

LOTO: WHY TAKE A CHANCE WITH ENERGY?

PLAYING LOTTO MAY BE ENERGIZING, BUT ENERGY WITHOUT LOTO IS A FOOL'S GAME

HIERARCHY OF CONTROLS

Always remember that removing the hazard is at the top of the hierarchy of controls. Engineering controls is in the center of the 5-step hierarchy, and using various devices to control hazardous energies is an important part in "isolating people from the hazard."¹

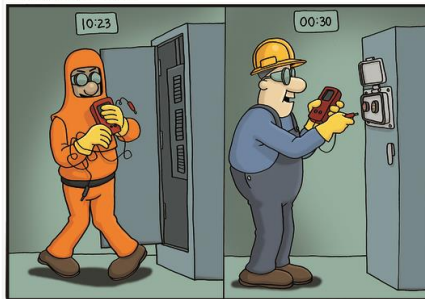
A strong Energy Control program with the right locking and blocking devices saves both life and limb.

¹ Hierarchy of Controls. www.cdc.gov/niosh/topics/hierarchy/default.html

WHAT ARE...

Permanent Electrical Safety Devices

Burnie & Les



"Don't start yet, Les, I almost got it." "And done."

Reprinted with permission from GracePort:
www.graceport.com/safeside

Burnie & Les showing the difference in time and effort using PESDs.

It's one thing to use warning labels to keep *people away from voltage*, but the ability to keep *voltage away from people* is truly a testament to safety by design.² Using integrated devices, shown above is a voltage-testing device, is putting into practice the Hierarchy of Controls.

To learn more about the use of PESDs, you may read about them here: "How Permanent Electrical Safety Devices Affect Safety."³

² Schiltz, Nick. "Burnie & Les." *Graceport*, 11 May 2019. info.graceport.com/blog/burnie-and-les-make-loto-safer-with-pesds. Accessed 17 Jun 2019.

³ Allen, Phil. "How Permanent Electrical Safety Devices Affect Safety." <https://cdn2.hubspot.net/hubfs/477905/Case%20Studies%20and%20Whitepapers/How%20Permanent%20Electrical%20Safety%20Devices%20Affect%20Safety-1707.pdf>. Accessed 17 Jun 2019.

ENERGY CONTROL TERMS

In a world which instant gratification is almost demanded, and texting obliterating words to ultra-short abbreviations, taking a short cut can lead to a short circuit, which gets you.

29 CFR 1910.147 is the law and provides minimum requirements for the Control of Hazardous Energy, otherwise known as Lock Out / Tag Out (LOTO). One of the first things to know is WHO you are. Given the similarities of these words, pay heed to the important definitions:

- **Affected Employee:** An employee whose job requires him/her to operate or use a machine or equipment on which servicing or maintenance is being performed under lockout or tagout, or whose job requires him/her to work in an area in which such servicing or maintenance is being performed.
- **Authorized Employee:** A person who locks out or tags out machines or equipment in order to perform servicing or maintenance on that machine or equipment.
- **NOTE:** An affected employee becomes an authorized employee when that employee's duties include performing servicing or maintenance covered under this section.

While a majority of people associate LOTO with electricity, one must-know definition is:

- **Energy Source:** Any source of electrical, mechanical, hydraulic, pneumatic, chemical, thermal, or other energy.

Know who you are, what your responsibilities and energy sources are, as well as the specific energy control procedures for your place of employment, and machines. Thoroughly document all LOTO actions.

In my Science class we were talking about Kinetic and Potential energy. I said aloud "No wonder my mom calls me Kinetic..."

"... I have no Potential!"

Program & Procedures

The 1910.147 is quite clear when a Control of Hazardous Energy Program is required, but have you thought of the procedures for equipment which will need LOTO?

Beware of those systems having multiple sources of energy, as these are such that on the spot LOTO actions can kill. For these type situations always have a written LOTO plan, and perhaps include pictures of out of the way places where a switch/valve or other control must be accounted for and locked open or shut as appropriate.

Where LOTO is common, post the written procedure at the work station being locked/tagged out. Where posting may pose additional hazards, label the equipment identifying the location of the written procedure.

Consult maintenance and service manuals to ensure accuracy and sufficient level of LOTO detail. Review manuals, drawings, tags, labels and signs to identify all locations to shut down, isolate, block, and safely release and secure all potentially stored or residual hazardous energies. Make a list of disconnecting means to be locked/tagged.

CLASSIFIEDS

Movie for Energy Control: Tight production on the LOTO program; terminology clarification, positive practices and live action procedures demonstrated. Watch at <https://www.youtube.com/watch?v=je53N3K-noY>

Booklet on Energy Control: OSHA has a booklet on the requirements for the Control of Hazardous Energy. Go to osha.gov and order OSHA 3210-2002.

FIRE PREVENTION & SAFETY

ANSWERS TO ALL YOUR BURNING QUESTIONS

FIRE SAFETY EQUIPMENT IN THE HOME

YOU should be the best fire prevention item in your home! That includes avoiding fire hazards, preventing injury, destruction of property and death.

Smoke detectors are one of the best alerts when you are not present in an area. Each dwelling should have alarms in each sleeping room and outside each separate sleeping area, as well as on every level of the home.¹

A fire extinguisher is the next important piece of equipment. If you are present when a fire begins, and only if you are able to extinguish the fire, do so. If you are unable, evacuate your family and call 911. If you are alerted to a fire, LEAVE your home, taking the children as you are able.

Using your head to make an evacuation plan, and teaching and practicing it will help ensure your loved ones get out safely, meeting at a designated area.

Do you know your primary and secondary evacuation routes at your place of work? Hotel? Place of entertainment? Be aware.

A fire blanket or rug (stop, drop and roll) is good to have if clothing catches fire.

¹ "Safety messages about smoke alarms." *NFPA*, www.nfpa.org/public-education/by-topic/smoke-alarms/safety-messages-about-smoke-alarms. Accessed 31 May 2019.

Did you know?
Fire Prevention Week is observed each year during the week of Oct. 9th in commemoration of the Great Chicago Fire, which began on Oct. 8, 1871.

SMOKE & CO DETECTORS

One might think that all smoke detectors are created equal, but that is not the case. The basic mechanism consists of two basic parts: a sensor to detect smoke and an alarm to alert people.

The most common types on the market today are photoelectric and ionization detectors. The photoelectric detector is more efficient detecting a smoky, smoldering item, like a mattress.²

The ionization detector is both more common and more complex, but its strength lies in sensing smaller amounts of smoke, generally associated with a flaming fire. Dual-sensing alarms have both photoelectric & ionization sensors.

Regardless of the technology used, smoke detectors placed in the home and kept in working order save lives. NFPA statistics indicated that in home fires between 2012 and 2016, 40% of fatalities occurred in homes with no smoke detectors. Missing or inoperative detectors resulted in fatalities twice as high (12.3 deaths vs. 5.7 per 1,000 fires).³

Unintentional fires cause a great deal of destruction, and things intended to burn can also be deadly. Anything you might burn in or around your home- wood, natural gas or oil- can produce carbon monoxide, CO. Without adequate ventilation, the CO gas- and it doesn't take much- can build up to deadly levels.⁴

² Marshall, Brian. "How Smoke Detectors Work," *HowStuffWorks*, home.howstuffworks.com/home-improvement/household-safety/smoke. Accessed 31 May 2019.

³ "Smoke alarms." *NFPA*, www.nfpa.org/-/media/Files/News-and-Research/Fire-statistics-and-reports/Detection-and-signaling/ossmokealarms.pdf. Accessed 31 May 2019.

⁴ Black, Angela. "How Carbon Monoxide Detectors Work," *HowStuffWorks*, home-improvement/household-safety/carbon-monoxide-detector.htm. Accessed 31 May 2019.

How is it that one match can start a forest fire, but it takes a whole box of matches to start a campfire?

~Christy Whitehead

FAMILY FIRE ESCAPE PLAN

When faced with smoke, flames, or the sounding of an alarm, the first thing one should do is evacuate. Easily said and done as an adult, but throw in the variables of home and children and pets, and the situation becomes more complex.

The National Fire Protection Agency's Public Education page provides planning tips and tools for a [Family Escape Plan](#).

Key elements ensuring a successful execution of the plan is the involvement of children and practicing the plan until they understand what and where to go.

- ✓ Make a home escape plan showing doors and windows
- ✓ Know two ways out of every room
- ✓ Have an outside meeting place a safe distance from the house
- ✓ Practice your home fire drill, both day and night, twice a year
- ✓ Practice using different ways to exit rooms and buildings
- ✓ Teach children how to escape if you are unable to help them.
- ✓ Close doors as you leave ⁵

⁵ <https://www.nfpa.org/-/media/Files/Public-Education/Resources/Safety-tip-sheets/EscapePlanningTips.pdf>. Accessed 30May2019.

CLASSIFIEDS

FREE FIRE PREVENTION TIPS & TOOLS FOR HOME & SCHOOL. VISIT THE PUBLIC EDUCATION PAGE AT WWW.NFPA.ORG/PUBLIC-EDUCATION.

SPARKY THE FIRE DOG: FREE LEARNING GAMES, VIDEOS, ACTIVIES FOR CHILDREN TO LEARN ABOUT FIRE PREVENTION AND FIRE SAFETY. www.sparky.org

SIGHT - YOU ONLY HAVE ONE CHANCE... TO SEE A FIRST IMPRESSION, THE REST AND THE BEST.

IMPORTANCE OF EYE PROTECTION

It seems almost trite to constantly remind people to protect their eyes; maybe they think it is just another part of the body which can withstand injury, like a broken arm, torn muscles or bruised skin. But if one pauses to consider loss of vision, that puts a new perspective on the situation.

