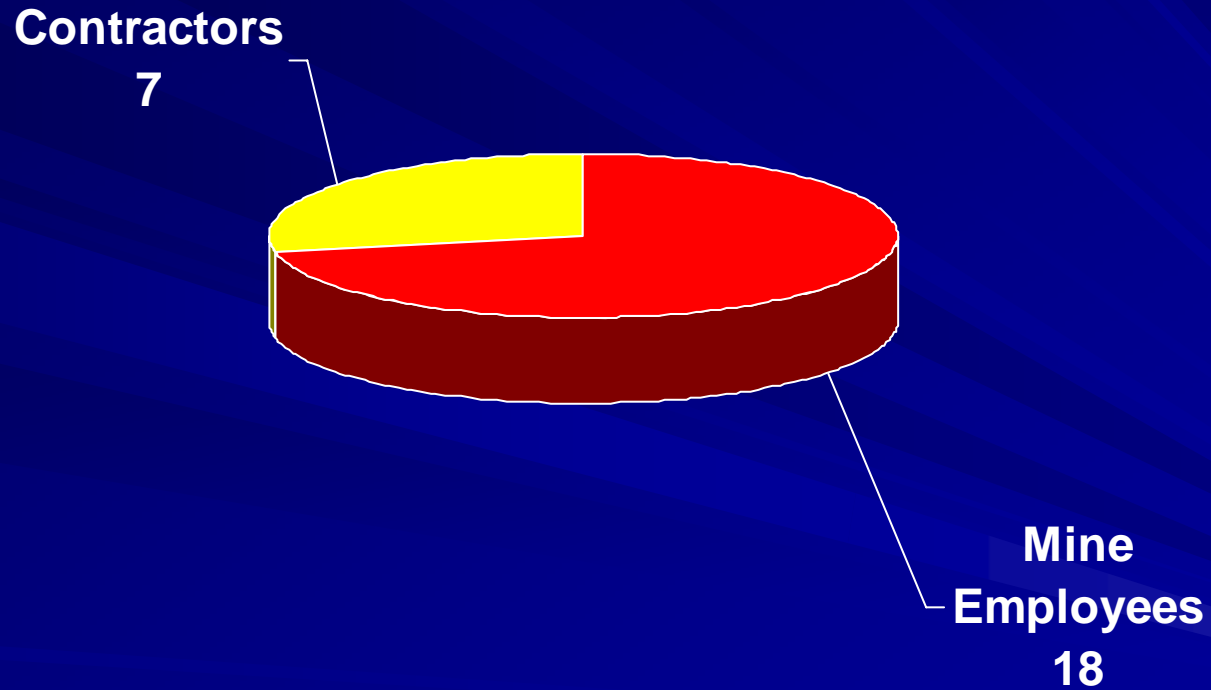
