2020 Fatal Comparison Chart (**based on preliminary report data, fatal alerts, & final reports**) Updated: 10/15/2020

MNM Total	17	Fatal Date	Coal Total	3	Fatal Date	Total
Underground (UG)	2	May21, Jul24	Underground (UG)	1	Oct13	3
Surface & Sur of UG	15	Jan8, Jan23, Feb27m, Feb29, May2, Jun1, Jun13, Jun19, Jul9, Jul29, Aug18, Aug26, Sep1, Sep16, Oct14	Surface & Sur of UG	2	Feb27c, Oct9	17
Found Non-Chargeable			Found Non-Chargeable	1	Feb10	1
Contractor	2	Jan23, Jun13	Contractor	1	Feb27c	3
Powered Haulage	3	Jul29, Sep16, Oct14	Powered Haulage	2	Feb27c, Oct13	5
Machinery	4	Feb29, Jun13, Jul24, Aug26	Machinery	1	Oct9	5
Roof, Rib, Highwall Fall			Roof, Rib, Highwall Fall			0
Electrical	1	Jul9	Electrical	0		1
Slip & Fall of Persons	4	Jan8, Jan23, Jun1, Sep1,	Slip & Fall of Person	0		4
Fall & Sliding Materials	2	Jun19, Aug18	Fall & Sliding Materials	0		2
Handling Materials	2	Feb27m, May2	Handling Materials	0		2
Hand Tools	1	May21				1
Age 0-19			**Age** 0–19			
Age 20-29	5	Feb27m, Feb29, Jun13, Jul24, Aug18	Age 20-29	0		5
Age 30-39	1	Jan8	Age 30-39	0		1
Age 40-49	1	Sep16	Age 40-49	0		1
Age 50-59	3	May2, Aug26, Sep1,	Age 50-59	1	Feb27c	4
Age 60+	6	Jan23, May21, Jun1, Jun19, Jul9, Jul29	Age 60+	0		6
Experience			**Experience**			
Less than 1 year	3	Jan8, Jun1, Jul24	Less than 1 year	0		3
1-9 years	7	Feb27m, Feb29, May2, Jun13, Jul29, Aug18, Sep1	1-9 years	0		7
10-19 years	0		10-19	0		0
20+	6	Jan23, May21, Jun19, Jul9, Aug26, Sep16	20+	1	Feb27c	7
Mine Site Experience			**Mine Site Experience**			
Less than 1 year	5	Jan8, Jan23, Jun1, Jul24, Aug26	Less than 1 year	1	Feb27c	6
1-9 years	9	Feb27m, Feb29, May2, Jun13, Jun19, Jul29, Aug18, Sep1, Sep16	1-9 years	0		9
10-19	1	May21	10-19	0		1
20+	1	Jul9	20+	0		1
Job/Task Experience			**Job/Task Experience**			
0-7 days	*1*	*Jul24*	0-7 days			*1*
Less than 1 year	3	Jan8, Jun1, Aug26	Less than 1 year			3
1-9 years	11	Feb27m, Feb29, May2, May21, Jun13, Jun19, Jul9, Jul29, Aug18, Sep1, Sep16	1-9 years	1	Feb27c	12
10-19			10-19			0
20+	1	Jan23	20+			1
Day of the Week:			**Day of the Week:**			
Sunday			Sunday			0
Monday	1	Jun1	Monday			1
Tuesday	2	Aug18, Sep1	Tuesday	1	Oct13	3
Wednesday	5	Jan8, Jul29, Aug26, Sep16, Oct14	Wednesday	0		5
Thursday	4	Jan23, Feb27m, May21, Jul9	Thursday	1	Feb27c	5
Friday	2	Jun19, Jul24,	Friday	1	Oct9	3
Saturday	3	Feb29, May2, Jun13	Saturday	0		3

Focus on your safety goal with purpose!

