

# Industry Needs U in the Middle to Reduce Fatalities

## Web Cast Presentation

January 22, 2004

[\[Slide 1\]](#)

[\[Opening display slide - no comment\]](#)

[\[Slide 2 - Felix\]](#)

Hello to all of you who are participating in today's second Metal and Nonmetal mining industry WebCast. I'm Felix Quintana, Deputy Administrator for Metal and Nonmetal Mine Safety and Health, and I bring greetings from MSHA's headquarters in Arlington, Virginia. I'm pleased to say hundreds of WebCast participants are listening in, gathered in large and small groups at 200 sites across the country. I'm happy to have with me today Mr. John Correll, Deputy Assistant Secretary of Labor for Mine Safety and Health. JC, as he is known to his friends, is joining our WebCast for the second time, having hosted the first WebCast last October with Bob Friend, the agency's Administrator for Metal and Nonmetal. I've asked JC to say a few words to kick off today's WebCast. JC...

[Remain on [Slide 2](#) - JC speaking]

Thanks, Felix, glad to be here with you today. Bob Friend, our Administrator for Metal and Nonmetal and my co-host during last October's WebCast, is at the Kentucky Crushed Stone Association's workshop in Lexington today. He and all those in attendance there are listening in as we speak. Bob asked me to convey his special greetings to everyone not fortunate enough to be with him in Kentucky.

[[Slide 3](#) - JC]

First of all, on behalf of myself and Dave Lauriski, I'd like to congratulate the entire Metal and Nonmetal mining industry on an outstanding year in 2003 in mine safety and health. Preliminary figures indicate a significant decrease in the total number of injuries that occurred in 2003 compared to the previous year. Fatalities fell from 41 in 2002 to 26 in 2003, a 36% reduction. This is the lowest number of fatalities in the history of Metal and Nonmetal mining! This was achieved only by dedication, determination and hard work across the length and breadth of the industry, with every category of mining doing its part to see

fatalities reduced. Extra-special kudos are also in order for all those in the underground mining industry, as your group did exceptionally well.

Underground fatalities stood at 13 as recently as 2000, but fell to three in 2002 and to just one in 2003. This shows what can be accomplished when safety becomes a value instead of a priority. Well done!

The significant and widespread improvement experienced would not have been possible without the concerted effort of everyone in the industry. Such a great reduction was realized only through daily, diligent attention to safe work practices, thorough training and an ever-widening circle of mining industry stakeholders adopting safety as a personal and organizational value. So whether you are a mine owner or an equipment operator, a member of a maintenance crew or a foreman, a miners rep or a safety manager, a leader in a labor organization or an industry trade association, a state agency or grantee - no matter what your position or organizational horsepower may be, my hat is off to every one of you. This is your record and you should be proud of it.

I'd be remiss in not sharing my vision for mine safety and health performance

with you. I believe over time we can achieve even greater success in accident and incident prevention. One day, maybe soon, we will achieve a full year without a single mining fatality! In the meantime, all of us must continue our vigilance and commitment to improve our performance.

I'm turning the WebCast back over to Felix so he can make a few comments, but I'm staying right here to participate in the question-answer, ideas and recommendation session that will come in just a few minutes. We had a very good response from participants during the last WebCast and I am eager to hear your comments and ideas again this time. Felix...

[Remain on [Slide 3](#) - Felix speaking]

Thank you, JC, for those heartfelt comments. I, too, would like to congratulate the Metal and Nonmetal mining industry for the tremendous effort that went into last year's safety record. Everyone's hard work and attention to safety and health resulted in the lowest number of fatalities on record. Everyone associated with the Metal and Nonmetal mining industry had a part in this accomplishment.

[\[Slide 4\]](#)

Even though the safety record achieved last year was tremendous, there are still danger signs that pop up. I think you will be interested in some fatality statistics from years past.

[\[Slide 5\]](#)

As you can see on this chart, historically January and February have seen a disproportionately high number of fatalities. These fatalities may be caused by a post-holiday letdown, the return to work of many following vacation times with family and friends, a relaxation of focus after striving to meet annual production goals, heavy winter equipment maintenance schedules or simply by the arrival of winter's harshest conditions. There are probably many factors, but we cannot lose sight of the significance of this period's deadly record. Hazards never take a vacation and must be dealt with on a daily basis. To let our guard down now, while celebrating a great 2003, would invite tragedy. Please encourage every miner in your organization to be extra vigilant during these next two months. Let's break winter's deadly trend.

[\[Slide 6\]](#)

Now that our congratulations and celebrations are complete, let's remember that although the number of fatalities was way down in 2003, we lost 26 of our fellow miners. So if one of those 26 tragedies occurred in your family, or to your friend or employee, no matter how good 2003 was for the mining industry, it was a sad year for you personally. If you are in this category, I express condolences on behalf of myself and all of MSHA. Let's take a few minutes to look at some 2003 industry-wide trends and issues that temper our statistical exhilaration a bit and pose a healthy cause for concern.

[\[Slide 7\]](#)

Of great concern is the high number of fatal injuries that occur while miners are performing maintenance and repair activities. Sixteen miners lost their lives last year while maintaining equipment. Many of those victims were not full time, permanently assigned maintenance employees.

[\[Slide 8\]](#)

Whereas in past years powered haulage activities accounted for the highest percentage of fatal injuries, in 2003 maintenance work has the dubious distinction

of ranking first, with more than 60 percent of the fatalities. It is to the credit of powered haulage and production operators that fatalities in those categories have declined dramatically. Now is the time to work towards an equally large reduction in maintenance-related deaths.

[\[Slide 9\]](#)

Maintenance and repair personnel were not the only group suffering a high number of fatalities. An alarming number of supervisors also lost their lives in 2003. At one point near mid-year more than half of those fatally injured were supervisors, an extraordinarily high toll on a relatively small segment of the nation's miners.

[\[Slide 10\]](#)

MSHA noticed this troubling trend last year and raised the alarm. In August, supervisors from MSHA's field, district and headquarters offices fanned out across the country to talk to as many foremen, supervisors, engineers and mine managers as possible, warning them to be extra vigilant. The response was exceptional and we received renewed personal and organizational pledges to

stop supervisory risk-taking and for supervisors to always set a good example for miners working under their direction. I am happy to say supervisor fatalities in the final third of the year were greatly reduced. To those supervisors who are listening in today, please keep up this good work and continue to spread the message of safety to your workers and fellow supervisors.

[\[Slide 11\]](#)

A second prong of the August campaign targeted the disturbing number of miners fatally injured while working with others. Eleven of the victims were working as part of a team when their fatal incident occurred, and often there were numerous others present on the job. You know mining has come a long way from the days when death and serious injury was considered part of the job. Now, more miners than ever are making special efforts to intervene and protect their co-workers from injury. I'm sure you have ideas on how to further strengthen this "brothers' keeper" mentality and increase the urgency miners feel to speak up and correct hazards when they see co-workers at-risk. We welcome your thoughts and ideas.

