

United States Department of Labor
**Mine Safety and Health
Administration**



Dennis Cotton

Acting District Manager

District 6

Coal Mine Safety and Health

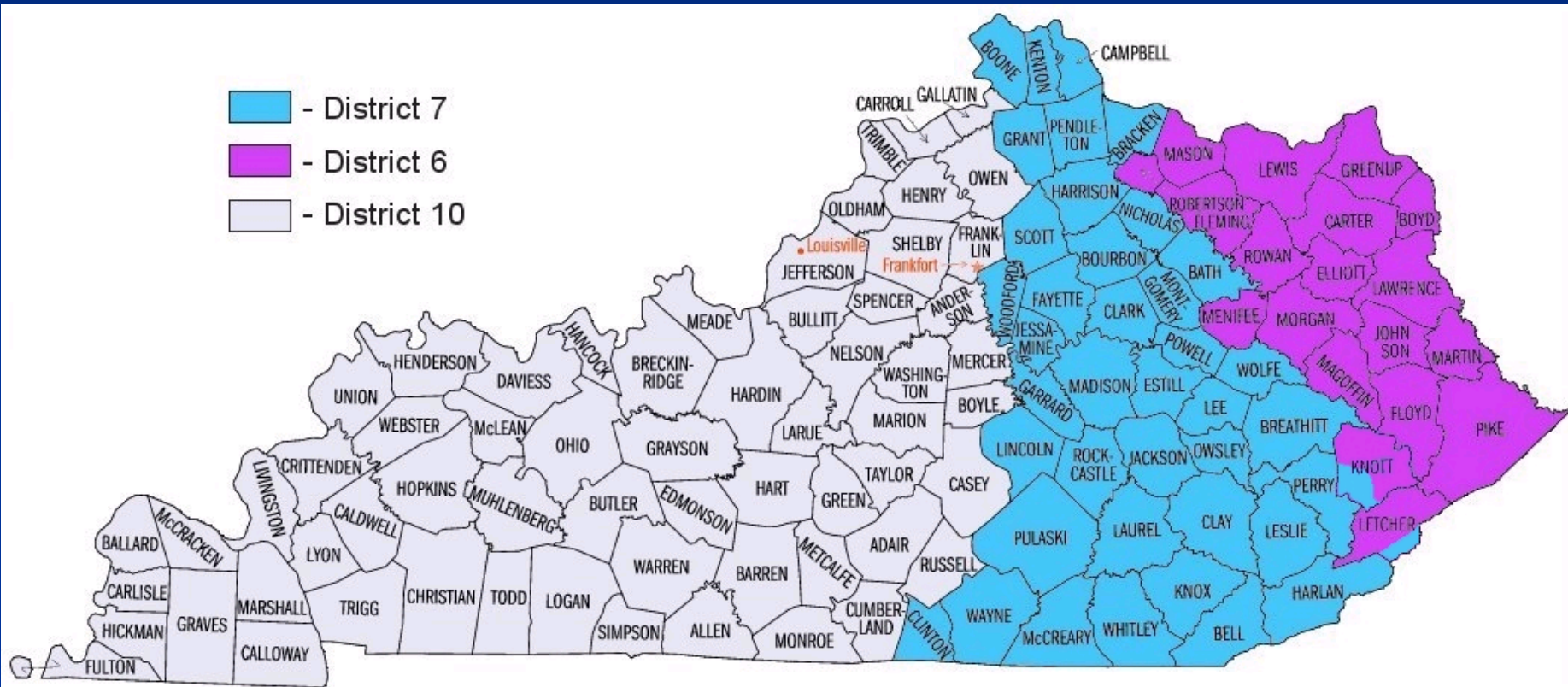
Mine Safety and Health Administration



Our Mission:

To Prevent death, disease, and injury from mining and promote safe and healthful workplaces for the nation's miners.

KY MSHA Districts



Leadership In MSHA



Assistant Secretary of Labor
for Mine Safety and Health
Joseph A. Main



Deputy Assistant Secretary
for Operations
Patricia W. Silvey



Deputy Assistant Secretary
for Policy
Anthony C. Mayville



Administrator
Coal Mine Safety and Health
Kevin Stricklin

COAL DISTRICT 6 OVERVIEW

- District 6 activities are conducted from 6 locations.
 - The District Office located in Pikeville, Kentucky.
 - Field Offices in:
 - Pikeville, Kentucky
 - Elkhorn City, Kentucky
 - Phelps, Kentucky
 - Martin, Kentucky
 - Whitesburg, Kentucky
 - Hindman, Kentucky
- 147 MSHA personnel are currently employed at these offices.

District 6 Management

- Dennis Cotton – District Manager (Acting)
- Don Gibson – Assistant District Manager, Enforcement (Acting)
- Jim Poynter – Assistant District Manager, Technical
- David Steffey – Staff Assistant (Acting)
- Alan Howell – Supervisory, Special Investigations

District 6 Field Offices

6 Field Office Locations

- **Pikeville, KY Field Office**
 - Danny Deel, Supervisor
 - Silas Adkins, Supervisor
- **Elkhorn City, KY Field Office**
 - Brian Dotson, Supervisor
- **Phelps, KY Field Office**
 - James Hager, Supervisor
- **Martin, KY Field Office**
 - Billy Buchanan, Supervisor
 - Hargis Hurt, Supervisor
- **Whitesburg, KY Field Office**
 - David Ison, Supervisor
 - Greg Ison, Supervisor
- **Hindman, KY Field Office**
 - Vernus Sturgill, Supervisor

District 6 Technical Division

- Electrical & Training Group

- Bob Bates, Supervisor

- Health Group

- Stevie Justice, Supervisor

- Roof Control & Impoundments Group

- Hank Bellamy, Supervisor

- Ventilation Group

- Craig Plumley, Supervisor

COAL DISTRICT 7 OVERVIEW

- District 7 activities are conducted from 4 locations.
 - The District Office located in Barbourville, Kentucky.
 - Field Offices in:
 - Barbourville, Kentucky
 - Harlan, Kentucky
 - Hazard, Kentucky
 - Jacksboro, Tennessee
- 136 MSHA personnel are currently employed at these offices.

District 7 Management

- Irvin T. Hooker – District Manager
- Clayton E. Sparks – Assistant District Manager, Enforcement
- Dennis Cotton – Assistant District Manager, Technical
- Charles J. Maggard – Staff Assistant

District 7 Field Offices

4 Field Office Locations/ 2 States

Total Mines by Field Office

- *Barbourville, KY Field Office* *94*
 - *Sam Creasy, Supervisor*
 - *Charles Barton, Supervisor*
 - *Ron Burns, Supervisor*
- *Harlan, KY Field Office* *74*
 - *Robert Rhea, Supervisor*
 - *Brad Sears, Supervisor*
 - *Lester Cox, Supervisor*
- *Hazard, KY Field Office* *57*
 - *Marvin Hoskins, Supervisor*
 - *Craig Clark, Supervisor*
- *Jacksboro, TN Field Office* *19*
 - *Kevin Bruner, Supervisor*

District 7 Offices

Technical Division Employees

- *Electrical & Training Group* 8
 - *Randall Lewis, Supervisor*

- *Health Group* 9
 - *Randy Kline, Supervisor*

- *Roof Control & Impoundments Group* 9
 - *Steven Sorke, Supervisor*

- *Ventilation Group* 7
 - *Terry Sheffield, Supervisor*

COAL DISTRICT 10 OVERVIEW

- District 10 activities are conducted from 3 locations.
 - The District Office located in Madisonville, Kentucky.
 - Field Offices in:
 - Madisonville, Kentucky
 - Morganfield, Kentucky
 - Beaver Dam, Kentucky
- 65 MSHA personnel are currently employed at these offices.

District 10 Management

- Jim W. Langley – District Manager
- Ronald W. Burns – Assistant District Manager, Enforcement
- Vacant – Assistant District Manager, Technical
- William L. Barnwell – Staff Assistant

District 10- Field Offices

3 Field Office Locations

- *Madisonville, KY Field Office*
 - *Abel DeLeon, Supervisor*
 - *Michael Whitfield, Supervisor*

- *Morganfield, KY Field Office*
 - *Alan Frederick, Supervisor*

- *Beaver Dam, KY Field Office*
 - *William Cook, Supervisor*

District 10 Offices

Technical Division Employees

- *Electrical & Training Group* 3
 - *Michael Moore, Supervisor*

- *Health Group* 2
 - *Edward Nichols, Supervisor*

- *Roof Control & Impoundments Group* 4
 - *Mark Odum, Supervisor*

- *Ventilation Group* 3
 - *David West, Supervisor*

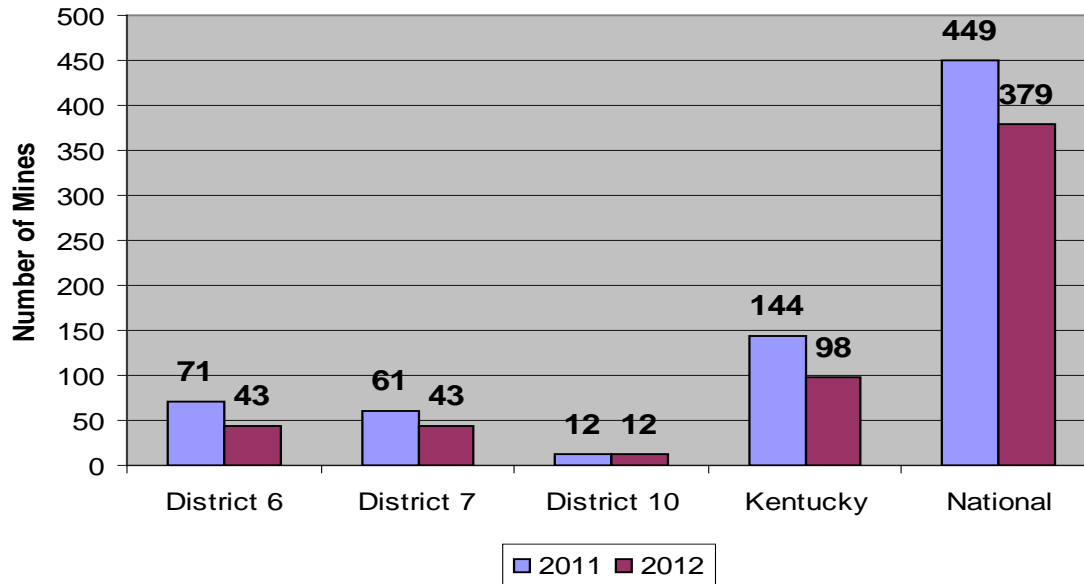
Kentucky

Total Number of Mines

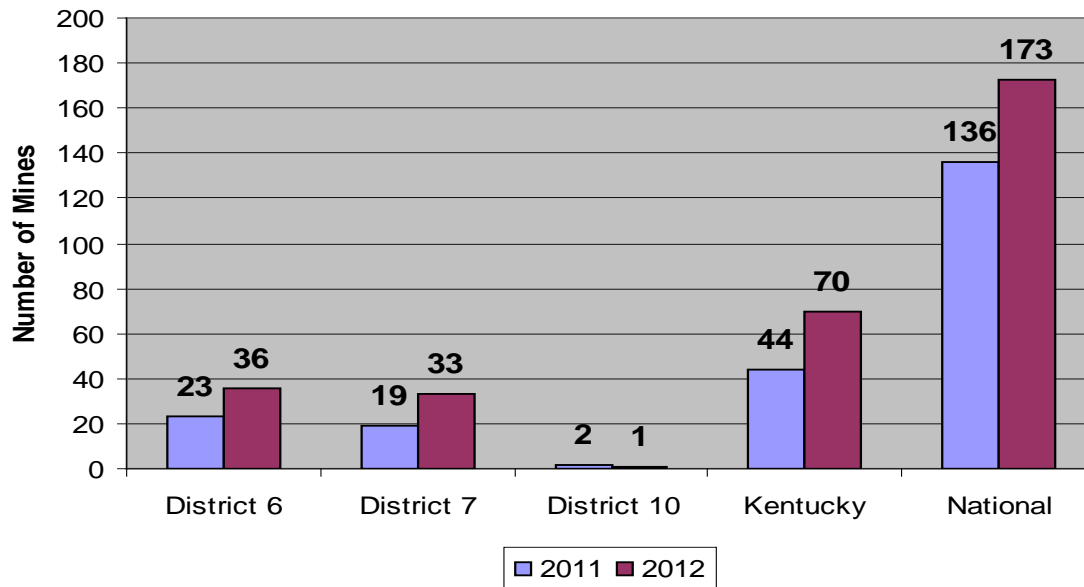
	<u><i>D6</i></u>	<u><i>D7</i></u>	<u><i>D10</i></u>	<u><i>Total</i></u>
■ <i>Underground</i>	<i>79</i>	<i>71</i>	<i>13</i>	<i>163</i>
■ <i>Surface</i>	<i>117</i>	<i>94</i>	<i>16</i>	<i>227</i>
■ <i>Facilities</i>	<i>50</i>	<i>59</i>	<i>13</i>	<i>122</i>
■ <i>Total Operations</i>	<i>246</i>	<i>224</i>	<i>42</i>	<i>512</i>
■ <i>Producing Operations</i>	<i>150</i>	<i>148</i>	<i>35</i>	<i>333</i>
■ <i>Non-producing Operations</i>	<i>96</i>	<i>76</i>	<i>7</i>	<i>179</i>

