



# The Safety Net

## SUMMER 2013



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The second step is not to panic in the event of a fire emergency. If you see a fire, do not assume someone else has already reported it. Immediately activate a pull station and report it to the call center (686-5333). Early notification of the fire is important. The operator will ask questions regarding the emergency. Stay calm and give the operator the information they request. Prepare and assist your patients and visitors as needed. Assist your fellow employees in evacuation as needed.

The last step is practice. Learn your building evacuation plan. Practice your plan together with your fellow employees. Participate in the fire drills. Remember, they are mandated by code, so take advantage of them. Ask for training. OH&S will be happy to go over your evacuation plan with you and conduct practice drills specific to your department.

Remember, fire safety is a responsibility that we all share. **Fire Safety Starts With You!**

## *Building Evacuations*

Recently, the Occupational Health and Safety Department (OH&S) has been working to revise existing building evacuation plans for all buildings on campus to support fire safety. A key to fire safety for those who work in these beautiful, special buildings on campus is to practice specific fire safety and prevention behaviors. We would like you to know there are simple fire safety steps you can take to prevent the loss of life and property in the case of fires.

The first step is to be prepared for a fire emergency. Make sure everyone in your area knows what to do if the fire alarm sounds. Never block fire exits or doorways, halls or stairways. Fire doors provide a way out during the fire and slow the spread of fire and smoke when closed. Never prop stairway or other fire doors open. Learn the sound of your building's fire alarm and post emergency numbers near all telephones. Make sure nothing blocks the fire notification devices and promptly report any sign of damage or malfunction to the Engineering and Operations Department.



## *Ergonomics: Tips for Pipetting*

- Use anti-fatigue floor mats if standing for long periods.
- Sit supported against the backrest of your chair.
- Sit or stand close to your work at bench cut outs. Adjust your chair to work height rather than jutting out your chin or bending your neck down when working.
- Elevate your chair rather than reaching up to pipette.
- Do not twist or rotate your wrist while pipetting.
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For questions or comments about this publication:  
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**Ergonomics: Tips for Pipetting continued...**

- Alternate or use both hands to pipette.
- Hold the pipetter with a relaxed grip.
- Use minimal pressure while pipetting.
- Use light force or two hands to change tips.
- Use low profile tubes, solution containers and waste receptacles.
- Select a light-weight pipetter sized for your hand.
- Use pipettors with finger aspirators and thumb dispensers to reduce thumb strain.
- Use latch-mode or electronic pipettors for repetitive pipetting.
- Take a 1 to 2 minute break after every 20 minutes of pipetting.



**Enjoying Nature's  
Tanning Bed:  
The SUN!**

In the summer it seems that we live at the ballpark, the pool, the lake, the amusement park or the beach. Almost every day we are out in the sun – nature's tanning bed. We all know that we should be using sunscreen to protect ourselves from sunburn, but we tend to forget to reapply sunscreen or decide to not use it so that we can work on our tan. What we often forget is that tanning (darkening of the skin) is actually the body's natural defense mechanism and attempt to prevent skin damage from ultraviolet (UV) radiation.

**What is Tanning?**

Tanning is the skin's response to UV radiation. As skin cells are exposed to UV radiation in the form of sunlight (or UV bulbs in tanning beds), they produce a brown pigment to protect themselves from further exposure. Melanin is the pigment that darkens the skin to help protect an individual from UV radiation. The more frequent the UV exposure, the more melanin produced in the skin cells, and the darker the skin. People with naturally darker skin have less risk from the harmful effects of UV radiation. Individuals with naturally fair skin are more susceptible to health effects from UV radiation received during tanning. The skin's response to UV light that results in tanning or sunburning is believed to be similar regardless of the source of exposure (sun or

tanning bed) and may result in adverse health effects.

**Biological and Health Effects**

Tanning and burning play a role in health effects, including skin cancer. UV radiation damage to DNA in skin cells can result in mutations that promote or cause cancer. Short-term effects are sun-burns and peeling of the outer layer of skin. Repeated UV exposures may result in wrinkles, sagging skin, loss of elasticity, and sun spots. It is also important to protect your eyes when exposed to the sun or in tanning beds since cataracts are known health effects from UV exposure.

**Medications and Tanning**

There are a number of drugs and cosmetics that may increase skin photosensitivity, such as antidepressants, antibiotics, psoralens, antifungals, antidiabetics, birth-control pills, tranquilizers, high blood pressure medications, and certain soaps. If individuals have questions or concerns, a physician should be consulted prior to tanning.

