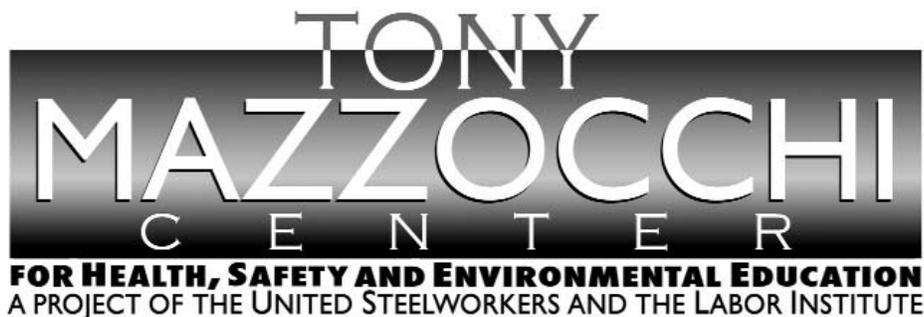


Pedestrian Door Opens into High Traffic Area

Purpose

To share “lessons learned” gained from incident investigations through a small group discussion method format.

To understand “lessons learned” through a Systems of Safety viewpoint.



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Lessons Learned

Volume 06 Issue 22

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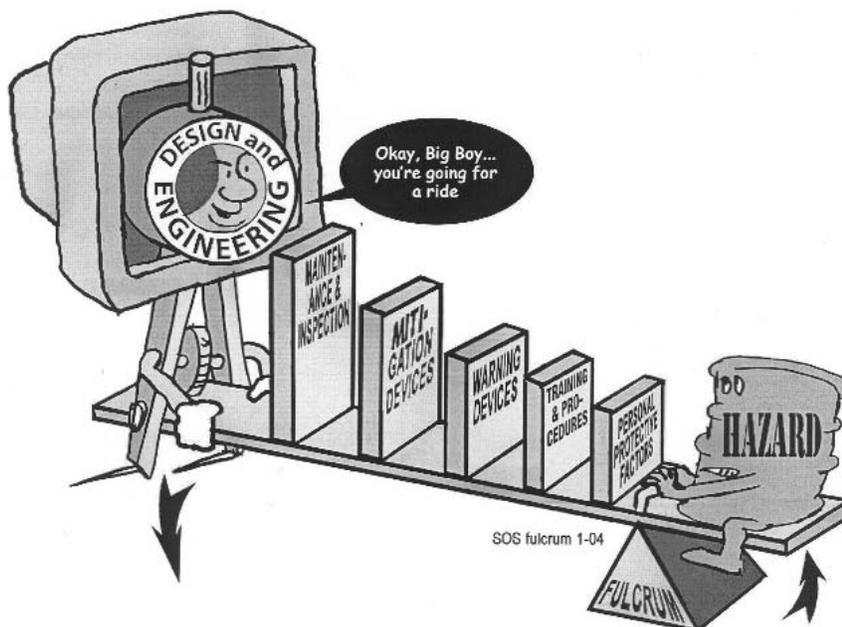
Background Information

Before beginning this Lessons Learned, please review this and the next page which contain information that will introduce the concepts of Lessons Learned and Systems of Safety.

Creating a safe and healthy workplace requires a never ending search for hazards that sometimes are not obvious to us. These hazards exist in every workplace and can be found by using various methods. Lessons Learned are just as the name suggests: learning from incidents to prevent the same or similar incidents from happening again.

Systems Are Not Created Equal: Not equal in protection and not equal in prevention.

Using our Systems Focus to uncover system flaws or root causes is only one part of controlling hazards. We also need to look at the systems involved to decide on the best way to deal with the problem. The most effective way to control a hazard is close to its source. The least effective is usually at the level of the person being exposed. The system of safety in which the flaw is identified is not necessarily the system in which you would attempt to correct the flaw.



