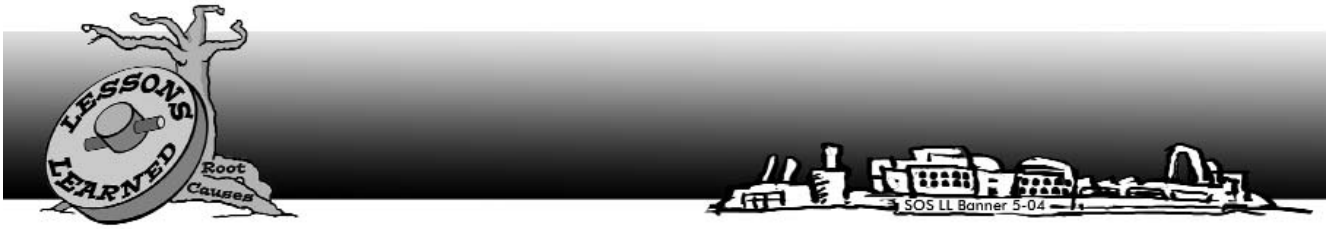

Worker's Nose Fractured

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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A PROJECT OF THE UNITED STEELWORKERS AND THE LABOR INSTITUTE

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Lessons Learned

Volume 07, Issue 16

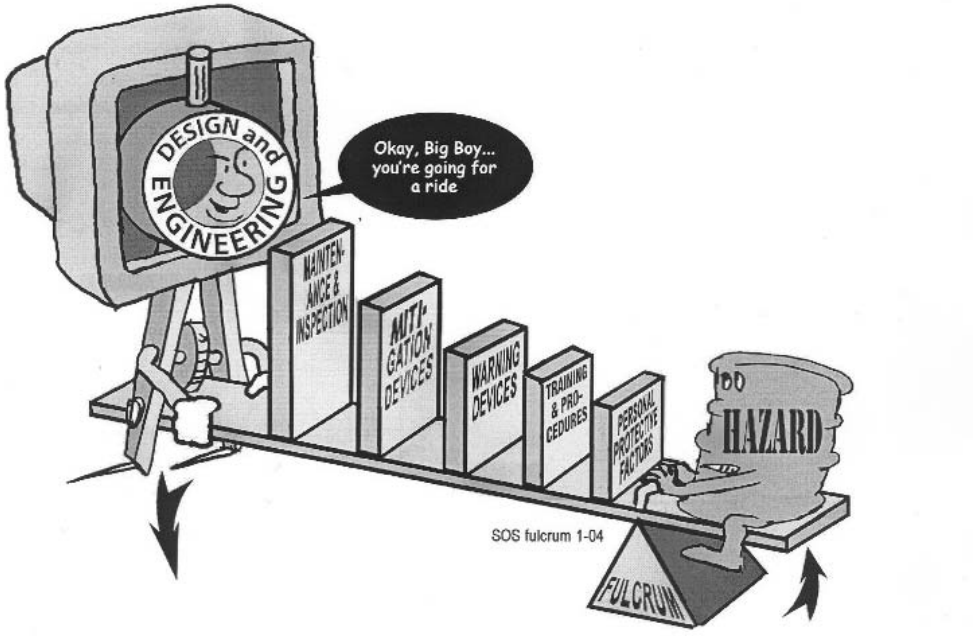
Background Information

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** Design and Engineering of Equipment, Processes and Software Management of Change (MOC)** Chemical Selection and Substitution Safe Siting Work Environment HF **Organizational *(must address a root cause)*** Staffing HF Skills and Qualifications HF Management of Personnel Change (MOPC) Work Organization and Scheduling HF Work Load Allocation of Resources Buddy System Codes, Standards, and Policies**	Inspection and Testing Maintenance Quality Control Turnarounds and Overhauls Mechanical Integrity	Enclosures, Barriers Dikes and Containment Relief and Check Valves Shutdown and Isolation Devices Fire and Chemical Suppression Devices Machine Guarding	Monitors Process Alarms Facility Alarms Community Alarms Emergency Notification Systems	Operating Manuals and Procedures Process Safety Information Process, Job and Other Types of Hazard Assessment and Analysis Permit Programs Emergency Preparedness and Response Training Refresher Training Information Resources Communications Investigations and Lessons Learned Maintenance Procedures Pre-Startup Safety Review	Personal Decision-making and Actions HF Personal Protective Equipment and Devices HF Stop Work Authority

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 sybsystem 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.

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Title: Worker's Nose Fractured

Identifier: Volume 07, Issue 16

Date Issued: January 31, 2007

Lessons Learned Statement:
In a work environment where heavy lifting and lowering is required, ***Systems of Safety*** have not been recognized or implemented to assure a safe approach to the tasks at hand.

By using the **Training and Procedures** approach, training on the importance of using proper equipment and the need for clear and precise communication could have eliminated the hazards associated with heavy loads. Also, retraining of individuals doing the task, would have given more insight on using the right tools for the job.

By utilizing the **Maintenance and Inspection** ***System of Safety***, the cranes could have been properly maintained to ensure the availability and integrity of the before mentioned tool to complete the task at hand.