**Biosafety Levels- Did You Know?**

Below are the definitions of Biosafety Levels 1-4, as described in the Biosafety in Microbiological and Biomedical Laboratories (BMBL), 5th Edition.

<http://www.cdc.gov/od/ohs/biosfty/bmb15/bmb15toc.htm>

**Biosafety Level 1:** work involving well-characterized agents not known to consistently cause disease in immunocompetent adult humans, and presents minimal potential hazard to laboratory personnel and the environment.

- Work is typically conducted on open bench tops using standard microbiological practices. Special containment equipment or facility design is not required, but may be used as determined by appropriate risk assessment. Laboratory personnel must have specific training in the procedures conducted in the laboratory and must be supervised by a scientist with training in microbiology or a related science.

*Biosafety Levels- Did You Know? continued...*

**Biosafety Level 2:** suitable for work involving agents that pose moderate hazards to personnel and the environment.

- It builds upon BSL-1. It differs from BSL-1 in that 1) laboratory personnel have specific training in handling pathogenic agents and are supervised by scientists competent in handling infectious agents and associated procedures; 2) access to the laboratory is restricted when work is being conducted; and 3) all procedures in which infectious aerosols or splashes may be created are conducted in BSCs or other physical containment equipment.

**Biosafety Level 3:** clinical, diagnostic, teaching, research, or production facilities where work is performed with indigenous or exotic agents that may cause serious or potentially lethal disease through inhalation route exposure.

- Laboratory personnel must receive specific training in handling pathogenic and potentially lethal agents, and must be supervised by scientists competent in handling infectious agents and associated procedures. All procedures involving the manipulation of infectious materials must be conducted within BSCs, other physical containment devices, or by personnel wearing appropriate personal protective equipment.

**Biosafety Level 4:** work with dangerous and exotic agents that pose a high individual risk of life-threatening disease, aerosol transmission, or related agent with unknown risk of transmission.

- Agents with a close or identical antigenic relationship to agents requiring BSL-4 containment must be handled at this level until sufficient data are obtained either to confirm continued work at this level, or re-designate the level. Laboratory staff must have specific and thorough training in handling extremely hazardous infectious agents. Laboratory staff must understand the primary and secondary containment functions of standard and special practices, containment equipment, and laboratory design characteristics. All laboratory staff and supervisors must be competent in handling agents and procedures requiring BSL-4 containment. Access to the laboratory is controlled by the laboratory supervisor in accordance with institutional policies.

Questions regarding Biosafety Levels may be addressed to [Carol Price](#) at 686-5299.

## *Speeding Around the Block: Families are More at Risk on Local Roads than Highways*

Public perception tends to view speeding as a highway problem. Every night on TV news programs, families see huge, fiery crashes on the interstate. Because of this, many families assume they are most at risk on the highways.

But this is not so, according to John Ulczycki, director of the National Safety Council's Transportation Safety Group. Motorists, their families, and the people around them often are most at risk right in their own neighborhoods.

"Speeding is a much more serious problem on city streets and local roads, and the impact of speeding is much greater on city streets and local roads," Ulczycki said.

A National Highway Traffic Safety Administration study released in 2005 confirmed the number of speeding-related deaths was highest on arterial roads, followed by local/collector roads. Interstate highways came in last.

Busy roads lined with residential houses are among the most dangerous problem areas, Ulczycki said. These roads offer a mixture of commuters, pedestrians, schoolchildren and bicyclists. Rarely does either one see the road the same way.

Case in point, Ulczycki said opinion polls show most people believe speeding is a problem in their neighborhood and would like to see speeds reduced. However, in many cases the same people thought speed limits should be higher in other parts of their community.

"Chances are if you are speeding on a local road, then you are speeding through somebody's neighborhood. Yet people don't think about it that way. They are thinking about how the speed limit should be higher or how they are late for work," Ulczycki said. Drivers need to understand speed limits are not based exclusively on the whims and fancies of local government, nor are they based exclusively on engineering of the road itself. A host of science-based factors come into play in setting a speed limit, Ulczycki said, including the number of residences, vehicles' stopping ability, proximity of schools, and levels of traffic congestion.

