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ENVIRONMENTAL HEALTH and SAFETY

MU Emergency Preparedness Update

A year ago, I presented an overview of Emergency Preparedness at MU in the EHS Newsletter. This article presents an update on MU preparedness activities and contains reminders of steps you can take to be prepared.

In 2006, MU arranged for table top exercises involving top administrative staff on two occasions: one for a spring tornado and one for a severe weather event during the Homecoming football game. These two drills were in addition to annual drills at University Hospital, Residential Life, and the Research Reactor. All of these drills paid off when the campus was hit with a 15-inch snowstorm in December and a severe ice storm in January. Though disruptive to normal campus activities, excellent preparation and prompt response by campus personnel allowed campus operations to very quickly return to normal.

Although severe weather is the most likely cause of emergencies, MU also prepares for other emergencies. Management of large crowds typically occurs six times each fall with our home football games, and in 2006, we actually had seven games. A lot of coordination goes into preparing for the smooth operation of these games.

We have not forgotten about pandemic flu concerns. The MU Pandemic Flu Assessment Team and its three subcommittees described in the last EHS Newsletter have continued meeting to address a wide variety of issues.

In addition to the Campus Emergency Plan, departmental emergency plans, and building-specific emergency plans, the following resources can help you be prepared:

- Post the EHS Emergency Procedures poster (<http://ehs.missouri.edu/other/pdf/emergency-poster.pdf>)
- Make sure your department has a weather radio with Specific Area Message Encoding (S.A.M.E.) technology
- Bookmark the MU Alert web page (<http://mualert.missouri.edu>)

Feel free to contact EHS if you desire assistance in addressing emergency preparedness issues at your work location.

Peter Ashbrook
Director

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Director's Desk Workplace Injuries

Three years ago I was appointed as the MU representative on a System-wide task force to address Workers Compensation costs. The driver for this task force was the fact that Workers Comp costs showed a very large increase in Fiscal Year 2003 over the previous year. For MU, the increase was over 80% in one year.

The task force reviewed a lot of statistics and discussed various approaches to reduce Workers Comp costs. We settled on two preventive initiatives: establishing a contract with a loss control (safety) consultant to enhance campus safety programs and to implement a post-offer employee testing program.

The loss control consultant began work at MU in July 2005 and focused his efforts on enhancing safety programs in Campus Facilities, Campus Dining and Residential Life, which have the largest number of employees. In addition, the consultant has made preliminary contacts with several other departments. Areas of emphasis have included implementation of an injury review program, slip resistant shoes, and ergonomic assessments.

The employee testing program is still under development, but is expected to be implemented for some positions later this year. The purpose of the program is to make sure that new employees are physically capable of performing the jobs for which they are hired. For example, if employees are expected to be required to lift 50 pounds on occasion,

they should be able to do so without injury.

Injury statistics are affected by a lot of variables, so one needs to be careful not to over interpret the data. Fortunately, Workers Comp costs have been dropping since the high year of FY03 and in fact, the MU data for FY06 showed that costs were about half of those incurred in FY03. This is good not just for MU, but for employees, too, since there are either less injuries or less severe injuries than in the past.

Continued improvement in control of Workers Comp costs will depend on preventing accidents and injuries. This will require cooperation on the part of supervisors and workers to make sure that hazardous conditions are understood and appropriate work practices are identified to prevent accidents and injuries. I encourage everyone to remember that EHS can be a resource in making safety improvements; however, everyone is responsible for safety.

Peter Ashbrook

Disposal of Smoke Detectors at MU

Residence halls and most other campus buildings have smoke detectors. These detectors have a specific life span and will at some point need to be replaced. The question has come up as to what to do with the old smoke detector? To answer this question it is helpful to know a bit about the workings of a common smoke detector.

Smoke detectors basically have two
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Smoke Detectors (Continued)

components: a sensor to detect smoke and an alarm. The detector can run off of a 9 volt battery or be wired into house current. The most common type of smoke detector is known as an ionizing detector. This type has a small amount of a radioactive isotope, Americium-241. The detector itself is simply two metal plates with the voltage running across them and the radioactive source. The Americium ionizes or negatively charges the oxygen in the detector while the electrical current over the plates forms a positive charge. When smoke enters the detector it reacts with this ionized oxygen and disrupts the balance between the negative and positive charges. This reaction causes the current to drop and the sensor sets off the alarm. This is why it is important to replace batteries on a regular basis to maintain this balance in the detector.

