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Schools



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SAFETY COMPLIANCE MADE EASIER!

FALL 2017 NEWSLETTER

THE IMPORTANCE OF DRINKING WATER, STAYING HYDRATED

When you feel thirsty, your body is likely already insufficiently hydrated. While you can make a habit of drinking water first thing in the morning to help stay hydrated, sipping water throughout the day is also important.

You should also never consider sweet juices, soda, tea, or coffee as substitutes for pure water. They simply won't hydrate you as well. Both sugar and salt as well as caffeine dehydrate the body. If you can't kick the morning coffee habit, be sure to drink a tall glass of water along side of it to make sure you aren't dehydrating yourself further as the sun is just coming up.

Drinking more water is one of the safest, healthiest ways to detox the body. What's more, when you drink more often, you will feel satiated, leading to weight loss from over-eating less often. Often when you feel hungry, this signal from the body is actually telling you that you need to drink more, so try a glass of water first, and then eat something if you are still feeling hunger pangs.

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Overexertion is a serious and chronic problem that affects many people. They also result in many non-fatal injuries.

6 STEPS TO PREVENT INJURY FROM OVEREXERTION

With nicer weather upon us, it is only fitting to discuss the top injury cause, Overexertion.

As the third leading cause of unintentional injuries in the United States, overexertion injuries account for approximately 3.3 million emergency room visits. Overexertion injuries can occur when the body is pushed beyond its limits through strenuous or extreme exercise, activity, heat, lack of water or food, and other causes.

The resulting injuries from overexertion can vary from temporary sprains to more serious health risks. While dehydration is the most prominent health concern when it comes to overexertion, injuries can also range from simple and easily treatable strains and pains to severe debilitating situations like cardiac arrest and hypoglycemia (low blood sugar).

BELOW ARE 6 STEPS YOU CAN TAKE TO PREVENT OVEREXERTION.

1. Know your limits. It is important to pace yourself and know when to say "enough." If at any time you are breathing heavily or profusely perspiring, slow down or take a break.

2. Stretch and warm up before any heavy lifting or strenuous activity. Instead of jumping in to a tough project or activity, do something less strenuous for the 5-10 minutes. This will help warm up your muscles and ligaments to help prevent sudden strains on cold body tissue.

3. Lift properly. Prevent back injuries by lifting with your legs bent; keep the object(s) close to your body; avoid bending, reaching and twisting while lifting; and get a friend for help with large or heavy items.

4. Set obtainable goals. When exercising, set a goal that you can achieve without causing your body too much stress and make sure to take frequent breaks.

5. Stay hydrated. Drink plenty of water before and during any strenuous activity.

6. Stop and take a break if you experience any of the following:

- Dizziness
- Sore or painful muscles
- Low abdominal pain
- Nausea

Following these guidelines should help avoid overexertion. However, be sure to call your doctor immediately if you experience heart fluttering lasting longer than 30 minutes, chest pain, blue lips or fingers, lack of coordination, extreme headache, and shortness of breath or labored breathing.

WEBMD



Some hazardous chemicals take only 6 to 8 seconds to penetrate the outer membrane of your eye to its interior, where they can do the most serious damage.

5 COMMON EYEWASH MYTHS DEBUNKED

Maintain safety in the workplace from head to toe. In this article, we take a look at OSHA requirements for eyewash safety stations.

Myth #1: "An eyewash flushing bottle counts as an OSHA (Occupational Safety and Health Administration) compliant eyewash."

Incorrect. According to the American National Standards Institute (ANSI) standard for Emergency Eyewash and Shower Equipment (ANSI Z358.1-2009), 16- and 32-oz. bottles are considered personal eyewashes. Personal eyewash units provide immediate flushing and can be used as the employee is making his/her way to an approved emergency flushing station. An approved eyewash station must be able to flush both eyes simultaneously, for 15 continuous minutes, with a minimum flow rate of 0.4 gallons per minute.

