



Coal Mine Safety Awareness Initiative November 4-21, 2003 Second Initiative

Included in this packet are the following documents that are being utilized to raise Stakeholder's awareness of recent coal mine accident trends and relevant potential hazards:

- Press Release
- Action Plan providing guidance to districts for implementing the initiative with hyperlinks.
- Calendar Year 2003 Synopsis of Accidents to provide MSHA personnel with talking points and relevant data while making mine visits.
- Safety Alert Bulletins to be distributed to Stakeholders.

Synopsis of CY2003 Coal Mine Fatalities

Through October 25, 2003

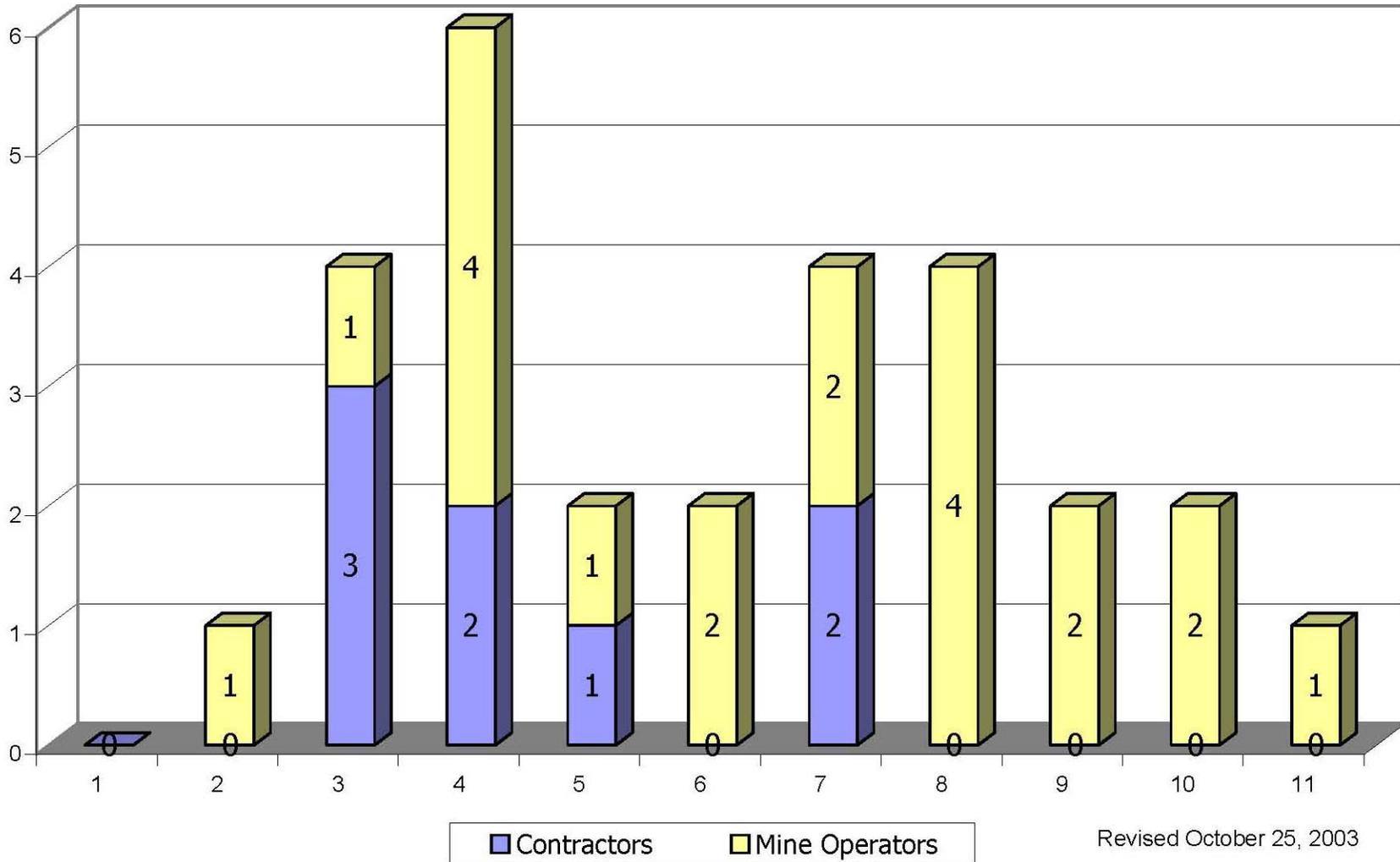
- 28 fatalities have occurred in CY03.
- 10 fatalities (36%) involved maintenance and construction activities.
- 7 fatalities (25%) involved independent contractors.
- 5 fatalities (18%) involved cutting or welding.
- 14 fatalities (50%) occurred in Tri-State districts.
- 54% of the fatal victims had more than 10 years total mining experience, but 38% had less than one year of experience at the mine where the accident occurred.
- 53% of the fatalities occurred at mines with more than 100 employees, 11% at mines with less than 20 employees.
- 53% of the fatal accidents occurred on day shift, 18% afternoon, and 29% midnight.
- 7 (25%) of the fatal victims were supervisors.