2020 Fatal Comparison Chart (**based on preliminary report data, fatal alerts, & final reports**) Updated: 10/15/2020

2020 - Month	MNM	Coal	Totals	Difference	Totals	2019 - Month	MNM	Coal
January	2	0	2	0	2	January	0	2
February	2	1	3	+3	0	February	0	0
March	0	0	0	-3	3	March	2	1
April	0	0	0	0	0	April	0	0
May	2	0	2	-1	3	May	2	1
June	3	0	3	+1	2	June	2	0
July	3	0	3	-1	4	July	3	1
August	2	0	2	-4	6	August	3	3
September	2	0	2	0	2	September	0	2
October	1	2	3	+2	1	October	0	1
November					2	November	2	0
December					2	December	1	1
2020 Total:	**17**	**3**	**20**	**-3**	**27**	**2019 Total:**	**15**	**12**

Product	Fatals For 2020	2020 Total product	2019 Total product
Alumina			
Cement	Jan23	1	1
Clay			1
Coal	Feb27c, **Oct9, Oct13**	3	11
Copper			1
Diatomaceous Earth			
Dimension Stone			
Gold Ore			
Granite	Oct14	1	1
Gypsum			
Iron Ore			1
Kaolin			
Lead Ore			
Lime			
Limestone	Jan8, May21, Jun19, Jul24	4	2
Magnesite			
Phosphate			
Potash			
Sand/ Sand & Gravel	Feb27m, Feb29, May2, Jun1, Jun13, Jul9, Jul29,Aug18, Aug26, Sep1, Sep16	11	2
Sandstone			2
Shale			
Silver Ore			
Stone			1
Titanium			1
Traprock			

State (2020)	Total	MNM	Coal	Fatal Date
Arizona	2	2	0	**Jun1, Jun13**
California	2	2	0	**Jan23, Aug18**
Georgia	2	2	0	**Jul9, Jul24**
Iowa	1	1	0	**Jan8**
Kansas	1	1	0	**Jun19**
Kentucky	2	0	2	**Oct9, Oct13**
Illinois	1	1	0	**May21**
Louisiana	1	1	0	**Feb29**
Michigan	1	1	0	**Feb27m**
Missouri	1	1	0	**Jul29**
New Jersey	1	1	0	**Sep16**
Ohio	1	1	0	**May2**
South Carolina	1	0	1	**Oct14**
Texas	1	1	0	**Sep1**
Washington	1	1	0	**Aug26**
West Virginia	1	0	1	**Feb27c**

Part 48 = 5	Part 46 = 15
All Coal = 3 MNM: UG = 2 Metal: SUR = 0	Non Metal SUR = 15

Month	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	TOTAL	AVG
January	2	2	1	2	3	5	1	3	2	1	4	26	2.36
February	3	0	2	3	1	1	5	5	3	3	0	26	2.36
March	0	3	3	3	3	5	2	3	5	2	1	30	2.73
April	0	0	1	0	2	0	6	3	2	2	33	49	4.45
May	2	3	1	2	2	4	6	1	5	1	6	33	3
June	3	2	3	3	4	3	6	3	2	4	6	39	3.55
July	3	3	1	4	2	2	2	4	4	2	3	30	2.73
August	2	5	2	2	1	4	3	3	2	3	4	31	2.82
September	2	2	1	3	3	2	3	3	5	4	1	29	2.64
October	3	0	6	4	1	0	3	5	1	6	6	35	3.18
November		2	2	0	0	0	6	5	4	4	3	26	2.6
December		2	4	2	3	3	3	4	1	4	5	31	3.1
Total:	**20**	**24**	**27**	**28**	**25**	**29**	**46**	**42**	**36**	**36**	**72**	**385**	**2.96/mo**

Average over past 10 years (2010-2019) = 37 per year

Average over past 5 years (2015-2019) = 27 per year

Focus on your safety goal with purpose!

2020 – Combined Coal and MNM Fatals

Jan 8 Slip/Fall of Person Iowa

On Wednesday, January 8, 2020, at a surface limestone mine a 30-year-old truck driver/quality control person with a year and half experience died when he fell into a lime surge hopper and became engulfed by the material.

Cited Regulations: 56.16002(b), 56.18002(a), 46.7

Root Cause:

- The mine operator did not provide a suitable walkway at the rim of the lime surge hopper.
- The mine operator did not ensure that a competent person conducted workplace exams in all places prior to miners beginning work.
- The mine operator did not provide task training on safety hazards encountered when walking and working on walkways around the lime surge hopper.

