THE UNIVERSITY OF OKLAHOMA
ENVIRONMENTAL HEALTH AND SAFETY OFFICE

SAF• T• GRAM

"A gram of safety is worth a pound of cure!"

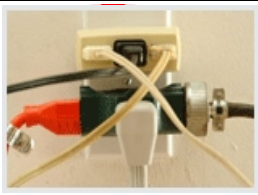
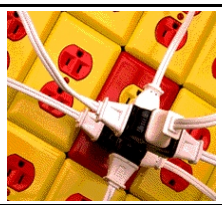
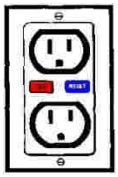
Volume 11, Number 3 Winter 2005

In this issue...

Safe Holiday Lighting

Sources: http://www.sce.com/Safety/SafetyTips/HolidayLighting/default.htm
http://www.cpsc.gov/CPSCPUB/PREREL/prhtml06/06046.html

Now that you've hung your holiday lights, here are some tips to review your work for safe practices.

Did you:	Do you:
 Check everything for frayed cords, broken wires and bulbs, and loose connections? If you find a problem, throw the strand away! And never replace a broken bulb or fuse when the lights are plugged in!	 Unplug your decorative lights when you leave home or go to bed? Use a timer so they're on only during the hours you select, and in case you forget to turn them off. Timers can also help you save energy.
 Use only UL approved lighting and cords and use only lights and extension cords designed for outdoor use outdoors? The UL (Underwriters Laboratories) certification is recognized worldwide as a standard for product safety and quality.	 Keep indoor trees well watered so they won't dry out and become a fire hazard? Be sure to safely dispose of the tree when it begins to drop needles.
 Put no more than three strands of lights per electrical cord/outlet? Overloading an outlet could cause a short circuit and a fire danger.	 Keep lights away from carpeting, drapes, furniture and other combustible materials?
 Make sure the staples, tacks or nails you used to hang the lights did not pierce the wires? Next time, you might consider plastic hooks or zip cords instead.	 Plug outside lights into ground-fault circuit interrupter (GFCI) protected receptacles to reduce the risk of shock when water is present?

'Tis the Season to Ring in New Food Safety Traditions

Source: http://www.homefoodsafety.org/pages/media/pdfs/holiday03.pdf

Eat, drink and be merry with these simple home food safety tips from the American Dietetic Association and ConAgra Foods

Reckless Thawing

- **Old Habit:** More than one out of four Americans admit to thawing their frozen turkey or other main meat dish on the kitchen counter, in the oven or even under hot water in the kitchen sink.
- **New Tradition**: To prevent the spread of harmful bacteria, frozen meats should be thawed, and marinated, for that matter in a refrigerator set below 40 degrees Fahrenheit. Or, if pressed for time, you can thaw a wrapped frozen turkey (breast-side down) in a sink filled with cold tap water, making sure to change the water every 30 minutes.

Holding Out on Hot Stuff

- **Old Habit:** When preparing a cooked dish that needs to chill (for storage or serving purposes), nearly four out of five home cooks think it's necessary to wait until foods cool before putting them in the refrigerator.
- **New Tradition:** Once upon a time, placing hot foods in the refrigerator could lower the overall temperature of the fridge and cause foods to spoil. Not anymore! To ensure the freshness and safety of your freshly cooked foods, place them promptly in the refrigerator after cooking…no need to wait.

Covered Dish Delivery

- **Old Habit:** Three out of five holiday revelers typically travel for at least one hour with their homemade holiday dish to a relative or friend's home.
- **New Tradition:** Pay close attention to how much time passes from the time you leave your door until your dish is eaten. If it's more than two hours, consider packing your cold dish in a cooler or hot dish in an insulated bag to keep it safe and bacteria-free.

Rocking the Gravy Boat

- **Old Habit:** While a majority (71 percent) of home cooks remember to bring gravy to a boil before serving it, many do not know the same rule also applies during the encore presentation. More than half just reheat leftover gravy in the microwave.
- **New Tradition:** In order to eliminate harmful bacteria, always bring leftover gravy to a boil on the stove before serving it a second or even third time around.

Festive Floor-Grazing

- **Old Habit:** Nearly one out of four Americans say they abide by a specific "rule" to determine how long food is safe to eat after it falls on the floor, with the majority giving a green light to food rescued within five seconds.
- **New Tradition:** Tragic as it may be when a holiday treat topples to the floor, it's never a good idea to eat it. In the spirit of "out with the old, in with the new," toss it.