Synopsis of CY2003 Coal Mine Fatalities

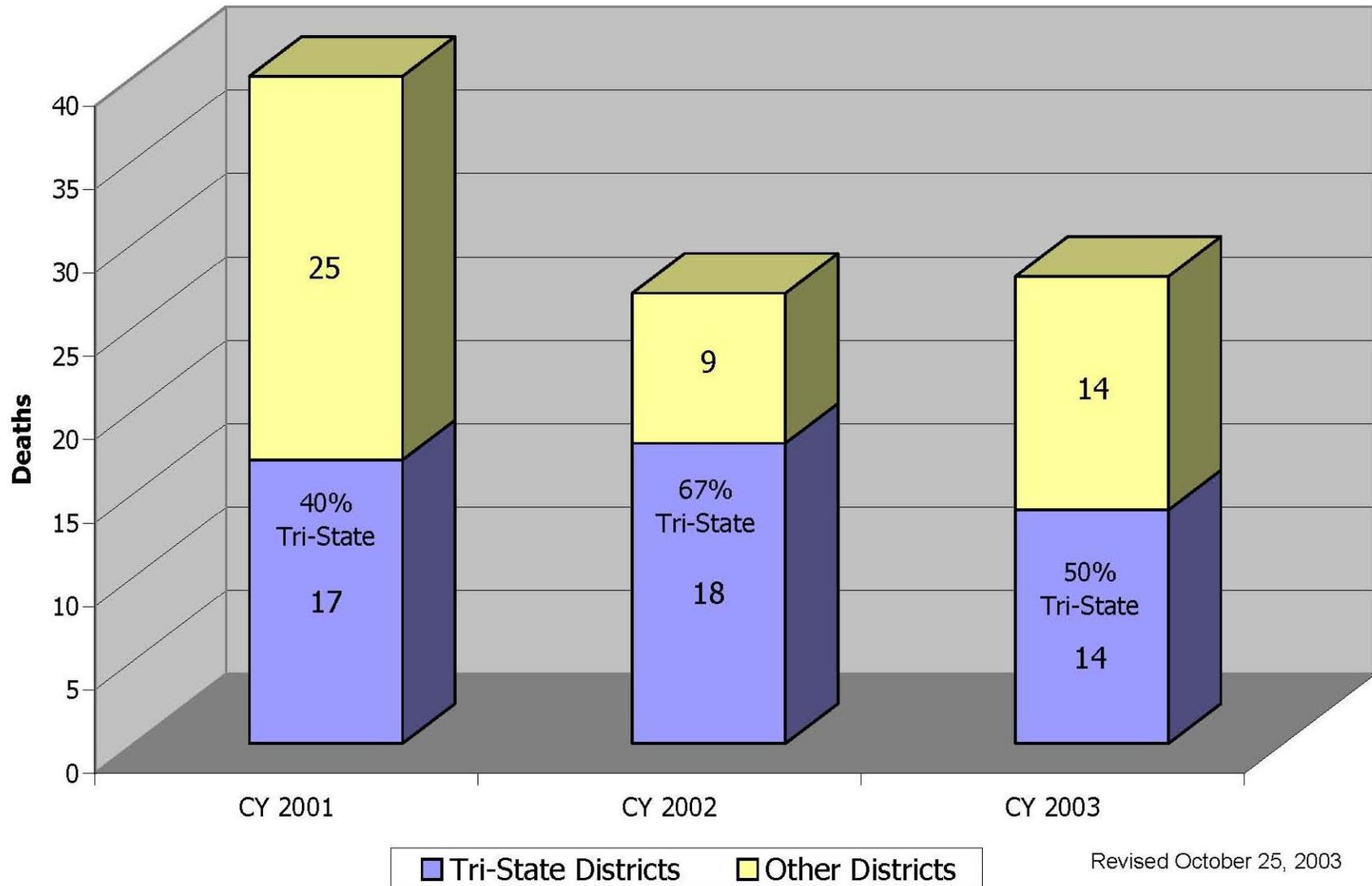
Through October 25, 2003

- 5 fatalities involved ignitions of gas or fluids:
 - Fatal 1-3: Methane explosion while cutting into water ring during shaft construction;
 - Fatal 12: Pressurized can of starting fluid ignited and ruptured when it contacted a battery terminal while being used to clean dust and oil from engine-mounting bolts;
 - Fatal 23: Explosion of 55-gallon drum while being filled with acetylene.
- 3 recent accidents involved explosives:
 - Fatal 13: Foreman used a power center to detonate explosives;
 - Fatal 15: Three miners were injured, one fatally, when a shot unexpectedly blew through into the area where they were taking shelter from the blast.
 - Non-injury Ignition: Methane accumulated in a roof fall cavity and was ignited when explosives, which were placed on the fallen roof material, were detonated.

