Cal State San Marcos

Safety Sense

Environmental Health & Safety

Winter 2001

Holiday Decorations and Fire Safety in Cal State San Marcos Buildings

Environmental Health & Safety wishes everyone a happy holiday season and offers the following safety reminders:

- All fresh cut trees and decorations should be treated with State Fire Marshal approved fire retardant. You may have to ask the sales person to be sure, as some trees are not labeled. In either case, trees must be removed for recycling when they begin to dry out.
- Artificial trees need not be treated. Artificial metal trees may present an electrical shock hazard if decorated with electrical decorations, so indirect lights will provide a safer option.
- Decorations must not obstruct any exits or corridor routes.
- If candles are a traditional part of your holiday decorations, please remember that they must remain unlit.
- All electrical decorations and extension cords must be UL listed. Large heat-producing lights are not recommended, small "twinkle" lights are safer. To help conserve energy please keep electrical decorations to a minimum.
- Remember to turn off decorations prior to leaving the office at night. Prior to leaving for the holiday break, take down trees and decorations. Please do not leave them connected to power sources.

A Hot Topic About A Cold Item

- Regina Frasca

There are many hazards within the science laboratory - biological, radioactive, and chemical. Some of these hazards we are aware of, some we do not know too much about and some we take for granted. Cal State San Marcos is extraordinary when it comes to the storage of hazardous materials. We have an excellent chemistry stock room that is equipped with many bells and whistles in the name of safety. One of the pieces of safety equipment that we have is a flammable-safe refrigerator and freezer unit. In fact, we have two of them standing side by side. Why is this important, you ask? Well, some research requires flammable solvents to be very cold in order for them to be effective in an experiment. Many universities find themselves in a quandary because the units for proper storage of flammable materials are very expensive. Why use such a unit when a household refrigerator that is 1/3 the price can do the job just as well? Answering that question is the reason for this article. Refrigerator/freezer units bought at department stores are used in many laboratories for the storage of flammable materials such as ethanol and ether. This use is against fire code and National Fire Protection Association (NFPA) regulations. Once there is an understanding of how flammable vapors behave, it is also against common sense.

Mess Left by Refrigerator Explosion

Explosion proof refrigeration equipment is designed to protect against ignition of flammable vapors both inside and outside the refrigerated storage compartment. This type of refrigerator is intended and recommended for environments such as laboratory work areas where all electrical equipment must meet the requirements of Article 501 of the NFPA 70, National Electrical Code. Also, refrigerator temperatures are almost universally higher than the flash points of the flammable liquids

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Holiday Food Preparation Tips

Now that we are entering the holiday season, EH&S has some tips on the preparation of a special holiday treat..... turkey. Most commercially grown and prepared poultry present a greater than normal risk for human exposure to food poisoning. In the time it takes to defrost, cook and consume a large bird many conditions take place that can contribute to food poisoning. On a brighter note, nearly all foodborne illnesses can be prevented. The World Health Organization (WHO) offers us the following Ten Golden Rules for safe food preparation:

1. Choose food processed for safety (food from known sources).
2. Cook food thoroughly.
3. Eat cooked food immediately.
4. Store food carefully.
5. Reheat cooked food thoroughly.
6. Avoid contact between raw foods and cooked foods.
7. Wash hands frequently.
8. Keep all kitchen surfaces meticulously clean.
9. Protect foods from insects, rodents and other animals.
10. Use pure water.

When poultry is stuffed, remember to increase the cooking time so that the stuffing is thoroughly cooked. To be very safe and save energy at the same time it is I recommended that the poultry and the stuffing be cooked together in the same oven, but with the stuffing in a pan separate from the turkey.

Finally, don't allow the food to remain outside the oven or stove for long periods. As soon as meat products experience an internal temperature drop, bacterial growth can start.

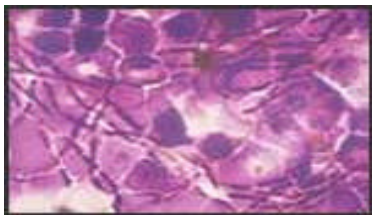
Anthrax: The Biological Intruder

-Regina Frasca

On Friday October 12th attorney general John Ashcroft announced a new case of anthrax in New York City, involving a NBC News employee. The employee tested positive for cutaneous (skin) anthrax after handling a letter filled with a powdery substance.

After hearing of this case, the Business Services, Safety, and Risk Management Unit went into emergency information mode. On October 15th, Environmental Health and Safety provided an awareness training session to the Mail and Copy Center, representatives of Parking, and Materials Management. This training was in response to the heightened alert from the Office of Emergency services on mail and package handling. On October 16th, Cal State San Marcos had its own suspicious substance scare in University and Craven Hall. With University Police securing the area, the San Marcos Fire Department standing by, and County Haz-Mat en route, the campus community patiently waited for a resolution. Our answer came by way of an anthrax test kit, which entailed a buffer solution and an apparatus resembling a pregnancy test. The substance was tested for anthrax and subsequently found to be negative. By 4:00 P.M. the whole emergency response team had packed up, and headed out leaving Cal State San Marcos with its first case of "Misplaced Baby Powder".