Major Safety System	Design & Engineering	Maintenance & Inspection	Mitigation Devices	Warning Devices	Training & Procedures	Personal Protective Factors
Level of Prevention	Highest—the first line of defense		Middle—the second line of defense			Lowest—the last line of defense
Effectiveness	Most Effective		←————→			Least Effective
Goal	To eliminate hazards	To further minimize and control hazards				To protect when higher level systems fail
EXAMPLES OF SAFETY SUB-SYSTEMS**	Technical	Inspection and Testing	Enclosures, Barriers Dikes and Containment	Monitors	Operating Manuals and Procedures	Personal Decision-making and Actions HF
	Design and Engineering of Equipment, Processes and Software	Maintenance	Relief and Check Valves	Process Alarms	Process Safety Information	Personal Protective Equipment and Devices HF
	Management of Change (MOC)**	Quality Control	Shutdown and Isolation Devices	Facility Alarms	Process, Job and Other Types of Hazard Assessment and Analysis	Stop Work Authority
	Chemical Selection and Substitution	Turnarounds and Overhauls	Fire and Chemical Suppression Devices	Community Alarms	Permit Programs	
	Safe Siting	Mechanical Integrity	Machine Guarding	Emergency Notification Systems	Emergency Preparedness and Response Training	
	Work Environment HF				Refresher Training	
	Organizational (must address a root cause)				Information Resources	
	Staffing HF				Communications	
	Skills and Qualifications HF				Investigations and Lessons Learned	
	Management of Personnel Change (MOPC)				Maintenance Procedures	
	Work Organization and Scheduling HF				Pre-Startup Safety Review	
	Work Load					
	Allocation of Resources					
	Buddy System					
	Codes, Standards, and Policies**					

HF - Indicates that this sub-system is often included in a category called Human Factors.
 * There may be additional subsystems that are not included in this chart. Also, in the workplace many subsystems are interrelated. It may not always be clear that an issue belongs to one subsystem rather than another.
 ** The Codes, Standards and Policies and Management of Change sub-systems listed here are related to Design and Engineering. These subsystems may also be relevant to other systems; for example, Mitigation Devices. When these sub-systems relate to systems other than Design and Engineering, they should be considered as part of those other system, not Design and Engineering.

Revised October 2006



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Lessons Learned Statement

A pedestrian door located at the loading dock area allows people to enter the warehouse in the middle of fork truck operations. Barricades and forklift loads limit visibility and provide an invitation to disaster as machine and man collide.

Taking immediate action to redesign the work area as a result of the reported near-misses provides maximum prevention for the future in the **Design and Engineering System of Safety** approach. Moving the door to provide a safe entry and walkway to the most frequent destinations would eliminate the need for other **Warning Devices** and **Mitigation** efforts.

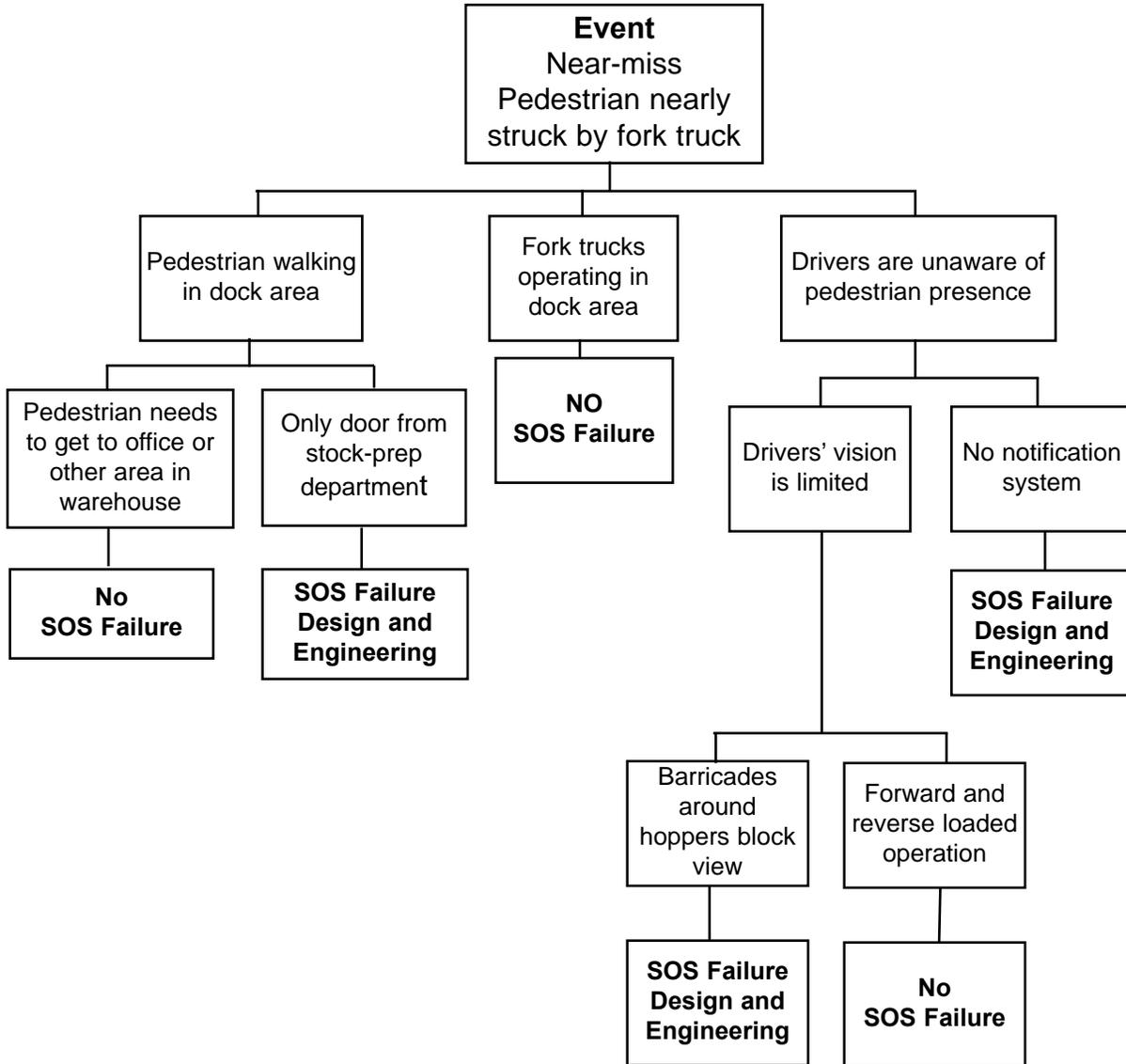
Until the door can be relocated, audio/visual **Warning Devices** should be installed to alert the fork truck drivers of pedestrian presence. Mirrors and pedestrian warning signs and mechanisms could also be utilized until the walkway is relocated.

