Facilities and Engineering/Environmental Health and Safety Newsletter

Safety Office: (843) 953-4816, 953-6945/Radio: Channel 1 #98 or #99

Date: January 24, 2020

Safety Counter

127

Days Since Last Recordable

(Contusion/Laceration – Staff/Library 9/25/2019)

(Last injury, Elbow Abrasion - PSAF)

Safety Stats

3	YTD Campus Recordable Injuries
5.8	RIR Rate (Target: 0.00)
17	YTD First Aids & Report Only
1.9	NCAIS Educational Institution Avg.

Days Since Last OSHA Recordable	
1,029	Zone Maintenance
480	HVAC
392	Grounds
>1,200	Paint Shop
>1,200	Electrical Shop
>1,200	Motor Pool
>1,200	Carpenter Shop
703	Machine/Plumbing Shop
132	All Other Campus Departments

Olga Zeller – Civil & Engineering Lab Tech

Olga coordinates six very active labs for the Civil and Environmental Engineering Department including environmental, geotechnical, fluid mechanics, materials, concrete/asphalt, and surveying. She troubleshoots equipment, preps labs for classes, assists faculty and students during lab experiments, and always makes sure the labs are in great condition for faculty and students. She is well-trained in the use of lab equipment such as the Universal Tensile Machine and has extensive technical knowledge of the courses she assists with. She also works with Mechanical Engineering during their labs in LeTellier Hall. She brought a wealth of experience from her previous lab position at University of Maryland.

Safety is a high priority when working with lab equipment. Olga makes certain the Department's Industrial Hygiene Plan is updated to ensure compliance. She organizes Student Safety Agreements to make sure all students working in labs are aware of mandatory safety measures and are following proper safety guidelines.

Olga works with work-study students, Navy OC's, Cadets and evening students, guiding them on use of best practices, and answering their questions on use of lab equipment, testing procedures, and data collection.

During summer 2019, undergraduate students completed a research project on the soil properties of Pluff Mud, and Olga was an integral part of this work, ensuring materials and equipment were readily available, and the lab was prepped for testing procedures.

Olga is a dedicated, and highly valued member of our team, continually going above and beyond for students by coordinating special projects, including the Concrete Canoe, and providing many opportunities for student learning and enrichment.

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Hypothermia

As the weather starts to turn colder and winter sets in, we all need to be aware of hypothermia and the impact on our bodies.

Under healthy conditions, the body maintains a relatively stable temperature of around 98.6˚ F. If the environment gets too cold or the body is unable to produce sufficient heat, the core temperature can drop and hypothermia can develop. Between 2003 and 2014, more than 13,400 people died from hypothermia in the United States (Centers for Disease Control and Prevention).

Hypothermia is a severe condition in which the body temperature drops to an abnormally low level. It occurs when the body is unable to produce enough heat to counter the heat that the body is losing. The part of the brain that controls body temperature is called the hypothalamus and when the hypothalamus recognizes changes in the body temperature, it initiates body responses to bring the temperature back in line. If the environment becomes colder, the body shivers. This increase in muscle activity generates more heat. However, if the body loses heat more quickly than it can make heat, the core temperature will fall. As the temperature falls, the body shunts blood away from the skin to reduce the amount of heat that escapes. Instead, the blood is redirected to the vital organs of the body such as heart, lungs, kidney and brain. If the body temperature continues to fall, the organs will start to fail, potentially leading to death.

First Aid Treatment for Hypothermia

- Move the person to a warm, dry place, if possible, or shelter them from the elements.
- Remove wet clothing, cutting items away if necessary
- Cover their whole body and head with blankets, leaving only the face clear.
- Put the individual on a blanket to insulate them from the ground
- Monitor breathing and carrying out CPR if breathing stops.
- Provide skin-to-skin contact, if possible, by removing clothing and wrapping yourself and the individual in the blanket together to transfer heat.
- Provide warm drinks, if the individual is conscious, but no alcohol or caffeine.

