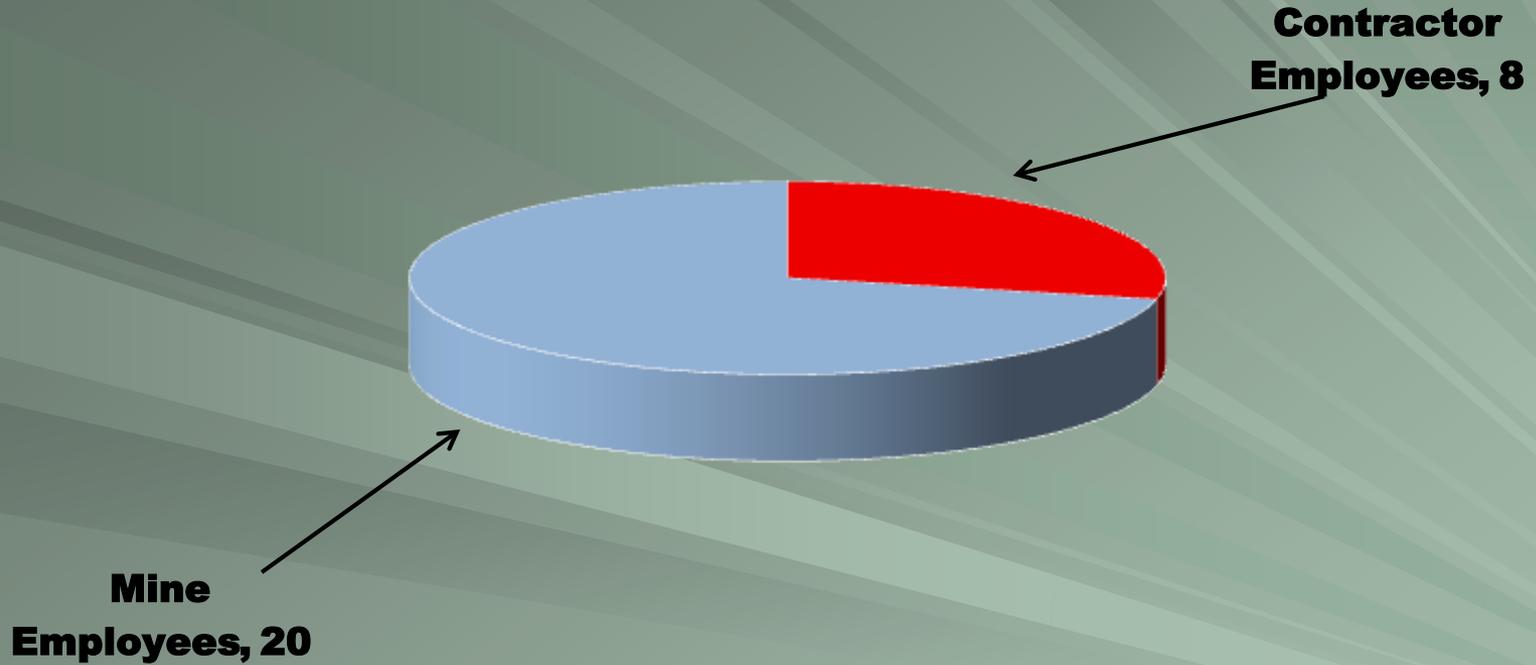


**Metal and Nonmetal  
Fatal Accident Review  
CY – 2014**

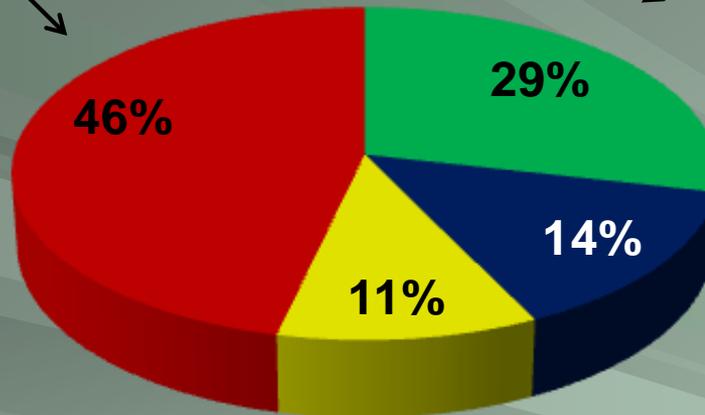
