EHS QUARTERLY

Volume 1, Issue 3 - 2019

CMU ALERT

Dear Members of the University Community,

CMU-Alert, Carnegie Mellon University's emergency notification system, has transitioned to a new service provider, which will no longer require subscribers to opt-in. As of July 1, members of the university community will automatically receive CMU-Alert messages to their email, office phone and personal phone numbers listed in Workday.

As a result of this change, please review, and if necessary, update your contact information in Workday by using this guide or work with your department initiator to do so. If you wish to unsubscribe from receiving emergency alerts to your mobile and/or home phone numbers, please follow this guide: Unsubscribe from CMU-Alert in Workday Quick Guide.

Contact information for students will continue to be automatically imported from the Student Information Online (SIO) system. Students are encouraged to make sure their contact information is accurate in the SIO.

CMU-Alert email messages will come from CMU-Alert@andrew.cmu.edu. CMU-Alert voice notifications will come from 412-268-2578 (ALRT). Please add this information as a contact on your mobile device to avoid confusion and concerns with spam communications. If you have any questions regarding this information, please contact cmu-alert@andrew.cmu. ◆

EHS AUTHORIZATION POLICY

University leadership recently approved the revision of the EHS Authorization Policy. This was to accommodate organizational changes, the new EHS mission, and expanded policy statement. The revised policy also defines roles and responsibilities of all stakeholders and promotes a culture of safety.

The original policy was issued in 2003 and was focused on risk reduction and regulatory compliance. The revised policy includes a focus on corrective actions, program participation, environmental consciousness, continuous improvement, transparency and communication. This document also defines the responsibility and accountability for the EHS Department.

After extensive socialization and feedback from various CMU stakeholders at all levels (students, staff and faculty), the new policy was published on June 21, 2019, and is available on the CMU University Policies webpage (https://www.cmu.edu/policies/index-a-z/index.html). ◆

FIRE EVACUATION DRILLS

Fire evacuation drills will continue throughout the month of July. Evacuation drills will be conducted between 9 a.m. and 12 p.m. and will follow the schedule below, however please be advised that the schedule is subject to change.

Monday, July 1
Gates/Hillman Center
Newell-Simon Hall
Purnell Center for the Artrs/Miller Gallery
Cyert Hall
Cohon University Center
Bramer House
Alumni House

Wednesday, July 10
Information Networking Institute
Software Engineering Institute
UTDC Building
Whitfield Hall
4721 Fifth Ave.
GATF Building

Friday, July 12
Integrated Innovation Institute
205 S. Craig St.
300 S. Craig St.
305 S. Craig St.
311 S. Craig St.
407 S. Craig St.
417 S. Craig St.

Tuesday, July 16
Tepper
Mellon Institute
6555 Penn Ave.
National Robotics Engineering Center
Pittsburgh Technology Center

During the evacuation drill, you will hear a siren/ horn and/or voice command announcement. The fire team asks for your full cooperation during the drills. The expected duration of drills will be 15-20 minutes.

Follow the directions of your floor marshal and proceed to the nearest exit.

Floor marshals should notify the nearest emergency official when everyone is accounted for, or if anyone is missing.

Once outside of the building, remain with your group until the all-clear is given to return to the building. Do not leave campus until the drill has been completed.

If you have questions regarding proper procedures for your area, please contact your Floor Marshal, or Thomas Plietz, Fire Safety Manager at: tplietz@andrew.cmu.edu or 8-9404. ◆

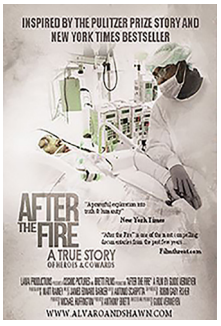
FIRE SAFETY MONTH

The fire safety team is hosting a series of events throughout the month of September that coincides with the National Campus Fire Safety Month, which is an initiative founded by the Center for Campus Fire Safety to raise fire and life safety awareness on campuses. Students, faculty and staff will be exposed to a variety of fire and life safety topics, tips, hands-on training opportunities and fun activities. Below is the schedule of events:

Wednesday, September 4
What: Tabletop discussion with trivia and popcorn
Where: CUC
When: 10 a.m. - 2 p.m.
Members of EHS will be on hand to provide important fire and life safety information. Participants will be able to participate in a Fire Safety Trivia Contest.

Tuesday, September 10
What: Hands-on Fire Extinguisher Training
Where: Near the fence
When: 12-1 p.m. and 4-6 p.m.
Participants will learn how to effectively use a fire extinguisher in a realistic simulation, putting out the flames only when the extinguisher is used correctly.

Wednesday, September 18
What: Fire Trailer
Where: Merson Court Yard, outside of the CUC
When: 11 a.m. - 3 p.m.
The trailer is designed to simulate an actual fire in a bedroom by introducing theatrical smoke into the trailer so participants can see how quickly smoke can impair visibility in a fire situation.