“Perhaps most devastating is the fact that while vision loss is among the top 10 disabilities among American adults aged 18 years and older, 90 percent of eye injuries are preventable.”¹

“Some people assume that if you have one eye with good vision, you will function the same way you would if you have two eyes. In fact, many eye doctors have underestimated the time required to adjust to losing one eye.”²

When working at home or hobbies, the recommended eyewear can be a guide to what you might purchase for your own protection

Losing vision involves a change in perspective of life and the ability to complete certain tasks. But be aware that there is often physical pain and a recovery period which is overlooked, no pun intended. Do what you must to protect your vision at work and play. Being short-sighted can lead to blindness.

¹ “Eye Safety At-a-Glance: Protecting Your Vision at Work.” www.thevisioncouncil.org/sites/default/files/VCASESafetyReportv4.pdf. Accessed 2 May 2019.

² “Learning to Live with One Eye Learning to Live with One Eye.” *DukeHealth*, www.dukehealth.org/blog/learning-live-one-eye, 27 Aug 2013. Accessed 4 Jun 2019.



WHAT DOES YOUR SIGHT MEAN TO YOU?

“Simple pleasures are the best.” What simple pleasures do you regularly experience?... Drinking coffee and watching the birds with my wife makes me ‘so happy.’... We miss out on the joys of simple pleasures because of our screens. Checking email and Facebook while taking a walk will muddle your senses and rob you of the delight your environment can give you.

“I encourage (you) to practice ... Habit No. 5: ‘practice mindfulness for a few moments every day.’ One of the easiest ways to practice...is to tie it to a simple daily pleasure... This kind of practice will make a marked difference in your ability to focus.”³

What are the things which you may be taking for granted, but would miss never seeing or doing again if you lost your vision? Take the time to be mindful, and protect yourself AND your vision, both literally and figuratively.

Taking care of your vision is more than simply wearing the proper protective equipment while working, both while employed and at home. Visitors in an eye-hazard area should be provided appropriate protection.⁴

A great resource on the web for eye protection, health, development, problems and changes in vision is www.preventblindness.org.

The best way to protect your vision is by realizing how dear it is before anything happens to it. Protect your eyes.

³ Hawk, Richard. “Focus on simple pleasures.” *Safety + Health*, May 2019, p. 50.

⁴ “Sight Conservation.” OPNAVIST 5100.23G CH1., Ch. 19.

Of all the senses, sight must be the most delightful.

Helen Keller

COLOR DEFICIENCY

Did you realize that 8% of males world-wide have one of four types of color blindness, also known as color vision deficiency - CVD?

Often CVD is not noted until much later in a child’s life, which is sad because there is a lot of frustration in the early years of school when color is an early part of learning. How do you teach someone that the sky is blue, the grass is green and the dog is brown if such colors do not even exist in one’s vision, hence understanding? It is both frightening and frustrating to not understand what “everyone else” grasps with ease.

Even as adults, colors on graphs and pie charts, or even advertising in the world, or more primally, food in the store, present challenges that are not even thought of by those with regular sight. As adults, we should be aware of the visual challenges some people face and be willing to assist as needed.

Consider visiting this website to learn more about CVD, read life stories, find resources and see examples of what those with CVD see: www.colourblindawareness.org

CLASSIFIEDS

Prevent Blindness America offers a battery safety sticker that lists the correct steps for jump-starting a battery. Call us at 1-800-331-2020 for a free sticker. www.preventblindness.org/how-jump-start-car-battery-safely

Free on-line Color-Blind test: enchroma.com/pages/color-blindness-test#test

WORKPLACE ERGONOMICS

FITTING THE JOB TO THE WORKER- SIT UP STRAIGHT AND PAY ATTENTION!

NOT ALL ERGONOMIC PRODUCTS ARE - ERGONOMIC

"The best of intentions can often lead to the worst of results. Employers may take steps to improve the well-being and productivity of their employees, only to have such initiatives backfire." ¹ Remember not all people have the same build and ergonomic equipment purchased for employees may not be correct, leading to more problems than if traditional equipment remained in place.

A command should take inventory of equipment in use; this allows identification of personal or modified items to be easily identified. Equipment in place must not be modified beyond built-in adjustments; such changes can cause warranties to be void, or worse, equipment to become dangerous, opening the door to injuries and lawsuits.

Ergonomic tools and equipment vary widely between industries and jobs, and must not be a one-size-fits-all action; it was just that attitude which had to be dispelled! If you will be involved in equipment changes, you should be given the opportunity to test its use. If there is no increase in comfort or efficiency, the change may not be an ergo or economic improvement.

Ergonomics is an approach to work, not just a trend or fad.

¹ Alaniz, Richard D. "Legal Liability for Ergonomics and Add-On Equipment." the News, 21 Sep. 2009, www.achrnews.com/articles/111462-legal-liability-for-ergonomics-and-add-on-equipment. Accessed 18 Oct. 2018

ALL WORK AND NO PLAY...

With increased efficiency and comfort working, one might think that's the end of it. However, research indicates that breaks and mild exercises also increase mental and physical health and productivity; this is adult recess!

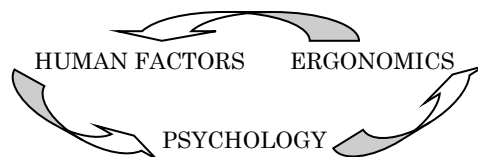
Take your breaks away from your desk; walk around, outside if possible. Stand and do some exercises. Do something right for you.

A 70-YR INEXTRICABLE LINK: FITTING MACHINES TO HUMANS

World War II was the tipping point where technological advances finally outpaced the ability of people to adapt and compensate for poor machinery designs. ¹ Prior to that time, focus was on fitting the human to the machine.

The ground-breaking report 70 years ago, "Analysis of 270 'Pilot Error' Experiences in Reading and Interpreting Aircraft Instruments" by Fitts & Jones, suggest that pilot error was in no small part due to poor instrument design. ²

Nature abhors a vacuum, and a full investigation into ergonomics, design and human factors is a complex field for study & consideration.



¹ Shaver, Eric. "Human Factors – A Brief History." erichaver.com, 8 Feb. 2015, www.ericshaver.com/human-factors-a-brief-history. Accessed 28 Sep 2018

² Miranda, Andrew. "Reconsidering Human Error," Aviation Safety, 12 May 2017. safety.navylive.dodlive.mil/2017/05/12/reconsidering-human-error. Accessed 3 Oct 2018.

BE COMFORTABLE AND EFFICIENT WITH ERGONOMICS

Do not stop thinking at office furniture when thinking of ergonomics in the workplace! That is only the beginning. OPNAV M-5100.23 offers visual checklists in Ch. B-23's appendices for evaluating work both industrial and administrative environments, Those can be accessed in ESAMS course 373 in OJT library. Ergonomic Baseline.

Identify & Assess Hazards

- Survey work areas
- Review Mishap, Near Miss and Unsafe/Unhealthy data
- Solicit worker comments and suggestions

Make Risk Decisions & Implement Controls

- Involve employees in arriving at the best solution for problems; arrange for several types of equipment to be tested

Hazard Prevention & Control Points

- Engineering Controls
- Redesign workstation
- Illumination
- Design of Work Methods
- Tool Design & Handles
- Administrative Controls

Follow up

- Once implemented, make sure workers are using the tools and equipment properly; adjust as needed
- Determine if additional changes are needed

Working your ergonomics program follows the principles of ORM.

CLASSIFIEDS

WANTED: Truth in Advertising. "Ergonomic!" is used as a product selling point. Check with users about actual improved efficiency. Research it.

RESPIRATORY PROTECTION:

CLEARING THE AIR ON THE FACTS WILL ALLOW YOU TO BREATHE EASIER

What OSHA, NIOSH and Navy Programs require in a nutshell

LUNGS; THEY ARE NOT JUST FULL OF HOT AIR!

There are three main parts of the Respiratory system.¹ The Airways begin with the sinuses, connected with the nose and mouth, trachea and bronchial tubes into the lungs. The Lungs and Blood vessels are the working parts of the system, where oxygen and carbon dioxide are exchanged in the in- and exhalation process. Finally, as the protective and driving forces, there are the ribs and the diaphragm.

The first line of defense for larger particulate filtration is the nose, Mucus produced in the lungs catches much smaller particles. However, particles <10 microns can enter the lungs and cause problems.² Asbestos and silica dust are well-known problems, but also included are bacteria and mold, heavy metals, volatile organic compounds, as well as wood smoke. A High Efficiency Particulate Air (HEPA) filter is capable of trapping 99.97% of .03 micrometer diameter particles.³ Chemical cartridges are required to filter out chemicals and gases; a simple particulate filter will not work for those hazards.

Keep in mind that our diaphragms are what cause us to in- and ex- hale, and our ribcages provide support and the protective framework for the lungs.

¹ "How Lungs Work." American Lung Association, www.lung.org/lung-health-and-diseases/how-lungs-work. Accessed 21 Sep.2018.

² "Health and Environmental Effects of Particulate Matter (PM)." EPA, www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm. Accessed 24 Sep 2018.

³ "Asbestos." OSHA, www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.1001. Accessed 24 Sep 2018.

KNOW YOUR RESPIRATOR

There are three basic types of respirators:

- Air-Purifying
- Supplied-Air
- Self-Contained Breathing Apparatus (SCBA)

The Respiratory Protection Program Manager (RPPM) determines the best respirator for the processes based upon the following: the results of Industrial Hygiene Survey and Air Sampling of the processes and which respirators have been approved by NIOSH for the identified hazards. Chances are your command already has a program, but if you are starting out, the Certified Equipment List can be navigated easily here: www2a.cdc.gov/drds/cel/cel_form_code.asp.

The respirator program requirements are outlined in Ch. B-15 of the OPNAV M-5100.23.