# MNM Fatalities



# MNM Fatalities by Commodity

Other\*

Sand &  
Gravel



Sand & Gravel

Cement

Limestone

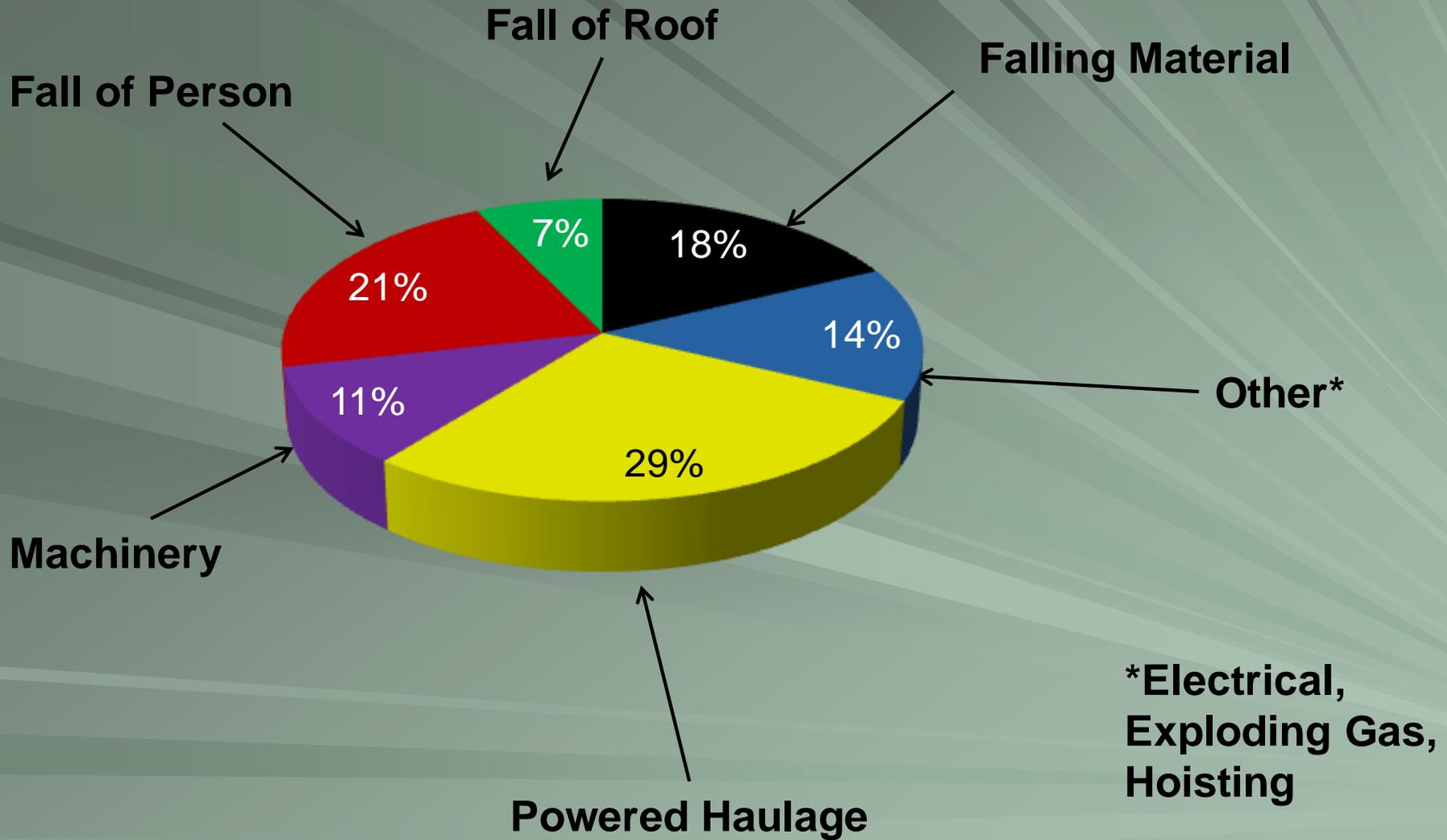
Other\*

Cement

