

Summer Safety

Jim Gindlesperger



Summer has finally arrived in Pittsburgh, accompanied by some potentially serious safety concerns.

If you will be exposed to the heat it is important to know the symptoms of heat stress. For information on heat-related health issues refer to our web site at http://www.cmu.edu/ehs/Occupational_Safety/heat%20stress.htm. Some heat-related problems can be life-threatening without medical intervention, so know how to protect yourself.

Excess exposure to sunlight can lead to skin cancer and cataracts. Always use a sunscreen with a Skin Protection Factor (SPF) of at least 15, wear a wide brim hat, wear sunglasses that block UV radiation, and limit your exposure between 10 AM and 4 PM when the UV rays are most intense.

Insects present their own set of problems, some of which are hazardous to your health. Avoid sweet smelling perfumes and brightly colored clothing with flowery patterns. Wear long sleeves and long pants, particularly if you will be in areas known to have ticks. Use a good insect repellent, and shower immediately after coming inside. Look for ticks as you undress. If you are allergic to insect venoms, get medical attention immediately, particularly if symptoms of Lyme disease appear.

Finally, know how to identify (and avoid) poisonous plants. Remember that you can develop a rash from the oils of these plants without actually touching them. The oil can be carried on tools, in smoke from burning brush, or even by pets. Wash thoroughly (don't use soap, which can transport the oils) if you have been exposed, and treat the characteristic rash with a good topical treatment. If the rash becomes severe, medical attention may be necessary.

New Requirements for Researchers Using Primary Human and Nonhuman Primate Cell Lines

Andrew Lawson

Recently, the IBC (Institutional Biosafety Committee) has established new requirements for all researchers who utilize primary human and nonhuman primate cell lines as well as those human and nonhuman primate cell lines that are poorly established. According to these requirements, anyone using these materials must be enrolled in the university's Bloodborne Pathogen Program which is governed by the Occupational Safety and Health Administration's Bloodborne Pathogen Standard (29 CFR 1910.1030). As part of the requirements of this standard, anyone who is enrolled in the program must receive Bloodborne Pathogens Training, offered through the Department of Environmental Health and Safety. If you are using such materials and have not received this training, please contact Andrew Lawson at 8-8405 or alawson@andrew.cmu.edu to schedule a training session today!

Recapping of Needles

Andrew Lawson



During recent inspections of laboratories across campus, recapped hypodermic needles were observed in sharps disposal containers. Needles, regardless of their nature or use, must never be recapped by anyone for any reason. The practice of recapping needles is a common source of needlesticks among laboratory personnel. Needlesticks can result in an inadvertent injection of hazardous chemicals and/or biological materials, some of which can have serious health consequences. In addition, hypodermic needles should not be clipped, bent, or removed from disposable syringes for any reason. If you or someone else in your laboratory engages in the practice of recapping needles, it is important that you stop this practice immediately.

New EH&S Personnel

Mark Banister

Michael Fouch joined Environmental Health and Safety as of July 1st, as a Laboratory Auditor. Michael will be performing evaluations of laboratories and other areas of hazardous materials, to ensure compliance with our regulatory requirements as well as with university safety protocols. He will also be spearheading our ongoing efforts to ensure that our inventory of hazardous materials, in the Chemtracker program, is up to date.

Michael will soon obtain his masters degree in Industrial Hygiene from West Virginia University and comes well prepared to help ensure that the Carnegie Mellon community continues to use, store and dispose of hazardous materials safely. Please welcome him when he comes to visit you.

Also, as in previous years, we have a summer intern in our department. Robert Ralcewicz is a senior at Slippery Rock University, majoring in Safety and Environmental Management. Rob will be canvassing the campus laboratories and updating our hazards database with contact names and numbers, as well as ensuring that the emergency response door signs are properly updated. Please be sure to provide Bob with the cooperation that he needs for these important tasks.

To Reach Us

Telephone: 268-8182

Fax 268-6976

Web: <http://www.cmu.edu/ehs>

Offices: FMS Bldg., 3rd floor

A Brief History of Waste

(As taken from "Do you want to be a garbologist" by Roberta Crowell Barbalace)
Jeff Harris



Archeologists have long studied the garbage (waste) of mankind. It has given great insight into civilizations of yesteryear. Not just a trait of the 20th century, evidence shows that humans have always been careless and "people tend to let trash fall where it may".