*[Continued on page 4...](#)*

Speeding Around the Block continued...**Who are these speeders?**

According to a 2004 survey of drivers by the Mayfield Village, OH-based Progressive Insurance Co., 90 percent of respondents admitted exceeding the speed limit, so chances are you or someone you know exceed the speed limit regularly. In many cases, drivers don't understand the risks they are taking when they speed. NHTSA cites speeding in 32 percent of traffic fatalities, costing an estimated \$40 billion each year – including wage and productivity losses, medical expenses, legal costs, insurance costs, police department costs, and property damage.

According to the Governors Highway Safety Association, a Washington-based nonprofit, the effects of excess speed can be disastrous. Speed:

- Reduces a driver's ability to negotiate curves or maneuver around obstacles in the roadway
- Extends the distance necessary for the vehicle to stop
- Increases the distance a vehicle travels while the driver reacts to a hazard
- Compromises the integrity of the vehicle structure
- Decreases the effectiveness of vehicle design features, such as air bags and restraint systems
- Decreases the ability of roadway hardware, such as guardrails, barriers and impact attenuators to protect occupants
- Increases tread wear on tires and wear on braking systems
- Increases the risk of crashes because other vehicles and pedestrians may not be able to judge distance accurately

**5 mph makes a difference**

What motivates drivers to press a little harder on the gas? They do it for a host of reasons, including busy schedules, over-confidence in driving ability and sometimes just plain selfishness. The biggest reason is probably they think they won't get caught. According to Ulczycki, vigilant enforcement of speed limits is the best deterrent against speeding.

However, most drivers believe, and some law enforcement agencies admit, a grace area exists of about 5 to 7 mph above the posted speed limit. Traffic police in some communities most likely will not stop a driver doing "35 in a 30." A likely reason for this is radar equipment and passenger vehicle speedometers have a combined margin of error of about 5 mph, Ulczycki said.

But what impact does this 5 mph have on safety? The difference between life and death, according to recent findings by researchers at the Monash University Accident Research Center in Victoria, Australia. Researchers found through simulated tests that when a child darted in front of a passenger car traveling 30 mph, the car was able to stop suddenly. At 35 mph, the car struck and killed the child.

The bottom line of research like this is that the most dangerous threat to American families is not terrorism, Mad Cow Disease, West Nile virus or avian influenza, but the belief "It can't happen to me." The person with this attitude does nothing to protect him- or herself, not to mention the people around them, and this lack of vigilance places everyone at risk.

"Permission to reprint granted by the National Safety Council, a membership organization dedicated to protecting life and promoting health".

**Top 3 Workplace Injuries at UAMS**

Unfortunately, on-the-job injuries and incidents are all too common. Virtually any type of injury can occur in the workplace or while performing your job. However, certain injuries are more common than others. With regards to claim payout, sprains and strains led the list by a wide margin, accounting for more than 3/4 of the total amount spent on worker's comp claims. A few reasons these injuries occur involve strenuous work such as truck loading and heavy lifting, assisting patients, and trips and falls. The UAMS Worker Safety Committee is monitoring these incident/injuries and trying to develop ways of minimizing injury to employees and students, which will reduce the amount of money spent on Worker's Compensation claims and increase employee satisfaction and health.

Top 3 workplace injuries at UAMS for the last quarter (4/13-6/13) per Worker's Compensation payout:

Injury/Incident	Total claims payout
1. Strains/sprains (62 claims)	\$ 243,909.36
2. Exposures (57 claims)	\$ 3,197.09
3. Punctures (49 claims)	\$ 6,031.37

## UAMS Workers' Compensation Claims Report Card

It is very important for workers compensation claims to be processed within the first seven (7) days of an injury/incident. When claims are not processed in a timely manner, a notification from OHR is sent to the employees' department to inform them of an Outstanding Claim. Below are the UAMS results for 2012.

Workers' Comp Claims	Processed Timely	Total Claims Processed
1 <sup>st</sup> Quarter 2012	27.7%	148
2 <sup>nd</sup> Quarter 2012	28.2%	131
3 <sup>rd</sup> Quarter 2012	41.0%	156
4 <sup>th</sup> Quarter 2012	42.9%	147
<b>Yearly Average</b>	<b>35.0%</b>	

- **Employees MUST notify his/her supervisor when they have a work related injury/incident ASAP.**
- **Department supervisors/managers MUST initiate the process and give the claim forms to the injured employee.**
- **ALL claim forms MUST be sent to OHR, ATTN: Mabeline Hansberry. Fax: (501) 686-8872 or Email: MHansberry@uams.edu.**

Claim Forms can be found on the OHR website: [www.hr.uams.edu/managers/workers-compensation](http://www.hr.uams.edu/managers/workers-compensation). If you desire a departmental training please contact Mabeline Hansberry @ (501) 686-7083. The next Workers Compensation Training will be in The Manager's Guide to HR, October 17-18, 2013.

