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DAOE

## Protecting Yourself at Work During the Flu Season

By now, nearly everyone has heard of the H1N1 Flu. It is spread the same way that seasonal flu spreads, mainly from person-toperson when infected individuals cough or sneeze. Some people may also become infected by touching something with flu viruses on it and then touching their eyes, mouth, or nose.

Be alert to the symptoms of all flu viruses, which typically include fever, cough, sore throat, runny or stuffy nose, body aches, headache, chills, and fatigue. Some people also report diarrhea and vomiting.



There are everyday actions you can practice to help prevent the spread of germs that cause respiratory illnesses like influenza. Here are everyday steps to follow for home and at work:

- If you are sick, stay home and away from the workplace. Stay home for at least 24 hours after your fever is gone. Your fever should be gone without the use of a fever reducing medicine. This will help keep you from infecting others and spreading the flu virus.
- Practice respiratory hygiene and cough etiquette all the time to prevent the spread of <u>all</u> respiratory infections. This requires that you cover your cough and sneeze with a tissue. Dispose the tissue in the trash after you use it. If tissues are not available, then cough or sneeze into your upper sleeve, not your bare hands. Always wash your hands after you cough or sneeze with soap and water. If a sink is not available, then use an alcohol-based hand sanitizers or wipes to clean your hands. Note that the university has placed more than 200 waterless hand sanitizer dispensers all across campus to help you wash your hands and stop the spread of germs. Please use them.
- Avoid touching your nose, mouth, and eyes. Germs can spread when you touch something
  that is contaminated and you then touch your eyes, nose, or mouth.
- Keep work surfaces, telephones, computer keyboards, work tools, equipment, and other frequently touched surfaces and office equipment clean. To reduce the chance of spreading the flu, disinfect commonly-touched hard surfaces in the workplace, such as workstations, counter tops, door knobs, kitchen counters, etc., by wiping them down with a household disinfectant according to directions on the product label.
- If your job requires you to wear gloves to protect your hands in any work or study setting, remember to wash your hands after removing the gloves to avoid any contamination.
- ◆ Post signs to remind everyone to cover their cough (and sneeze) and to wash their hands after coughing and sneezing. Yale's Emergency Management and Environmental Health and Safety offices have created posters for you to place in your work area. To get copies of them, contact Yale Environmental Health and Safety at 785-3550 or your Safety Advisor.
  - For the most up-to-date information on H1N1 flu, please visit CDC website <a href="www.cdc.gov/h1n1flu">www.cdc.gov/h1n1flu</a>, and to learn more about what Yale is doing in response, visit Yale's Emergency Management website at <a href="www.yale.edu/secretary/emergency">www.yale.edu/secretary/emergency</a>.

#### **EHS Web Training Links**

- Bloodborne Pathogen for Laboratory Personnel: info.med.yale.edu/bbp
- Bloodborne Pathogen for Clinical Personnel: info.med.yale.edu/bbpclinical
- Chemical Hazardous Waste: www.yale.edu/ehs/onlinetraining/hazwaste/chemicalwaste.htm
- Dry Ice: www.yale.edu/ehs/Documents/training/dryice.pdf
- General Awareness-Research Materials Shipping: www.yale.edu/ehs/powerpoint/GeneralAwareness.htm
- Laboratory Chemical Safety: info.med.yale.edu/chemsafe
- Laser Safety Awareness: www.yale.edu/ehs/onlinetraining/laser/lasersafety.htm
- P.I. Orientation of Yale's Biosafety Manual: www.yale.edu/ehs/onlinetraining/Biosafety/BioAdmin.htm
- Shipping Biological Substance-Category A: www.yale.edu/ehs/Documents/Bio/shippingcategorya.pdf
- Shipping Biological Substance-Category B: www.yale.edu/ehs/powerpoint/categoryB.htm
- Radiation Safety Basics Part 1: www.yale.edu/ehs/onlinetraining/RadiationSafety/RadiationSafety.htm
- Tuberculosis Awareness: www.yale.edu/oehs/onlinetraining/TB/TB.htm
- Universal Waste: www.yale.edu/ehs/onlinetraining/universalwaste/universalwaste.htm
- X-Ray Diffraction: www.yale.edu/ehs/powerpoint/X-RayDiffraction.htm