Discussion

Multiple near-misses have been recorded as a result of a pedestrian door being located in a high fork truck traffic area near the loading docks in the warehouse. People entering the warehouse must walk directly behind the docks as they proceed to the office area at the other end of the warehouse. Visibility is hindered by barricades that surround hoppers on the dock and fork truck drivers have no way of knowing when pedestrians have entered the area. The docks are constantly in use during the day shift and this is the only access door from the stock-prep department.

Analysis

The Logic Tree is a pictorial representation of a logical process that maps an incident from its occurrence, “the event,” to facts of the incident and the incident’s root causes.



Recommended Actions

1. Relocate the door to reroute the pedestrian walkway away from the fork truck traffic area.
2. Install a wire baler that would not require a barricade around it; thereby increasing the fork lift drivers' visibility of the area.
3. Install an audio/visual device that would activate when the door is opened.
4. Install mirrors to allow fork truck drivers to see around obstructions.
5. Install gates that would warn pedestrians to be aware of fork truck operations.

Education Exercise

Working in your groups and using the Lessons Learned Statement, Discussion, Analysis and Recommended Actions, answer the two questions below. Your facilitator will give each group an opportunity to share answers with the large group.

1. Give examples of ways to apply the Lessons Learned Statement at your workplace.

2. Complete the chart below by:

- Putting an “X” beside the recommended actions you think your employer would implement at your workplace.
- Putting an “X” beside the recommended actions you think should be implemented at your workplace.
- Prepare to share with the group the reasons for your answers.

Employer	Recommended Actions	You
	1. Relocate the door to reroute the pedestrian walkway away from the fork truck traffic area.	
	2. Install a wire baler that would not require a barricade around it; thereby increasing the fork lift drivers' visibility of the area.	
	3. Install an audio/visual device that would activate when the door is opened.	
	4. Install mirrors to allow fork truck drivers to see around obstructions.	
	5. Install gates that would warn pedestrians to be aware of fork truck operations.	

EVALUATION

Lessons Learned: Pedestrian Door Opens into High Traffic Area

Please answer the two questions below:

1. How important is this lessons learned to you and your workplace? (Circle one.) Rate on a scale of 1 to 5, with 5 being the most important.

1	2	3	4	5
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2. What suggestions would you make to improve this Lessons Learned?

End of Training Trainer's Instructions

Please complete the information below.

Trainer's Name _____
(Please Print)

Date of training: _____

No. of Participants: Total _____ Hourly _____ Management _____

Location of Training: _____

USW Local # _____

Send this page **plus the Education Exercise and Evaluation for each participant** to:

**Doug Stephens
United Steelworkers International Union
3340 Perimeter Hill Drive
Nashville TN 37211**

Thank you for facilitating the sharing of this
Lesson Learned with your coworkers.

