

# Safety Warden Training



***New, Improved and  
endorsed by the  
Accelerator  
Division Safety  
Warden Task  
Force!***

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## *Why are you here?*

One of the reasons we've gotten better at ESH&Q is the influence of a group of informed, diligent people in the workplace to provide guidance and early intervention:

## *Safety Wardens*

This course is designed to give safety wardens the knowledge and skills to be effective in their role.

It also will aid supervisors in their support of safety wardens.

## *What's in this course?*

**Part 1:** Jefferson Lab's Approach to ESH&Q, and how Safety Wardens contribute.

**Part 2:** Conducting workplace inspections and using the information for improvement.

## Part 1

# *Jefferson Lab's Approach to ESH&Q, and how Safety Wardens contribute.*

**What are the most serious and most common safety problems in your area of responsibility?**

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## ***What should a safety warden do (according to the book)?***

(From the *ESH&Q Manual*, Chapter 2210)

<http://www.jlab.org/ehs/manual/PDF/2210EHSResponsibilities.pdf>

All **safety wardens** shall have responsibility for:

- a. Inspecting their areas and tracking resolution of ES&H deficiencies.
- b. Requesting resources to bring their areas into compliance and to maintain compliance with established Jefferson Lab ES&H standards.
- c. Ensuring that hazards associated with their areas are posted.
- d. Maintaining Material Safety Data Sheets (MSDSs) for materials used in the area.\*
- e. Promoting and enforcing ES&H rules and sound work practices in their areas.
- f. Assisting in the resolution of ES&H concerns brought to their attention.
- g. Perform weekly inspections of safety shower and eyewash stations in their areas.

\* ***There is no longer a requirement that MSDS be kept in the work area. We rely on the on-line MSDS & Chemical Inventory System.***

<http://jlabsonline-msds.com/msdsmanagement.exe/AnonymousSearch>

## *What should a safety warden do (in practical terms)?*

- Promote and help enforce good ESH&Q work practices.
- Inspect the local work area.
- Request resources to correct problems and maintain Jefferson Lab ESH&Q standards.
- Track resolution of safety deficiencies.
- Maintain “official” ES&H bulletin board if it’s in the SW’s area.
- Maintain safety information bulletin board
- Ensure work-area hazards are posted.
- Assist in resolving ESH problems:
  - » **Facilitate ESH Concern Reports**
  - » **Document Stop-Work actions**
  - » **Provide assistance for accident investigations**
  - » **Propagate lessons-learned**
- Inspect safety appliances, fire extinguishers, eye wash, and other safety-related apparatus in their area of responsibility.
- Support the 5 core functions of the ISM

### ***5 Core Functions of Integrated Safety Management (ISM):***

- 1. Define the scope of work;***
- 2. Identify and analyze hazards associated with the work;***
- 3. Develop and implement hazard controls;***
- 4. Perform work within controls; and***
- 5. Provide feedback on adequacy of controls and continue to improve safety management.***

<http://www.jlab.org/ehs/manual/PDF/2210EHSResponsibilities.pdf>

# Integrated Safety Management

## JLab's Official ESH&Q Strategy

### INTEGRATED SAFETY MANAGEMENT

#### 7 Guiding Principles

1. Line Management Responsibility for Safety
2. Clear Roles and Responsibilities
3. Competence Commensurate with Responsibilities
4. Balanced Priorities
5. Identification of Safety Standards and Requirements
6. Hazard Controls Tailored to Work Being Performed
7. Operations Authorization

For more information:

[http://www.jlab.org/div\\_dept/dir\\_off/oa/index.html](http://www.jlab.org/div_dept/dir_off/oa/index.html)

### 5 Core Functions

1. Define the Scope of Work
2. Analyze the Hazards
3. Develop and Implement Hazard Controls
4. Perform Work Within Controls
5. Provide Feedback and Continuous Improvement

<i>Emergency Responders</i>	911
<i>Guard Shack/Security</i>	ext 4444, 269-5822
<i>Medical Services</i>	ext 7539
<i>Crew Chief</i>	630-7050
<i>Facilities Management</i>	ext 7400
<i>ESH&amp;Q Reporting Manager</i>	876-1750
<i>RadCon</i>	876-1743

*Safety Wardens can affect most of these.*

## ***What are the benefits of having safety wardens?***

- You're in the area most of the time; you know the work operations and hazards.
- You know the workers involved.
- You're readily available to give advice on commonplace ESH&Q issues.
- You often can respond quicker to problems than "outsiders."
- It's your work area; you benefit directly from your efforts.

***A list of current Safety Wardens (and other ESH&Q-related assignments) is available at:***  
<http://www.jlab.org/ehs/manual/PDF/2200R1EHStaff.pdf>

## *What authority does a safety warden have?*

Your authority derives from the ***Jefferson Lab ESH&Q Manual***. It defines the respective safety roles and responsibilities within the entire Lab.

As a safety warden, you have specific duties and responsibilities that go beyond those of the “average” employee.

You are part of a system that gives **primary ownership of ESH&Q to line managers**, but ensure assistance and resources are available to everyone.

***As you perform your safety warden duties, you do so with the authority of the Lab Director.***

## *How do safety wardens and ESH&Q staff work together?*

- **Safety wardens normally** provide a “**first-line**” of observation, information, and quick intervention.
- **ESH&Q staff** are expected to provide more detailed information, interpretation of requirements, and address issues on a programmatic or lab-wide basis.

They are often facilitators and “**consultants**” to safety wardens and supervisors.

Safety wardens and ESH&Q staff should be complementary in their efforts, not redundant or competitive.

## ES&H Manual 2220 Landlord/Tenant Responsibility.

This chapter defines the assignment of environmental, safety, and health (ES&H) responsibilities particular to geographical areas at Jefferson Lab. While the laboratory Director is ultimately responsible for ES&H, and each person at Jefferson Lab is responsible for establishing knowledgeable control of the hazards encountered at the laboratory. Particular aspects of coordination and oversight are most conveniently handled on a geographical basis.

**In order to ensure clarity, a landlord division is identified for each space within the laboratory.** From time to time other organizational units may occupy part of the space. This chapter describes the ES&H responsibilities of each party.

Current lists of landlord divisions, building managers, and safety wardens can be found in *Appendix 2210-R1 Current ES&H Staff Assignments, Table 9, Emergency Staff.*

<http://www.jlab.org/ehs/manual/PDF/2210R1EHStaff.pdf>

## Landlord and Tenant Responsibilities

*This section defines the landlord/tenant relationship and related responsibilities.*

The Director shall ensure that each space at Jefferson Lab has assigned to it a designated division or office as landlord. The **landlord line management is responsible to:**

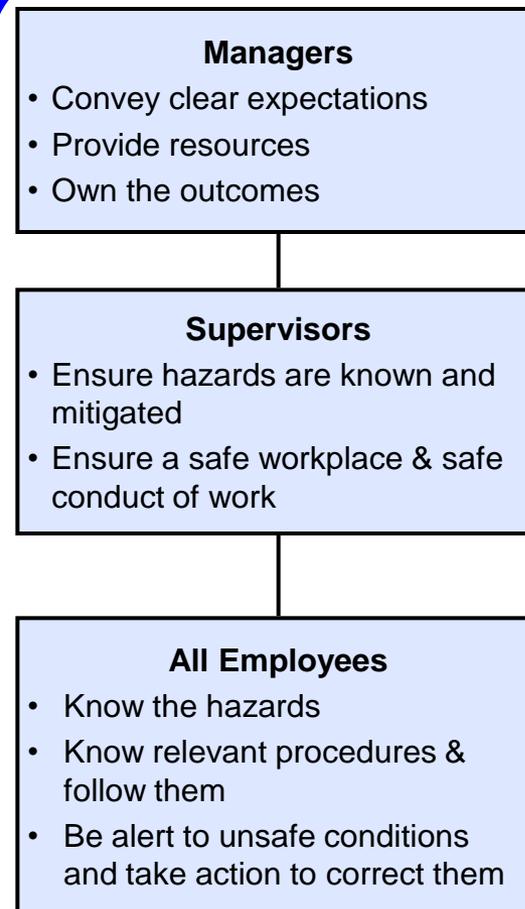
- b. Arrange periodic, **documented ES&H inspections of the space at least quarterly** in accordance with the division self-assessment plan and using a graded approach, correct deficiencies found on those inspections or other inspections conducted by the laboratory, DOE, or other cognizant outside agencies. This may be done via coordinated involvement of tenant safety wardens.
- f. **Ensure that a safety warden, and, if appropriate, a building manager has been appointed** for each assigned space. These roles are typically collateral duties subject to the individual's normal line management supervision.

**Safety Wardens are typically assigned for functional work areas where they normally spend a large fraction of their work time**

## Jefferson Lab management and the role of safety warden?

The “**landlord division**” is responsible for appointing safety wardens.

- Supervisors, as part of their own ESH&Q responsibilities, must be aware of and support safety wardens’ activities.
- A safety warden’s immediate supervisor has a particularly important role in providing support and commitment to the safety warden:
  - *ensure that the safety warden has the appropriate training*
  - *allocate time for safety warden duties*
  - *adjust conventional duties and priorities accordingly*
  - *recognize efforts via performance appraisal*



<http://www.jlab.org/ehs/manual/PDF/2220LandlordandTenant.pdf>

## ***Reality check:***

- You, the area safety warden, may be a lightning rod for pent-up frustrations.
- Safety wardens sometimes need to tell people things they don't want to hear.
- People sometimes resent anything that appears to hinder their own agenda -- production, schedule, budget, etc. -- or anything that challenges their expertise.
- Safety wardens can't impose discipline.