Coal Mine Fatalities by District CY 2003

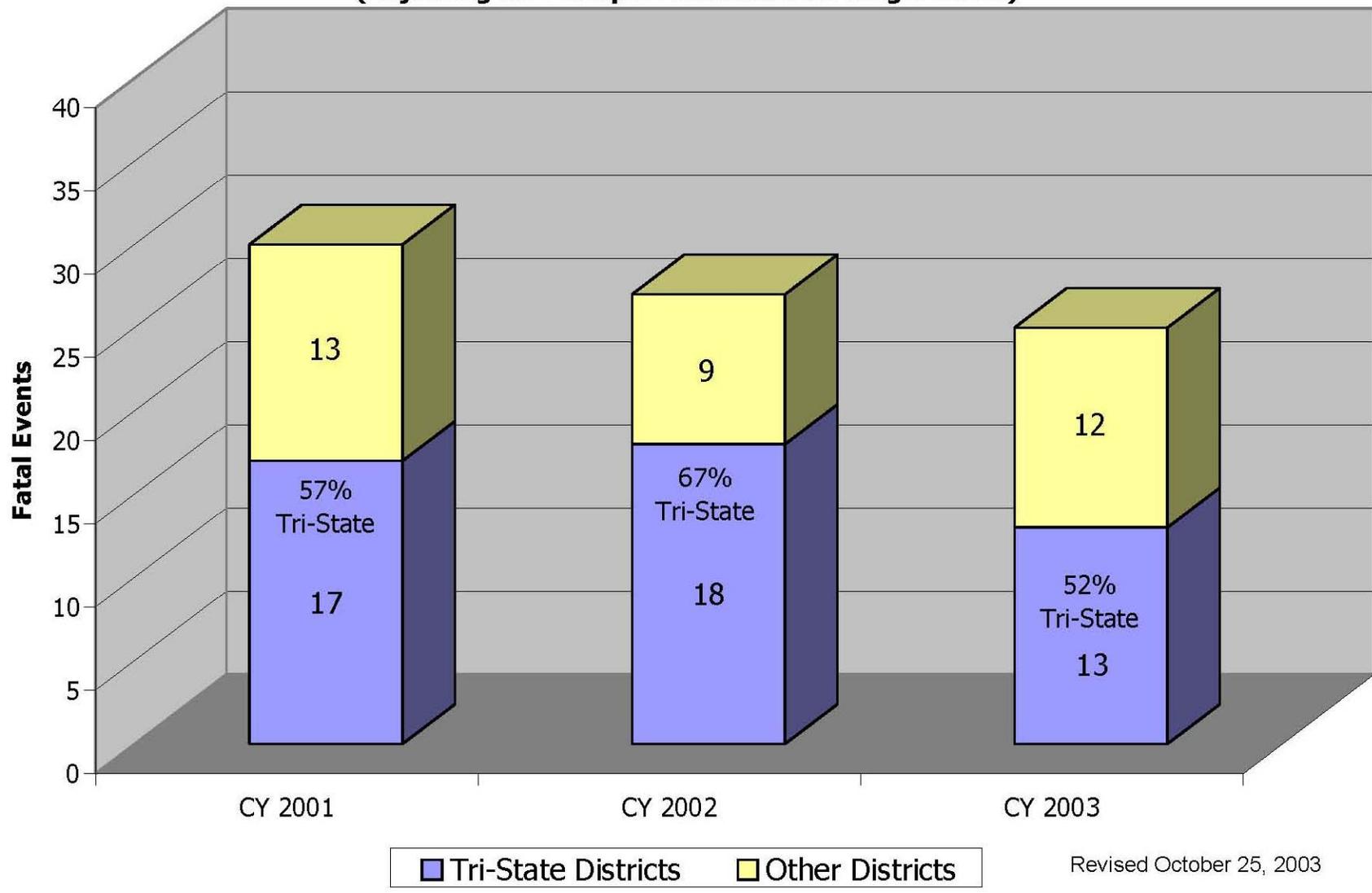


Coal Mine Fatalities By Region - CY 2001-2003

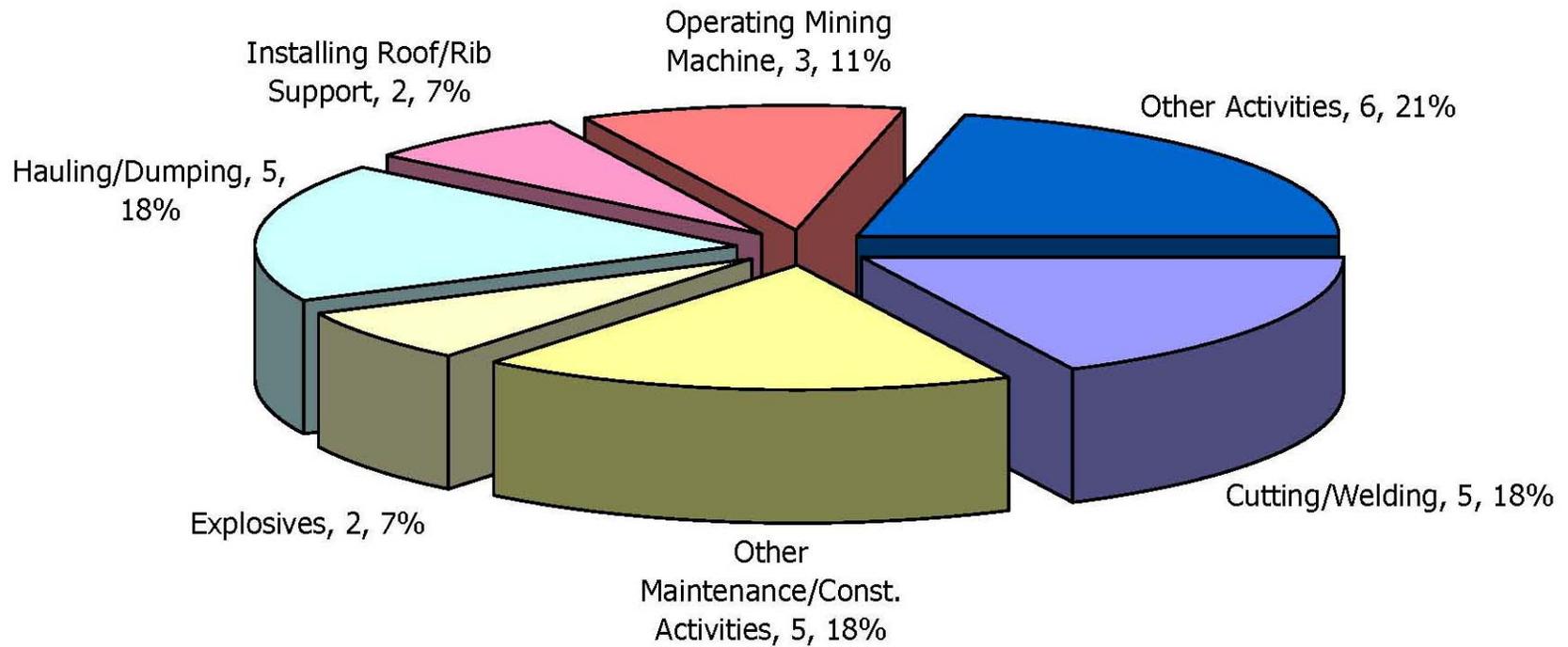


Coal Mine Fatal Events By Region - CY 2001-2003

(Adjusting for Multiple Fatalities as a Single Event)