There is only a very small amount of radioactive material in a smoke detector and the type of radiation emitted can easily be completely shielded by a sheet of paper. Since the amount of Americium-241 is so small and the life saving benefits of a smoke detector are so great the Nuclear Regulatory Commission will allow you to dispose of used smoke detectors in your home as regular trash without any restrictions.

Since MU has the potential for significant numbers of used smoke detectors to be generated, we would prefer that you contact EHS at 882-7018 for collection and disposal. Additionally, for home disposal, the City of Columbia would prefer you take all used smoke detectors to the city's Household Hazardous Waste Facility behind the city power plant.

Dave Burgess
Health Physicist

Easter Egg Handling Food Safety Tips

Consider using plastic eggs for the Easter egg hunt instead of hard-boiled eggs. It is safer to treat colorful hard-boiled Easter eggs as disposable decorations, not food. If you do use real eggs as part of your family's Easter tradition, follow these simple safety measures to help keep dyed Easter eggs safe to eat:

- Wash hands thoroughly with warm, soapy water before handling the eggs.
- Eggs should be cooked until the yolks and whites are firm.
- Cool eggs quickly, either under cold running water or in an ice bath.
- When coloring eggs, use a food-safe dye.
- Do not decorate, hide, or eat cracked eggs.
- Refrigerate eggs (41°F or below) until you are ready to hide them.
- Choose hiding places with care, avoiding areas where the eggs could come in contact with harmful bacteria or chemicals.
- Refrigerate immediately after hunting eggs; discard eggs that have been out of the refrigerator for more than two hours.
- Hard-boiled eggs held at 41°F in the refrigerator may be kept up to seven days.

Please contact Environmental Health & Safety, Dick Fancher (University Sanitarian) at 882-7018, if there are any questions or additional information needed.

Roger Riddlemoser
Assistant Director EHS – Biosafety

Chemical Training Key to Services

Over the last several years, the Environmental Management Section of EHS has endeavored to overhaul and improve our programs. First was the reorganization of our 1990s internal structure to ensure campus users were receiving a consistent message regarding the management of chemical materials. Second was the “reboot” of our training program in an effort both to make sure workers had the current information, and that EHS had a current list of workers for each Registered User (RU).

EHS is moving forward again by tying RU-related services to proper training. Beginning late in 2006, customers who visited the Resource Recovery Center to select free chemicals from our inventory of over 10,000 containers (<http://ehs.missouri.edu/haz/recycling.html>) found that we needed to know their name and their RU number. The reason is that we now do an immediate check to make sure workers have both current training and are associated with the RU. If the worker is trained, but not listed, we can update our records and the customer can still leave with the chemicals. However, if the customer has not been trained, the transaction cannot be completed and a trained worker will need to return for the chemicals.

We are instituting similar checks for certain grant proposals using chemicals that require approval from EHS; as part of our decision making process when workers request to have some work spaces evaluated for exemption from MU’s Food/Drink policy (which in turn can only be granted in limited circumstances); and when requests are made for cost-sharing under our Safe Storage program (<http://ehs.missouri.edu/chem/safe-storage.html>). Eventually, these types of checks may be included in our soon-to-be-

launched web-based Pick Up Request Form (PURF) process.

As an RU, or as a worker, you may be interested in what you can do to avoid interruptions when requesting service from EHS:

1. Verify your training is current. Chemical workers must be trained at least once every three years. RUs currently only have an initial training requirement. You can check when you last took any EHS training, or register for a class, by logging onto our online system: <http://mubswb.missouri.edu/ehsweb/training/>
2. If you are an RU, keep your worker list up to date with EHS. You can do this by providing a current list of workers (with employee ID numbers) to hazmat@missouri.edu or by simply returning the periodic update requests you receive from EMS.

And as always, if you have questions about any of our programs, don’t hesitate to contact us at 882-3736 or via the email address above.

Roger Giles

Manager, Hazardous Material Services

Annual Severe Weather Drill



The annual severe weather exercise will be held at approximately 1:30 p.m., Tuesday, March 13, 2007. For more information please see <http://ehs.missouri.edu/other/er/severe-weather.html> (If you see this notice after the drill occurred, there is still value in reviewing the guidance on the above web page.)

Spring Break Travel Safety

Many people travel during spring break. Such trips frequently involve large crowds, contact with strangers, and access to alcohol. It is important for you to be aware of your safety, as well as the safety of your friends. If you're planning a spring break vacation, here are some safety tips to remember to protect both yourself, family, friends, and your valuables.

