# *Department of Labor, Licensing and Regulation*

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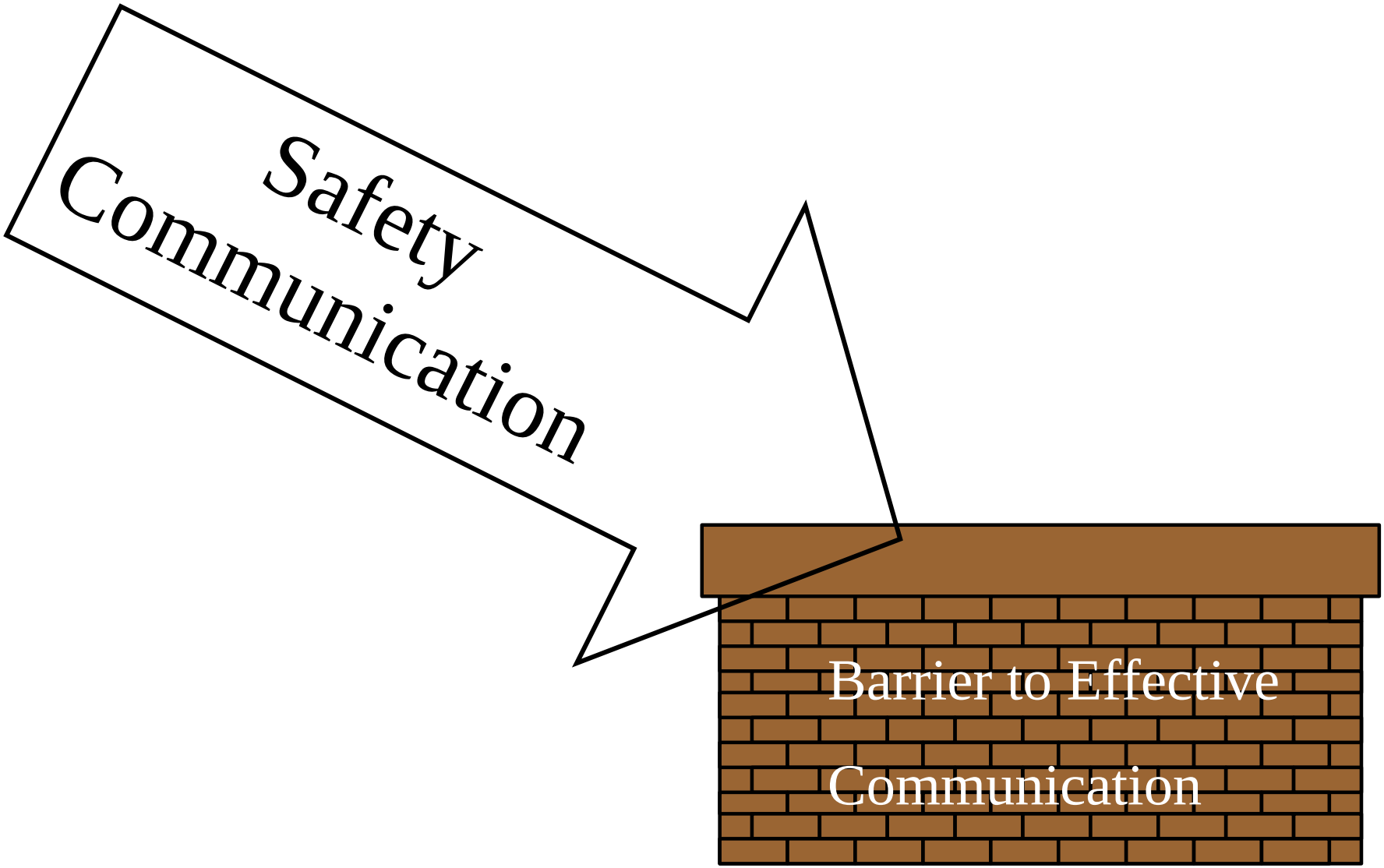
# Safety, Subcontracting and Your Hispanic Workforce