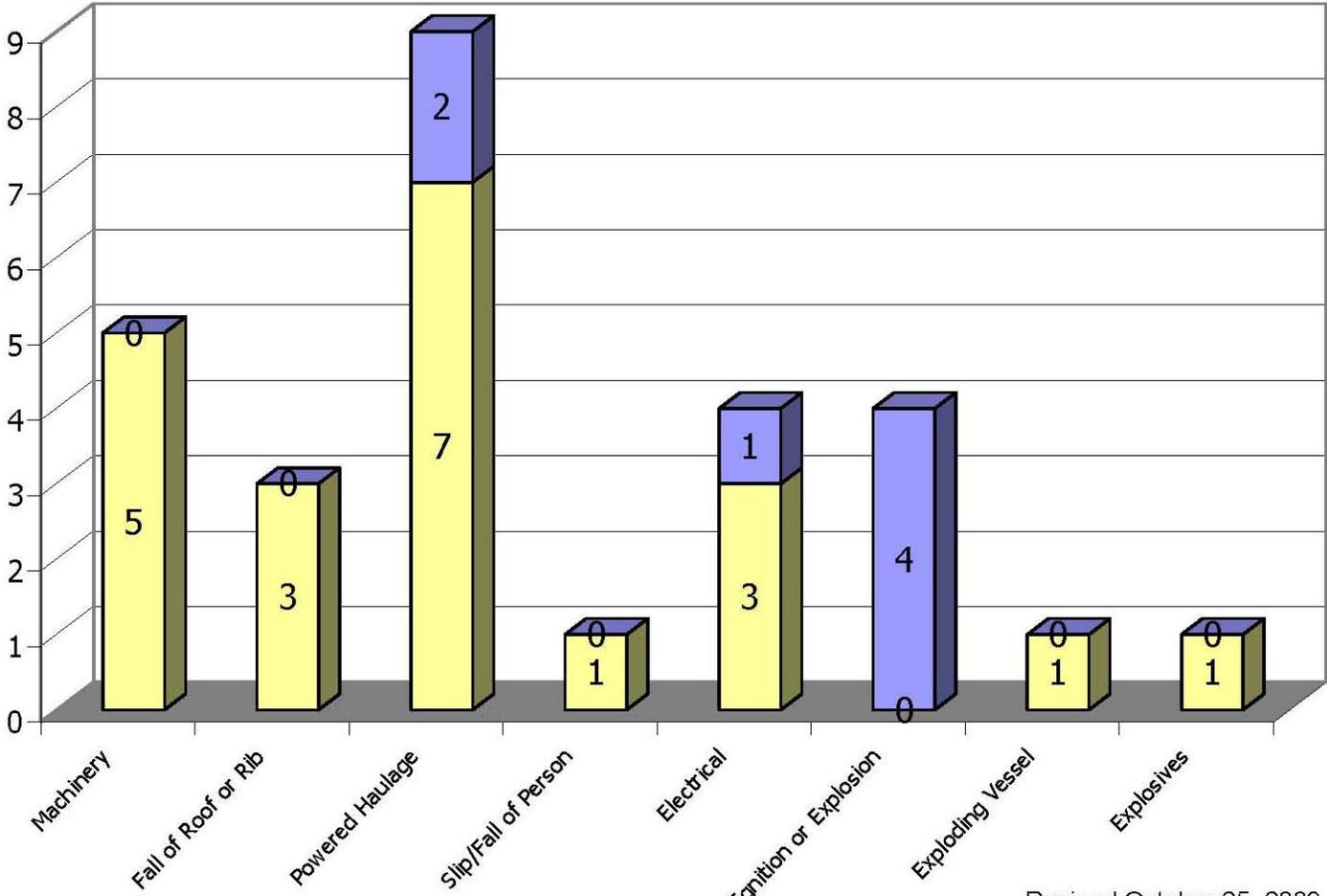
CY2003 Coal Mine Fatalities by Activity



Revised October 25, 2003

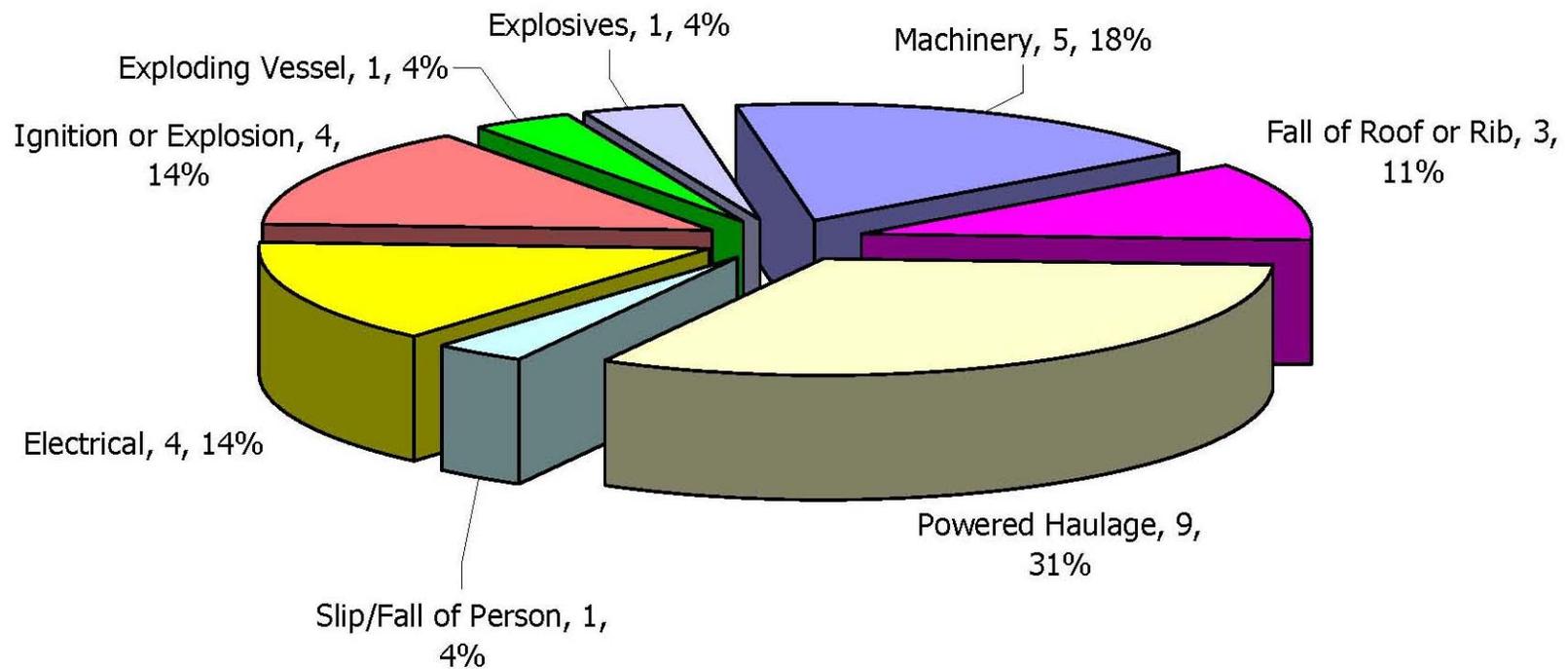
CY2003 Coal Mine Fatalities by Accident Classification

Mine Operator Contractor



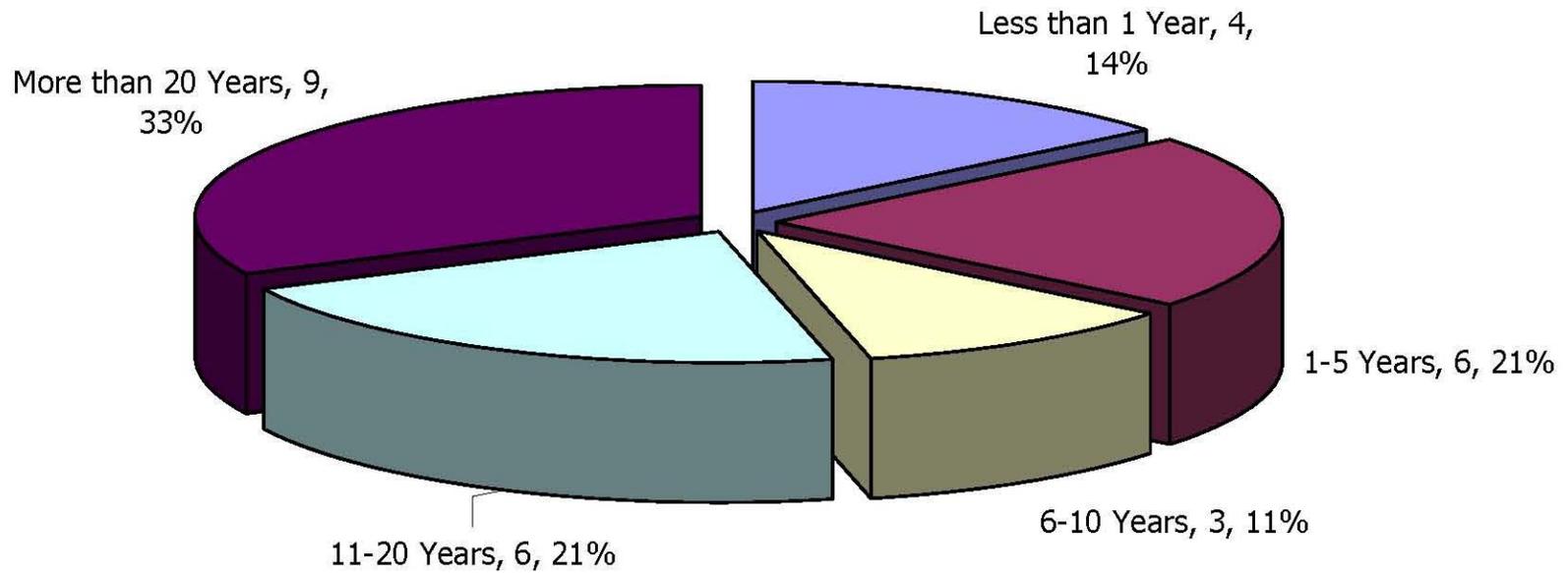
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Coal Mine Fatalities by Classification CY2003