Best Practices:

- Provide a suitable walkways and ensure that the walkway is examined by a competent person for conditions that may adversely affect safety before work was performed from the walkway.
- Task train employees on safety hazards encountered when walking and working on walkways around hoppers. Task train competent persons who conduct workplace exams in all working places.
- Check handrails and gates. Ensure handrails and gates are substantially constructed, properly secured, and free of defects.
- Install mechanical flow-enhancing devices so workers do not have to enter a bin to start or maintain material flow.
- Don't stand on material stored in bins. Material stored in a bin can bridge over the hopper outlet, creating a hidden void below the material surface.
- Lock-out, tag-out. Do not enter a bin until the supply and discharge equipment is locked out.
- Wear a safety belt or harness secured with a lanyard to an adequate anchor point before entering a bin. Station a second person near the anchor point to make sure there's no slack in the fall protection system.
- Train all miners to recognize fall hazards and properly use fall protection.
- Provide safe access to all work places, and discuss and establish safe work procedures.

Use the following links to view additional information:		
Preliminary Report	Fatal Alert	Final Report

Focus on your safety goal with purpose!

2020 – Combined Coal and MNM Fatals

Jan 23 Slip/Fall of Person California

On Thursday, January 23, 2020, a 71-year-old Contract Truck Driver with over 48 years of total mining experience fell through a gap from the top of his bulk trailer while opening the bulk trailer lids. The gap was the result of the tractor-trailer not being correctly aligned with the center of the truck racks. He died on January 26, 2020, due to head trauma he received from the fall.

Cited Regulation: 56.11001

Root Cause:

Management did not provide adequate policies, procedures, or equipment to assure proper alignment of the bulk trailers in relation to the truck racks such that the gangway ramp with Safe-T Cage would properly protect miners while they opened the bulk trailer lids.

Best Practices:

- Provide a means to align bulk trailers under truck racks to assure the ramp is aligned correctly with the trailer's lids so that miners have safe access. Alignment methods can include painted lines, concrete barriers, cameras and monitors, or sensors to indicate proper positioning.
- Wear proper footwear that is clean and in good condition.
- Examine work areas and routinely monitor work habits to ensure that workers follow safe work procedures.
- Identify and control all hazards associated with the work to be performed.

Use the following links to view additional information:		
Preliminary Report	Fatal Alert	Final Report

2020 – Combined Coal and MNM Fatals

February 27m Handling Material Michigan

On Thursday, On February 27, 2020, at a surface sand and gravel mine a 29-year-old equipment operator with almost 2 years experience died while attempting to secure a steel plate (20'x8'x1") at the feed hopper. The victim had positioned himself between the steel plate and a front-end loader that was holding the steel plate in the vertical position before the feed ramp was constructed. While removing a rigging chain from the steel plate, the steel plate fell over and pinned the victim between the steel plate and the forks of the front-end loader.

Cited Regulation: 56.9201

Root Cause:

The mine operator's feed ramp construction procedure did not explicitly require that the steel plate be securely fastened to the frame of the feed hopper prior to persons removing rigging, or prevent miners from working near an unsecured load.

Best Practices:

- Ensure that the steel plate is fastened to the frame of the feed hopper before unhooking the rigging from the loader and steel plate.
- Establish and discuss safe work procedures before beginning work.
- Identify and control all hazards.
- Task train everyone on safe job procedures and to stay clear of suspended loads.
- Require all workers to stay out of the fall path of heavy objects/materials that have the potential of becoming off-balance while in a raised position.
- Monitor routinely to confirm safe work procedures are followed.
- Be aware of your environment. Factors such as wind, snow, and icy surfaces can affect the stability of an object.
- When securing an object, identify the location of its center of gravity.

Use the following links to view additional information:		
Preliminary Report	Fatal Alert	Final Report

Focus on your safety goal with purpose!

2020 – Combined Coal and MNM Fatals

February 27c Powered Haulage West Virginia

On Thursday, February 27, 2020, at a surface of an underground coal mine a 50-year-old a contract mechanic of a trucking company employee died while helping to position a low-boy trailer. The victim was standing in front of the trailer wheels to assist the driver. The truck driver moved the truck forward causing the wheels of the trailer to strike the victim. The victim died later that day from these injuries.