# COMMUNICATING SAFETY:
# *THE KEY TO*
# *PREVENTING FATALITIES*

**Craig D. Lowry, CSP**
Safety Program Manager
Division of Labor and Industry


Safety
Communication
Barrier to Effective
Communication

# BARRIERS

Use of Jargon

Lack of Clarity

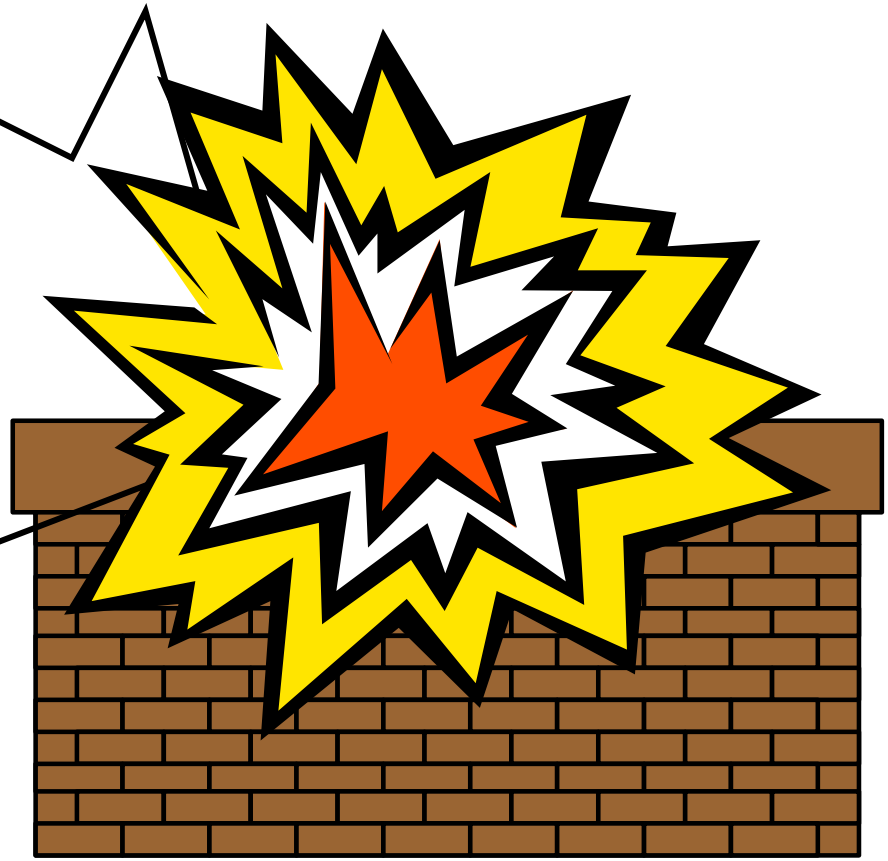
Filtering

Poor Timing

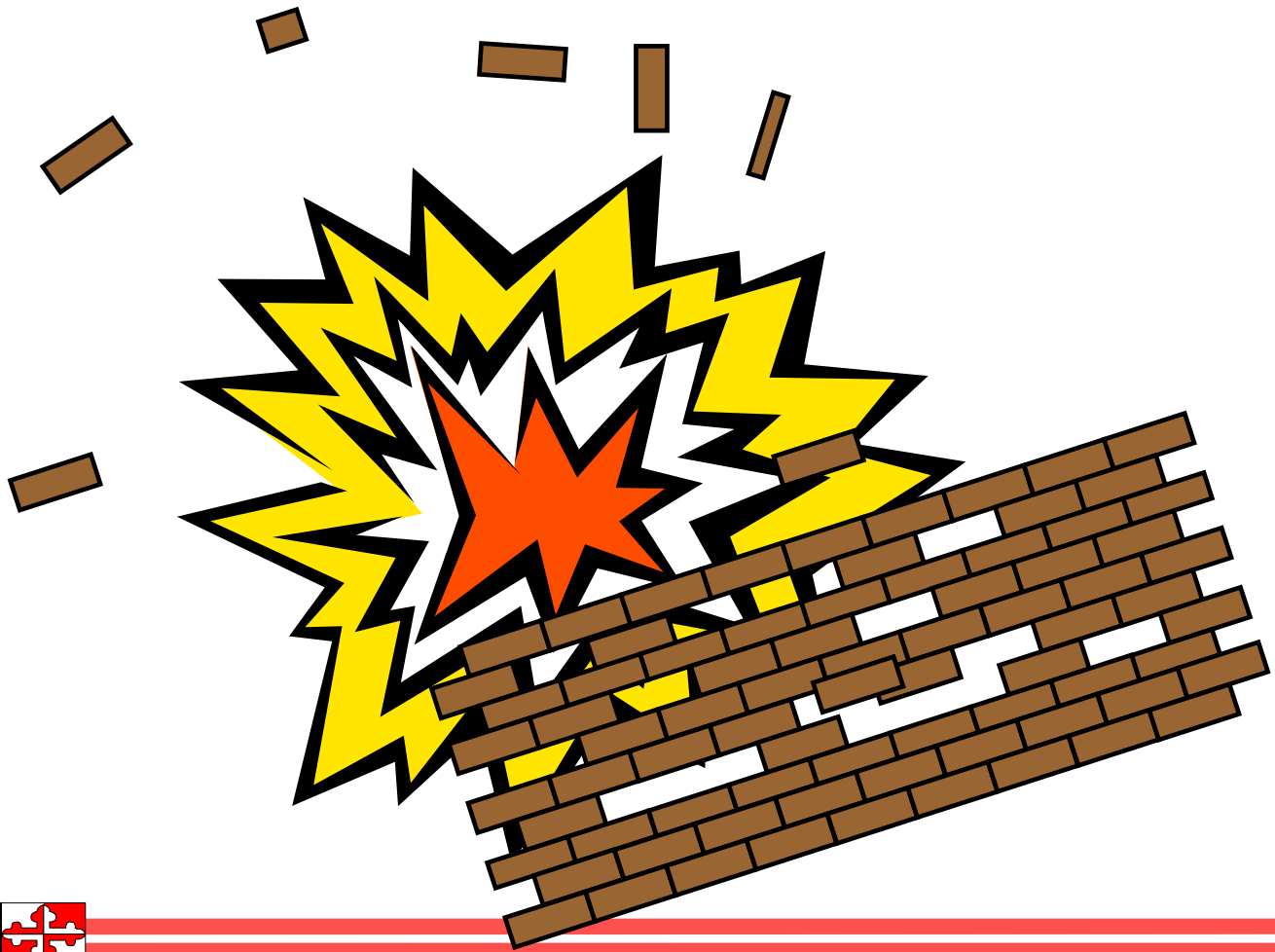
Conflict

Different Status

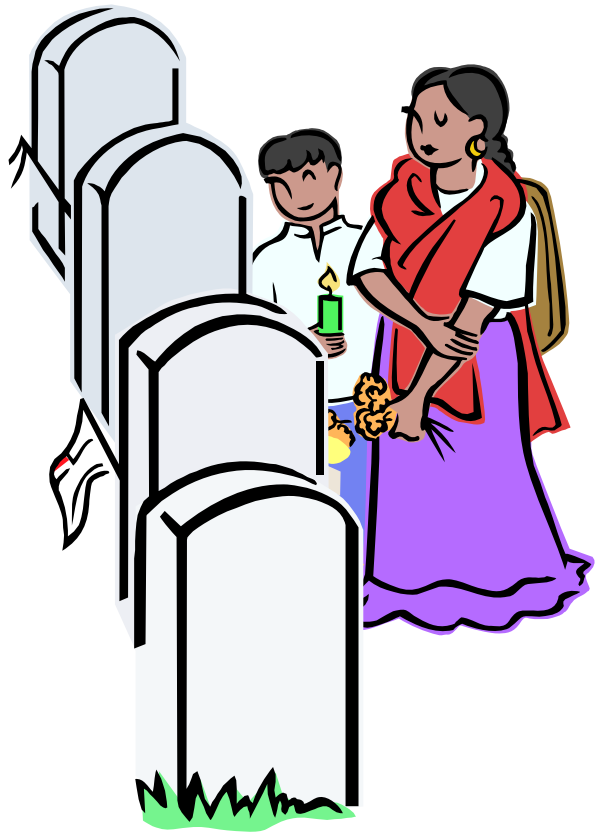
Safety Communication



# When Safety Communications Fail…

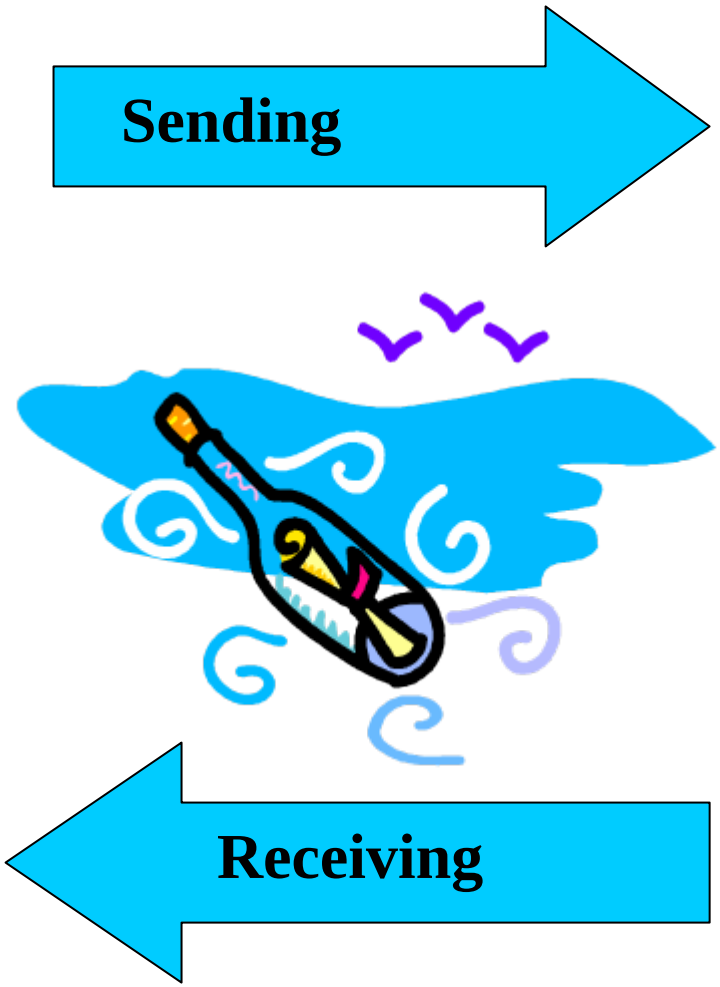


# people become injured!



# COMMUNICATION

- Five Elements
  - Message
  - Sender
  - Transmission Medium
  - Receiver
  - ?