Myth #2: "There are no specific guidelines for water temperature for an emergency eyewash or shower."

Incorrect. Guidelines in ANSI Z358.1-2009 specify the water temperature for emergency flushing equipment to be in the range of 60–100°F. Water temperatures below 60° can cause hypothermia and may prematurely stop the emergency first aid treatment. Temperatures above 100° can accelerate a chemical reaction with skin and eyes. The use of thermostatic mixing valves blend hot and cold water for a comfortable water temperature, which help ensure workers flush for the required 15 minutes.

Myth #3: "All gravity-fed eyewashes that meet the minimum 0.4 gpm flow rate are ANSI compliant."

Incorrect. Gravity-fed eyewashes that meet the minimum 0.4 gpm flow rate must also meet the requirement of 15 continuous minutes of uninterrupted flow. According to ANSI, the gravity-fed eyewashes that do not meet the minimum requirements are considered personal eyewashes only.

Myth #4: "Personal eyewash bottles have an indefinite shelf life as long as the seal remains unbroken."

Incorrect. Personal eyewash bottles are factory sealed. The shelf life for most personal eyewash bottles can be between two and three years from the date of manufacture. The expiration date will normally be printed on the bottle for easy identification.

Myth #5: "Emergency eyewash and emergency eye/face wash are synonymous terms."

Incorrect. Emergency eyewash and emergency eye/face wash have two different definitions under the ANSI Z358.1-2009 standard based on the rate of flow. The minimum flow requirement for eyewash is 0.4 gpm compared to the minimum flow rate of 3.0 gpm for an eye/face wash. Applications where emergency eyewash is suggested would be in a work environment where particulate hazards exist. In a work environment where chemical hazards are a concern, an emergency eye/face wash is suggested because chemicals can be hazardous to both skin and eyes.

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MINIMIZING WORKPLACE HAZARDS WITH OSHA'S THREE LINES OF DEFENSE

While some lines are more effective than others, they all take critical thinking and the ability to recognize hazards. And the concept of OSHA's three lines of defense continues to be an important part of maintaining a safe workplace. The three lines of defense represent a way of thinking about and applying specific actions to eliminate or reduce exposures to identified hazards. It is generally depicted as a pyramid with the most effective method – engineering controls – at the pinnacle, followed by administrative/work practice controls, and finally the least effective – personal protective equipment (PPE).

1. Engineering controls
2. Administrative and workplace controls
3. Personal protective equipment (PPE)

The three lines of defense are used in all workplaces, including offices, construction sites, factories, hospitals and more.

Everyone has a role in assuring a safe and healthy workplace. There are opportunities to help assess hazards, discuss accidents and near-miss incidents, and offer suggestions based on the three lines of defense.

ENGINEERING CONTROLS

Some hazard control measures are more effective than others. Engineering controls are the first line of defense and they are physical changes to the work area or process that minimizes a worker's exposure to the hazard. Examples of engineering controls include installing guardrails to prevent falls, limiting exposure to hazardous chemicals via ventilation, using portable air conditioners to combat heat stress and installing noise absorption panels to dampen high noise levels.

ADMINISTRATIVE OR WORK PRACTICE CONTROLS

The second line of defense – administrative or work practice controls – involve changes in work procedures, schedules and training that reduce the duration, frequency and severity of exposure to identified hazards. The entire operation from management and human resources to supervisors, general staff, and line workers – everyone has a role in developing administrative or work practice controls.

PPE

PPE is considered the last line of defense. It is equipment that is worn to minimize exposure to a variety of hazards. According to the Centers for Disease Control and Prevention (CDC), PPE is used by 20 million workers and is very important, but according to OSHA it must be considered last after all engineering and administrative/work practice controls.