Tips for Winter Driving

Source: http://www.nhtsa.dot.gov/people/injury/Seasonal_Advisories/WinterDriving2005/wintertips1_5.html#tip1

No one wants to break down in any season, but especially not in cold or snowy winter weather. Start the season off right by ensuring your vehicle is in optimal condition.

- Visit your mechanic for a tune-up or other routine maintenance.
- Make sure your windshield wipers work and replace worn blades.
- Check to see that your window defrosters (front and rear) work properly.
- Regardless of season, you should inspect your tires at least once a month and always before embarking on a long road trip. Check tire pressure (when tires are "cold") and make sure each tire is filled to the vehicle manufacturer's suggested psi (pounds per square inch) of air pressure, which is listed in your owner's manual and on a label inside the driver's door. Look closely at your tread and replace tires with uneven wear or insufficient tread. Tread should be at least 1/16 of an inch or greater on all tires.
- Check the weather, road conditions, and traffic; plan to leave early if necessary.
- Keep your gas tank close to full. If you get stuck in a traffic jam or in snow, you might need more fuel to get home or keep warm. To avoid carbon monoxide poisoning when stuck in snow, be sure to keep your vehicle's exhaust pipe clear of snow and ice, run your vehicle only in the open with the windows partially down, and run it only long enough to keep warm.
- Keep the following on hand: Snow shovel; broom; ice scraper; abrasive material (such as sand or kitty litter in case your vehicle gets stuck in the snow), jumper cables, flashlight, warning devices (such as flares or markers), blankets, a cell phone, water, food, and any necessary medicine (for longer trips or when driving in lightly populated areas).

Squinting While Staring At Computer Monitor Can Cause Painful Dry Eye

Source: http://www.ohsonline.com/stevens/ohspub.nsf/d3d5b4f938b22b6e8625670c006dbc58/5cc53c495d8dd115862570c9005d5fe2?opendocument

Squinting at a computer screen can cut in half the number of times someone blinks each minute - which could lead to an irritating condition called dry eye, according to Ohio State University researchers. The more that the participants in this study squinted their eyes, the less they blinked. The less they blinked, the more their eyes ached or burned, and the more they reported sensations of dryness, irritation and tearing.

The researchers asked 10 college students to squint at different levels. For the first trial, participants were asked to completely relax their eyes. For the next four trials, students squinted in increments ranging from 5 percent (barely squinting) to 50 percent (eyes closed about half-way.) At the end of the trials, the researchers watched videotapes of the students and counted the number of times each student had blinked during the trials.

Blink rates decreased from an average of 15 blinks per minute when the eyes were relaxed to 7.5 blinks a minute when students squinted just 5 percent. That number was reduced to four blinks a minute when participants squinted at the 50 percent level.

Squinting serves two purposes. It improves eyesight by helping to more clearly define objects that are out of focus. It also cuts down on the brightness from sources of glare. It may be voluntary or involuntary - a person working at a computer may not realize that he is squinting. Check your workstation to be sure you have minimized any potential glare, and that your monitor is an appropriate distance to minimize squinting.

What's Wrong with this Picture?

Source: http://www.safetyphoto.co.uk/photo1/fire_enviro_risk/fire_officer_workstation/fire_dse.htm

Choose your answer:

A. This clutter presents a fire hazard.

Any potential source of a spark, whether from a frayed cord or an overheated computer could start any of these papers on fire. When do you think the last time this person checked or has even seen the cords and outlets in this office. Sound familiar? Check the cords on all office equipment and appliances. If they are worn or frayed, have them repaired. Don't overload the outlets.

B. This clutter presents a trip and an egress hazard.

Consider the fire situation, or any circumstance which would require this person to leave in a hurry. Chances are, a trip or fall could happen easily, especially if the power is out and the lights are off.

C. This clutter could cause a stressful work environment.

The design of the workstation is of fundamental importance in providing a comfortable working condition thus contributing to the reduction of stress in the workplace. (I get stressed out just looking at this picture.)

D. This clutter does not allow a person to practice healthy ergonomics.

Healthy ergonomic practices include:

- Hands, wrists, and forearms are straight, in-line and roughly parallel to the floor. Keyboard and mouse are directly square in-line with the user and computer, and are about 2-3" lower than the desk height.
- Computer monitor is located so that the top of the screen is at or just below eye level with minimal glare.
- Feet are fully supported by floor or footrest.
- Back is fully supported with appropriate lumbar support when sitting vertical or leaning back slightly.
- An adjustable document holder is available to hold paper for prolonged computer inputting.

