

ChEE Safety Committee Update



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University of Arizona

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Outline

- **The Team**
- **The Charter**
- **Laboratory Chemical Safety Manual**
- **Role of Principal Investigators**
- **Role of Those Working in Labs**
- **DHS Lab Inventory Survey**
- **Chemical Safety Training Indicator**
- **ChEE Safety Training Challenge**
- **Safety Notice**
- **Safety Audits Performed To Date and Distribution of Scores**
- **Safety Audits to be Conducted during the next 9 months**
- **Q & A**

The Team

- Ara Philipossian (chairman, 9/06 to present)
- Jim Field (started 8/08)

- Brian Barbaris (9/06 to present)
- Jo Leeming (9/06 to present)

- Valeria Ochoa (9/06 to present)
- Anand Meled (started 8/08)

- Reyes Sierra (9/06 to 8/08)
- Matt Schutlz (9/06 to 5/08)

During the academic year, we meet monthly.

In the summer we meet on an 'as-needed' basis.

The Charter

- Our charter is to ensure that:
 - ❖ Laboratory use of **hazardous chemicals** and **test equipment** in occupational settings at all facilities that are being used by the ChEE department personnel is conducted in a safe and healthful manner
 - ❖ Faculty, staff and students are **ALL** committed to **create** and **maintain** a safe working environment
 - ❖ All department activities meet the UA Laboratory Chemical Safety (LCS) Manual

The Charter

- **Through successful execution of our charter, we will continue to:**
 - ❖ **Maintain oversight to ensure that we follow safe practices**
 - ❖ **Comply to UA's safety guidelines to limit risk and potential liability to the department**
 - ❖ **Instill the overall goal that safety should be part of all graduate student's education**

Laboratory Chemical Safety (LCS) Manual

- UA's official handbook governing safety in labs
- As of January 2007, the UA Laboratory Chemical Safety (LCS) Manual replaced the Chemical Hygiene Plan (CHP).
- LCS Manual describes how people working with hazardous chemicals can protect themselves from potential health and physical hazards presented by the chemicals
- LCS Manual applies to the "laboratory use of hazardous chemicals," all people working in these labs, and their line management
 - ❖ Lab workers must become knowledgeable in the applicable details of this manual and fulfill their responsibilities
 - ❖ All operations performed in a laboratory must be planned and executed in accordance with the manual

Laboratory Chemical Safety (LCS) Manual

- The Laboratory Chemical Safety (LCS) Management System is a web-based system for implementing the LCS Manual in UA labs

<http://risk.arizona.edu/index.shtml>



[UA Home](#) | [UA Map](#) | [Phonebook](#) | [Calendars](#) | [A-Z Index](#) |

[Home](#) | [FAQs](#) | [Forms](#) | [Health & Safety](#) | [Fleet Safety](#) | [Environmental Compliance](#) | [Emergency Procedures](#) | [Training](#) | [Insurance](#)

Risk Management & Safety

Welcome!

The Department of Risk Management & Safety (RM&S) is a service and support unit within the Administrative Services Section of [Business Affairs](#) for The University of Arizona. RM&S coordinates the University's overall risk management effort through programs of environmental compliance, occupational health and safety and insurance coverage for property, liability and workers' compensation.

The University of Arizona has adopted an institutional commitment to the principles of risk management and loss prevention. The components of this program are described in the [Risk Management and Loss Prevention Program Document](#) (PDF format).

RM&S Contact Information

- ✦ **Office Location:** USA Bldg. #300A, 4th Fl. South, 220 W. 6th St., Tucson, AZ 85701-1014
- ✦ **Mailing Address:** P.O. Box 210300, Tucson, AZ 85721-0300
- ✦ **Phone:** (520) 621-1790, **FAX:** (520) 621-3706, **E-mail:** risk@email.arizona.edu

RM&S News

- ✦ **Now Available!** Online Driver Registration and Motor Vehicle Record Check
- ✦ **Important Safety Information** – Users of BD Vacutainer® Blood Collection Tubes that contain lithium heparin should be aware that certain product lots contain small amounts of a contaminant. More details.