## Green(er) Laboratories

University safety and health departments have a long history of working with labs to find and adopt safer, more environmentally-friendly practices. Yale EHS was among the first to evaluate and fund alternatives to mercury thermometers and pressure monitoring equipment, ultimately replacing thousands of mercury-containing devices with non-toxic ones over the past decade. We have also worked with research departments on campus to reduce the use of many other dangerous compounds by substituting with safer alternatives, including detergents for cleaning, liquid scintillation counting fluors, and toxic gases in some semi-conductor labs. We maintain an active redistribution program for unwanted laboratory



chemicals and try to find new homes for orphaned supplies and equipment during renovations and moves. We work diligently to ensure that wastes are properly segregated to facilitate the most economical and environmentally-sound disposal outlets. And we have worked closely with Facilities to evaluate the most appropriate lab ventilation rates to save energy and reduce carbon emissions.

We are currently working with the Office of Sustainability and Facilities Systems Engineering on a more targeted initiative aimed at "greening" our labs even further. While labs are likely to always be highly resource dependent, there are many potential avenues for lowering their individual and collective impacts. The "Green(er) Labs" initiative began with a detailed evaluation of the kinds and distribution of labs on campus, development of field checklists and guidance for survey teams, and an assessment of major electrical and ventilation equipment in labs. This autumn our next step will be the recruitment of student and staff volunteers to perform surveys to gather field data about existing conditions and practices. That information will be used to evaluate and prioritize opportunities for improvement. We are confident that even small changes can affect overall environmental impacts.

Individuals interested in this subject or participating as a member of a laboratory survey team should contact either Rob Klein, EHS 785-3550 or Sustainability, 432-1446. Stay tuned – more to come!

## **Laser Safety Training**



The word "laser" is an acronym for the phrase "Light Amplification through Stimulated Emission of Radiation." The laser is a source of extreme, intense light quite different from the light emitted by more conventional sources. One should be aware of these unique characteristics and observe the proper safety precautions before attempting to operate such devices. The energy level can be high enough to cause serious damage to the eye, flesh burns, ignite inflammable materials, and damage sensitive optical equipment.

EHS reminds all employees that Laser Safety training is required for all operators and users of class 3B/4 lasers. The Laser Safety training program is offered online at: http://www.yale.edu/ehs/onlinetraining/laser/lasersafety.htm.

If you have any questions or wish to provide an evaluation of the training, please send an e-mail to: lasersafety@yale.edu

## **Incident Blotter**

#### **July 2009**

**Description:** chemical contamination to ungloved hand

Researcher working with a concentrated sodium azide solution was not wearing gloves and spilled a small amount on her hand. She did not report this to other lab members but washed her hand at the sink and started to walk to the Yale Health Plan for evaluation. She felt ill on route and called 911 for assistance.

Resolution: She was picked up and taken to YNHH emergency room. The report came through as a chemical spill and exposure, so there was a large-scale response to the laboratory that included the New Haven Fire Dept, the YPD, YFM, and EHS, surprising lab workers who did not know of the event. It was determined that there was no spill to clean up. Researcher was evaluated by the hospital and released.

Lessons Learned: Always inform colleagues of the occurrence of mishaps and enlist their assistance in resolution. EHS met with the laboratory staff and reviewed chemical safety, personal protective equipment requirements, and emergency response procedures. The researcher indicated that she will work with a less concentrated solution and always wear gloves in the future.

#### September 2009

**Description:** broken mercury thermometer

Undergraduate student moving into the dormitory over the weekend broke a mercury thermometer he brought with him from home.

Resolution: EHS responded. An assessment of the area determined that most of the mercury was contained in the bulb of the instrument, but the room was decontaminated as a precaution to recover any mercury that may have slipped into the cracks in the floor. The room was turned back to the occupant after the cleanup was complete.

