfway down. The answer is always that you'd pull your arm off.

Teach Basic Risk Assessment

Now you have the class actually thinking about falls. For the remainder of the class, ask them to consider:

- What is required (what the regulations say); and
- What should be done (what is the safest or best industry practice)?

Then ask: When should you use / or need fall protection? It usually takes about 3 or 4 minutes before they come up with the desired response, "When you can fall and get hurt!"

To make the point that they should not concentrate on the "Minimum Standard of 10 feet," it's time for another pop quiz: If a person is six feet tall and they are on a ladder with their feet at the five-foot level and they fall, how far do they fall?

Answer: 11 feet (their head falls 11 feet to the floor), which may put them in the 50% fatality category!

This is the thinking part to which you have led the class and now they should be ready to participate in a meaningful lesson on fall protection details.

* OSHA requires fall protection be provided at elevations of four

feet in general industry workplaces, five and six feet in the construction industry. In many jurisdictions in Canada, the minimum standard for construction is 10 feet or 3 meters.

Conclusion

The main point here is to get people to think for themselves and to develop as second nature two basic concepts when working at heights:

- The primary goal is not to fall.
- The secondary goal is to fall the least distance possible.

If your crew follows these lessons, they won't have to worry about remembering all of the regulatory technicalities.

Protecting Workers who Wear Contact Lenses

More than 32 million American adults wear contact lenses. Of course, many of them are employees who wear lenses in a variety of industrial environments.

Here's what the employee, employer and first responder should know about contact lenses in the workplace.

The Employee View

Contact lens materials and designs have advanced a long way in the past 30 years. Today's contact lenses are cleaner and more comfortable to wear on the eyes. These advances have lead to a healthier use of contacts for the wearer.

Disposable soft contact lenses can be replaced daily, weekly, monthly or quarterly. Prescription options enhance the eye's muscle coordination and offer a wider field of vision. There are

even bifocal contacts.

Contact lenses can be used cosmetically, for example, to change or enrich eye color. But it is important to remember that contact lenses are classified by the Food and Drug Administration as a medical device requiring a doctor's prescription.

How the Workplace Affects Contact Lenses

Where contact lens use is permitted in the industrial workplace, employees must be sure to inform their eye doctor that they plan to wear their lenses at work. That's because there are a number of critical variables that may affect the doctor's final choice of a contact lens design. Besides the prescription itself, the variables associated with the employee's industrial environment include:

- Dust and airborne debris levels;
- presence of vapors or gases; and
- Exposures to chemicals.

Based on the information supplied by the employee, the doctor's final choice of a contact lens may:

- Include a larger diameter to protect the eye from debris; or
- Consist of a plastic material which is more resilient to dirt and debris collecting upon the contact lens surface.

Or, the doctor may determine that contact lenses are not appropriate for the industrial environment and advise against providing a prescription for such an application altogether.

What to Tell Your Eye Doctor

To help the doctor make an appropriate decision, employees should provide the doctor a summary of information relating to how they use their eyes during work activity. In the summary, employees should explain to their eye doctor:

- What the work environment is like;
- The on-the-job visual demands it involves; and
- The unique distances involved with the work activity (this

information is especially vital for wearers of bifocals).

Teaching Your Employees to Care for their Lenses

There are four things a person needs to properly care for contact lenses.

1. Lubricants

Contact lenses dry-out during use. We blink less when we tire. This causes the lens to dry. Dust and debris in the workplace also contribute to the drying process.

It's therefore necessary to use a contact lens lubricant to maintain the proper moistness level and maintain contact lens performance during the workday. It's important to use the right kind of lubricant. Long gone are the days when saliva could be used for lubrication. Drops designed for "getting the red" out of your eyes will permanently destroy a contact lens if used while the contacts are on the eye.

2. Carrying Case

In my experience, most contact lens loss or damage can be traced to the fact that no case was available. When filled with fresh solution, a carrying case provides the safest way to store a contact lens. A glass of water is not a safe or sterile alternative.