# FEEDBACK

Si

Consider it done!

yes

Ok...sure, I know.

Can Do!

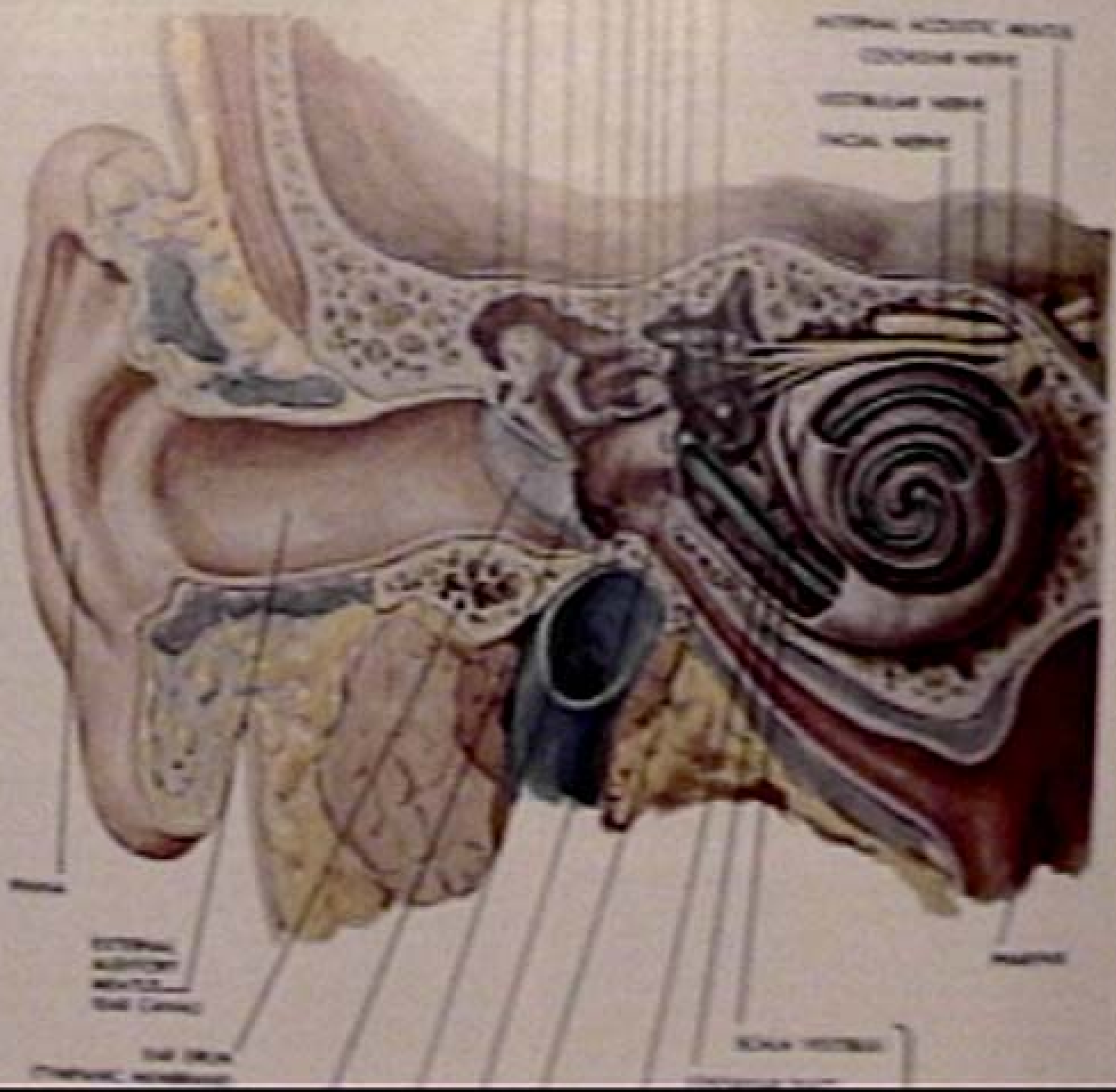
# Design of Safety Communication

- Consider the intended outcome. (Goal)
- Develop objectives to the communication.
- Develop delivery materials and methods.
- Develop a feedback measurement tool.
- Deliver the communication.

**Example:**

# OBJECTIVE:

- Given a job site assignment, employees will be able to don hearing protection of the disposable type. Employee shall recognize and recite that when on the jobsite the hearing protection must be worn. Employee will understand the expected performance criteria and demonstrate to the satisfaction of the supervisor their ability to don disposable type hearing protection.




Don your noise protection.

# Design of Safety Communication

- Consider the intended outcome. (Goal)
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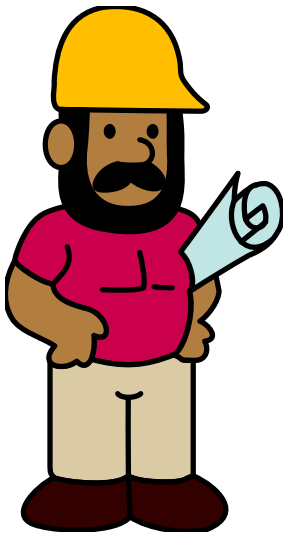
# Design of Safety Communication



- Consider the intended outcome. (Goal)
- Develop objectives to the communication.
- Develop **delivery materials and methods.**
- Develop a feedback measurement tool.
- **Deliver the communication.**