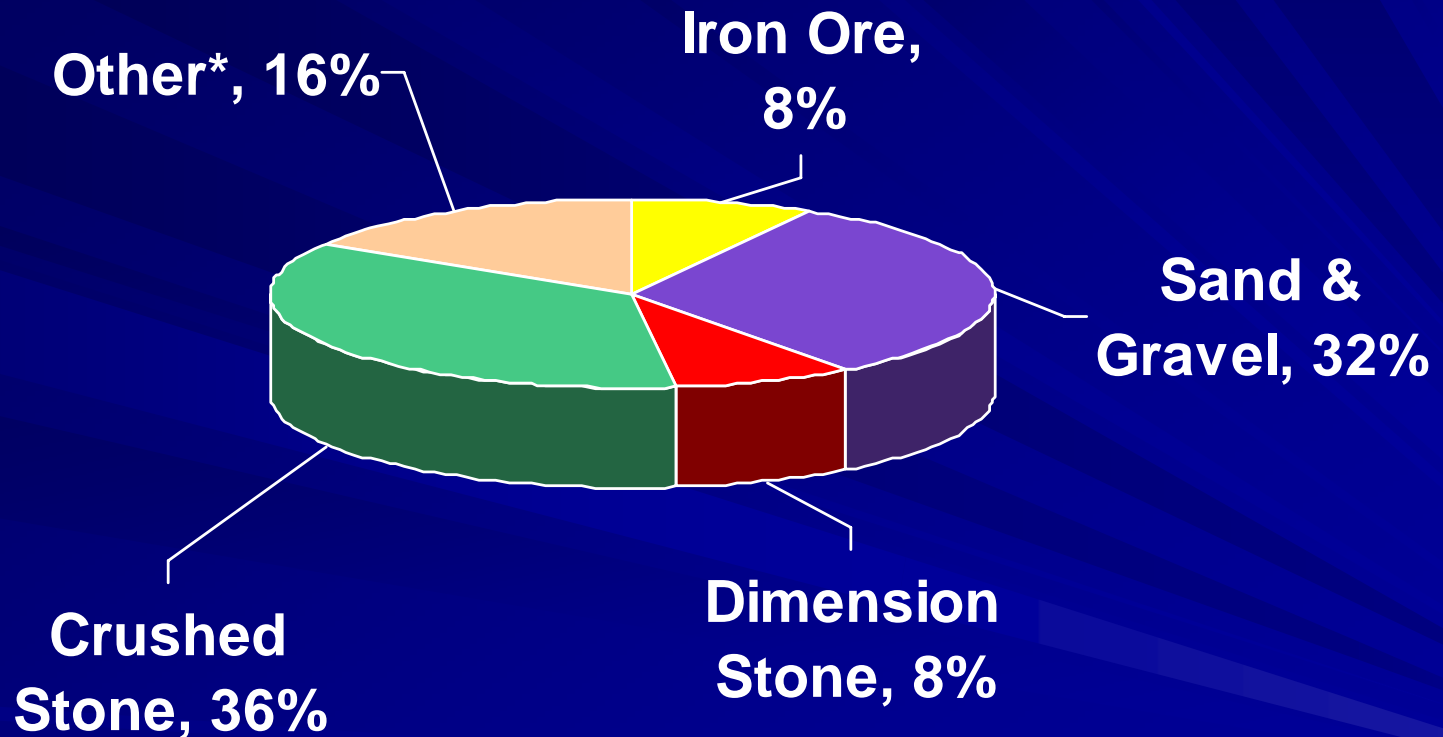


