



Safety Grab Bag

AR Training

2012

DMME

Division of Mineral Mining

Operating Or Working Around Equipment While Distracted

Cell phones and other distractions

Multiple Studies Show....

- ◆ Drivers on the road are equally impaired using hand held or hands free cell phones.
- ◆ Some people showed the same impairment while talking on a cell phone as someone legally drunk (0.08 blood alcohol level).
- ◆ 18 to 25 year olds had the same reaction time, while on the phone, as those 65 to 74 years old.



The National Safety Council Has Determined....

- ◆ Drivers using cell phones are 4 times as likely to have a crash.
- ◆ Cell phone use is involved in 6% of all crashes.
- ◆ Some sort of distraction is the cause of 30%, or more, of all crashes.



Cell Phones At Mine Sites

- ◆ A number of mine operators have banned cell phones from their sites or restricted the use to designated areas.



**Stakeholders Best Practices
Tailgate Health Meeting Series**

***SAFETY AND
HEALTH ARE
VALUES!***

“Is that Cell Phone conversation worth the Price?”

Today using a cell phone is commonplace in our society. Using a cell phone however, may be very hazardous in the mining industry. Have you ever driven down the highway and been distracted by your cell phone? Cell phone usage can cause inattention to your specific job assignments. This inattention may result in property damage, injury to your fellow miner or even worse an injury to YOU!

The Best Practices:

- Never operate equipment while using a cell phone.
- Never operate a cell phone around flammable liquid.
- Store your cell phone in a location that will not startle you when it begins to ring or vibrate. A vibrating cell phone may startle you more by wearing it than hearing a ring tone.
- Let phone calls go to your voice mail to be retrieved later. Not all phone calls are life and death situations.
- Do not use your cell phone for receiving or sending text messages while operating equipment.
- Cell phones should be turned off within 100 feet of any blasting area.
- Site specific hazard training should include possible hazards associated with cell phone use.



Developed in cooperation with the following Quarry & Open Pit Group Members:

PCS Phosphate; Swift Creek Mine, White Springs, Florida; (Team Leader)
Quarries Inc.; Everlasting Pink; Elberton, Georgia;
Lafarge North America; Lithonia Plant, Lithonia, Georgia;
Lafarge North America; Newton County Mine; Newton, Georgia;

Operators Aren't The Only Ones At Risk

- ◆ People working on the ground around mobile equipment are at a high risk of injury if they do not stay alert to what is going on around them.
- ◆ The pictures at right are of accident scenes where people were struck and killed by the equipment shown.



Cell Phones Aren't The Only Problem

- ◆ Ipods or MP3 players that not only distract, but keep people from hearing approaching equipment.
- ◆ Looking at paperwork, maps, books, etc., as people move around mobile equipment can distract them.
- ◆ Driving while eating, adjusting radios or reaching for items are all distractions operators should try to avoid.



* Fatality scenes where people were struck.

Unexplained Operator Fatalities

- ◆ Many mobile equipment accidents, resulting in the death of the operator, have been due to the operator losing control of the vehicle for some unknown reason.
- ◆ Some, if not all, of these may have been because the operator was distracted by something. We will never know for sure.

So What's The Bottom Line?

- ◆ Any type of multitasking, especially while operating heavy mobile equipment, or while working around congested areas where traffic is present, can impair an individual's ability to concentrate.
- ◆ The next time you are operating mobile equipment and your cell phone rings, resist the urge to answer that cell phone.
- ◆ Or how about when you take your eyes off the road to pick up that bottle of water you dropped? Take the time to pull over to a safe area and park. Then pick up that bottle.
- ◆ The same goes for eating while operating equipment. Don't eat and drive.
- ◆ If you are walking or working in an area where traffic exists, take the time to communicate with the equipment operator and pay attention to the activity occurring around you.
- ◆ If you must make a phone call or read something, go to an area where there is no traffic.
- ◆ Protect yourself by paying attention to what is going on around YOU!



Finger Rings, Jewelry, Loose Clothing

Finger Rings Are A Danger

- ◆ 4VAC25-40-1780.
Finger rings shall not be worn while operating or working on equipment or tools.



Do You Believe Me Now?



Just Ask Him



Watch Out For Loose Clothing



Driller
caught in
rotating
steel.

- ◆ Loose clothing can be deadly around moving/rotating machinery.
- ◆ Drillers, maintenance and clean-up personnel are at greater risk since they often are near moving parts.



- ◆ Even gloves can present a hazard.
- ◆ Be mindful of long hair and dangling necklaces, bracelets and chains.

Clean-up man pulled into feed conveyor pulley.



Seat Belts

Better Off With It, Than Without It!



Scene of a 2005 accident in which a driver trainee lost control of the truck he was operating. The truck went through a berm and fell 70 feet. The trainee, who was wearing a seat belt, was treated overnight in the hospital and released. The instructor, who was not wearing a seat belt, was killed!!

- ◆ The statistics are clear, your chances of survival are much better when wearing a seat belt.
- ◆ Operators are seldom able to “jump clear”, the equipment usually runs/rolls over them.
- ◆ 4VAC25-40-1370.
....Equipment operators shall use the seat belts provided.

