Hazard Inspections:
Van Kaam & Bushinski Buildings
July 17, 2012
Administration
August 21, 2012
Assumption LLC
September 18, 2012
Lab Safety Training
(Blackboard)
August 2012
Fire Prevention Training
September 2012
EHS Radiation Safety Committee Meeting
September 7, 2012

Inside this issue:

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Floor Marshall Program</td>
<td>1</td>
</tr>
<tr>
<td>Duquesne EHS Facebook Page</td>
<td>1</td>
</tr>
<tr>
<td>Mellon Hall Annual Safety Meeting Review</td>
<td>2</td>
</tr>
<tr>
<td>Lab Inspections</td>
<td>3</td>
</tr>
<tr>
<td>Campus Fire Safety Awareness</td>
<td>4-5</td>
</tr>
<tr>
<td>Heat Stress</td>
<td>6</td>
</tr>
<tr>
<td>Annual Fire Extinguisher Inspections</td>
<td>7</td>
</tr>
</tbody>
</table>

The Safety Chronicle

FLOOR MARSHAL PROGRAM REVISED

By: George Bender

The University Emergency Operations Committee has again updated the University Emergency Operations Plan, and the responsibilities of building floor marshals have been revised. These were the result of the need to address building evacuations and/or lock downs due to earthquakes, bomb threats, active shooters, etc., and the major adjustments are as follows:

- Floor marshals are now required to commit to offering up to four hours of their time per year towards these activities.
- Annual floor marshal training is now mandatory and will no longer be offered online for those that cannot attend any of the scheduled sessions.
- All floor marshals will now be required to wear their reflective vests during events in order to identify themselves to building occupants, emergency personnel, and other floor marshals.
- Enrollment into the DU Alert system is also required.

150 floor marshals are currently required to provide coverage across campus, and we still have 35 positions open. If you wish to become a floor marshal, please contact George Bender at x5329 or at benderg@duq.edu Substitute floor marshals are needed as well, because a floor marshal may not be in a building when an event occurs. A full roster is required before the start of the Fall 2012 semester.

Facebook

EHS now has it’s own Facebook page! We come across so many articles and information and this is a great avenue to share that information with everybody.

Go to “DU Environmental Health & Safety” and like our page!
By: Paula Sweitzer

Annual Mellon Hall Safety Meeting

The 11th Annual Safety Meeting was held on May 24, 2012. We had a large turn-out; actually too large for the auditorium we were given! This meeting is held every year, usually late May, and many topics are discussed. Each member of the EHS Office presents on a new topic, or sometimes it is just a review. The topics during this year’s meeting included:

- Aftermath of the UCLA Incident
- The EHS Website
- Global Harmonized System (GHS)
- Weekly SAA Inspections

The session was video-taped, so those that missed the session are able to easily make it up and have been emailed on how to do so.

At the meeting there was a funny song that we played as everybody was coming in. It was the called the Hazardous Waste Song, by the Squirrel Hillbillies. If you wanted to hear this again...go to http://soundcloud.com/jpainter314159/the-hazardous-waste-song.

As a reminder, there are two mandatory training sessions each year for all lab workers – the annual safety meeting (in person) and the lab safety training; which is conducted through blackboard in August, usually at the beginning of the new semester or as new folks start.

July is Eye Injury Prevention Month!
Lab Inspections

Thorough lab inspections are conducted on an annual basis in all the labs in each department. Each department has a designated individual that is part of the Lab Safety Committee. This individual will schedule the inspections with EHS. Most lab inspections include four individuals that each focus on specific areas – waste, hazcom, ppe, housekeeping, safety equipment, etc. The Biology and Chemistry Departments were recently inspected and in total, 79 labs were inspected. The main finding between both departments was general housekeeping: cluttered work areas, benches, fume hoods, etc.

Cluttered work areas can cause problems especially during emergency situations. What if you need to get to that eyewash station or fire extinguisher and you trip on something else or cut your arm on glassware that was lying around the sink. The Occupational Safety and Health Administration (OSHA) requires neat, clean workplaces because they are safer. Just taking a little time to put things in their place can prevent many accidents and injuries.

