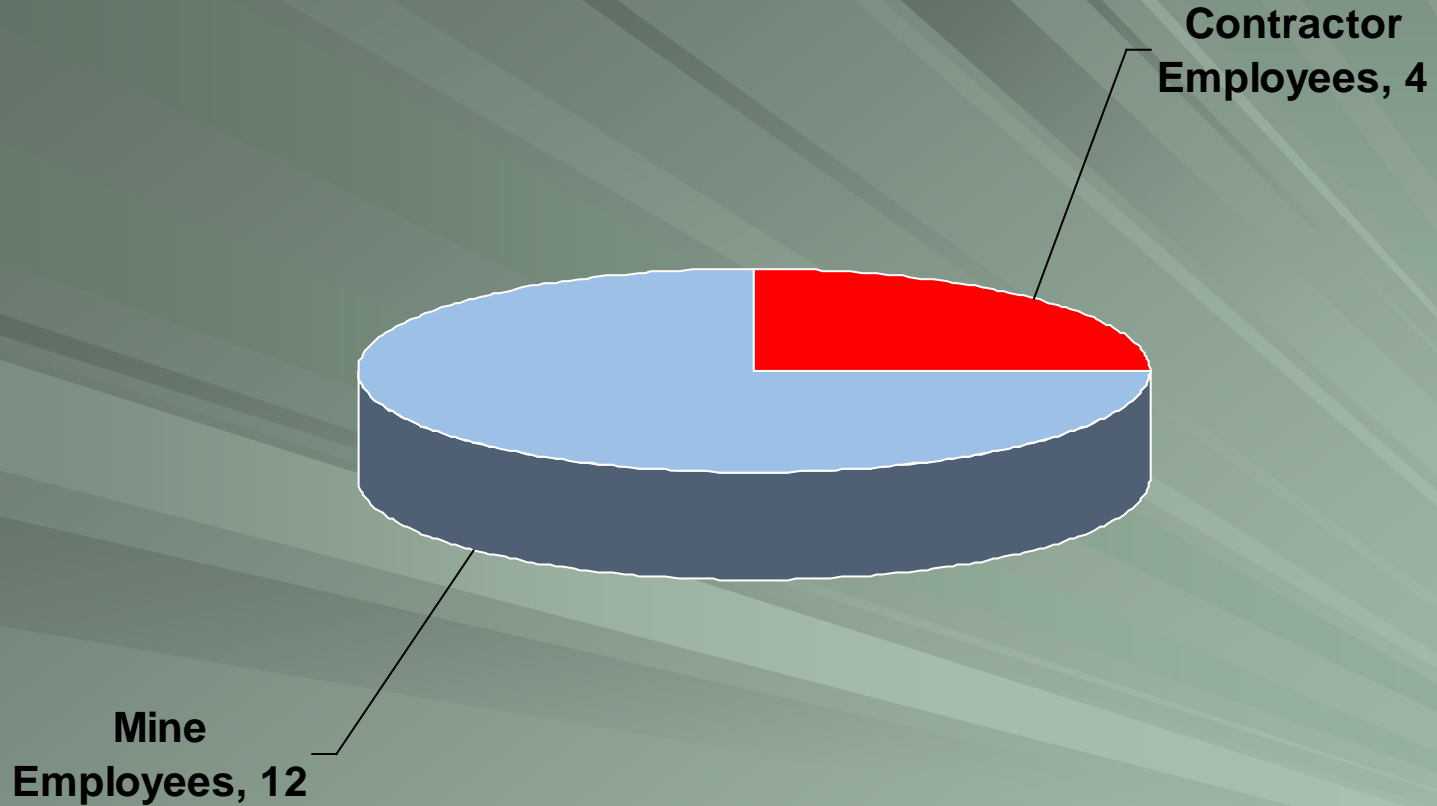
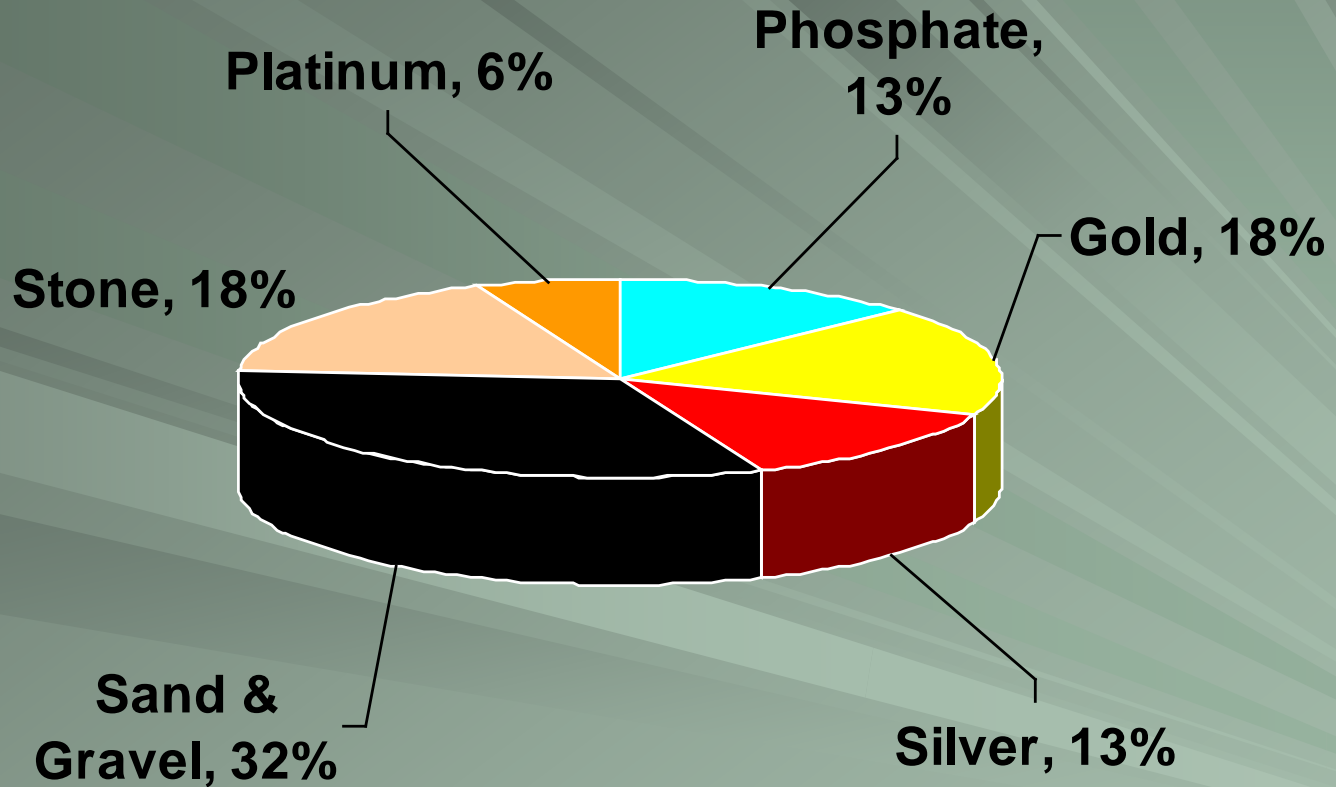