Lessons Learned: Students were reminded that personal mercury thermometers and other hazardous materials are not allowed in campus dormitories.

## Keep An Eye On Safety

Thousands of people are blinded each year from work-related eye injuries that could have been prevented with the proper selection and use of eye and face protection.

Protect your eyes by wearing eye protection whenever handling hazardous materials or performing physical actions that could liberate or create flying particles, dust, or other debris. Select eve protection based upon the kind and quantity of material to be handled, and the potential for spills, splashes, or flying objects. Safety glasses are the minimum eye protection that must be worn at all times in the laboratory. Goggles must be worn in situations where bulk quantities of chemicals are handled and chemical splashes to the eyes are possible. When handling highly reactive substances, chemicals under pressure, or larger quantities of corrosives, poisons, and hot chemicals, goggles with a face shield must be worn.

Know the location of the nearest emergency eyewash and shower before beginning work with hazardous and corrosive materials. Test the eyewashes periodically to familiarize yourself with their use and flush the lines of any contamination. Report any problems with the eyewash's operation to the Facilities Department immediately.

In the event of an accidental splash to the eye, go to the nearest emergency eyewash and flush for 15 minutes, summon emergency assistance, and promptly get your eyes evaluated by a medical provider. A medical evaluation will help to ensure that all contamination is removed. Any medical issues that may have occurred from the exposure or from the use of the eyewash will also be addressed during this evaluation.

Road sense is the offspring of courtesy and the parent of safety.

~Australian Traffic Rule, quoted in *Quotations for Special Occasions* by Maud van Buren, 1938.

## Director's Corner



#### A VISION OF PARTNERSHIP

I am a fan of Dean Smith, the legendary coach of the University of North Carolina men's basketball team. At the start of the 1992-3 season, he altered a picture of the Tar Heels' 1982 championship game scoreboard so that it showed a winning final score, but read 1993. He put copies of the photo in all of the lockers so that—each day—the players could envision their ultimate goal. UNC won the national title that season.

If you have a goal, it often helps to have a clear vision of your success. Your garden in full bloom. A

thinner you. In my last column, I explained that EHS' mission is to reduce injuries, accidents and environmental impact. What would that look like?

We know that EHS cannot reduce injuries, accidents and environmental impact alone. EHS works hard to make Yale safe, but safety is everyone's responsibility. People need to act safely and let us know of problems. The best solutions come from collaboration.

With this in mind, EHS' vision for a safe Yale...

...is a partnership with students, faculty and staff who are aware of risks and are empowered to learn, discover and work in a manner that protects human health and the environment.

Like the basketball team, this vision clarifies what is needed for success. To reduce injuries, accidents and environmental impact we must form partnerships with students, faculty and staff. We need to effectively communicate risks associated with learning and working here. We need to give people tools and knowledge to do their work safely.

In our lockers, we have a photo of a handshake. We are here to help you. Please let us know how we can be partners to reduce injuries, accidents and environmental impact at Yale.

### New to Yale?

As a member of the University community, you have safety responsibilities to yourself, your co-workers, the public and our environment. How you work can have a major influence on others, so always consider your actions in terms of how they might impact yourself and others, and what steps are necessary to prevent harm or injury. Information on EHS services are listed in our 'New Hire Brochure' which can be found at: <a href="https://www.yale.edu/ehs/Documents/Admin/NewHireBrochure.pdf">www.yale.edu/ehs/Documents/Admin/NewHireBrochure.pdf</a>.

As a follow-up to your recruitment, identify known workplace hazards and any potentially harmful exposures with your supervisor. Become familiar with and observe established safety requirements and procedures for your work area, use any required protective equipment, and report unsafe conditions to your supervisor or our office. Please also note that attendance at mandatory training sessions is required by a variety of governmental regulations and University policy. Successful completion of initial and any required periodic refresher training thereafter is an ongoing condition of your employment here at Yale University. Complete your training profile at: <a href="http://www.yale.edu/training">http://www.yale.edu/training</a> to find out what training requirements are needed for your job here at Yale.