3. Back-up Contact Lenses

Contact lenses are generally uncomfortable when debris builds up on the lens surface, a rip or tear develops along the lens edge or a crack occurs in the body of the lens. A back-up contact lens allows the employee to replace the uncomfortable lens with a fresh one. If the eye is still uncomfortable or irritated, the employee should remove the contact lens and consult the eye doctor.

4. Safety Glasses

What better way to continue your workday endeavors safely and comfortably than by using your safety glasses? They won't help you if they're at home on the dresser. The safety glasses prescription

should also be up-to-date. If the prescription is over two-years-old, chances are you won't see as well as you should to perform your best on the job.

The Employer View

Let's now consider contact lenses from the employer's perspective.

Know the Regulations

There's only one OSHA standard that specifically addresses the wearing of contact lenses in an industrial workplace. This standard recommends against contact lens use when working with acrylonitrile, dibromo, chloropropane, ethylene oxide, ethylene chloride and ethylene dianiline chemicals.

Canada: In Canada, there are six jurisdictions with legislation on wearing contact lenses in the workplace: Federal, PEI, Ontario, BC, Yukon and NT. In the remaining provinces, contact lens use would be encompassed under the so called "general duty" clause of the OHS laws—which requires employers to safeguard employees against known risks.

Develop a Contact Lens Policy

To address situations specific to your workplace, you should create a contact lens policy. Your first step should be to assess the requirements for protective eyewear by reviewing the work environments in accordance with OSHA 29 CFR 1910.132 (d). Next, you should conduct your own hazard assessment. (SafetyXChange members can download my company's hazard assessment form from Tools.)

3 Danger Signs

When preparing your hazard assessment, these three questions will help you determine if contact lenses are inappropriate for any given area in an industrial environment.

1. Does this area already have a documented history of eye injuries and thus pose a potential hazard to the contact lens wearer? Note that chemical splashes currently account

for 20% and flying debris 70% of eye injuries.

2. Does wearing contact lenses place the eye at greater risk of eye injury?
3. Do contact lenses conflict with any existing safety requirement or strategy?

What Your Policy Should Say

Once you have identified that contact lens usage is appropriate for your workplace, be sure your company's contact lens policy:

- Sets out which, if any, areas of your workplace where the use of contact lenses by employees and visitors is prohibited and restricted;
- Requires employees who wear contact lenses to have the four kinds of support materials as detailed in last week's article: lubricant, carrying case, back up contact and safety glasses;
- Requires employees to fill out a form to ensure that their doctor has the information necessary to provide (or deny) an appropriate contact lens prescription;
- Requires employees to clearly indicate on their personal identifications if they are wearing contact lenses.

The First Responder View

Here's what first responders need to know about contact lenses in the workplace.

Training First Responders on Contact Lens Removal

If an employee wearing contact lenses suffers an eye injury, it's imperative to check the eye and remove the lens. If the lens is not removed, the eye can suffer serious injury. Ideally, injured employees can perform these functions themselves. But if for some reason, they are unable to remove their own contact lenses, a first responder might have to do it for them.

First responders need to be trained how to do this. Improper removal of a contact can make a bad situation worse and cause more serious damage to the eye. Training should cover both rigid and

soft lens contacts since removal techniques differ for each.

First responders and safety personnel who wear or have worn contacts themselves may be best suited to do this. But even these individuals require training in the detection of injury and proper handling of contact lenses. My experience with contact lens wearers is that over time they tend to develop poor handling and maintenance techniques that could adversely influence their emergency techniques.

Keep the Appropriate First Aid Supplies

Your first aid center or kit should contain these five items to assist first responders:

1. Sterile gloves: Tears in the eye can lead to infections ranging from simple conjunctivitis (pink eye) to HIV. First responders handling contact lenses must wear gloves to protect against these risks. Gloves should be sterilized to avoid infecting the victim.
2. Multipurpose solutions: You need solutions to help loosen a contact lens if bonding to the eye's epithelium has occurred and also for temporary storage of contacts. You need solutions for soft and rigid lenses. *Caution: Eye wash solutions contain a type of salt that make them inappropriate for contact lenses.*
3. DMV removal devices: These specially designed removal instruments, referred to as "plungers," are helpful in removing a rigid contact lens from the eye.
4. Glostrips: Available for both rigid and soft lenses, glostrips are used to detect a contact lens that has moved off center onto the eye's sclera (the white part of eye).
5. Temporary storage contact lens cases: Having temporary storage cases on hand will help prevent any loss or damage to the contact lenses once removed.