Laboratory Chemical Safety (LCS) Manual

- **Specific goals of the LCS Management System include:**
 - ❖ **Improved laboratory safety and health for all persons involved in the laboratory use of hazardous chemicals.**
 - ❖ **Enhanced university compliance with the OSHA Laboratory Standard (since it serves as the UA Chemical Hygiene Plan, as required by the OSHA Standard).**
 - ❖ **Identification and classification of laboratory operations by hazard level, location, personnel, and who is responsible for the activity.**
 - ❖ **Communication of university rules for laboratory safety and health through online training in a format that is easy to understand, practical and convenient (replaces the “Laboratory Safety” lecture training).**
 - ❖ **Allows the Institutional Chemical Safety Committee (ICSC) and Risk Management and Safety (RM&S) to focus their efforts on those activities with the highest hazards and risk factors for workers and the institution.**

Laboratory Chemical Safety (LCS) Manual

- To get started:

- ❖ First, read the orientation information in '*GETTING STARTED*' section in the LCS Manual

<http://risk.arizona.edu/healthandsafety/labchemicalsafety/manual/index.shtml>

- ❖ Then, login to the LCS Management System and complete the required tasks

The screenshot shows the website for the University of Arizona's Risk Management & Safety department. The header includes the university logo and navigation links such as 'UA Home', 'UA Map', 'Phonebook', 'Calendars', and 'A-Z Index'. Below the header, there is a navigation bar with links for 'Home', 'FAQs', 'Forms', 'Health & Safety', 'Fleet Safety', 'Environmental Compliance', 'Emergency Procedures', 'Training', and 'Insurance'. The main content area is titled 'Laboratory Chemical Safety Manual' and includes the following text:

July 2008, version 1.1
This document replaces all previous versions of the UA Chemical Hygiene Plan

Getting Started

1. Introduction

1.1) Purpose: The purpose of this manual is to describe the proper use and handling practices and procedures to be followed by people working with hazardous chemicals in University of Arizona laboratories to protect them from potential health and physical hazards presented by chemicals used in the workplace, and to keep chemical exposures below specified limits. It was created by Risk Management & Safety (RM&S) for the Institutional Chemical Safety Committee (ICSC). It has been approved by the ICSC, the Research Policy Committee of the Faculty Senate, the Faculty Senate and by the President's Cabinet. It is based on the recommendations of the National Research Council in their publication, "[Prudent Practices in the Laboratory – Handling and Disposal of Chemicals](#)" and constitutes the Chemical Hygiene Plan (CHP) required by the U.S. Occupational Safety & Health Act (OSHA) of 1970 and regulations of the U.S. Department of Labor including 29 CFR 1910.1450 "[Occupational Exposure to Hazardous Chemicals in Laboratories](#)."

On the right side of the page, there is a 'Table of Contents' section with the following items:

- Getting Started
 - 1. Introduction
 - 1.1) Purpose
 - 1.2) Policy and Scope
 - 1.3) Manual Organization
 - 1.4) Great Place to Start
 - 2. Roles and Responsibilities
 - 2.1) Administrators
 - 2.2) Supervisors
 - 2.3) Lab Workers
 - 2.4) Risk Management &

Role of Principal Investigators (PIs)

- PIs are critical to the success of the LCS Management System. They need to log in to the system with their university NET ID to:

Register and classify your laboratory chemical use and request prior approval, if necessary, for extremely hazardous chemicals/activities ****(bldg. names or numbers, lab room numbers, and general knowledge about chemical use in each lab, are necessary to do this);***

Register the people that work in these labs ****(EID numbers for each employee are necessary to do this, SID numbers are required for students who are not employees, and DSVID numbers are required for Registered Department Sponsored Visitors who are not employees or students);***

Post the appropriate lab signs/warnings/labels ****(signs/warnings/labels and instructions will be provided by RM&S following the lab registration);***

Complete the on-line, general laboratory chemical safety training ***(an e-mail reminder will be sent following the lab registration);***

Role of Principal Investigators (PIs)

- PIs are critical to the success of the LCS Management System. They need to log in to the system with their university NET ID to:

Complete a chemical safety self-evaluation for assigned lab spaces and pass a certification test * ***(the self-evaluation and test are components of the training and reference the LCS Manual)***;

At least annually verify and update (if necessary) the lab and employee registration and self-evaluation info ****(an e-mail reminder will be sent)***, and

Comply with LCS Manual
(<http://risk.arizona.edu/healthandsafety/labchemicalsafety/manual/index.shtml>).