Cited Regulation: 77.1607(g).

Root Cause:

- An effective policy or procedure was not in place to ensure safe work practices and communications with all persons while working around mobile equipment.

Best Practices:

- Develop a written procedure to address safe work practices and communications when persons are working around mobile equipment. This procedure would include information about job-specific work plans, communication plans, and general safety measures including keeping clear of mobile equipment when the equipment is engaged.
- Communicate your planned movements with the equipment operator before approaching mobile equipment and verify the information was received and understood.
- Verify miners are clear before driving mobile equipment. Communicate your planned movements with miners and verify the information was received and understood.
- Sound your horn to warn miners that you are about to move and wait to give them time to get to a safe location.
- Establish policies and procedures for miners to stand in safe locations when directing mobile equipment.
- Inspect backup alarms and collision warning/avoidance systems on mobile equipment to ensure they are maintained and operational.

Use CTRL and click to follow links to view additional information:		
Preliminary Report	Fatal Alert	Final Report

2020 – Combined Coal and MNM Fatals

February 29 Machinery Louisiana

On Saturday, February 29, 2020, a 28-year-old plant foreman with 4 years experience was closing a water valve used to prime the main suction line with the jet pump when a two-inch cam lock fitting (fitting) failed, causing pressurized water to strike him. The pressurized water knocked him into the operator's compartment and then swept him into the dredge pond where he drowned.

Cited Regulation: 56.15020, 56.14205

Root Cause:

- The mine operator redesigned the water system beyond the manufacturer's design capacity without the required evaluations to ensure the modified system was safe to use. Mine management did not evaluate the capacity of the new parts used in light of the stresses to which the parts would be subjected.

- Mine management did not ensure that the victim wore a life jacket or belt while working on the dredge.

Best Practices:

- Wear a life preserver where there is a risk of falling into the water.
- Ensure that any proposed dredge design changes to be designed by a qualified engineer and in accordance with the manufacturer's design capacity.
- Identify all possible hazards and ensure appropriate controls are in place to protect miners before beginning work.
- Provide swimming training for everyone that works around water.

Use the following links to view additional information:		
Preliminary Report	Fatal Alert	Final Report

2020 – Combined Coal and MNM Fatals

May 2 — Handling Material — Ohio

On Saturday, May 2, 2020, a 56-year-old front-end loader with 8 years of experience died when he was engulfed by material inside the hopper. The victim entered the hopper to clear a blockage caused by material in the hopper. Once he was inside, a large amount of material dislodged and engulfed him.

Cited Regulation: 46.7 and 56.16002

Root Cause:

- Management did not have safe procedures to clear blockages in the hopper.
- Mine management did not task train any of their miners on how to safely clear blockages in the hopper. The miner entered the bottom of the hopper when loose unconsolidated material, which ultimately engulfed him, was present inside the hopper.

Best Practices:

- Develop and implement written procedures for safe entry, operation, and maintenance of hoppers in accordance with 30 CFR § 56.16002.
- Lock-out, tag-out. Never enter a bin until the supply and discharge equipment is locked out.
- Task train miners to recognize and safely remove all potential hazards before beginning work and when clearing blocked hoppers.
- Equip bins with mechanical devices such as vibrating shakers or air cannons to loosen blockages, or provide other effective means of handling material so miners are not exposed to entrapment hazards by falling or sliding material.
- Follow manufacturer recommendations for clearing out blockages.
- Establish and discuss policies and procedures for safely clearing bins.
- Install a heavy screen (grizzly) to control the size of the material and prevent clogging.

Use the following links to view additional information:		
Preliminary Report	Fatal Alert	Final Report

2020 – Combined Coal and MNM Fatals

May 21 **Hand Tools** **Illinois**

On Thursday, May 21, 2020, a 60-year-old plant mechanic with 27 years mining experience was fatally struck in the head at an underground limestone mine. Two miners were working to remove an electric motor. They attached a 3/4 ton come-along to an overhead steel pipe. A chain hoist was attached to the lifting eye of the motor to pull it. As the two miners were moving it off of the base, the steel pipe slid and fell forward striking the victim in the head and back. The victim was driven to the hospital and was released on May 21; however, he returned to the hospital on May 23 where he passed away.