## ***So what happens if there is a conflict?***

**Problems must get fixed.** *Safety wardens have the means (and encouragement) to elevate a problem to any level necessary to get action.*

- Try to resolve the problem with those involved.
- Talk to the supervisor (following chain of management authority).
- Get guidance from ESH&Q staff who support the activity (They're available anytime, not just when there is a problem.)
- Inform the Division Safety Officer (DSO).
- In some situations, the building manager may help find a solution.
- Get advice through the Workers Safety Committee.

**Safety wardens have access to all of these people.**

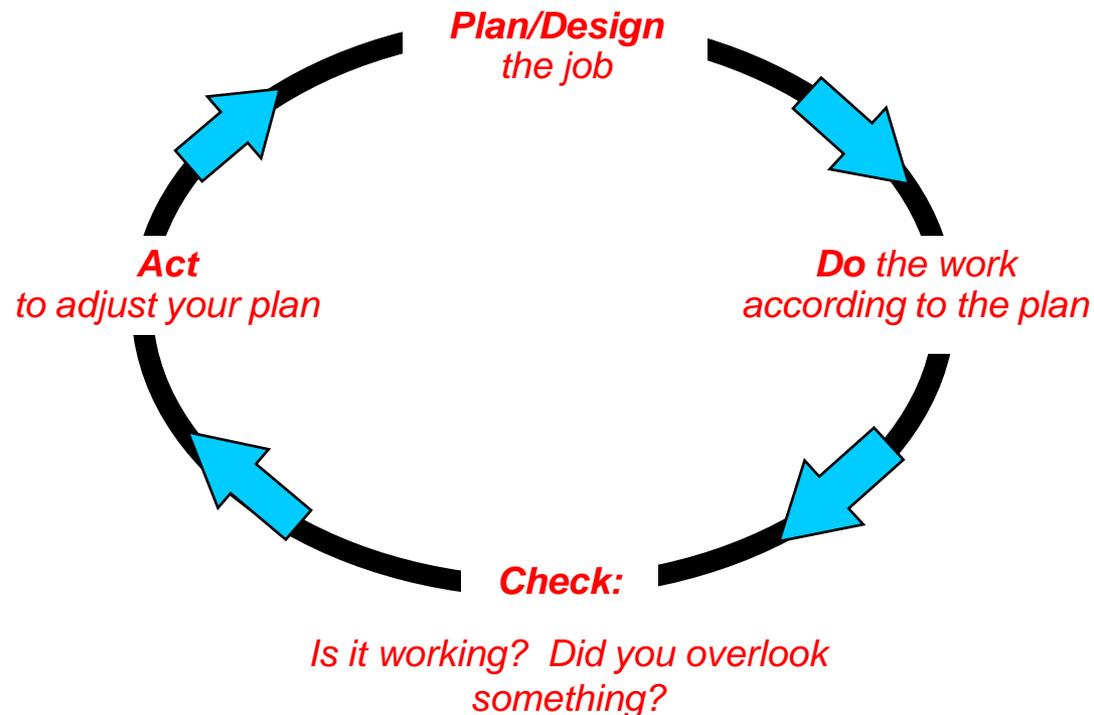
*(And remember your stop-work authority!)*

## ESH&Q Planning in New Work

- **Risk evaluation** is useful for planning new operations, apparatus, and procedures.
- It **minimizes hazards** during construction, fabrication, installation, and testing.
- It **prevents most long-term liabilities** that may come from poorly planned work: electrical defects, chemical contamination, ventilation problems, Life Safety Code issues, excessive quantities of haz. waste, etc.

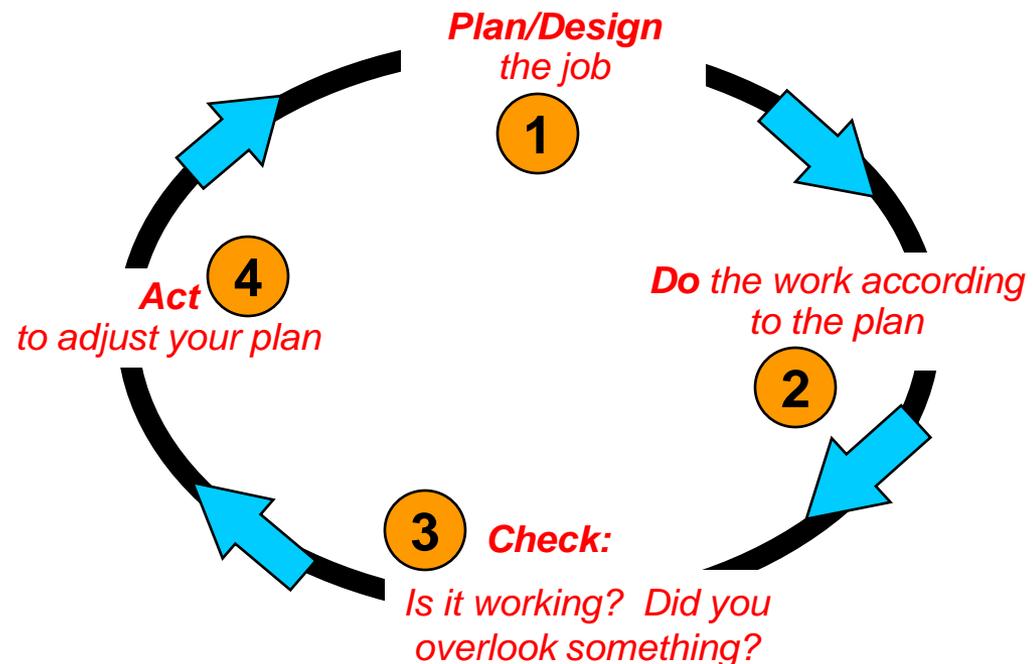
**Work-control documents (SOP, OSP, TOSP)** are intended to be aids to planning.

So is good ESH&Q evaluation **before purchasing** new materials and services.



## Safety Warden involvement?

1. SW sometimes assists in developing work-control documents. Should be aware of other SOPs, OSPs, TOSPs, etc. that affect their work area.
- 1-2. Facilitates improvements to work area or to existing equipment to accommodate new activity.
- 2-3. Serves as an informed, experienced observer of work in progress.
- 3-4. Knows whom to call for help if and when flawed ideas need “adjustment.”



## Work Control Documents

- **Standard Operating Procedures (SOPs):** work procedures that address technical aspects of a job, including ordinary ESH&Q hazards that are discussed in the *Manual*. Expiration date 3 years or less.
- **Operational Safety Procedures (OSPs):** a safety-focused set of procedures for unusual hazards that are not discussed in the *Manual*. The owner division specifies an expiration date, 3 years maximum.

<http://www.jlab.org/ehs/manual/PDF/EHSbookTOC.pdf>

- **Temporary Work Permits** include special written permits for hazards such as Fire Hazard Work Permits, Confined Space Entry Permits, Excavation Permits, Radiological Work Permits, etc.

They also include **Temporary Operational Safety Procedures (TOSPs)** for unusual hazards or situations. They are usually short duration: hours to a few days.

<http://www.jlab.org/ehs/manual/PDF/3320TOSPs.pdf>

## Primary ESH&Q Performance Measures: TRC and DART

### **TRC** (*Total Recordable Case*)

The number of recordable accidents per 200,000 hours worked. 200,000 hours is about 100 person-years of work - 40 hours per week for 50 weeks times 100. A recordable accident is one that requires more than first aid treatment.

### **DART** (*Cases with Days Away, Restricted or Transferred*)

The number of incidents that result in lost work days, restricted work days (the worker cannot perform all of his/her normal duties) or days in which the worker is transferred to alternate duties to accommodate the injury per 200,000 hours worked.

## Occurrence Reporting

{Jefferson Lab has sometimes fumbled this contract requirement. *The more people who know even a little bit about the obligation, **the more likely someone will remember** in the heat of the moment.*}

### Some mishaps must be reported to DOE. Typical examples:

- non-permitted environmental release of chemicals or radionuclides
- accidents causing or potentially causing loss of life, multiple serious injuries, or a potential mission/business impact
- overexposure of personnel to hazardous agents
- serious transportation incidents
- significant violations of standard operating procedures
- fires taking longer than ten minutes to extinguish
- radiation overexposure of personnel
- other events with “safety significance”