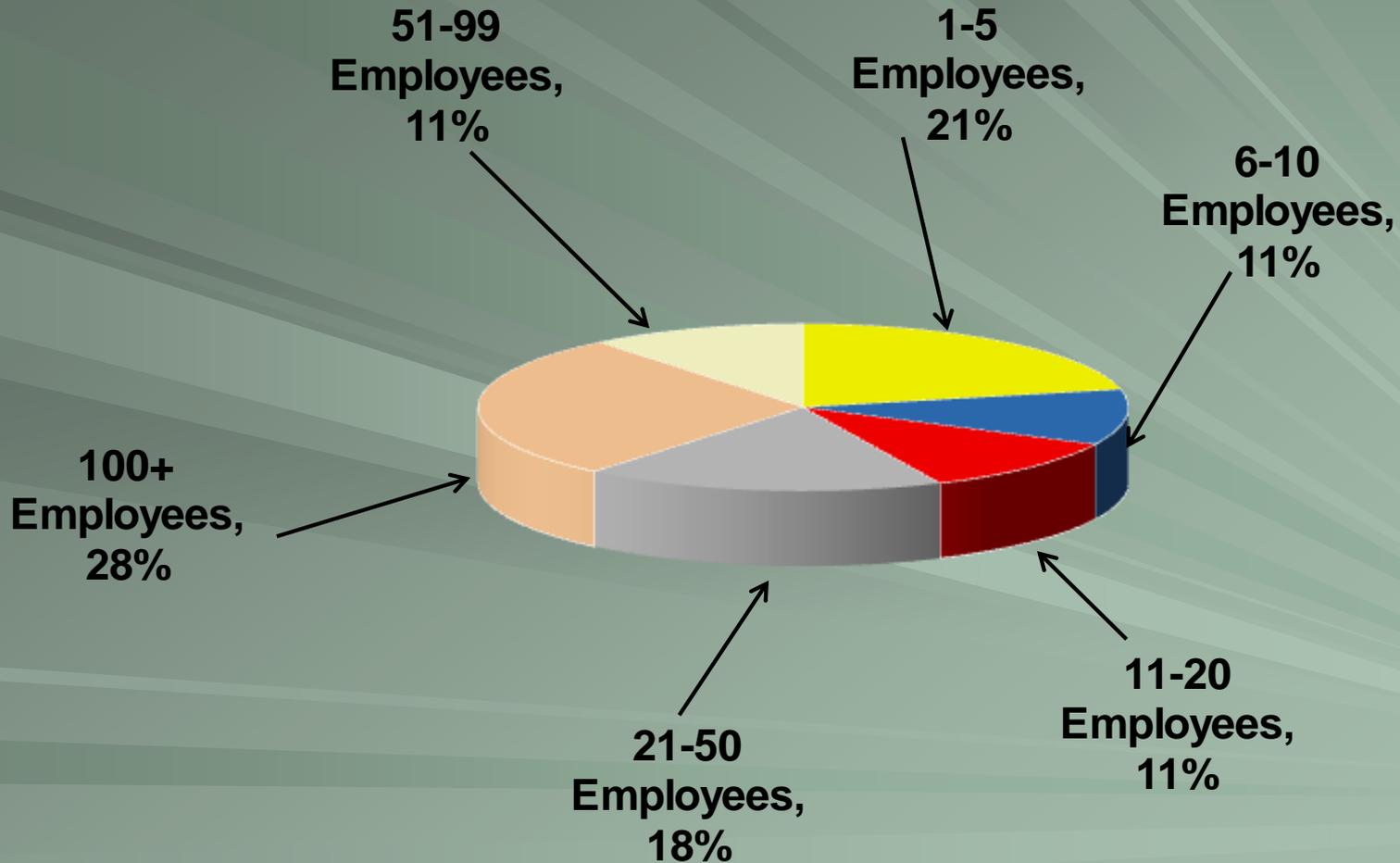
Limestone

\* Gold, Lime, Salt, Gypsum, Silver, Sandstone, Cement, Granite, Iron Ore, Sand, Clay, and Alumina