Keep Records

Your first responders should also have access to a data file that lists both office and plant employees who wear contact lenses and

the type they wear (i.e., soft lens or rigid). This information may prove crucial to the rendering of appropriate first aid.

Conclusion

Employers who permit contact lens usage should have a clear contact lens policy in force; first aid responders should have proper training and resources; and employees who wear contact lenses in an industrial environment must follow their doctor recommendations for safe wearing and care. By implementing these protocols, contact lenses should not pose a risk to the employee, the first responders or the business.

Respirators How to Demonstrate the Equipment

The focal point of training workers in proper use of respiratory equipment is to demonstrate all of the different forms of respiratory protection and the kinds of hazards each one is suited to protect against. Here are the seven basic kinds of respiratory protection equipment in order of complexity, i.e., starting with the simplest and ending with the most complex. If you don't have actual pieces of the equipment, you can substitute photographs:

1. Dust Masks

Dust masks protect against dust and airborne particles. Masks are inexpensive, simple to use, minimally invasive and typically disposable. **Limitation:** The tradeoff is that they offer only limited protection and aren't appropriate for tasks that involve severe respiratory risks.

Air Purifying Types of Respirator

The next three forms of respirator are what are known as Air Purifying Types of Respirator. What they have in common is the use

of a filter or cartridge to protect against airborne hazards. There are three types of Air Purifying Respirator:

2. Particulate Respirator

Particulate respirators use a filter and/or cartridge that captures particles in the air and prevents workers from breathing them in. **Limitation:** Filters and cartridges must be periodically cleaned and replaced in accordance with the manufacturer's instructions. Particulate respirators don't protect against gas or vapors.

3. Gas & Vapor Respirators

Gas and vapor respirators are designed to protect against hazardous gases and vapors in the air through use of a special chemical filter. Some gas and vapor respirators are designed to screen out specific types of gases and vapors. **Limitation:** Gas and vapor respirators don't protect against airborne particles.

4. Combination Respirators

The difference between particulate and gas and vapor respirators on the one hand and combination respirators on the other is that the latter protects against both airborne particles and gas vapors. That's because combination respirators include particulate and chemical gas vapor filters that need to be maintained and replaced according to the manufacturer's instructions.

Air Supplying Respirators

Now the respiratory equipment is becoming more complex. The next three kinds of respirator are what are known as Air Supplying Respirators. Such respirators aren't simply a head piece but a system of equipment containing four basic pieces:

1. A hood;
2. A helmet;
3. A face piece; and
4. A compressor or cylinder.

You should demonstrate how each system works including the

component parts of the system. There are three basic systems:

5. Air Supplied Respirators

Air supplied respirators are a lightweight system that delivers clean air through a hose. They're normally used for extended work periods in environments that are low in oxygen content or contain non-immediately life threatening levels of gases or vapors. **Limitation:** Air supplied respirators aren't appropriate for work in atmospheres that are or may be immediately dangerous to life and health.

6. Combination Air Supplying Respirators

Combination air supplied respirators have an auxiliary self-contained air supply that workers can use if the primary supply source or system fails. They're normally used for extended work periods in environments that are or may be immediately dangerous to life and health such as work in confined spaces.

7. Self-Contained Apparatus (SCBA)

SCBA systems contain a wearable clean air supply pack and a hose connection that doesn't restrict movement. Closed circuit systems provide air for up to 4 hours. Open circuits provide air for a fraction of that time—typically up to 60 minutes. SCBA systems are normally used when there's a short time needed to enter and escape from atmospheres that are or may be immediately dangerous to life and health.