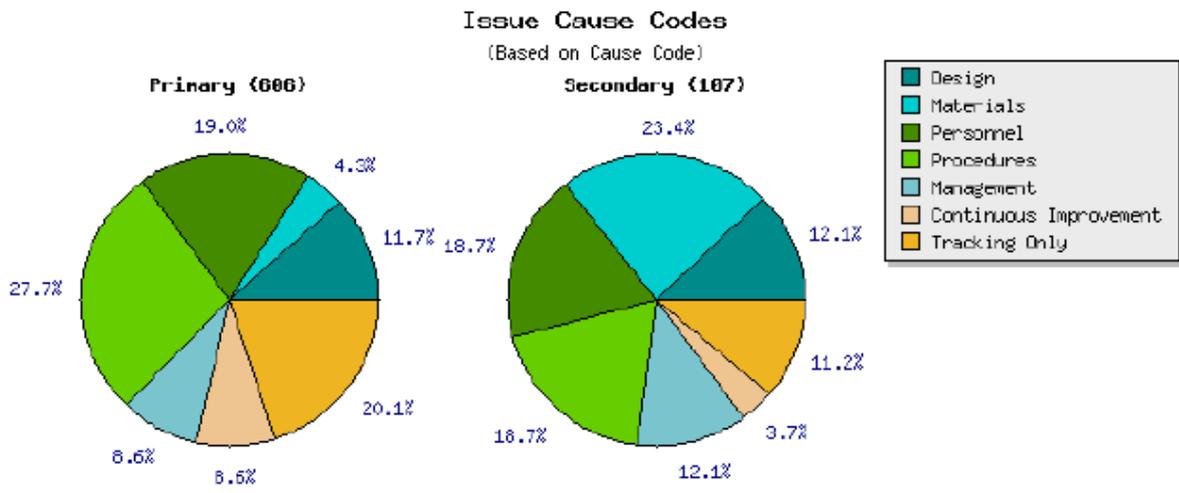
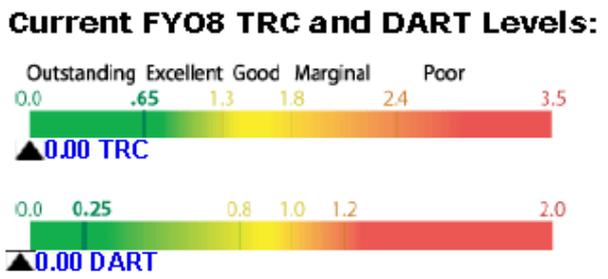
*Some incidents must be reported immediately. Remind your supervisor to help make certain the Facility Manager (**Craig Ferguson**) or ESH&Q Reporting Manager (**Carter Ficklen**) is informed if any of these mishaps occur in your area.*

<http://www.jlab.org/ehs/manual/PDF/5300OccurrenceReporting.pdf>

# JLab's Primary ESH&Q Performance Measures:

As of 11/26/07

Current ESH&Q	
<b>Days Since Last...</b>	
Recordable Accident:	68
(Lost) Work Day Accident:	387
<a href="#">Environmental Safety Health Information</a>	
<a href="#">Refresh</a>	



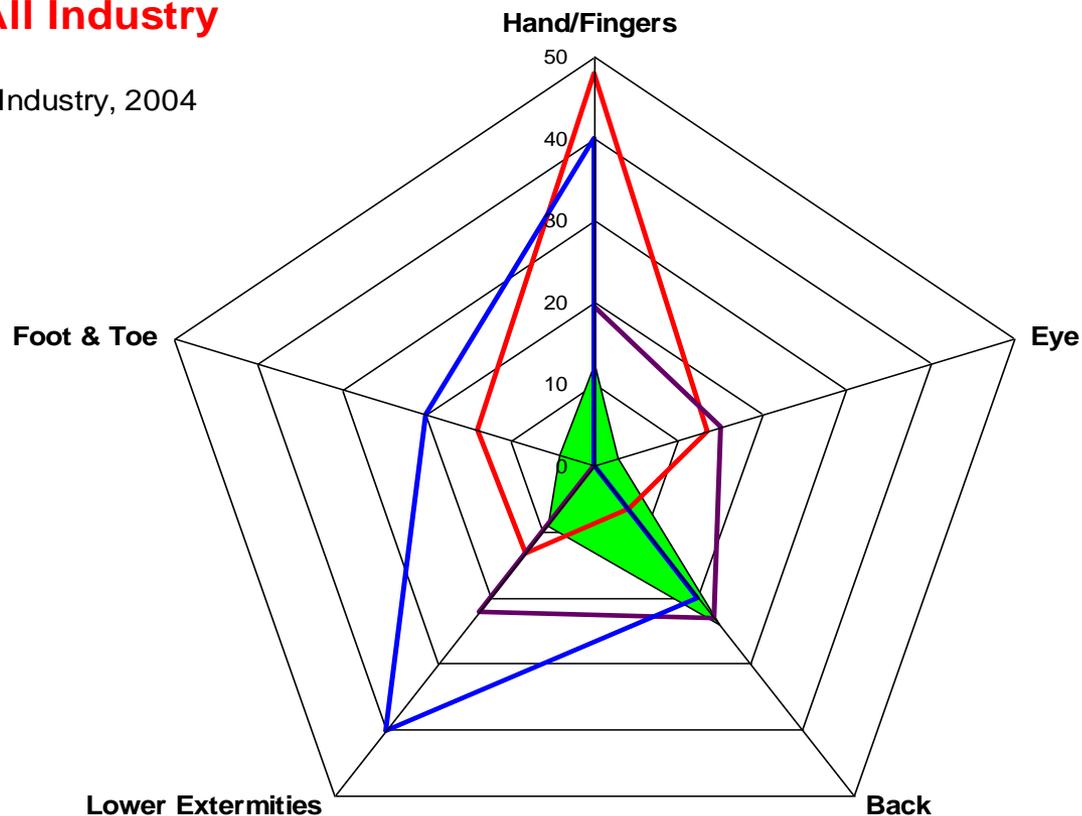
<https://www1.jlab.org/ul/apps/insider/components/ehs.cfm?preview=2>

## Why should Safety Wardens know about JLab's injury experience?

Knowing what has happened helps focus on chronic or recurring problems.

### Comparison of Injuries by Body Part: JLab & All Industry

- Distribution Pattern All Industry, 2004 (% of all injuries)
- JLab Avg 99-01
- JLab Avg 02-04
- JLab Avg 05-06



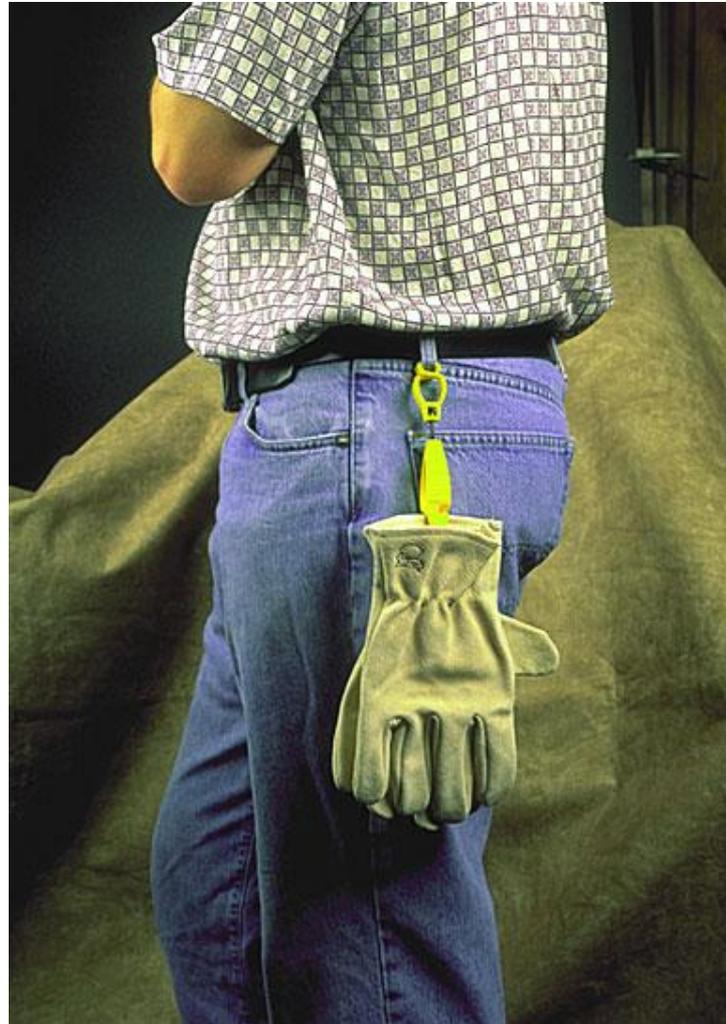
## Lessons Learned?

([http://www.jlab.org/div\\_dept/dir\\_off/oa/notable/index.html](http://www.jlab.org/div_dept/dir_off/oa/notable/index.html))

- We do lots of manipulative tasks; **hands are at risk**. Gloves would have prevented or reduced severity of many injuries.
- Over the years, we've had excessive **eye injuries**; most were preventable. Fewer in the last several years. Why?
- Many of our injuries occurred while **moving or installing** apparatus. Talking it through first ("planning") could have prevented some of these.
- Some injuries have an aspect of people being in a hurry, not paying attention, productivity concerns taking precedence over safety.
- **There is no "silver bullet."** It takes commitment, **planning**, and cooperation to make a safe workplace.