**Communication Failure**

# Antonio Alvarez

## Human Resources Director

## CIANBRO Corporation

# Gerald “Jerry” Phillips

## Safety Director

## Clark Realty Builders, L.L.C.

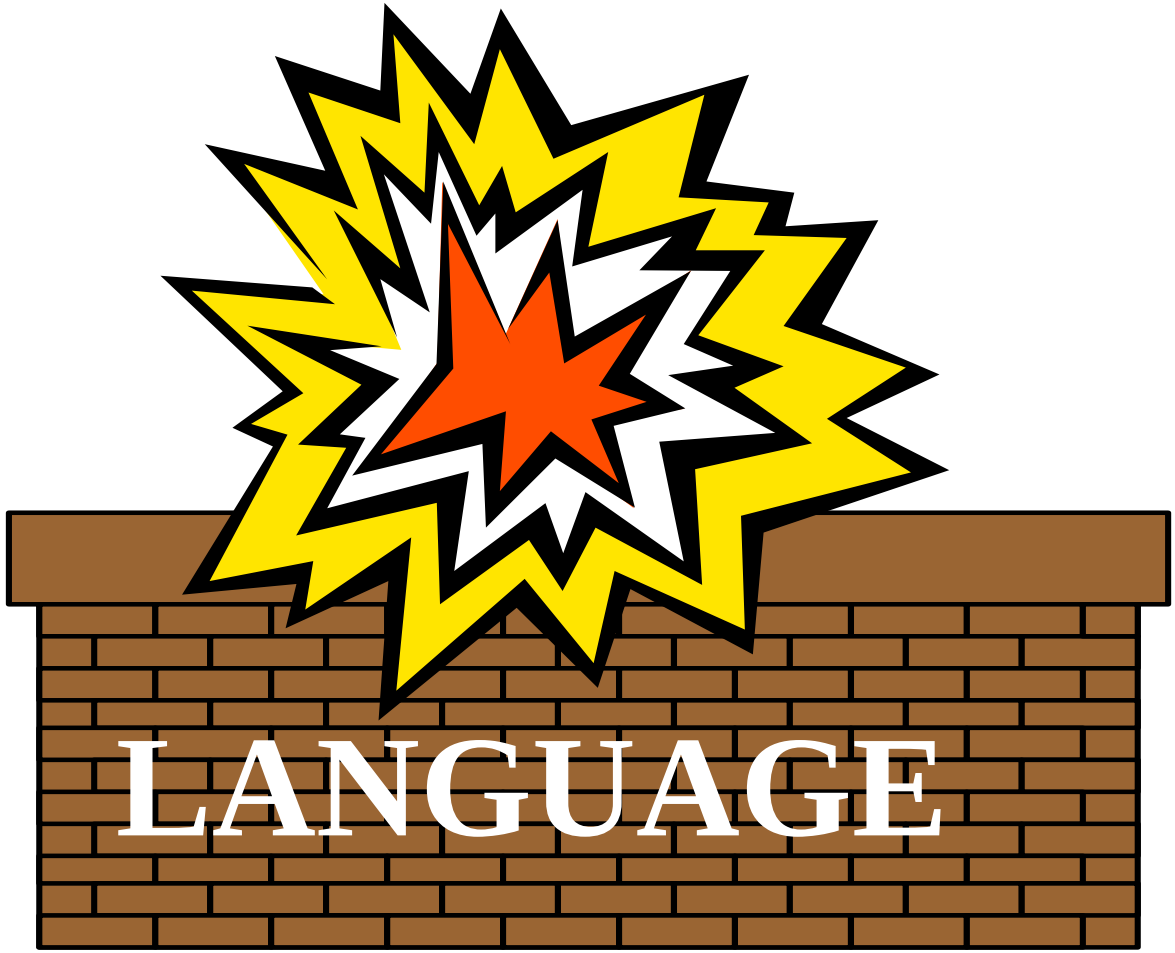
# Stop the **NOISE** -***Time to Insert***

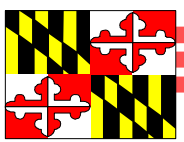
- Open Package.
- Separate foam plugs.
- Reach Behind Head with left hand, Grab right EAR.
- Roll and squeeze foam plug.
- Pull EAR away from head.
- Insert plug.
- Repeat process for left ear. / Reverse to remove.

# Design of Safety Communication

- Consider the intended outcome. (Goal)
- Develop objectives to the communication.
- Develop delivery materials and methods.
- Develop a feedback measurement tool.
- Deliver the communication.

# SAFETY COMMUNICATION





# Behavioral Based Safety

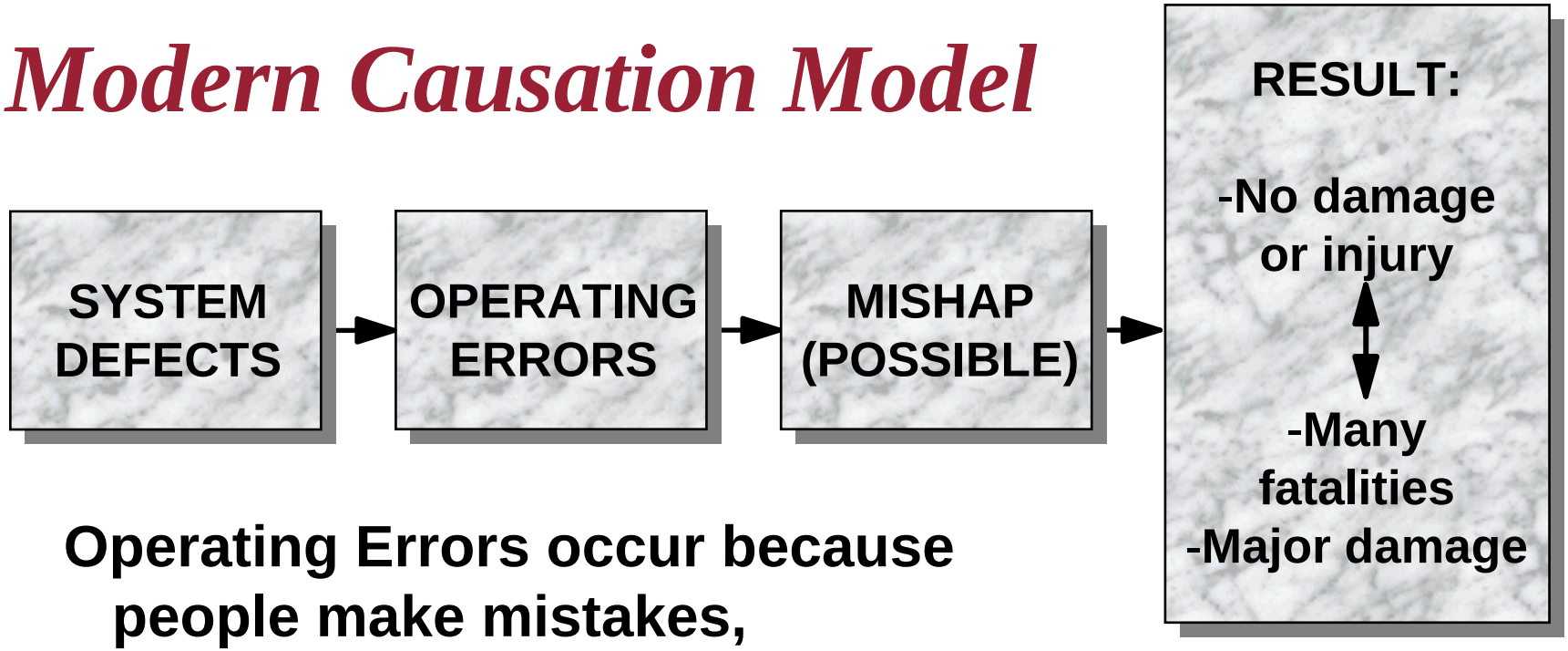
# 80% of ACCIDENTS Caused by Unsafe Acts

# Controlling behavior can prevent 80% of your accidents?

# Does Not Work That Way!

**Incidents that cause injury are multi-causal and may be influenced by several factors within the safety infrastructure.**