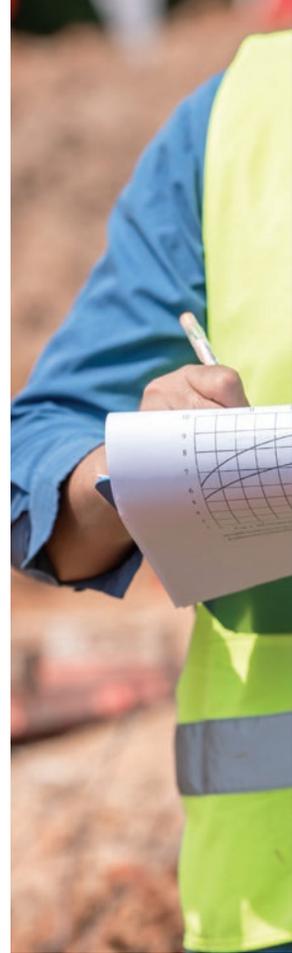
CONCLUSION

The three lines of defense are process-based and connect with the overall workplace safety culture. Everyone should have a say and be able to provide input into reducing unsafe conditions. It can be difficult to remove hazards completely, which is why there are three lines of defense in order to reduce or lessen threats. Those lines connect with each other, helping instill a safe work environment.

Overall, ensuring the safety of workers is a team effort – one that includes management, supervisors and line workers and OSHA's three lines of defense.

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OSHA'S THREE LINES OF DEFENSE



THE IMPORTANCE OF DRINKING WATER, STAYING HYDRATED (continued from page 1)

10 BENEFITS OF PROPER HYDRATION

The following specific functions in the body require hydration. Drink more water to:

1. Combat Fatigue
2. Reduce High Blood Pressure
3. Halt Allergies and Asthma
4. Reduce Acne, Dermatitis, Psoriasis, and Premature Aging of the Skin
5. Stop High Cholesterol
6. Eliminate Digestive Disorders
7. Flush Out Unwanted Bacteria from the Bladder and Kidneys
8. Speed Up Joint and Cartilage Repair
9. Stop Gaining Unwanted Weight
10. Slow the Aging Process

Try drinking water with a little lemon and sea salt after a workout instead of sports drinks that are full of refined sugar. Instead of drinking soda, replace this beverage with water. Try adding some lemon, orange or cucumber wedges or even letting a pitcher of water infused with herbs like mint, holy basil, or sage steep in the refrigerator overnight. The result is delicious and healthy.

In colder weather, follow the Dalai Lama's habit of drinking warm or hot water in a mug. The body has to work less to warm up water that is already heated.

WebMd



WHAT IS PPE?

Personal protective equipment, commonly referred to as "PPE", is equipment worn to minimize exposure to hazards that cause serious workplace injuries and illnesses. These injuries and illnesses may result from contact with chemical, radiological, physical, electrical, mechanical, or other workplace hazards. Personal protective equipment may include items such as gloves, safety glasses and shoes, earplugs or muffs, hard hats, respirators, or coveralls, vests and full body suits.

WHAT CAN BE DONE TO ENSURE PROPER USE OF PERSONAL PROTECTIVE EQUIPMENT?

All personal protective equipment should be safely designed and constructed, and should be maintained in a clean and reliable fashion. It should fit comfortably, encouraging worker use. If the personal protective equipment does not fit properly, it can make the difference between being safely covered or dangerously exposed. When engineering, work practice, and administrative controls are not feasible or do not provide sufficient protection, employers must provide personal protective equipment to their workers and ensure its proper use. Employers are also required to train each worker required to use personal protective equipment to know:

- When it is necessary
- What kind is necessary
- How to properly put it on, adjust, wear & take it off
- The limitations of the equipment
- Proper care, maintenance, useful life, and disposal of the equipment

If PPE is to be used, a PPE program should be implemented. This program should address the hazards present; the selection, maintenance, and use of PPE; the training of employees; and monitoring of the program to ensure its ongoing effectiveness.

PERSONAL PROTECTIVE EQUIPMENT

EYE AND FACE PROTECTION

Safety glasses or face shields are worn any time work operations can cause foreign objects to get in the eye.