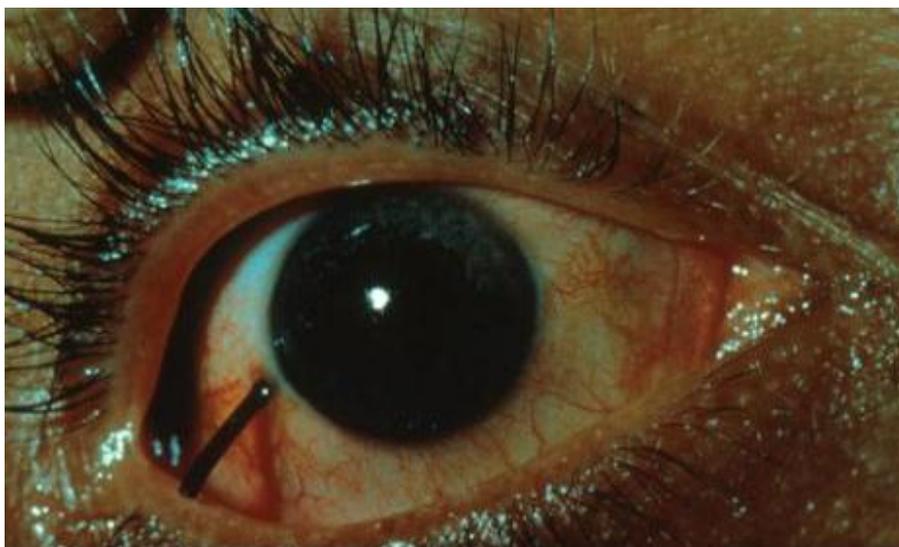
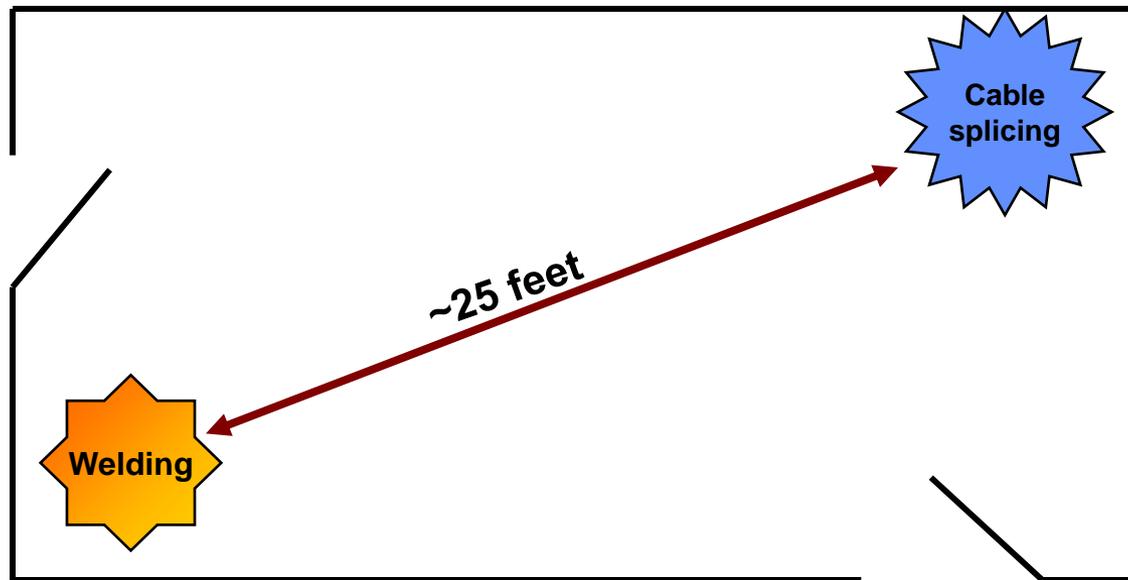
**"Planning is a conscious decision to worry ahead of time."**





GOVSCI 19811709 1.0 \$4.33 "Glove Retainer by Glove Guard - 1939 Yellow, Min. Order 24 ea."

# Eye-injury case study



## *Proven Tools for Improving & Sustaining Safety Performance:*

- Training, coaching, mentoring
- Expertise, advice
- Optimal equipment, materials, facilities
- Clear expectations and priorities
- Listening to those who do the work
- Accountability & encouragement
  - **Supervisor**
  - **ESH&Q staff**
  - **Peers – including Safety Wardens**

### *5 Core Functions of ISM:*

- 1. Define the scope of work;*
- 2. Identify and analyze hazards associated with the work;*
- 3. Develop and implement hazard controls;*
- 4. Perform work within controls; and*
- 5. Provide feedback on adequacy of controls and continue to improve safety management.*

## Safety Training

- Jefferson Lab requires appropriate training for all employees, users, and subcontractors -- ***before they are exposed to a hazard.***
- It is usually acceptable for visitors or new staff to be **escorted or directly supervised** in ordinary hazard areas until they can attend the next available training.
- Supervisors/sponsors/SOTRs must prepare an **Individual Training Plan (ITP)** for people under their responsibility.

# Training Records Access:

Aspen - Mozilla Firefox  
 File Edit View Go Bookmarks Tools Help  
 https://training.jlab.org/aspen/lang-en/management/LMS\_LearnerReports.asp?UserMode=1  
 Financial & Banking Emerg. Mgmt. Misc Personal JLab Sites Tackboard Media PDF Manual Aspen Learning Mana... Conversion Calculator... Google Dictionary, Etc. Facilities Politics

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**Summary**

Training completed:	Training canceled:	Training upcoming:
52	0	0
Training in progress:	Earned credit hours:	
3		

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**Organization**

Organization Name	Primary
Directorate	Yes
Jefferson Lab	No

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**Job**

Job Name	Primary
JSA/JLab Employee	No
Laboratory Director	Yes

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**Courses**

Name	Delivery Method	Status	Start Date	Completion Date	Credit Hours	Class Hours	Grade	Percentage Grade
<a href="#">Core Managers Security Briefing</a>		Completed	8/19/1999	8/19/1999		2		
<a href="#">Diversity Stand Down Training</a>		Completed	4/5/2000	4/5/2000		2		
<a href="#">EH&amp;S Orientation</a>	Self-study	Completed		11/27/1990		1	A	
<a href="#">EH&amp;S Orientation</a>	Self-study	Completed		11/15/1991		1	A	
<a href="#">EMS Awareness</a>	Self-study	Completed	8/31/2005	8/31/2005			A	
<a href="#">Giving and Receiving Feedback (Giving and Receiving Feedback - Core Managers)</a>	Instr-led on-site	Completed	10/8/1999	10/8/1999				
<a href="#">Hall A Safety Awareness Training</a>	OJT	Completed	12/22/2004	12/22/2004		1	A	
<a href="#">Hall B Safety Awareness Training</a>	Other	Completed	12/22/2004	12/22/2004		1	A	
<a href="#">Hall C Worker Safety Awareness Training (SAF112 Hall C Worker Safety Awareness Training)</a>	OJT	Completed	1/30/2001	1/30/2001		2		
<a href="#">Harness the Power of Behavior-based Safety</a>	Instr-led off-site	Completed	7/9/2004	7/9/2004				

Done training.jlab.org

# - Risk -

All hazards are not created equal.

Evaluate them to the best of your ability using the two elements...

$$\text{probability} \times \text{severity} = \underline{\text{risk}}$$

## Why is risk assessment important?

- Serious problems get the priority they deserve.
- We don't overreact to minor problems.
- We speak of problems in a common language.
- The process of risk evaluation sometimes reveals multiple options for a solution.

See *Manual Chapter 3210*, "Hazard Identification and Characterization."

# Risk Assessment

Outcome Severity		Risk Code			
Personal injury	Property loss, environmental impact				
Death or permanent disability	>\$100,000	1	3	4	4
Hospitalization required or ≥ 5 lost workdays	>\$10,000	1	2	3	4
First aid or medical treatment, < 5 lost days	>\$500	0	1	2	3
First aid not required	<\$500	0	0	1	1
		> 500 years	≤ 500, but >10 years	≤ 10 years > 10 days	≤ 10 days

**Likelihood of accident**

***What happens if you (or anyone else) encounters an imminent danger to life, property, or the environment (Risk Code = 4)?***

**A **Stop-Work** action is required.**



Safety wardens have a key role. They document the condition on the worksheet and ensure the right people know about it.

***You do not have to agree with the stop-work decision.***



**3330**

**Stop-Work Orders**

## Jefferson Lab's Stop-Work Process

### Some important points:

- The first priority is to *prevent injury*.
- Stop-work is used if there is *no other immediate means* to correct a hazard.
- Staff are *not* expected to recognize dangers outside their experience or training, nor direct a stop-work action for those problems.
- There will be *no retaliation* for invoking a well-intended stop-work order, even if subsequent investigation determines it was not needed.

<http://www.jlab.org/ehs/manual/PDF/3330StopWork.pdf>

## ***What does the safety warden do as part of a stop-work action?***

- Help make the area safe. This may include using administrative lockout/tagout.
- Use the *Safety Warden's Stop-Work Worksheet*\* to describe the situation. As soon as possible, get copies to the division ESH&Q officer and department manager.
- Make sure the operation does not restart until authorized by the department manager.
- Note corrective actions on your copy of the Worksheet.

You don't have to agree with the stop-work decision. You do have to make sure the situation is well described on the Worksheet.

\* <http://www.jlab.org/ehs/manual/PDF/StopWorkOrder.pdf>

## *How about subcontractors?*

- Subcontractors can (and are required to) direct stop-work when justified for lower-tier subs or other subs working on the same project.
- Jefferson Lab staff can direct them to stop work, and they have the same responsibility for our activities.
- Contact the SOTR (JLab subcontracting officer's technical representative) with concerns about subcontractors.

*The SOTR is analogous to a Jefferson Lab supervisor and is the person you should contact about any subcontractor activities.*

*You should ask all new subs in your work area who their SOTR is. If they don't know, you may deny them permission to start work.*

**SOTR list for service subs: [http://www.jlab.org/serv/info/service\\_subs/](http://www.jlab.org/serv/info/service_subs/)**

You should see both of these at any Facilities Mgmt. construction job.