# *Modern Causation Model*




**Operating Errors occur because people make mistakes, but more importantly, they occur because of**

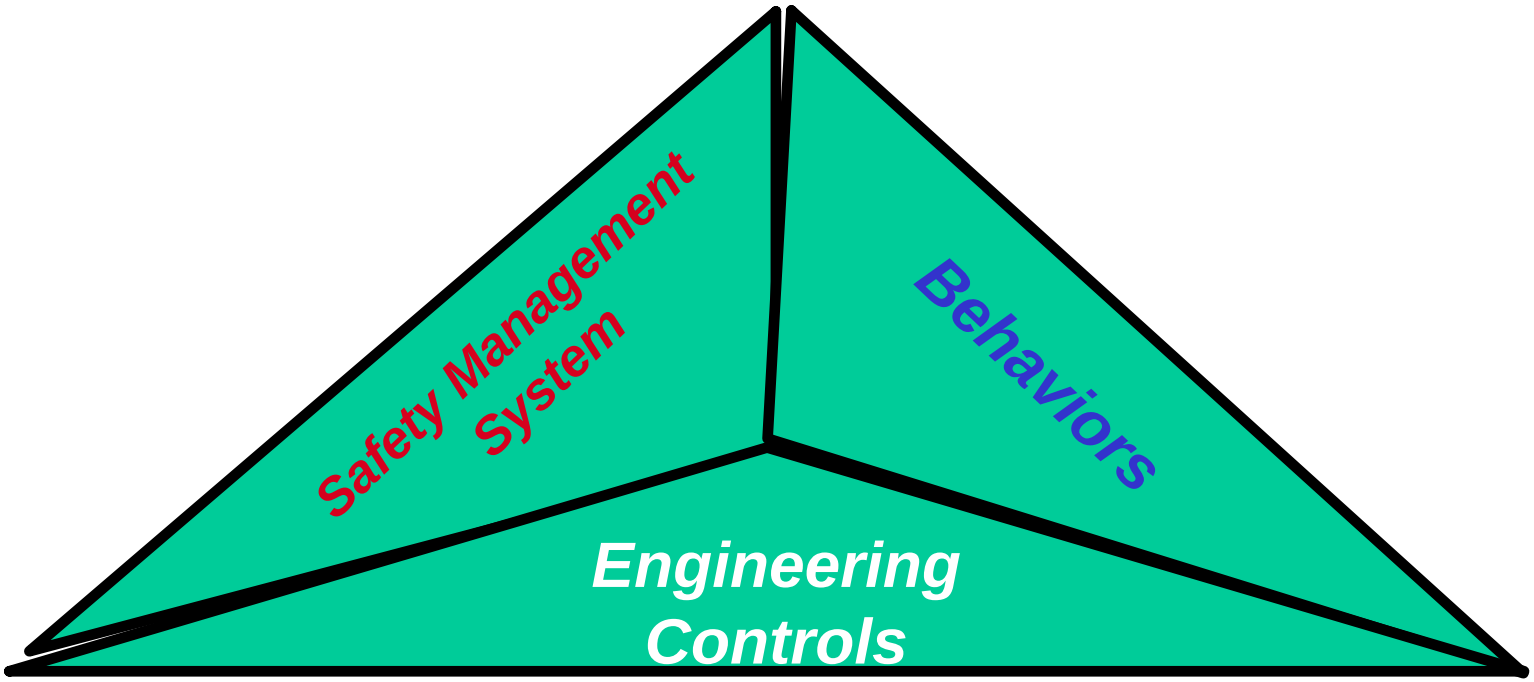
***SYSTEM DEFECTS***

## ***SYSTEM DEFECTS** are strongly influenced by behavior.*

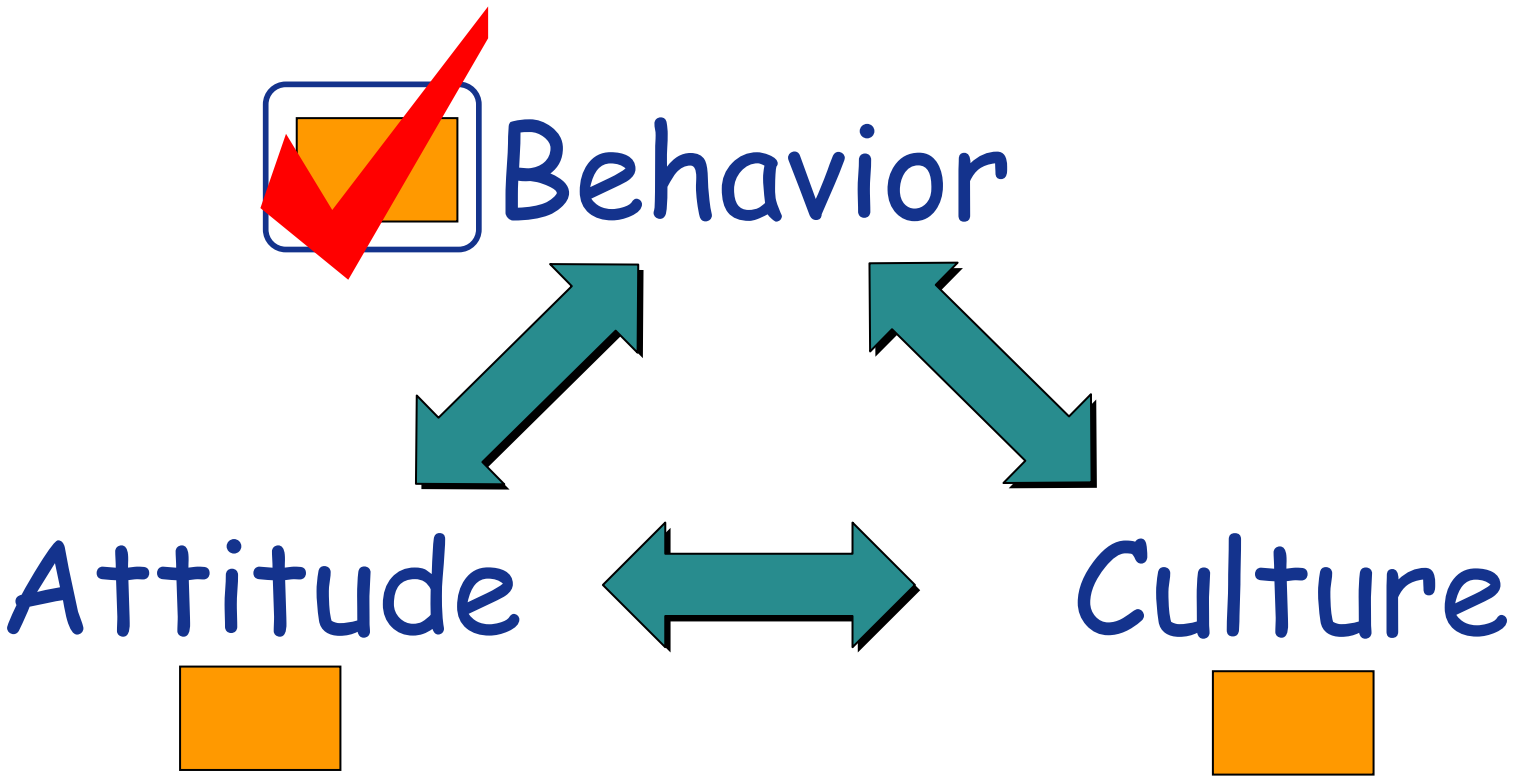
- **Ineffective Information Collection**
- **Weak Causation Analysis**
- **Poor Countermeasures**
- **Inadequate Implementation Procedures**
- **Inadequate Control**