Tuesday, September 24
What: ***After the Fire*** Presentation
Where: McConomy Auditorium
When: Brief talk at 12-1 p.m. and Documentary Viewing at 4-6 p.m.
In a Seton Hall University freshman dormitory a fire occurred in the predawn hours of January 19, 2000. Three freshman students passed away and fifty-eight were injured. Amongst the injured, Alvaro Llanos and Shawn Simons were two of the most severely burned students.

Shawn and Alvaro visit campuses across the country to share the powerful documentary "After the Fire", and to share their story with students, faculty and staff to re-inforce the importance of fire safety. Their motive is to be advocates for fire safety and prevention so that no other students will have to endure the pain that they suffered.

Please join us for any or all of the events. If you have any questions, please contact EHS at: safety@andrew.cmu.edu ◆

HYDROFLUORIC ACID (HF) SAFETY PROGRAM

Hydrofluoric Acid First-aid/Spill Kit

Calcium Gluconate

EHS has rolled out a new safety program for the laboratories who use or store Hydrofluoric acid. All the users and lab members, where Hydrofluoric acid is present, should be aware of the hazards, safety precautions, emergency/spill response and complete the Hydrofluoric acid safety training. EHS also provides Hydrofluoric acid First-aid/Spill kits with the anecdote, calcium gluconate, to laboratories. The kits are essential for safely responding to incidents involving Hydrofluoric acid. Users are responsible for inspecting the kit before every use of Hydrofluoric acid.

Hydrofluoric acid is especially hazardous due to its high level of toxicity. In addition to causing severe chemical burns to tissue, it can also cause toxic systemic effects. Fluoride ions are easily absorbed through the skin, cause death of soft tissue and erode bone as well can cause cardiac arrhythmias or cardiac arrest. Acute effects of Hydrofluoric acid exposure include extreme ‘respiratory irritation, immediate and severe eye damage and pulmonary edema. Skin, eye or lung exposure to concentrated (>50%) Hydrofluoric acid solutions will cause immediate, severe, penetrating burns. Exposure to less concentrated solutions may have equally serious effects, but the appearance of symptoms can be delayed for up to 24 hours. This delayed toxic effect makes it particularly dangerous.

Users and even the members of labs with Hydrofluoric acid must adhere to the safety guidelines, which include:

1. Hydrofluoric acid Safety Training
2. Standard Operating Procedure for Hydrofluoric Acid use
3. Emergency and Spill Response

For more information or any questions, please contact EHS at safety@andrew.cmu.edu ◆

ERGONOMICS

Ergonomics is the practice of designing products, systems or processes to fit the user. The goal of ergonomics is to prevent soft tissue injuries and musculoskeletal disorders (MSDs) caused by sudden or sustained exposure to force, vibration, repetitive motion and awkward postures.

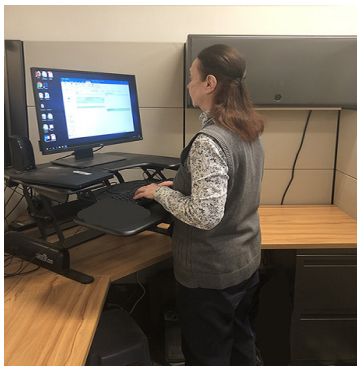
Symptoms of musculoskeletal disorders and other ergonomic injuries may be subtle at first, but will continue to worsen if ignored. Often, these types of injuries affect the joints, tendons, muscles, ligaments and other parts of the body.

Ergonomic related disorders occur to all types of workers, from laborers to office personnel. Factors that contribute to poor ergonomics include working in awkward positions; having a poorly set-up workstation; overexerting yourself when lifting, pushing or pulling; and sitting for too long in one position.

Whether sitting in an office all day or performing maintenance, practicing good ergonomics can help you stay healthy. To avoid ergonomic-related disorders:

- Change your work methods to maintain a neutral posture;
- Change positions, stretch often to improve blood circulation, and take breaks regularly;
- Carry fewer objects at a time;
- Use dollies and conveyers to move heavy materials;
- Use proper lifting techniques - do not bend or twist at the waist when lifting any object;
- Use electric tools instead of mechanical tools;
- Rotate workers among different tasks;
- For computer use - keep the screen 12 to 18 inches from your face and just below eye level; and
- Position the keyboard so that your wrists are straight and your elbows are close to your body.

Contact EHS with any questions and/or ergonomic concerns at safety@andrew.cmu.edu. EHS provides services that are free and include computer workstation assessments, assistance in developing strategies for successful return-to-work tasks after injury and training for injury prevention. ◆



DANGERS OF WORKING AND/OR BEING OUT IN THE HEAT

Heat is one of the leading weather-related killers in the United States, resulting in hundreds of fatalities each year and even more heat-related illnesses.