[\[Slide 12\]](#)

Also of great concern are the many accidents that included a human element.

That is, someone's personal decisions, choices, actions and inactions played a role in 21 of the 26 fatalities in 2003. Such was the case here when a truck driver climbed into the space between the raised bed and the frame of this truck, ...

[\[Slide 13\]](#)

And here, where a miner following a front end loader down a one-lane roadway lost his life when the loader backed up. The victim's own actions played some part in the tragic outcome in 15 of 2003's fatal accidents.

[\[Slide 14\]](#)

Don't misunderstand me, we're not laying the blame for these accidents on any of the deceased miners, or downplaying the responsibility accorded management under the Mine Act. We're just looking at the breakdowns in the safety systems that led to these tragic events. It was such a system breakdown that allowed a miner to enter this confined space without a complete risk analysis and lockout...

[\[Slide 15\]](#)

...or here, where a steep embankment collapsed under an excavator perched near the edge with its tracks oriented parallel to the face.

[\[Slide 16\]](#)

Each of us has a personal responsibility to ourselves and especially to our families to minimize risk. We have to continually assess, "What could possibly go wrong, and if it does, are the consequences acceptable?" Here, a tire mechanic was maneuvering heavy tires with a hydraulic grapple. When the unexpected happened and a tire fell from the grapple's jaws close to his position, he had no escape path or margin of safety.

[\[Slide 17\]](#)

No one expects crane rigging to fail while moving heavy objects, but when safe work procedures are followed, no one will be found under a suspended load at that critical instant if it does fail...

[\[Slide 18\]](#)

...no one will be unprotected at the bottom of an unshored trench at any time ...

[\[Slide 19\]](#)

...no one will be working beside or beneath a heavy unsecured crusher liner...

[\[Slide 20\]](#)

...no one will be in close proximity to energized high voltage power lines...

[\[Slide 21\]](#)

...and no one will be working on an energized circuit. There were numerous persons on these jobs who could have prevented the incidents by speaking up or by making the job safe for all before beginning to work. Unfortunately, in these accidents, some miners just didn't notice hazards or risks, some allowed subordinates or co-workers to work at-risk, and some didn't establish and enforce safe work procedures. The human element in accidents may be one of the last frontiers to explore as we search for opportunities to make another large leap forward in safety. I'd like to hear your thoughts on this subject when we open up the phones for comments, and later when you follow up with E-mails. By the way, the E-mail address where you can send comments after the WebCast will be displayed at the end of the slide show.

[\[Slide 22\]](#)

We all know that accidents sometimes result from hurrying, fatigue or loss of focus on the task at hand. When these human elements are present at the mine,

risk increases, often beyond the limit of what may be termed acceptable risk. I'm interested in hearing your ideas on how to motivate every individual in the mining industry, not just to be more aware of hazards, but to be personally involved in preventing accidents and committed to working safely at all times.

What can we do to reduce conscious and unconscious risk taking?

[\[Slide 23\]](#)

Let's change gears here for a minute. Our upcoming Spring Thaw will begin in February and carry on into April. We plan to host about four dozen workshops around the country to assist the mining industry broaden and reinforce its safety culture. These are designed to be industry-to-industry workshops, so please look for an opportunity to attend and participate at a location near you. Locations will be listed on the MSHA Web page under "Upcoming Events." Please call your local MSHA field office to find out how you can help.

[\[Slide 24\]](#)

When we think of safety, we often consider the elements that make up a first-class safety process. Some of these components are shown here as building

blocks in the wall of a comprehensive safety effort. However, as necessary as these building blocks are, the wall will not withstand the test of time unless a solid foundation is first provided, and then maintained.

[\[Slide 25\]](#)

More and more miners and mining companies are deciding to base their safety effort on a strong set of values. These values represent core beliefs and principles, which when adopted, internalized and followed, guide the decision-making process at all levels for all persons and events. Good safety values put a mining operation on a course that will strengthen its safety culture and greatly decrease risk, accidents, injuries and fatalities.

[\[Slide 26\]](#)

Safety needs to shift from being an add-on that works alongside production, to one based on values, where safety is woven into the very fabric of every aspect of the operation and becomes indistinguishable and second nature in the process. Where safety is so ingrained, dedication to it is so widespread and safety commitment is so total on a personal and on an organizational basis, accidents

and fatalities have no direction to go but down.

[\[Slide 26\]](#)

So along this line, let me pose a few questions to you...

How can the mining industry's stakeholders influence the corporate structure to further embrace safety as a value from top to bottom? And...

[\[Slide 27\]](#)

[\[Slide 28\]](#)

What can be done so more miners:

Perform pre-job risk analyses?

Resist influences to take risks?

Assume responsibility for their safety?

Intervene to improve co-workers' safety? And...

Make safety a personal value?

[\[Slide 29\]](#)

*[Leave up while phone calls are placed and discussed]*

This is the portion of the Web Cast where we welcome your thoughts and ideas.

So with that I would like to take our first call. Please state your name and where

you are calling from. If you'd also like to share the name of the company or organization you represent, that's fine, but it's not necessary.

*[At the end of the allotted time for phone calls... display [Slide 30](#) - next page]*

[\[Slide 30](#) - Felix]

That's all the time we have for calls today. I'd like to thank each and every person who participated in this WebCast, whether you listened or had the opportunity to get through on the phone line. Please take the time to E-mail us ideas you may not have had the chance to share, or about which you wish to offer more detail. I have asked Metal and Nonmetal Mining's Chief of Safety Tom Loyd to be our contact person. Please address your comments and recommendations to [m/nmwebcast@dol.gov](mailto:m/nmwebcast@dol.gov) and Tom will take it from there. I assure you that every message will be read by both Bob Friend and me and we will respond. JC and Dave Lauriski will each get a summary of your E-mails.

[\[Slide 31](#) - Felix]

As we finish for today, I want to wish you all a safe and successful year in 2004.

JC, is there anything you'd like to say in closing?