## CHEMSHARE PROGRAM

*Occupational Health and Safety*

### OH&S Chemshare Program

Attention Researchers, please don't forget about OH&S CHEMSHARE Program. We have several chemicals available as well as glassware such as Beakers, Flasks, and an assortment of other types of bottles, FREE!



All bottles are triple rinsed and meet inspection from Dr. Webb. Please call OH&S main number at 686-5536 or call Dr. Michael Webb himself at 686-6958 to make arrangements and shop for FREE!!



Our Lab is located at Barton 2nd. Floor Room 2R/28.

**Several Chemicals to choose from. Some chemicals have never been used, and are still in great form!**

## *Tips for Computer Users*

Repetitive and prolonged use of a computer keyboard and/or mouse can lead to muscle aches and discomfort. Posture and positioning are important.

Try to incorporate the following tips into your work style to avoid problems.

### **Maintain good posture when working**

- Sit all the way back in the chair against the backrest.
- Keep your knees equal to, or lower, than your hips with your feet supported.
- Keep your elbows in a slightly open angle (100° to 110°) with your wrists in a straight position. The keyboard tilt can help you attain the correct arm position. A negative tilt (front of keyboard higher than back) helps when working in upright sitting positions. If you recline, a positive tilt (front of the keyboard lower than the back) might be necessary

### **Avoid overreaching**

- Keep the mouse and keyboard within close reach.
- Center the most frequently used section of the keyboard directly in front of you.
- Center the monitor in front of you at arm's length distance and position the top of the monitor 2" to 3" above seated eye level. You should be able to view the screen without turning or tilting your head up or down.
- Place source documents on a document folder positioned between your monitor and keyboard. If there is not enough space, place documents on an elevated surface close to your screen.

### **Use Good Typing Technique**

- Float your arms above the keyboard and keep your wrist straight when keying.
- If you use a palmrest, use it to support your palms when pausing, not while keying.
- Hit the keyboard keys with light force. The average user

keys four times harder than necessary.

- Keep your wrists straight and hands relaxed when using your pointer.
- Don't hold the pointer with a tight grip or extend fingers above the activation buttons.
- Avoid moving the pointer with your thumb or wrist. Movement should originate at your shoulder and elbow

### **Limit Repetitive Motions**

- Reduce keystrokes with macros and software programs such as voice recognition. Reduce pointing device movement with scroll locks and keystroke combinations

### **Customize Your Computer Settings**

- The screen font, contrast, pointer size, speed, and color can be adjusted to maximize comfort and efficiency.

### **Reduce Glare and Eye Fatigue**

- Place your monitor away from bright lights and windows. Use an optical glass glare filter when necessary.
- Take eye breaks and intermittently refocus on distant objects. Try palming your eyes in your hands to reduce eye fatigue.

### **Take Breaks**

- Take 1 or 2 minute breaks every 20-30 minutes, and 5 minute breaks every hour.
- Every few hours, try to get up and move around.

### **Wrist Splints**

- Non-prescriptive medication or wrist splints can often be more harmful than helpful. If you begin to develop symptoms, seek help.

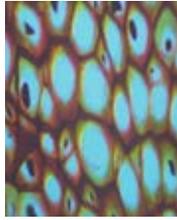
- Early intervention can prevent future problems.

### **Wellness**

- Stay in shape by stretching and exercising regularly. Stretches and exercises can be found on our website



## **BIOSAFETY**



### Biosafety Question:

Do all human cells, even human cell lines purchased from commercial vendors, require participation in the Exposure Control Plan?

A: Yes, OSHA has provided guidance that even commercially available cell lines can carry bloodborne pathogens. Since it is virtually impossible to test each cell line for all possible pathogens, all laboratories using human cell lines should follow the exposure control plan and blood borne pathogen regulations.

Exposures to infectious biological agents are serious potential health hazards in clinical laboratories, research institutions, and production facilities. The most common causes of accidental exposure are:

- Biosafety procedures being employed are not properly matched to the hazard/risk.
- Lack of implementation of procedures. A written policy may exist, but the procedures are not properly communicated or enforced.
- Laboratory personnel are not adequately trained to work safely with infectious agents.
- Safety equipment is not readily available or is improperly used in the laboratory.