First, prepare your home before going: turn on outdoor lights, install timers or motion lights, move valuables away from windows, ensure windows and doors are secure, and pull first floor curtains (but ensure curtains are left open on second level or higher which allows neighbors, police or campus security a good view into your home). Ensure sliding doors have a wooden dowel or stick in the sliding track. Let neighbors know that you're going away for a few days. Have your mechanic check your vehicle's fluids, belts, lights, battery, and tires. Additionally, arrange to hold your mail and newspaper until you return.

At the University, do not leave experiments unattended. Designate a contact person who is knowledgeable enough about your research or area to answer questions should they arise or an emergency takes place. Inform your department office who the contact person for your area is in your absence. Make sure all hazardous chemical, radiological, and biological items are secured.

If you're traveling by plane or bus, mark your luggage boldly with durable tags and place some brightly colored yarn/ribbon on the handle. If you must take items such as razors, scissors, other sharp articles, toiletries, or personal hygiene items, put them in your checked-in baggage (not carry-on). Keep at least two forms of government-issued

identification handy at all times (do not carry all your ID, money or credit cards in one place). If you are driving, bring a cell phone and place a flashlight, flares, first-aid kit and maps in the trunk. Stow all valuables out of sight and check the interior/exterior of the vehicle each time you get in. **DO NOT DRIVE** when you are sleepy, drowsy, or drinking alcohol.

Travel with someone or a group at all times, and let others know if you have any medical conditions, allergies, and alcohol limits prior to leaving your room. Note the location of fire exits, alarms, and fire extinguishers. Place all valuables in the hotel/motel safe deposit box. Do not answer the door without verifying who it is – check with hotel/motel management if necessary.

Food safety is also very important. Wash your hands often and well with soap and water or a disinfectant hand rub to help kill germs, especially before eating! Drink water or soft drinks only from sources you trust. Only eat food that has been cooked all the way through or fruits and vegetables that have been washed and peeled. Remember: boil it, cook it, peel it, or forget it. If visiting an area where you might get malaria make sure to take your medication before, during, and after your trip, as directed. If you might be bitten by insects (like mosquitoes or ticks) use insect repellent (bug spray) with up to 50% DEET. Make sure you know how to keep yourself from being injured while you travel. Refer to the article "Norovirus" in this newsletter for additional information on travel sickness/diarrhea.

Taking these easy steps will help keep your spring break safe and fun. Use http://travel.state.gov/travel/cis_pa_tw/safety/safety_2836.html for additional Travel Safety Information.

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Annual Severe Weather Drill, Tuesday March 13, 1:30pm

(See page 4 for more details)

Norovirus (aka: Stomach Flu, Gastroenteritis)

We are currently finishing up the 'season' for stomach flu although this viral infection can occur anytime. This is the disease that you hear about that hits cruise ships with hundreds of people getting sick. It is second only to the common cold in occurrence. Last December alone there were at least 12 major outbreaks around the US. The CDC estimates that about 23,000,000 cases occur every year. The problem with the norovirus is that it is extremely communicable. You can get it from food or you can get it from person to person contact.

The norovirus is an intestinal/stomach virus and is transmitted via the fecal – oral route. It is characterized by nausea, diarrhea, vomiting, headache, low grade fever and possible tiredness. Death is very rare although you think this is possible while it is attacking you. It is self limiting and lasts for about 2 – 3 days. The problem is that you can remain infectious for up to two weeks. Dehydration

EHS appreciates campus support of environmental and safety issues. If you have any special needs regarding the format of this publication, or have any comments regarding newsletters, training programs or services, please direct your communications to Rebecca Bergfield, Editor at the above address.

is a problem during infection and water and juices should be administered. Do not give sports drinks.

Prevention is simply washing your hands. Due to its contagious nature it is important to wash your hands every time after using the bathroom and before you eat. If this is done on a regular basis it will greatly restrict your chances of contracting the norovirus.

Should you come down with the norovirus it is important that you do not handle anyone else's food. This includes food services like restaurants as well as in your home. There was a case last December in a popular chain restaurant where there were two infected employees causing over 300 guests to be infected with the norovirus.

With people traveling during spring break to other parts of our country and other parts of the world it is important to be sure you get maximum enjoyment from your trip by simply taking care of yourself. At the very least, keep your hands washed and away from your mouth. If you have any questions or concerns please feel free to contact me at fancherr@missouri.edu.

Richard Fancher
Sanitarian