[C]

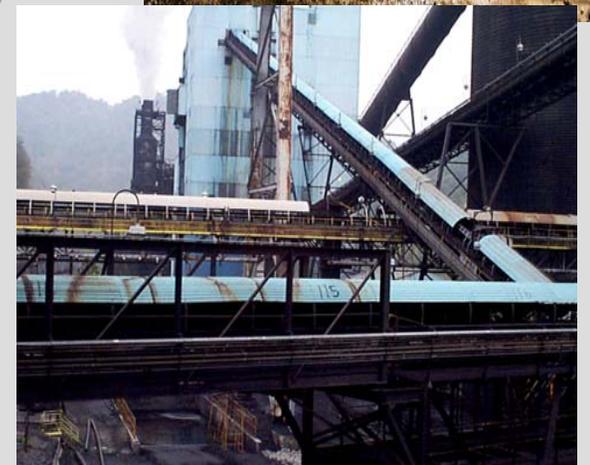
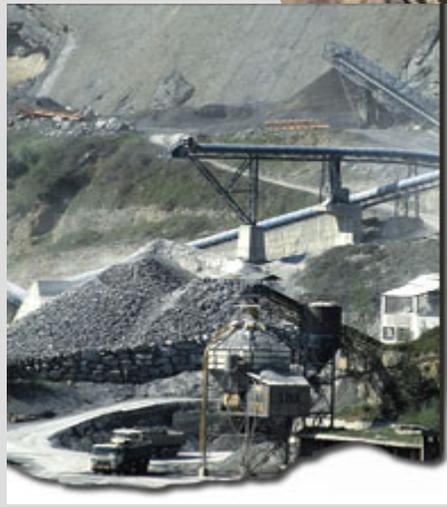
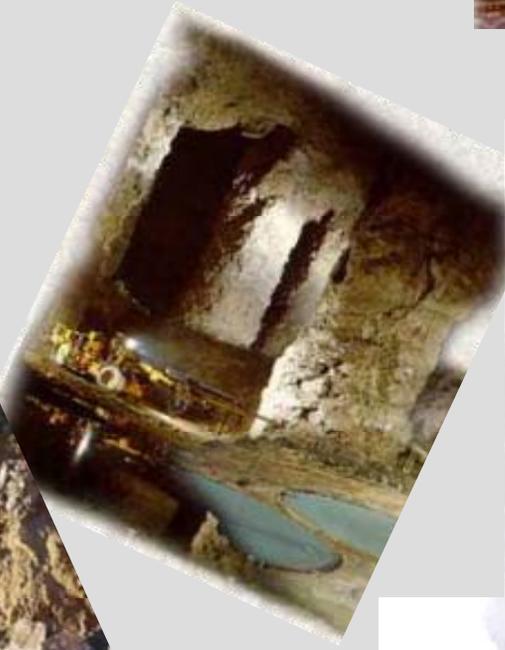
.....

# **Welcome!**

**Metal and Nonmetal  
Web Cast Presentation**

**January 22, 2004**

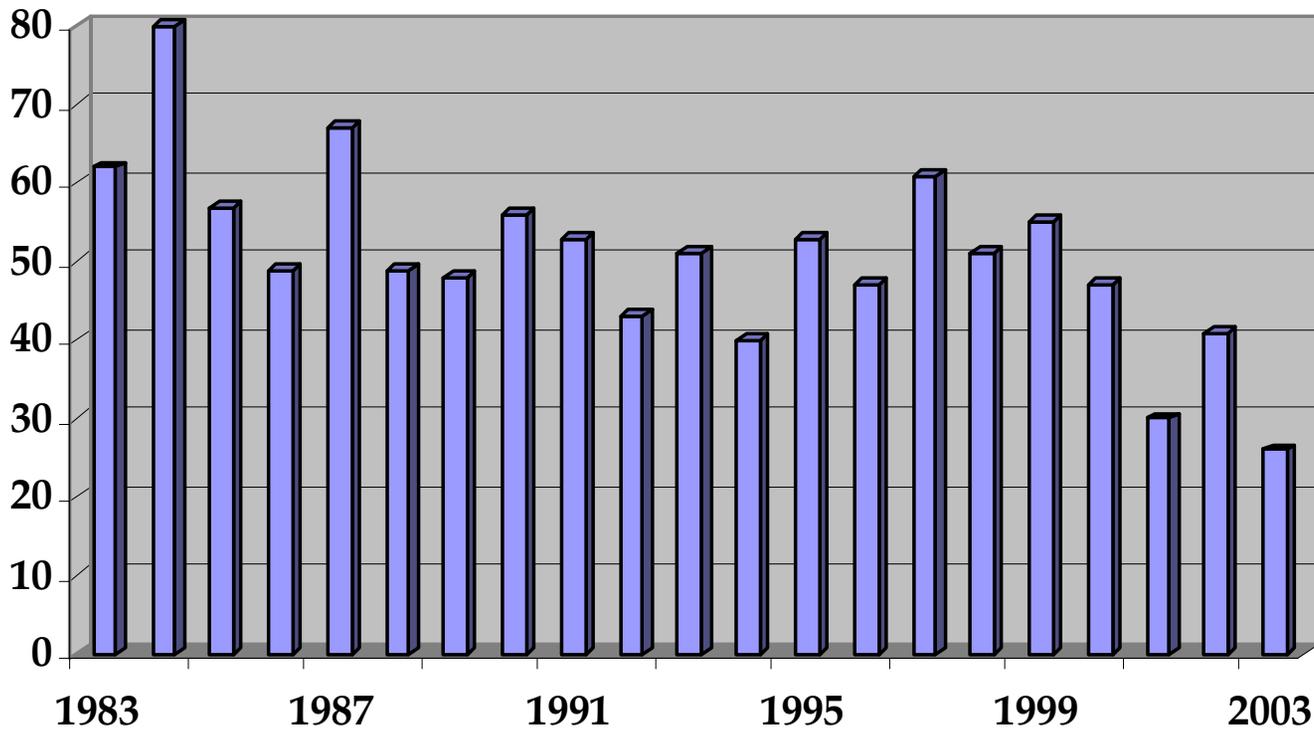
Industry needs **U** in the middle to reduce fatalities