# Interventions:

## Always Consider These 3 Components

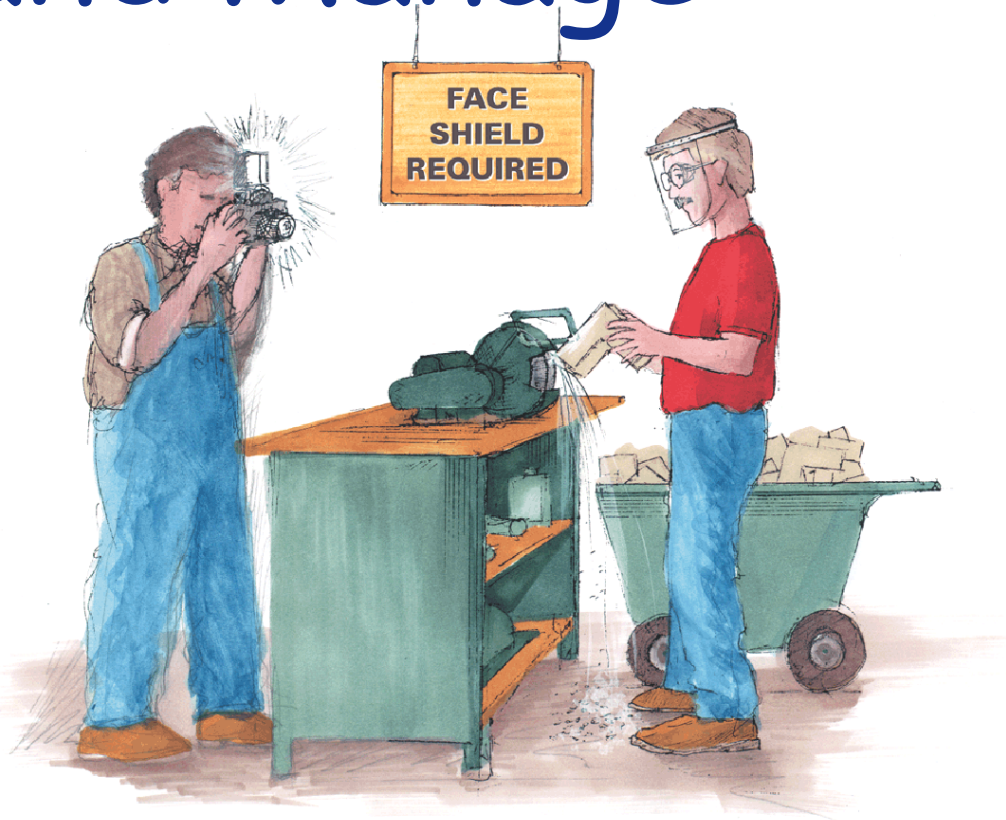


# Which One is visible?



# Focus on Behavior
## Measure and Manage

**An Observable Act**



# ABC Analysis

## Antecedents

**Anything which precedes and triggers behavior**

## Behavior

**An observable act**

## Consequences

**Anything which directly follows from the behavior**

# Understanding System Influences

## Antecedents

Employee is Non-English Speaking
Goggles are in poor condition

**What Controls Behavior?**

## Behavior

Worker fails to wear goggles when using bench grinder in the maintenance shop.

## Consequences

Better Vision  Exposure to Injury

# Consequences

# Control

# Behavior

# Antecedents

## Influence

# Behavior

## Only to the Extent that

## They Accurately Predict

# Consequences

Increase Safe Behaviors

&

Reduce At-risk Behaviors

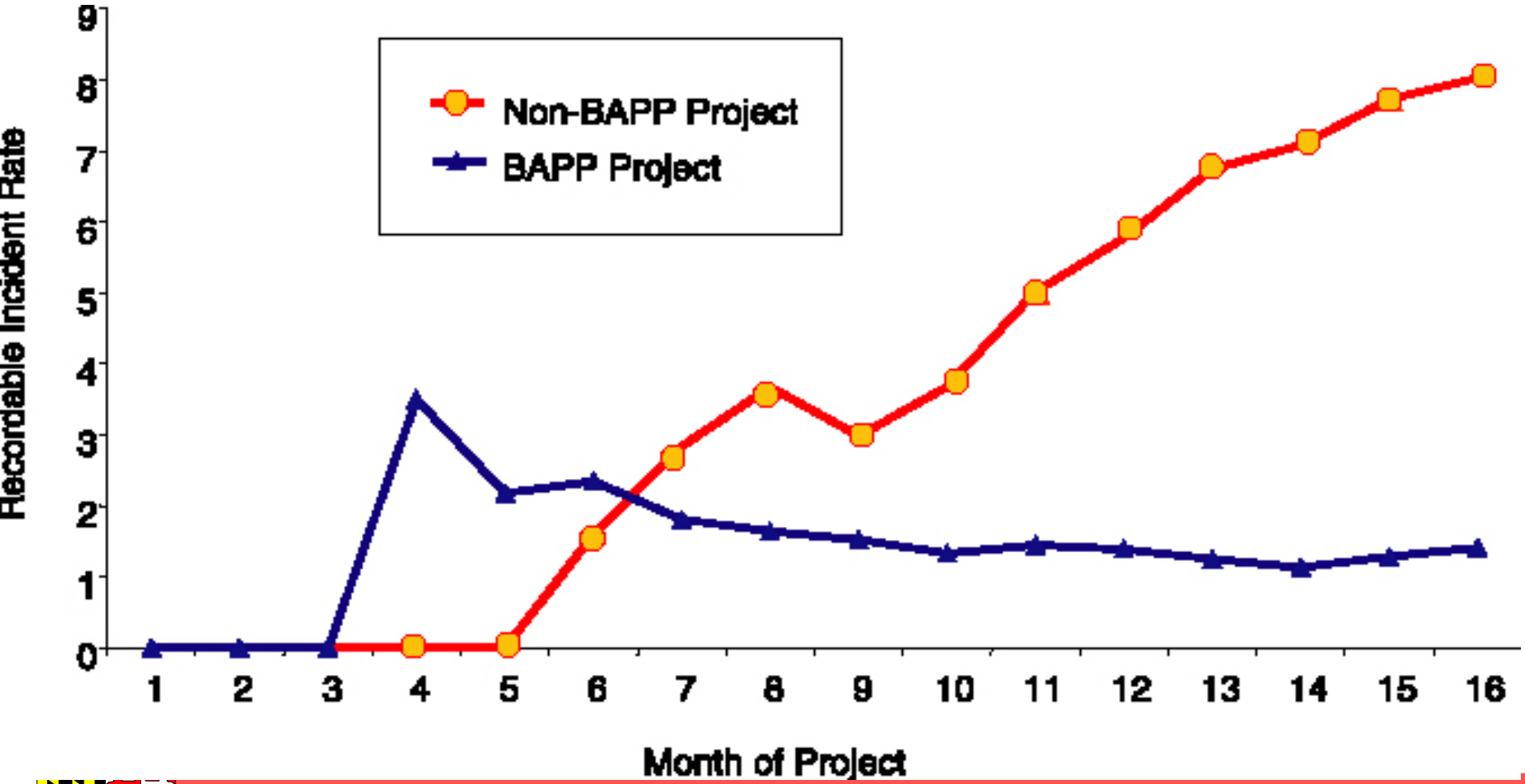
Enhance, not replace, existing safety systems