**Construction Activity Hazard Analysis**

Project: **New Utility Building**      Subcontractor: **Build-it-Quick, Inc.**

Project Phase or Activity	Hazard(s) Anticipated	People or Property at Risk	M
New sidewalk & parking area	Earth-moving machinery	Workers, JLab staff Vehicles parked nearby	See Compan Program, Ch
	Sediment run-off	Storm-water permit violation	Silt fence; pr
Steel erection	Personnel injury from falls Falling objects Crane swing	Iron workers Everyone on site Everyone on site	See attache
Exterior painting	Falls from ladders	Painters	Select suit cautionary
	Inhalation of spray paint mist and vapors	Painters	Respirator MSDS and protection OSHA sta
	Paint overspray damage	Vehicles and adjacent building surfaces	Coordinat are move
Installation and modification of electrical systems	Electrical shock	Installers, others in vicinity	Lockout- power so
	Arc flash		De-ener, conduct around current

*Jefferson Lab*

## Subcontractor Work Permit

Name of Subcontractor: \_\_\_\_\_

JLab Customer Division & Contact: \_\_\_\_\_

SOTR: \_\_\_\_\_ Tel: \_\_\_\_\_ Pager: \_\_\_\_\_

**Description of Project:**

\_\_\_\_\_

\_\_\_\_\_

Start Date: \_\_\_\_\_ Est. Completion Date: \_\_\_\_\_

**Special Precautions or Work Practices Required:**

\_\_\_\_\_

\_\_\_\_\_

Jefferson Lab expects subcontractors to meet our EH&S requirements. If you have concerns about work practices on this job, contact the Subcontracting Officer's Technical Representative (SOTR). Remember, all lab employees are authorized to stop work in the case of imminent danger. See the area safety warden for help.

This permit must be displayed prominently at the worksite for the duration of the job.

## EH&S Concern Resolution

### Jefferson Lab's ESH&Q Concern Resolution System

- *Who can initiate a concern?*

Anyone, including a safety warden.

- *Where does the concern go?*

As far as necessary to get action, but it's a sign of a healthy system when problems get corrected at the lowest level possible.

- *Who decides that the problem is fixed?*

Everyone who has been involved, but especially the person who initiated the concern. A Concern Report cannot be closed if the Safety Warden does not concur with the proposed corrective action.

**CALL 269-7000 To report a concern**

<http://www.jlab.org/ehs/manual/PDF/2310EHSCConcernRes.pdf>

## Safety wardens have an important role in the concern-resolution process:

- Often the safety warden is the first point of contact.
- They direct people to the ESH&Q bulletin boards where the **ESH&Q Concern Report** forms are kept.
- They assist in filling it out.
- They forward the Report to the
  - *responsible managers*
  - *division ESH&Q officer*
  - *ESH&Q reporting manager\**

\* Appendix 2210-R1 Current ES&H Staff Assignments:  
<http://www.jlab.org/ehs/manual/PDF/2210R1EHStaff.pdf>

The safety warden does not have to agree or disagree with the concern.

But, if you do agree there is a problem, and ***you can get action*** using your safety warden role, then ***offer that option*** to the person with the concern.

***A Concern Report suggests that normal ownership of ESH&Q may not be working.***

## Accidents & Injuries



# Accidents and Injuries – Response Actions

(Manual Chapter 5200)

- Get help for injured persons: **911 & 4444**, then 7539 (Medical Services)
- Don't endanger yourself
- Help make the area safe
- Provide first aid and CPR if you are qualified and willing



*Jefferson Lab*

***If you have just been injured on the job...***

***There are a few very important things you need to know.***

**Emergency phone numbers:**

Newport News Fire and Rescue:	911 (or 9-911)
JLab Medical Services:	269-7539
Nurses' pager:	584-7539
On-site emergency response:	269-4444

***Please take one of these pamphlets and read it.***

08/20/02

<http://www.jlab.org/ehs/manual/PDF/6810MedicalEmergencies.pdf>

## Summary of Emergency Procedures for JLab Reception Desks

**Important information about all emergency calls (911 or 9-911)**

Dialing 911 or 9-911 will connect you to the City of Newport News Emergency Dispatch Center. The dispatcher is able to see the location of the caller: JLab address, building number, and room. Either number also automatically alerts the main guard station, Medical Services, and other key offices on site that an emergency call was made and its location.

- JLab's telephone system will transmit a 9-911 call faster than a 911 call.
- When calling 911 or 9-911, stay on the phone until the dispatcher tells you it is OK to hang up.
- 4444 contacts the accelerator gate guard who will mobilize on-site emergency response.

**RESPONSE**

SPECIFIC EVENT	ACTION 1	ACTION 2	ACTION 3
Serious injury or acute illness	Call 9-911	Call 4444	Call Medical Services (7539)



**While awaiting emergency responders...**

- Ensure area is safe before entering (air, electricity, chemicals, heat, etc.).
- Do not move victim unless life is endangered at present location.
- Ensure someone stays with victim.
- Try to locate willing and trained employee(s) to give first aid/CPR.
- Ask someone to flag down the ambulance and someone else to clear a path for medical responders from the building door to the victim.

**Direct minor injuries to Medical Services (VARC Rm. 22) during regular business hours.**  
All major buildings on site have one or more first-aid cabinets. There are pamphlets at the cabinets that explain what to do in the event of an on-site injury – including those that occur after normal work hours.

**Refer requests for information about injured/ill person to Medical Services (7539) or Human Resources (7502).**

**Additional information sources:**

- Information about on-site medical emergencies: <http://www.jlab.org/ehs/manual/PDF/6810MedicalEmerg.pdf>
- Seeking care and follow-up of work-related injuries: <http://www.jlab.org/ehs/manual/PDF/6830MedMgmtOccInj.pdf>
- List of physicians for treatment of work injuries: <http://www.jlab.org/ehs/manual/PDF/6830R1PhysRefPnl.pdf>
- Accident investigation: <http://www.jlab.org/ehs/manual/PDF/5200IncidInjuryInvest.pdf>

SMOKE	Sound alarm using the nearest pull box		Evacuate to muster point (Refer to evacuation diagram for location)	Call 9-911 and 4444 from safe location. Await all-clear notification from Building Manager or Plant Engineering before re-entering the building.
Fire Alarm	Evacuate to muster point (Refer to fire evacuation diagram on the wall for muster-point location)		Call 9-911 from a safe location	Be alert to fire & smoke as you evacuate – especially as you open closed doors. Use alternate route if path is blocked by fire or heavy smoke.
Trouble indication/audible alert in fire alarm panel	Follow any specific procedures POSTED on the cover of the fire alarm panel; otherwise call Fire Protection Engineer (7674) or Plant Engineering (7400) to report the condition. For more information about fire alarm systems: <a href="http://www.jlab.org/ehs/manual/PDF/6930FireProtSystems.pdf">http://www.jlab.org/ehs/manual/PDF/6930FireProtSystems.pdf</a> For more information about fire evacuation: <a href="http://www.jlab.org/ehs/manual/PDF/6920T1BuildEvacuaPro.pdf">http://www.jlab.org/ehs/manual/PDF/6920T1BuildEvacuaPro.pdf</a>			
Severe weather (via weather alert radio or other official source)	Pass the word (Especially to the building manager)		Evacuate or take cover per building procedures. For more information on severe weather: <a href="http://www.jlab.org/intralab/emergency/hurricane/severe.html">http://www.jlab.org/intralab/emergency/hurricane/severe.html</a>	
Bomb threat	Refer to the yellow Bomb Threat Card for instructions on handling the call.		Call JLab Security: 4444	Evacuate/take cover
CHEMICAL SPILL	Evacuate (Use fire alarm pull-box if needed to alert all occupants promptly)		Call 4444	Send evacuees upwind. Await for trained and equipped staff to control and contain the spill