**Metal and Nonmetal  
Fatal Accident Review  
CY 2006**

# MNM Fatalities

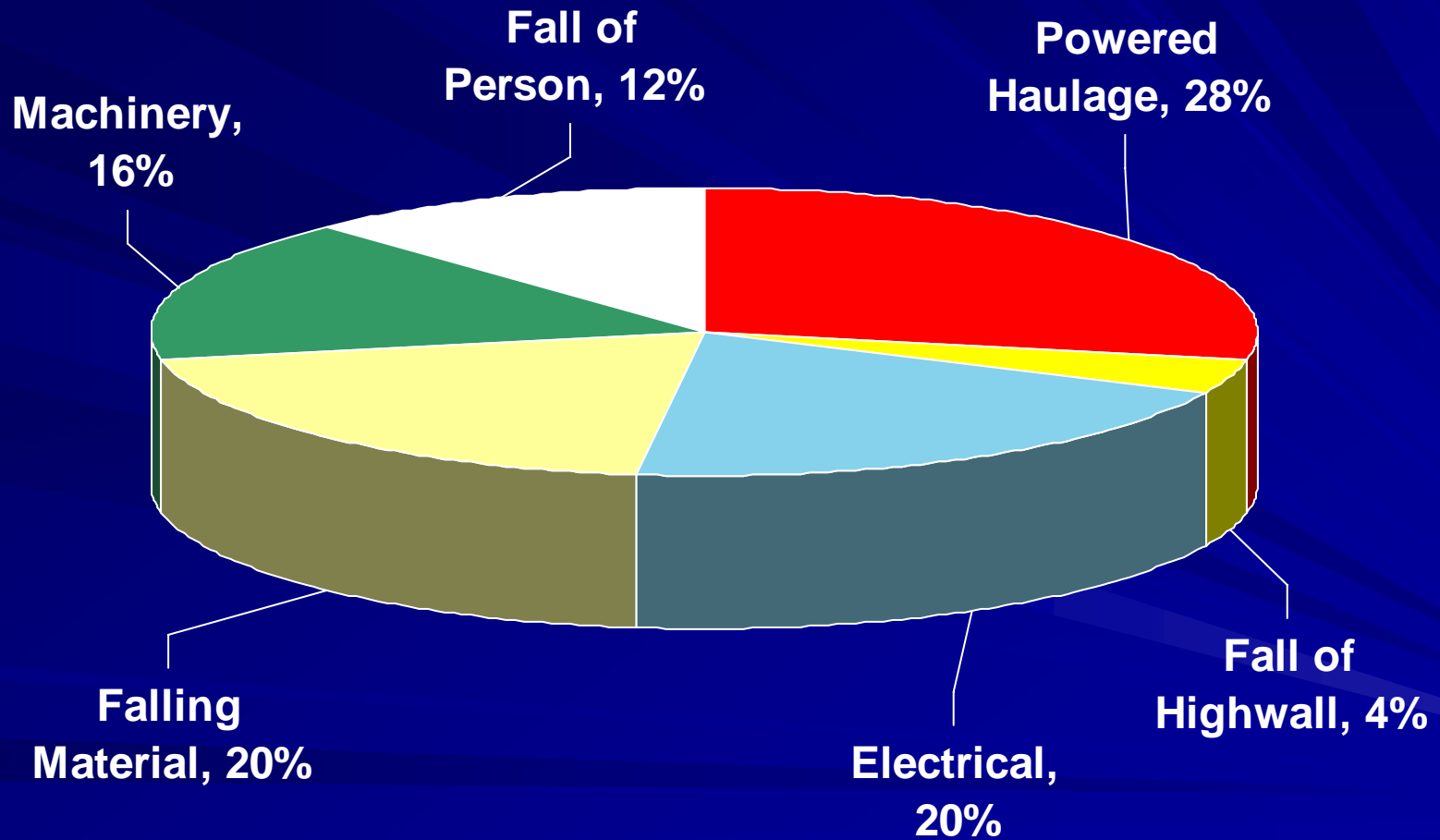


# MNM Fatalities by Commodity

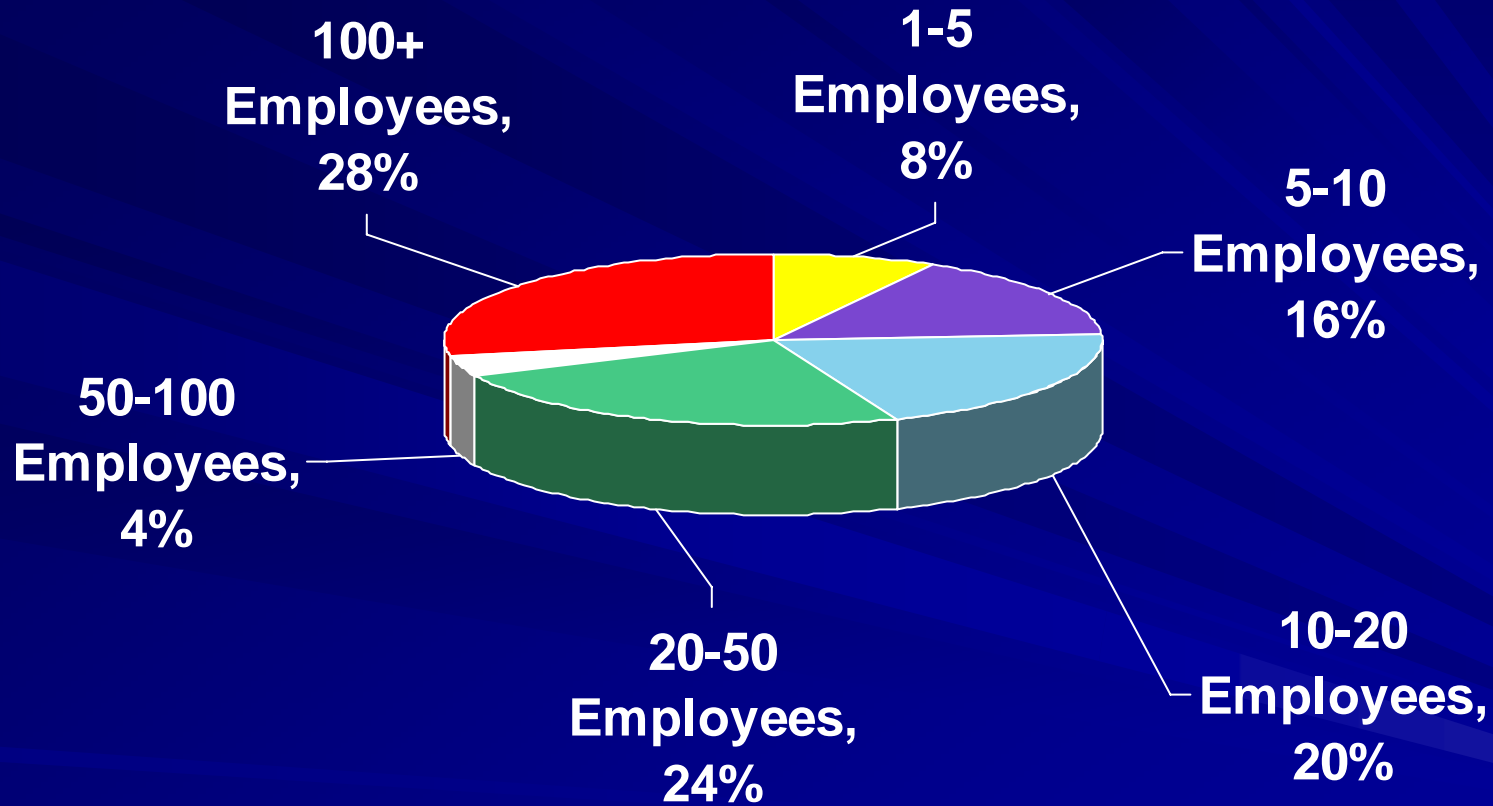


\* Cement, Phosphate, Sand, Lead/Zinc,

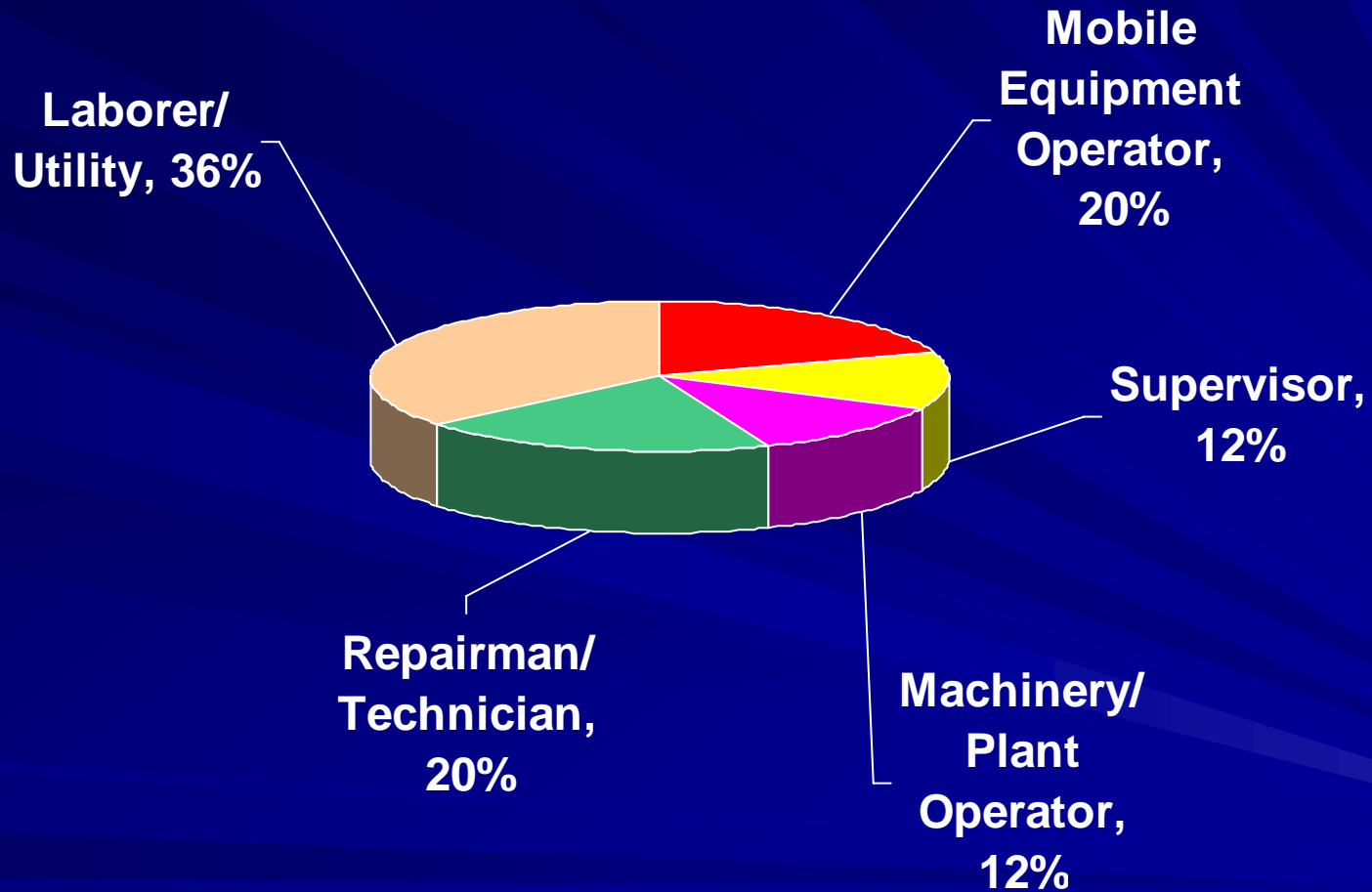
# MNM Fatalities by Classification



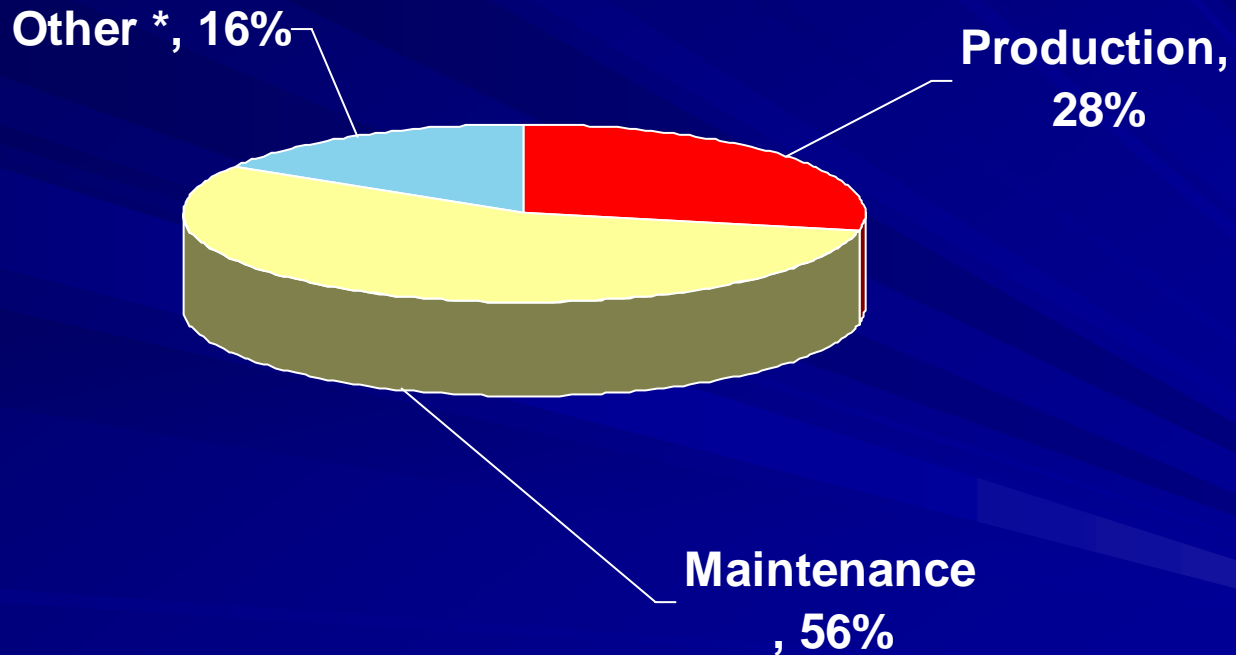