Below are some of good housekeeping practices that OSHA recommends:

- Clean up spills immediately; they are a slipping hazard.
- Never place materials in aisles and passageways.
- Stack materials carefully, so they don’t fall over.
- Have a place to keep all tools, materials, and chemicals; put them away whenever you are not using them.
- Keep all drawers closed when they are not in use.

Every employee has a personal responsibility to:

- Keep your own work area neat, clean, and safe.
- Keep aisles, passages, and stairways clean and uncluttered.
- Put tools, materials and chemicals away in their designated places when they are not being used.

Report anything that’s broken or not working properly so it can be fixed (for building problems contact Facilities Maintenance at x6011).
By: Ryan Reilly

**Campus Fire Safety**

Have you ever experienced a fire in your dwelling? Did you have the proper knowledge, training, and equipment in order to adequately control and extinguish the fire? Most individuals use senses to detect the presence of fire. Using smell we may detect smoke such as the hydrocarbons released upon combustion of material, touch detects the presence of heat, sight can detect flames and severity of fire, and hearing may detect a sparking sound or arc. All of these are great indicators for detection of the presence of fire. Fire prevention methods, procedures, and knowledge are the best methods to avoid unwarranted fires.

Let’s walk through a fictitious scenario: The kitchen poses a significant risk of fires. There is a house party with 25 people in a 2 bedroom dwelling. There is plenty of refreshments and food in the kitchen. There are pizza boxes sitting on the stove (combustibles with an ignition source). After plenty of beverages, Jane decides she needs a cigarette (smoking indoors). Jane did not realize Pete was leaning against the stove and the gas inadvertently turned the burner knob releasing gas (fuel source). A blaze of intense flame ignites the cardboard boxes, in turn lighting the dish towels, and aerosol WD-40. The spread of the fire engulfs the kitchen cabinetry in a matter of minutes. The fire happened so quickly people panicked, tripping and falling down the steps. The fire department was called, yet it was too late to save the kitchen. Several people sustained burns, were treated for smoke inhalation, and one person sustained a concussion from falling down the steps. This was not a fun social gathering. This example illustrates a fire can quickly devastate a dwelling and set people’s emotions into flight.

We can learn certain aspects to prevent fires from this incident. The key to fire prevention is knowledge, training, and the proper extinguishing methods. What happens during the first minutes of a fire determines if the fire is controllable. There were many factors contributing to this incident such as: unsafe behavior and actions, means of egress, fire prevention controls, emergency procedures, and limited knowledge of extinguishing fires. The dwelling exceeded the occupancy limit. The exit was limited to one door; the other door was blocked with a couch. There was not a fire extinguisher pre-

![The Center for Fire Safety—Fire Fatality Data](image)

**The Center for Fire Safety—Fire Fatality Data**

*From January 2000-Present*

71 fatal fires have been documented that occurred on a college campus, in Greek housing or within 3 miles of the campus - claiming a total of 102 victims.
People panicked and multiple injuries occurred. Combustibles were placed on an ignition source. A no smoking indoors policy was not followed.

We can prevent fires from happening with recognition. It is important to realize that buildings are usually not the source of fires; it is the contents inside of the buildings and the actions of people in the building.

First, recognize potential fire hazards. Second evaluate the hazards and take inventory of important items. Third, establish prevention controls and emergency evacuation procedures. Hazards can include: Flammable liquids (gasoline vapors), combustibles (cardboard, paper, clothing), electrical (overcurrent on electrical strips), and combustible metals (more likely in laboratory and welding areas). Establish how you would prevent these items from igniting. This could be as simple as storing flammables in a specialized cabinet or proper procedure for storing combustibles away from ignition sources. Prevention controls could involve fire extinguishers, smoke detectors, water hose connection, and sprinklers if feasible. Other prevention controls include always reading labels to determine the contents of materials.

Don’t be a victim of burns, smoke inhalation, and property loss; know how to react if a fire happens. Whether living on or off campus fire safety is important. The initial response to fight a fire is crucial. Proper emergency preparedness and fire prevention controls will greatly reduce the risk of a fire happening.

