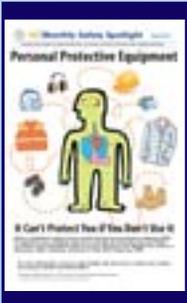


**August 2011
Safe Work
Practices: Per-
sonal Protective
Equipment**

Poster of the Month

**Downloadable
Poster:
PPE: For Best
Results, Apply
from Head to Toe**



This month's poster is a light-hearted reminder that Personal Protective Equip-

ment can't help you if you don't use it. Display the poster in your workplace to help keep your area injury-free.

[Download Poster](#)

Video Links



[How a "culture of silence" can contribute to workplace incidents](#)

[Avoiding foot injuries](#)

[Facts about noise-induced hearing loss](#)

[Respiratory Safety Basics from OSHA](#)

[Hand and power tool safety tips](#)



UC | Safety Spotlight

A UC System-Wide Publication of the Environment, Health & Safety Leadership Council

Safe Work Practices

Your First Line of Defense: Personal Protective Equipment

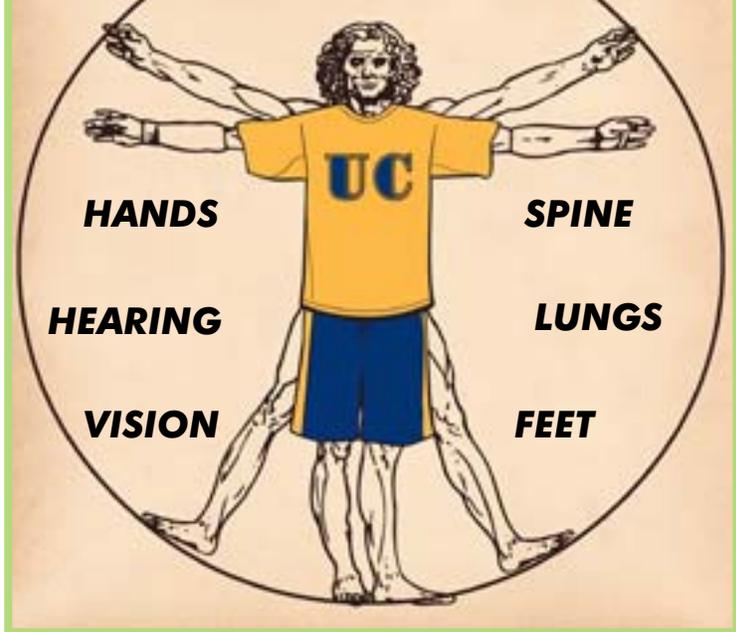
Q What is most important in ensuring the effectiveness of personal protective equipment (PPE)?

A You have to use it! A surprising number of injuries occur each year because workers fail to use required, easily accessible PPE.

This is the only body you have and your most important tool. Taking good care of it enables you to live an

interesting and meaningful life. Don't let small safety oversights or rushing through your work lead to injuries you may feel for a lifetime. Safe work procedures are designed to protect you and they are usually simple, common-sense actions. Using required personal protective equipment and other safety measures can safeguard your body from head to toe, but only if you use them! Depending on the type of work you do, your required PPE could include:

Your body is your most important tool. Protect it every working day!



	WORK GLOVES	HANDS-FREE PHONE	KNEE PADS
	FACE SHIELD		
	REFLECTIVE VEST	RESPIRATOR	
	SAFETY GLASSES	CUT-RESISTANT GLOVES	
	HARD HAT	SUN PROTECTION	
		DUST MASK	
		SPECIALIZED PROTECTIVE CLOTHING	

Links & Resources

[NIH's *Medicine Plus* Hand Injury Portal](#)

[A Hand Surgeon Talks About Hand Safety](#)

[OSHA Safety & Health Topics: Occupational Noise Exposure](#)

[U.S. Centers for Disease Control on Eye Safety](#)

["Laptop Logistics" ergonomics from UC Davis](#)

Injury Prevention

An effective Illness and Injury Prevention Program (IIPP) is a valuable tool for all UC departments. Defining personal protective equipment required for each job classification and task is only one of the ways that IIPPs support workplace safety management.



IIPPs provide comprehensive health and safety guidelines for all employees. View a model IIPP on the California Division of Occupational Health and Safety website.

Feedback, Please

Send an email to safetyspotlight@ucdavis.edu to submit your comments on our August 2011 issue or to suggest content ideas for future issues. We look forward to hearing from you!

Hand and Grip Safety

Our hands make it possible for us to earn a livelihood, work at home, enjoy sports and recreation, and reach out to those we love. Protect your hands and the amazing physiological network that powers them.