Role of Those Working in Labs

- People working in the labs need to:

Complete the on-line general laboratory chemical safety training (*an e-mail reminder will be sent following the lab worker registration by the PI or their designee*);

Complete a chemical safety self-evaluation for assigned lab spaces and pass a certification test * (*the self-evaluation and test are components of the training and reference the LCS Manual*), and

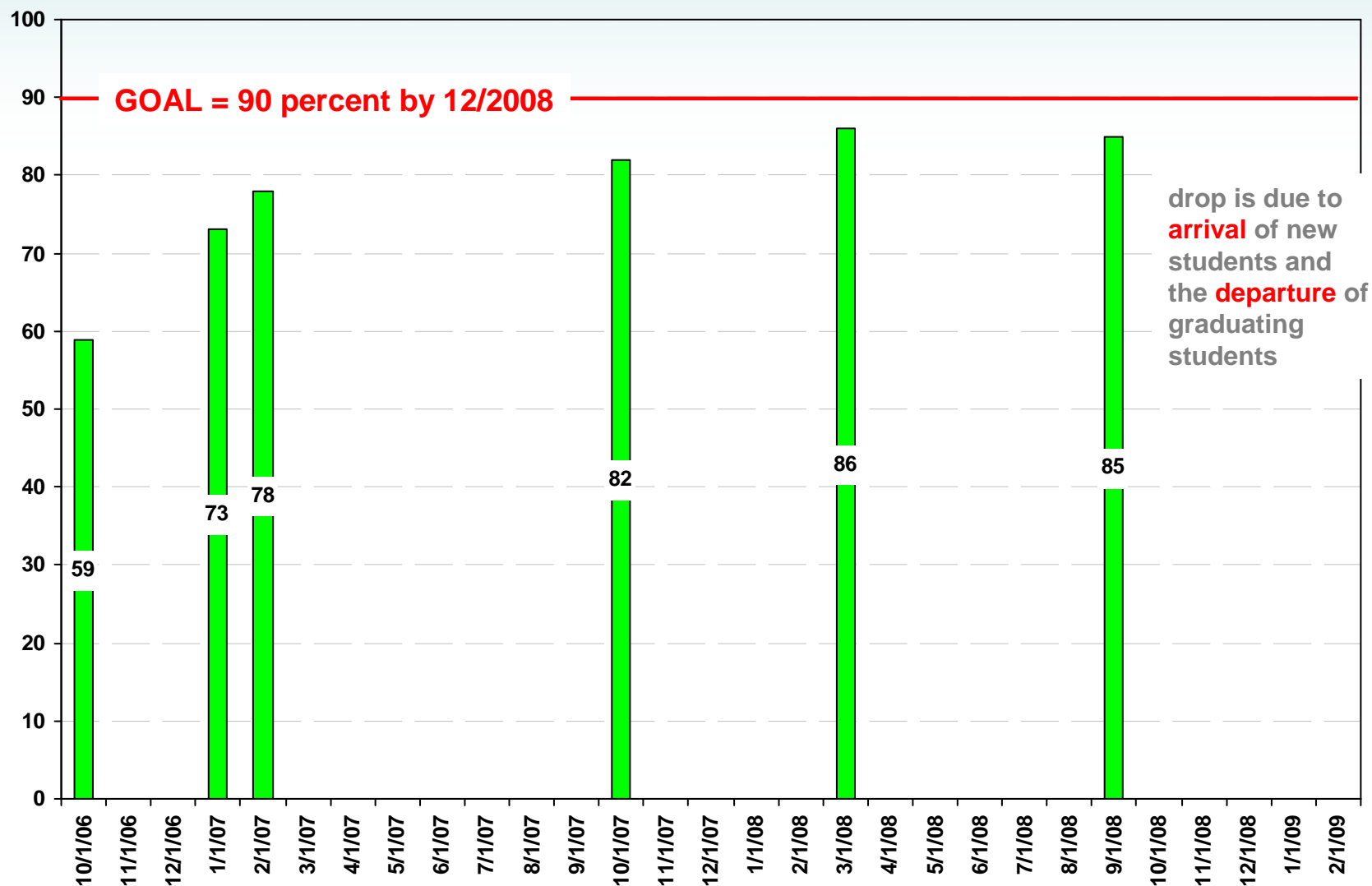
Comply with LCS Manual
(<http://risk.arizona.edu/healthandsafety/labchemicalsafety/manual/index.shtml>).