There is always a safety professional available to answer your questions and provide you with any information you may need to do your job safely. Be sure to find out who the safety advisor assigned to your area is at: <a href="http://www.yale.edu/ehs/sa.htm">http://www.yale.edu/ehs/sa.htm</a>.

Welcome to Yale!

EHS offers a wide variety of safety trainings in classroom sessions as well as online. Be sure to complete your Yale training assessment at: www.yale.edu/training to find out what type of training is required for your job duties.

The EHS training room is located in the lower level of 135 College Street, room 15. To find out about upcoming classroom session dates and times, visit Yale's training website at: www.yale.edu/training or call EHS at 737-3211.

## **Traffic Safety Begins With You**

Most people on campus are pedestrians at times, vehicle drivers at times, and some are cyclists. Therefore, everyone should be a part of the solution to improve pedestrian, cyclist, and traffic safety on campus, even if their contribution only includes taking personal responsibility for their own actions.

# The choices you can make to improve your safety when crossing the street.

- Always wait for the walk signal. Pay attention and look both ways, and use the crosswalk.
- Talking on the cell phone is a major distraction while crossing the street, so put your phone away when possible.
- Make eye contact with drivers as you cross, making sure they see you. Drivers often say that pedestrians came out of nowhere. Make an impression.
- You have a much more serious risk if you have had something to drink when crossing the road, especially at night. If you see your friends are clearly not sober, take care to get them home safely.

#### The choices you can make to improve your safety riding a bicycle.

- Wear a helmet this is the single most effective way to reduce head injuries and fatalities from bicycle crashes. Make sure it fits properly and wear it every time you ride.
- The safest place for an adult cyclist to ride is in the road, with the flow of traffic. Obey all rules of the road and behave in a predictable manner.
- ◆ Be alert at all times—watch out for motorists and pedestrians who might not see you.
- Be visible at dusk and at night. Wear bright clothing and equip your bike with reflectors or lights, both front and rear, so you can be

#### The choices you can make to improve your driving.

- While driving, remain alert, attentive and sober. If you become tired pull over in a safe place and rest. Avoid unnecessary distractions, such as bending within the vehicle to pick up a dropped item, or attending to a back seat passenger.
- Try to avoid using your cell phone while driving. If it's a must while you're driving, be sure to use a hands-free device. Pulling over into a safe area to use the phone is the best solution.
- Maintain an appropriate distance when following other motorists, bicyclists, and motorcyclists.
- Always use caution when changing lanes. Cutting in front of someone, changing lanes too quickly, or not using your signals may cause an accident.
- Click It or Ticket: Buckle-up. Make sure you and all of your vehicle's occupants are properly restrained. Be sure you also have proper air bags and head rests.
- Move Over, it's the law! On October 1<sup>st</sup>, 2009, the "Move Over" law in Connecticut became effective. The law requires motorists to immediately slow down when approaching a stopped emergency vehicle and whenever possible, to move over one lane to put extra space between the motorist and the emergency vehicle.

## EHS New Employee

We are pleased to introduce the newest member of the Environmental Affairs Section staff, Jim D'Addio. Jim joins EAS as a Health and Safety Technician. He comes to Yale with a degree in Geology, and experience working in environmental consulting and hazardous waste disposal.

How you work can have a major influence on others so always consider your actions in terms of potential impact and what steps are necessary to prevent harm or injury.

Become familiar with and observe established safety requirements and procedures in your work area, use any required protective equipment, and report unsafe conditions to your supervisor or our office.

#### **Safety Bulletin Committee:**

Whyndam Abrams George Andrews Brenda Armstrong Deborah Farat Cathleen King Robert Klein Tammy Stemen

Additional Contributors:

Kim Heard Maryjo Lanzillotta

# EHS Safety Training

#### **Biosafety Training**

Mandatory for employees prior to initiating work with agents classified at Biosafety Levels 1 and 2. Classroom only.

#### **Biosafety Level 3 Initial Training**

Mandatory for employees prior to initiating experiments with agents classified at BL2+, BL3, or BL3+. Classroom only.