Minimize Your Risk

- Hands are the most-injured body part at many campuses. Severe, debilitating damage can take place in a second.
- More than 25% of U.S. workplace injuries involve the hands, and many of these are permanent. Cuts, scrapes, crushing, burns, strains and sprains are some of the injuries that can damage our hands.
- Most hand injuries are not due to tool malfunctions but to personal inattention or carelessness, including failure to use PPE.
- Hand injuries also occur due to repetitive motion over time in an office, lab, shop or in the field. Before you begin a task, take a moment to identify potential dangers and take the precautions that protect one of your most precious resources - your hands.
- [Click here](#) to view a short video on hand stretches from eHow Health.

Healthy Hands for a Healthy Future

- Inspect materials for jagged, rough or slippery surfaces before working, and always use the appropriate gloves and protective devices.
- Remove jewelry when working around moving or rotating equipment.
- Be aware of pinch points in your workplace and keep your hands and fingers away from these areas.
- Be sure you are using tools and mechanical devices properly. Read and follow manufacturer's instructions.
- Use proper lock-out and power isolation procedures before adjusting or servicing machinery.
- Follow proper ergonomic guidelines for hand and arm positioning at your computer workstation or laboratory bench to help prevent repetitive motion injury.
- [Click here](#) to learn more about hand safety.

Kitty Waldow, Safety Programs Manager, UC Santa Cruz



"Hand injuries can have tragic consequences for a person's long term physical and psychological health, not to mention their professional objectives. The irony is that nearly every hand injury can be



A UC Santa Cruz dining hall worker wears a wizard glove to protect her hands when using a knife.

prevented by simply watching what we're doing, and of course, wearing the appropriate personal protective

equipment (PPE). PPE is there to protect you. Use it consistently so you won't find yourself suffering a preventable injury."

The Human Torso: Vital & Vulnerable

The workplace can be a dangerous location for the body's core. The spinal cord, back and essential organs are contained in the torso, so protecting it should be a top priority in every working environment.

- Personal protective equipment such as heat/radiation shields and lab coats should be used at all times as defined in your department or unit safety procedures.
- Follow all proper body mechanics practices for your work area when lifting and moving material, or use a hand or platform truck to move the load.
- Use required dust masks and other devices to protect your respiratory system.
- Stay up-to-date on safety training in your department, including requirements for personal protective equipment, safe operating practices, emergency response, proper documentation, occupational health procedures and other vital information.

It's Just a Screwdriver. What Could Go Wrong?



Most of us envision powerful mechanized tools when we think of tool-related injury. But mishaps can occur with hand tools if they are not in good repair or are used improperly. Avoid these pitfalls at work and at home:

When screwdrivers are used as levers or chisels, the tip can break off suddenly and strike with enough force to cause serious injury.

If you pull toward yourself with wrenches, pliers or cutting tools, the energy you're applying can cause a tool or fragment to strike or cut you without warning.

Severe injury, including loss of fingers, can occur if rope or chain is wrapped around your hand as you try to control a vehicle, large animal or other force.

Learn more about safe operation of both hand and power tools before you start your next project. Use injury prevention training available on your campus, and visit the [OSHA](#) tool safety site for additional information.

Keeping Those Pesky Particulates Away from Your Lungs

Whether your work takes you to the laboratory, the workshop or the field, you're probably no stranger to respiratory



protection devices. They can range from disposable paper dust masks to air-purifying or air-supplied respirators.

Each type of activity requires a specific kind of technology to prevent you from inhaling dust, fumes or gases.

Be sure you are using the right personal protective equipment to safeguard your respiratory system.

[Click here](#) for more information about respiratory protection products and methods.

Hearing and Vision Safety

You depend on your eyes and ears to enjoy and understand the world around you. What protects you most is your commitment to maintaining healthy vision and hearing.

Eye Protection - Every Task, Every Time

- Take eye protection seriously and wear your safety glasses with side protection, goggles or face shield at all times when working, to prevent:
 - Corneal abrasions or laceration of the eye's surface
 - Dust, metal particles or slivers on or embedded in the eye
 - Chemical splash or burn, and welder's flash-burn
- Nearly 60% of workers with eye injuries were not wearing eye protection or were using the wrong kind of protection at the time of the accident.
- Be sure you use safety glasses, tinted glasses, face shields or tacking/welding hoods provided and/or approved by your campus safety guidelines.
- Know where safety showers and eye wash stations are, and know how to respond in case of exposure.