These are just some examples of good ergonomic practices. This clutter hinders these practices considerably. You may find additional information at http://w3.ouhsc.edu/ehso/Ergo.htm.

E. All of the above

The correct answer is **E: All of the above**. Having this much clutter in your work space contributes to many unhealthy circumstances.

How Do I Report a Bad Drug Reaction?
(Or Other Problems Related to Drugs, Biological Products, Medical Devices, Food, or Cosmetics?)

Source: http://www.fda.gov/medwatch/

The FDA has created the MedWatch program to monitor adverse effects and problems with medical products the agency regulates such as human drugs and medical devices. MedWatch is a voluntary reporting system available to consumers or health professionals by going to http://www.fda.gov/medwatch/index.html. Click on "How to Report", then "Reporting by Consumers" or "Reporting by Health Professionals." You also can call the FDA Division of Drug Information at 301-827-4573 and request that a MedWatch Voluntary Reporting Form be sent to you.

To report adverse reactions or other problems with food (except meat and poultry), contact the FDA district office consumer complaint coordinator for your geographic area (see the list at http://www.fda.gov/opacom/backgrounders/complain.html. For problems with meat and poultry, which the U.S. Department of Agriculture regulates, call 1-800-535-4555.

For problems with vaccines, the FDA and the Centers for Disease Control and Prevention maintain the Vaccine Adverse Event Reporting System. To report a vaccine problem online, go to https://secure.vaers.org/VaersDataEntryintro.htm.

For more on reporting problem products to FDA, go to http://www.fda.gov/opacom/backgrounders/problem.html.

Penalty for the Maine College of Art

Source: http://www.epa.gov/region1/pr/2005/jul/sr050702.html

The Environmental Protection Agency is proposing a **$107,165** penalty against the Maine College of Art in Portland for violating numerous hazardous waste regulations. According to a complaint/order filed by EPA Region I, an inspection in April 2004 determined that the College failed to identify that certain wastes were hazardous, and subsequently failed to manage them properly. The complaint alleged that acid pickling solution neutralized with marble was washed down the sink, and waste glaze and related floor sweepings were put in the trash and also washed down the sink.

In addition, cans of old waste paint, metal-blasting debris, paint thinners, and other solvents were managed improperly. EPA observed other hazardous waste management violations, such as improperly labeling containers, failing to obtain a site-specific hazardous waste generator identification number, failing to provide containment around containers in case of spills, and failing to keep containers of hazardous waste closed.

Vermont-Based Veterans Administration Hospital Cited & Fined For Improper Handling & Storage of Hazardous Waste

Source: http://www.epa.gov/region1/pr/2005/aug/dd050806.html

The Veterans Administration hospital in White River Junction, VT has been cited for improper handling and storage of hazardous waste, and will pay a fine in addition to addressing EPA's concerns for public health and safety.

EPA's complaint requires the VA to come into compliance with applicable hazardous waste laws within 30 days of receipt of the complaint, and seeks a penalty of **$372,254**. The proposed fine is one of the largest ever issued by EPA against a Veterans Administration facility nationwide. It is also the largest fine ever issued to a federal facility by EPA's New England regional office for improper handling and storage of hazardous waste. The VA Hospital in White River Junction is the sixth VA hospital in New England to receive an EPA Administrative Complaint.

EPA's complaint cites numerous hazardous waste violations, including the hospital's improper storage of containers of ether and picric acid in the facility's clinical laboratory and pathology areas. Because these substances are potentially explosive and shock-sensitive, they may pose high risks to patients, hospital personnel or to the hospital itself if they are improperly stored or handled.

Editor's Note: Procedures for the proper management of hazardous waste are found in the *OUHSC/OU-Tulsa Laboratory Safety Manual* at http://w3.ouhsc.edu/ehso/labman/Section%205%20-%20Hazardous%20Waste.pdf. The Norman campus *Laboratory Safety Manual* is coming soon, so if you have any questions regarding proper hazardous waste management on the Norman campus, call 325-5147.

Is There a "Bomb" in Your Laboratory?