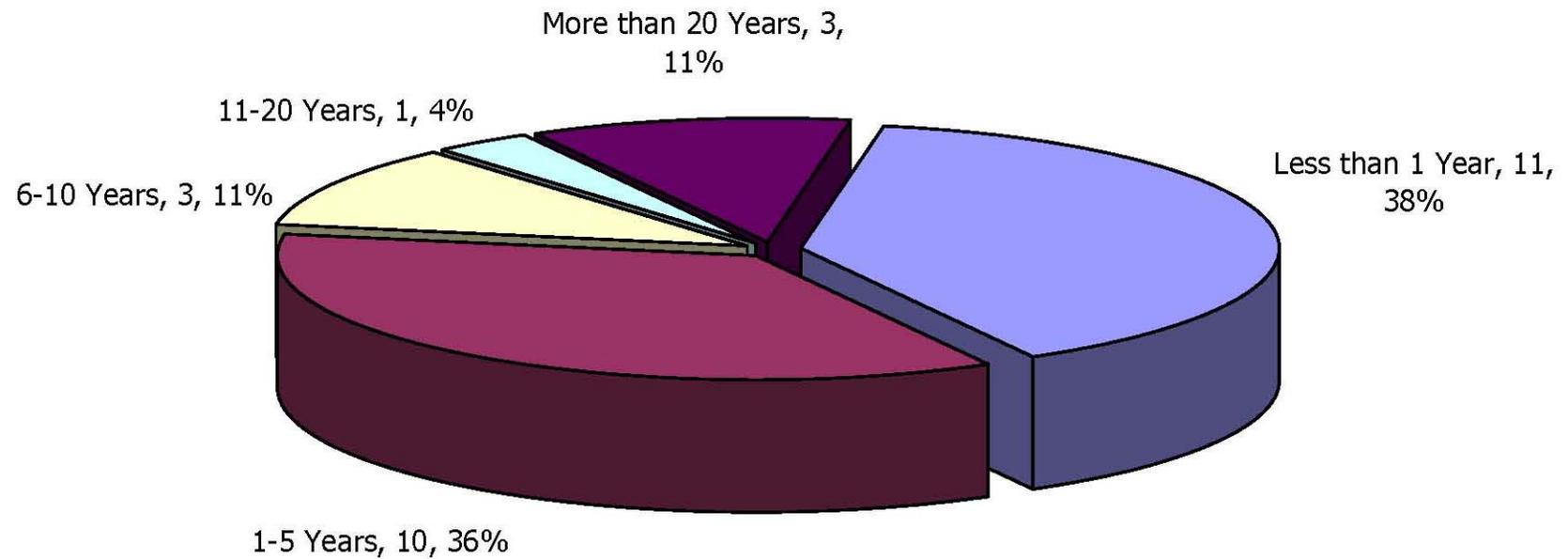
Revised October 25, 2003

CY2003 Coal Mine Fatalities By Total Mining Experience



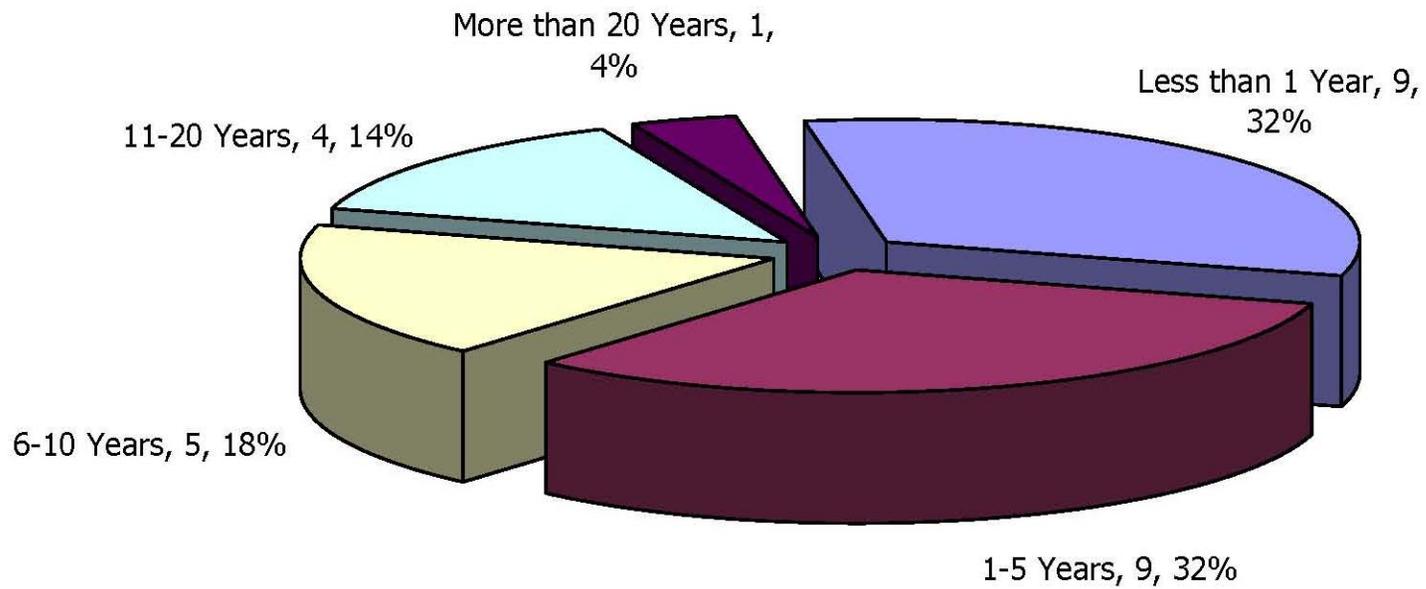
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CY2003 Coal Mine Fatalities By Mine Experience



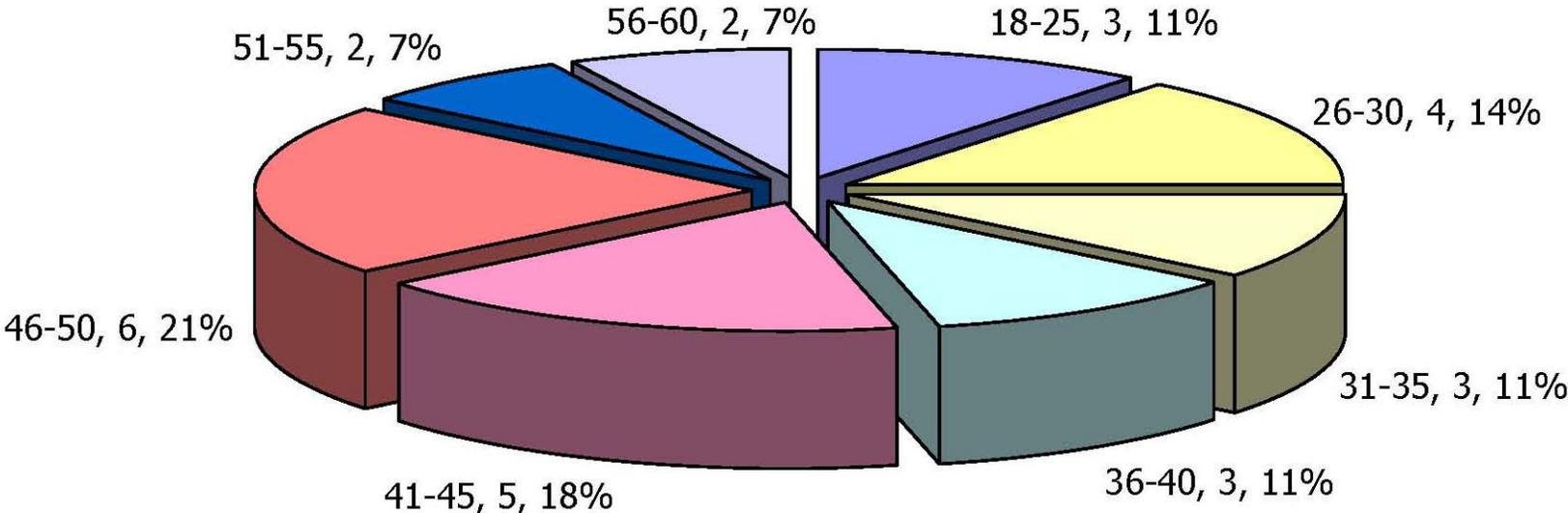
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CY2003 Coal Mine Fatalities By Activity Experience