# A Feedback System to Ensure Success

# Behavioral Accident Prevention Process

**BAPP**

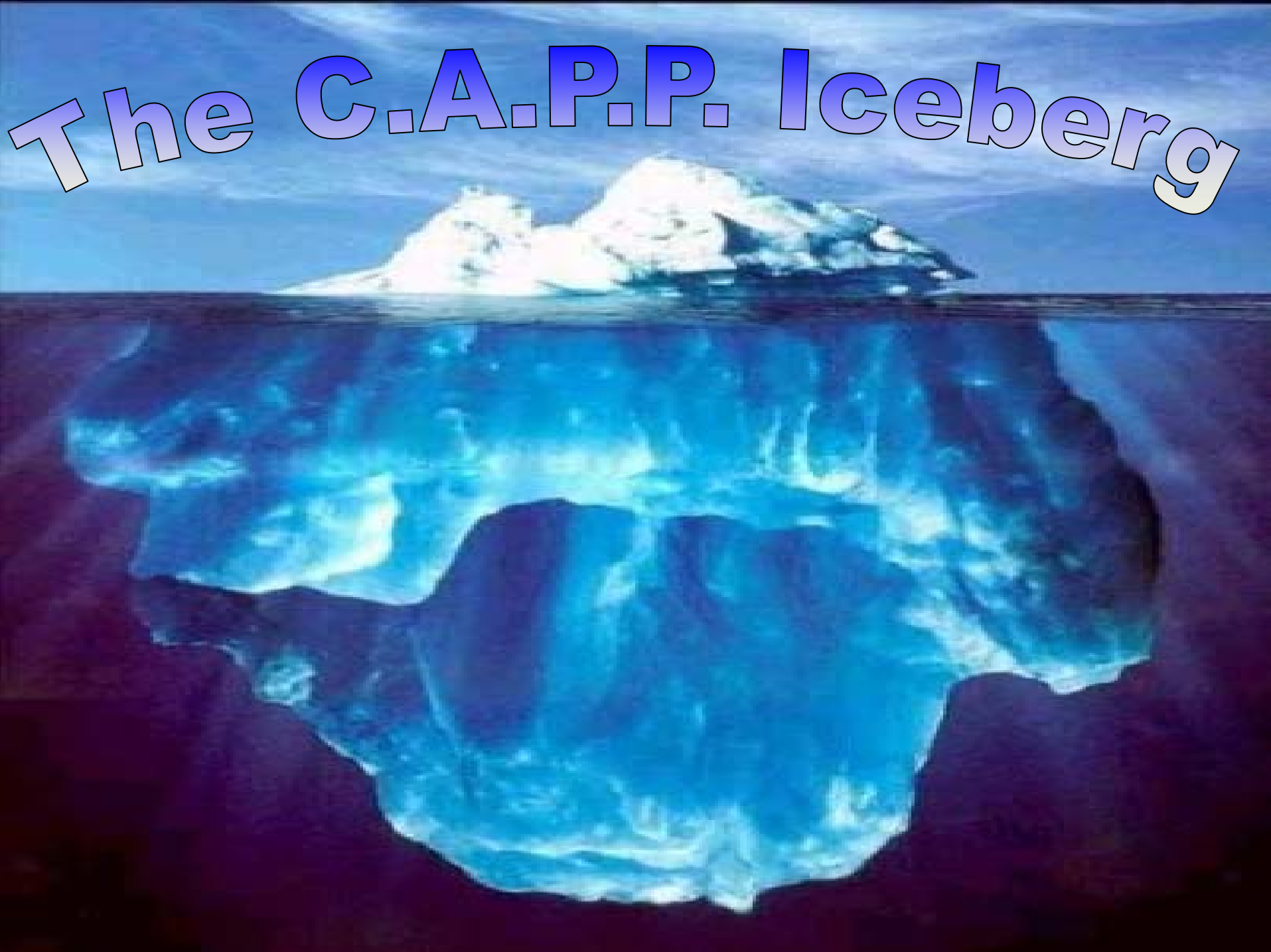
# Applying a behavior-based tool is a powerful method to improve processes including safety.

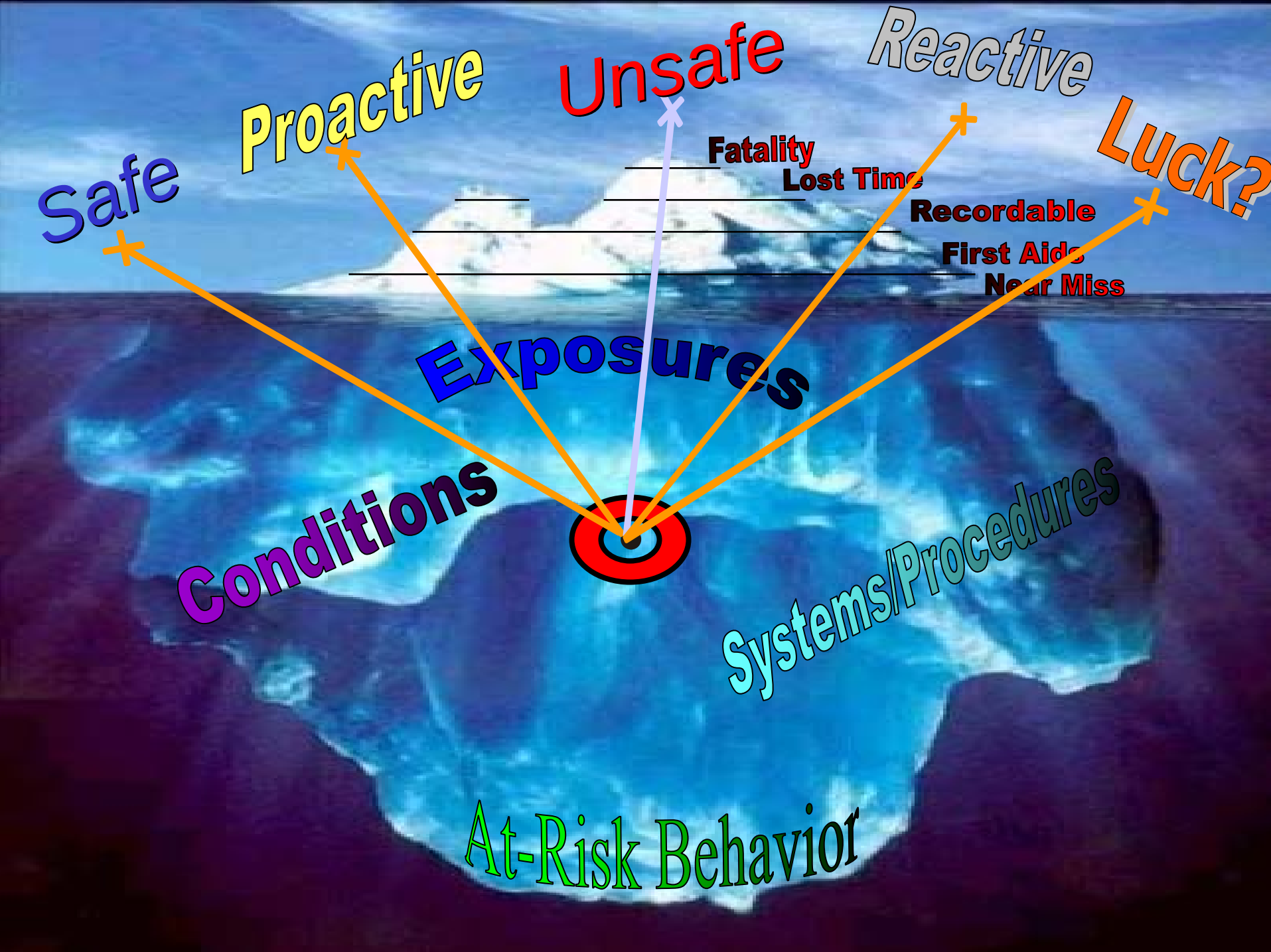

Recordable Incident Rate
9
8
7
6
5
4
3
2
1
0
Non-BAPP Project
BAPP Project
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
Month of Project