Take Steps to Ensure a Lifetime of Healthy Hearing

- Prolonged exposure to loud noises can damage the delicate structures within the inner ear and cause permanent hearing loss.
- Always use hearing protection such as earplugs or ear-muffs when working around loud tools, machinery and other loud noises.
- Check with your supervisor or department safety coordinator to determine which kind of hearing protection is most appropriate.
- When you use earphones or earbuds to listen to music or other audio, turn down the sound. Headphones can damage your hearing as much as some tools and motors if played too loud.



Seven Habits of Highly Healthy People

(They'll work for you, too!)

Read departmental safety procedure documents and ask questions if you need more information.

Check campus safety and health websites for policy updates, health bulletins and general information.

Follow illness prevention measures such as washing hands often and staying home from work when you're sick.

Practice *personal risk management* - knowing what the risks are and taking proactive steps to offset them.

Recognize that an injury affects your family, co-workers and community, not just yourself.

Work with your department safety staff to develop emergency response and personal security procedures.

Use proper safety procedures and required personal protective equipment, every time.

Careless Chris

Careless Chris Learns to Value Personal Protective Equipment ...an Imaginary Scenario

Fictitious employee Careless Chris had been clock-watching all morning. She was waiting for the arrival of a large shipment of office supplies she had ordered for her administrative group on campus. Over the past few months, Chris had developed an ordering and tracking protocol designed to save money while ensuring that each office had the materials they needed to do business: recycled printer paper, toner cartridges, colored pens, highlighters, envelopes and other essentials.

Chris was passionate about controlling costs and building efficiency and was proud of her new system. Her co-workers admired her energy and encouraged her by sending in schedules, supply needs and suggestions for improvement.

Later that morning, Chris's single-minded focus would lead to sad consequences.

[Click Here to Continue](#)

COMING SOON!

September 2011: Laboratory Safety



UC laboratories are recognized world-wide for their scientific expertise. The September 2011 Safety Spotlight issue will focus on laboratory safety measures.

connect

Know where to turn on your UC campus for the information you need to keep yourself, your workplace and your environment safe and secure. Click on the campus links below to connect to local program, educational and informational resources.

[UC Berkeley](#)

[UC Riverside](#)

[UCOP](#)

[UC Davis](#)

[UC San Diego](#)

[UC ANR](#)

[UC Irvine](#)

[UCSF](#)

[UCLA](#)

[UC Santa Barbara](#)

[UC Merced](#)

[UC Santa Cruz](#)

UC Santa Cruz Laboratories Benefit from UCOP Be Smart About Safety Funding

Researchers in the labs of two departments at UCSC are better protected and find it easier to comply with Personal Protective Equipment (PPE) requirements thanks to an innovative lab safety program.

Jim Schoonover, EH&S Advisor to the Division of Physical and Biological Sciences worked with Campus EH&S and Risk Services to pilot a culture change in the Chemistry and Biochemistry Department as well as the Microbiology and Environmental Toxicology Department (METX).

"We knew that lab workers were not using lab coats consistently in part because there was no clear mechanism for acquisition and laundry," says Jim.

"CalOSHA and UC Policy require appropriate lab attire and personal protective equipment, including lab coats, be worn in laboratories. This was a clear opportunity to improve employee safety."

Using funding obtained through the UCOP's Be Smart About Safety program, Jim and his colleagues developed a two-stage pilot program to provide garments that were suited to specific work requirements and the means to keep them laundered and maintained. The program was developed in 2009 and implemented in the fall. The objective was three-fold:



UCSC post-doctoral researcher Weng Ruh Wong wears a flame-retardant lab coat in the Chemistry lab. Other basic PPE for the laboratory staff includes gloves, safety goggles and closed-toe shoes.



first, ensure adequate protection from the chemical hazards present, second, enable Principle Investigators to achieve full compliance with the personal protective equipment

(PPE) policy, and third, promote a culture of safety among laboratory staff.

In the first phase, flame retardant, all cotton lab coats were rented for the chemists, with fireproof Nomex® coats purchased for those who use highly hazardous pyrophoric materials. Also part of the first phase was the rental of 100% cotton lab coats for METX where the fire danger was less, but still present. Laundry was provided for all coats at no charge to the labs.

The program's second phase provides matching funds to help Principle Investigators purchase lab coats for all staff members. The program also subsidizes laundry service for a limited period. Compliance with lab coat requirements has improved noticeably under the new system.

"This program is important in several ways," says Jim; "It has encouraged employees to be more proactive about their own safety and has helped to integrate safety into laboratory operations. The improvement in compliance also models a culture of safety for students, helping them to value safety early in their careers."



[Click here](#) to learn more about the UCOP Be Smart About Safety program