**Metal and Nonmetal
Fatal Accident Review
CY - 2011**

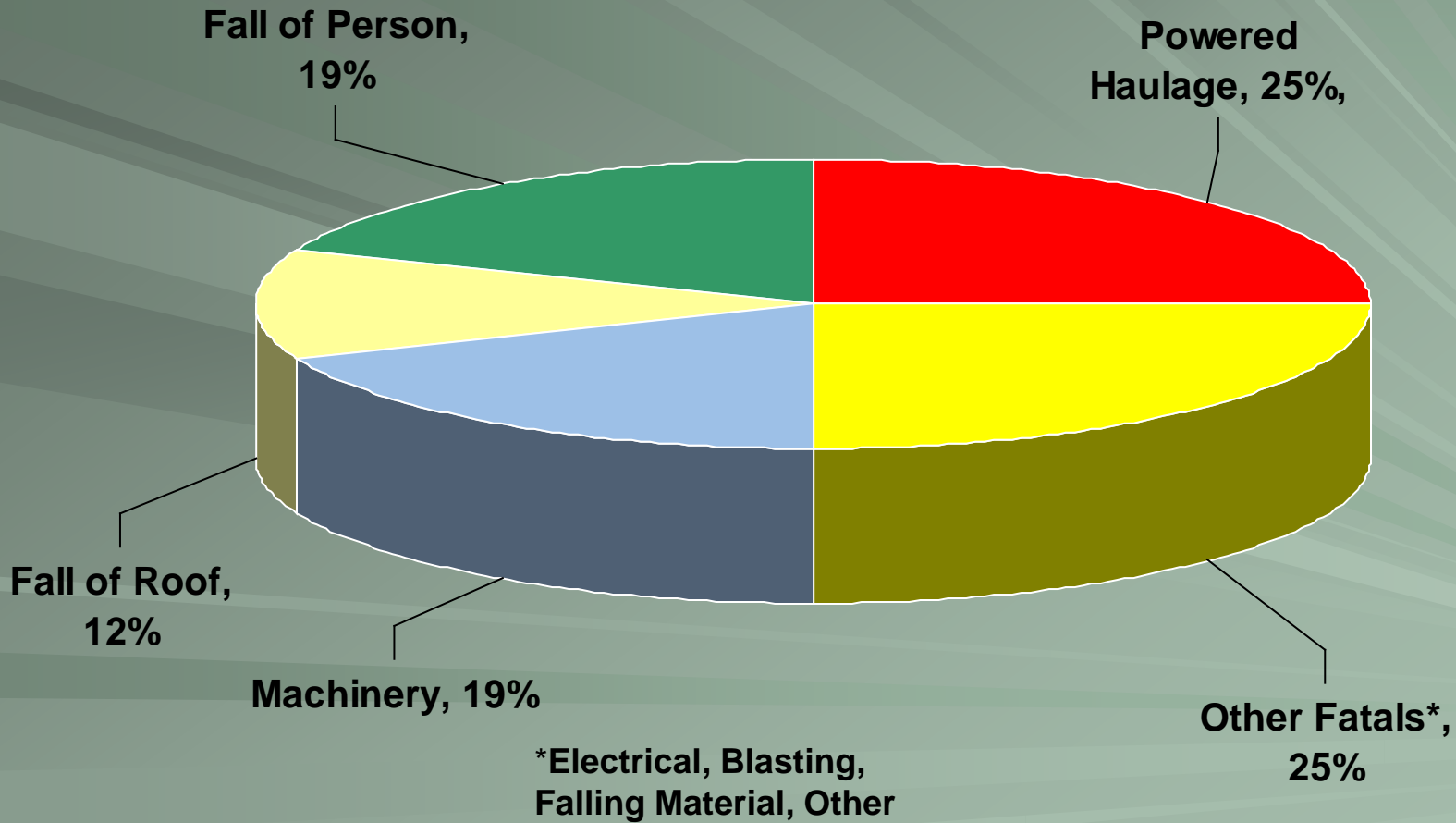
MNM Fatalities



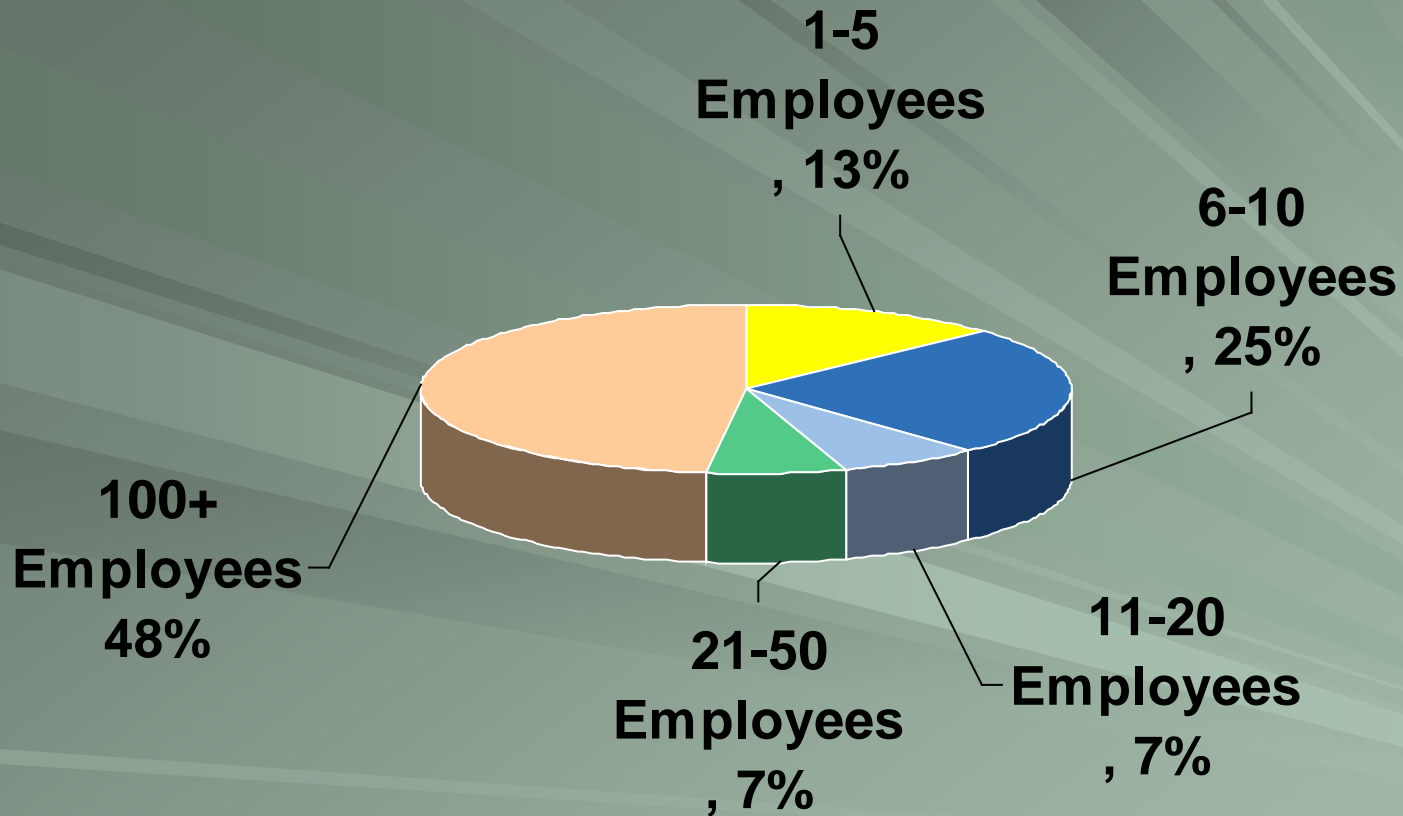
MNM Fatalities by Commodity



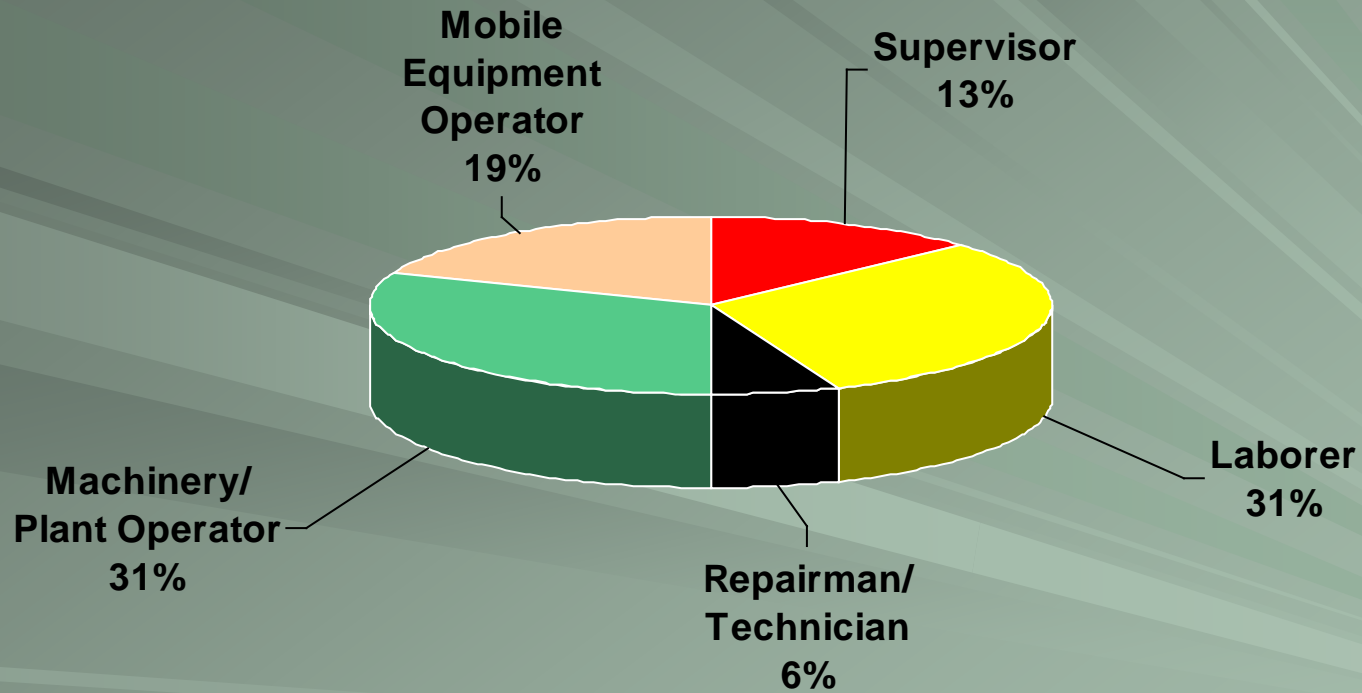
MNM Fatalities by Classification



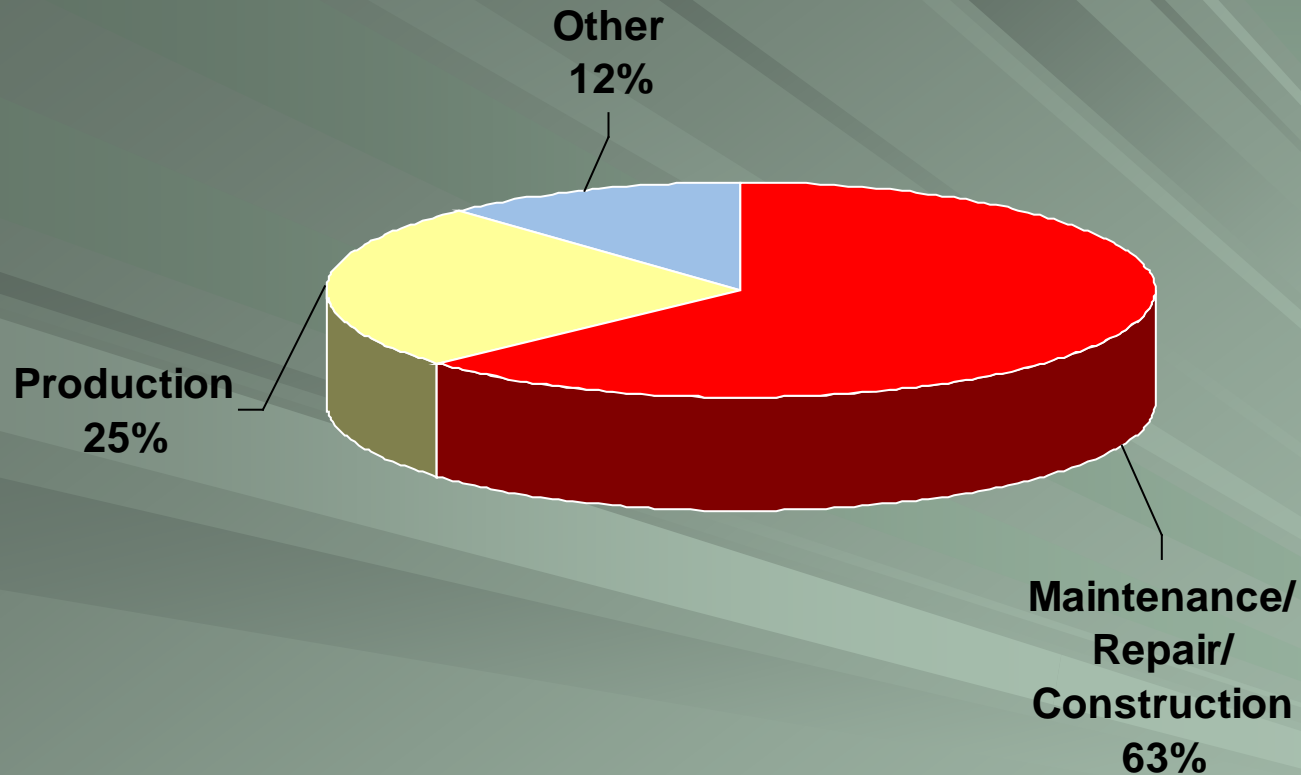
MNM Fatalities by Mine Size



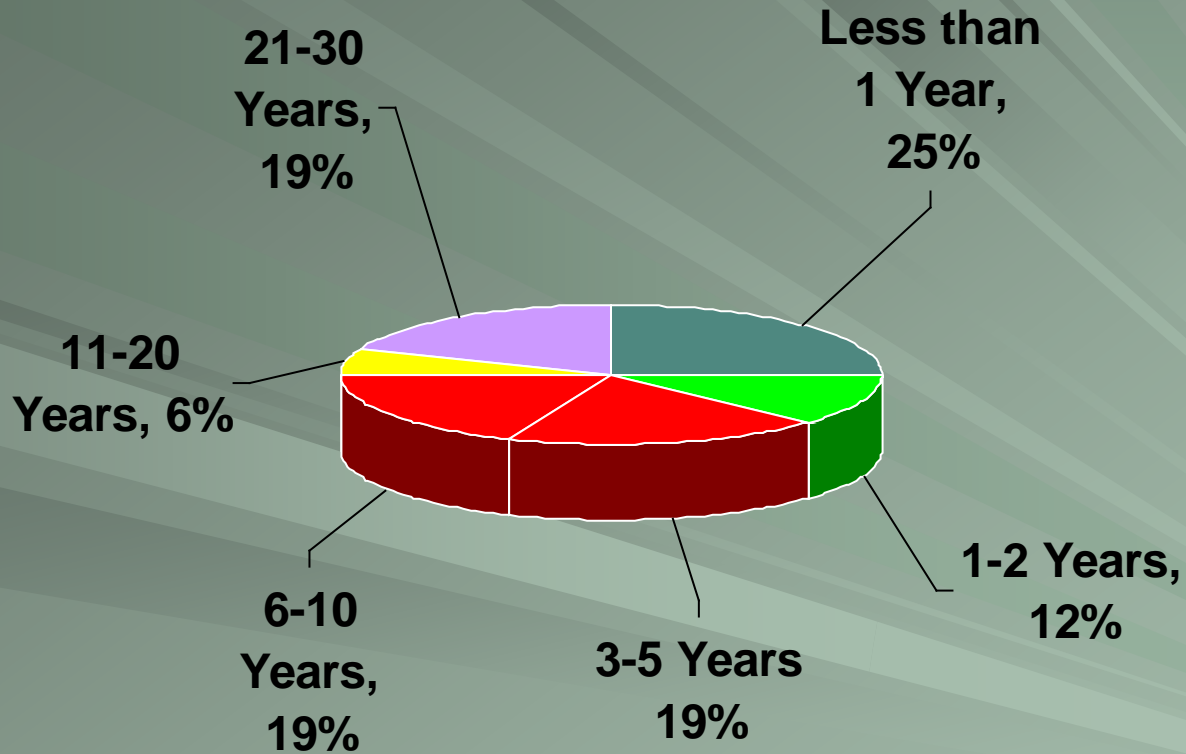
MNM Fatalities by Occupation