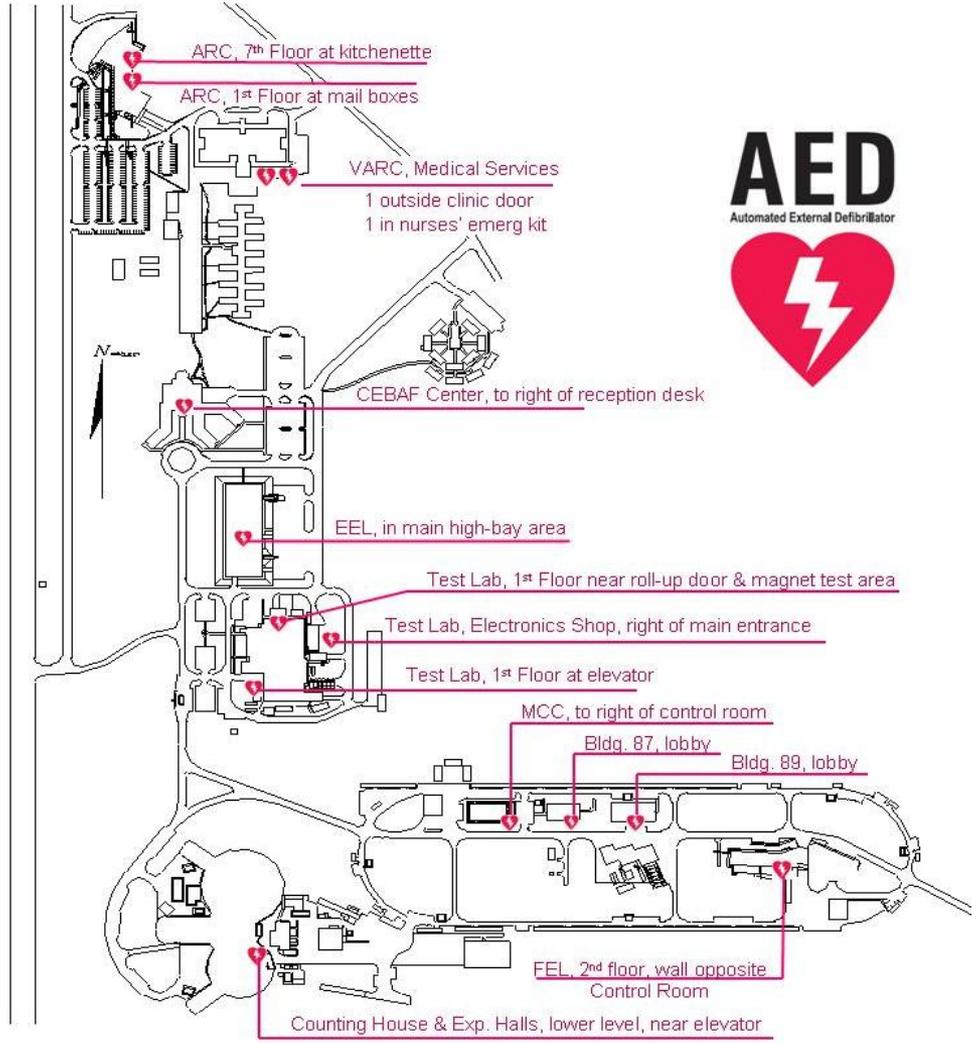
Rev. 10/7/04

SPECIFIC EVENT	ACTION 1	ACTION 2	ACTION 3
	Call 4444	Await trained and equipped staff to control and contain the spill (Usually this will be JLab Chemical Assistance Team)	
Evacuate		Call 4444	Call Crew Chief (7050) Call Building Manager ( )
Evacuate		Call 4444	Call Crew Chief (7050) Call Building Manager ( )
Evacuate ♦ Use fire alarm pull-box if needed to alert all occupants promptly. ♦ Ask for volunteer(s) to direct occupants away from any doors that lead toward the leak if location is known.		Call Facilities Management: 7400 Call 4444	Call Crew Chief (7050) Call Building Manager ( )

**Current Building Manager list:** [http://www.jlab.org/intralab/emergency/personnel/bldg\\_mgr.html](http://www.jlab.org/intralab/emergency/personnel/bldg_mgr.html)

Other requests to Lab	Call JLab Security: 5822 Ensure your personal safety! If you feel endangered, leave the reception area to call for help.		Call Facilities Management: 7400
Abusive	Activate the duress (silent alarm) push button. More information on site access and security: <a href="http://www.jlab.org/intralab/security/">http://www.jlab.org/intralab/security/</a>		Call Facilities Management: 7400
Mobile	Ask if anyone is injured. If so, call 9-911 and 4444	Call JLab Security: 4444	Call Facilities Management: 7400
Personal JLab staff			Call Human Resources: 7502
Requests to personnel	Explain that you cannot provide any information about JLab staff members, and ask the requestor to wait to speak with an HR representative.		
Summons, documents			Refer caller to Computer Center Help Desk: 7155
Words or access	Do not provide any information about computer accounts, passwords, user names, and so forth. More information on JLab computer policies: <a href="http://cc.jlab.org/policies/">http://cc.jlab.org/policies/</a>		
News information	Refer the requestor to the JLab Public Information Office: 7689 For more information on public information and communication: <a href="http://www.jlab.org/div_dept/admin/HR/Admin_Manual/100/102.01.html">http://www.jlab.org/div_dept/admin/HR/Admin_Manual/100/102.01.html</a>		
If you feel unsafe	Activate the Duress Button Security will come to your location immediately. See the separate Reception Desk Duress Procedures card for details on how this process works.		

### Locations of Automatic External Defibrillators (AED) on Site

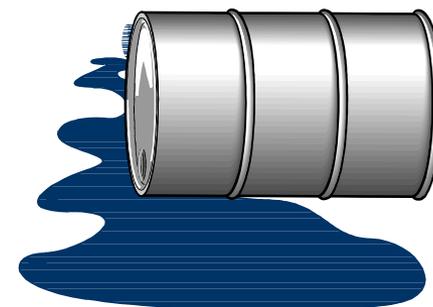
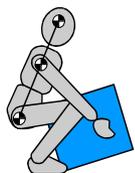


[http://www.jlab.org/intralab/emergency/aed\\_locations.pdf](http://www.jlab.org/intralab/emergency/aed_locations.pdf)

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## Depending on the situation, there may be other actions that are called for such as:

- Evacuate a building or area
- Notify co-workers
- De-energizing a power source (using PPE per NFPA 70E).
- Contain oil or chemical spills if you have the know-how and equipment.
- Help secure the area and preserve evidence
- Assist supervisors and ESH&Q staff in the investigation as requested



## Safety Warden’s Role in Investigations?

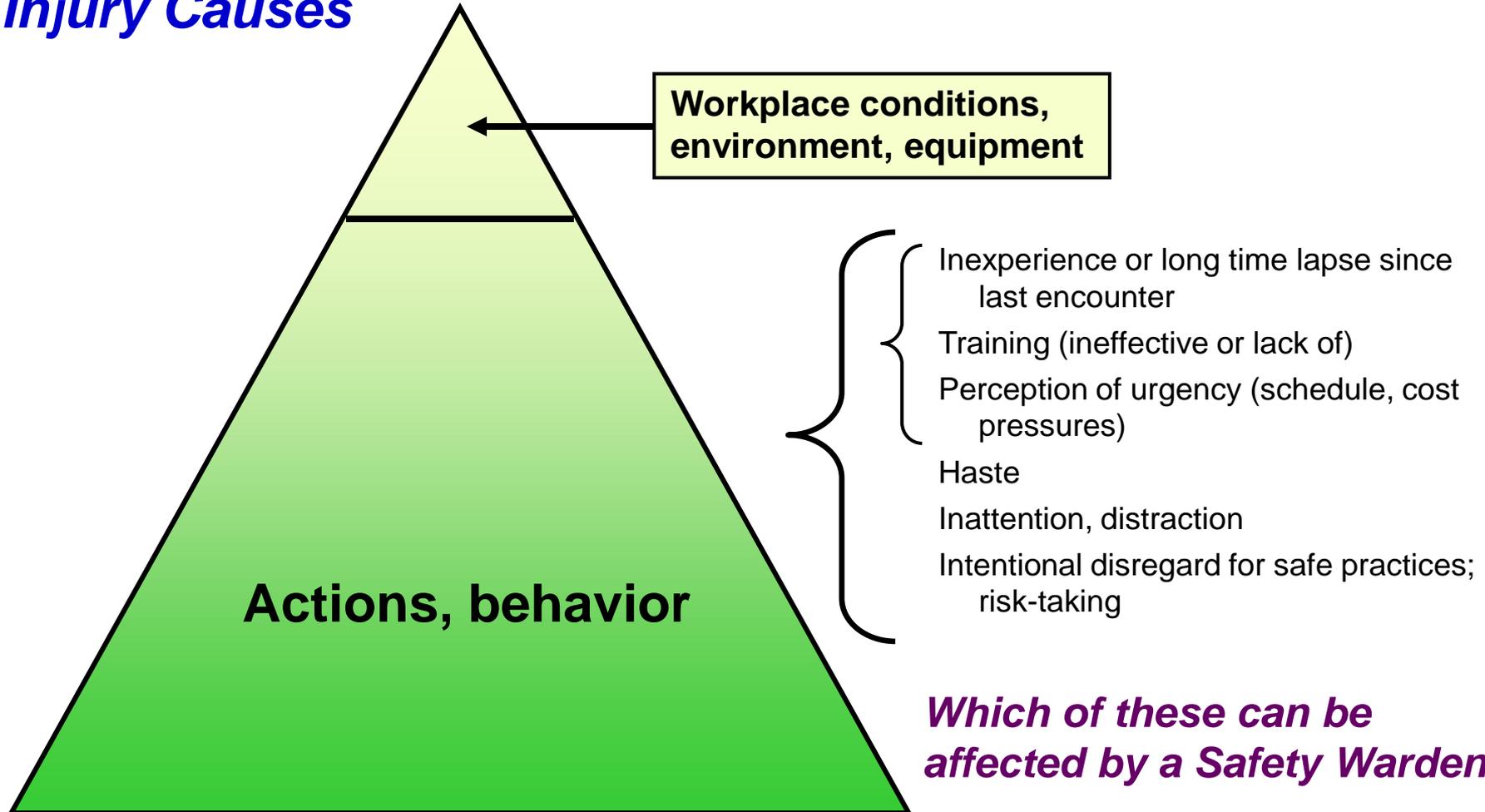
- You are likely to be a convenient source of information early on. If you were present during the event, your observations will be important.
- You may be able to provide info on equipment, systems, material, people.
- You may know who the subject-matter expert (SME) or system owner is.
- You may be asked to assist in preserving or securing the scene.