# Congratulations on 2003

## *Well Done, Mining Industry !!*

### Fatal Accidents



26

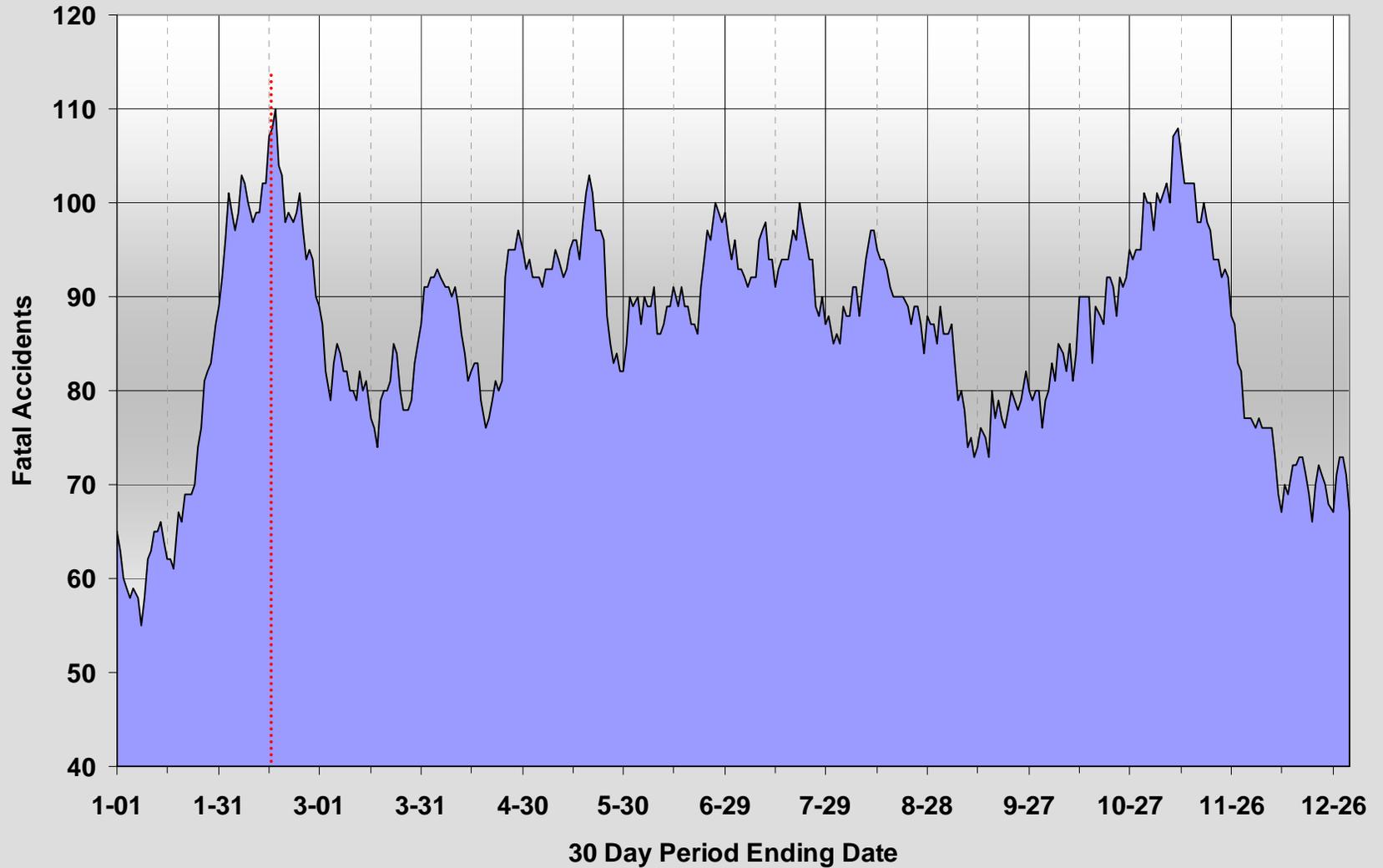


**JANUARY - FEBRUARY  
CAN BE HAZARDOUS  
TO YOUR LIFE**

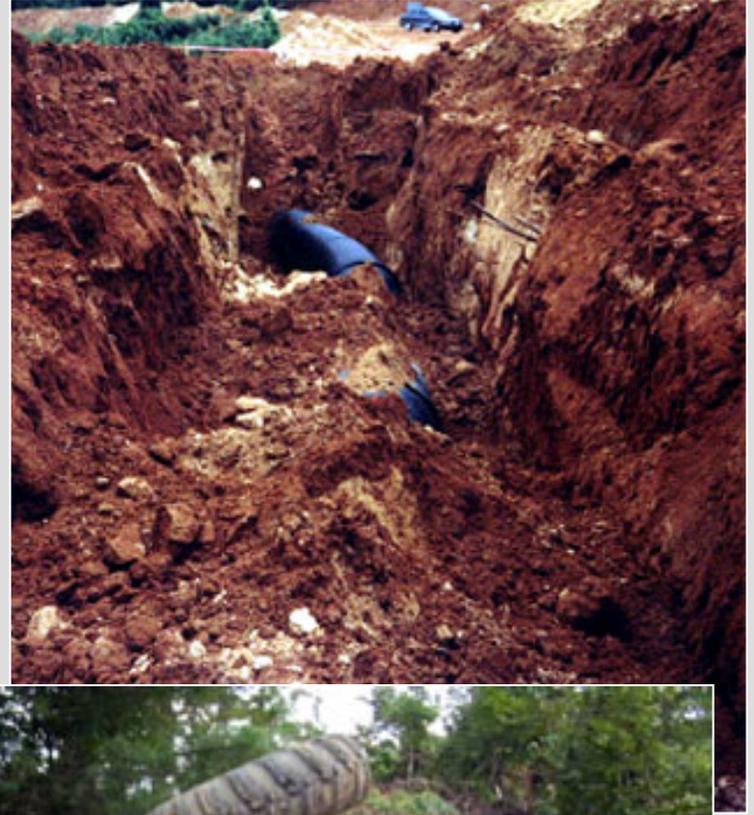
# Fatal Accidents in the M/NM Mining Industry