# CIANBRO

# Accident Prevention Process

# The Number's Game


The C.A.P.P. Iceberg


Safe
Proactive
Unsafe
Reactive
Luck?
Fatality
Lost Time
Recordable
First Aide
Near Miss
Exposures
Conditions
Systems/Procedures
At-Risk Behavior

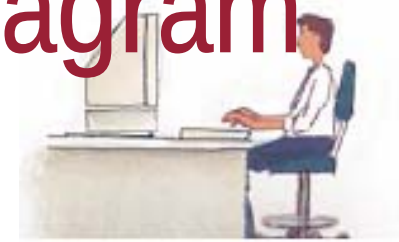
## 1. Identify Critical Behaviors

## 2. Gather Data

## 3. Provide Feedback

## 4. Use Data to Remove Barriers

# Process Flow Diagram



Data Management

Facilitator

S.H.A.R.E Committee

Observer

Job

**The C.A.P.P. Process is locally owned**

**The S.H.A.R.E. Committee is the "board of directors"**

**C.A.P.P. is a data gathering "process"**

**This is a continuous improvement process**

# C.A.P.P. is a no name,

# no blame process.

# Except for supervisors.

# Risk not Rules

# C.B.I. Development

**Critical Behavior Inventory is a list of the critical few behaviors that are the "Final Common Pathway" to injury**

CIANBRO

# ACCIDENT PREVENTION PROCESS

## C.A.P.P. Observation Sheet

**Date:** 1-5-04 **Location:** Shops and Yards **Observer:** Kris Chipman

**# of Workers observed:** 2 **Time:** 11:45 ☒a.m.☐p.m. **Day:** S (M) T W Th F S (circle one)

**Project:** ☒ Fab Shop ☐ Paint Shop ☐ Repair Shop ☐ Supply ☐ Yards/Trucking **Shift Duration** 10

**Temp.:** ☐ Hot(>90f) ☒ Mild ☐ Cold (<32f) **Precipitation:** ☒ None ☐ Rain ☐ Snow/Sleet

**Wind:** ☒ None ☐ Breezy ☐ Windy **Workers Trade/Craft:** 34-Fabricator

**Is worker working in his/her trade?** ☒ Yes ☐ No **Task Performed:** weld/grind H beam

**Coached?:** ☐ Yes ☒ No **Coaches' Name:** _____

**Activity Plan:** ☒ Yes ☐ No **(if no,** write comment for 4.2) **Stop Observation?** ☐ Yes ☒ No

| 1.0 BODY MECHANICS | Safe | At-risk | N/A | 3.0 P.P.E. | Safe | At-risk | N |
|---|---|---|---|---|---|---|---|
| 1.1 Line of Fire | | | | 3.1 Hand/Wrist/Arm | | | |
| 1.2 Eyes on Work/Hands * * | | | | 3.2 Eyes/Face | | | |
| 1.3 Eyes on Path | | | | 3.3 Respiratory | | | |
| 1.4 Ergonomics/Relief | | | | 3.4 Body | | | |
| 1.5 Ascending/Descending | | | | 3.5 Feet/Legs/Knees | | | |
| 1.6 Pinch/Impact Points | | | | 3.6 Hearing | | | |
| 1.7 Lifting/Lowering | | | | 3.7 Fall Protection | | | |

*To be completed by Observer*

| Item #: | Comments: (What was he/she doing At Risk) (Why did he/she do it that way?) (Suggestions: What suggestions do you both have for improvement?) |
|---|---|
| **What:** | Was he/she aware that the behaviour was at risk? Did they agree that it was at risk?<br>**Aware** pYes pNo<br>**Agree** pYes pNo |
| **Why:** | p Within the observed's control.<br>pWithin control of the observed but requires additional effort or some help.<br>p Beyond the actual or perceived control of observed |
| **Suggestion:** | Were you and the observed able to come up with a solution-remedy to the at-risk behavior? Did they agree to try the solution?<br>**Solution** pYes pNo<br>**Try solution?** pYes pNo |
| | ↓ To be completed by your SHARE committee ↓ |
| | pLittle detail pWhat pWhat & Why |
| | Follow up needed? pYes pNo<br>In progress p Completed p |

*To be completed by Observer*

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| | ↓ To be completed by your SHARE committee ↓ |
| | pLittle detail pWhat pWhat & Why |
| | Follow up needed? pYes pNo |

S.
H.
A.
R.
E.

| S.H.A.R.E. Agenda | Comments |
|---|---|
| | |
| **Report for Project** | |
| | |
| **Items to Report** | |
| Near Misses | |
| Safe and At-Risk Behavior | |
| Injuries | |
| Damage to Equipment – Facilities – Materials - Tools | |
| Issues with management Commitment to Safety | |
| Issues with Team Member Commitment to Safety | |
| Client or Host Facility Issues/Concerns | |
| **Inspections / Audits** | |
| Conducted at the Regional level (Results) | |
| Conducted at the Corporate Level (Results) | |
| Conducted by the Insurance Carrier (Results) | |
| Conducted by Government Agency (Results) | |
| **Safety Program Evaluation** | |
| What is working well? | |
| What needs to be changed? | |
| Training Needs | |
| **Review of New Initiatives/** | |
| **Changes with the Safety Program** | |
| CAPP Implementation – What's Working? What's not? | |
| Z.E.S. – Changes in the Program – What's working? What's not? | |
| Barricades and C.A.Z. – What's working? What's not? | |
| Work Zone Traffic Safety – What's working? What's not? | |
| Safety Accountability Bulletin – Consistent implementation? | |
| **Safety Equipment Purchases / Availability** | |
| Standard items - | |
| Can we standardize PPE / Safety Devises for best price? | |
| Available Items – Who can use them? | |
| Issues / Concerns with Sole Source Supplier | |
| **Environmental Considerations** | |
| Projects with special needs – What's working? What's not? | |
| Reporting and compliance | |
| **Computer System / Information Needs** | |
| BAPTRACK | |
| Safety Bulletins | |
| Lessons Learned | |
| Environmental Monitoring | |
| Injury Management | |
| Reports | |
| **Wellness and Community Initiatives** | |
| Action Items Identified | |
| Assignment of responsibility | |
| Completion Date | |
| | |
| **Other:** | |
| | |
| | |

A
G
E
N
D
A

# Behavior Based Safety: What Is It?

- **A tool for collecting data on the quality of a company's safety management system**
- **A scientific way to understand better why people engage in "at risk behavior"**
- **A tool towards creating a truly pro-active safety culture where loss prevention is a core value**
- **Conceptually easy to understand but often hard to implement and sustain**

# Behavior Based Safety: What It Is Not!

- **Only about observation and feedback**
- **A substitution for traditional risk management**
- **About manipulating people & aversive control**
- **Triggered by incident rates or reaction**
- **A process that does not need employee involvement**

# Thanks for Listening

**Craig D. Lowry, CSP**

**Safety Program Manager**

**Division of Labor and Industry**

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