<ol style="list-style-type: none"> <li>1. In the event of an accident ensure medical treatment</li> <li>2. Secure scene if necessary; call Security #4444 if needed</li> <li>3. Notify DSO who develops ES&amp;H notification and sends to Division Mgr and JLab ESH&amp;Q Rpt Mgr</li> <li>4. Division Mgr reports to Lab Director</li> <li>5. Division Mgr assigns Investigation Team (IT)</li> <li>6. Division Mgr of ESH&amp;Q notifies DOE, if necessary</li> <li>7. Distribution of ES&amp;H preliminary event notification by JLab ESH&amp;Q Rpt Mgr in all-staff e-mail</li> <li>8. IT starts analysis</li> </ol> <p>(Division Mar = COO, CS, AD or Project Mar)</p>	
<p style="text-align: center; font-size: 2em; font-weight: bold; color: white;">SME</p> <ol style="list-style-type: none"> <li>1. IT discusses findings and provides briefing to Division Mgr</li> <li>2. Division Mgr briefs Lab Director</li> <li>3. IT completes Draft 5200-T1 &amp; distributes it to Division Mgr and Lab Director</li> <li>4. IT addresses comments from reviewers &amp; assigns follow-up actions</li> </ol>	<p style="text-align: center; font-size: 2em; font-weight: bold; color: white;">S</p> <ol style="list-style-type: none"> <li>1. IT finalizes 5200-T1 for Division Mgr review</li> <li>2. IT enters follow-up actions into CATS</li> <li>3. IT sends 5200-T1 to ESH&amp;Q Rpt Mgr</li> <li>4. ESH&amp;Q Rpt Mgr posts event update on JLab Insight Page</li> </ol>

## Objectives of any good investigation:

- *Identify all relevant causes*
- *Fix the **cause** not the blame.*
- *Share lessons learned*

## Injury Causes



## Safety Wardens & Workplace ESH&Q Information

### Safety Bulletin Boards

- ***required items:***

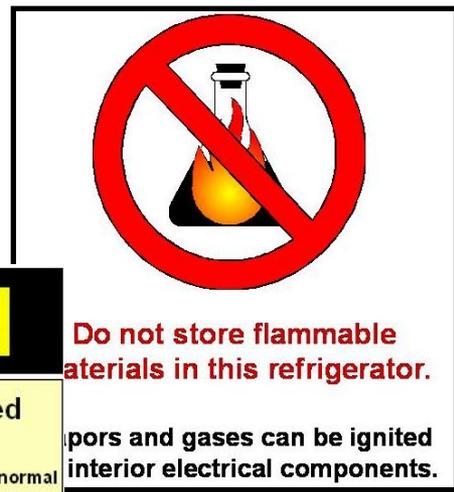
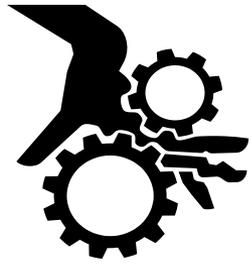
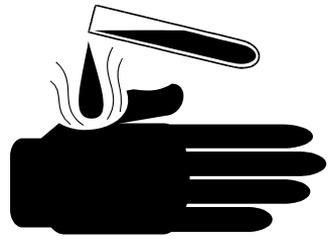
- DOE/OSHA poster
- JLab & DOE Concern-Reporting processes
- Workers Compensation notice
- JLab ESH&Q Policy Statement
- OSHA 300A: summary of prior year injuries (posted during the month of February)

- ***other, optional stuff:***

- |   |                             |
|---|-----------------------------|
| product alerts/recalls  | your photo and phone number |
| work-control documents  | posters                     |
| lessons-learned info.   | inspection reports          |
| fire evac. diagram  |                             |
| special information (e.g. fire-protection system impairments) |                             |

# Safety Wardens commonly ensure other kinds of useful ESH&Q-related information is posted:

- access restrictions
- required ESH&Q training
- required PPE
- location of safety signs, barricade materials, chemical-spill clean-up materials
- interpretation of postings & signs
- lockout/tagout information
- whom to call for particular emergencies
- “owners” of systems and equipment; subject-matter experts



Do not store flammable materials in this refrigerator.  
vapors and gases can be ignited interior electrical components.

**CAUTION**

**Non-Permit-Required Confined Space**

This area has limited egress and is not intended for normal occupancy. Avoid introducing hazards such as:

- oxygen deficiency
- flammable or toxic gases or vapors
- engulfment or entrapment hazards

Any of these will change this area to a *permit-entry confined space*, and special precautions and entrant training are required.

For more information see EH&S Manual, Chapter 6160 or contact: \_\_\_\_\_

Contact the Safety Lab for signs.  
(Jennifer Williams, 7882 or Mary Boggs 7863)

## Facilities Management Work-Request System

### Topics to be covered:

Locating the Work-Request System on Lab's web pages

Secure log in

Selecting type of work or service requested

Entering details of work and its location

ES&H elements:

- Safety training requirements for access into the work area
- Identifying any special hazards
- Linking a work request to CATS

Prioritization of requests

Charge codes

# Using the Corrective Action Tracking System (CATS)



## Topics to be covered:

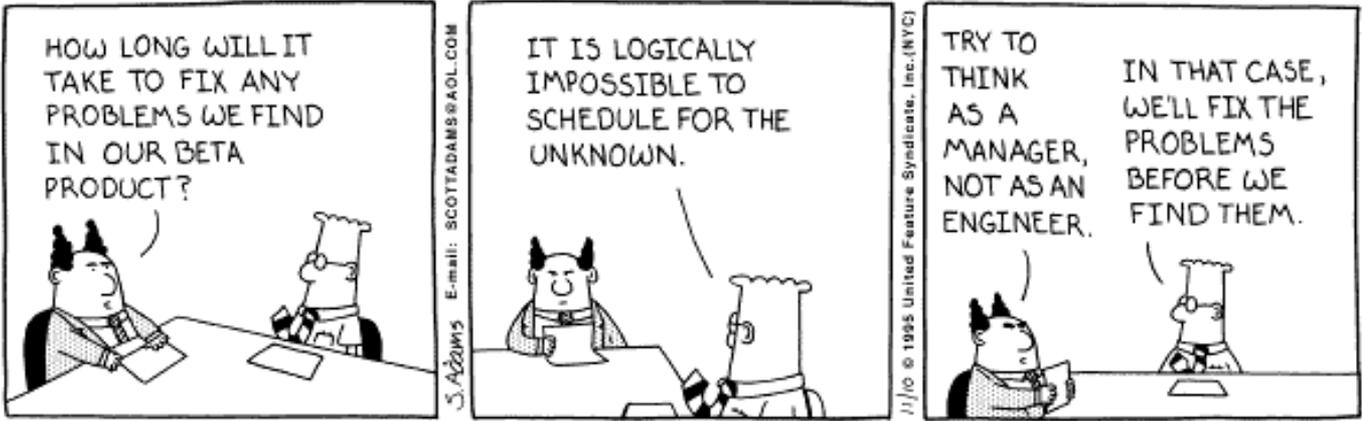
- Locating CATS on Lab web pages
- Secure log-in
- Entering a new action item
  - Required information
  - Significance level
  - Target close date
  - Making items “closable”
- Entering status updates
- Closing items (how and by whom)
- Search feature
- Modifying close-by dates (how and by whom)
- Links from CATS page

**Call Bob Doane (6380) For assistance with CATS.**

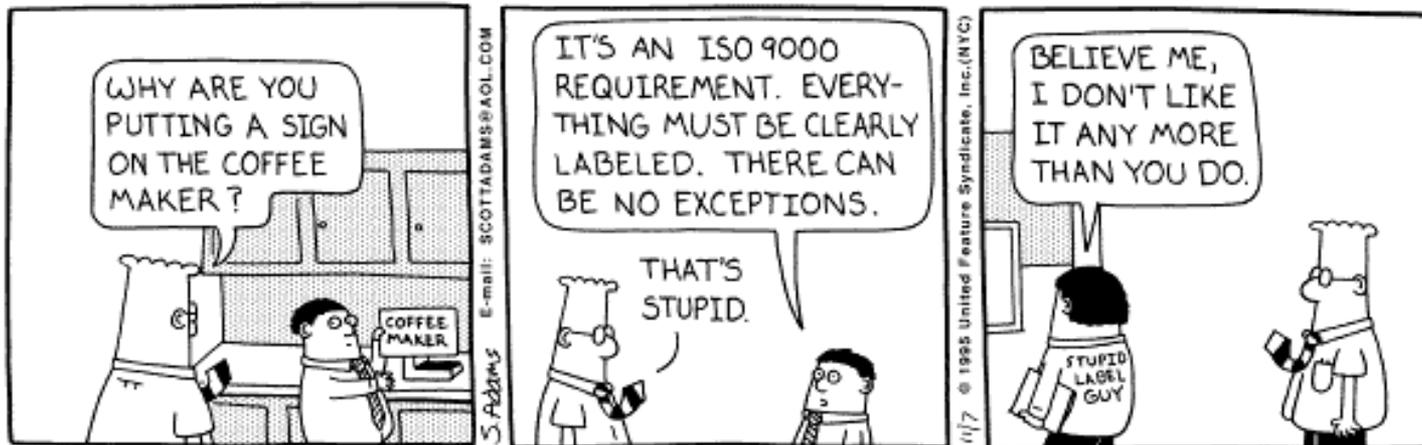
## Part 2

# *Inspections, Common ESH&Q Problems, & Assessing the Hazards*





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## “Iceberg Principle”