## 30 Day Average

### 1983-2003



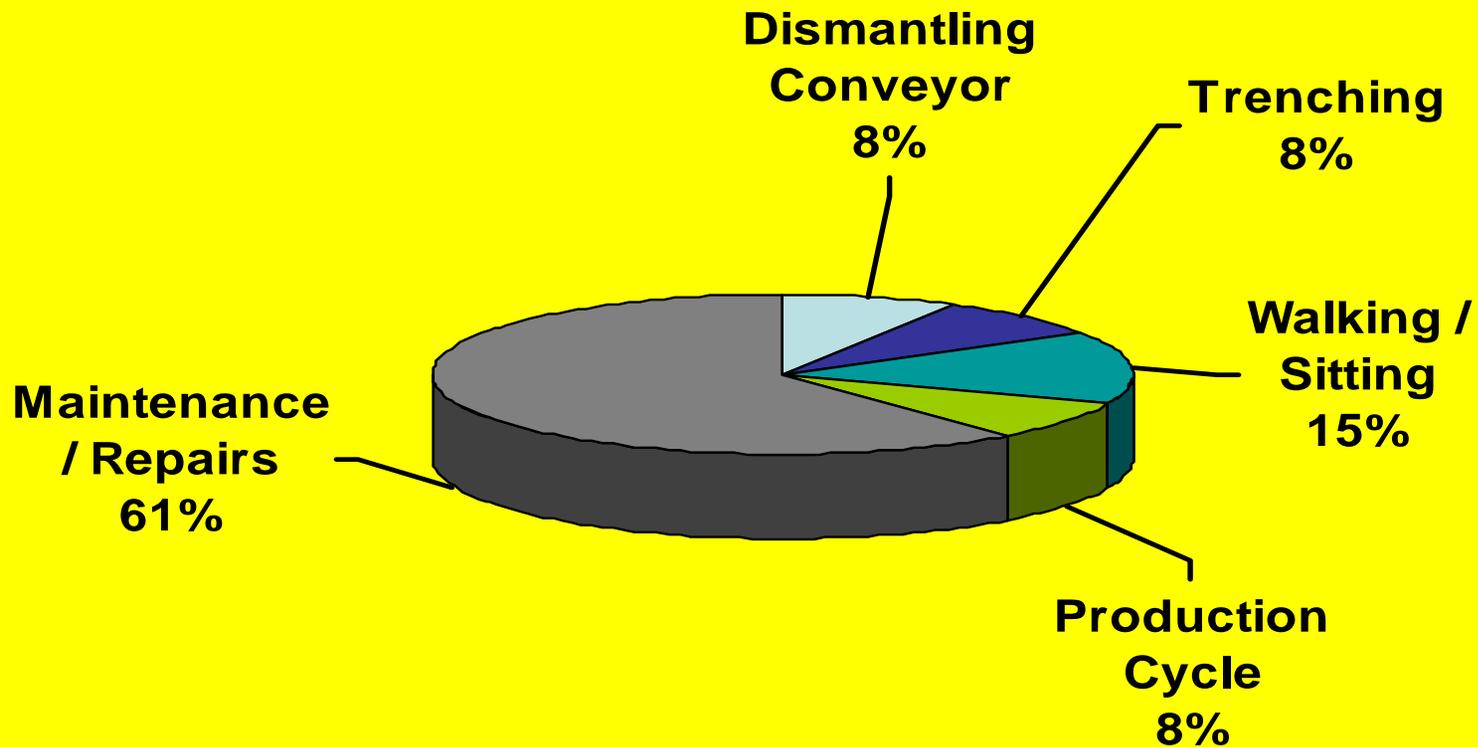
# 2003 Fatalities



# 16 Fatalities in Maintenance & Repair



# 2003 MNM Fatalities by Activity

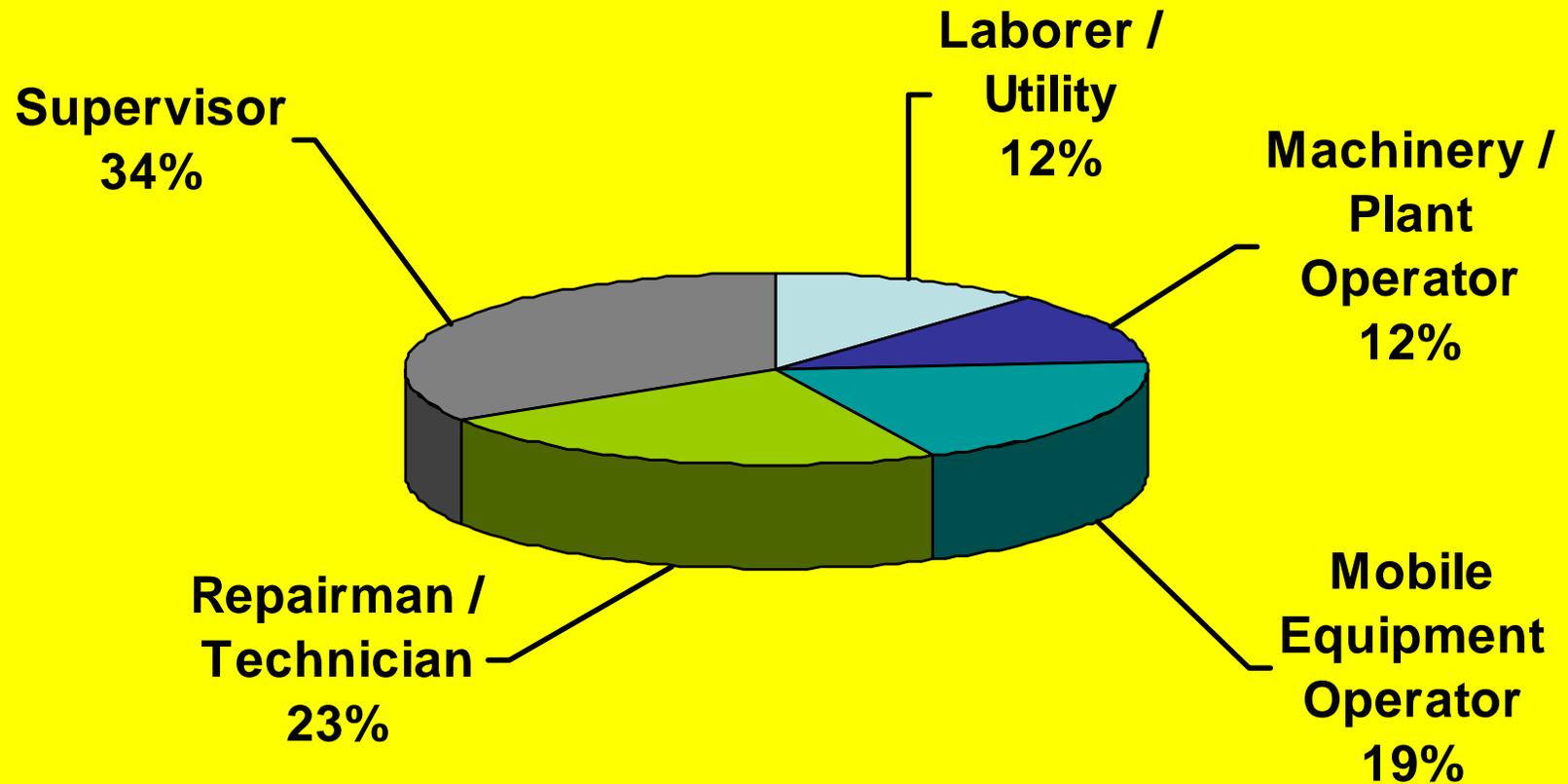




9 Supervisors were  
fatally injured

01/10/2003