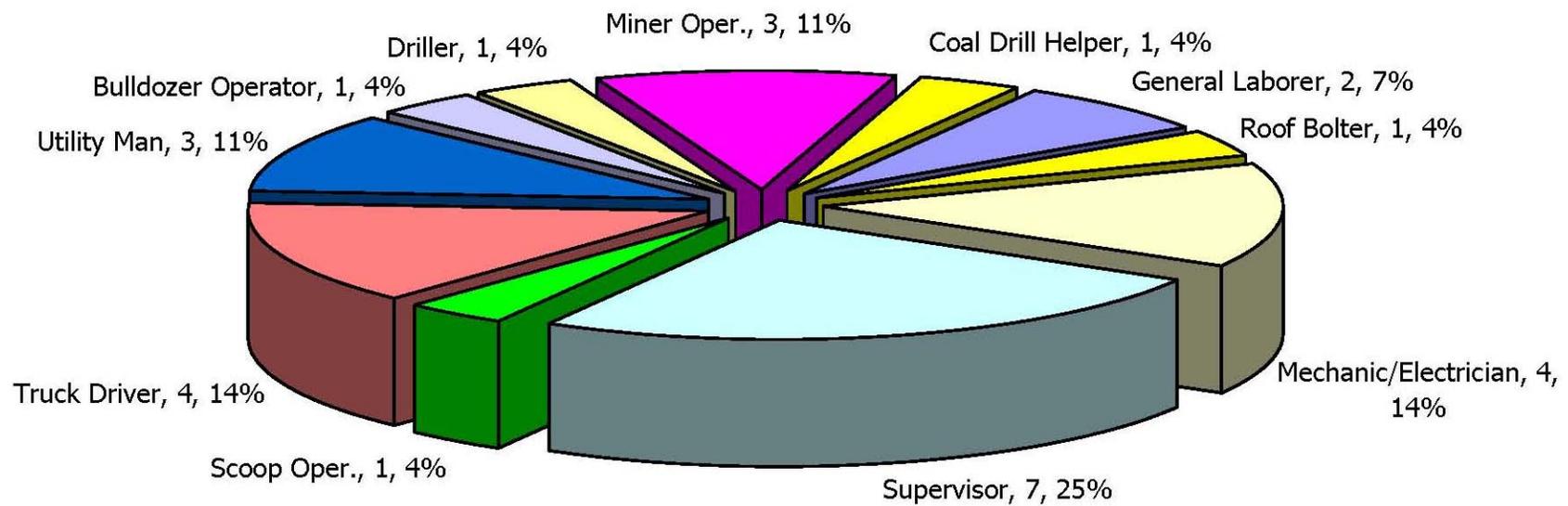


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CY2003 Coal Mine Fatalities by Age



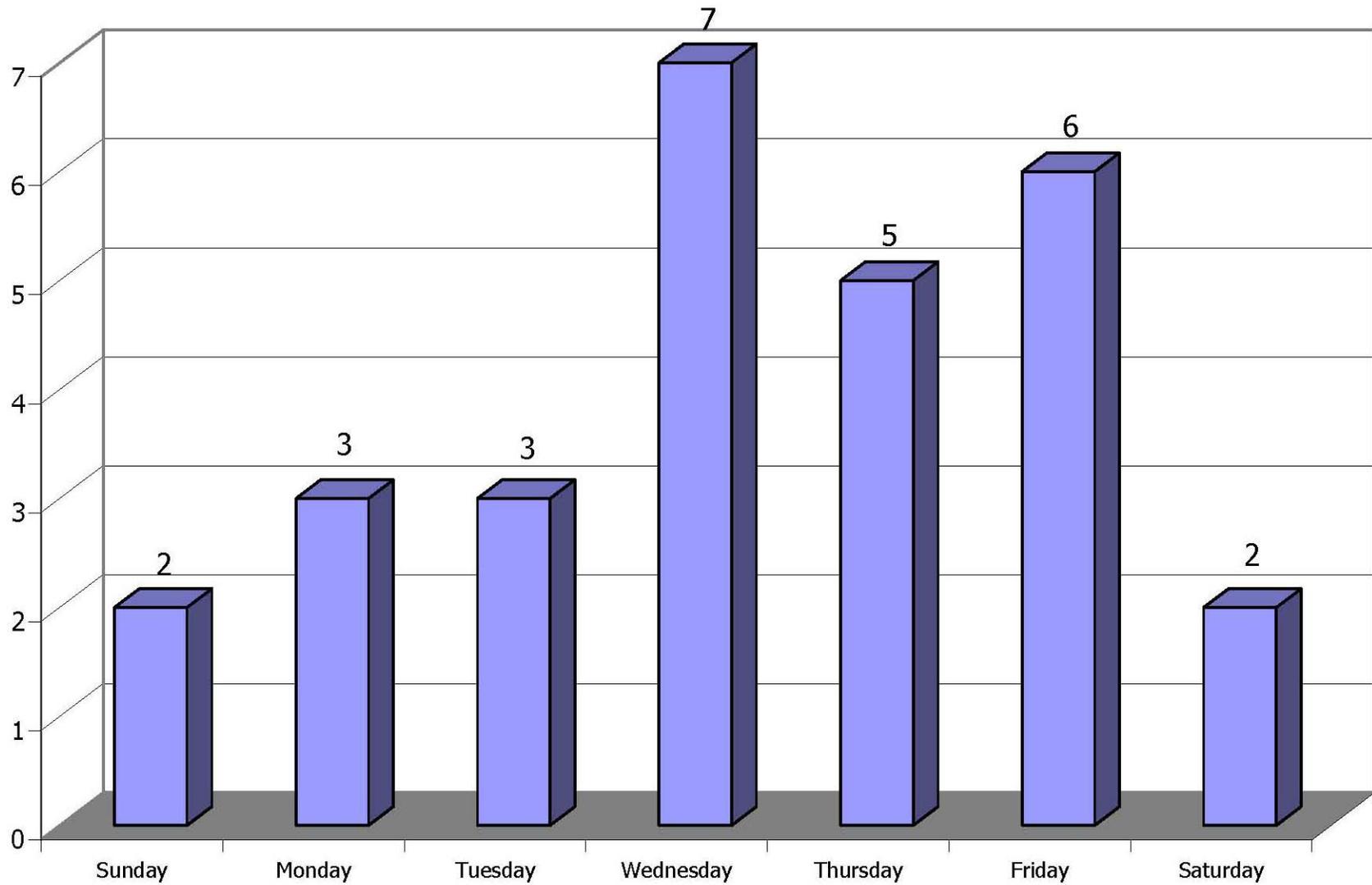
CY2003 Coal Mine Fatalities By Occupation