- Electrical cords are in good condition (not damaged).
- Appliances and lights are plugged into separate electrical outlets.
- All smoke alarms work when tested.
- The clothes dryer has a clean vent and filter (no lint buildup).
- All extension cords are used safely (not under carpets or across walking areas).
- Portable space heaters are 3 feet away from anything that can burn.
- All escape routes are clear of clutter and easily accessible.
- Curtains and other things that can burn are away from the stovetop.
- The furnace has been inspected in the past year.
- Portable space heaters are off whenever a person leaves the room and goes to sleep.
- The chimney has been inspected and cleaned in the past year.
- Never leave burning candles unattended.
Heat Stress

By: Bob Haushalter

With summer in full swing, and cities in our area reporting record breaking temperatures, it would be a good time to put out an article concerning heat stress.

Whether at home or working on campus, people can develop heat stress related issues such as:

- Heat Stroke
- Heat Exhaustion
- Heat Syncope (fainting)
- Heat Cramps
- Heat Rash

Let’s take a quick review of each to include symptoms & first aid treatments.

HEAT STROKE
The most serious of all heat related disorders. Heat stroke occurs when the body becomes unable to control its temperature.

Symptoms:
- Hot, dry skin or profuse sweating
- Hallucinations
- Chills
- Throbbing headache
- High body temperature
- Confusion/dizziness
- Slurred speech

First Aid:
- Call Public Safety (X2677) or 911 if at home
- Move the person to a cool shaded area
- Cool the person using methods such as:
  - Soaking their clothes with water or fanning their body
  - When heat stroke occurs, the body temperature can rise to 106°F or higher within 10 to 15 minutes!!

HEAT EXHAUSTION
The body’s response to an excessive loss of water and salt, usually through sweating.

Symptoms:
- Heavy sweating
- Extreme weakness or fatigue
- Dizziness, confusion
- Nausea, vomiting
- Clammy, moist skin
- Fast and shallow breathing

First Aid:
- Rapid heart beat
  - First Aid:
    - Rest in a cool, shaded or air-conditioned area
    - Drink plenty of water or other cool, nonalcoholic beverages.
    - Take a cool shower, bath, or sponge bath.

HEAT SYNCOPE (fainting)

Symptoms:
- Light-headedness
- Dizziness
- Fainting

First Aid:
- Sit or lie down in a cool place when you begin to feel symptoms.
- Slowly drink water, clear juice, or a sports beverage.

Factors that may contribute to heat syncope include dehydration and lack of acclimatization.

HEAT CRAMPS

Symptoms:
- Muscle pain or spasms usually in the abdomen, arms, or legs.

First Aid:
- Stop all activity – sit in a cool place.
- Drink clear juice or a sports beverage.
- Seek medical attention if you have heart problems, are on a low-sodium diet or if the cramps do not subside within one hour
- On hot, humid days—avoid non-breathable synthetic clothing.

HEAT RASH

Symptoms:
- Red clusters of pimples or small blisters.

First Aid:
- Keep the affected area dry.
- Dusting powder may be used to increase comfort.
- Work in a cooler, less humid environment when possible.

Sweating depletes the body’s salt and moisture levels.
Annual Fire Inspections

In July the 1200+ fire extinguishers will be serviced for annual inspection. Throughout the month, employees from PFE (Pittsburgh Fire Extinguisher) Company will be inspecting the equipment. The inspections are in every building at Duquesne throughout the month of July. Responsibilities for the yearly inspection include: cleaning, checking seals, checking pressure gauges, recharging, and hydrostatic testing.

Cost

- Fire and burn injuries represent 1% of the incidence of injuries and 2% of the total costs of injuries, or $7.5 billion each year (Finkelstein et al. 2006).
- Males account for $4.8 billion (64%) of the total costs of fire/burn injuries.
- Females account for $2.7 billion (36%) of the total costs of fire/burn injuries.
- Fatal fire and burn injuries cost $3 billion, representing 2% of the total costs of all fatal injuries.
- Hospitalized fire and burn injuries total $1 billion, or 1% of the total cost of all hospitalized injuries.
- Non-hospitalized fire and burn injuries cost $3 billion, or 2% of the total cost of all non-hospitalized injuries.

Risk Factors

- Over one-third (37%) home fire deaths occur in homes without smoke alarms (Ahrens 2011).
- Most residential fires occur during the winter months (CDC 1998; Flynn 2010).
- Alcohol use contributes to an estimated 40% of residential fire deaths (Smith 1999).