These Guys Learned The Hard Way!

Backwards 30 ft. - 2008



Thrown out - 2005



Backwards 20 ft. - 2005



Roll over - 2007



Jumped, rolled over - 2006



Back/Lifting Safety

Manual Materials Handling Injuries

- ◆ While fatalities are rare, manual materials handling injuries account for about 35% of all mining injuries at surface locations.
- ◆ Four out of five of these injuries will affect the lower back.
- ◆ Back injuries account for about 25% of the lost-time injuries in the mining industry.
- ◆ While the rate of these injuries has declined over recent years, the decline has not been nearly as much as with overall injury rates.



So....

.... Let's Talk About Back Injuries And Prevention

Common Types of Back Injuries:

- Muscle Strain or Spasm
- Ruptured or Herniated Discs



❖ Low back pain can have many other causes

BACK INJURIES CAN TAKE YOU OUT!

Many of these injuries could be avoided if miners practiced a few basic and simple rules for back conservation. The lumbar spine, which includes the five vertebrae and six disks in the curved portion of the lower back, is the part most often injured. Lifting, bending, and twisting motions (on or off the job) can cause severe injury and pain. Because the lumbar region is the area at greatest risk during normal work, it deserves to be the main focus of back conservation and maintenance attention.



Factors Associated With Back Disorders

Back disorders result from exceeding the capability of the muscles, tendons, or discs. Or, the cumulative effect of several contributors:

- ◆ **Reaching while lifting**
- ◆ **Twisting while lifting**
- ◆ **Bending while lifting**
- ◆ **Poor posture -- how one sits or stands**
- ◆ **Staying in one position for too long**
- ◆ **Bad body mechanics -- how one lifts, pushes, pulls, or carries objects**
- ◆ **Poor physical condition -- losing the strength and endurance to perform physical tasks without strain**
- ◆ **Poor design of job or work station**
- ◆ **Repetitive lifting of awkward items or equipment**
- ◆ **Heavy lifting**
- ◆ **Fatigue**



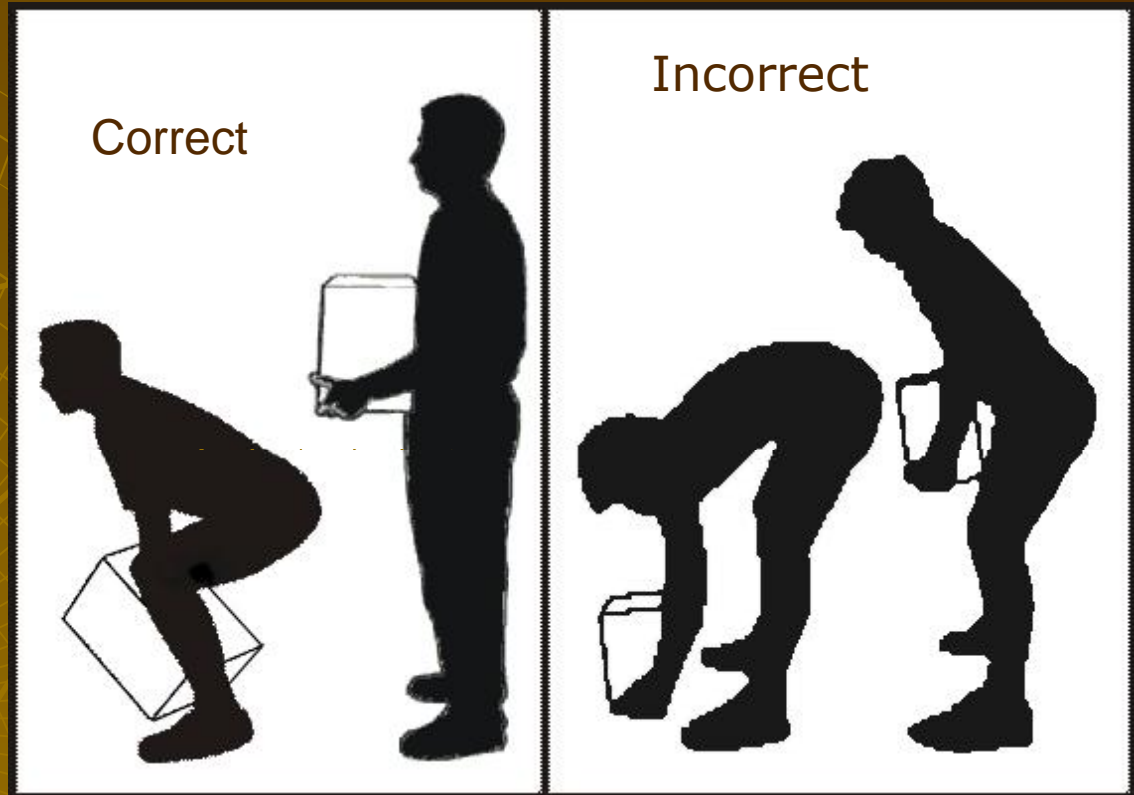
Proper Lifting

First:

- Test the weight
- Plan your route

Then:

- Take a wide stance
- Bend your knees
- Get close
- Get the best hold
- Stable position
- Tighten the stomach
- Use your legs
- Keep back straight
- Lift smoothly

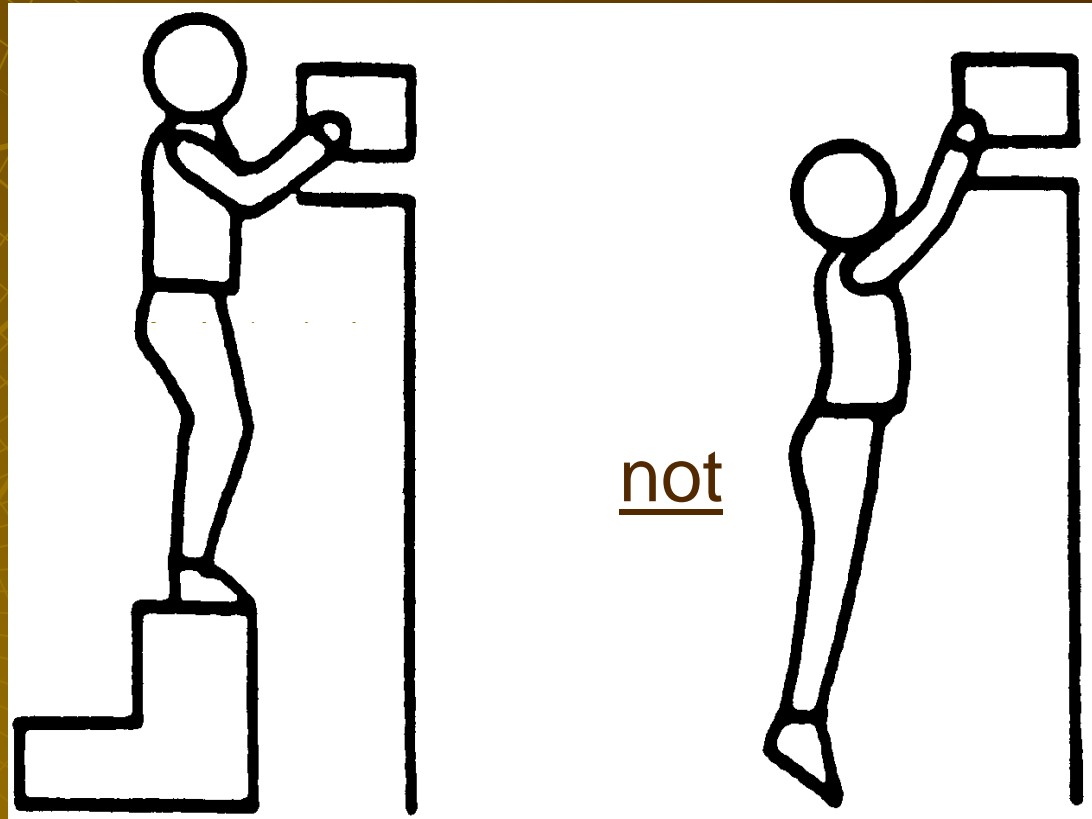


Avoid or Minimize:

- Bending and twisting
- Reaching out with the weight

Reaching Overhead

- Wide, sturdy base of support.
- Safe platform or step stool.
- Avoid lifting above shoulder height.
- Heaviest items should be stored at waist height.



Manual Handling Of Materials

Seek help:

- ◆ When a load is too bulky to properly grasp or lift.
- ◆ When you can't see around or over the load.
- ◆ When you can't safely maneuver the load.
- ◆ When the weight is uncomfortable.



◆ Always ask yourself, “Is there a better way to do this job?”

Does this photo show the proper way to lift?



Does this look any better?



What are some injuries that result from improper lifting?

Analyze Common Activities

Consider common lifting and moving activities at your operation. Assess the risk. Can you identify the hazards and safer ways of doing the jobs? For example:

Changing conveyor rollers.



- Handling guards during maintenance work.



What About These Jobs?

Handling
cylinders &
drums



Back Support Belts

- ◆ While they can be helpful, avoid:
 - Lifting more than you normally would. This puts you at greater risk for other injuries such as hernias, pulls and strains.
 - Prolonged use will actually weaken your back muscles making injury more likely!





Safe Lifting Summary

- ◆ Be alert to the hazards that may be present.
- ◆ Break load into parts if possible.
- ◆ Get help with heavy or bulky items.
- ◆ Lift with legs, keep back straight, do not twist or bend.
- ◆ Avoid lifting above shoulder level.
- ◆ Avoid reaching out over an obstruction to lift, hold, or lower an object.
- ◆ Store heavy and frequently used items at waist height.
- ◆ Push, instead of pull.
- ◆ Use handling aids as much as possible such as steps, trestles, dollies, lift gates, wheelbarrows, come-alongs, chain hoists, jacks or a forklift.
- ◆ Always look for a better way!!