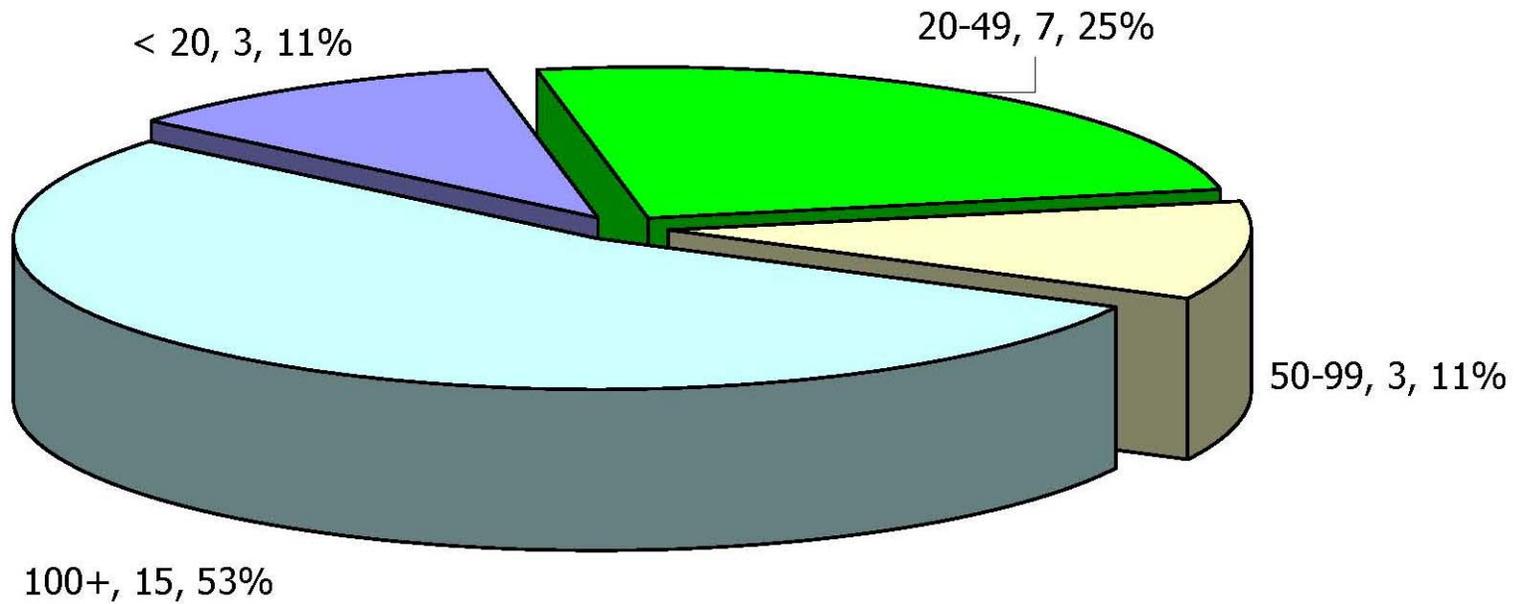
Revised October 25, 2003

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CY2003 Coal Mine Fatalities by Day of Week

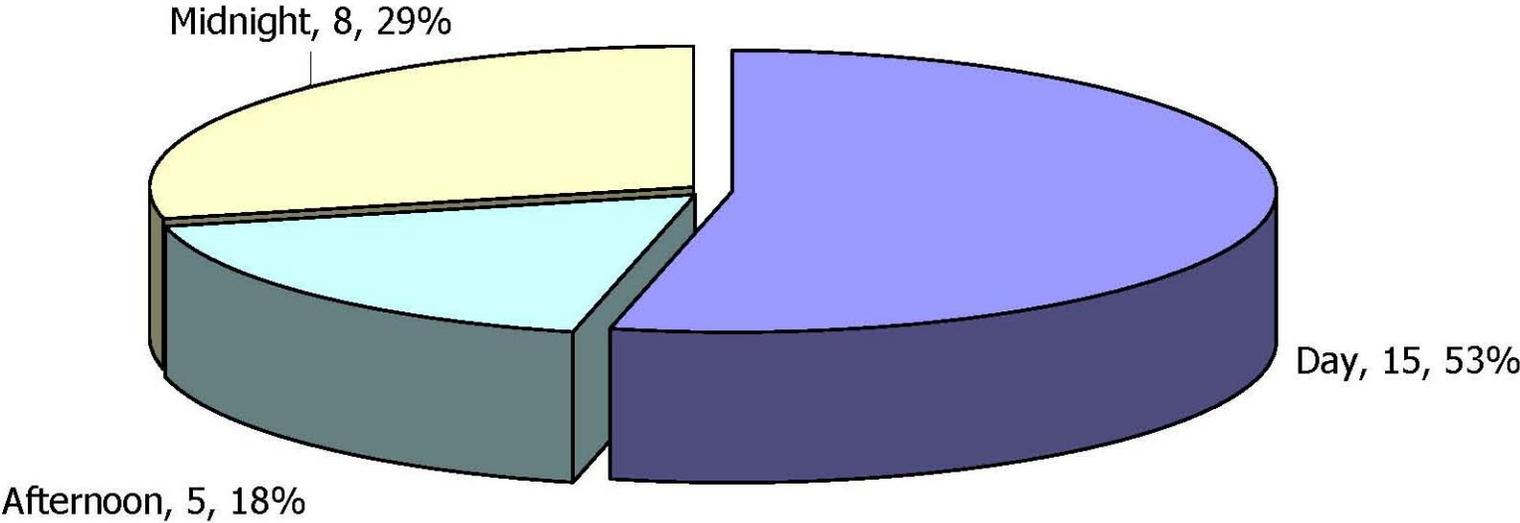


CY2003 Coal Mine Fatalities By Number of Employees



Revised October 25, 2003

CY2003 Coal Mine Fatalities By Shift



To date, nine fatal Powered Haulage accidents have occurred, accounting for more fatalities than any other accident classification in 2003.

Coal Mine Fatality - On September 17, 2003, a driller with 7-years mining experience and a bulldozer operator with 10-years mining experience were fatally injured when their man-trip was crushed by a 190-ton capacity haul truck. After approaching from the haul truck's right side, the Ford E-350 van had stopped immediately in front of the haul truck to drop off some supplies. The haul truck moved forward, pushed the van over, and crushed it under the truck's right front tire. The driver of the van, a backhoe operator, was seriously injured.



Best Practices

- Ensure, by signal or other means, that all persons are clear before moving equipment.
- When approaching large mobile equipment, do not proceed until you make eye contact with, or obtain approval from, the equipment operator.
- Minimize situations where smaller vehicles need to approach large haul trucks (e.g., arrange for haul truck drivers to have supplies available at the pre-shift meeting place, rather than having supplies delivered to the truck).
- Do not park smaller vehicles in a large truck's potential path of movement.
- Equip smaller vehicles with flags or strobe lights, positioned high enough to be seen from the cabs of haulage trucks.
- Equip larger vehicles with cameras to monitor blind spots and ensure that they are properly used (refer to http://www.msha.gov/Accident_Prevention/initiatives/cameras/cameras.htm).
- Stagger the times that vehicles leave assembly areas and separate the parking and travel areas for larger and smaller vehicles.