Total Number of Miners in Kentucky - 16,181

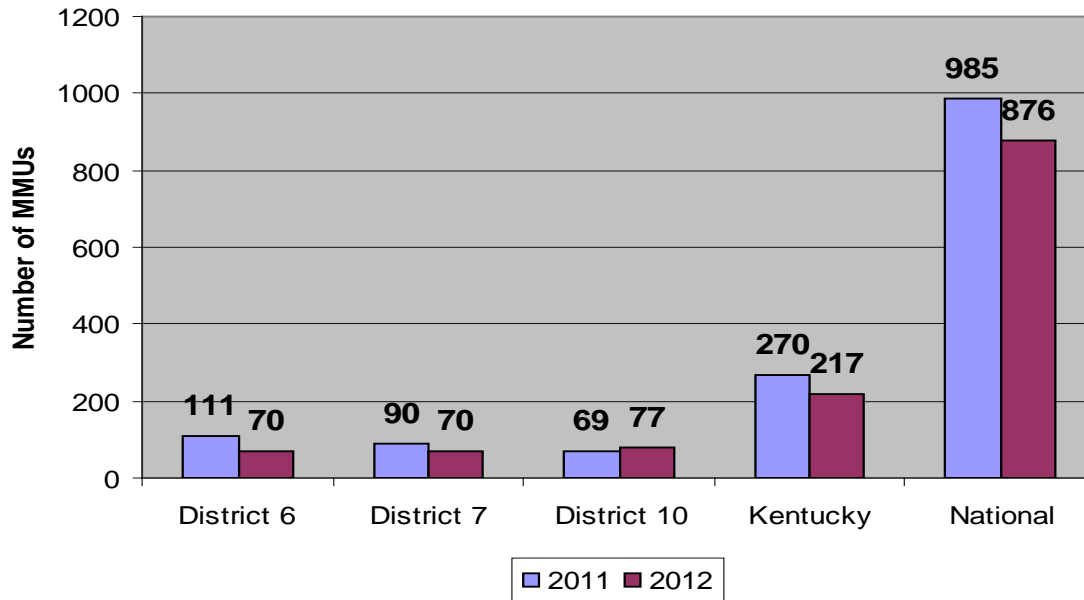
2011 vs. 2012 "A" Status UG Mines



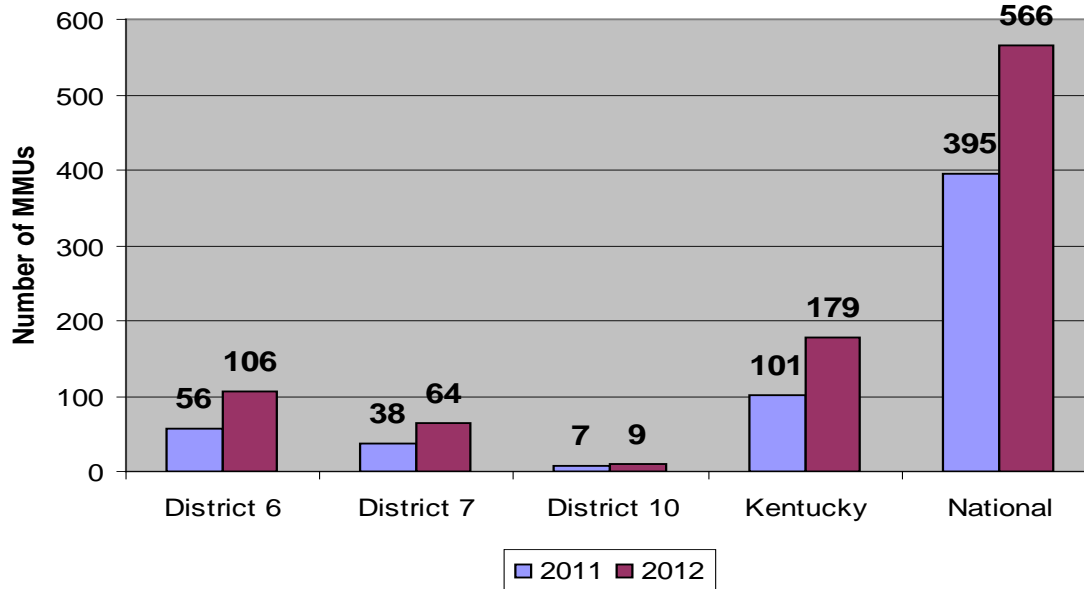
2011 vs. 2012 "B" Status UG Mines



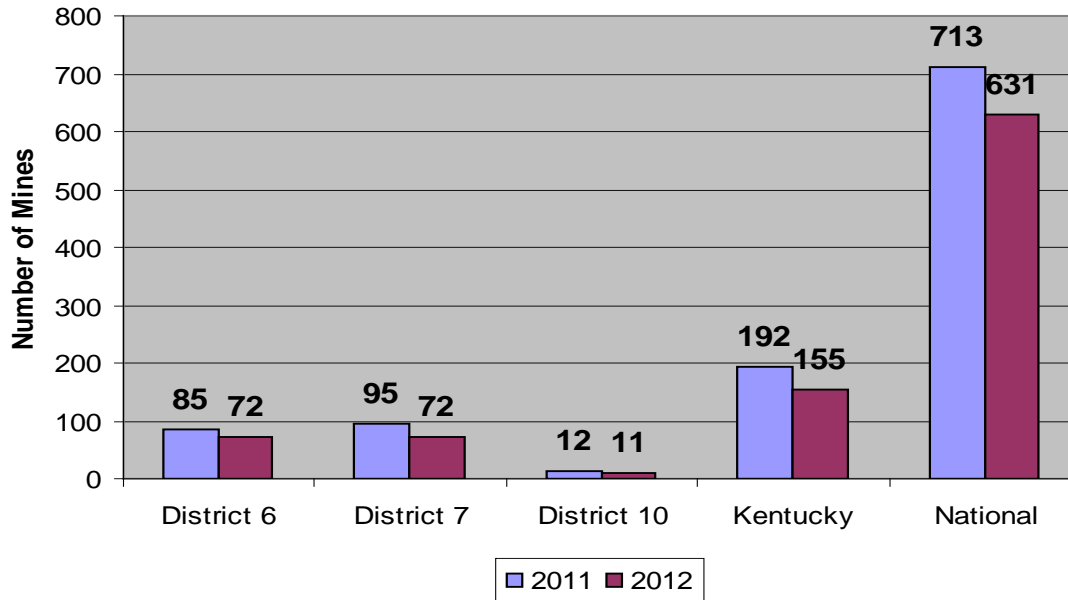
2011 vs. 2012 "A" Status UG MMUs



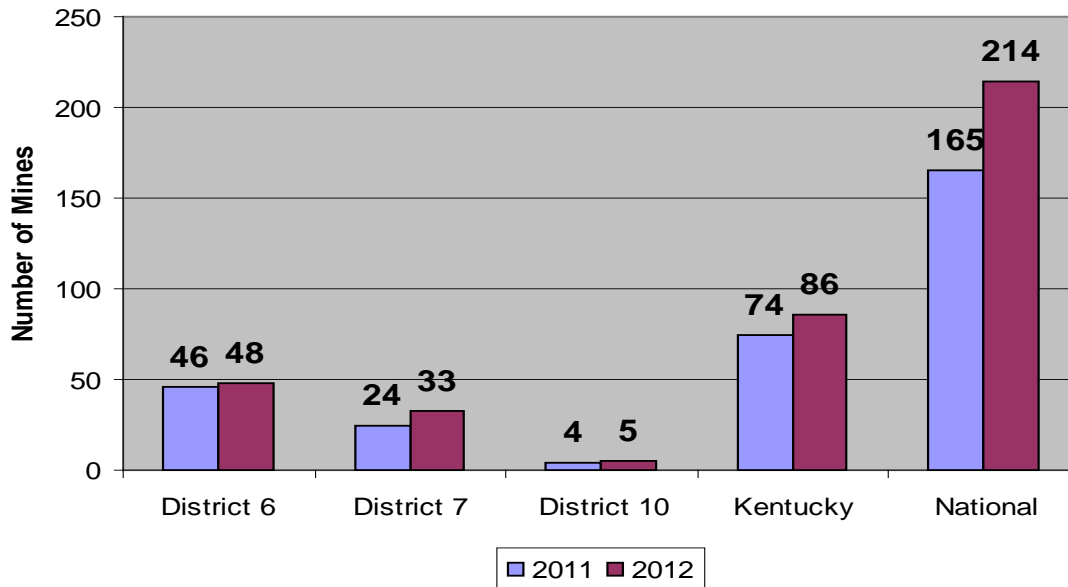
2011 vs. 2012 "B" Status UG MMUs



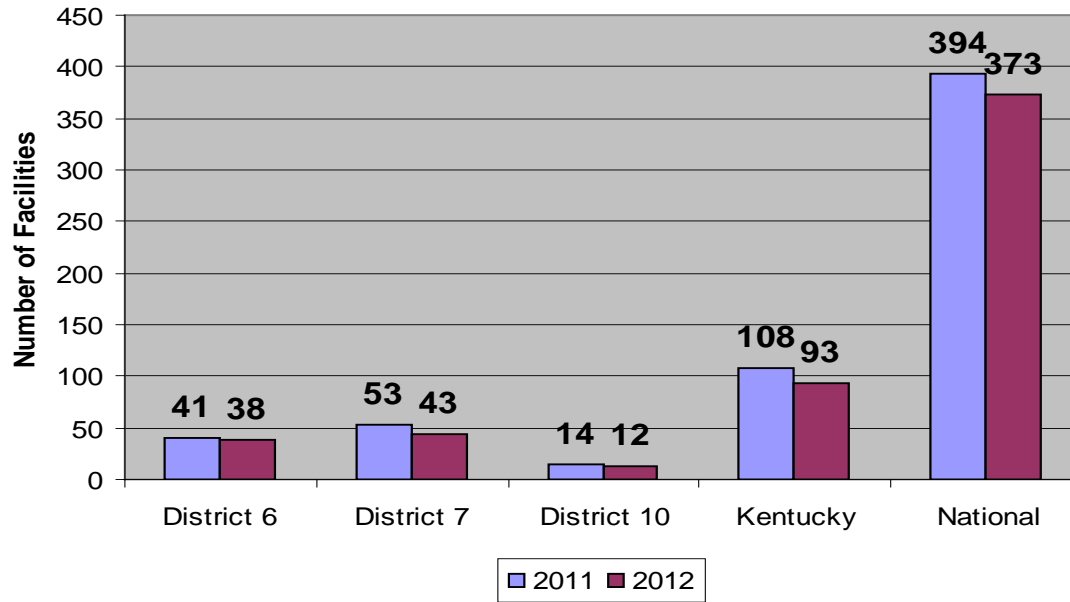
2011 vs. 2012 "A" Status Surface Mines



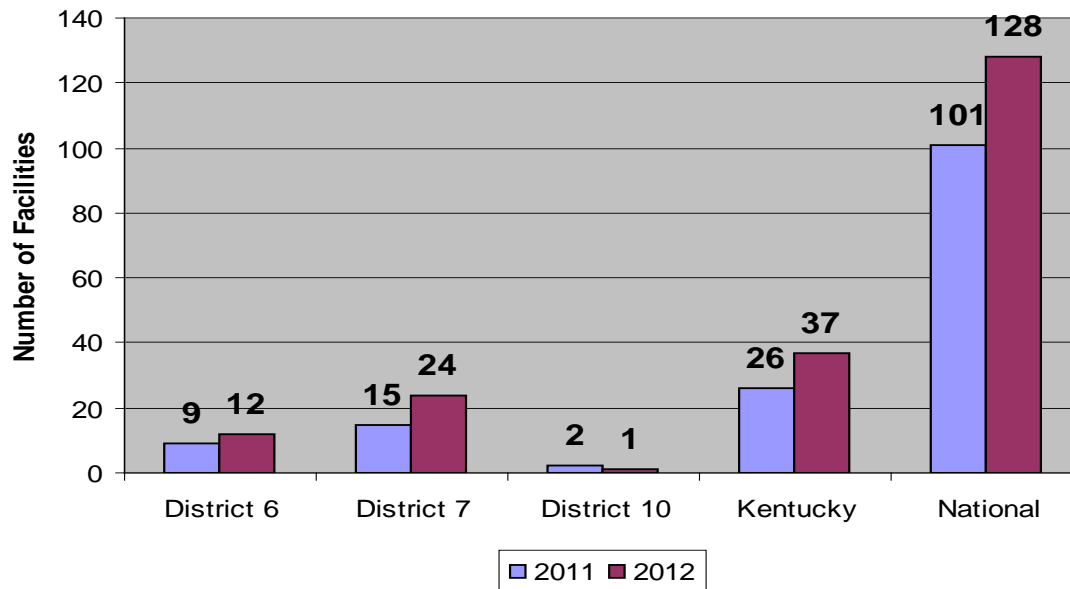
2011 vs. 2012 "B" Status Surface Mines



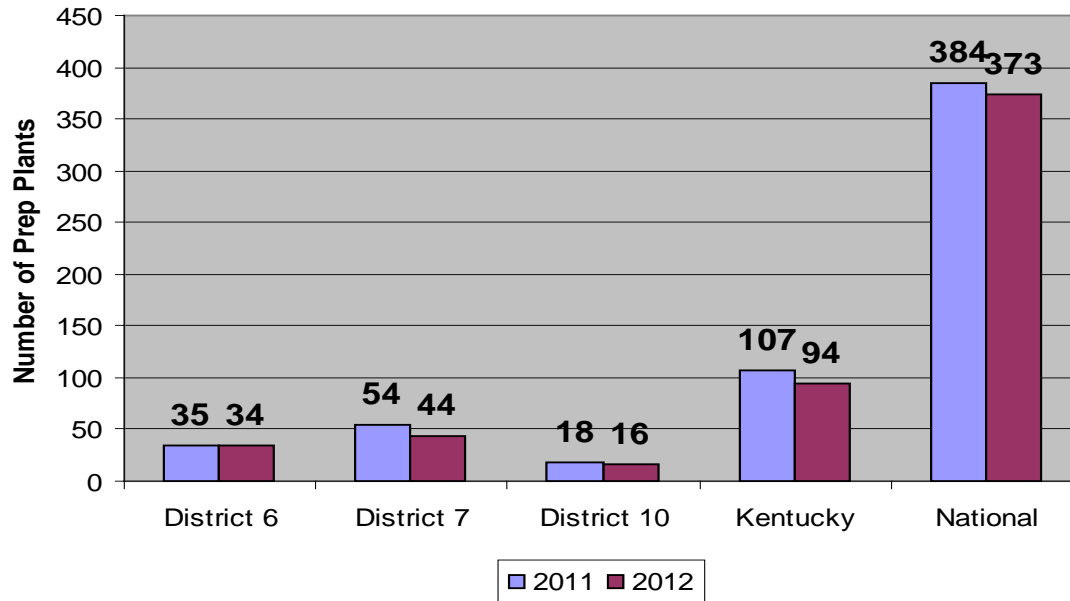
2011 vs. 2012 "A" Status Facilities



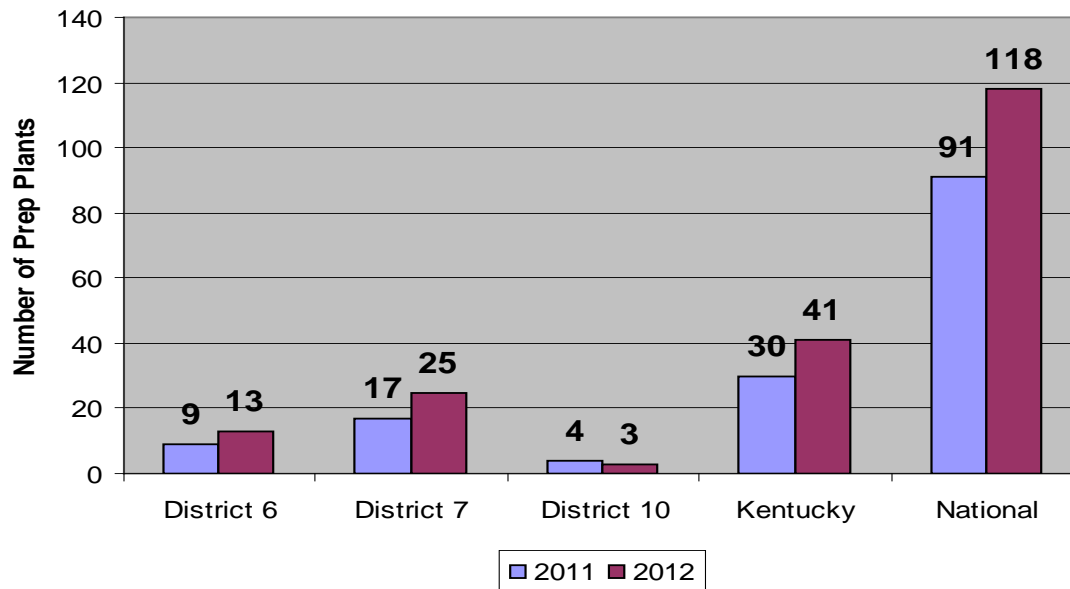
2011 vs. 2012 "B" Status Facilities



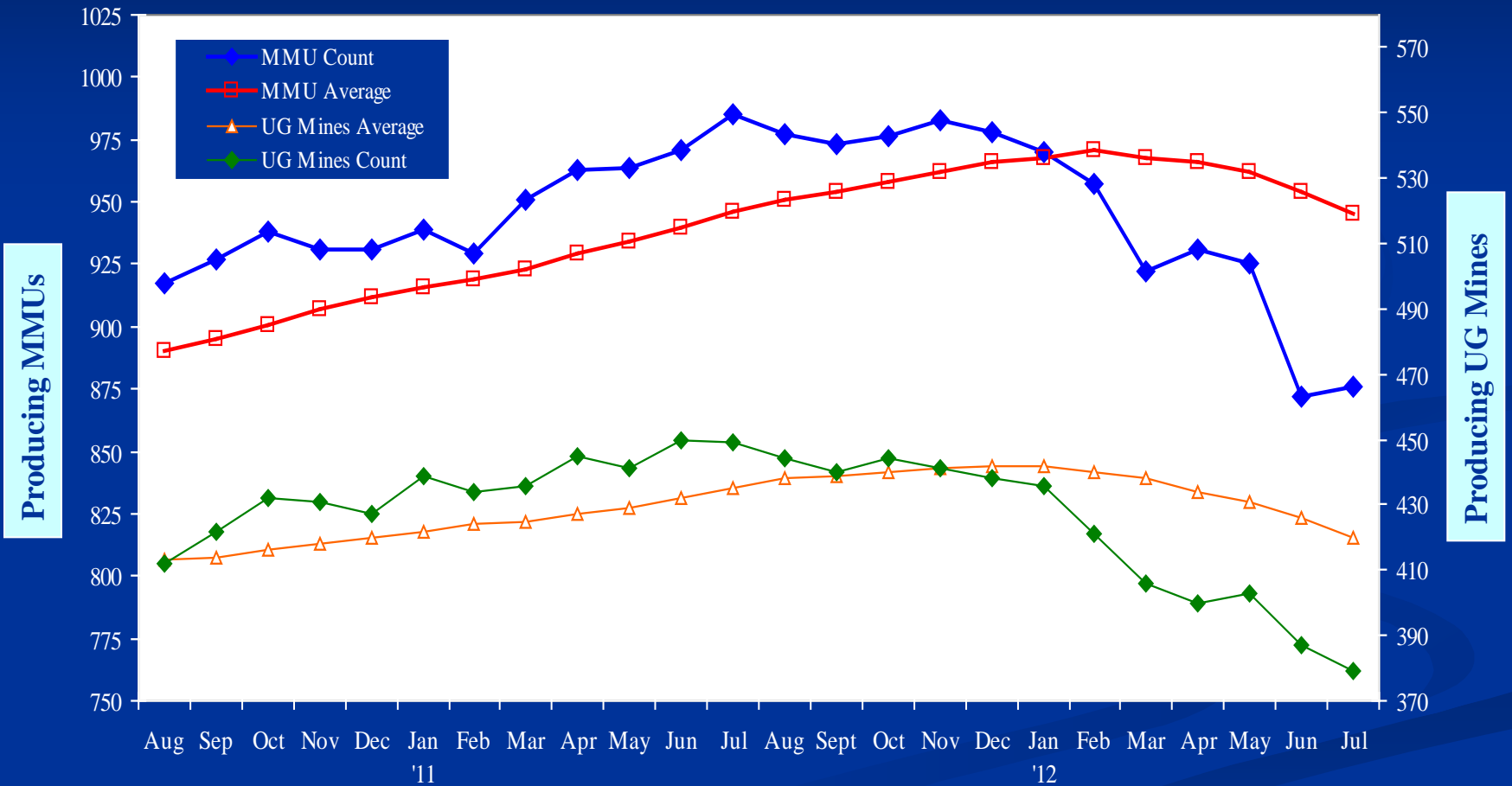
2011 vs. 2012 "A" Status Prep Plants



2011 vs. 2012 "B" Status Prep Plants



National MMU and Underground Mine Counts



Note: Count – monthly count as determined by an end-of-the-month point in time

Average – a 12-month moving average

Coal Fatalities Nationwide

CY 2012

COAL DAILY FATALITY REPORT - August 16, 2012

FATALITIES CHARGEABLE TO THE COAL MINING INDUSTRY	2008		2009		2010		2011		2012	
	UG	S	UG	S	UG	S	UG	S	UG	S
ELECTRICAL	1	1	0	0	0	0	0	1	1	0
EXP VESSELS UNDER PRESSURE	0	0	0	0	0	0	0	0	1	0
EXP & BREAKING AGENTS	0	0	0	0	0	0	0	0	0	0
FALL/SLIDE MATERIAL	0	0	0	0	0	0	0	0	0	0
FALL OF FACE/RIB/HIGHWALL	0	1	0	0	3	0	2	0	1	0
FALL OF ROOF OR BACK	4	0	1	0	2	0	1	0	1	0
FIRE	0	0	0	0	0	0	0	0	0	0
HANDLING MATERIAL	0	0	0	1	0	0	0	0	1	0
HAND TOOLS	0	0	0	0	0	0	0	0	0	0
NONPOWERED HAULAGE	0	0	0	0	0	0	0	0	0	0
POWERED HAULAGE	5	1	1	4	3	1	2	1	0	1
HOISTING	0	0	0	0	0	0	0	0	0	0
IGNITION/EXPLOSION OF GAS/DUST	0	0	0	0	29	1	0	0	0	0
INUNDATION	0	0	0	0	0	0	0	0	0	0
MACHINERY	2	3	0	1	2	1	2	2	2	1
SLIP/FALL OF PERSON	0	1	0	1	0	0	0	1	1	2
STEP/KNEEL ON OBJECT	0	0	0	0	0	0	0	0	0	0
STRIKING OR BUMPING	0	0	0	0	0	0	0	0	0	0
OTHER	0	0	0	0	0	0	0	0	0	1
YEAR TO DATE TOTALS	12	7	2	7	39	3	7	5	8	5
COMBINED YEAR TO DATE TOTALS	19		9		42		12		13	
END OF YEAR TOTAL	30		18		48		21			

Coal Fatalities Nationwide

CY 2012

Location of Accidents

13 Fatal Accidents

- 8 Underground
- 5 Surface

4 Kentucky Fatal Accidents

- 3 Underground
- 1 Facility

Coal Fatalities Nationwide

CY 2012

Accident Classification

13 Fatal Accidents

- 3 Machinery
- 3 Slip or Fall of Person
- 2 Roof/Rib
- 1 Powered Haulage
- 1 Electrical
- 1 Handling Materials
- 1 Exploding Vessels
- 1 Other (Drowning)

Coal Fatalities Nationwide

CY 2012

By State

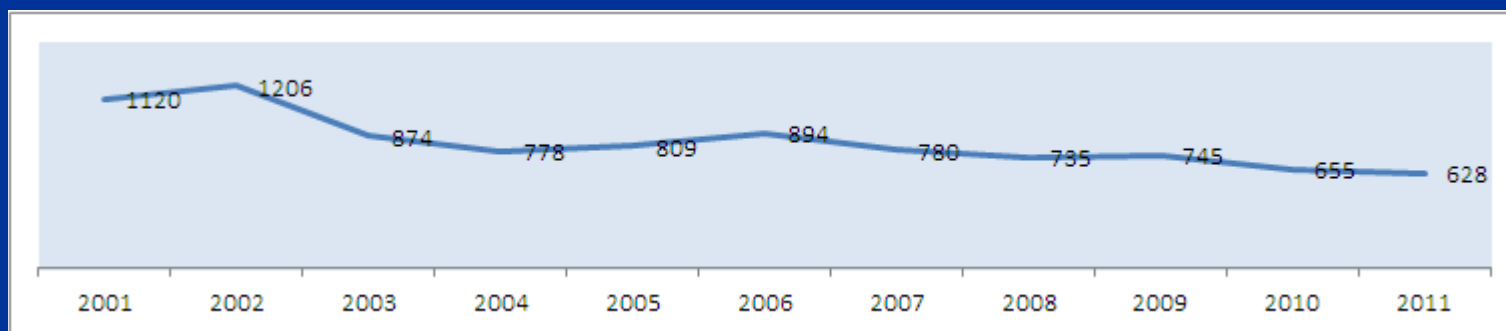
13 Fatal Accidents

- 4 KY
- 4 WV
- 1 CO
- 1 IN
- 1 AL
- 1 VA
- 1 OH

Kentucky Accidents 2001 - 2012

Kentucky Accidents (Degree of Injury 2 - 5)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Totals