Time Line

- 6,500 years ago in what is now Colorado, a clan of Native Americans was found to produce an average of 5.3 pounds of waste per day.
- 500 BC in Athens, Greece the first municipal dump was created when regulations required waste be dumped outside city limits.
- The Valley of Gehenna (Sheol in the Bible's New Testament) was apparently a dump outside the city which periodically burned, becoming synonymous with "hell".
- 1388 England: Parliament bars waste dispersal in public waters and ditches.
- 1690 Philadelphia: Rittenhouse Mill makes paper from recycled fibers.
- 1842 England: a study links disease with filthy environmental conditions and "the age of sanitation" begins...shortly later came the first waste incinerators.
- 1914: there are 300 incinerators burning trash in the U.S.
- 1920's saw the use of trash landfills as a means to reclaim swamp land.
- 1954: Olympia Washington pays for the return of aluminum cans.
- 1965 U.S.: the first solid waste management laws were enacted.
- 1970: the first Earth Day.
- 1976 (oil embargo and Love Canal) : EPA enacts the Resource Conservation and Recovery Act emphasizing management of hazardous waste and recycling.

Today we strive to develop sound practices, Green Practices and Green Chemistry.

To learn more, visit www.cmu.edu/ehs or <http://environmentalchemistry.com/yogi/environmental/wastehistory.html>

Safety Fact

Injury and property-damage vehicle crashes occur at the highest rates in urban areas such as Pittsburgh. (Source: Insurance Institute for Highway Safety)

Environmental Audit Coming in August

Mark Banister



Carnegie Mellon has contracted with an external organization to perform an Environmental Evaluation of the University's environmental activities. This audit will simulate an EPA visit and will help us ensure that our environmental practices are performing properly. A similar audit was performed in 2002 that was both favorable to our environmental efforts and helpful to the University in identifying future activities.

The audit will be August 1-2, 2005 and will address a wide range of campus activities including hazardous materials handling and disposal. These materials include chemicals as well as compressed gases, paints, pesticides, refrigerants, oil (including cooking oil), asbestos and lead containing items. The groups who will be addressed include not only laboratories but also in Art and Drama functions, photo labs, facilities and maintenance work, Athletics, Robotics, and Printing & Publications areas. The auditors will look at our practices in handling these materials and will evaluate whether our people have been trained and are knowledgeable in these activities.

If you are in an area that will be affected by this audit, please review the practices and requirements for handling and disposal of these materials. If you have any questions about your area's environmental status or potential problems with the audit (including employees needing training in hazardous material handling) please contact EH&S at 8-8182.

What to do in an Emergency

Jim Gindlesperger

The university's Emergency Operations Plan outlines responsibilities for each of the anticipated types of emergency we would expect to encounter on campus. Duties have been assigned to specific teams and individuals, but there are things you can do to assist.

First, know who the Emergency Coordinators and Floor Marshals are for your building. Also, know at least two ways out of your building. Your Floor Marshal will tell you which routes have been planned for your part of the building. Once outside, continue moving to your designated assembly area. Your floor marshal can also give you this information. Once outside, stay in your designated area and await further instructions.

Flooding

Jim Gindlesperger



Have you ever heard a weather reporter warn of potential flooding, followed by an announcement that you should never try to drive through standing water on the road? Most people have heard that warning, but did you ever think about what it meant, or why it is so dangerous? It's one of those things we tend to hear and forget about, but it is a warning that should be heeded.

The Centers for Disease Control (CDC) report that more than one-half of all flood-related drownings occur when a vehicle is driven into hazardous flood waters. The next highest percentage of flood-related deaths are the result of the victim walking into flood waters.

There are several things that can go wrong when flooding hits, aside from the obvious. Walking into flood waters, even those you are sure are not particularly deep, present numerous potential hazards. Waters can rise rapidly, or begin flowing dangerously fast, causing pedestrians to be swept off their feet. As little as six inches of rapidly moving water is enough to cause a pedestrian to be swept away. Debris in the water can also knock an individual off his feet, and raw sewage and other biological hazards can enter the body. Also, downed electrical wires often can not be seen until it is too late, and water can wash away a road or sidewalk without it being obvious until the water recedes.

Vehicles can encounter the same problems, from washed out road surfaces to being swept away. Many think that their vehicle won't float because it weighs nearly two tons. Nothing could be further from the truth. After all, a 97,000 ton aircraft carrier floats, doesn't it? Then why would your vehicle be immune from buoyancy? Once it is swept downstream, it will often roll onto its side, or even onto its roof. This only gives the occupants a few seconds to get out.

When camping or parking your car near a stream, be especially vigilant during storms. Always pay attention to storm warning announcements, and be particularly cautious at night when it is more difficult to see potential danger.

Next time you hear the warnings about walking or driving into flooded roadways, pay attention. It is easier to turn around than deal with the consequences.