# MNM Fatalities by Mine Size



# MNM Fatalities by Occupation

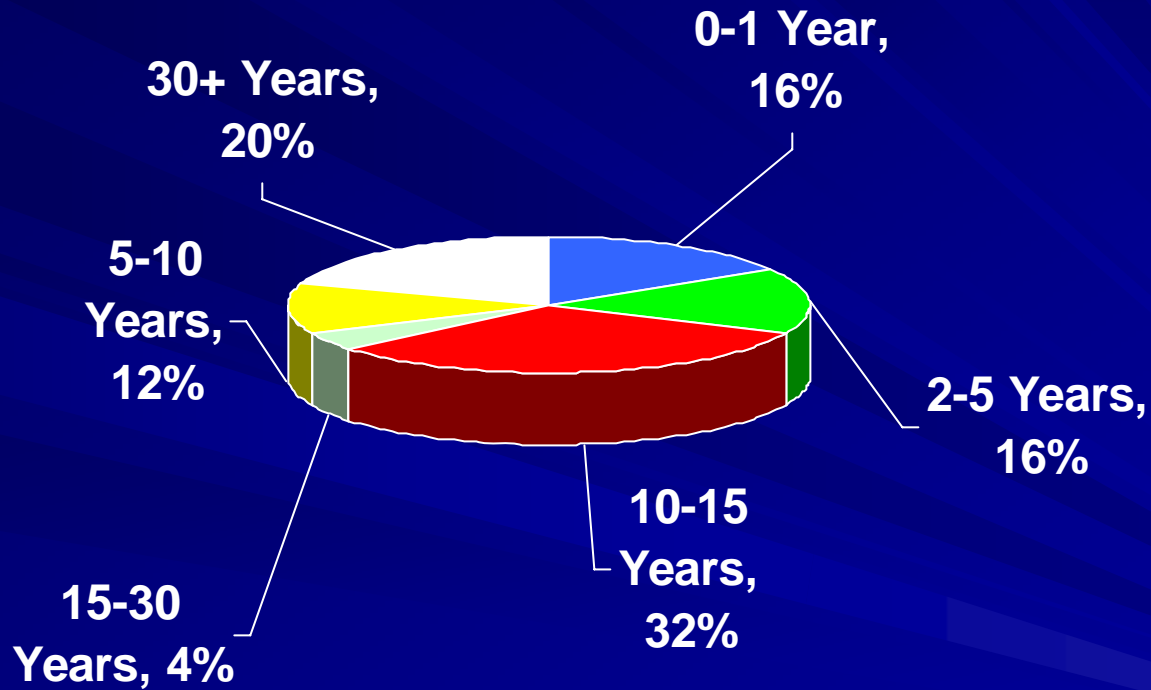


# MNM Fatalities by Activity



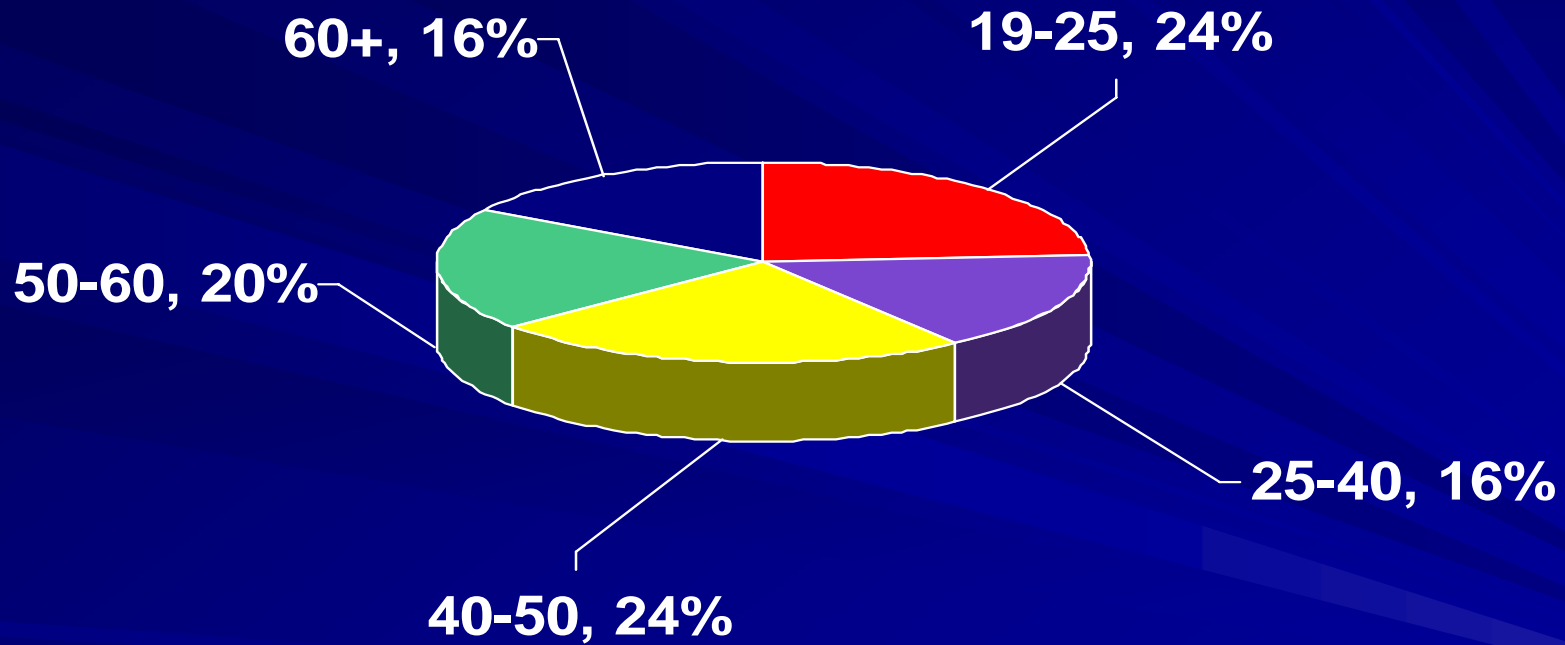
\* Walking, trimming weeds

# MNM Fatalities by Mining Experience





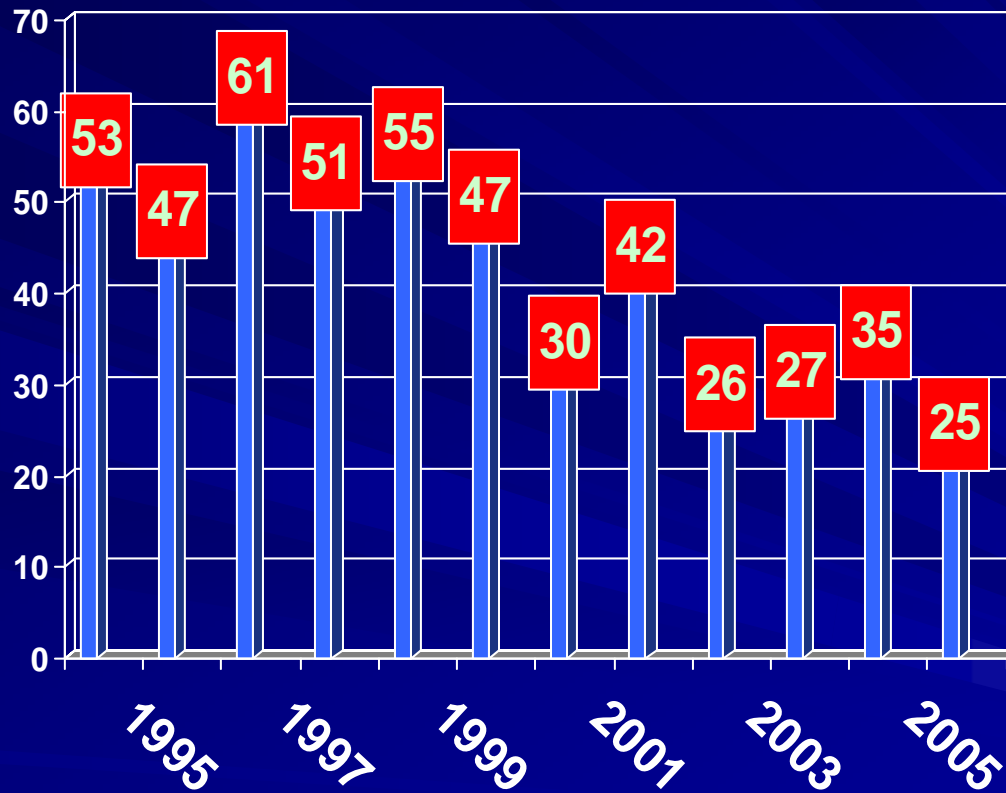
# MNM Fatalities by Age



# Root Causes

- **No Risk Assessment Conducted**