This summer, a bottle of picric acid was discovered in an OUHSC laboratory. The material had become dry and crystalized. Picric acid (a.k.a. 2-hydroxy-1,3,5-trinitrobenzene, CAS Number 88-89-1) can be a useful laboratory reagent; however, dry picric acid is a shock-sensitive explosive capable of releasing energy on a level similar to dynamite. In a confined area such as a lab, the force of a picric acid explosion could be devastating. Due to its unstable nature, dry picric acid is forbidden from being transported in the U.S. In this case, the picric acid had to be disposed of by the Oklahoma Highway Patrol Bomb Squad donning a full bomb suit.

In addition to picric acid, other potential explosives may be found in containers of peroxide forming chemicals such as ethyl ether, tetrahydrofuran, dioxane, and others. Implementing strong inventory controls within your laboratory can minimize nasty

surprises and the expenditure of thousands of dollars to have these explosives stabilized and removed.

If you possess picric acid, you have a responsibility to keep the material wet, in good condition, and have the EHSO remove it when you no longer plan to use it. Go to http://w3.ouhsc.edu/ehso/forms/hazwasteform.pdf for the EHSO Hazardous Waste Pick-Up Form.

Mercury Spill Cleaned up at Northeastern

Source: http://www.suntimes.com/output/news/cst-nws-merc14.html

A spill of six pounds of mercury has led Northeastern Illinois University to consider reformulating its policies about moving old science equipment. The spill was discovered by a student worker in mid-June in a storage room on the North Side campus. Although officials can't say for sure where the mercury came from or when it spilled, they believe an old manometer or barometer from the science department leaked in the storage area or broke when it was being moved.

School officials attempted to clean up the spill using a special kit, but after a week they realized there was too much mercury to contain. A private hazardous waste removal specialist removed six pounds of mercury along with six 55-gallon drums of contaminated material. The cleanup, which was finished in early July, cost $44,000.

Surplus Chemicals

In an effort to reduce waste at the University (saving $$$ and other resources), the EHSO has established a surplus chemical program. These chemicals are in good shape, mostly unopened, and available free of charge to University departments. For a complete list, visit the EHSO website at http://w3.ouhsc.edu/ehso/SurplusOKC.htm and http://w3.ouhsc.edu/ehso/SurplusNorman.htm.

OUHSC Campus
(Contact Chad Winn at 271-3000)

1-Butanol
1,2-Dichloroethane
5-sulfosalicylic acid
Acetonitrile, Low Water
Acrylamide: Bis Acrylamide (29:1)
Ammonium Carbonate
Aquasol-2
Atomlight Scintillation Solution
Benzyl Chloroformate
Chloroform, 99.9%
Ethyl Acetate
Formaldehyde Solution (37%)
Glacial Acetic Acid
Glutaraldehyde
Hydrochloric Acid (36.5-38%)
Isopentyl Alcohol
Lithium Carbonate
Nicotinic Acid
Nitric Acid (70-71%)
Periodic Acid
Petroleum Ether, Bulk
Picric Acid, 1% Solution
Potassium Cyanide, 97%
Scintiverse Scintanalyzed
Sodium Bisulfite
Sodium Fluoride (99%)
Sodium Sulfate
Sodium Tetraborate
Sulfuric Acid (93%)
Taurine
Toluene, Bulk
Xylenes, Bulk

Norman Campus
(Contact Trent Brown at 325-5147)

8022s Mid-Temp Reducer
Acacia, U.S.P. - FCC Food Grade
Acetic Anhydride
Acetophenone
Acrylonitrile
Anise Oil
Bis (2-methoxy-ethyl) Ether
Boric Acid
Dextrose
Disodium Ethylene Diamine - Tetraacetate
Dwarf Pine Needle Oil
Ethyl Acetate
Ferrous Sulfate
Immersion Oil Type a
Methyl Salicylate, USP
No. 16a Chalkboard Adhesive
Phenylmagnesium Bromide in Diethyl Ether
Potassium Chloride
Sandalwood Oil
Sesame Oil
Soda Lime
Sodium Ammonium Phosphate
Sodium Chloride
Sodium Citrate
Sodium Hydrosulfite
Tech-85 Degrees
Sudan III
Tin
Trichlorethylene
Zinc Iodine

The Saf·T·Gram is published by the University of Oklahoma Environmental Health and Safety Office

Norman Office:
350 David L. Boren Blvd, Suite 1750
405-325-5147
http://www.ou.edu/ehso

Oklahoma City Office:
800 NE 15th St., ROB 301
405-271-3000
http://w3.ouhsc.edu/ehso/

Tulsa Office:
4502 E. 41st St.
918-660-3878
http://www.ouhsc.edu/ehso-tulsa/default.asp