D06	502	519	409	370	299	326	307	283	257	207	238	100	3817
D07	397	388	314	265	331	358	317	273	284	288	236	107	3558
D10	221	299	151	143	179	210	156	179	204	160	154	71	2127
	1120	1206	874	778	809	894	780	735	745	655	628	278	9502



Kentucky Fatalities

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Totals
D06	1	5	5	3	3	6	2	1	3		2	2	33
D07	3	4	3	3	5	9		5	2	4	4	1	43
D10	1	1	2			1		2	1	3	2	1	14
	5	10	10	6	8	16	2	8	6	7	8	4	90

Kentucky

Fatalities CY 2012

- **As of August 07, there have been four fatalities at coal mines in Kentucky.**

**SCH Terminal Co., Inc.
Calvert City Terminal LLC
Slip or Fall of Person**



On Sunday, February 26, 2012, at 1:15 a.m., a 52-year-old deckhand with 4 years of mining experience was determined missing. He had been assigned the task of measuring the draft of a set of empty barges that were to be loaded. He had to cross from the dock to the first empty barge. Witnesses observed him on the empty barge walking up-river on the barge. He apparently fell from the barge into the water. Co-workers saw his cap in the water and immediately called for the rescue squad. The victim was found beneath the bow of the dock at approximately 2:30 a.m. The miner was wearing a flotation device, but the flotation device was not designed to keep an unconscious miner's face above water.

Kentucky

Fatalities CY 2012

Parton Bros. Contracting, Inc.
Timber Tree #9
Handling Material



On Saturday, March 3, 2012, a 32-year old foreman was killed while attempting to install a canopy on a Joy 21 SC Shuttle Car. The canopy was suspended from the mine roof by a cable and chain. The foreman was seated in the operator's compartment of the shuttle car beneath the suspended canopy. The canopy shifted and fell, striking the foreman in the head, causing fatal injuries. The victim had 11 years of mining experience, 2 years and 6 weeks experience at this mine, and 32 weeks of experience as a foreman.

Kentucky

Fatalities CY 2012

McCoy Elkhorn Coal Corp.
KC #1
Slip or Fall of Person



On Wednesday, April 25, 2012, a 61-year-old demolition contractor with approximately 20 years of experience was killed from injuries received while dismantling a conveyor stacker belt from the surface area of an inactive underground coal mine. The victim had completed the final torch cut on an elevated, inclined stacker frame support beam containing the counter-weight, when the structure fell. The structure contacted the walkway (catwalk) where the victim was located. This section of the walkway, approximately 25 feet long, broke loose from the main structure, causing the victim to fall approximately 27 feet.

Kentucky

Fatalities CY 2012

McCoy Elkhorn Coal Corp.