- **No/Inadequate Policy or Procedures**
- **Did not use Personal Protective Equipment**
- **Lack of Pre-operation Checks**
- **Equipment not Maintained**
- **Training Inadequate**
- **Failure to Conduct Examinations**

# MNM Fatalities – 1995-2006





The majority of fatal accidents have these common root causes

- Failure to identify hazards
- Failure to manage risks

## **SLAM Risks the SMART Way!**

### **Miners:**

- Stop** Think through the task
- Look** Identify the hazards for each job step
- Analyze** Determine if you have the proper knowledge, training, and tools
- Manage** Remove or control hazards and use proper equipment

### **Mine Operators:**

- Stop** Isolate each step in a task and identify past and potential accidents, injuries, and violations.
- Measure** Evaluate the risks associated with the task and barriers that have allowed hazards to cause injuries
- Act** Implement controls to minimize or eliminate any hazards that make the risk unacceptable
- Review** Conduct frequent work site visits to observe work practices and audit accidents, injuries, and violations to identify root causes
- Train** Develop a human factor-based action plan and then involve and train the miners
- Make the RIGHT Decision!**

When Miners & Mine Management are  
**Risk SLAMMERS**

*together they*

Make the RIGHT Decision and...





U.S. Department of Labor

**Make the  
RIGHT Decision**

Mine Safety and Health Administration