Accident Cost Ratio

### Direct Costs:

- medical treatment
- administrative costs
- salary

### Indirect Costs (5 to 10<sup>x</sup> direct costs):

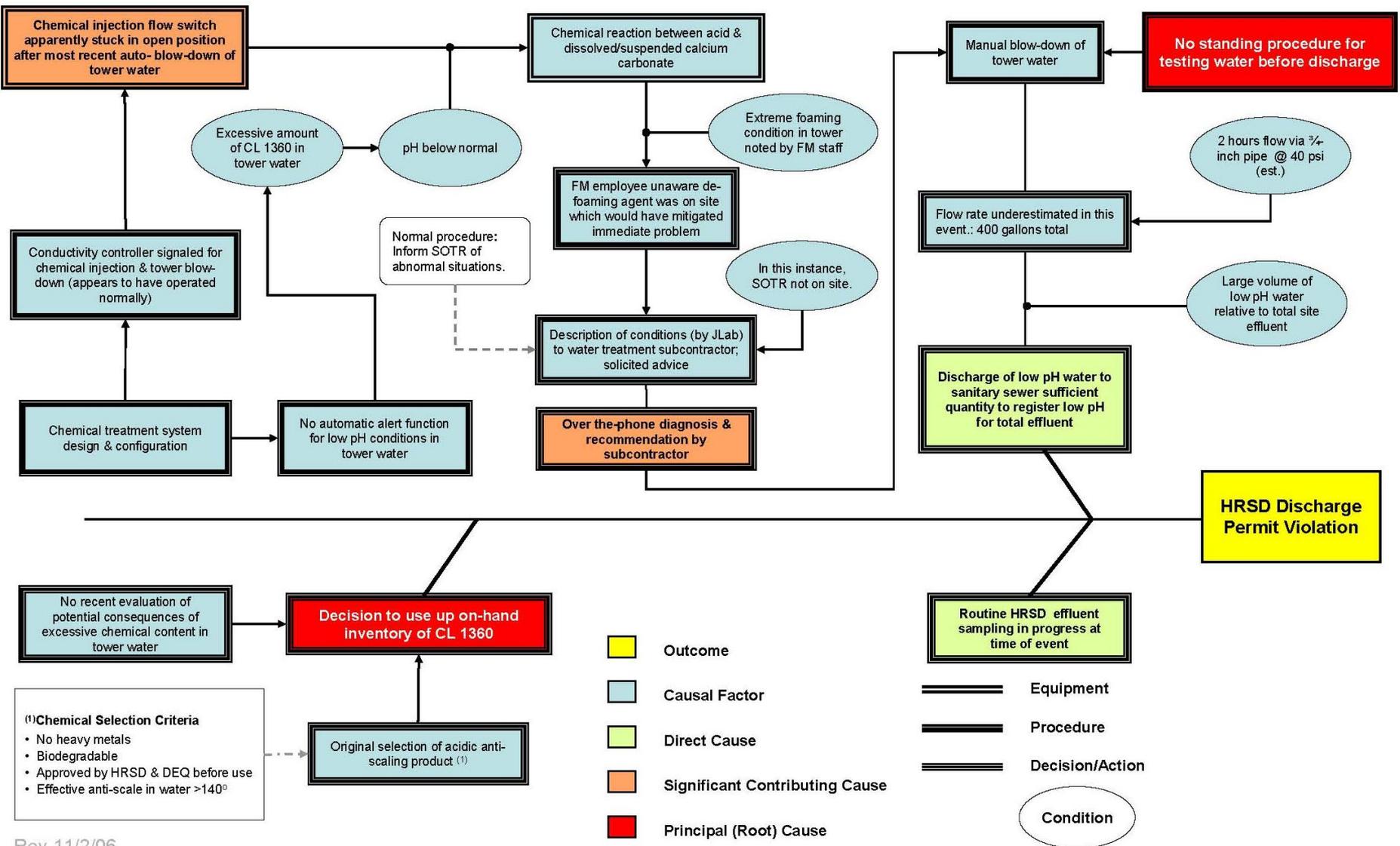
- loss of production by the injured employee during absence
- schedule effects within the work group and on its customers
- productivity impacts from physical-activity restrictions during recuperation
- leadership penalties if it's the supervisor who's injured
- overtime costs to maintain group output
- psychological impact on co-workers
- costs of temporary labor to back-fill lost employee, including start-up training, medical evaluation, dosimetry, etc.
- management attention, possible cessation or modification of an activity
- repairs to damaged equipment
- consumption of leave time to supplement the fixed maximum disability payment



***JLab's safety performance is a multiplier in our overall contract performance measures.***

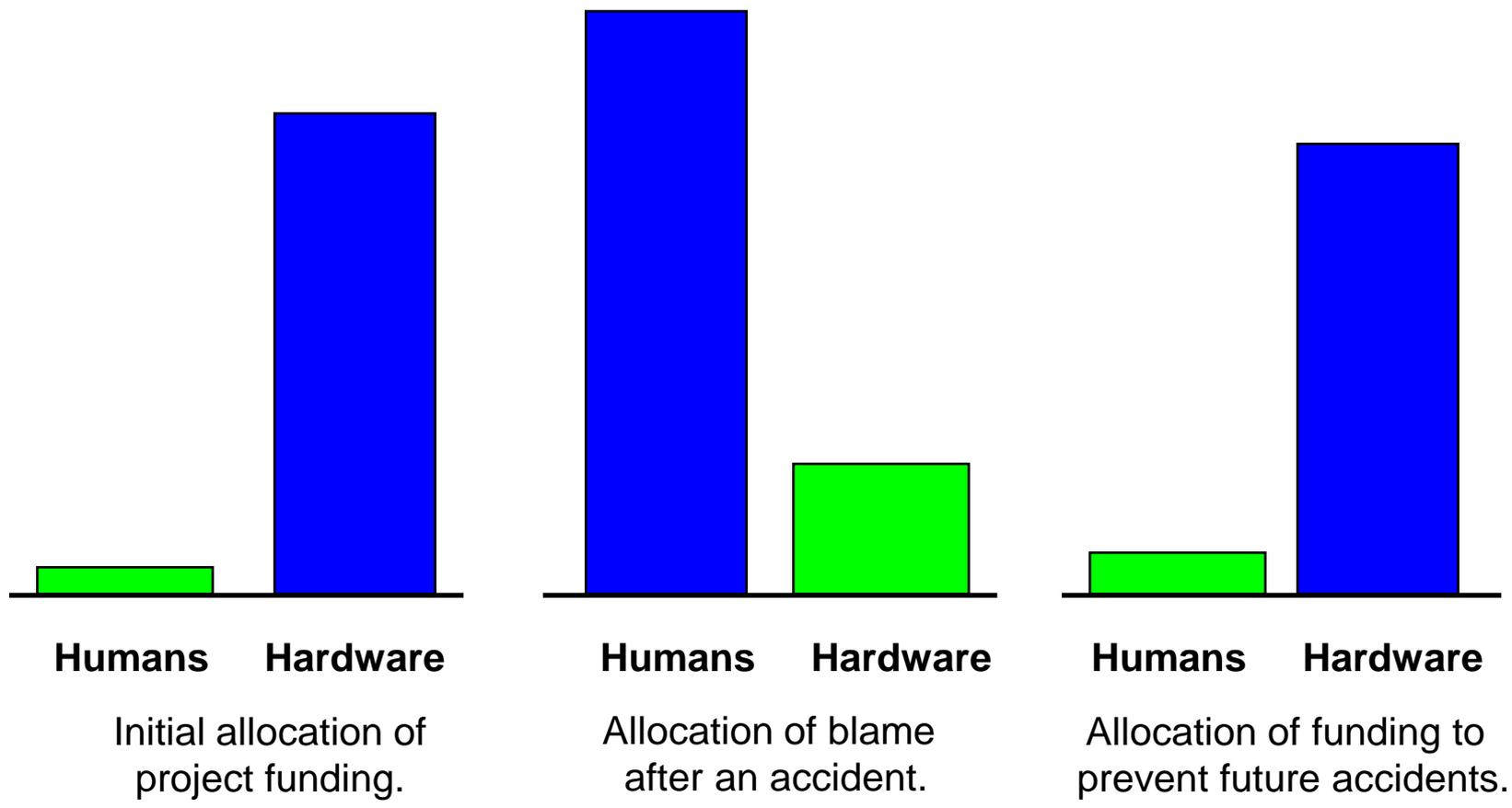
TRC Performance Level	DART Performance Level	Adjectival Rating	% of Assigned Points
≤ 1.0	≤ 0.4	Outstanding	90 to 100
1.0 to ≤ 1.3	0.4 to ≤ 0.8	Excellent	80 to 90
1.3 to ≤ 1.8	0.8 to ≤ 1.0	Good	70 to 80
1.8 to ≤ 2.4	1.0 to ≤ 1.2	Marginal	60 to 70
2.4 to ≤ 3.0	1.2 to ≤ 1.6	Unsatisfactory (poor)	50 to 60
> 3.0	> 1.6	Unsatisfactory (failing)	0 to ≤ 50

Causal Analysis of 9/26/06 Process Cooling Water Discharge & Resultant HRSD Permit Violation



Rev 11/2/06

# Paradox of Bucks and Blame



## Objectives of a good investigation:

- *Identify all relevant causes*
- *Fix cause not the blame.*
- *Share lessons learned*

### ***The Law of Probable Dispersion:***

***“Whatever hits the fan will be unevenly distributed.”***  
***(also known as the “How-Come-It-All-Landed-On-Me Principle”)***

If it's an **inter-divisional issue**, it is the job of the respective **ESH&Q officers** to ensure it's resolved.

If that doesn't work, it goes to the **Director's Safety Council** for action.

## The bottom line...

**Problems must get fixed.** *Safety wardens have the means (and encouragement) to elevate a problem to any level necessary to get action.*