#### **Bloodborne Pathogens**

Required annually for laboratory and clinic personnel working with human materials, including blood, body fluids, unfixed tissues, human cell lines or bloodborne pathogens.

Available online and in classroom.

# **Chemical Hazardous Waste Training**

This is an interactive training course in chemical waste management on the proper collection, storage and labeling of chemical wastes.

Available online only.

## Chemical Safety for Laboratory Personnel

This required training covers the hazards of chemicals in the workplace, including information on hazard classes, exposure limits, and personal protective equipment. Available online and in classroom.

#### Office Ergonomics

Call EHS to schedule a personal assessment with your Safety Advisor. Be sure to visit Yale's Ergonomic website at: www.yale.edu/ergo for more information.

#### **Powered Industrial Vehicles**

This annual training is mandatory for personnel who operate a powered industrial vehicle or PIV. Call to schedule.

#### Radiation Safety Training

Mandatory two (2) part training: Basic and Applied, for personnel working with radioactive material or frequenting an area where radioactive materials are stored or used. Employees must first complete the online session "Radiation Safety Basics-Part I" prior to enrolling in the classroom session.

#### **Respiratory Protection**

Respiratory protection training and fit testing is required initially and annually for all respirator wearers.

# Safe Use of Biological Safety Cabinets

This training reviews the biological safety cabinets, their limitations, proper use techniques, and certification and repair procedures. This is a classroom only training.

## Safety Orientation for Non-Lab Personnel

This course combines three required training classes for non-laboratory personnel: Bloodborne Pathogens, Chemical Safety, and Radiation Safety. This training fulfills the annual requirement for bloodborne pathogen training. This is a classroom only training.

# **Shipping and Transport of Biological Research Materials**

Required for anyone that may be involved in any aspect of shipping research materials such as biological, chemical and radioactive materials. This includes administrative personnel working in departments or areas of campus using research materials. For more information please visit: www.yale.edu/ehs/traininghazmat.htm

#### **Tuberculosis Awareness Training**

Mandatory training for personnel in a clinical setting with potential exposure to TB positive patients. Available online or in classroom.

#### X-ray Machine Safety Training

This training is for all personnel who operate, perform maintenance or alignment of any diagnostic or analytical x-ray producing machine on campus. Precaution, hazards and exposure limits are discussed along with our goal of safe operation.

## **EHS Web Trainings**

Bloodborne Pathogens for Lab Personnel http://info.med.yale.edu/bbp

Bloodborne Pathogens Clinical Personnel http://info.med.yale.edu/bbpclinical

#### **Laboratory Chemical Safety**

http://info.med.yale.edu/chemsafe

#### **Chemical Hazardous Waste Training**

www.yale.edu/ehs/onlinetraining/hazwaste/chemicalwaste.htm

#### Dry Ice

www.yale.edu/ehs/Documents/training/dryice.pdf

## General Awareness: Research Materials Shipping and Export Controls

www.yale.edu/ehs/powerpoint/GeneralAwareness.htm

#### **Laser Safety Awareness**

www.yale.edu/ehs/onlinetraining/laser/lasersafety.htm

## P. I. Orientation of Yale's Biological Safety Manual, Procedure & Policies

www.yale.edu/ehs/onlinetraining/Biosafety/BioAdmin.htm

#### Shipping Infectious Substances – Category A

www.yale.edu/ehs/Documents/Bio/shipcategorya.pdf

# Shipping Biological Substance – Catebory B and Exempt Human or Animal Specimens

www.yale.edu/ehs/powerpoint/categoryB.htm

#### **Radiation Safety Training**

Radiation Safety Basics—Part I Web Training www.yale.edu/ehs/onlinetraining/RadiationSafety/RadiationSafety.htm

#### **Tuberculosis Awareness**

www..yale.edu/ehs/onlinetraining/TB/TB.htm

#### **Universal Waste**

www.yale.edu/ehs/onlinetraining/universalwaste/universalwaste.htm

#### X-Ray Diffraction

www.yale.edu/ehs/powerpoint/X-RayDiffraction.htm

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