As we continue doing "business as usual" here at Cal State San Marcos and in our personal lives, there are a few things to take into consideration. You should always be aware of your surroundings and any unusual circumstances involving packages or letters. Although the nation is on a heightened alert, it is highly unlikely that Cal State San Marcos would be a terrorist target. Most anthrax threats around the country have been false alarms or hoaxes, and the white powder associated with anthrax turned out to be substances like flour or other common household products. Of the 600 million pieces of mail delivered daily through the US Postal Service, only a fraction have contained anthrax spores. However, we take our customers (CSUSM staff, faculty, students and visitors) safety and well-being very seriously. For everyone's peace-of-mind, we urge you to take the precautions outlined below and to report any suspicious packages or letters to University Police at extension 4567.



Anthrax

Here is some of the information discussed with our staff for mail handling. This information should be taken into consideration by people at work and at home. The general precautions for handling mail entail the following:

1. Washing your hands with warm water and soap before and after handling mail.
2. Do not drink, eat or smoke around mail. This is how foreign material is ingested.
3. If you have open cuts on your hands, latex gloves would be appropriate. Be aware that some people are allergic to this material, and alternatives such as Nitrile or Vinyl gloves can be used.
4. Dust masks and eye protection are NOT necessary or recommended.

Suspicious mail- Letters or packages that…

1. Seem unfamiliar or unexpected. Are addressed to title only or incorrect titles. Display a name with the wrong title.
2. Do not have a return address or one that is unrecogniz able. The postmark does not coincide with return address.
3. Have an unusual shape or weight or exhibit strange stains or odors. Excessive tape, string, or protruding wires.
4. Have restrictive markings such as confidential/ personal, or misspelled words.
5. Are possibly mailed from a foreign country, or excessive postage displayed.

You receive a piece of mail and are concerned or fearful of opening it:

·Don't open it!

·Call University Police at x4567 or 911. The letter or package will be removed and bagged. Give the arriving officer or safety personnel information that indicates your concerns regarding the envelope or package. You will be contacted shortly afterwards with additional information.

What should you do on Campus if you encounter a suspicious package?

1. Handle with Care, don't shake or bump package.
2. Isolate and look for the above indicators.
3. Don't open, smell or taste.
4. Treat it as suspect and call the University Police at x4567 or 911.

If you open a letter that contains a threat or a white powder:

·Do not panic.

·Calmly and slowly lay the envelope down.

·If immediately available, lay something over the top of the envelope. (A sheet of paper, a plastic bag, etc.) Do not walk around with the letter, show it to others, or shake it!!

·Remove yourself from the immediate area and notify those working around you to do the same. Everyone in the immediate area should relocate in a calm manner.

·Have someone call University Police and tell them what you received and what you have done with it. Indicate whether the envelope contains any visible powder or if powder was released.

·Wash your hands with warm water and soap for one minute.

·Do not allow anyone to leave the office or area that might have touched the envelope.

·List all people who were in the room or area when this suspicious letter or package was identified. Give this list to responding law enforcement officials.

·Emergency responders will arrive shortly and they will provide further instructions.

-Excerpts taken from the FBI Advisory

Ergonomics Program at Cal State San Marcos

-Debbie High

With the national incidence of repetitive motion injuries on the rise, I would like to remind all university faculty and staff that EH&S offers a variety of information regarding ergonomics on campus. The Cal State San Marcos Ergonomic Program adheres to the OSHA Ergonomic Program Standard regarding employee safety and health. EH&S conducts on-site ergonomic evaluations and ergonomic training as part of the Illness & Injury Prevention Program. You'll find these web based programs at www.csusm.edu/EHnOS. Just click on Illness & Injury Prevention Program and click again on Office Safety.

The Ergonomic Program at Cal State San Marcos is currently designed to train as many employees as possible through one on one evaluations and ergonomic trainings. The goal of ergonomics is to "fit the job to the person" rather than making the person fit the job. When required, employees are provided ergonomic equipment to take with them whenever their worksites change. EH&S is currently in the process of designing a quarterly ergonomic training session to be offered to the campus community. We also provide web based animated stretching exercises, as well as web- based workstation checklists so you can conduct your own evaluation of your work area. For further information, or to schedule an ergonomic evaluation, please call Debbie High at x4510.