It is vital not to use direct heat, such as heat lamps or hot water, as this can damage the skin. It can also trigger irregular heartbeats and, potentially, lead to cardiac arrest. Do not rub or massage the person either, as these potentially jarring movements could also cause cardiac arrest.

SAFETY PICTURES OF THE DAY

No this is not a new style hardhat

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WHAT TO DO IN CASE OF FIRE OR EMERGENCY IN A CAMPUS BUILDING…

1. Numbers to call in case of a fire or emergency:

A. From a campus (VOIP) phone
- 953-5114 (Citadel Public Safety)
-811 (Citadel Public Safety)

B. From a cell phone
-911 (Charleston 911 Dispatch Center)
-843-953-5114 (Citadel Public Safety)

2. Give the following information:

A. Name
B. Phone Number (Preferably a cell #)
C. Location (Bldg, Room #)
D. Nature of emergency (What is the situation?)
E. Number of Injured
F. Nature of Injuries (How/what is injured?)

DO NOT hang up until told to do so.

3. **ALL PERSONNEL MUST EVACUATE** the building when a fire alarm is sounding. **NO EXCEPTIONS!**

4. Know multiple routes out of your building. DO NOT use an elevator in the event of a fire or emergency.

5. Know where your fire extinguishers are located and what types of extinguishers are available.

6. Only attempt to extinguish a fire if you deem it safe enough and small enough. If in doubt, evacuate.

7. Know where the closest fire alarm pull station is located. Most are located near an exit or door to a stairwell.

8. Consider your co-workers. Provide additional help evacuating to those in need, i.e. injured, handicapped, and elderly.

9. Know where your muster points are located. All facilities should have a primary and alternate muster point to assemble and complete accountability of all faculty, staff and students. Muster points should be far enough away from the building to avoid impeding emergency response vehicles. Primary and alternate muster points should be located away from each other in case one is impacted by smoke, gases, etc.

10. Notify emergency responders of anyone that may still be left in the building and where they may be located.

11. **DO NOT RE-ENTER THE BUILDING** for any reason. Only re-enter the building after being given the **"ALL CLEAR"** by Public Safety and alarms have been silenced.

12. Close all doors in office, administrative and educational buildings after rooms have been evacuated. This is especially important if the room is on fire. Closed doors will help to compartmentalize the building and reduce the spread of fire.

13. Barracks doors will be left open with lights on after evacuation unless the room in question is on fire. That door will be closed. Barracks doors left open are to help assist in the evacuation and accountability process.

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Winter Weather terms

R	R	X	T	K	K	X	K	N	S	P	C	W	Z	O
O	C	D	F	H	E	T	O	K	T	O	K	I	Q	U
K	J	J	B	T	U	R	K	C	F	L	C	N	J	R
H	Z	L	R	V	E	N	F	C	I	A	I	D	I	B
W	M	O	E	A	W	Q	D	M	R	R	R	C	M	P
L	V	N	S	P	C	Q	X	E	D	O	X	H	U	D
B	U	T	V	D	U	F	G	L	R	Y	L	I	E	H
F	E	W	M	G	M	A	V	R	I	S	S	L	C	C
R	D	J	X	F	Z	L	R	A	C	A	N	L	I	F
T	S	A	C	E	R	O	F	G	S	S	H	O	T	H
N	E	G	H	F	D	N	I	W	N	D	R	C	W	F
H	S	Q	U	H	R	U	O	O	T	P	Q	U	D	N
W	L	H	Q	X	J	O	W	T	Y	D	L	Z	G	P
P	H	Z	W	U	C	V	S	S	L	E	E	T	R	O
J	J	K	P	W	N	H	Z	T	R	I	M	F	Z	P

DRIFTS
GRAUPEL
NOREASTER
SNOW
WIND
FORECAST
HAIL
POLAR
THUNDERSNOW
WINDCHILL
FROST
ICE
SLEET
VORTEX

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THINK SAFETY

THE CITADEL FIRE MARSHAL'S OFFICE January 2020

HOME FIRES OCCUR MORE IN WINTER THAN IN ANY OTHER SEASON. AS YOU STAY WARM THIS WINTER, THINK SAFETY.