Heat-related illnesses, like heat rash, heat cramps, heat exhaustion and heat stroke, can happen when the body is not able to properly cool itself during extremely hot and humid weather. While the body normally cools itself by sweating, during extreme heat, this might not be enough. In these cases, the body temperature rises faster than it can cool itself down. This can cause damage to the brain and other vital organs.

You can take precautions to prevent heat-related illnesses. When temperatures climb, remember to:

Get Acclimated: Limit time spent working or exercising in heat until you're conditioned to it. People who are not used to hot weather are especially susceptible to heat-related illness. It can take several weeks for your body to adjust to hot weather.

Dress for Summer: wear lightweight, loose fitting, light-colored clothing to reflect heat.

Drink Plenty of Water: focus on non-alcoholic and decaffeinated fluids. Drink water even if you don't feel thirsty. If you are on a fluid restrictive diet or have a problem with fluid retention, consult a physician before increasing consumption of fluids.

Eat Light: choose easy-to-digest foods such as fruit or salads. Avoid hot and heavy meals.

Schedule Outdoor Activities Carefully: try to limit your outdoor activity to when it's coolest, like morning and evening hours. Rest often in shady areas so that your body has a chance to recover.

Check for Updates: check your local news for extreme heat alerts and safety tips and to learn about any cooling shelters in your area.

Know the Signs: Learn the signs and symptoms of heat-related illnesses and how to treat them.

If exertion in the heat makes your heart pound and leaves you gasping for breath, STOP all activity. Get into a cool area or into the shade and rest, especially if you become lightheaded, confused, weak or faint. ◆

EHS STAFF SPOTLIGHT

Andrew Lawson, EHS Biological and Radiation Safety Officer, has been promoted to EHS Senior Manager, Laboratory and Research Safety and reports to EHS Director, Dr. Shailendra Singh. This is a new role within a new organizational structure that consolidates all aspects of laboratory and research safety, including Chemical Safety, Biological and Radiation Safety, Hazardous Materials Management and Research Safety. He joined Carnegie Mellon University in 2004 as a Biological and Radiation Safety Technician. Andrew is a Certified Industrial Hygienist and received a Bachelor of Science degree in Medical Technology from West Virginia University, a Master of Science degree in Industrial Hygiene from West Virginia University, and a Master of Public Management degree from the Heinz College at Carnegie Mellon University. He received the Andy Award for Commitment to Excellence in 2018 and Mellon College of Sciences Special Staff Award in 2019. Please join us in congratulating Andrew on his promotion and wish him the very best in his new role. ◆

Sahara Moses joined the Environmental Health and Safety department on May 28 as our new Summer Safety Intern. Sahara is a rising junior in the chemistry department in the Mellon College of Science where she is pursuing a Bachelor's Degree in Chemistry with a minor in Arabic Language and Culture. Her role as Safety Intern includes but is not limited to: annual fume hood inspection, assistance with the water quality program and fire extinguisher inspection. After graduating she plans on continuing her studies in chemistry with a potential focus in pharmaceutical chemistry and eventually plans on travelling to the Middle East. ◆

EHS WOULD LIKE TO HEAR FROM YOU!

We encourage all members of the Carnegie Mellon University community to submit safety improvement ideas that impact your personal safety on campus or the safety of the greater community. Your participation will help raise safety awareness in our community! Please submit your safety concerns/ideas to: safety@andrew.cmu.edu.

In addition, if you have any suggestions for the next newsletter, please submit your ideas to Mary Sickles at: msickles@andrew.cmu.edu. ◆

SAFETY WORD SEARCH

I	E	N	F	C	Q	I	D	E	E	N	E	R	G	I	Z	E	F	I
O	P	G	E	X	O	Y	S	E	L	G	G	O	G	F	Y	N	X	I
U	F	P	B	A	G	A	R	R	T	N	J	H	F	S	E	X	I	R
A	L	M	Q	O	N	R	I	E	E	M	E	R	G	E	N	C	Y	E
A	A	P	G	U	I	D	E	L	I	N	E	F	Y	S	D	D	M	D
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HOUSEKEEPING
AWARENESS
FIRSTRESPONDER
GUIDELINE
ALARM

DEENERGIZE
FLASH POINT
GOGGLES
HAZARDOUS
EXTINGUISHER

SAFETY
OSHA
SHIELD
TRAINING
ERGONOMICS

INSPECTION
GLOVES
CHEMICALS
EMERGENCY
DATA SHEET

Answers will be provided in the next EHS Quarterly Newsletter.

CROSSWORD PUZZLE ANSWERS

The crossword puzzle was published in the second quarter newsletter, which was distributed on Friday, April 12. Below is the answer sheet for the crossword puzzle. ◆