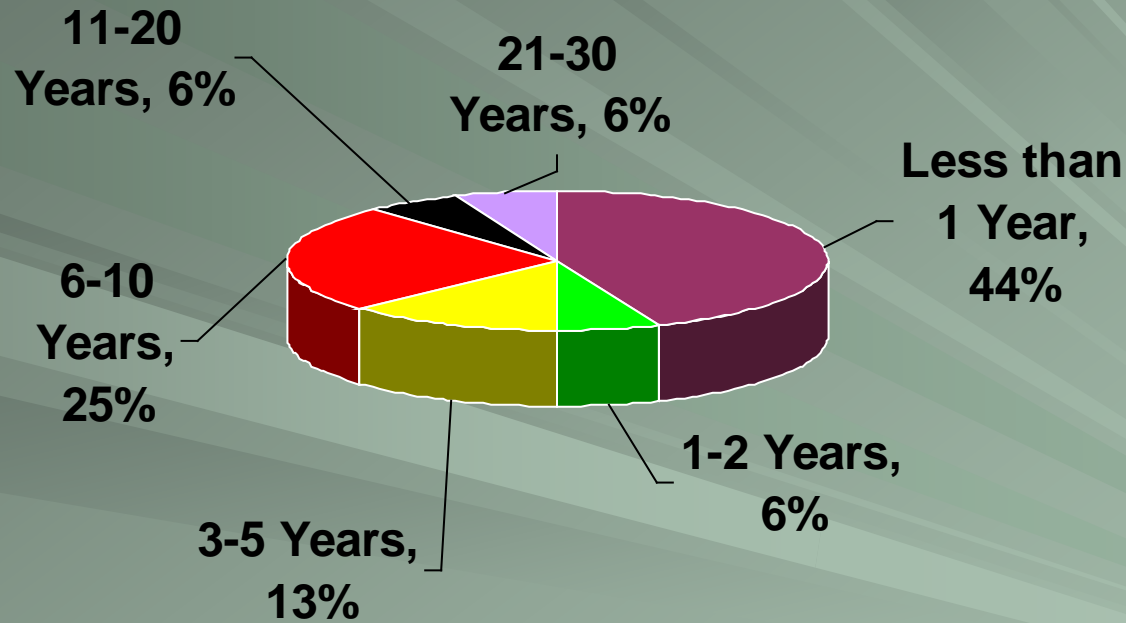
MNM Fatalities by Activity



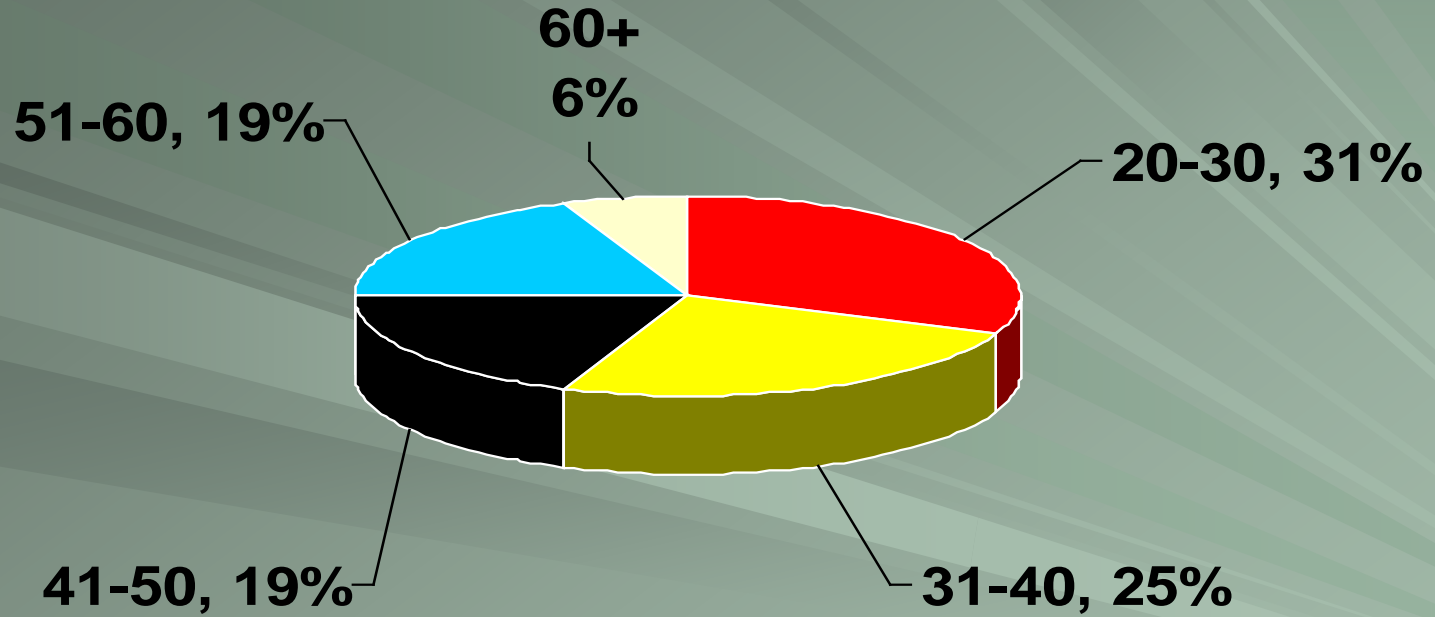
MNM Fatalities by Total Experience



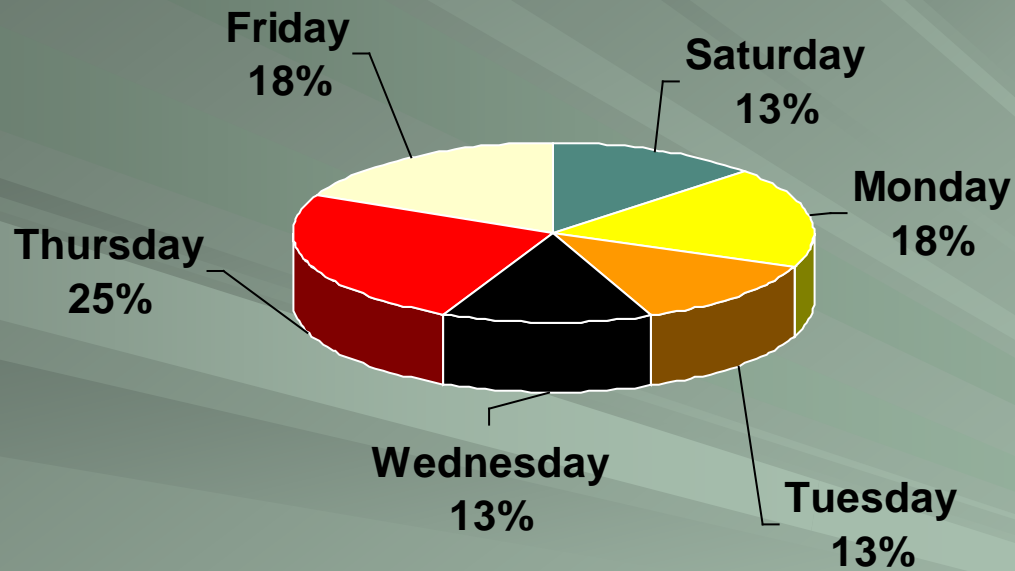
MNM Fatalities by Job Experience



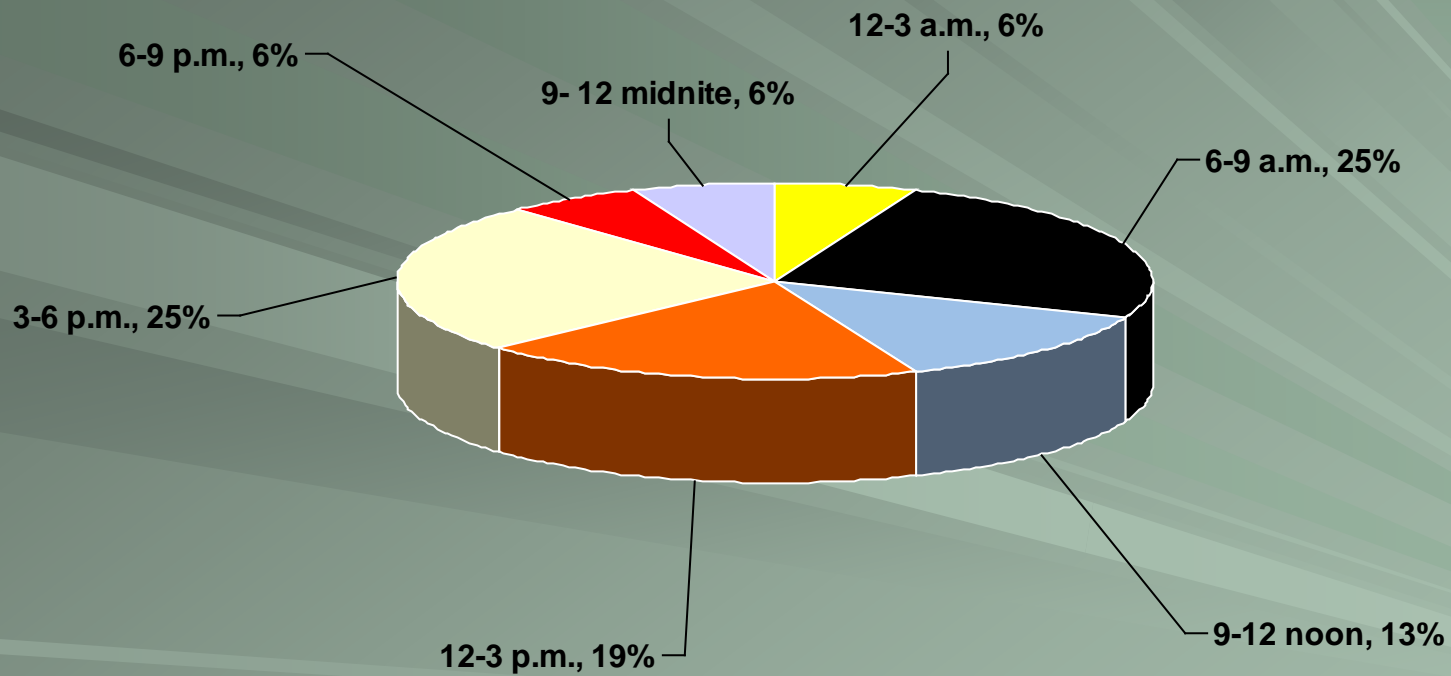
MNM Fatalities by Age



MNM Fatalities by Day of Week



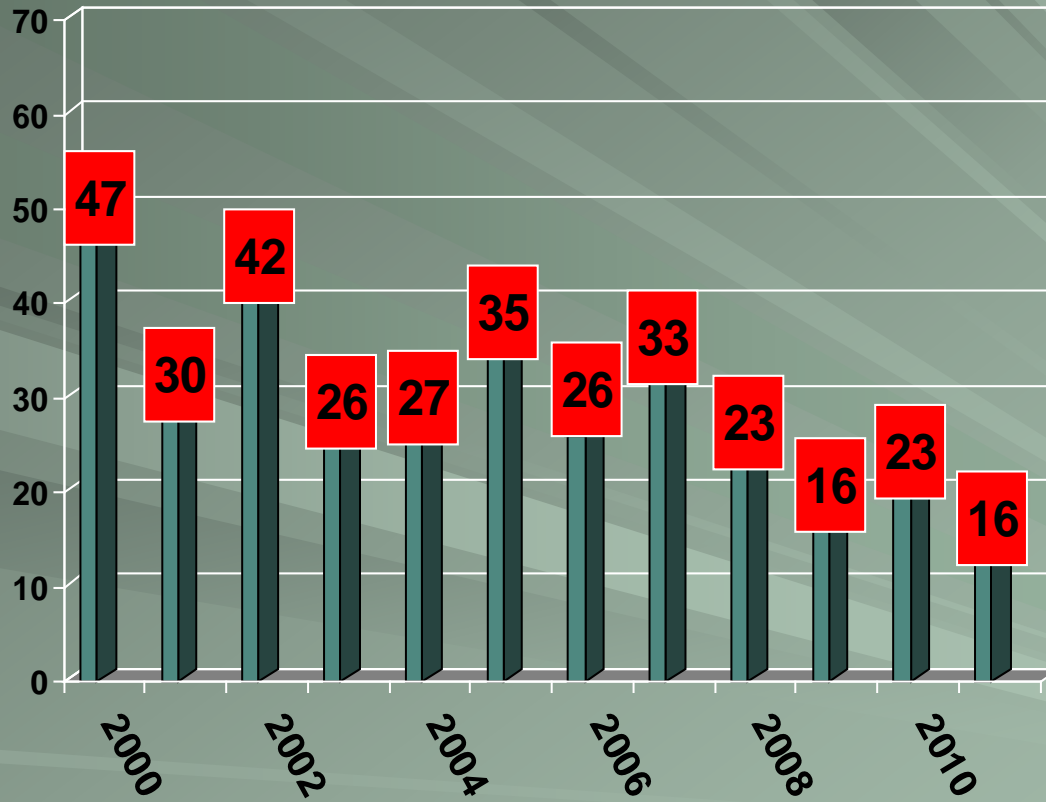
MNM Fatalities by Hour of Day