PUT A FREEZE ON WINTER FIRES

Half of all home heating fires occur in the months of December, January, and February. Heating equipment is involved in 1 in every 7 reported home fires and 1 in every 5 home fire deaths during these months. Follow these simple safety tips to heat your home safely:

- Keep anything that can burn at least 3 feet from any heat source, like fireplaces, wood stoves, radiators, or space heaters.
- Keep portable generators outside, away from windows, crawlspace openings, and as far away from your home as possible.
- Install an test carbon monoxide alarms at least once a month.
- Have a qualified professional clean and inspect your chimney and vents once a year.
- Store cooled ashes in a tightly covered metal container, and keep it outside at least 10 feet from your home and nearby buildings.
- **DO NOT** put ashes or coals in a plastic container or trash can.
- Plug only 1 heat-producing appliance into an electrical outlet at a time.

WRAPPING UP THE HOLIDAYS

Now that Christmas is over and holiday celebrations are winding down, it is time to remind residents of the danger of leaving up those Christmas trees to long. Almost 40 percent of home fires that begin with a Christmas tree happen in the month of January.

Last January, national headlines were made when a Maryland couple and 4 of their grandchildren died in a home fire fueled by an extremely dry Christmas tree.

By removing your Christmas tree from your house the risk for fire to begin with the tree is eliminated, so lets get those trees out our your homes.

A Message from the Fire Marshal:

With the New Year here, I hope that it brings health and happiness for all. As many make New Year resolutions I would like to suggest adding one to your list, have a working smoke alarms in your home. It is a proven fact that smoke alarms reduce the chance of getting injured or death due to a home fire. I ask you to make a resolution to check your smoke alarm monthly and replace if it is over 10 years old,

Also, do not forget to make sure that you have the prover coverage with your homeowner and renters insurance.

Think Safety.

911

Call 911 in case of a fire.

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How does OSHA define a recordable injury or illness?

- Any work-related fatality.
- Any work-related injury or illness that results in loss of consciousness, days away from work, restricted work, or transfer to another job.
- Any work-related injury or illness requiring medical treatment beyond first aid.
- Any work-related diagnosed case of cancer, chronic irreversible diseases, fractured or cracked bones or teeth, and punctured eardrums.
- There are also special recording criteria for work-related cases involving: needle sticks and sharps injuries; medical removal; hearing loss; and tuberculosis.

Remember: Not all work-related incidents rise to the level of an OSHA recordable. OSHA is very specific on what type of injuries are considered OSHA recordable injuries in the standard 29CFR1904.7 and any incident outside of that definition would be considered a first aid case – it all depends on the level of treatment and who renders the treatment.

OSHA's General Duty Clause:

29CFR1904.5 (a) (1) – Each employer shall furnish to each of their employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to their employees.

To issue a General Duty Clause citation, OSHA must prove:

1). The employer failed to keep the workplace free of a hazard to which its employees were exposed.

2). The hazard was recognized.

3). The hazard was causing or was likely to cause death or serious physical harm.

4). A feasible and useful method to correct the hazard was available.

What constitutes an OSHA recordable injury?

In order for an injury or illness to be recordable, it must be work-related. An injury is considered work-related if an event or exposure in the workplace caused or contributed or significantly aggravated a pre-existing condition.

Generally, a recordable injury or illness under OSHA is defined as one that requires medical treatment beyond first aid, as well as one that causes death, days away from work, restricted workdays, and transfer to another job or loss of consciousness.

Contact Helen Ballestas (843) 953-1501 for more details

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