# MNM Fatalities by Classification



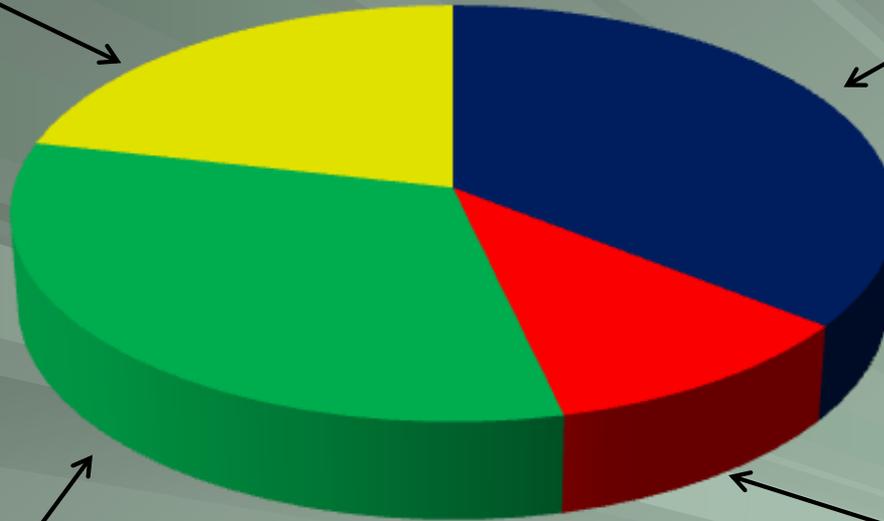
# MNM Fatalities by Mine Size



# MNM Fatalities by Occupation

**Repairman**  