# 2003 MNM Fatalities by Occupation



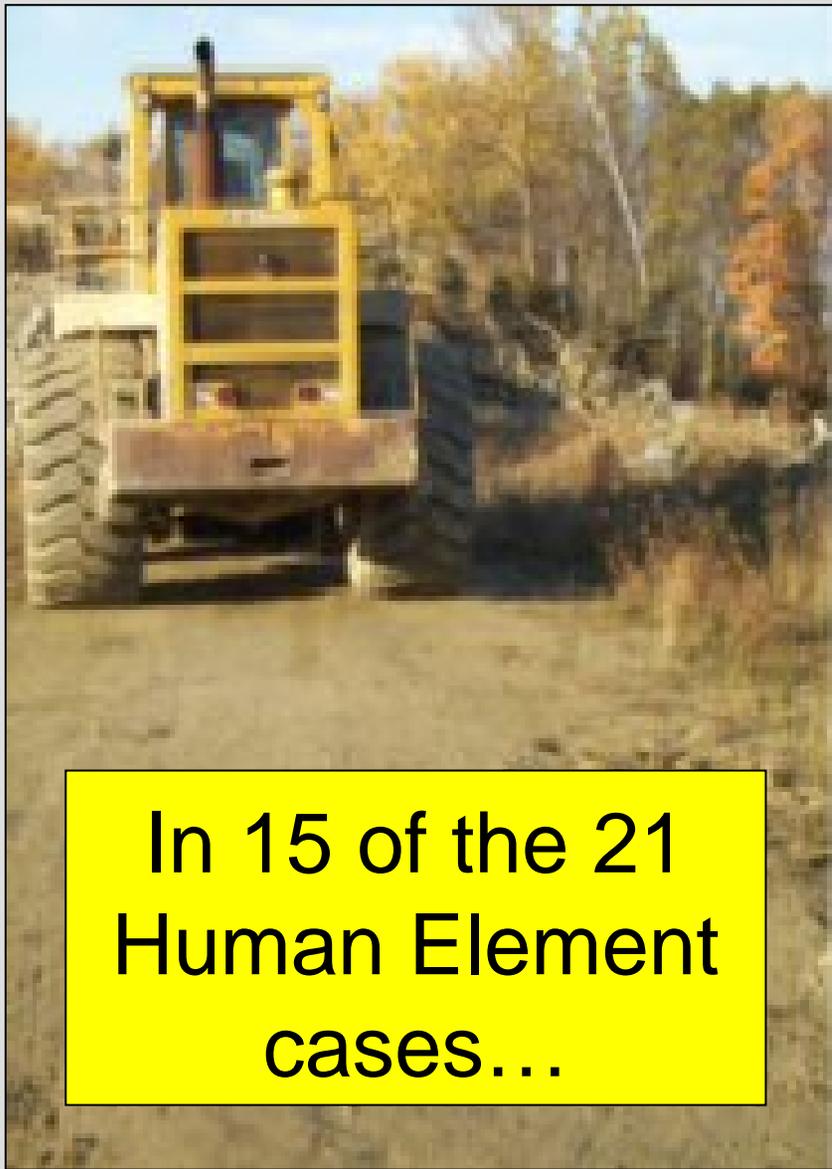
In 11 of the fatal injuries, at least one other person was present



Speak Up and Make a Difference !!



21 Fatalities Involved a Human Element



In 15 of the 21  
Human Element  
cases...