Eliminating the hazard through engineering (hoods, waterfalls, negative pressure) is ideal, but when the hazard cannot be eliminated, the proper protective equipment is required not only for survival, but for continued quality of life. Wearing an incorrect cartridge is the same as not wearing one; organic vapor cartridges will not protect one from ammonia or acid gas. Likewise, an air purifying respirator will not be of any use in an IDLH (immediate danger to life and health) atmosphere.

Whenever I feel blue, I start breathing again.

L. Frank Baum

Safety Sam Says...

Q: Why do I have to have a medical exam in order to wear a respirator? If I can do my job, that should be enough!

A: It would seem, but there is more to it. Not only will Doc evaluate your current health regarding the obvious stresses of wearing a respirator, but past history and the conditions which might interfere with wear & use. A comprehensive explanation can be read at https://www.osha.gov/video/respiratory_protection/medevaluations_transcript.html.

Q: If I used to go to medical every five years for my physical, why do I have to go biennially and my co-worker annually?

A: You may be surprised to learn that until you are 35 yrs. old, your lungs have a capacity of approximately 6 liters, the amount of three large soda bottles. As one ages, lung function naturally declines. The diaphragm weakens, and airways can lose elasticity, and even bones can shrink, making less room for lung expansion.⁴ If you have sudden trouble breathing or shortness of breath, talk to your doctor immediately.

⁴ "How Lungs Work." American Lung Association, www.lung.org/lung-health-and-diseases/how-lungs-work/lung-capacity-and-aging. Accessed 21 Sep.2018.

*Mark Twain sat on the train next to a gloom-and-doomer who said,
"Do you realize that every time I take a breath, 10,000 people on this planet die?"*

Twain replied, "Hmmm...ever try cloves?"

Respirator reasoning.
Which of the following concentrations of oxygen is considered "normal?"

A. Less than 19.5%
B. Greater than 24%
C. Grade D or above
D. Between 19.5 to 23.5%

HUMAN FACTORS AT WORK:

GETTING TO THE REAL BOTTOM OF OCCUPATIONAL MISHAPS

LACK OF ATTENTION TO DETAIL: WHAT, NOT A WHY

CY17 data in ESAMS cites “Lack of Attention to Detail” 35%, followed by “Other” 28%, as Primary Cause Codes (PCC), for nearly 63% of all 5845 valid mishaps. Likewise, they account for 41% of secondary and 26% of tertiary cause codes.

But are those really the leading causes? Perhaps more can be gleaned from investigating WHY someone was inattentive.

Research indicates that this is indicative of circular thinking, e.g.

Q: Why did the driver fail to see the pedestrian?

A: Because the driver was inattentive.

Q: How do we know the driver was inattentive?

A: Because the driver failed to see the pedestrian. ¹

The better questions are, “WHY was the driver inattentive?” Was there a distraction outside the car? Was the driver daydreaming? Was the driver sneezing? Was the driver aware of the pedestrian, even subconsciously? Those questions are more revealing than stopping at the summary event.

Don't let your lack of attention to detail hamper your investigation.

¹ Green, Marc; “What is ‘Inattention?’” www.visualexpert.com/Resources/whatis-inattention.html. Accessed 12 Sep 2018.

Every incident is a notice that something is wrong with men, methods or material. Investigate, then act.

Unknown

A POUND OF PREVENTION

If you could prevent a mishap, would you? Fully 9% of mishaps are due to some sort of supervisory failure, whether it be untrained personnel doing a job, or a lack of communication in some part of the process. Protecting your people is part of your job. Supervise!

Statistically, there are more injuries per day and with the most lost time in June through August; remind your people to be extra vigilant and more cautious. Most fractures occur December through February. ² Look around and ensure walkways are being shoveled, ice melt spread where needed and have cleats available.

Look at and compare statistics; the trends become the **leading indicators** where preventive actions can mitigate the circumstances which allow injuries to occur. Yes, everyone should pay attention to the walking surface, but snow can hide lifted sidewalks, introducing trip hazards. If there are seven slip/trip/fall mishaps each winter, perhaps there should be an initiative to identify and mark the frost-raised sections of sidewalks for visual awareness.

Extra daylight allows for extended outdoor work hours, where fatigue and heat stress can occur. Summer also brings about a temporary workforce; are they being trained on hazards and expected procedures they will face for summer employment?

Temporary workers are also present at winter holiday times as well as summer breaks. OSHA has resources available for temporary workers at www.osha.gov/temp_workers/index.html.

² Pierce, Brooks; “The Seasonal Timing of Work-Related Injuries,” JSM 2013, Gov.Stats.Sec., Bureau of Labor Statistics Oct. 2013. www.bls.gov/osmr/ www.bls.gov/osmr/research-papers/2013/pdf/st130230.pdf. Accessed 12 Sep 2018

What do 3-year olds and good mishap investigators have in common? They both ask, “Why?” a lot.

DON'T DISREGARD DESIGN DETAILS

In our homes, how often do we flip the wrong switch on a panel? Upstairs light vs. downstairs? Garbage disposal vs. light? Often there no logic to switch order or placement, or it is contrary to what we have “always” known.

How many may have had problems with these symbols?



Is that round thing Open (as in circuit=off) or Open (as in an eye=on)? Or is it O for On? The line seems like less of something, as in not operating or off, or like a shut eye, opposite of open. Many are relieved that the combined icon is a simple on/off button vs. an on/off switch.

It is that sort of small detail that seems like a minor point, but can cause serious consequences in operational environments.

Don't overlook design elements just because “that is the way it is.”

CLASSIFIEDS

PUBLIC SERVICE ANNOUNCEMENT!

Improve your safety investigation techniques using Human Factors. Don't get in a rut using the old “Lack of attention to detail.” Step back and look at the ever-expanding background and discover what ELSE was going on. Nature abhors a vacuum... and so should you.

OFFICE SAFETY

BE NOT BEGUILDED BY BEAUTIFUL DÉCOR OR BUCOLIC BACKGROUND!

ERGONOMICS: THE HABIT HAZARDS YOU CAN AVOID

Working in an office should be one of the safest environments imaginable yet there are many niggling details which can present chances of ergonomic injuries.

Ergonomics is the study of how humans interact with manmade objects.¹ While a simple definition, it is how you and your equipment fit while working. Keep in mind though, that just as all people are not the same, 'ergonomic' in the title does not indicate a panacea for bad work habits nor a quick fix for a bad product; that product may not work for all employees.

If your chair is adjustable, have you adjusted it? Then, are you sitting properly? If your screen is not properly positioned, have you moved it? If you are on the phone a lot, do you have a headset? If your keyboard is too high/low, large/small, have you worked with your IT department for a replacement? The OPNAV M-5100.23 has illustrations in the Ergonomic chapter which will help you adjust your workstation for you. Ask your supervisor or safety professional for assistance if you're uncomfortable or strained at the end of the day. They may refer you to Occ. Health if an ergo injury is suspected. They will work both with what you have and offer suggestions on what you might need. Give the adjustments time; if you have been bent out of shape, it will take time to untangle.

¹ "Ergonomics." *TechTerms*, 29 Apr 2011, techterms.com/definition/ergonomics. Accessed 8Jan2020.

There is a new trend in our office; everyone is putting names on their food. I saw it today, while I was eating a sandwich named Kevin.

HAZARDS TO PRODUCTIVITY

Administrative duties, while not physically demanding, carry the strains of being productive and creative can be challenging. To overcome those challenges, there are some mental and physical tips to keep yourself fresh.

Vision problems can keep you from seeing things clearly, literally. Correct lighting is very important for each task, not only in lumens needed, but the actual lighting as well. Surprisingly, some office buildings are overly bright. Glare on work produces eyestrain, as does straining to see too-small fonts on screen; use proper task lighting and increase font size. Take a break every hour. Close your eyes a few moments and then look at something distant- the scene outside, for instance.

Take a break physically! Walk around the office, up and down some stairs, or go outside. Talk to someone about an unrelated work topic.

There may not be time in your day to work out at the gym, but there are a variety of exercises one can do at one's desk!² They range from simple stretches to strengthening moves.

In Japan, for instance, many companies are taking steps to get workers out of their seats. Employees often say "working on their feet when they want... improves communication and stimulates new ideas and fresh perspectives."³

² Courtright, Sammy. "25 Office Exercises: Easy Desk-Friendly Ways to Get Fit." *SNACK NATION*, 22 May 2019, www.snacknation.com/blog/office-exercises. Accessed 18 Dec 2019.

³ "Japan Inc. taking steps to get workers to sit less." *JapanTimes*, 27 Sep. 2016, www.japantimes.co.jp/news/2016/09/27/national/japan-inc-taking-steps-get-workers-sit-less/#.Xe1NdeTsYdI. Accessed 16 Dec. 2019

Big jobs usually go to the men who prove their ability to outgrow small ones.

- Ralph Waldo Emerson

EQUIPMENT HAZARDS

The increase in digital office equipment decreases the chances of tinkering with things out of adjustment. If your office has older equipment, think before you tinker!

Copiers are meant to jam frequently, otherwise there would not be so many unjamming doors built into them! Unplug other electronic machines before accessing unauthorized openings, being aware of stored energy. Once something is heading into the shredder, do not try to retrieve it! Do not try to override safety interlocks.

Even simple equipment can cause hazards. Cords across walkways pose trip hazards. Drawers and doors left open can cause trips and bruises. (Remember that scene in the movie Date Night?)

Kitchen equipment requires cleanliness, too. Clean up after yourself; wash your dishes, wipe up spills and throw your trash out. Remember basic hygiene- germs and bacteria need moisture to multiply.

CLASSIFIEDS

TEST: Check your hazard awareness in the office environment by reviewing identifying the 12 listed hazards here: www.safetyandhealthmagazine.com/articles/safety-hazards-in-an-office-setting-2

Office or Gym... How about exercises to do at your own desk throughout the day, without the challenge of getting away? Check out this office workout: www.snacknation.com/blog/office-exercises

SYSTEM SAFETY:

DEFENDING THE NATION WHILE PROTECTING THE DEFENDER

SYSTEM SAFETY:

OPNAV M-5100.23, CH. B-38

Formerly known as “acquisition safety,” this new chapter provides several references which highlight the process of acquisition and the responsibilities at the various levels.

As set forth by statute and regulation, from concept to deployment, a weapon system must go through a three-step process of identifying a required (needed) weapon system, establishing a budget, and acquiring the system.¹

The actual acquisition process involves program milestones:

- A- initiates technology maturation and risk reduction
- B- initiates engineering and manufacturing development
- C- initiates production and deployment

The program manager is the advocate for the system or platform, and must be able to make decisions based on performance metrics, including rates of funding obligations and expenditures. Their challenge is to avoid suppressing adverse information about program status. They must communicate pros and cons, unfulfilled expectations or surprises including “show stoppers” and “show slowers.”²

It is imperative that those in high-level administrative positions show the same Honor, Courage and Commitment as the deck plate Sailor.

¹ “Defense Acquisitions: How DOD Acquires Weapon Systems and Recent Efforts to Reform the Process.” Congressional Research Service, 7-5700, fas.org/sgp/crs/natsec/RL34026.pdf. Accessed 15 Oct 2019.

² Christensen, David D., Maj USAF. “Cost Overrun Optimism: Fact or Fiction?” Acquisition Review Quarterly, Winter 1994, dau.edu/library/arj/ARJ/arq94/christe.pdf. Accessed 9 Oct 2019.

COST SAVINGS USING DESIGN-BUILD

A familiar example of projects seen on an installation would be construction projects. All DoD components use the Unified Facilities Criteria (UFC) as a basic building plan, and then work with the “customer” for modifications and specific requirements. This process keeps both costs and variances to a minimum, thereby keeping costs down.³

This process is called Design-Build, and works like this. To streamline the proposal, there are 10 common facility types, and each facility model has a basic template. If building a hangar, for example, what type and how many planes are going to be housed? What maintenance shops are required? Still, the basic hangar concept is the same.

It is difficult to understand the complexities of project management for complex weapons systems and its various components unless in that field, but breaking the basics down to a more understandable construction project may make it easier to grasp.

First, the best frame of mind for a project is not pinching pennies, but to spend time and resources more wisely. Given that 98% of all projects experience some sort of budget overrun, it is important to know in which phase of construction the money is best spent.⁴

Planning, feasibility and communications are the front-end keys to a successful project. Make sure a detailed and complete design, with a clear scope of work is done; collaborate on expectations and complexities which will be encountered. Changes to a project are easier and

Be warned that being an expert is more than understanding how a system is supposed to work. Expertise is gained by investigating why a system doesn't work.

Brian Redman

DESIGN-BUILD (CONT'D)

more inexpensive in the design phase than retro-fitting a new element into completed construction.⁴

The main reasons for cost overruns are inaccurate project estimates, design errors, change orders, administrative errors and poor site management.⁴

There is merit in the old adage, “Plan your work, and work your plan.” It saves time and money in the long run, whether it be simple maintenance efforts or the acquisition of a major weapons system.

³ “Design-Build Master RFP.” wbdg.org/ffc/navy-navfac/design-build-request-proposal. Accessed 10 Oct 2019.

⁴ Ellis, Grace. “How to Save Money in Construction: Cost-Cutting in Each Project Phase.” Plan-Grid, 21 Feb 2018, blog.plan-grid.com/2018/02/how-to-save-money-in-construction-project-phase/. Accessed 8 Oct 2019.

CLASSIFIEDS

WANTED: Your good ideas for cash and awards! DoDI 1400.25 of 4Nov2013 sets forth the guidelines for military and civilian personnel who have Beneficial Suggestions or Inventions which will “Contribute to the efficiency, economy, or other improvement of government operations or achieves a significant reduction in paperwork.” Read the instruction at esd.whs.mil/Portals/54/Documents/DD/issuances/140025/140025_vol451.pdf for details.

OCCUPATIONAL REPRODUCTIVE HAZARDS:

KNOW THE RISKS SO YOU DON'T MULTIPLY YOUR PROBLEMS

OCCUPATIONAL REPRODUCTIVE HAZARDS THE BASICS

A common misconception about conception is that women are the only ones who must be concerned about reproductive hazards. This is simply not true. Men are also affected by hazards in the workplace which affect their fertility.

THE TWO TYPES OF HAZARD

REPRODUCTIVE DEVELOPMENTAL Hazard - Any occupational stressor (biohazard, chemical, or physical) that has the potential to adversely affect the human reproductive and/or developmental process.¹

WHAT ARE THE HAZARDS

Hazards can be present in any environment and range from temperatures and noise, to biologic and zoonotic diseases, to chemical solids, liquids and gases, to physical exertion and emotional stress.

¹ Navy Safety and Occupational Health Program, OPNAV M-5100.23 Ch. B29.

WOMEN'S REPRODUCTIVE HAZARD CONCERNS

Because women have more regular and complex reproductive systems, reproductive hazards can affect them over the course of time, pregnancy related or not.

Stress or exposure to certain chemicals may disrupt the balance between brain, pituitary gland, and ovaries, causing disruption of the cycle and hormone production.³

Infertility can affect 10-15% of all couples annually which can be affected by damage to a woman's eggs or man's sperm.^{ibid.}

Regardless of cycles or pregnancy, an imbalance of estrogen and progesterone can also leave you more vulnerable to some cancers, osteoporosis or heart disease.^{ibid.}

"Exposure to a hazard could block ovulation and pregnancy only at specific times of the menstrual cycle. Exposure during the first 3 months of pregnancy might cause a birth defect or a miscarriage. Exposure during the last 6 months of pregnancy could slow the baby's growth, affect its brain development, or cause premature labor."^{ibid.}

The best news is that "reproductive hazards do not affect every woman or every pregnancy."^{ibid.}

Read the Safety Data Sheets (SDS) and use the precautions listed. Discuss exposures with your physician, both from work and certain hobbies (like jewelry making).

It is always a good time to avoid illegal drugs and alcohol, and stop smoking. Pregnancy is a better reason.

³ "Reproductive Health and the Workplace." *CDC*, 20Apr2017. www.cdc.gov/niosh/topics/repro/femalehealthimpact. Accessed 10Oct2019.

My daughter asked for a Cinderella themed party...

I invited all her friends over and made them clean my house!

MALES ALSO EFFECTED BY REPRODUCTIVE HAZARDS

Men are susceptible to hazards in the workplace which can affect reproduction. A hazard may cause a problem with the number of sperm, their shape, or the way they swim. It could also damage the sperm's DNA. Sperm may not be able to fertilize an egg. Or it could cause problems with the development of the fetus.⁴

While not always men, workers carry hazardous substances (dust, powder, chemicals, metal flakes) home on their shoes or clothing. Because of this, it is also important talk to your partner or other adults living in your home about their workplace hazards.⁵

Make it a habit to read the SDSs for the chemicals with which you work. Find out what the general health and reproductive hazards there are. Take the precautions required to keep yourself healthy.

⁴ "What are the Health Effects of Reproductive Hazards?" *NIH U.S. National Library of Medicine*, medlineplus.gov/reproductivehazards.html. Accessed 29Aug2019.

⁵ "Reproductive Hazards of the Workplace: Tips for Job Safety." *MotherToBaby*, 1Mar2019, mothertobaby.org/fact-sheets/reproductive-hazards-workplace. Accessed 28Aug2019.

PUBLIC NOTICE

As of this writing, the two forms, NAVMED 6260/8 and 6260/9- Occupational Exposures of Reproductive or Developmental Concern - Supervisor and Employee Statements, are no longer valid; locally developed forms may be used to assist in managing workers with occupational exposure concerns. The necessity to maintain confidentiality in matters of personal health must be emphasized.²

² Reproductive and Developmental Hazards: A Guide for Occupational Health Professionals, NMCPC TM-6260.01D (May2019).

CLASSIFIEDS

CHAT WITH AN EXPERT. Would you like to talk with an expert about your pregnancy before going to see your healthcare provider? You can call toll-free 866-626-6847, or text 855-999-3525, or live chat at mothertobaby.org.

BLOODBORNE PATHOGENS:

ONE SMALL SCRATCH CAN LEAD TO A MUCH LARGER PROBLEM.

EXPOSURE CONTROL PLAN

Where is your organization's Exposure Control Plan? Do you need one? If you have an Occupational Exposure to blood or other potentially infectious materials in the performance of your duties, you need an Exposure Control Plan.

The plan, which should be reviewed annually, as a minimum, must include 1) Exposure determination, 2) Methods of Compliance, 3) Hep B vaccination and post-exposure evaluation, 4) Communication of Hazards to Employees, & 5) Recordkeeping.

Input from non-managerial employees responsible for direct patient care shall be solicited for identification, evaluation and selection of effective engineering and effective work practice controls. Work to make your job safer for yourself!

NEEDLESTICK FIRST AID

WORKERS, PLEASE NOTE:¹

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

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

¹"Bloodborne Infectious Disease: HIV/AIDS, Hepatitis B, Hepatitis C." *CDC*, 5Oct2019, www.cdc.gov/niosh/topics/bbp/emergnedl.html. Accessed 13Aug2019.

There are over 80,000 miles of blood vessels in the human body! No wonder I have tired blood!

UNIVERSAL PRECAUTIONS

Universal Precautions is an approach to infection control. According to the concept of Universal Precautions, all human blood and certain human body fluids are treated as if known to be infectious for HIV, HBV, and other bloodborne pathogens. CFR 1910.1030 cites examples of when and how universal precautions must be in place.

CLASSIFIEDS

R U Curious? See & Understand via animation how different needle safety devices work.
www.osha.gov/SLTC/etools/hospital/hazards/sharps/sharps.html

REPORTING CRITERIA FOR NEEDLESTICKS AND SHARPS INJURIES: DO YOU KNOW HOW?

It is important to keep in mind the definitions pertaining to and requirements for reporting Sharps and Bloodborne Pathogen incidents.

In 1910.1030, the Bloodborne Pathogen standard, one must first remember that the section pertains to occupational exposure to blood or other potentially infectious materials (OPIM).

One must keep in mind that a "sharp" is not an adjective for something which is sharp, like a saw. There are different saws which are sharp, sharp being an adjective. There are many sharps, used as a noun, which are "object[s] that can penetrate the skin including... needles, scalpels, ... broken capillary tubes, and exposed ends of dental wires," used in the medical and dental fields.

Cutting oneself with a table saw or drill press is not a "sharps injury."

The recording criteria in the 1904.8 is very clear on what must be

recorded. "You need to record cuts, lacerations, punctures, and scratches **only if** they are work-related **and** involve contamination with another person's blood or other potentially infectious material."

Splashes need to be recorded only if there is a diagnosis of a bloodborne illness.

When submitting mishaps in ESAMS, personnel must do the following to be compliant with OSHA reporting:

- Record all needlestick injuries and cuts from sharps contaminated with blood or OPIM
- Protect employee privacy; do not enter names in narrative
- Record both the type & brand of device involved
- State work area and how the incident occurred.

Statistics from a review of 10 months of FY19 mishap data in ESAMS reveals the following data:

Of 7896 on-duty mishaps, 1179 of those were listed as sharps injuries if a cut or puncture occurred, regardless of source. In actuality, only 285, 24% of those, or 4% of all mishaps, are Sharps injuries.

For the five elements of reporting, 5% (14) included PII, violating required privacy.

Type Sharp Items were missing in 30% (86) of reports, and Brand Sharp Item was missing or listed as unknown in 64% (181) incidents.

Civilians were involved in 64 incidents and 27% were incorrectly determined (by the narratives) as OSHA Reportable, both in negative and positive reporting.

FIRE PREVENTION & SAFETY

ANSWERS TO ALL YOUR BURNING QUESTIONS

FIRE SAFETY EQUIPMENT IN THE HOME

YOU should be the best fire prevention item in your home! That includes avoiding fire hazards, preventing injury, destruction of property and death.

Smoke detectors are one of the best alerts when you are not present in an area. Each dwelling should have alarms in each sleeping room and outside each separate sleeping area, as well as on every level of the home.¹

A fire extinguisher is the next important piece of equipment. If you are present when a fire begins, and only if you are able to extinguish the fire, do so. If you are unable, evacuate your family and call 911. If you are alerted to a fire, LEAVE your home, taking the children as you are able.

Using your head to make an evacuation plan, and teaching and practicing it will help ensure your loved ones get out safely, meeting at a designated area.

Do you know your primary and secondary evacuation routes at your place of work? Hotel? Place of entertainment? Be aware.

A fire blanket or rug (stop, drop and roll) is good to have if clothing catches fire.

¹ "Safety messages about smoke alarms." *NFPA*, www.nfpa.org/public-education/by-topic/smoke-alarms/safety-messages-about-smoke-alarms. Accessed 31 May 2019.

Did you know?
Fire Prevention Week is observed each year during the week of Oct. 9th in commemoration of the Great Chicago Fire, which began on Oct. 8, 1871.

SMOKE & CO DETECTORS

One might think that all smoke detectors are created equal, but that is not the case. The basic mechanism consists of two basic parts: a sensor to detect smoke and an alarm to alert people.

The most common types on the market today are photoelectric and ionization detectors. The photoelectric detector is more efficient detecting a smoky, smoldering item, like a mattress.²

The ionization detector is both more common and more complex, but its strength lies in sensing smaller amounts of smoke, generally associated with a flaming fire. Dual-sensing alarms have both photoelectric & ionization sensors.

Regardless of the technology used, smoke detectors placed in the home and kept in working order save lives. NFPA statistics indicated that in home fires between 2012 and 2016, 40% of fatalities occurred in homes with no smoke detectors. Missing or inoperative detectors resulted in fatalities twice as high (12.3 deaths vs. 5.7 per 1,000 fires).³

Unintentional fires cause a great deal of destruction, and things intended to burn can also be deadly. Anything you might burn in or around your home- wood, natural gas or oil- can produce carbon monoxide, CO. Without adequate ventilation, the CO gas- and it doesn't take much- can build up to deadly levels.⁴

² Marshall, Brian. "How Smoke Detectors Work," *HowStuffWorks*, home.howstuffworks.com/home-improvement/household-safety/smoke. Accessed 31 May 2019.

³ "Smoke alarms." *NFPA*, www.nfpa.org/-/media/Files/News-and-Research/Fire-statistics-and-reports/Detection-and-signaling/ossmokealarms.pdf. Accessed 31 May 2019.

⁴ Black, Angela. "How Carbon Monoxide Detectors Work," *HowStuffWorks*, home-improvement/household-safety/carbon-monoxide-detector.htm. Accessed 31 May 2019.

How is it that one match can start a forest fire, but it takes a whole box of matches to start a campfire?

~Christy Whitehead

FAMILY FIRE ESCAPE PLAN

When faced with smoke, flames, or the sounding of an alarm, the first thing one should do is evacuate. Easily said and done as an adult, but throw in the variables of home and children and pets, and the situation becomes more complex.

The National Fire Protection Agency's Public Education page provides planning tips and tools for a [Family Escape Plan](#).

Key elements ensuring a successful execution of the plan is the involvement of children and practicing the plan until they understand what and where to go.

- ✓ Make a home escape plan showing doors and windows
- ✓ Know two ways out of every room
- ✓ Have an outside meeting place a safe distance from the house
- ✓ Practice your home fire drill, both day and night, twice a year
- ✓ Practice using different ways to exit rooms and buildings
- ✓ Teach children how to escape if you are unable to help them.
- ✓ Close doors as you leave ⁵

⁵ <https://www.nfpa.org/-/media/Files/Public-Education/Resources/Safety-tip-sheets/EscapePlanningTips.pdf>. Accessed 30May2019.

CLASSIFIEDS

FREE FIRE PREVENTION TIPS & TOOLS FOR HOME & SCHOOL. VISIT THE PUBLIC EDUCATION PAGE AT WWW.NFPA.ORG/PUBLIC-EDUCATION.

SPARKY THE FIRE DOG: FREE LEARNING GAMES, VIDEOS, ACTIVIES FOR CHILDREN TO LEARN ABOUT FIRE PREVENTION AND FIRE SAFETY. www.sparky.org

SAFETY TRAINING REQUIREMENTS: WHAT YOU DON'T KNOW CAN KILL YOU.

IS YOUR SAFETY TRAINING EFFECTIVE?

One seemingly endless complaint is taking the time to do “useless safety training.” “Useless” training is useless, which is why it is so important to “consistently evaluate... the existing plan... where [employees] can succeed and grow, without worrying about certain hazards that can slow down production and efficiency.”¹

But why is the training useless? Or do people just like to complain? The actual actions taken, near miss and mishap reports will be the answer.

It is known that both younger and newer employees have higher mishap rates; they don't want to appear ignorant of a job's details and are less prone to asking questions. “It should be acknowledged, however, that both experienced and unexperienced workers might require training. Especially in jobs that involve many risks, safety must be priority number one. The human nature is to get accustomed to and comfortable in a task.”²

Supervisors, talk to your people! Watch their work habits; give feedback, both good and bad. Conversely, ask for feedback before and after training. Involvement when training is valuable—just like your employees.

¹ Buzzaird, Kristen. “How to Evaluate the Success of your Employees.” *prosapien*, www.prosapien.com/blog/safety-training-program-how-to-evaluate-the-success-of-your-employees. Accessed 22 Feb 2021.

² Ibid.

Learn as if you were not reaching your goal and as though you were scared of missing it.

— Confucius

WHY IS TRAINING REQUIRED?

“Ignorance is bliss,”³ except when it comes to safety and the training needed to keep one from harm or death.

Practice is essential in a controlled environment. Youngsters learn to use a hot stove with parental supervision. But change the setting and the results can radically alter the situation. Leave the child unsupervised and a house can burn down. Training and supervision are essential. What risk level is acceptable?

“OSHA's Fatal Four” in 2019 were Falls, Struck by Object, Electrocutions and Caught-in or Caught-between incidents.⁴ In many of these cases, the workers were either not trained or they accepted a work situation which violated OSHA safety standards.

In the case of fall, each of the deaths could have been prevented if proper fall protection requirements had been followed. If the numerous training requirements for electrical safety had been met, many more workers would have gone home.

While the standards are in place, people must be trained! That is listed specifically in that same standard. While some incidents are unavoidable, the excuse of “I didn't know” is rather weak. If one doesn't know, ask; if something doesn't seem right, it probably isn't. Why would one work around unguarded machinery, walk around unguarded holes, not wear PPE correctly? It only takes one time—a mere moment—for a life-changing incident to occur.

³ Gray, Thomas. “Ode on a Distant Prospect of Eton College.” *Poetry Foundation*, www.poetryfoundation.org/poems/44301/ode-on-a-distant-prospect-of-eton-college. Accessed 17 Feb 2021.

⁴ Neitzel, Dennis K. “OSHA's “Fatal Four” – Leading Causes of Fatalities in the Workplace.” *EHS Daily Advisor*, May 1, 2019, ehsdailyadvisor.blr.com/2019/05/oshas-fatal-four-leading-causes-of-fatalities-in-the-workplace. Accessed 17 Feb 2021.

TRAINING VS. ATTITUDE

Each of us is unique, but we do work together. Our different backgrounds, education and experiences make us special. Additionally, our attitudes also reflect how we view safety.

Those who believe their lives are largely controlled by outside forces (externals) are on one end of the spectrum... while those who believe they control their own lives (internals) are on the other end.⁵ Researchers concluded... employees with more external ... orientations reported significantly more occupational accidents (as well as more severe and costly injuries) compared to workers with more internal safety attitudes.⁶

The good news is there are ways the ‘externals’ can be “nudged,” taught, to internalize control. Help them set goals with some kind of achievement, to increase their belief in internal control. Their successes reinforce their belief in internal control.⁷

You are responsible for your life.

⁵ Galloway, David. “How Locus of Control Can Impact Injury Rate.” *continuousmile*, 10 Dec. 2018, www.continuousmile.com/behavior/locus-of-control. Accessed 23 Feb. 2021.

⁶ Ibid.

⁷ Ibid.

| |
|---|
| CLASSIFIEDS |
| <p>FREE GUIDE! “How to Conduct an Effective Safety Conversation.” Available in downloadable apps or booklet. www.continuousmile.com/safety-conversation-guide</p> |
| <p>FREE SAFETY TALKS. Any quick search engine entry will yield at least 6 sites to search with hundreds of apropos topics & lessons for a myriad of subjects.</p> |

HAZARD ABATEMENT PROGRAM

BEST PRACTICES FOR GETTING IT DONE!

HAZARD ABATEMENT IS...

...defined in OPNAV M-5100.23:

Hazard: A workplace condition that might result in injury, health impairment, illness, disease, or death to any worker who is exposed to the condition, or damage or loss to property/equipment.

Abate: Eliminate or reduce permanently an unsafe or unhealthful working condition by coming into compliance with the applicable OSH standard.

Any actions or steps you take to lessen a hazard, improve a process or increase safety overall are part of a hazard abatement program. There are several levels of action which will be addressed.

JOB HAZARD ANALYSIS

Job Hazard Analysis (JHA) is a technique used by employees and supervisors to identify and put in place steps to eliminate or reduce hazards during any particular step of the job. There are several ways to accomplish the analysis; methods which are successful include the workers who are the subject matter experts, the task at hand, the tools and the work environment. Supervisors, Industrial Hygiene and Safety can also be involved and offer recommendations, testing and a fresh set of eyes on the job.

Jobs which have the highest injury rate, the potential to cause severe, disabling injuries or illnesses, those in which simple human error could lead to a severe accident or injury should take priority for analysis.¹

ESAMS has a JHA application which is available to all units.

¹ "Job Hazard Analysis," OSHA 3071, 2002. www.osha.gov/Publications/osh3071.pdf. Accessed 12 Nov. 2018

OSHA VPP

Occupational Safety & Health Administration Voluntary Protection Program recognizes commands who have implemented safety programs which have resulted in injury illness rates (IIR) which fall below the national average. Not only are IIRs lower, "As of October 1, 2018, 133 Department of Defense sites achieved an active Star recognition, and the SMCX recently estimated \$16.7M in annual cost savings due to reduced incidents based on data from the nearly 200 active Star or In-Progress sites being supported by the SMCX."²

DoD Safety Management Center of Excellence (SMCX) offers tailored industry solutions and support to commands who are engaged in earning, or recertifying their VPP Star status. One of the requirements is to have a robust and proactive Hazard Reporting system.

Hazard reporting can be submitted, tracked and trended in ESAMS. Supervisors have Workplace Inspection checklists which they can use; Safety Inspectors complete periodic workplace inspections, citing any deficiencies which need to tracked are available in ESAMS. Personnel Responsible for Abatement of deficiencies are able to record the abatement actions taken to correct both operational and facility deficiencies. Contact the Help Desk via phone or Live Chat if assistance is required.

² smscx.org. Accessed 7 Nov. 2018.

When people tell you what doesn't work, they're usually right. When they tell you how to fix it, they're usually wrong.

Bill Hader

CREATING PROJECTS

Tracking Hazard Abatement Projects (HAP) was more challenging with paper copies of inspections, deficiencies and then separate HAP submissions.

A worksheet for gathering information to put in ESAMS can be found at [HAP Funding Request Worksheet](#).

Deficiency correction may qualify for HAP funds under the following conditions:

- Hazards of RAC 1, 2 or 3
- Will take longer than 30 days to correct
- Funding between \$50K & \$1M
- Protect safety and health vice property

It is best to make contact with your local Public Works Department to see what assistance is available prior to submitting a formal HAP.

ESAMS has consolidated the deficiency and HAP into one bundle for greater efficiency. After the inspector writes the deficiency, the Person Responsible for Abatement (PRA) has the responsibility for initiating the corrective action. If the above criteria are met, then a request for HAP funding may be made and tracked in ESAMS. Be patient; the project will take time.

CLASSIFIEDS

WANTED: Movers & Shakers who are Motivated & Innovative! The Navy is looking for you, if so, and is willing to offer you up to \$25,000 for your suggestion, invention or scientific achievement which contributes to the economy, efficiency of other improvement in government operations! Title 10, Ch.57, para. 1124 outlines how your "bright idea" can actually make your service a better! See Admin for OPNAVINIST 1650.8D or AFI 38-402 for details.

RESPIRATORY PROTECTION:

CLEARING THE AIR ON THE FACTS WILL ALLOW YOU TO BREATHE EASIER

What OSHA, NIOSH and Navy Programs require in a nutshell

LUNGS; THEY ARE NOT JUST FULL OF HOT AIR!

There are three main parts of the Respiratory system. ¹ The Airways begin with the sinuses, connected with the nose and mouth, trachea and bronchial tubes into the lungs. The Lungs and Blood vessels are the working parts of the system, where oxygen and carbon dioxide are exchanged in the in- and exhalation process. Finally, as the protective and driving forces, there are the ribs and the diaphragm.

The first line of defense for larger particulate filtration is the nose, Mucus produced in the lungs catches much smaller particles. However, particles <10 microns can enter the lungs and cause problems. ² Asbestos and silica dust are well-known problems, but also included are bacteria and mold, heavy metals, volatile organic compounds, as well as wood smoke. A High Efficiency Particulate Air (HEPA) filter is capable of trapping 99.97% of .03 micrometer diameter particles. ³ Chemical cartridges are required to filter out chemicals and gases; a simple particulate filter will not work for those hazards.

Keep in mind that our diaphragms are what cause us to in- and exhale, and our ribcages provide support and the protective framework for the lungs.

¹ "How Lungs Work." American Lung Association, www.lung.org/lung-health-and-diseases/how-lungs-work. Accessed 21 Sep.2018.

² "Health and Environmental Effects of Particulate Matter (PM)." EPA, www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm. Accessed 24 Sep 2018.

³ "Asbestos." OSHA, www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.100 1. Accessed 24 Sep 2018.

KNOW YOUR RESPIRATOR

There are three basic types of respirators:

- Air-Purifying
- Supplied-Air
- Self-Contained Breathing Apparatus (SCBA)

The Respiratory Protection Program Manager (RPPM) determines the best respirator for the processes based upon the following: the results of Industrial Hygiene Survey and Air Sampling of the processes and which respirators have been approved by NIOSH for the identified hazards. Chances are your command already has a program, but if you are starting out, the Certified Equipment List can be navigated easily here: www2a.cdc.gov/drds/cel/cel_form_code.asp.

The respirator program requirements are outlined in Ch. 15 of the OPNAVINST 5100.23G

Eliminating the hazard through engineering (hoods, waterfalls, negative pressure) is ideal, but when the hazard cannot be eliminated, the proper protective equipment is required not only for survival, but for continued quality of life. Wearing an incorrect cartridge is the same as not wearing one; organic vapor cartridges will not protect one from ammonia or acid gas. Likewise, an air purifying respirator will not be of any use in an IDLH (immediate danger to life and health) atmosphere.

Mark Twain sat on the train next to a gloom-and-doomer who said, "Do you realize that every time I take a breath, 10,000 people on this planet die?"

Twain replied, "Hmmm...ever try cloves?"

Whenever I feel blue, I start breathing again.

L. Frank Baum

Safety Sam Says...

Q: Why do I have to have a medical exam in order to wear a respirator? If I can do my job, that should be enough!

A: It would seem, but there is more to it. Not only will Doc evaluate your current health regarding the obvious stresses of wearing a respirator, but past history and the conditions which might interfere with wear & use. A comprehensive explanation can be read at https://www.osha.gov/video/respiratory_protection/medevaluations_transcript.html.

Q: If I used to go to medical every five years for my physical, why do I have to go biennially and my co-worker annually?

A: You may be surprised to learn that until you are 35 yrs. old, your lungs have a capacity of approximately 6 liters, the amount of three large soda bottles. As one ages, lung function naturally declines. The diaphragm weakens, and airways can lose elasticity, and even bones can shrink, making less room for lung expansion. ⁴ If you have sudden trouble breathing or shortness of breath, talk to your doctor immediately.

⁴ "How Lungs Work." American Lung Association, www.lung.org/lung-health-and-diseases/how-lungs-work/lung-capacity-and-aging. Accessed 21 Sep.2018.

Respirator reasoning.

Which of the following concentrations of oxygen is considered "normal?"

- A. Less than 19.5%
- B. Greater than 24%
- C. Grade D or above
- D. Between 19.5 to 23.5%

The Monthly Safety Talk

SHOCKING ELECTRICAL NEWS

Authorized Employees

lock or tag machines or equipment to perform service or maintenance

Affected Employees

use machine or equipment on which servicing is being performed under LOTO

Other Employees

who are or may be in an area where energy control is being used

HAPPY 45TH BIRTHDAY TO THE GFCI

MAKING HOME SWEET HOME

The single best news for dwellings was the required installation of GFCIs, Ground Fault Circuit Interrupter, in 1973. The device monitors the amount of power going to the device and detects the interruption in current and cuts the power.¹ There has been an 83% reduction in electrocutions and a 95% drop in electrocutions caused by consumer products since then.²

A similar protective device for the house from damaged wiring is an AFCI, Arc Fault Circuit Interrupter. Consumer Product Safety Commission estimates more than 50% of electrical fires can be prevented by AFCIs.³

Finally, a new outlet is now required in new home construction—a Tamper Resistant Receptacle (TRR). Incorporated are built-in shutters which prevent children from inserting foreign objects into the single opening.

¹ Chandler, Nathan: "How Does a GFCI Outlet Work?" HowStuffWorks, 25 May 2018. home.howstuffworks.com/question1171.htm.

² "Ground Fault Circuit interrupters: Preventing Electrocution Since 1973." ESFi, 12 Oct. 2017. www.esfi.org/resource/ground-fault-circuit-interrupters-preventing-electrocution-since-1973-614. Accessed 27 Jul. 2018.

³ Lee, Douglas A.; Trotta, Andrew M.; King, William H. (Aug 2000). "New Technology for Preventing Residential Electrical Fires: Arc-Fault Circuit Interrupters (AFCIs)." 15 Aug. 1999. www.cpsc.gov/research-statistics/home-maintenance-construction/electrical-gfci-and-afci. Accessed 27 Jul 2018.

*LOTO – Lock Out Tag Out
Everyone is a winner!
LOTTO – Bingo-like Lottery game
in which almost no one wins.*

DON'T GET TRIPPED UP ON EXTENSION CORDS

SHOCKING NEWS FROM CPSC!

Normally one thinks of either fire or electrocution when thinking of extension cords. The US Consumer Product Safety Commission (CPSC) has estimated that each year, about 4,000 injuries associated with extension cords are treated in the ER. About half involve fractures, lacerations, contusions or sprains from tripping over the cords.¹ CPSC also estimates about 3,300 residential fires originate in extension cords, killing 50 people and injuring about 270.

Examine extension cords for loose or missing grounding pins, breaks in the sheathing and placement of the cord during use, every time.

¹ "Limit Extension Cords to Reduce Risk of Fire." US Consumer Product Safety Commission, 1 May 1990. www.cpsc.gov/Newsroom/News-Releases/1990/Limit-Extension-Cords-To-Reduce-Risk-Of-Fire.



ELECTRIC PERSONALITIES

Thomas Edison developed the practical incandescent light bulb and phonograph. Reddy Kilowatt was the symbol of hard working electricity at home and work. Who could imagine in the early 1930's, when Edison died and Reddy became a popular symbol, that electricity would be so central in our lives? Many of Edison's inventions are basic functions on our phones!

Did you hear? I finally managed to get rid of that nasty electrical charge I've been carrying. I'm ex-static!

Social Section

~W~W~W~ Who's Who?! ~W~W~W~

M/M Static Potential & Current Kinetic Electricity are an energy-driven couple who appear and work separately in many different circuits, being conducted easily at home, work and play, but still remained grounded.

Recently M. Ohm became a noted resistor of their work and has been arrested twice for impeding the hard-working pair.

Friends have tried to insulate the couple by providing a buffer, but they are concerned that those who insist on conducting themselves too near the energetic family will be shocked, seriously burned or even killed. They want to remind everyone that while playing with or improperly contacting Electricity seems like a thrill, it is truly a dangerous affair.

CLASSIFIEDS

FOR SALE: Lifesaving PPE for electrical workers! NFPA 70E lists the Hazard/Risk categories, and V-rated gloves and tools for each type of electrical working hazard. Additional non-conductive tools and equipment are available. Read NFPA 70E and see your safety specialist for details.

LOCK OUT TAG OUT

29 CFR 1910.147 & Subpart S

Working on energized parts is always a risk that is not worth taking, either at home or at work. Take the time to follow Energy Control procedures: circuits and equipment shall be disconnected from all energy sources.

Walking-Working Surfaces

They may not be where or what you think! Read below for information.

Fall Financial Impacts

Not all falls are created equal, as we know. Dar Robinson was reported to earn \$100K for each of his stunts, even more for the most memorable in Highpoint.¹ Liberty Mutual estimates more than \$61 billion per year is spent on disability claims in America with \$15.57 billion, or 25.1 percent, resulting from falls (16.4 percent of falls to same level, 8.7 percent falls to a lower level). It is noteworthy that there is a category of slips and trips without a fall that cost another \$2.35 billion, or 3.8 percent.²

Beyond the financial burdens of falls, if one survives, there are the real consequences of disability, limited duty times, and long term health issues. Impacted from the impact are not only the worker, but family members; the healing time changes the family dynamic in cleaning, transportation, hygiene and myriads of ways.

Face it; bodies are better before they are broken. Unless you are getting paid to fall, it is far better to remain standing.

¹ Yovino, Kirsten. "7 of Hollywood's Most Popular Stuntmen." TVCheatSheet, 13Jun.2014, cheatsheet.com/entertainment/7-of-hollywoods-most-popular-stuntmen. Accessed 16Jul2018.

² Black, Melissa. "Workplace Falls Pose a Danger to the Economy as well as Workers." EHS Today, 11Jun2016, ehstoday.com/safety/workplace-falls-pose-danger-economy-well-workers. Accessed 18 Jul. 2018.

*"One hand for the ship; one hand for yourself."
old naval adage*

BOLO for WWS

Rumors abound that Walking-Working Surfaces -WWS- are right in front of you, at your very toe-tips. It is exactly that rumor that gets OSHA officials worked up while workers get tripped up!

WALKING-WORKING SURFACE MEANS ANY HORIZONTAL OR VERTICAL SURFACE ON OR THROUGH WHICH AN EMPLOYEE WALKS, WORKS, OR GAINS ACCESS TO A WORK AREA OR WORKPLACE LOCATION.



BE ON THE LOOK OUT

Look UP! Ladders, platforms, roofs, stairs, ramps, and scaffolds, among others, constitute WWSs.

Look DOWN! Manhole steps, holes, and areas where a worker may fall to a lower level or into something.

Look AROUND! Openings and unprotected sides and edges are hazards where one could trip, slip and fall.

Watch out! Keep all of these walking-working surfaces as clean and dry as possible, whether from the weather or work environment

Don't be down about falling. There are many types of fall prevention and restraint devices that are available and required for use, including a simple handrail, toeboards and warning lines.

More complex work situations call for more complex systems which include work-positioning systems to allow hands-free work and personal fall protection systems which include all the components to provide protection from falling or to arrest an employee's fall if one occurs.

Q: If money really did grow on trees, what would be everyone's favorite season?

A: Fall

PROTECT THE MOST IMPORTANT TOOL IN PREVENTING FALLS: YOURSELF

Wisdom comes with age. Older workers (statistically age ≥ 45) are injured less often on the job than younger counterparts, but the severity of those injures tends to be greater, indicated by countless studies. Overall, fatal work injuries from falls, slips, or trips continued a general upward trend that began in 2011, increasing 6 percent to 849 in 2016 and 25 percent overall since 2011.¹ Additionally, there have been 219 fatalities from being struck by falling object or equipment.¹

¹ "National Census of Fatal Occupational Injuries in 2016." 19Dec2017, USDL-17-1667. Accessed 19Jul2018.



CLASSIFIEDS

OFFER: ESAMS has numerous safety courses on Fall Prevention from web to OJT to classroom! Navy Fall Protection (Slips, Trips and Same Level Falls) Awareness One Time Only; Slips, Trips and Falls; Navy Fall Protection Program Manager Course; (MCIPAC) Fall Protection Initial Training. See your Required Training for details & deadlines.

The Monthly Safety Talk

HAZARD RECOGNITION

JOB HAZARD ANALYSIS (JHA): RECOGNIZING & MANAGING RISK

JOB HAZARDS

Every occupation has its own hazards, from hairdresser to horticulturalist to HVAC technician. While each is very different, to avoid injury or illness, recognizing the hazards is instrumental in mishap prevention.

One of the best ways to become aware of the hazards and put in mitigating controls for the risks is to complete a Job Hazard Analysis, or JHA.

Your profession has you doing any number of different tasks, but knowing how to prioritize which of them needs a JHA is easily determined by several steps, the first two listed here¹:

- Jobs with the highest injury or illness rates
- Jobs with the potential to cause severe or disabling injuries or illness

Regardless of which source you obtain your JHA form, there are three main steps which must be followed:

- Break the task into steps
- Identify the Hazards
- Identify Hazard Controls

Just as you (should) train your workers on a job and procedures, you should also train them on how to complete the JHA. Without understanding the pitfalls of too much or too little detail, what can be a very useful tool becomes an administrative nuisance. Since worker involvement is key to success, make sure it is the right key.

¹ US Dept. of Labor. *Job Hazard Analysis, OSHA 3071*. Government Printing Office, Revised 2002.

Mindfulness: the quality or state of being conscious or aware of something.

A WOW JHA FOR VPP

The VPP is a program which requires a lot of proactive behaviors to support the Four Pillars:

- Management Leadership and Employee Involvement
- Worksite Analysis
- Hazard Prevention and Control
- Safety and Health Training

Conducting a Worksite Analysis, documenting JHAs for the highest risk categories is the way to meet one pillar.

Involving Employees is another pillar, and having a JHA Team working on this- newer to experienced workers on a job. The experienced and new eyes on the hazards, known or perceived, is a good mix for team make-up.

Teach the JHA team how to break the job into steps. Take the Goldilocks approach, not too many and not too few steps and details- strive for the Baby Bear “just right” goal.² List the hazards and precautions to be taken to minimize or mitigate the hazards.

Once the JHA is completed, have leadership review the JHA ‘in work’ to see if any steps were missed. Any hazards overlooked?

When the JHA is completed and approved, then it is part of an organization’s Hazard Prevention and Control plan, another pillar.

The final pillar is USING the JHA to communicate safety and health data to employees. They will be more aware of a job’s hazards and more willing to follow the controls put in place for their safety.

² Savage, Paul; Hody, Brandon. “Documenting Job Hazard Analyses that WOW Safety Professionals.” *DoD Safety Management Center of Excellence*, smscx.ort/repository/onepagars/SMCS_OnePager_JHA_Overview_Mar2019.pdf, 10/29/19

Our technological powers increase, but the side effects and potential hazards also escalate.
~ Alvin Toffler

IT’S THE LITTLE THINGS...

From the time we were little our parents told us it was the little things that are important, and on the job that remains true.

This brief article clearly illustrates how the overlooked or “meant to report” hazards have potential for greater incidents.³ The little things do count.

Knowing where to start analyzing hazards can be daunting, but a great example is provided by NATE. The National Association of Tower Erectors is probably a foreign concept to our military operations, but with a set of fresh eyes, one can see that JHAs are done not only for the “little” jobs, but for the huge ones, too.⁴ What are you missing at your worksite?

³ “Hazard Awareness: The Little Things Count.” *OSM*, www.safetymannualosha.com/hazard-awareness-the-little-things-count/, 22 Jun 2018. Accessed 24 Feb 2020.

⁴ “NATE Job Hazard Analysis #ClimberConnection Video.” *YouTube*, uploaded by NATESafety, Dec 17, 2018, www.youtube.com/watch?v=Rg9wXjnaDJ8.

CLASSIFIEDS

WANTED: Employees who know that safety is everyone's responsibility. If you are the opposite of Wasn't Me, then you have potential to be a safety leader! Check yourself against "Wasn't Me." www.youtube.com/watch?v=SIKHIZOeZ00

EXCEL. Be your best. While your workplace may not be ready for a VPP star, taking the training to have a pro-active safety program helps everyone. Free training sheets and videos are available at: smcscx.org/Links.

SYSTEM SAFETY:

DEFENDING THE NATION WHILE PROTECTING THE DEFENDER

SYSTEM SAFETY: A NEW CHAPTER IN OPNAVINST 5100.23H

Formerly known as “acquisition safety,” this new chapter provides several references which highlight the process of acquisition and the responsibilities at the various levels.

As set forth by statute and regulation, from concept to deployment, a weapon system must go through a three-step process of identifying a required (needed) weapon system, establishing a budget, and acquiring the system.¹

The actual acquisition process involves program milestones:

- A- initiates technology maturation and risk reduction
- B- initiates engineering and manufacturing development
- C- initiates production and deployment

The program manager is the advocate for the system or platform, and must be able to make decisions based on performance metrics, including rates of funding obligations and expenditures. Their challenge is to avoid suppressing adverse information about program status. They must communicate pros and cons, unfulfilled expectations or surprises including “show stoppers” and “show slowers.”²

It is imperative that those in high-level administrative positions show the same Honor, Courage and Commitment as the deck plate Sailor.

¹ “Defense Acquisitions: How DOD Acquires Weapon Systems and Recent Efforts to Reform the Process.” Congressional Research Service, 7-5700, fas.org/spp/crs/natsec/RL34026.pdf. Accessed 15 Oct 2019.

² Christensen, David D., Maj USAF. “Cost Overrun Optimism: Fact or Fiction?” Acquisition Review Quarterly, Winter 1994, dau.edu/library/arj/ARJ/arq94/christe.pdf. Accessed 9 Oct 2019.

COST SAVINGS USING DESIGN-BUILD

A familiar example of projects seen on an installation would be construction projects. All DoD components use the Unified Facilities Criteria (UFC) as a basic building plan, and then work with the “customer” for modifications and specific requirements. This process keeps both costs and variances to a minimum, thereby keeping costs down.³

This process is called Design-Build, and works like this. To streamline the proposal, there are 10 common facility types, and each facility model has a basic template. If building a hangar, for example, what type and how many planes are going to be housed? What maintenance shops are required? Still, the basic hangar concept is the same.

It is difficult to understand the complexities of project management for complex weapons systems and its various components unless in that field, but breaking the basics down to a more understandable construction project may make it easier to grasp.

First, the best frame of mind for a project is not pinching pennies, but to spend time and resources more wisely. Given that 98% of all projects experience some sort of budget overrun, it is important to know in which phase of construction the money is best spent.⁴

Planning, feasibility and communications are the front-end keys to a successful project. Make sure a detailed and complete design, with a clear scope of work is done; collaborate on expectations and complexities which will be encountered. Changes to a project are easier and

Be warned that being an expert is more than understanding how a system is supposed to work. Expertise is gained by investigating why a system doesn't work.

Brian Redman

DESIGN-BUILD (CONT'D)

more inexpensive in the design phase than retro-fitting a new element into completed construction.⁴

The main reasons for cost overruns are inaccurate project estimates, design errors, change orders, administrative errors and poor site management.⁴

There is merit in the old adage, “Plan your work, and work your plan.” It saves time and money in the long run, whether it be simple maintenance efforts or the acquisition of a major weapons system.

³ “Design-Build Master RFP.” wbdg.org/ffc/navy-navfac/design-build-request-proposal. Accessed 10 Oct 2019.

⁴ Ellis, Grace. “How to Save Money in Construction: Cost-Cutting in Each Project Phase.” Plan-Grid, 21 Feb 2018, blog.plan-grid.com/2018/02/how-to-save-money-in-construction-project-phase/. Accessed 8 Oct 2019.

CLASSIFIEDS

WANTED: Your good ideas for cash and awards! DoDI 1400.25 of 4Nov2013 sets forth the guidelines for military and civilian personnel who have Beneficial Suggestions or Inventions which will “Contribute to the efficiency, economy, or other improvement of government operations or achieves a significant reduction in paperwork.” Read the instruction at esd.whs.mil/Portals/54/Documents/DD/issuances/140025/140025_vol451.pdf for details.

BLOODBORNE PATHOGENS:

ONE SMALL SCRATCH CAN LEAD TO A MUCH LARGER PROBLEM.

EXPOSURE CONTROL PLAN

Where is your organization's Exposure Control Plan? Do you need one? If you have an Occupational Exposure to blood or other potentially infectious materials in the performance of your duties, you need an Exposure Control Plan.

The plan, which should be reviewed annually, as a minimum, must include 1) Exposure determination, 2) Methods of Compliance, 3) Hep B vaccination and post-exposure evaluation, 4) Communication of Hazards to Employees, & 5) Recordkeeping.

Input from non-managerial employees responsible for direct patient care shall be solicited for identification, evaluation and selection of effective engineering and effective work practice controls. Work to make your job safer for yourself!

NEEDLESTICK FIRST AID

WORKERS, PLEASE NOTE:¹

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

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

¹"Bloodborne Infectious Disease: HIV/AIDS, Hepatitis B, Hepatitis C." *CDC*, 5Oct2019, www.cdc.gov/niosh/topics/bbp/emergnedl.html. Accessed 13Aug2019.

There are over 80,000 miles of blood vessels in the human body! No wonder I have tired blood!

UNIVERSAL PRECAUTIONS

Universal Precautions is an approach to infection control. According to the concept of Universal Precautions, all human blood and certain human body fluids are treated as if known to be infectious for HIV, HBV, and other bloodborne pathogens. CFR 1910.1030 cites examples of when and how universal precautions must be in place.

CLASSIFIEDS

R U Curious? See & Understand via animation how different needle safety devices work.
www.osha.gov/SLTC/etools/hospital/hazards/sharps/sharps.html

REPORTING CRITERIA FOR NEEDLESTICKS AND SHARPS INJURIES: DO YOU KNOW HOW?

It is important to keep in mind the definitions pertaining to and requirements for reporting Sharps and Bloodborne Pathogen incidents.

In 1910.1030, the Bloodborne Pathogen standard, one must first remember that the section pertains to occupational exposure to blood or other potentially infectious materials (OPIM).

One must keep in mind that a "sharp" is not an adjective for something which is sharp, like a saw. There are different saws which are sharp, sharp being an adjective. There are many sharps, used as a noun, which are "object[s] that can penetrate the skin including... needles, scalpels, ... broken capillary tubes, and exposed ends of dental wires," used in the medical and dental fields.

Cutting oneself with a table saw or drill press is not a "sharps injury."

The recording criteria in the 1904.8 is very clear on what must be

recorded. "You need to record cuts, lacerations, punctures, and scratches **only if** they are work-related **and** involve contamination with another person's blood or other potentially infectious material."

Splashes need to be recorded only if there is a diagnosis of a bloodborne illness.

When submitting mishaps in ESAMS, personnel must do the following to be compliant with OSHA reporting:

- Record all needlestick injuries and cuts from sharps contaminated with blood or OPIM
- Protect employee privacy; do not enter names in narrative
- Record both the type & brand of device involved
- State work area and how the incident occurred.

Statistics from a review of 10 months of FY19 mishap data in ESAMS reveals the following data:

Of 7896 on-duty mishaps, 1179 of those were listed as sharps injuries if a cut or puncture occurred, regardless of source. In actuality, only 285, 24% of those, or 4% of all mishaps, are Sharps injuries.

For the five elements of reporting, 5% (14) included PII, violating required privacy.

Type Sharp Items were missing in 30% (86) of reports, and Brand Sharp Item was missing or listed as unknown in 64% (181) incidents.

Civilians were involved in 64 incidents and 27% were incorrectly determined (by the narratives) as OSHA Reportable, both in negative and positive reporting.