**21 %**

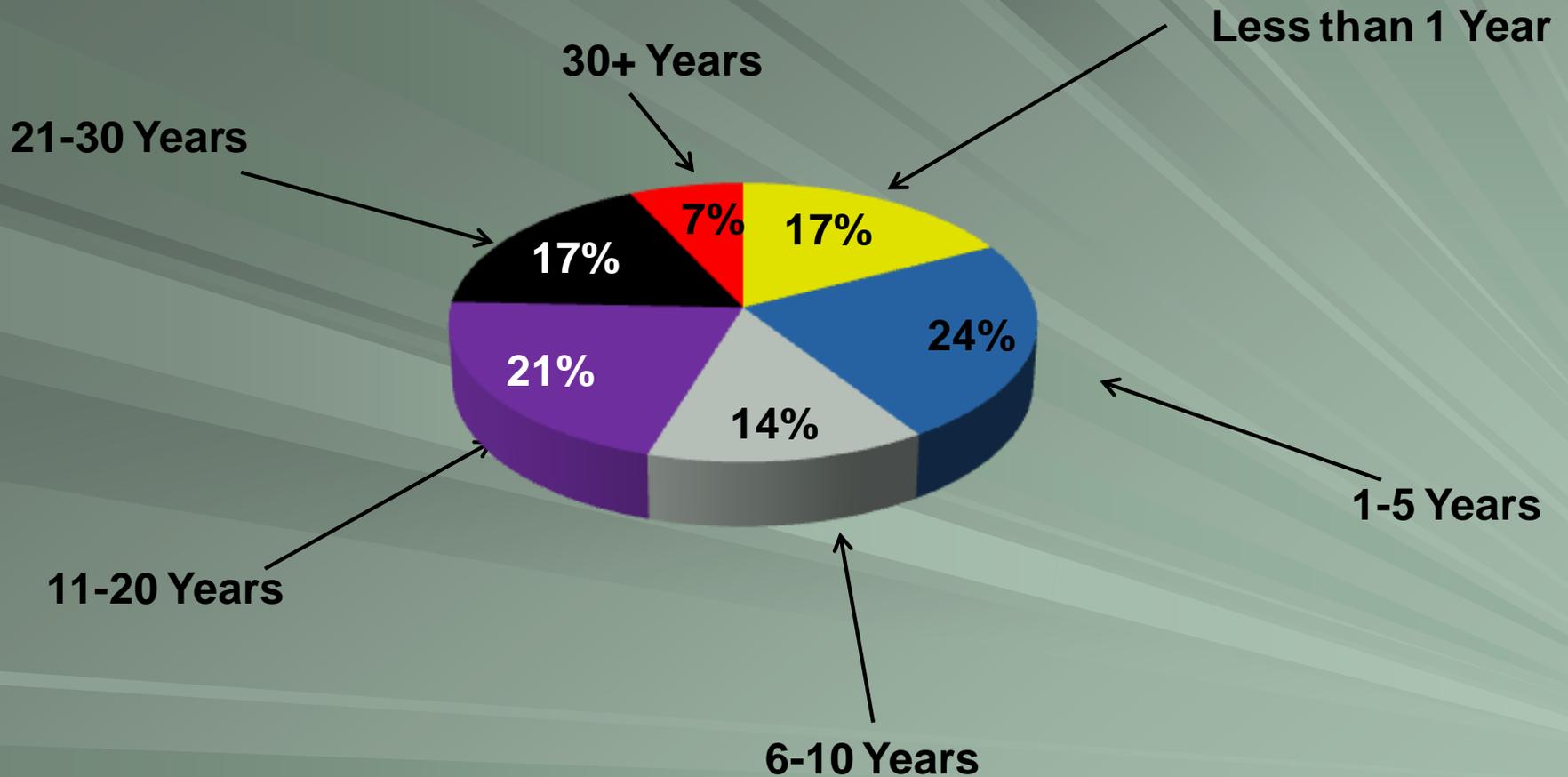
**Laborer**  
**36 %**



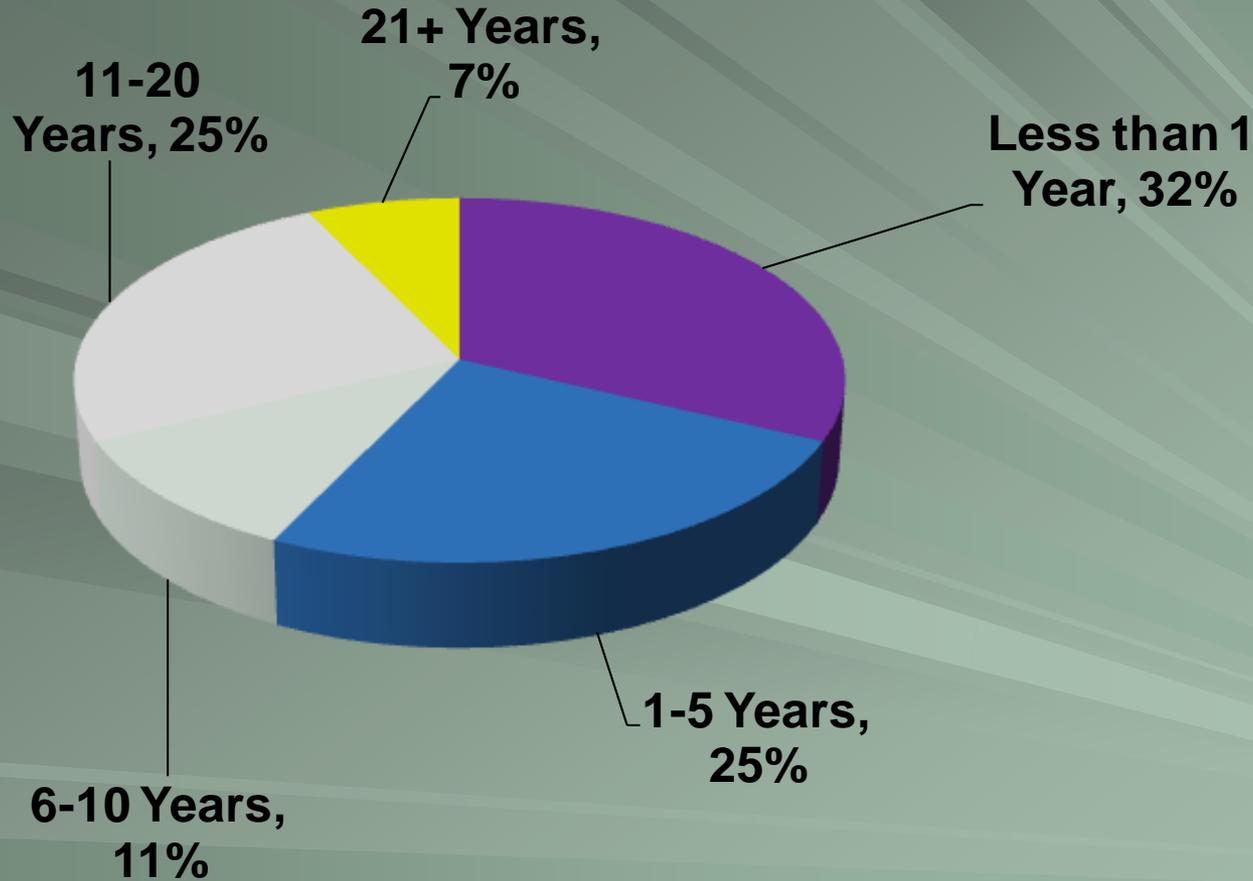
**Mobile  
Equipment  
Operator**  
**32 %**