Mine #23

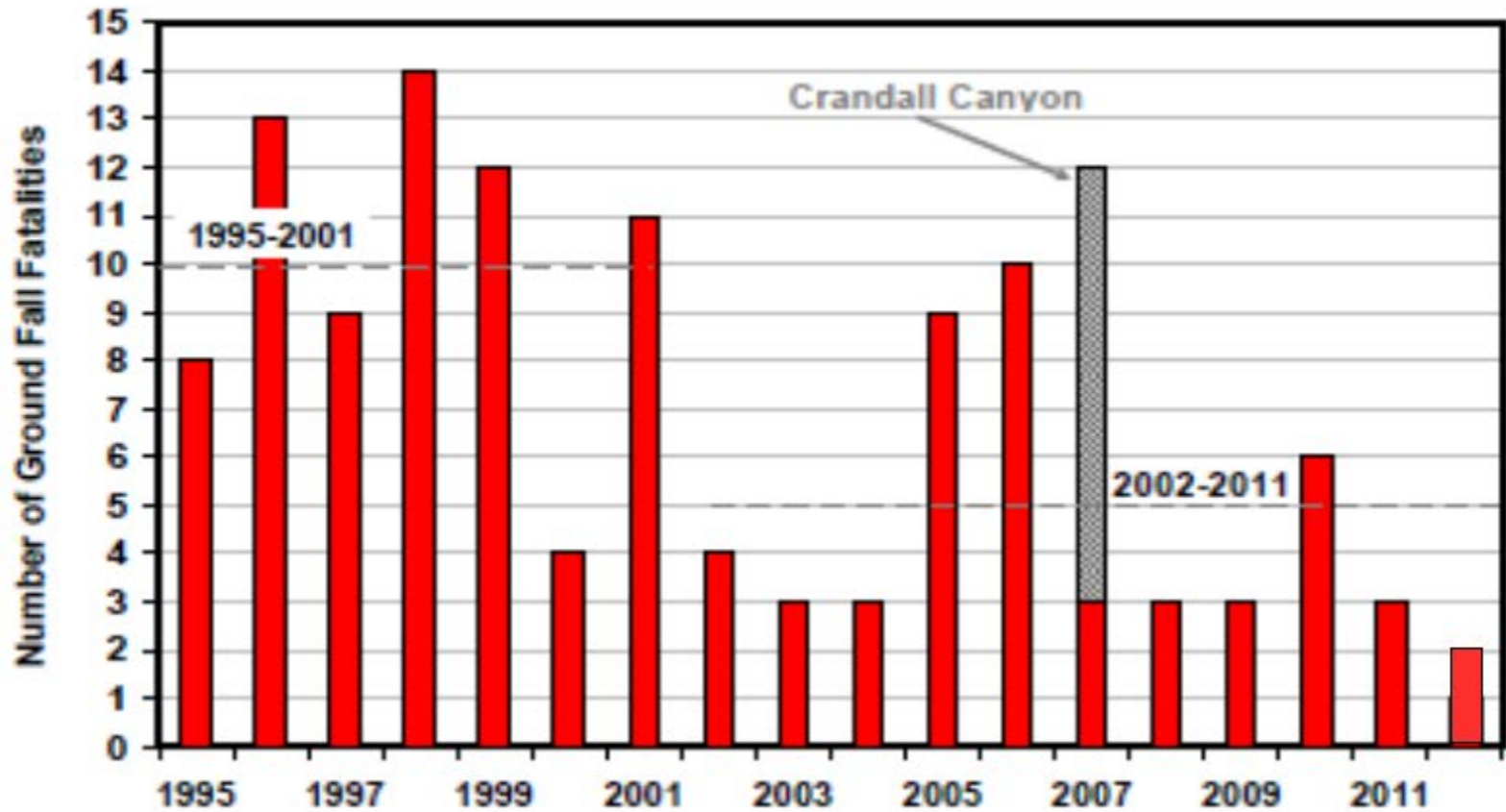
Fall of Face, Rib, Pillar or Highwall



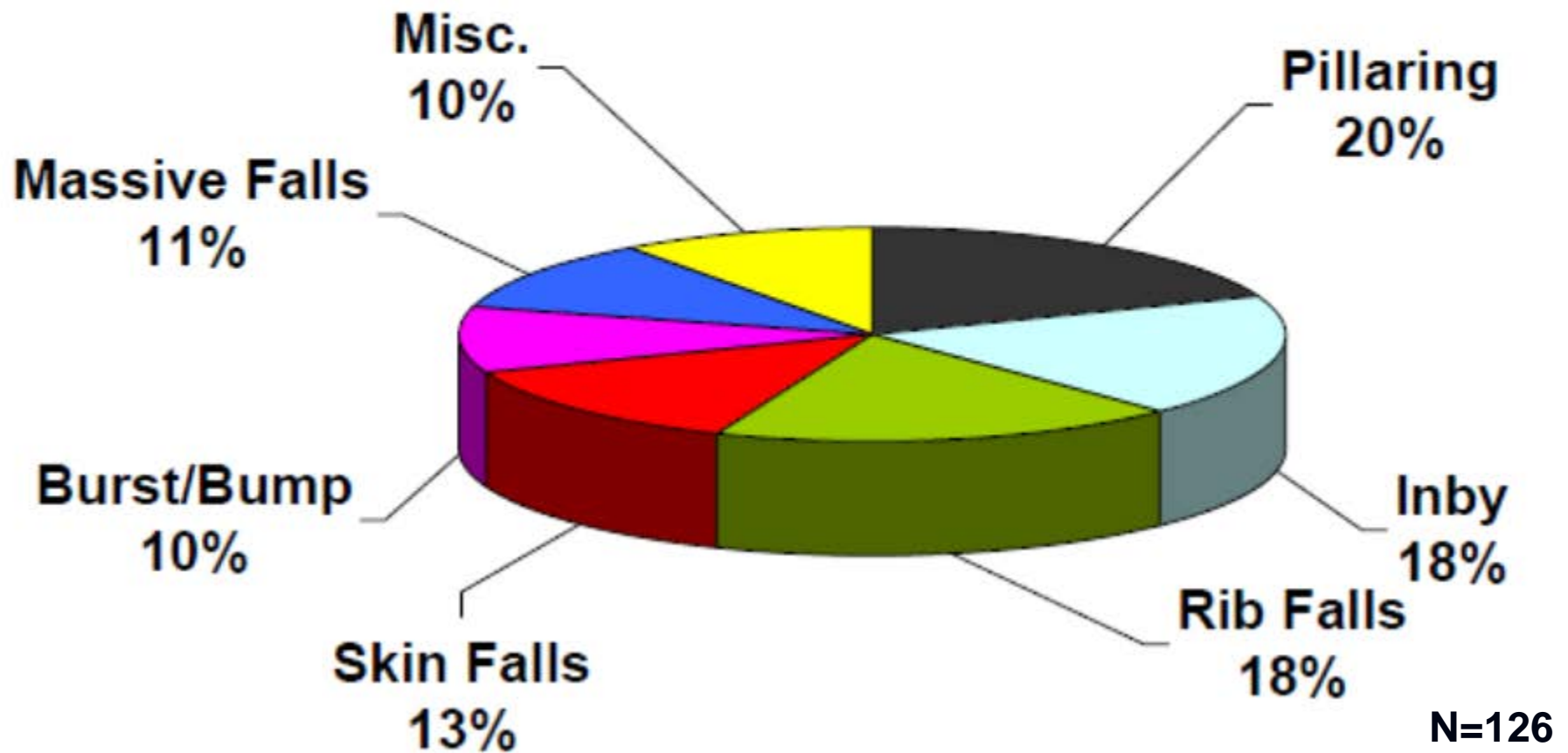
On Monday, June 25, 2012, at approximately 11:45 AM, a 33-year-old outby foreman with 7 years of experience was killed while installing additional rib/roof support in the No. 5 belt/track entry. The victim was wedging a timber against the mine roof to support the rib, when a section of the left hand rib rolled on top of him. The rock was approximately 14 feet long, 4 feet high, and 17 inches thick.



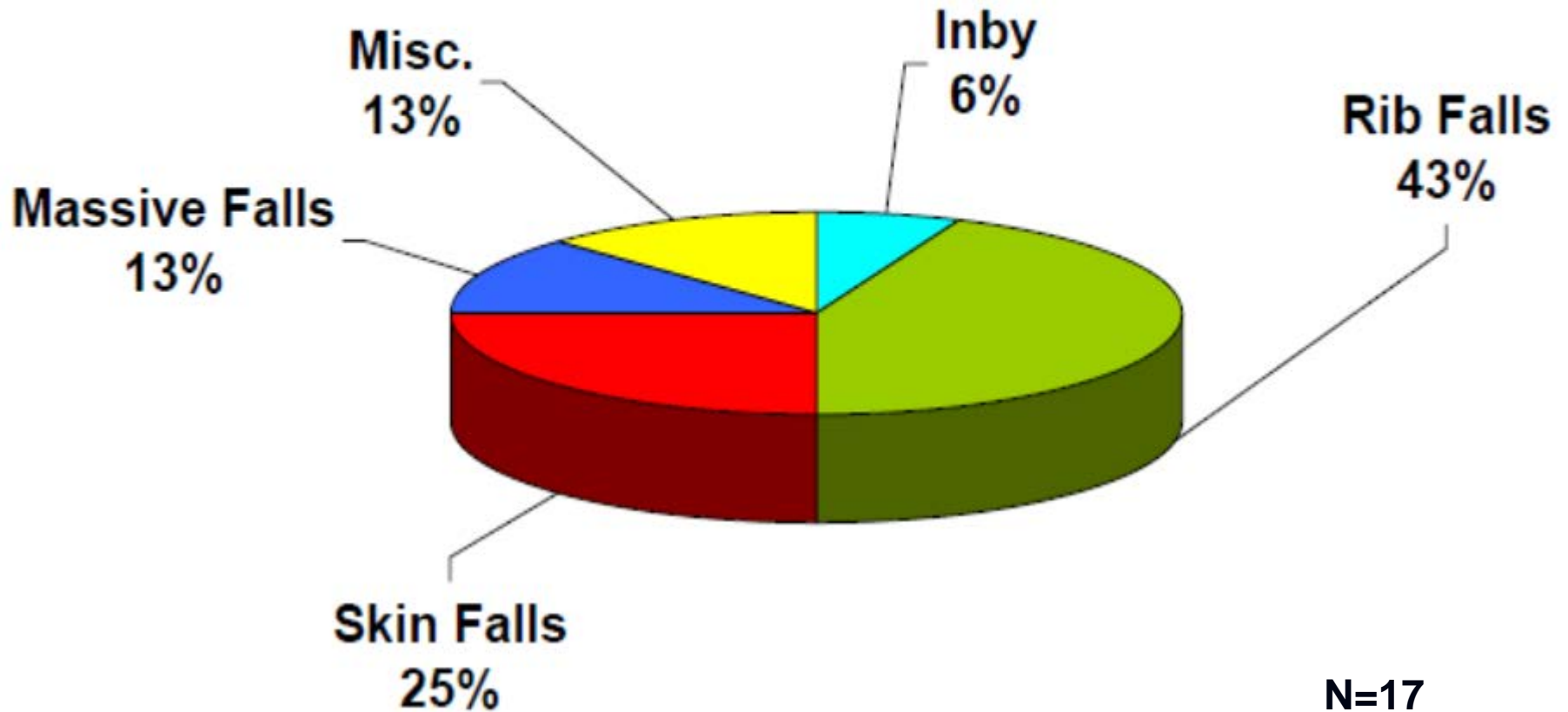
Roof/Rib Fatalities: Nationwide



Roof/Rib Fatalities, 1995-2012



Roof/Rib Fatalities, 2008-2012



Final Stump

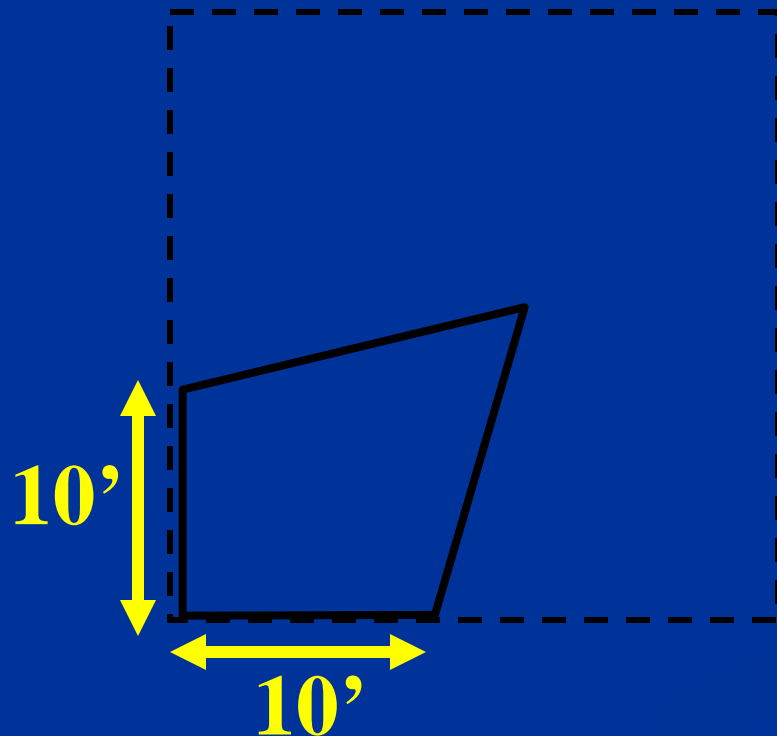


Historically, about 1/3 of retreat mining fatalities occurred while mining the final stump. Currently, few mines extract the entire pushout.



Leave an Engineered Final Stump!

- Large enough to support intersection
- Small enough to allow caving
- **RECOMMEND APPROXIMATELY 10 ft BY 10 ft**



POSTS AND MOBILE ROOF SUPPORTS



Cable Bolts or Superbolts in Intersections



MANAGEMENT TO ENSURE PLAN IMPLEMENTATION



CREW (RE)TRAINING PRIOR TO RETREAT MINING

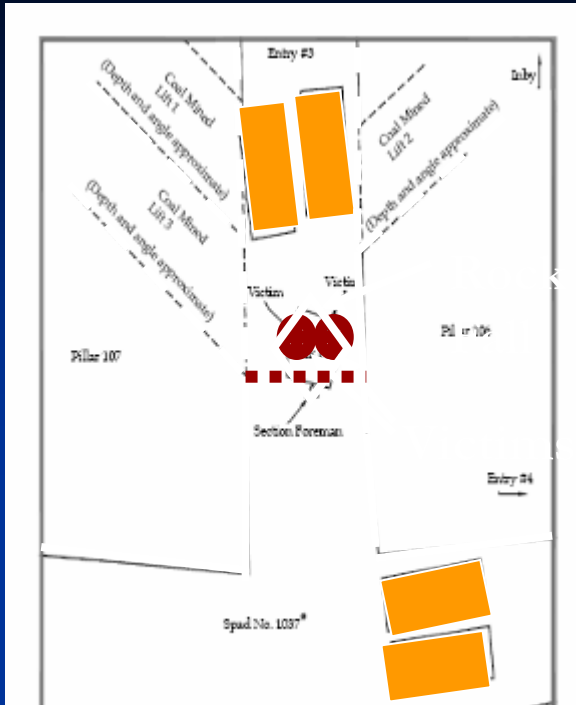


- Roof Control Plan
- Hazard Identification
- Cut Sequence
- Personnel location during mining (red zones)

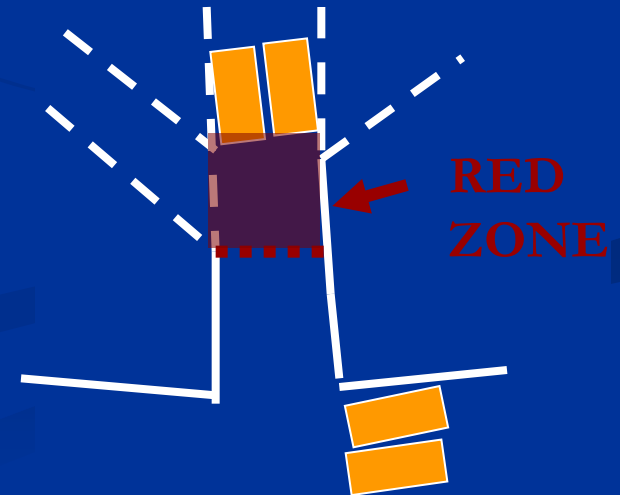


“RED ZONES” DURING RETREAT MINING

Four of the last six fatal incidents involved personnel that were in the wrong location.

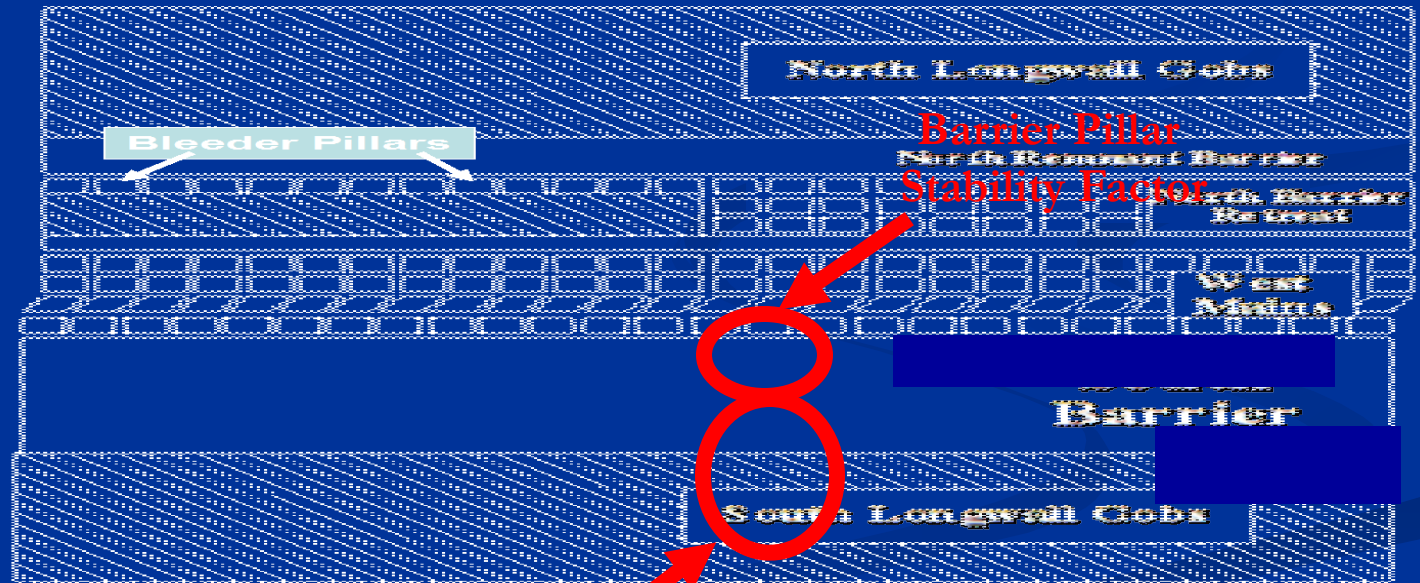


- Outby start of lift
- 25 ft outby MRS when raising/lowering
- Outby CM operator
- Outby intersection (unless presence necessary)