For example, during welding, cutting, grinding, nailing (or when working with concrete and/or harmful chemicals or when exposed to flying particles). Wear when exposed to any electrical hazards, including working on energized electrical systems. Eye and face protectors – select based on anticipated hazards.

FOOT PROTECTION

Construction workers should wear work shoes or boots with slip-resistant and puncture-resistant soles. Safety-toed footwear is worn to prevent crushed toes when working around heavy equipment or falling objects.

HAND PROTECTION

Gloves should fit snugly. Workers should wear the right gloves for the job (examples: heavy-duty rubber gloves for concrete work; welding gloves for welding; insulated gloves and sleeves when exposed to electrical hazards).

HEAD PROTECTION

Wear hard hats where there is a potential for objects falling from above, bumps to the head from fixed objects, or of accidental head contact with electrical hazards. Hard hats – routinely inspect them for dents, cracks or deterioration; replace after a heavy blow or electrical shock; maintain in good condition.

HEARING PROTECTION

Use earplugs/earmuffs in high noise work areas where chainsaws or heavy equipment are used; clean or replace earplugs regularly.

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PROPER LIFTING TECHNIQUES

Preventing back injuries can be a major challenge for some employers. According to the Bureau of Labor Statistics (BLS), overexertion was the nation's leading event or exposure leading to an injury or illness in the workplace, accounting for 34% of all workplace injuries or illnesses.

BLS also showed that the back was the leading body part affected, making up 18.2% of total cases. Although no approach has completely eliminated back injuries, a substantial portion could be minimized by incorporating an effective control program along with an ergonomics analysis and design of work tasks. OSHA has evaluated ways to help prevent lifting injuries. It specifies two types of controls: engineering and administrative. Engineering controls are used to redesign the workstation to minimize lifting hazards. Administrative controls include carefully selecting and training workers so that they can perform their jobs safely.

SUGGESTED ENGINEERING CONTROLS INCLUDE:

- Redesigning the weight being lifted to help make it easier to lift the item with the presence of handles, use of baskets and the stability of the package being handled.
- Adjusting the height of the object being moved.
- Installing mechanical aids such as pneumatic lifts, conveyors and/or automated material handling equipment.

SUGGESTED ADMINISTRATIVE CONTROLS INCLUDE:

- Strength testing of existing workers: Studies have shown strength testing can prevent up to one-third of all work-related injuries. Through the strength-testing process, employers can discourage employees from performing tasks that exceed their strength capacities.
- Physical conditioning or stretching programs: These programs are implemented to reduce the risk of muscle strain.
- Training: Employees should be trained to utilize proper lifting techniques that place minimum stress on the lower back.

HOW TO LIFT SAFELY

Before lifting, take a moment to think about what you are about to do. Examine the object for sharp corners, slippery spots or other potential hazards. Know your limit and do not try to exceed it. Ask for help if needed. Or if possible, divide the load to make it lighter. Know where you are going to set the item down and make sure the destination and your path are free of obstructions. Then follow these steps.

1. Stand close to the load with your feet spread shoulder width apart. One foot should be slightly in front of the other for balance.



2. Squat down, bending at the knees (not your waist). Tuck your chin while keeping your back as vertical as possible.



3. Get a firm grasp of the object before beginning the lift.



4. Slowly begin straightening your legs, lifting slowly. Never twist your body during this step.



5. Once lifted, keep the object as close to the body as possible. If the load's center of gravity moves away from your body, there is a dramatic increase in stress to the lumbar region of the back.

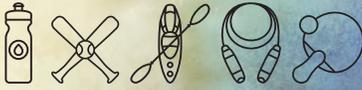


Using proper lifting techniques can help prevent downtime due to avoidable back injuries. With a little practice, precautionary methods such as these can become good daily habits that could help prevent back injuries both on and off the job. Remember, no approach will completely eliminate back injuries.

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WHAT'S WRONG WITH THIS?

Can you tell what's going wrong in this photo?



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