**Supervisor**  
**11 %**

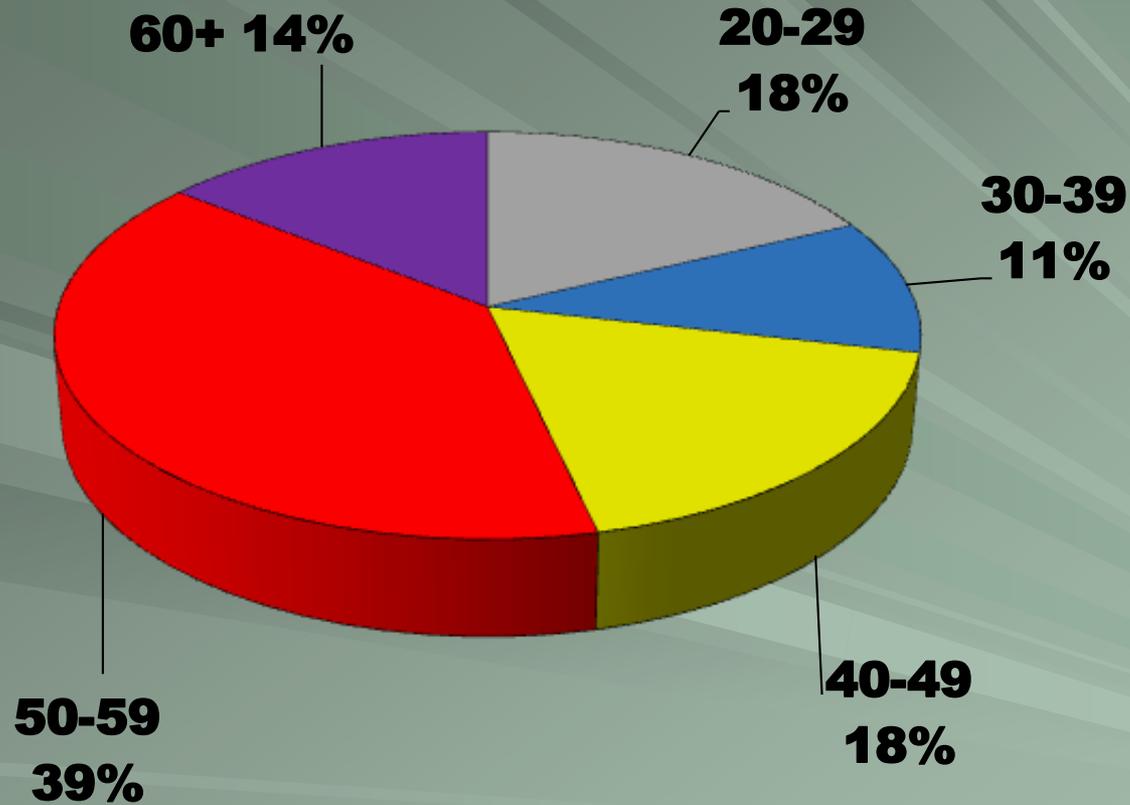
# MNM Fatalities by Total Experience



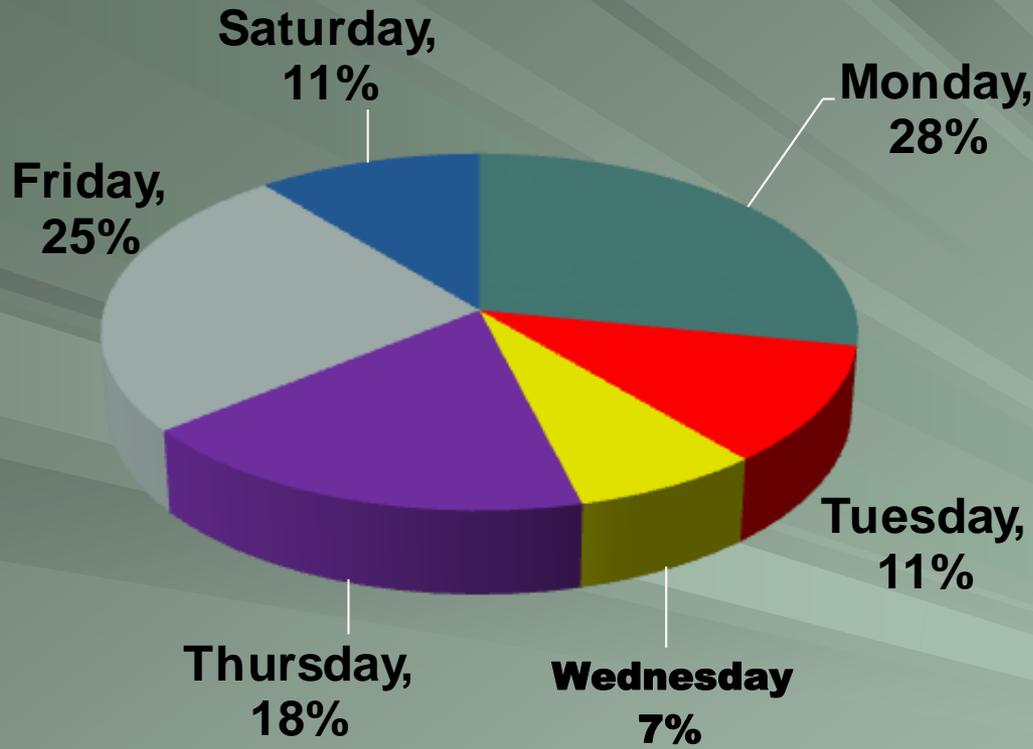
# MNM Fatalities by Job Experience



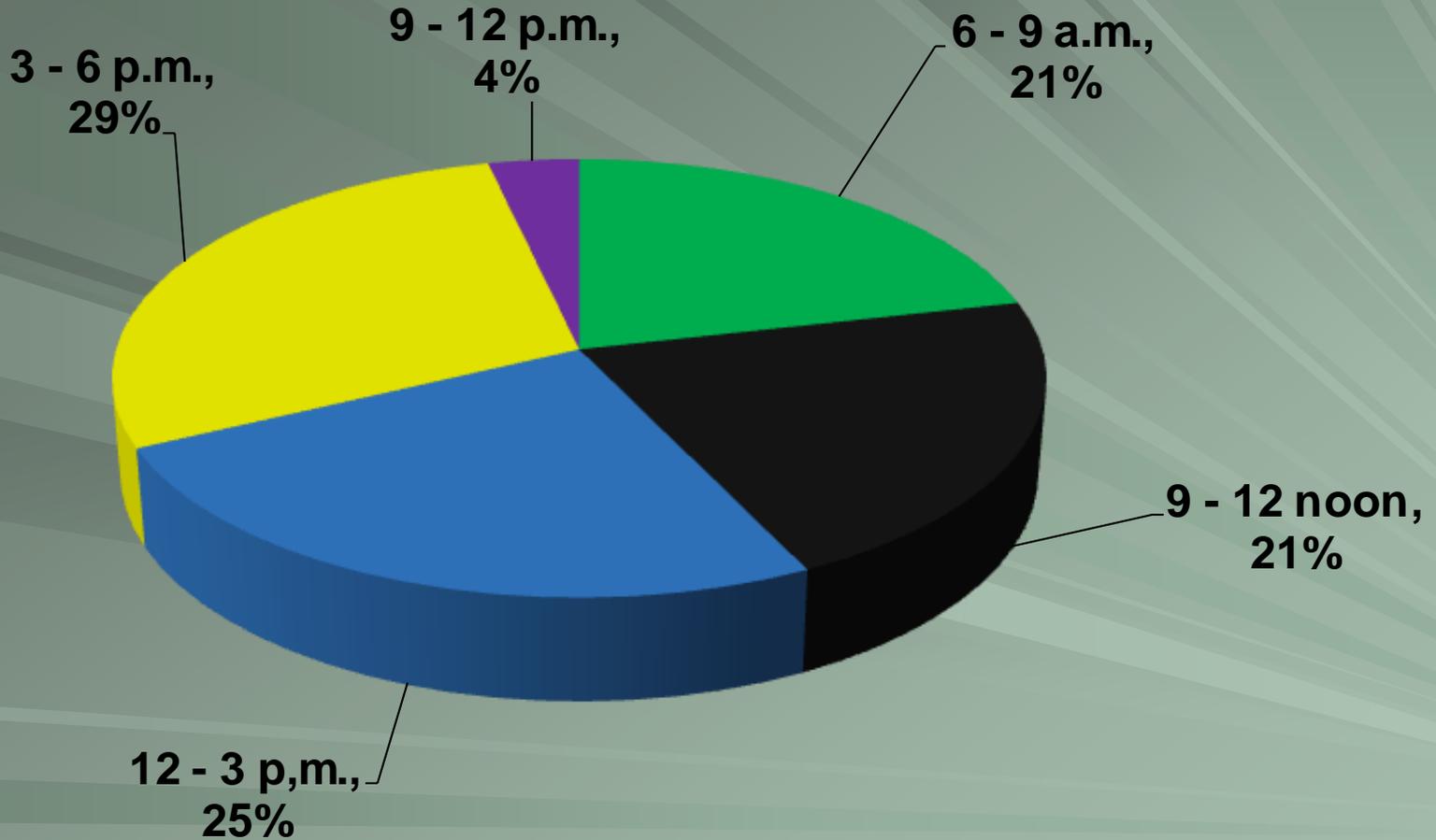
# MNM Fatalities by Age



# MNM Fatalities by Day of Week



# MNM Fatalities by Hour of Day

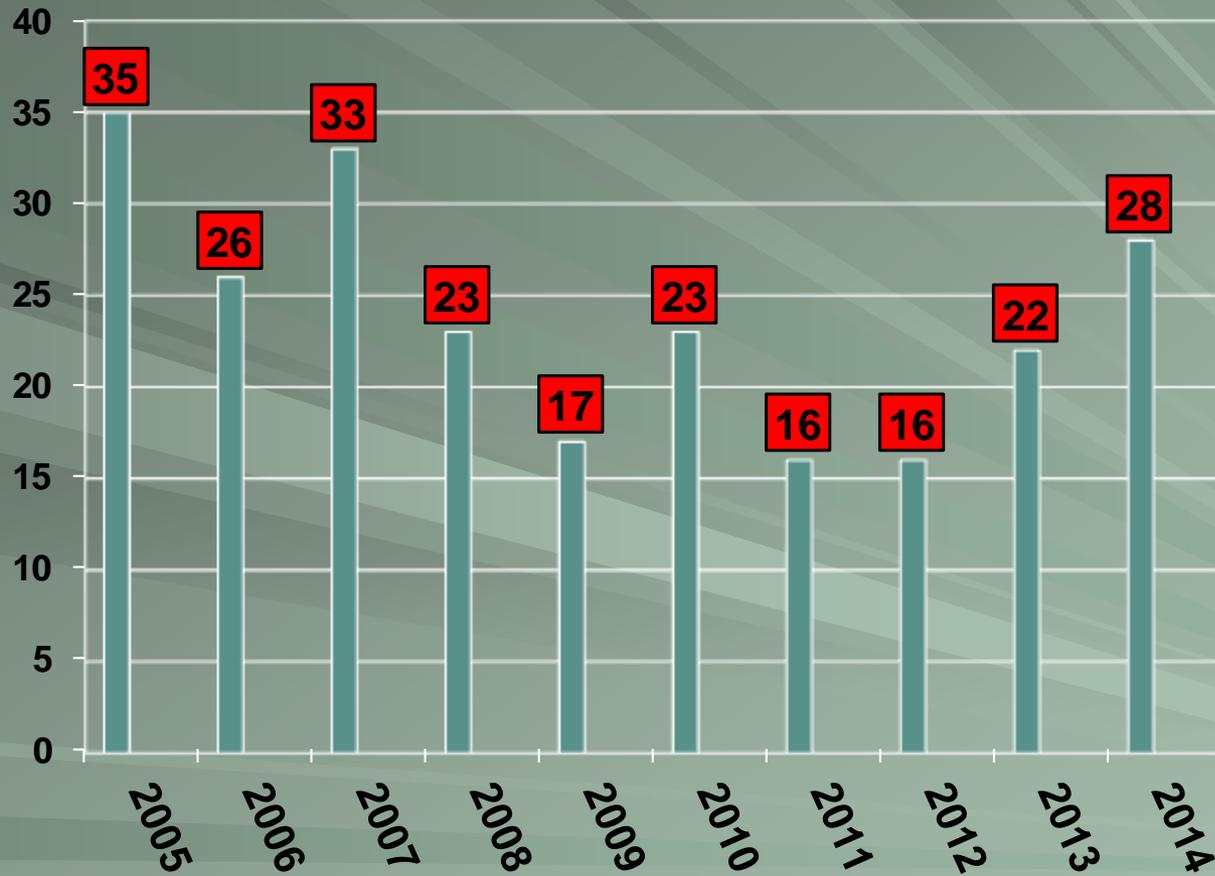


# Root Causes

## ■ Failure to

- Provide Task Training
- Conduct Examinations
- Conduct Risk Assessment
- Conduct Pre-operational Checks
- Maintain Equipment
- Provide Policies, Procedures, Controls
- Provide Personal Protective Equipment

# MNM Fatalities – 2005-2014



# MNM Fatalities---Supervisors

2014	6