DHS Lab Inventory Survey

- Action by PIs was due on February 22, 2008 (communicated by members of the ChEE – SC in early February)
- There were 4 steps to complete the survey
 - ❖ Print a copy of the DHS Laboratory Inventory [DHSLaboratoryInventory.pdf](#)
 - ❖ Complete your inventory by entering the information on your printed copy.
 - ❖ Return to this page and complete the Online DHS Laboratory Inventory Form <https://web.arizona.edu/~risk/dhs/labinventoryform.php> (be sure to complete all required fields before submitting. Submitting an incomplete form will require resubmission of the chemical information).
 - ❖ Destroy your printed copy of the DHS Laboratory Inventory as required by the DHS Rule for security reasons. RM&S has your information in a secure data base.

If you have questions about this requirement, please contact Risk Management & Safety at 621-1790 for assistance.

ChEE Chemical Safety Training Indicator



ChEE Safety Training Challenge

- Our goal is to:
 - ❖ Reach **90 percent** by the end of 2008
 - ❖ Reach **95 percent** by the end of May 2009
 - ❖ Stay above **90 percent** thereafter
 - ❖ Those who have not taken the on-line safety training course need to do so ASAP
 - ❖ There is now an incentive for new incoming students as well as students who have not taken the Safety Training Course (either in-class or on-line):

The ChEE department will present a gift (i.e. high-quality lab coat with the student's last name embroidered on it) to every student who completes the course and presents the certificate of completion to Jo Leeming by September 30, 2008

Safety Notice in Effect Since January 2007

NOTICE

**THESE RULES MUST BE FOLLOWED AT ALL
TIMES INSIDE ALL ChEE LABORATORIES**

FAILURE TO COMPLY WILL RESULT IN DISCIPLINARY ACTION

- (1) Individuals working on equipment, performing tests or watching others perform tests MUST wear lab coats, proper eye protection and closed-toe shoes**
- (2) All containers MUST be properly labeled as per LCS mandates regardless of their size or contents**
- (3) NO food or drinks of any kind inside research areas**

Safety Training Announcement

- **Gas Handling Safety**

- ❖ **September 8, 2008, 10 AM to noon at the Student Union Kiva Room (2nd Level)**
- ❖ **Sponsored by Praxair and Cryogenics & Compressed Gas Facility and Risk Management & Safety**
- ❖ **Course Outline**
 - ✓ **Cylinder & Valve Options**
 - ✓ **Gas Classifications & Hazards**
 - ✓ **Safe Storage & Use of Gases**
 - ✓ **Gas Handling Precautions**

Recommended for any UA – affiliated person using compressed or liquefied gases.

*Reservations required
call 626-1136 or e-mail risktrn@email.arizona.edu*

Notes on Lab Coats and Eyewear

- **Lab Coats**

- ❖ ChEE has a contract with Prudential to provide and launder lab coats
- ❖ Cost of lab coat is appx. 25 USD
- ❖ Cost to launder a lab coat is appx. 1 USD
- ❖ Disposable lab coats are available from Fischer Scientific or VWR for appx. 5 USD

- **Eyewear**

- ❖ Readily available from Fischer Scientific or VWR for appx. 25 USD
- ❖ Each lab should have multiple spares for visitors

Safety Audits Performed To Date

- Members of the ChEE Safety Committee have started systematic audits of ALL labs within the department using the **Laboratory Chemical Safety Self Evaluation Checklist** as the primary audit tool
- We have so far we have audited 14 labs (with follow-up audits of 7 labs) assigned to:
 - ❖ A. Philipossian
 - ❖ R. Sierra
 - ❖ W. Ela
 - ❖ E. Saez (1 lab only)
 - ❖ R. Arnold
 - ❖ J. Farrell (follow-up audit planned for October 2008)
 - ❖ R. Guzman (follow-up audit planned for October 2008)
- **Distribution of scores:**
 - ❖ A ... 5 labs
 - ❖ B ... 2 labs
 - ❖ C ... 5 labs
 - ❖ D ... 2 labs

Upcoming Safety Audits

- For the remainder of 2008

- ❖ Jim Field (October)
- ❖ Anthony Muscat (November)
- ❖ Farhang Shadman (December)

- In 2009

- ❖ Eduardo Saez (February)
- ❖ Jim Baygents (March)
- ❖ Glenn Schrader (April)
- ❖ Paul Blowers (May)

*To get a head start, PIs and students working in the above labs should begin **labeling all chemicals (name, date received and expiration date) and inventorying all chemicals (see the LCS Manual or one of the members of the ChEE – SC for an inventory worksheet)** with a copy held in the ChEE main office and another copy in each lab*

*This is also a good opportunity to **PROPERLY dispose of any and all chemicals that have expired or that are no longer needed***



Questions and Answer Session