...the victim's  
actions played a  
part in the outcome



**Confined Space:  
No Lockout**



# Embankment collapse



Equipment Position & Excavation Sequence

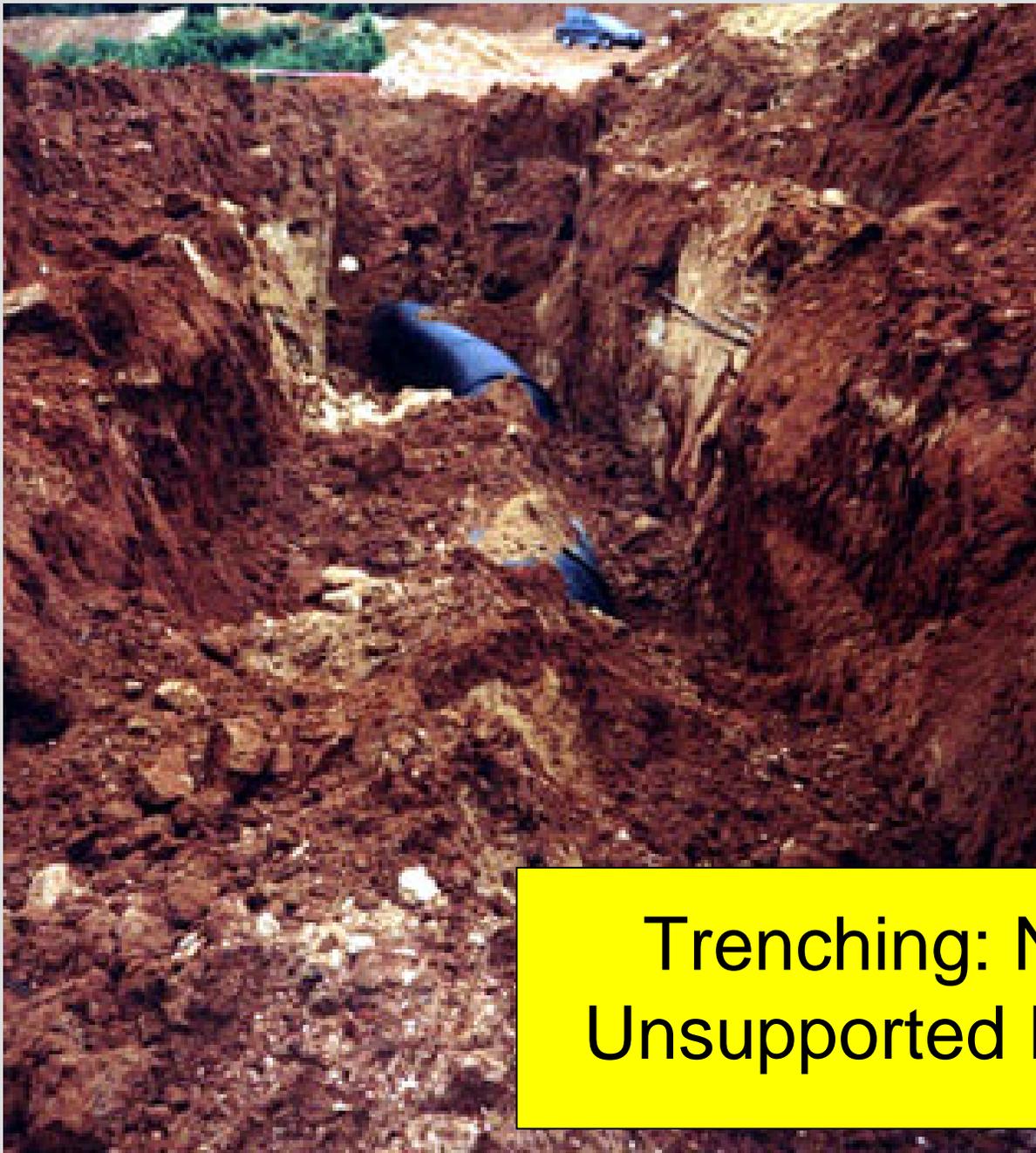
# Suspended Load



Equipment & Operator Positioning



**Suspended Load:  
No Blocking**

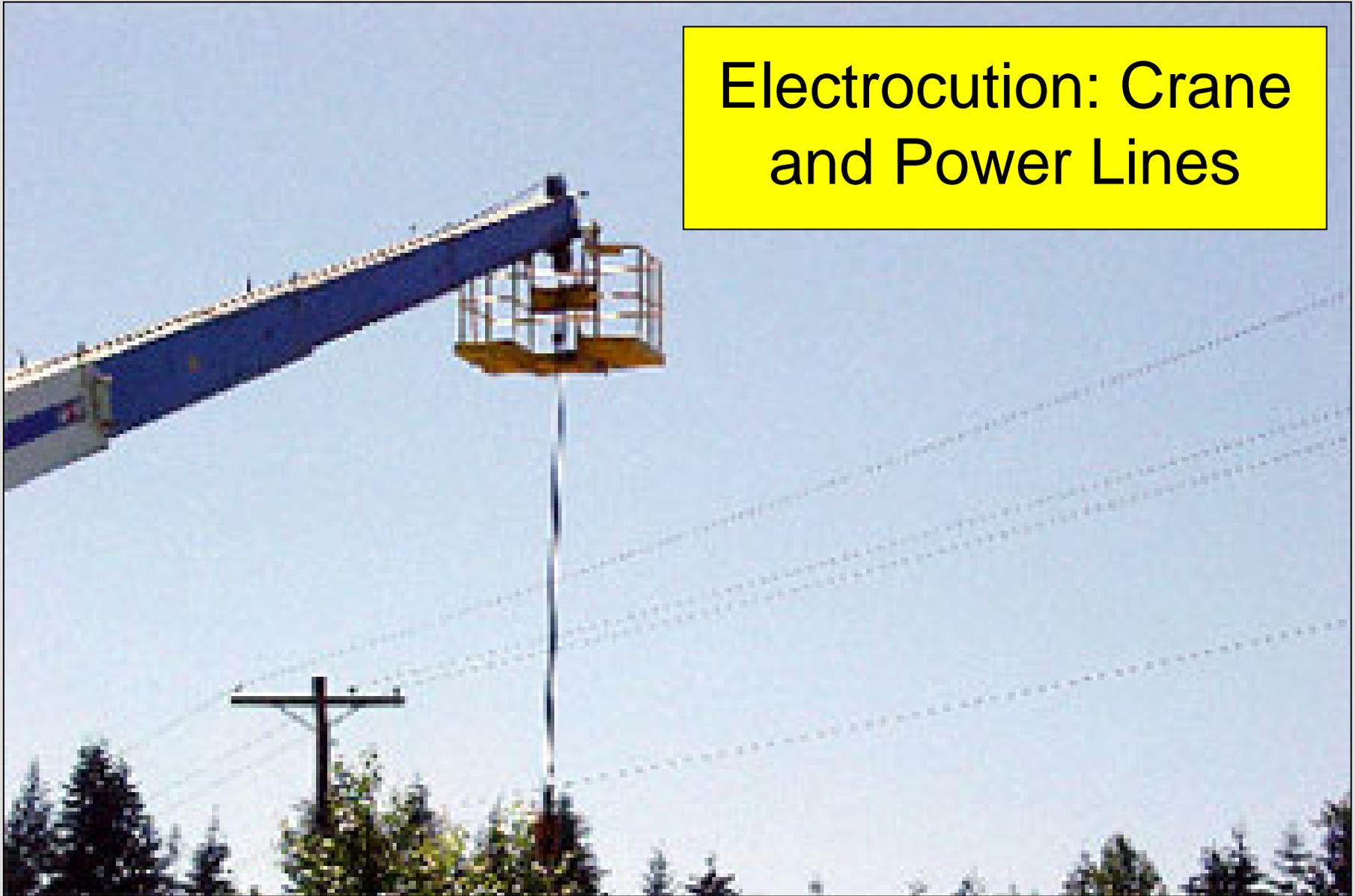


Trenching: No Shoring,  
Unsupported Embankment

# Unsupported Load: Crusher Liner Fell



# Electrocution: Crane and Power Lines





**Electrocution: Energized Circuit**

# Industry needs **U** in the middle to **re**duce fatalities in 2004

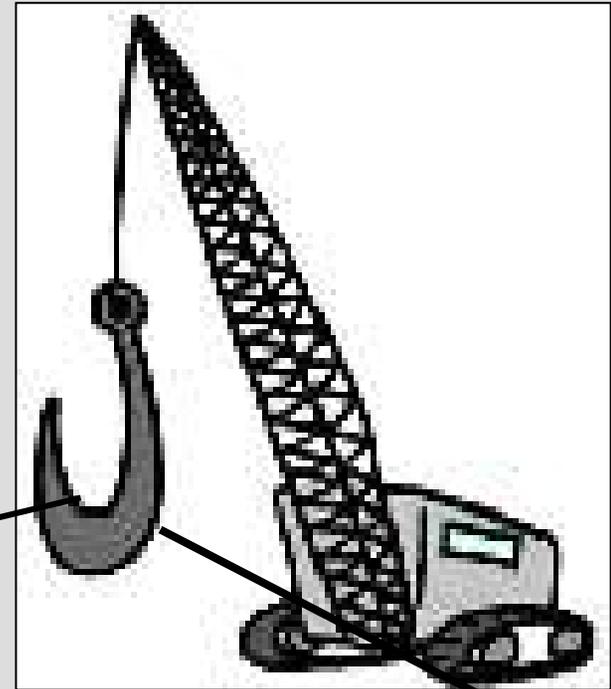
Accidents may result from...

- **H**urrying
- **F**atigue
- Inattention to the task

This means in some cases...