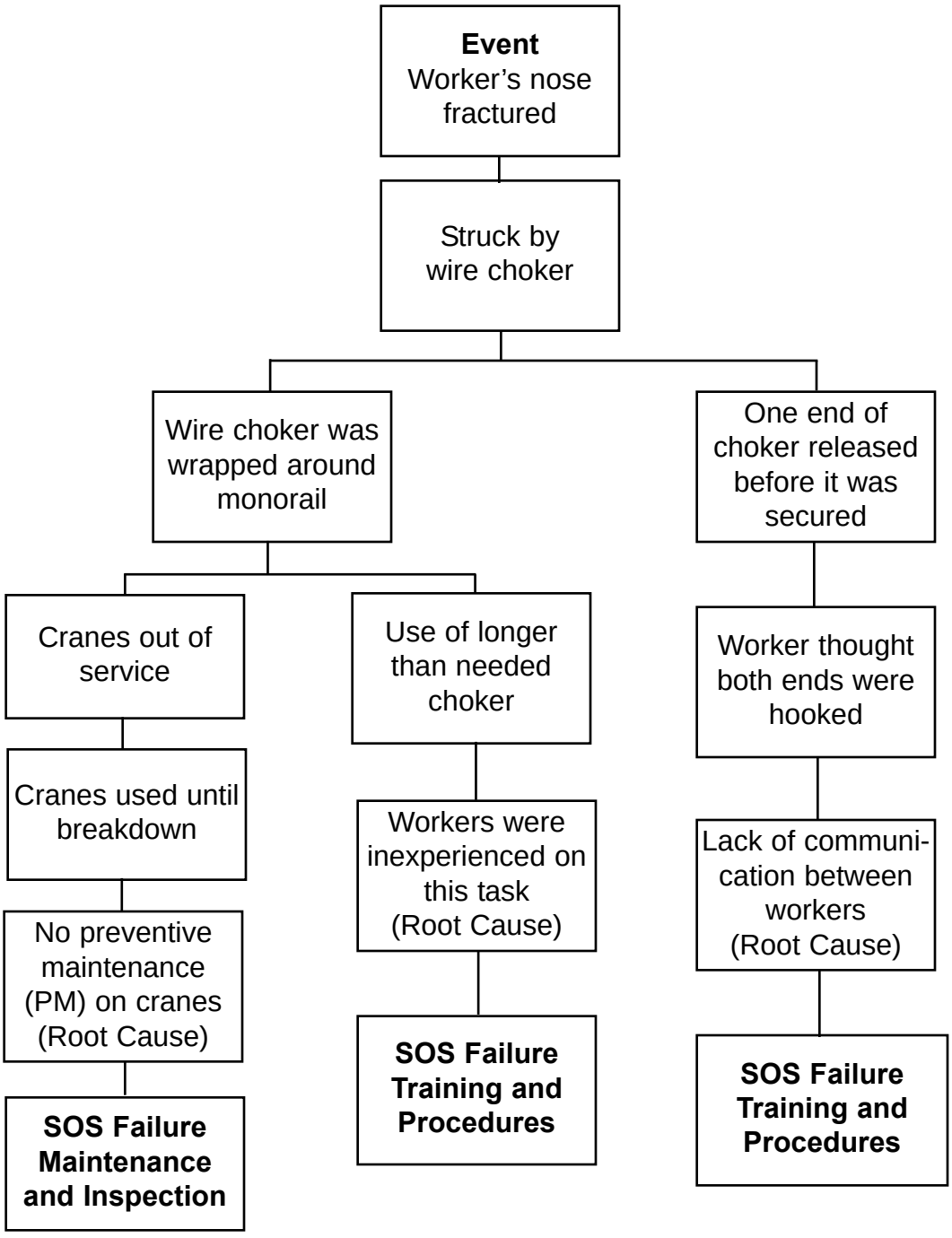
Discussion:

Two mechanics were preparing to lower parts to the floor and remove them. When doing this, a monorail is used to aid in the lowering and raising of heavy parts. This monorail is made of a two-inch diameter pipe that is 6-8 feet long, has a curve of about 45 degrees and is bolted in place. When the parts are being removed, they are attached to the pulley glide that is hanging on the monorail which can be rolled out of the way. Usually a crane is used for this type of work; but it was out of service at this time. Because of this scenario, they proceeded to secure a chain fall to the monorail by using a wire choker; wrapping it around the monorail and attaching each end of the choker to the chain fall. Due to its excessive length, the mechanics wrapped the wire choker around the monorail, about three turns. Mechanic #1 attached his end of the choker to the chain fall. Mechanic #2 put the eyelet of his end of the choker on the chain fall hook but let go before Mechanic #1 had released the safety latch to secure both ends to the chain fall hook. The spring tension on the wire choker uncoiled the loose end of the choker rapidly hitting Mechanic #1 on the nose; resulting in a fracture to the nose.

Note: Due to recent moves within the Maintenance Department, the two mechanics had not performed this task for several years

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. Maintain usable cranes.
2. If crane is not available, use cloth choker or proper length wire choker.
3. Ensure maintenance personnel performing these or similar tasks have applicable hoisting/rigging and safety training.
4. Ensure work package is accurate for scope of work considering the availability of a crane.

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. Of the examples you generated from Question 1, which will you pursue in your workplace? (**Note:** When we say something "you" may pursue, we mean a joint labor-management activity or a union activity rather than an activity carried out by you as an individual.**)**

EVALUATION

Lessons Learned: Worker's Nose Fractured

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

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 and the Sign-in sheet** 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.

Sign-In Sheet

Name of Class_____ Date of Class_____

Instructors: _____

Please Check One* H	M	Print Name	Signature

***H = Hourly Worker**
M = Management or Salaried Worker