Root Causes

- **Training Inadequate**
- **Failure to Conduct Examinations**
- **No Risk Assessment Conducted**
- **Inadequate Policies, Procedures, Controls**
- **Procedures not Followed or Monitored**
- **Personal Protective Equipment not used**
- **Did not conduct Pre-operation Checks**
- **Equipment not Maintained**

MNM Fatalities – 2000-2011



Powered Haulage

Year	'05	'06	'07	'08	'09	'10	'11
Fatalities	16	7	8	5	5	7	4

--Includes Mobile Equipment and Belt Conveyors

Powered Haulage-- Mobile Equipment

- Maintain mobile equipment
- Always wear a seat belt
- Be aware of the location and traffic patterns of mobile equipment in your work area
- Sound the horn to warn persons of intended movement



Powered Haulage -- Belt Conveyors

- Deenergize and block belt conveyors against motion before starting the task
- Lock-out/tag-out all energy sources to belt conveyors before working on them.
- Maintain communications with all persons performing the task



Electrical

Year	'05	'06	'07	'08	'09	'10	'11
Fatalities	2	5	1	2	1	1	1

- MCC fires / explosions
- Deenergize
- Lockout/Tagout
- Power line clearance
- Monitor Contractors



Machinery

Year	'05	'06	'07	'08	'09	'10	'11
Fatalities	10	4	7	3	4	3	3

- Block equipment against motion
- Provide a safe means of access
- Establish policies and procedures for safely clearing plugged material in a feed hopper.



Fall of Roof, Back, Ribs

Year	'05	'06	'07	'08	'09	'10	'11
Fatalities	0	0	3	3	1	2	2

- Examine and test for loose ground
- Design, install, and maintain a support system to control the ground in places where persons work or travel in performing their assigned tasks



Slip / Fall of Person

Year	'05	'06	'07	'08	'09	'10	'11
Fatalities	3	3	6	4	2	1	3

- Many serious fall injuries
- Eliminate Hazards and use PPE
 - Inadequate walkways and scaffolds
 - Fall protection not used
 - Persons not anchored
 - Holes not covered or protected





U.S. Department of Labor

**Make the
RIGHT Decision**

Mine Safety and Health Administration