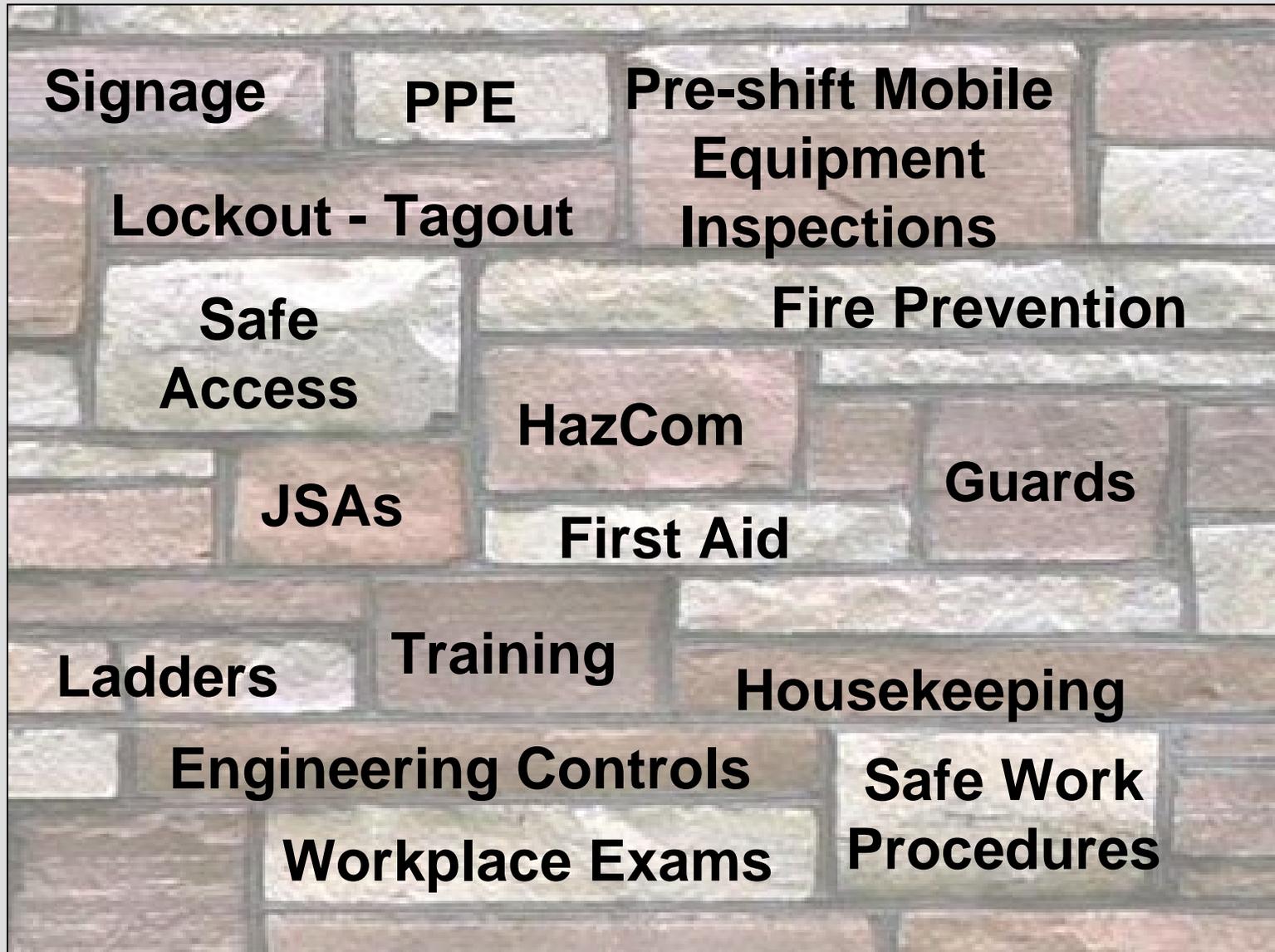
- Great risks are taken

Spring Thaw is  
*Coming Up...*

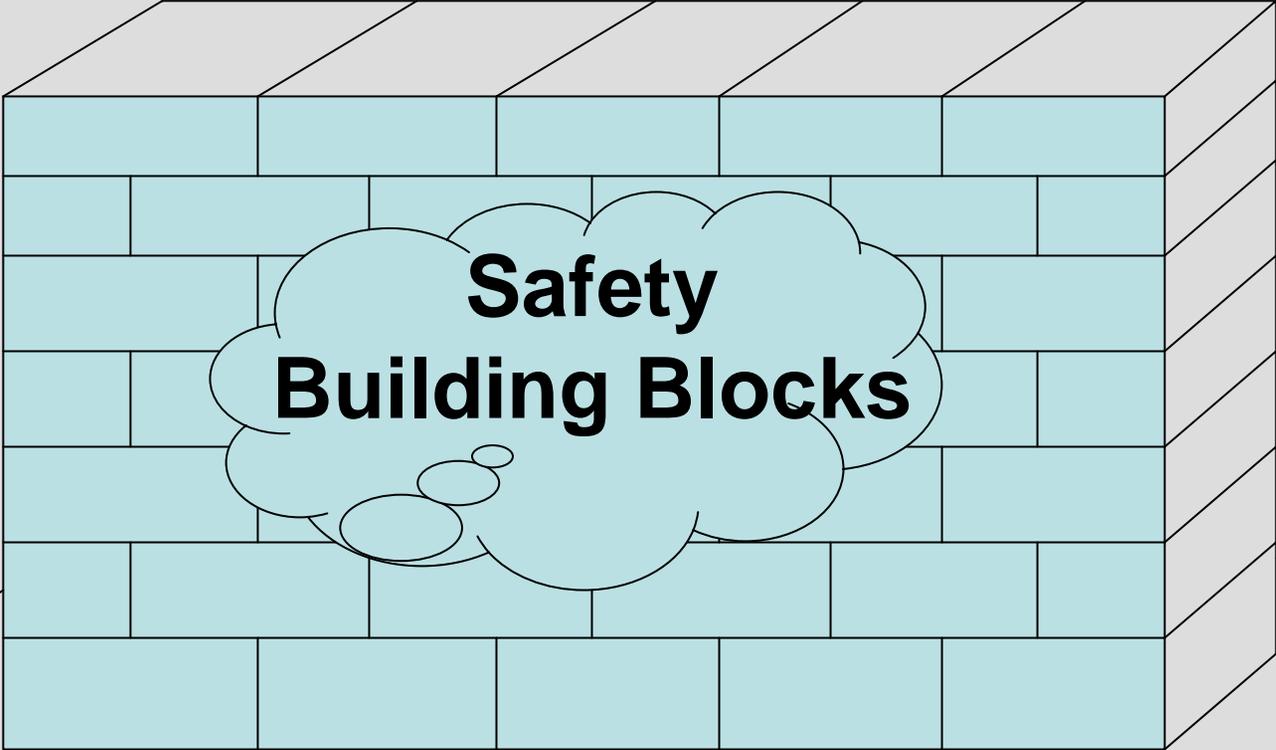


**Theme for 2004:  
“Building and Rebuilding  
The Safety Culture”**

# Building Blocks of Safety



# Safety's Firm Foundation



**Safety  
Building Blocks**

**SAFETY VALUES**

# VALUES

## The Foundation of Safety

- *Widespread Involvement*
- **TOTAL** Commitment
  - Organizational
  - Personal

# Ownership and Management

How can industry stakeholders influence the corporate structure to embrace safety as a value from top to bottom?

# Miners

What can be done so more miners...

- Perform a pre-job risk analysis?
- Resist influences to take risks?
- Assume responsibility for their safety?
- Intervene to improve co-workers' safety?
- Make safety a personal value?

We Want **U** for 2004 and Beyond



**Share your recommendations  
and ideas with the rest of  
the mining industry...**

**E-mail MSHA at:**

**[m/nmwwebcast@dol.gov](mailto:m/nmwwebcast@dol.gov)**

**Have a  
Safe 2004**

**EDUCATION & TRAINING**  
Compliance Assistance

**Triangle  
of  
Success**

**TECHNICAL SUPPORT**  
Compliance Assistance



Compliance Assistance

**ENFORCEMENT**