Cited Regulation: 48.7(c) and 57.14105,

Root Cause:

- The mine operator did not ensure that repairs were performed after the equipment was blocked against hazardous motion. The mine operator also did not provide appropriate equipment or establish safe procedures for the task of moving heavy components on the platform.
- The mine operator did not adequately task train miners in safe work procedures for the task.

Best Practices:

- Ensure load anchor locations are stable, substantial and adequate to support the load.
- Establish and discuss safe work procedures before beginning work and ensure those procedures are followed.
- Identify and control all hazards associated with the work to be performed and the methods to properly protect persons.
- Follow the manufacturer's recommended safe work procedures for the maintenance task.
- Examine work areas for hazards that may be created as a result of the work being performed.
- Position yourself in areas where you will not be exposed to hazards resulting from a sudden release of energy. Be aware of your location in relation to machine parts that can move.

Use the following links to view additional information:		
Preliminary Report	Fatal Alert	Final Report

Focus on your safety goal with purpose!

2020 – Combined Coal and MNM Fatals

June 1 Slip/Fall of Person Arizona

On June 1, 2020, a 61-year-old contract truck driver with over 13 years experience driving tractor-trailers, but only 4 weeks of mine experience, fell from the top of his end-dump trailer while attempting to deploy the tarp. He died later that day at a local hospital.

Cited Regulation: 56.1000, 46.11, 56.15005

Root Cause:

- Customer over-the-road truck drivers were not provided with Site-Specific Hazard Awareness training that met the requirements of 30 CFR Part 46.11.

Best Practices:

- Discuss work procedures; identify all potential hazards to do the job safely.
- Train everyone to recognize fall hazards and ensure that safe work procedures are discussed and established.
- Include safe truck tarping requirements in site-specific hazard training.
- Provide truck tarping safe access facilities where needed.
- Provide an effective fall arrest secure anchorage system. Ensure that people wear and attach fall protection connecting devices where there is a danger of falling.
- Use automatic tarp deploying systems to prevent people from working from heights.

Use the following links to view additional information:		
Preliminary Report	Fatal Alert	Final Report

2020 – Combined Coal and MNM Fatals

June 13 Machinery Arizona

On Saturday, June 13, 2020, a 25-year-old dragline operator with nearly three years mining experience died while operating a dragline. The dragline was found in about 25 feet of water, and the victim was found inside the dragline after it was removed from the water.

Cited Regulation: 56.9101

Root Cause:

- The accident occurred because the equipment operator didn't maintain control of equipment while extracting material.

Best Practices:

- Maintain control of operating mobile equipment.
- Keep all exits clear in cabs, including alternate and emergency exits, and make sure the doors open freely before beginning work.
- Retrofit older models of equipment with current automatic braking systems.
- Ensure all controls and brakes are set to the appropriate position for the task.

Use the following links to view additional information:		
Preliminary Report	Fatal Alert	Final Report

2020 – Combined Coal and MNM Fatals

June 19 Fall of Material Kansas

On Friday, June 19, 2020, a 68-year-old miner with 49 years experience died while inspecting a stockpile for oversized material. As the victim paused and knelt down during his inspection, the stockpile collapsed and covered him with approximately four feet of material.

The stockpile regularly had been falling to the angle of repose as the two front-end loaders removed material from the face. On the day of the accident, the face did not fall to the angle of repose and miners did not trim the face to prevent a hazard to persons.

Cited Regulation: 56.9314, 56.18002(a)(1),

Root Cause:

- The stockpile was not constructed/maintained in a manner that would prevent dangerous ground conditions as they removed material. This compromised its stability.

Best Practices:

- Construct and maintain stockpiles in a manner to eliminate vertical heights that require undercutting, which can cause a sudden rush of material into areas where foot traffic or mobile equipment are present.
- Barricade areas identified as hazardous to prevent entry until corrective measures are taken. Remove all personnel exposed to the hazard until all unsafe conditions are fixed (from a safe location (if possible)).
- