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National Safety Council Recognizes Duquesne Again

By: George Bender

Duquesne University was again recognized by the National Safety Council with its Occupational Excellence Achievement Award for the year 2012. This award is granted to those that demonstrate a lost time accident rate that is less than 50% of their industry average. The Bureau of Labor Statistics reported a lost time accident rate of 0.6 for employers who offered educational services in 2012, and Duquesne’s rate was 0.249, well below the award level of 0.3. This is the second time that Duquesne has received this award and is a testament to the safety awareness and performance of faculty and staff. Congratulations to all for job well done.
UV Radiation

By: Paula Sweitzer

UV Radiation

Did you know there is an exposure risk to uv radiation? Most of us are familiar with uv exposure from the sun, but there are other exposure avenues…even in the workplace.

Ultra Violet (UV) means “beyond violet”, since violet is the shortest wavelength of the visible light and UV light is the next shortest. UV is part of the electromagnetic radiation spectrum with wavelengths from 100 nanometer (nm) to 400 nm. There are three types/regions of UV radiation:

- **UVA** – near UV – black light, 315 – 400 nm
- **UVB** – middle UV – Erythemal, 280 – 315 nm
- **UVC** – far UV – germicidal, 100 – 280 nm

We all know the exposure effects the sun can take on our bodies (sunburn, sun poisoning, or even cancer), but do you know what exposure effects can be on our sensitive eyes?

- UVA exposure passes through the cornea to the lens and overexposure contributes to the formation of cataracts by creating oxidants that cause accelerated formation of cataracts. Corneal damage is possible since UVA passes through it to get to the lens. A cataract is any opacity or loss of transparency of the lens of the eye. Blurry vision and eventual blindness occur.

- UVB exposure to the eyes is a painful inflammation that leaves lesions on the cornea. Cataracts or pterygia (inflammatory, invasive and proliferating lesions) can form on the cornea. Pinguecula or yellowish deposits between the cornea and sclera can occur.

- UVC exposures in industry are the most dangerous. Exposure can cause damage to the eyes in as little as 3 seconds and DNA damage to all biological surfaces. Photokeratitis (burning of the cornea by intense exposure) is prevalent and chronic exposures to acute intense UVC can lead to cataract formation and retinal damage.

What safety measures are available to protect yourself? There are a couple ways to protect you. First make sure you read the warning signs and understand the danger. Ask questions when you don’t know. Guard yourself with the proper personal protective equipment. There are safety glasses and face shields that are designed to protect against the UV wavelength. Standard eyewear is not acceptable. Make sure you check with the manufacturer for specs including proper optical density. Also all exposed skin should be covered with opaque material, including the face, neck, head, hands and arms.
Accident Reporting & Near Misses

By: Ryan Reilly

All accidents and near misses should be investigated so that hazards can be identified and controlled before they cause a serious accident. The more complete the information is on a form, the easier it will be for management to implement corrective action and prevent reoccurrences. For example, knowing that 70% of organizations incidents involve slips, trips, and falls is not as useful as knowing persons did not hold a handrail, or talked on a cell phone while walking towards a descending flight of stairs. For the purpose of accident and incident prevention, investigations are objective and fact-finding, not fault-finding.

In the simplest terms a near miss is a close call - such as slipping on ice - but not sustaining an injury. It is where individuals are involved, yet there is no injury, illness, or property damage. If not addressed it is more than likely a near miss will result in an injury, illness, or property damage. Another example of a near miss is a forklift running over an employee’s foot (steel toe boots). We can learn from this near miss that a backup alarm may not have functioned, the forklift driver did not use mirrors or check their surroundings, or the area was not barricaded to prevent employees from entering restricted space.

Common reasons employees are reluctant to report near misses:

1. There is no system for reporting;
2. Workers believe that the Supervisors will hold near miss reporting against them;
3. Generates additional paperwork;
4. No instruction on how to report near misses; and
5. There is no corrective action or recommendations after the near miss are reported.

Benefits of reporting near misses

1. Near misses are second chances - a do over to get it right so an accident does not occur;
2. They can be used as a learning experience; and
3. Near miss reporting will reveal acts, conditions, procedures, design and layout, and techniques that can be adapted to prevent an injury, illness, or unwanted release to the environment.

You can report accidents and near misses using the accident / incident report available at: http://www.duq.edu/Documents/ehs/_pdf/Accident20Form.pdf

An accident is defined as an unplanned, undesired event that results in personal injury or property damage.

Reminder:
Facilities Management Chemical Inventory Reports due at the end of January.
Safety Tips for Winter

By: Bob Haushalter

Winter is here! Listed below are a few items to keep you safe and warm during the winter months.

- Winterize your home
  - Install weather stripping and insulation.
  - Insulate water lines that run along exterior walls

- Check your heating systems
  - Have a professional service your furnace to make sure it is operating properly
  - Install a smoke / carbon monoxide detector

- Automobile
  - Keep the gas tank full to avoid ice in the tank and fuel lines
  - Check the tire tread and pressure

⇒ Use a wintertime formula in your windshield washer
⇒ Keep an emergency kit in your car (i.e., blankets, food, water, etc.)

Article Ideas....
EH & S encourages suggestions and comments.
Contact Ryan Reilly x1506 or reillyr1@duq.edu

2013 OSHA TOP 10 Violations
Source: OSHA

Fall protection in construction is again at the top of OSHA’s list of most-cited workplace safety violations. Here are the preliminary figures for FY 2013, showing the standard in parentheses followed by the number of violations.

1. Fall protection in construction (1926.501), 8,241
2. Hazard communication (1910.1200), 6,156
3. Scaffolding in construction (1926.451), 5,423
4. Respiratory protection (1910.134), 3,879
5. Electrical, wiring methods (1910.305), 3,452
7. Ladders in construction (1926.1053), 3,311
8. Lockout/tagout (1910.147), 3,254
9. Electrical, general (1910.303), 2,745
10. Machine guarding (1910.212), 2,701
Fire Extinguisher Quiz

Test what you know
Choose the best answer for the following statements.

1. Class A extinguishers are used on fires involving:
   a. Gases and flammable liquids
   b. Paper, trash, or other ordinary combustibles
   c. Electricity

2. Class B extinguishers are used on fires involving:
   a. Gases and flammable and combustible liquids
   b. Paper, trash, or other ordinary combustibles
   c. Electricity

3. Class C extinguishers are used on fires involving:
   a. Electricity
   b. Combustible metals
   c. Flammable liquids and gases

4. Class K extinguishers are used on fires involving:
   a. Paper, trash, or other ordinary combustibles
   b. Flammable liquids
   c. Cooking oils

Gas Cylinder Storage – Mellon Hall

By: Paula Sweitzer

Gas cylinders from Air Gas are delivered to Mellon Hall every Tuesday and Friday. All new cylinders are immediately placed into the central storage area within the Receiving Department (B-12).

This central storage area is a temporary holding area for all gas cylinders, new and old. Individuals from the department are then responsible to come down and safely transport their new gas cylinder to the designated lab for proper usage.

The following guidelines apply to any lab using/storing gas cylinders:

* Orders can be delivered any Tuesday and/or Friday.

* Orders must be placed through purchasing no later than the morning of Monday or Thursday to receive a next day delivery.

* Only order a new cylinder when you are ready; the central storage area is for temporary storage only.

* Ensure your lab has proper storage areas for all gas cylinders (including any back-up cylinders).

* Safe storage of gas cylinders in your lab would include the following:
  * Secured individually with a chain or cylinder strap.
  * Secured to a fixed location (wall, lab bench, fume hood, etc.).
  * Secured approximately 2/3 up the height of the cylinder.
  * Leave protective cap on gas cylinder until ready to use.
  * Never transport a gas cylinder without the cap.
  * Transport all gas cylinders using a gas cylinder dolly; never drag, roll, or slide a gas cylinder.

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