PILLAR DESIGN



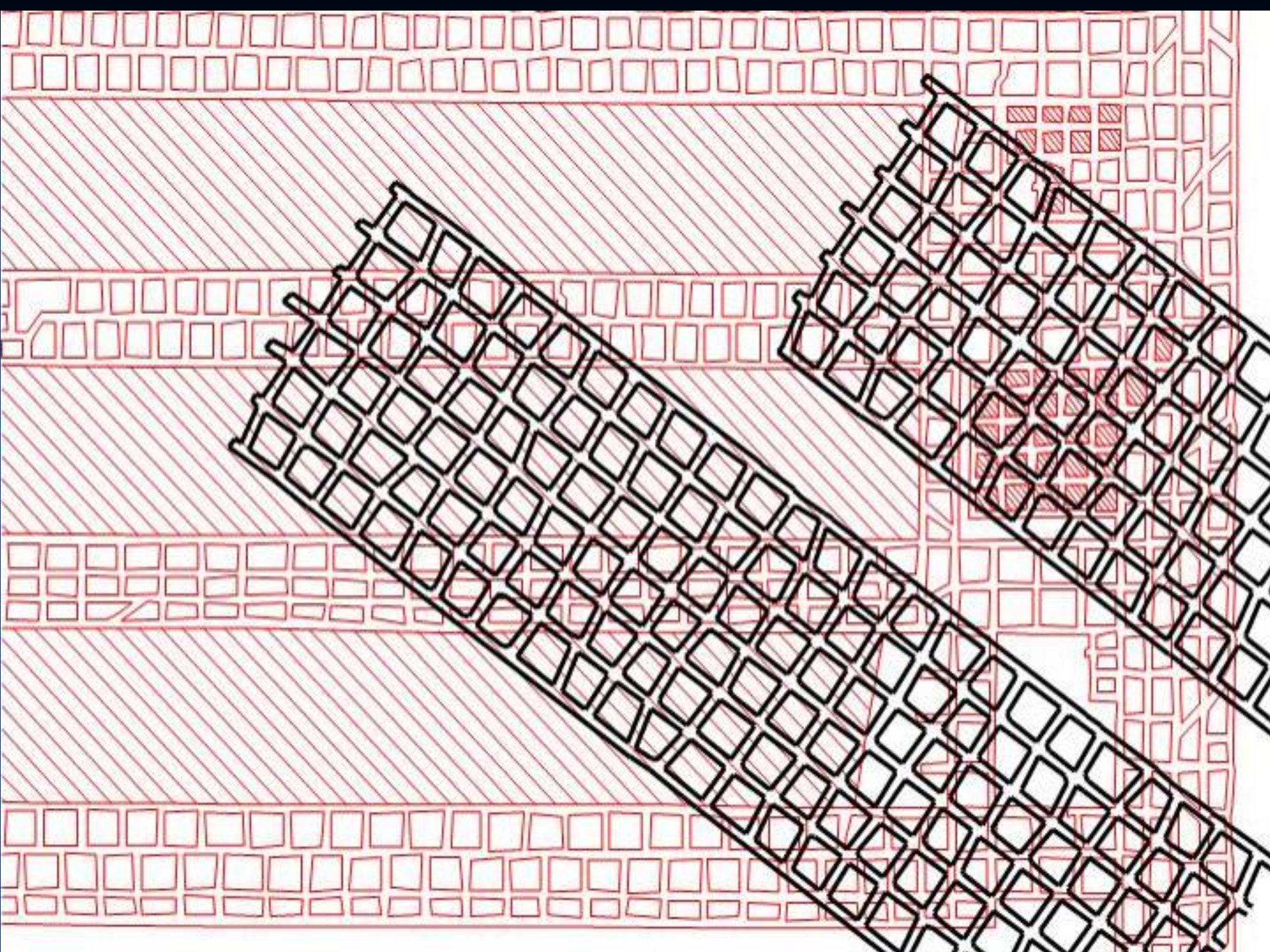
ARMPS SF
(Production Pillars)

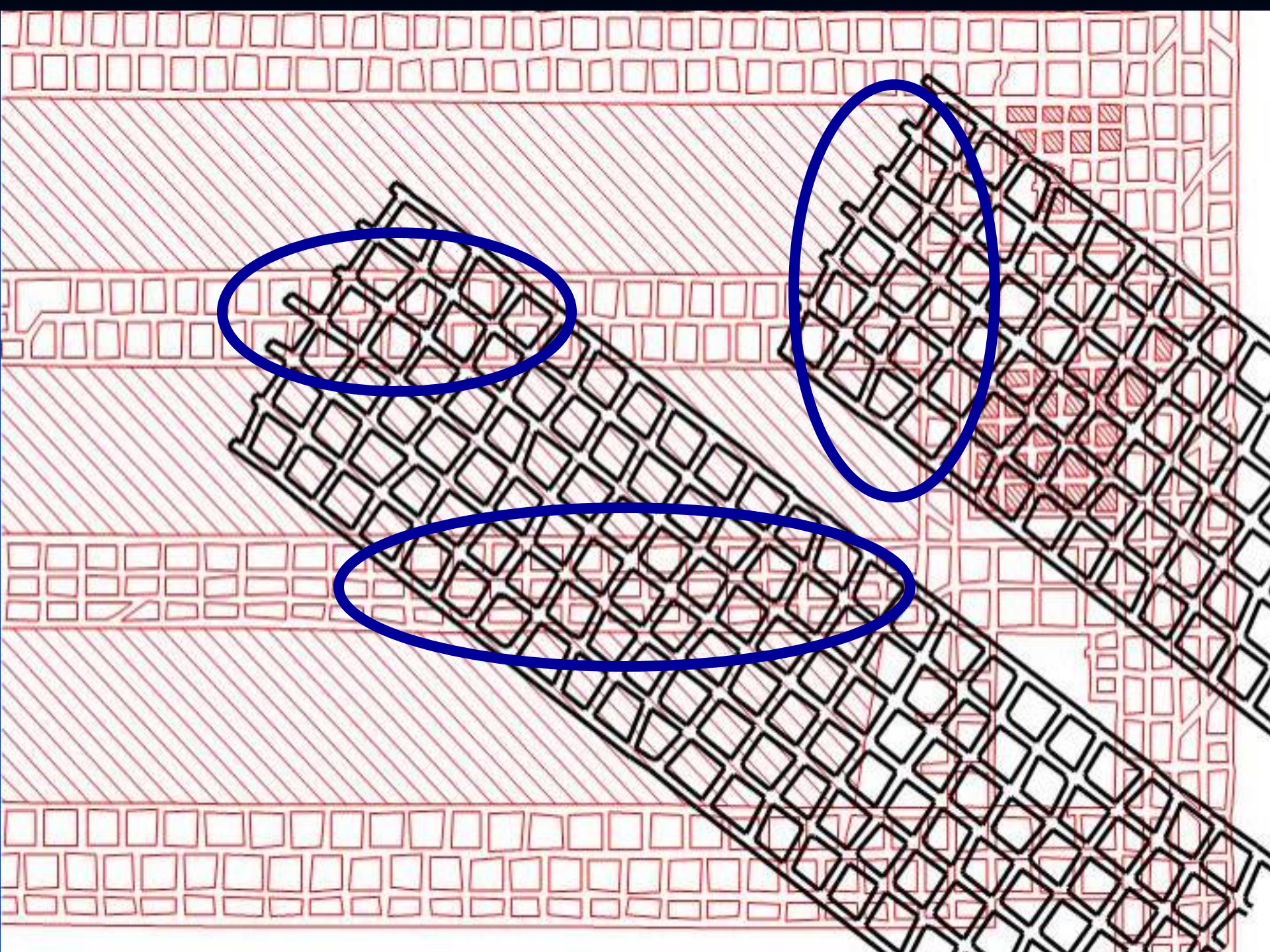
Analysis of Retreat Mining Pillar Stability (ARMPS): Version 6 (2010)



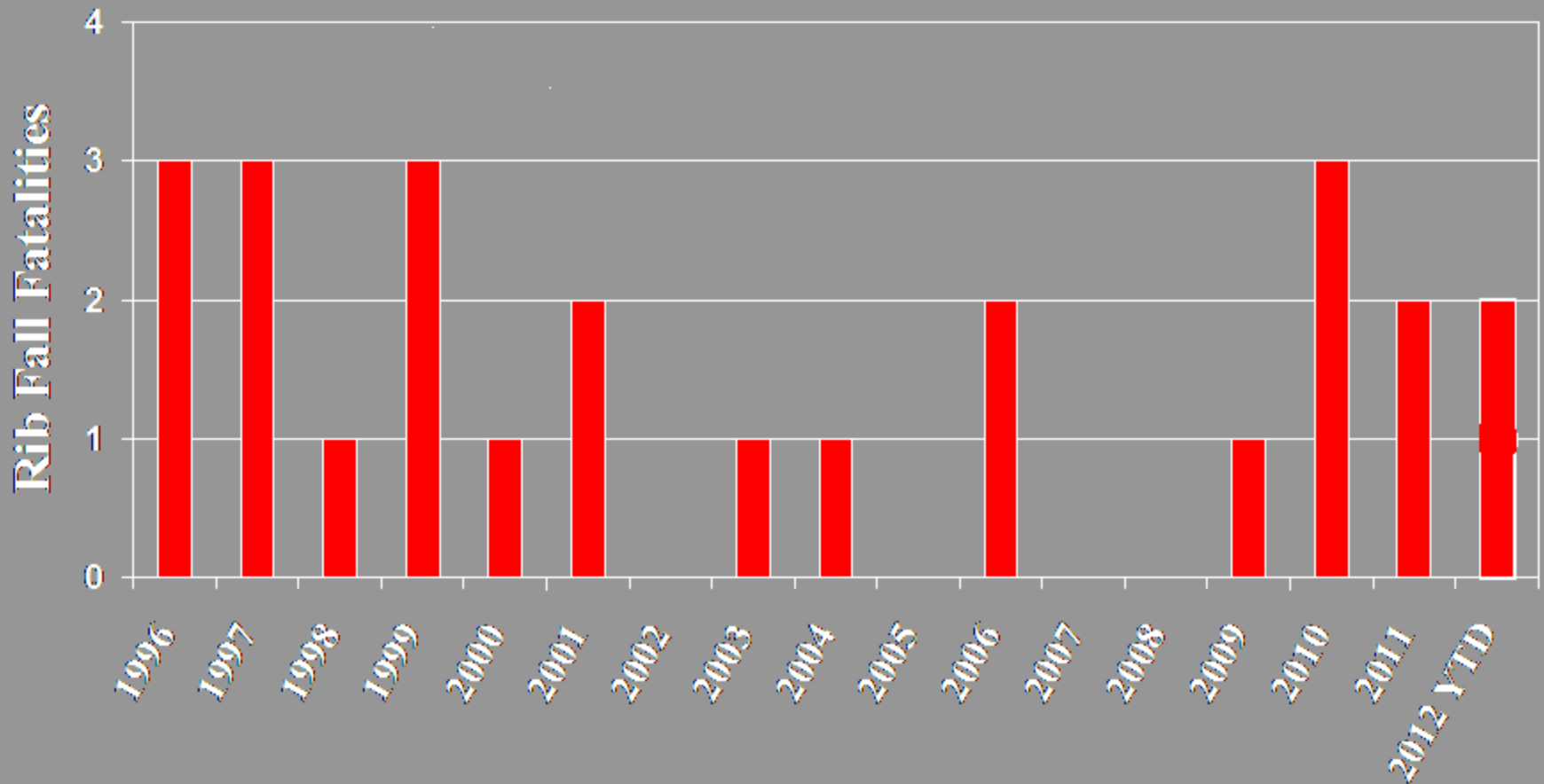
MULTIPLE SEAM MINING



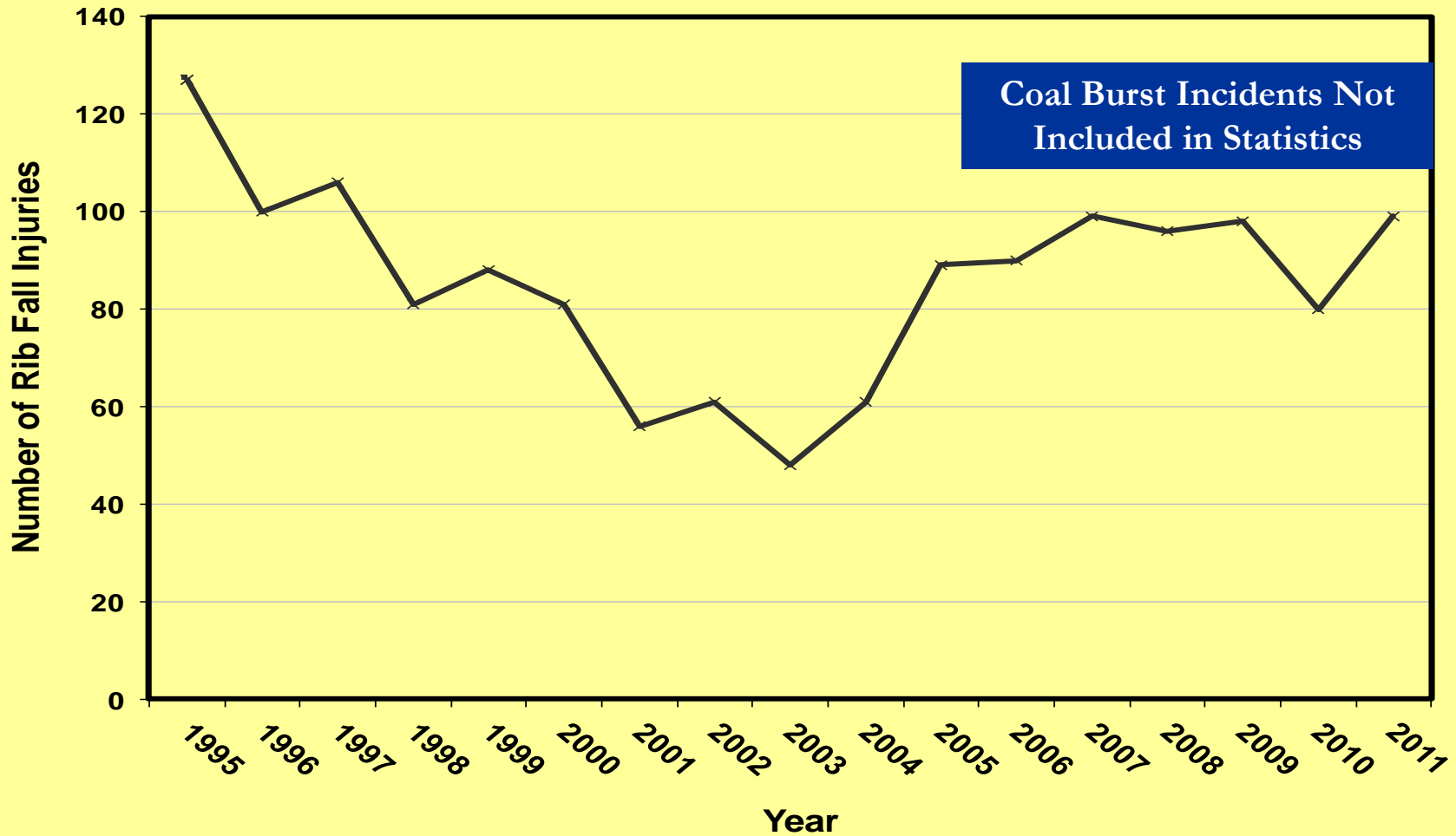




Underground Coal - Rib Fall Fatality



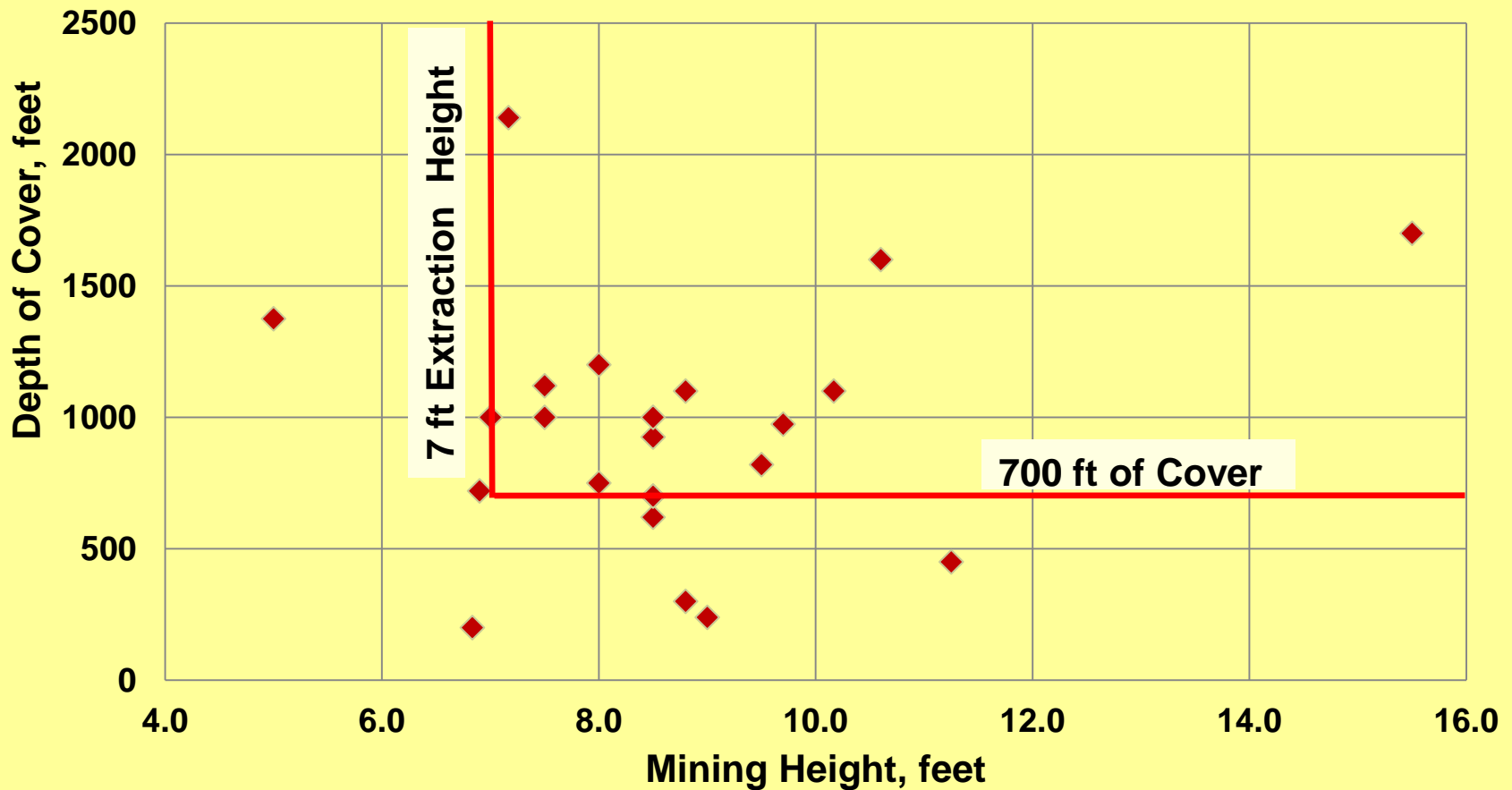
Underground Coal - Rib Fall Injuries



Rib Fall Fatality Analysis

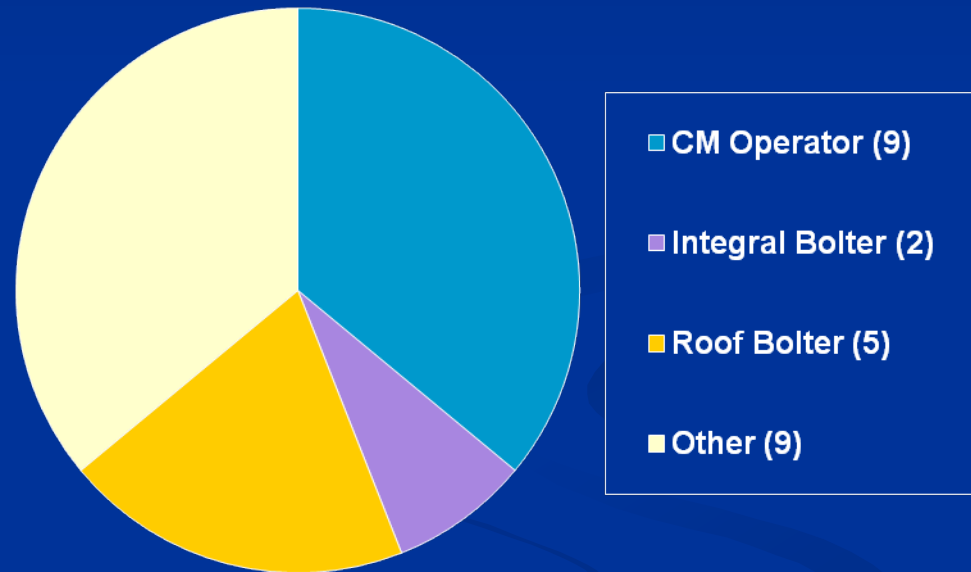
Mining Height – Mining Depth

Rib Fatalities: 1996 - 2012 YTD



Rib Fall Fatality Analysis

- Most rib fatalities occurred during production operations
- Five fatalities occurred during construction activity
 - Belt drive, overcast, etc.
 - High excavation height
- Common factor in rib fatalities: typically no rib support installed



Rib Fall Injury Analysis

- **U.S. deep mining research indicates**
 - Nearly one-quarter of all the rib fall injuries in the U.S. underground coal industry occurred in small group of deep cover pillar recovery mines
 - These mines accounted for less than 10% of all hours worked
 - The rib fall rate was approximately three times greater than other room and pillar mines
- **Coal seams with the highest rib fall rates (room and pillar mines) were primarily the thicker, deeper seams in the Central Appalachian coal fields**
- **The mine injury data also indicates that the highest rib fall injury rates are encountered in the Central Appalachian and Western coalfields of the US**

U. S. Coal Mining Regulations

Rib Control

- Ribs where persons work or travel shall be supported or controlled to protect persons from rib falls - 30 CFR § 75.202 (a)
- Roof control plan, developed by the mine and approved by MSHA, must also be suitable to the prevailing geological conditions and the mining system at the mine - 30 CFR. § 75.220 (a)(1)
- Operations required to revise the control plan when conditions indicate that the plan is not controlling the ribs - 30 CFR § 75.223(a)(1)

U. S. Coal Mining Regulations

Rib Control in Roof Control Plans

- **Rib control measures in approved roof control plans are specific to the mine site**
 - Could be installed routinely and on cycle throughout the mine
 - Or, could be triggered by a condition such as
 - Recognizable rib hazard
 - High mining height
 - Depth of mining
 - Geologic conditions such as a thick rock parting
 - Presence of a multiple seam stress interaction, etc.

Rules to Live By Fatality Prevention



An initiative to improve the prevention of fatalities in mining.

"Rules to Live By III": Preventing Common Mining Deaths" - focuses on 8 safety standards in coal mining - cited as a result of at least five mining accidents and resulting in at least five deaths during the 10-year period from January 1, 2001, to December 31, 2010.

Rules to Live By III

Coal Priority Standards Conditions for Enhanced Enforcement



30 CFR § 75.362(a)(1) - On-shift examination

During the review period, violations of 30 CFR §75.362(a)(1) contributed to 9 fatalities in 9 fatal accident investigations.

30 CFR § 77.404(a) - Machinery and equipment; operation and maintenance

During the review period, violations of 30 CFR §77.404(a) contributed to 15 fatalities in 14 fatal accident investigations.

Rules to Live By III

Coal Priority Standards Conditions for Enhanced Enforcement



30 CFR § 77.405(b) - Performing work from a raised position; safeguards

During the review period, violations of 30 CFR §77.405(b) contributed to 7 fatalities in 7 fatal accident investigations.

30 CFR § 77.1000 - Highwalls, pits and spoil banks; plans

During the review period, violations of 30 CFR §77.1000 contributed to 6 fatalities in 5 fatal accident investigations.

Rules to Live By III

Coal Priority Standards Conditions for Enhanced Enforcement



30 CFR § 77.1605(b) - Loading and haulage equipment; installations

During the review period, violations of 30 CFR §77.1605(b) contributed to 10 fatalities in 10 fatal accident investigations.

30 CFR § 77.1606(a) - Loading and haulage equipment; inspection and maintenance

During the review period, violations of 30 CFR §77.1606(a) contributed to 9 fatalities in 9 fatal accident investigations.

Rules to Live By III

Coal Priority Standards Conditions for Enhanced Enforcement



30 CFR § 77.1607(b) - Loading and haulage equipment; operation

During the review period, violations of 30 CFR §77.1607(b) contributed to 11 fatalities in 11 fatal accident investigations.

30 CFR § 77.1713(a) - Daily inspection of surface coal mine; certified person; reports of inspection

During the review period, violations of 30 CFR §77.1713(a) contributed to 8 fatalities in 7 fatal accident investigations.

FINAL RULE FOR MINE EXAMINATIONS

Effective August 6, 2012

Background

- MSHA determined that the same types of violations of health or safety standards are found by MSHA inspectors in underground coal mines every year and that these violations present some of the most unsafe conditions.
- These repeated violations expose miners to unnecessary safety and health risks that should be found and corrected by mine operators.
- The final rule will increase the identification and correction of unsafe conditions in mines earlier, removing many of the conditions that could lead to danger, and improving protection for miners.

Major Provisions of the Rule

- Examiners are required to look for violations of nine specific standards in addition to hazardous conditions during preshift, supplemental, on-shift and weekly examinations (effective August 6, 2012).
- On a quarterly basis, mine operators must review with examiners all citations and orders issued in areas where examinations under Subpart D are required.
- Mine operators must record and correct violations of the nine standards in a manner similar to hazardous conditions.

Violations of Mine Roof Control and Ventilation Plans

“The mine operator is required by § 75.220(a)(1) to develop and follow a roof control plan and by § 75.370(a)(1) to develop and follow a mine ventilation plan approved by the District Manager. These plans are mine-specific and can sometimes be comprehensive and complex. MSHA expects that the operator will assure the examiner should have broad knowledge of these plans.”

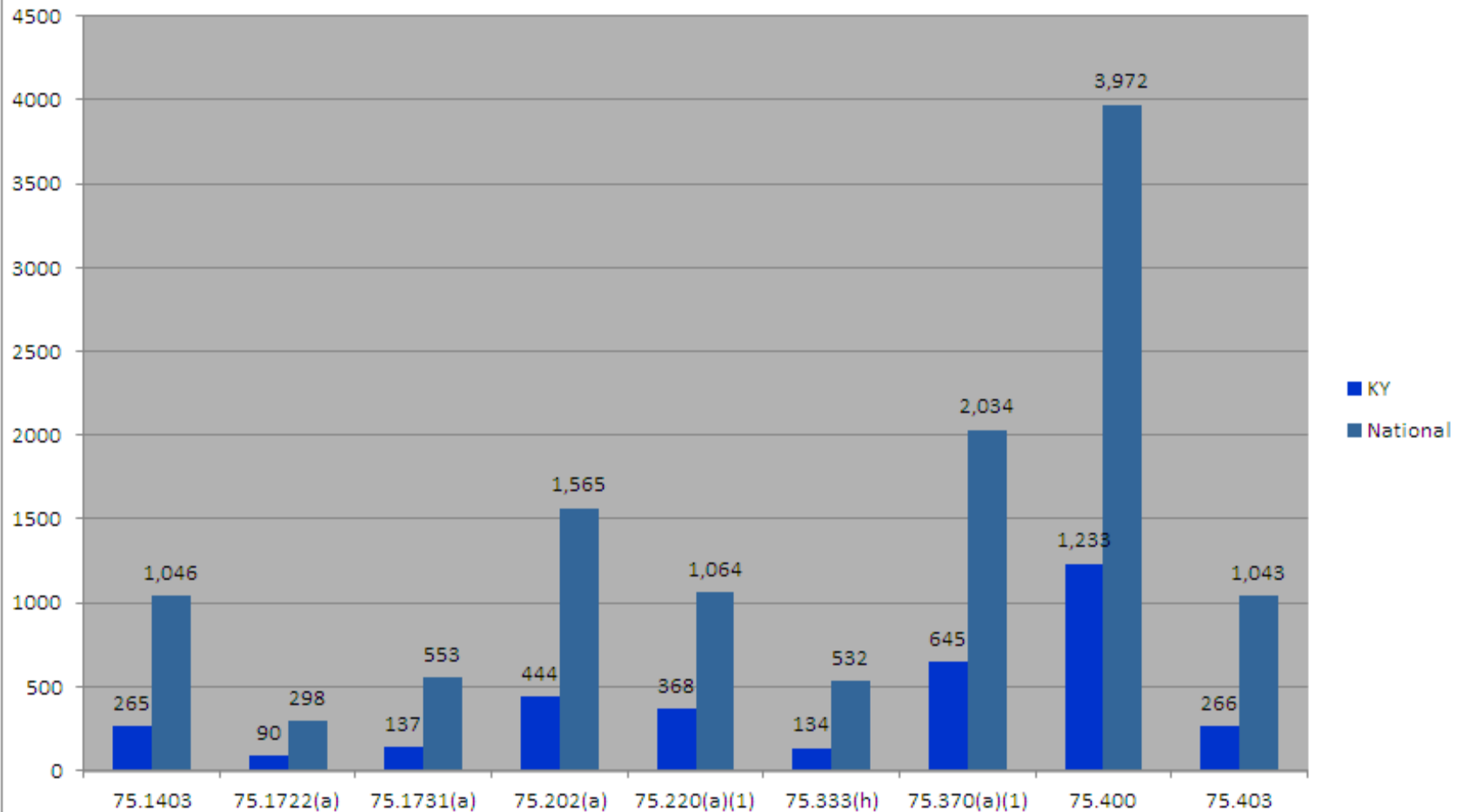
Summary

- The Mine Safety and Health Administration (MSHA) is revising its requirements for preshift, supplemental, on-shift, and weekly examinations of underground coal mines to require operators to identify violations of health or safety standards related to ventilation, methane, roof control, combustible materials, rock dust, other safeguards, and guarding, as listed in the final rule. Violations of these standards create unsafe conditions for underground coal miners.

Under the final rule, examiners must examine for hazardous conditions and violations of the following nine standards:

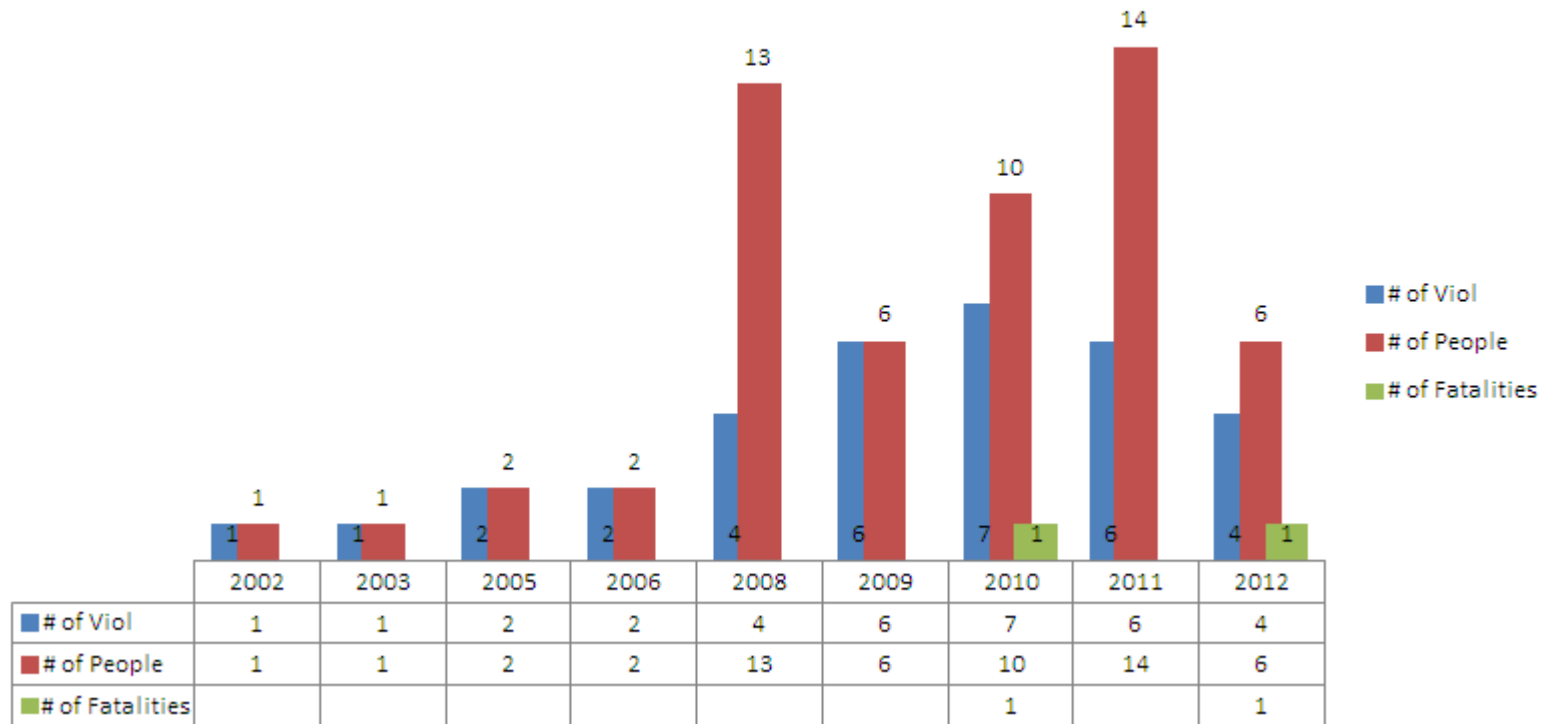
- 75.202(a) and 75.220(a)(1) — roof support and the mine roof control plan;
- 75.333(h) and 75.370(a)(1) — maintenance of ventilation controls and the mine ventilation plan;
- 75.400 and 75.403 — accumulations of combustible materials and application of rock dust;
- 75.1403 — other safeguards, limited to maintenance of travelways along belt conveyors, off track haulage roadways, track haulage, track switches, and other components for haulage;
- 75.1722(a) — guarding moving machine parts; and
- 75.1731(a) — maintenance of belt conveyor components.

Summary of Violations Issued January 01, 2012 - Present KY

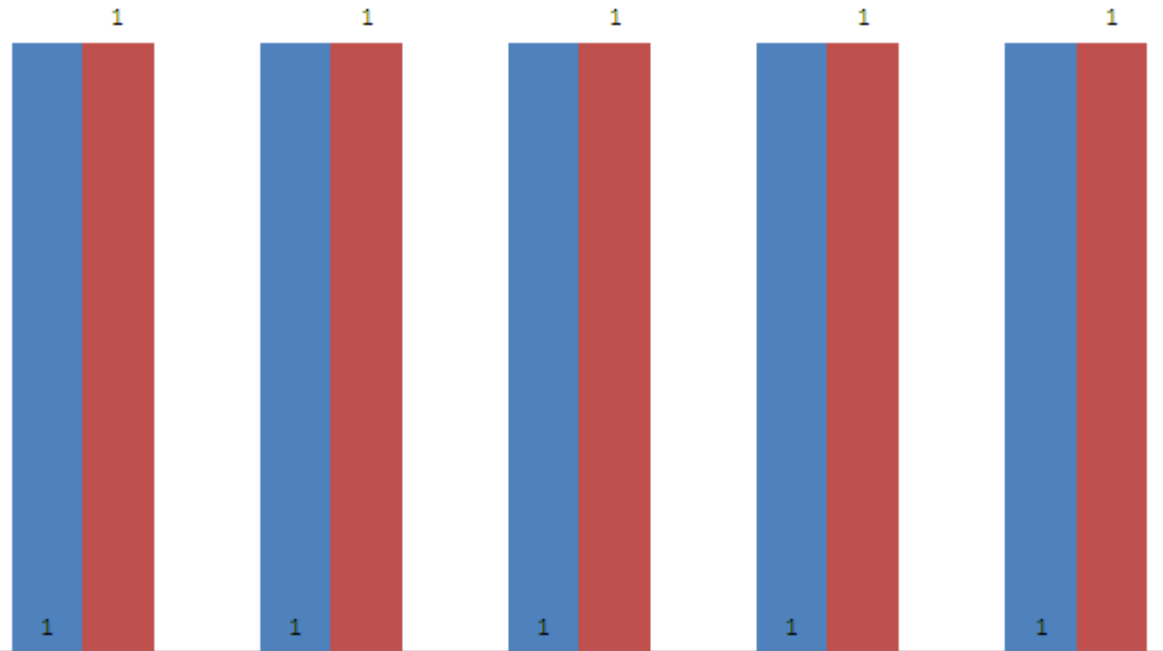


**Summary of accidents for the Last 10
Years that have Occurred resulting in
violations of the nine mandatory health
and safety standards referenced in
paragraph 75.360(b)(11)**

75.1403



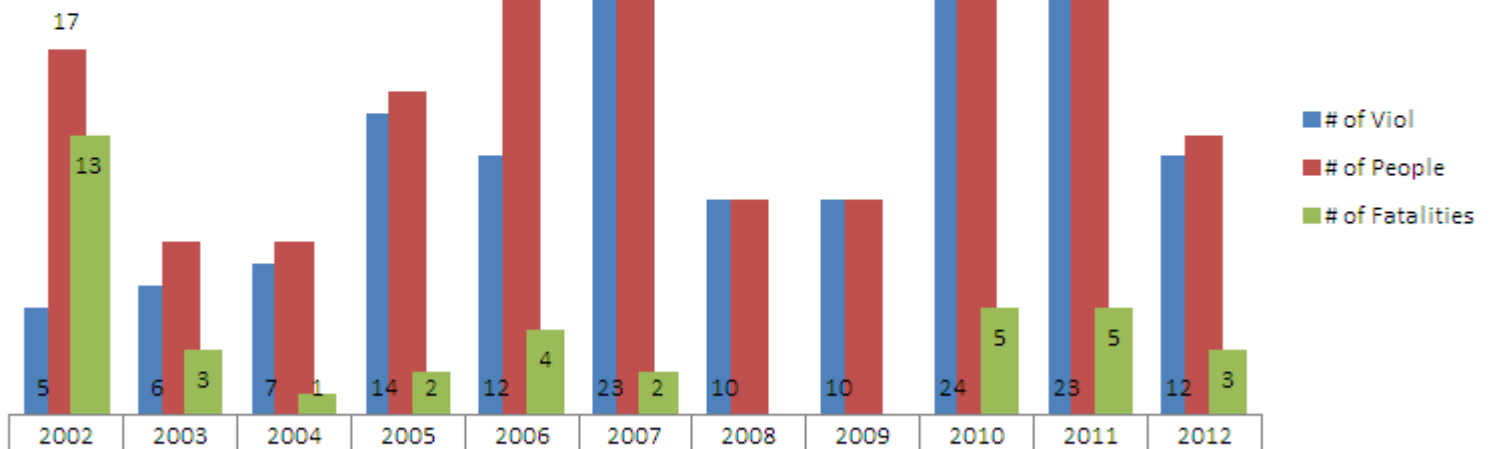
75.1722(a)



■ # of Viol
■ # of People

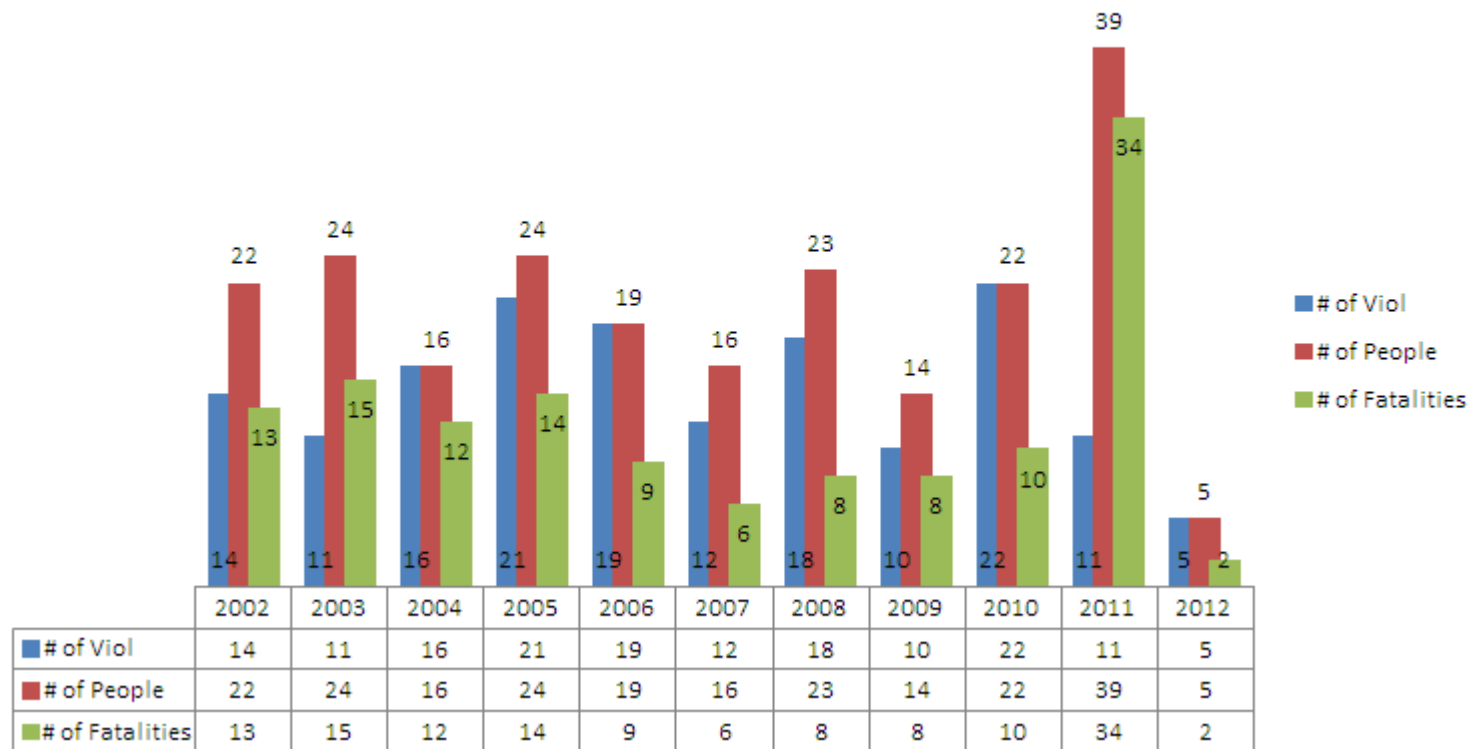
	2007	2009	2010	2011	2012
# of Viol	1	1	1	1	1
# of People	1	1	1	1	1

75.202(a)

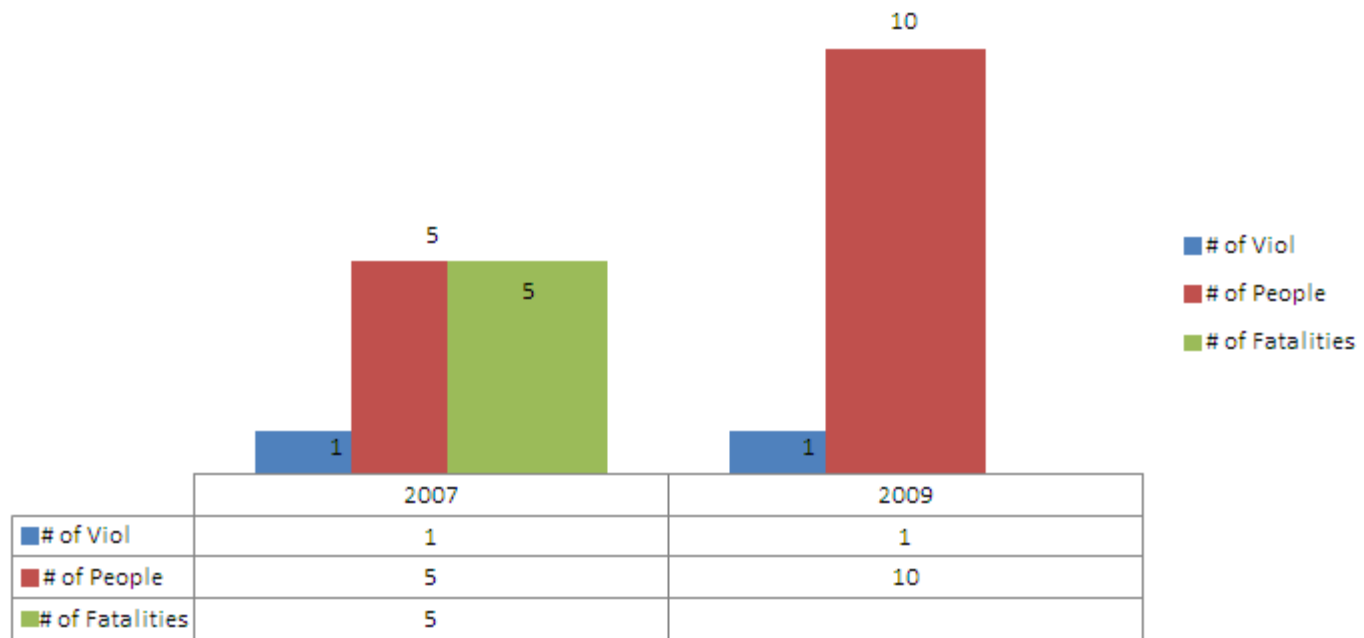


	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
# of Viol	5	6	7	14	12	23	10	10	24	23	12
# of People	17	8	8	15	21	25	10	10	26	27	13
# of Fatalities	13	3	1	2	4	2			5	5	3

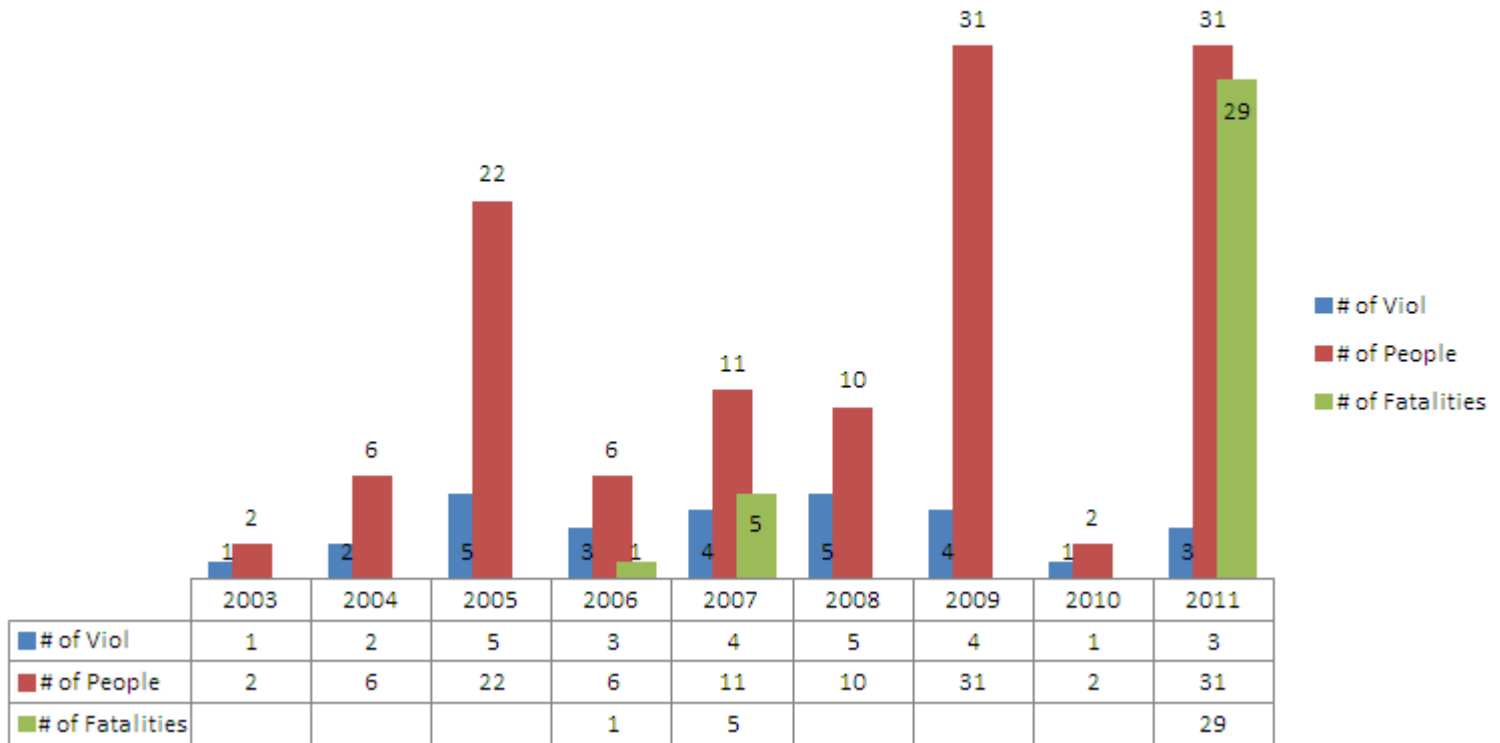
75.220(a)(1)



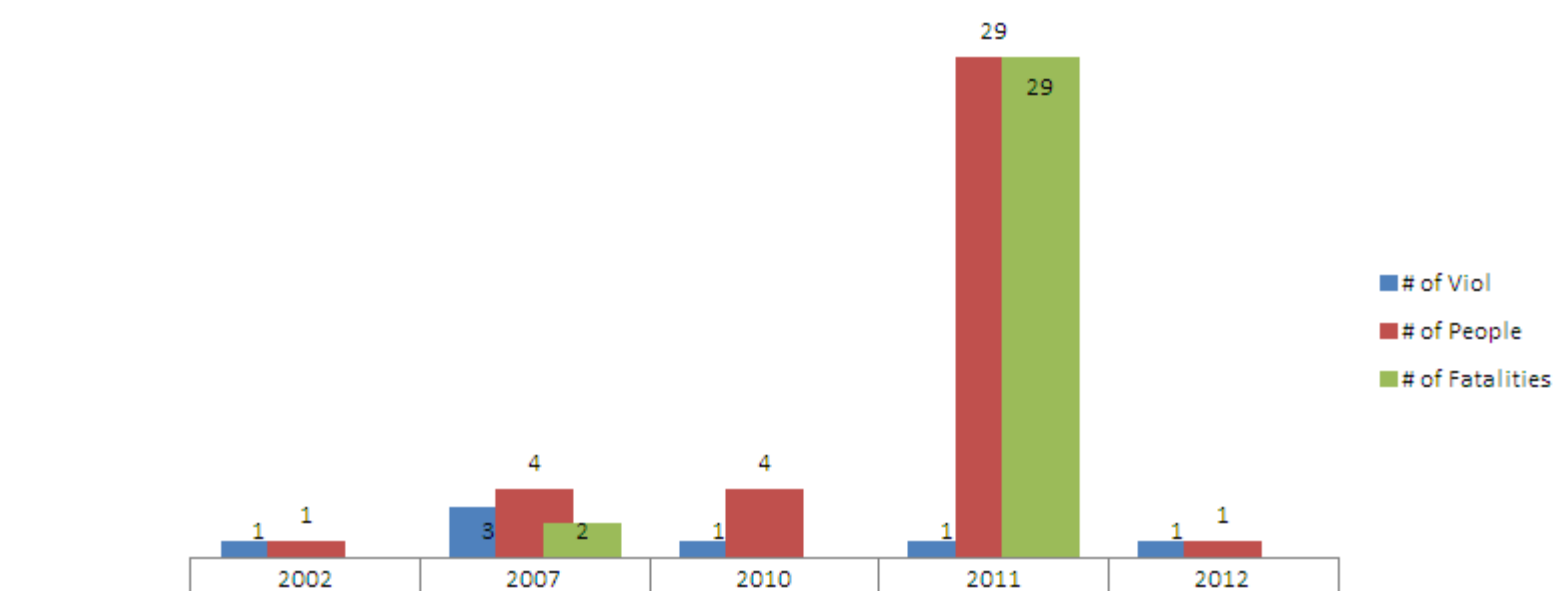
75.333(h)



75.370(a)(1)

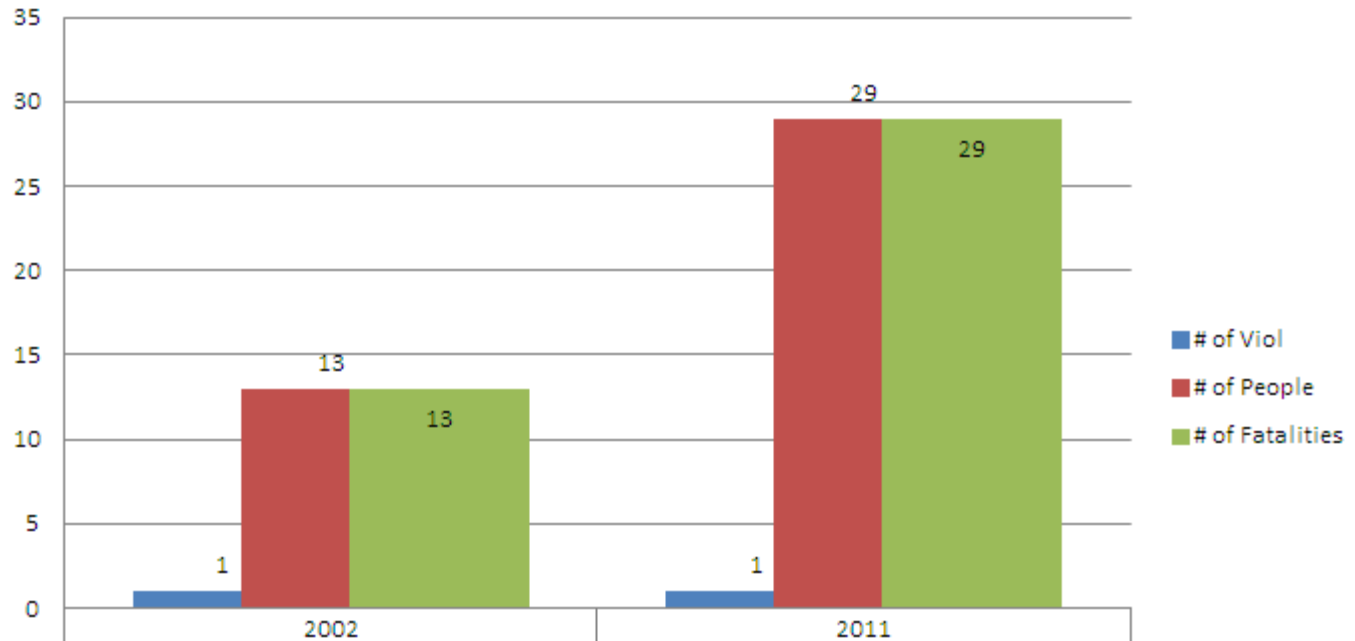


75.400



	2002	2007	2010	2011	2012
# of Viol	1	3	1	1	1
# of People	1	4	4	29	1
# of Fatalities		2		29	

75.403



	2002	2011
# of Viol	1	1
# of People	13	29
# of Fatalities	13	29

TWO MINERS WERE **KILLED**



IN **FIVE DAYS**

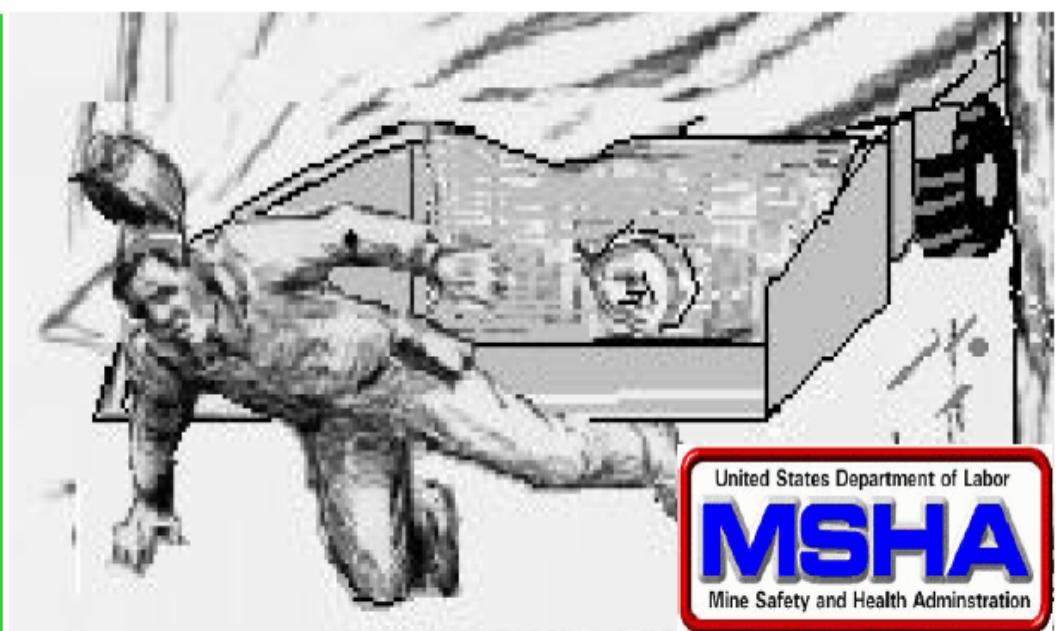
PRO  **XIMITY**

DETECTION SYSTEMS

CAN PREVENT DEATHS!

On July 27, 2012, a midnight shift move crew member received crushing injuries when he was caught between the continuous mining machine (CM) conveyor boom and the right rib on the working section. The CM was being operated by the miner's supervisor and was being set up for production on the day shift when the accident occurred.

On July 31, 2012, a miner was crushed when he was struck by a battery-powered scoop. The miner was near a scoop at the battery charging station, when a second scoop struck the scoop beside the miner, causing it to slide into the miner.



Best Practices

- Install Proximity Detection Systems on CMs and other face equipment. Find approved systems at www.msha.gov.
- Avoid Red Zone areas. See diagram at msha.gov.
- Use remote control units that have safeguards against accidental tram.
- Before tramming, ensure emergency stop and operational controls are functional.
- Ensure equipment is properly maintained and being operated safely, especially in low mining heights, and slippery and uneven floor conditions.
- See other MSHA Best Practices at:

<http://www.msha.gov/focuson/watchout/Hitby%20SHUTTLECARS.pdf>

Pattern of Violations Single Source Page



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Mine Safety and Health Administration

MSHA - Protecting Miners' Safety and Health Since 1978

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Pattern of Violations Single Source Page

A mine operator that has a potential pattern of recurrent S&S violations at a mine will receive written notification from MSHA. An S&S violation is one that could reasonably be expected to lead to a serious injury or illness. The operator will have an opportunity to review and comment on the documents upon which the potential pattern of violations is based, and develop a corrective action program to reduce S&S violations. MSHA will closely monitor the affected mine's compliance. If the operator significantly reduces its S&S violation rate, it can avoid being issued a Notice of a Pattern of Violations pursuant to Section 104(e) of the Federal Mine Safety and Health Act of 1977. If the improvement falls short of prescribed goals, MSHA will issue the notice. For each S&S violation subsequently found, MSHA will issue an order withdrawing miners from the affected area until the cited condition has been corrected. An operator can be removed from a pattern of violations when 1) an inspection of the entire mine is completed and no S&S violations are found or 2) no withdrawal order is issued by MSHA in accordance with Section 104(e)(1) of the Mine Act within 90 days of the issuance of the pattern notice.

Resources

- ***Monthly Monitoring Tool for Pattern of Violations***

Enter an MSHA Mine ID : (7 Digits - No Dash)

If you do not know the Mine ID, please use the [Data Retrieval System](#).

- [Pattern of Violations Screening Criteria - 2010](#)
(Revised 11/5/2010 to Include National Mine Type Severity Measures)
- [Pattern of Violations \(POV\) Procedures Summary - 2010](#)
- [30 CFR Part 104 - Pattern Of Violations](#)
- [FedReg 2011-2255](#) - Pattern of Violations; Proposed rule; notice of close of comment period.
- [FedReg 2011-7975](#) - Pattern of Violations; Proposed rule; extension of comment period.
- [FedReg 2011-10788](#) - Pattern of Violations; Proposed rule; notice of public hearings; notice of re-opening and close of comment period.
- [FedReg 2011-15250](#) - Pattern of Violations; Proposed rule; notice of public hearing; notice of extension of comment period.

Our Ultimate Measure of Success

Safety



Every Day Every Shift

Values