### Tips for Using Biosafety Cabinets

#### **DO**

- Operate the cabinet for 10-15 minutes before beginning work.
- Wipe down the cabinet with disinfectant before and after use.
- Verify inward air flow before beginning work.

- Keep front and rear grills clear to keep air flowing properly.
- Use absorbent pads or trays on the work surface to contain spills.
- Wear gloves and lab coat when working in the cabinet.
- Plan your work in advance, load all supplies in cabinet before beginning work.
- Minimize arm movements in and out of the cabinet.
- Adjust the seat height so that you can work comfortably.
- Work from clean side to dirty side.
- Keep a discard tray or waste bag inside of the hood.
- Practice good microbiological technique.
- Use sterile disposable loops instead of open flame for sterilizing loops.
- Allow the cabinet to purge for 10 minutes before shutting off.

#### **DON'T**

- Use open flames (bunsen burner) in the cabinet.
- Use excessive amounts of flammable solvents in the cabinet.
- Leave the UV light on when the lab is occupied.
- Put items on top of the cabinet, exhaust can be blocked.
- Locate cabinets in high traffic areas.
- Disable flow and sash alarms

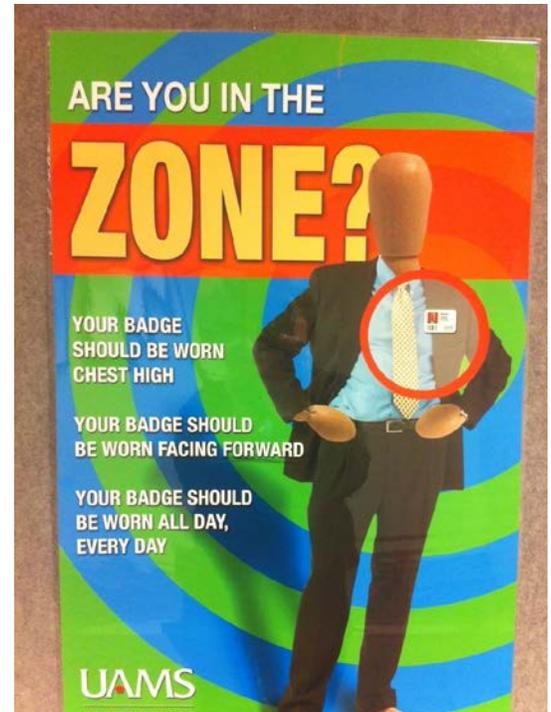
Laboratory acquired infections (LAI) are preventable. Understanding the principles of biosafety, using the proper containment, following facility safeguards and adherence to the sound microbiological practices will contribute to a safer and healthier working environment for all.

## Why do we need Identification Badges?

UAMS has a strict policy on the use and requirement of ID badges and details can be found in the UAMS Administrative Guide, Policy 11.3.05. The purpose of the policy is to identify individuals that are required to wear an ID and the procedures to follow for issuance.

There are several reasons that come to mind when we start to examine the need for identification (ID) badges. Not only do ID badges ensure security and safety of the workspace and classrooms, it also helps to protect our patients, visitors and employee assets.

ID badges immediately allow us to spot an employee, student, contractor or vendor from a non-employee/student/contractor vendor who may intend to do harm. ID badges act as a multipurpose tool. You can use it as an identity card, as a security pass, or as a punch card for attendance and time clocking. **Please make sure your ID badge is properly displayed!**



[Click here](#) to sign up for the classroom training.



### Chem/Lab Safety Training

8/21/13 12:00 pm CPH G232  
 9/18/13 12:00 pm CPH G232  
 10/16/13 12:00 pm CPH G232  
 11/20/13 12:00 pm CPH G232

### Radiation Safety Training

8/16/13 9:15 am Biomed II Rayford Auditorium  
 10/01/13 1:00 pm ED2 G104A/B  
 11/14/13 1:00 pm CPH 3204

### Respirator Fit Testing Schedule

Monday 7:00am-10:00am  
 Wednesday 1:30pm-3:00pm  
 Thursday 7:00am-10:00am



\*Please have your medical clearance form and online respirator training completed before attempting your fit test.\*

**If you have any questions for or need assistance from The Occupational Health and Safety Department please feel free to contact us at 686-5536. Your call will be directed to the appropriate division.**