These are the 25th and 26th fatalities reported in calendar year 2003 in the coal mining industry. As of the accident date in 2002, there were 22 fatalities reported in the coal mining industry. These are the eighth and ninth fatalities classified as powered haulage in 2003. There were seven fatalities classified as powered haulage at this time in 2002.



IMMEDIATE ROOF **CONTROL**



BEST WORK PRACTICES

- Add additional roof supports where necessary.
- Conduct a thorough visual examination of the roof, face, and ribs immediately before any work is started, and thereafter as conditions warrant.
- Conduct sound and vibration roof tests where appropriate (see 30 CFR 75.211b).
- Always be alert for changing roof conditions.





MSHA Job Safety Tips

ST Card No. 9

Coal Mine Roof Bolter
Operators and Helpers

INBY IS OUT!

Accidents involving roof bolter operators and helpers continue to cost lives, disabilities, and lost work days. Injuries and fatalities to roof bolter personnel usually result from:

- Traveling inby roof support.
- Improper hand/body positioning when setting up or installing roof bolts.
- Failure to follow the requirements of approved roof control plan.
- Inadequate/improper testing and examination of the mine roof.
- Improper lifting techniques when handling materials and performing maintenance or repair.
- Failure to use proper tools and equipment when scaling roof or ribs.
- Failure to use personal protective equipment.

To prevent these types of accidents, roof bolter personnel should:

Never travel inby roof support except to install temporary supports.

- Avoid pinch points, especially near the boom, ATRS and canopy. Avoid hand placement on rotating drill steel or body positioning between ribs and equipment.
- Know and follow the provisions of the approved roof control plan.
- Always properly test the mine roof and installed supports. Notify mine management and other miners of any observed hazardous conditions. Make sure the area has been properly examined by certified personnel before entering.
- Use proper lifting techniques. Don't attempt to lift too much weight. Get assistance when needed.
- Always use proper tools and equipment for the job to be done. Use proper length bar when scaling roof and rib.
- Use personal protective equipment.

Hazard Alert Bulletin

Methane Ignition during Shaft Construction

In the coal mining industry 41 accidental methane ignitions have been recorded during shaft and slope construction or repairs, of which 37 occurred while cutting or welding activities were being performed. The resulting ignitions have injured numerous workers resulting in burns and lost time injuries. Since 1980 there have been 7 fatalities, as a result of two separate explosions, which can be attributed to cutting or welding activities during shaft or slope construction.



Best Practices

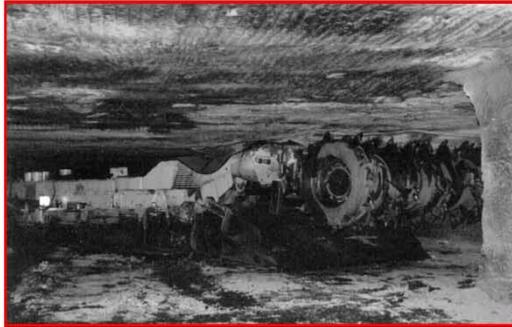
Conduct all cutting and welding on the surface away from the shaft or slope; where this is not possible make sure the following procedures are followed:

- Cutting and welding shall be done under the supervision of a qualified person
- Examinations for methane shall be made by a qualified person immediately before and during cutting and welding operations with an approved methane detector.
- Provide training in the use of gas detecting devices including the use of probes
- Ensure that adequate ventilation is provided to dilute, render harmless, and carry away explosive gases.





Natural Gas Well Mining Safety



Mining in close proximity to underground gas and oil wells, 30 CFR § 75.1700:

- **When located, such operator shall establish and maintain barriers around such oil and gas wells in accordance with State laws and regulations, except that such barriers shall not be less than 300 feet in diameter, unless otherwise permitted.**





Natural Gas Transmission Line Safety

Call Before You Dig 1-888-258-0808



- Never assume that a pipeline is located directly between two markers or directly beneath a marker.
- Make sure that markers are maintained and not removed for any reason.
- Provide adequate illumination at night in all work areas, particularly near pipeline right-of-ways. Make sure that markers are visible at all times.
- Maintain a safe distance between active mining and the pipeline right-of-way.





Natural Gas Transmission Line Safety

Call Before You Dig 1-888-258-0808

Quick Facts:

**3,447 incidents of
accidental contact
occurred between
1996 and 2002.**



- Verify that the pipeline “right-of-way” is physically marked with signs or markers that are clearly visible.
- Make sure markers are maintained and not removed for any reason. Review location of gas lines with all employees.
- Provide adequate illumination at night in all work areas, particularly near pipeline right-of-ways. Make sure that markers are visible at all times.
- Maintain a safe distance between active mining and the pipeline right-of-way.





SERVICE MANUAL

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[SAFETY](#)

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[FIRE SUPPRESSION SYSTEM](#)

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DRILLER CANOPY SUPPORT POST

CYLINDER ATTACHMENT BOLT



The driller canopy support post assembly is made up of three nested square tubes, supported by a hydraulic cylinder. A bolt, located at the top of the housing assembly, provides the connection between the tubing and hydraulic cylinder.

DANGER:

Failure in the connection between the cylinder and tubing can result in an unexpected drop in the driller canopy at some point after the CANOPY control lever is operated in the "canopy lower" direction.

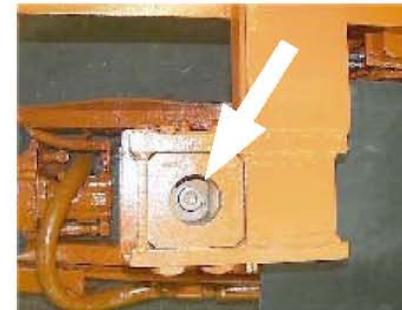
This unexpected drop in the canopy can result in serious injury or even death.

This bolt must be checked weekly -- making sure it is properly tightened (150 ft-lbs.).

ARROWS INDICATE LOCATION OF CANOPY ATTACHMENT BOLT

This bolt must be checked weekly – making sure it is in place and properly tightened.

Whenever re-assembling the driller canopy support post assembly, always use a genuine Fletcher OEM replacement bolt and tighten to 150 ft-lbs.



CONTACT PERSONS

TECHNICAL SUPPORT

Joe Judeikis (304) 547-2039

TRI-STATE GROUP

Jesse Cole (304) 256-3240

SMALL MINES GROUP

Kevin Burns (202) 693-9594

EDUCATION AND FIELD SERVICES

Douglas Altizer (202) 693-9580

COAL DISTRICTS

District 1

Larry Gazdick (570) 826-6321

District 3

Ron Wyatt (304) 225- 6803

District 5

Jim Kiser (276) 679-0230

District 2

Tom Light (724) 925-5150

District 4

Jim Beha (304) 877-3900

District 6

Bob Hardman (606) 432-0943

CONTACT PERSONS CONT.

District 7

Ronnie Brock (606) 546-5123

District 8

Bryan Sargeant (812) 882-7617

District 9

Judy Peters (303) 231-5458

District 10

Richard Reynolds (270) 821-4180

District 11

Gary Wirth (205) 290-7300