IIPP Meeting Dates & Times

Illness & Injury Prevention Program

11/27	**2:00-3:00**	**USB**
1/25	**9:00-10:00**	**USB**

Fire Extinguisher Training

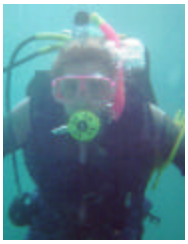
Nov 29 @ 10:30am
USB Conference Room

Please RSVP to Debbie High x4510

Our Role In Global Warming

Guest Writer: Debora Schmidt

There is much talk around the world about global warming and whether it is a real threat to our environment. At the present time, Earth appears to be facing a rapid warming, which most scientists believe is due, at least in part, to human activities.



[1]It is thought that the chief cause of global warming is the burning of fossil fuels such as coal, oil and natural gas. These fuels release carbon dioxide and other substances known as greenhouse gases into the atmosphere. As the atmosphere becomes richer in these gases, it becomes a better insulator, retaining more of the heat provided to the planet by the sun.

So what does this all mean to us, as individuals? And is there anything we can do to affect the climate change? Actually, there is a lot we can do. Over this summer by reducing our energy consumption, Californians were able to prevent the feared blackouts as well as receive a 22% reduction rebate. By using less energy we are making a commitment not just to our pocket books, but to our environment. The less energy we use, the less energy has to be produced; therefore less carbon dioxide is emitted into our atmosphere. We all win from this with more money, cleaner air and better health.

To see just how much carbon dioxide you as an individual produce, go to www.safeclimate.net. At this website you will calculate your carbon footprint by entering data on how many therms & kilowatts you use per month (this information can be found on your utility bill), the mileage you drive and the fuel efficiency of your vehicle. How you choose to use this new information is up to you, but you make an even bigger impact on your environment by continuing to reduce your energy usage and driving more fuel efficient or even alternative vehicles.

[1]*John Hart. Saving Cities, Saving Money & Environmental Strategies at Work.*

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(acetone -20° C, ethyl acetate -4° C, hexane -23° C) most often stored in them. Commercially available "laboratory-safe" refrigerators incorporate such design features as self-closing doors, friction latches, magnetic door gaskets and special materials for the inner shell. These features are intended to control or limit the damage should an exothermic reaction occur within the storage compartment. The compressor and its circuits and controls are located at the top of the unit to further reduce the potential for ignition of floor-level vapors. The design features of a commercially available "laboratory-safe" refrigerator are such that they provide important safeguards not easily available through modification of domestic models. So, with all this background, here are some close calls from other universities.

From Penn State:

"One of our labs experienced an explosion and fire resulting from the temporary storage of solution samples (alcohol / ethanol, etc.) in a non-explosion proof refrigerator. The amount of materials placed in the refrigerator was very small. One lab was conducting some house cleaning and an individual placed the solutions in another lab's refrigerator thinking it was explosion proof. Fortunately, no one was in the lab when the explosion occurred. The loss due to the explosion, fire and smoke was around $200,000 in addition to the time the lab was unable to be used during renovation and cleanup".

From the University of Virginia:

"At the University of Virginia we have found out the hard way. Two and a half years ago we had an incident in a Chemistry Lab using a household refrigerator. Vapor from stored chemicals exploded inside the refrigerator, ripping off the door and activating the sprinkler system. We believe the explosion occurred when the volatile gases came in contact with the electrical arc in the normal operation of the defrost timer housing. We were lucky that no one was hurt. We had claims in excess of $100,000. We have since removed all household type refrigerators that were being used for storage of flammable compounds in labs . We do not recommend the field modified units for this type of storage. They should be explosion proof type which are hard wired (not plugged into a receptacle)".

Safety In The Workplace Video

REMEMBER CHARLIE

In 1980, Charles T. Morecraft was an employee of Exxon Corporation. He was a good employee - both in the eyes of his union and in the eyes of his management, but otherwise he was unremarkable. He was just like hundreds of thousands of other blue-collar workers. He never considered himself exceptional. He was "just one of the boys". Charlie had more than 15 years experience on the job, and he knew it well. He knew all the rules. He knew all the safety regulations... and he knew all the shortcuts around them too. Yes, Charlie was just like all the other seasoned workers at the refinery; he was certain that nothing could go wrong when he was in control. And he was right... except for this one time...

When Charlie tells his story the audience sits in rapt attention as they are moved to new levels of awareness. Charlie has that rare and unique ability to speak with ordinary words and conjure extraordinary images. Both he and his story are unforgettable. His words are simple, and he tells us things we think we already know, but he tells it in a way that will dramatically change our attitudes toward safety forever.

His primary messages are "Safety is about going home at the end of the day, kissing your wife and hugging your kids", and "We are each responsible for our own safety". They aren't new messages, but Charlie gives us a powerful new way of looking at them.

This is Charlie Morecraft: an ordinary guy with an extraordinary story to tell.

December 14 from 11:30 - 1:00

Location: ACD 102

Brought to you by:
Your Friendly Neighborhood

EH&S

Feel Free to Bring Your own Lunch.
Desserts and Drinks Provided!

Please RSVP by Dec 12th to EHS X4510

First Come First Serve