2013	5
2012	4
2011	1
2010	2
2009	1
2008	2
2007	4
2006	2
2005	2
2004	6
<b>Total</b>	<b>35</b>

Ensure that supervisors are task trained before performing work.

# Powered Haulage

Year	'08	'09	'10	'11	'12	'13	'14
Fatals	5	5	7	4	6	7	8

**--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
- Conduct adequate pre-operational checks



# 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



# Fall of Roof, Rib and Highwall

Year	'08	'09	'10	'11	'12	'13	'14
Fatals	0	0	1	0	2	1	2

- Establish Safe Procedures
- Discuss safe work procedures
- Look, Listen and Evaluate pit and highwall conditions
- Always examine, sound, and test for loose ground



# Falling/Sliding Material

Year	'08	'09	'10	'11	'12	'13	'14
Fatals	3	3	6	1	2	4	5

- Establish Safe Work Procedures
- Task Train All Persons
- Deenergize Equipment
- Wear a Safety Harness & Lanyard
- Block Equipment Against Motion



# Machinery

Year	'08	'09	'10	'11	'12	'13	'14
Fatals	3	4	3	3	3	2	3

- Identify and control all hazards
- Deenergize equipment and lock out/tag out
- Block equipment against motion



# Slip/Fall of Person

Year	'08	'09	'10	'11	'12	'13	'14
Fatals	4	2	1	3	3	2	6

- Always use PPE
- Eliminate Hazards
- Remove Snow & Ice





U.S. Department of Labor

**Make the  
RIGHT Decision**

Mine Safety and Health Administration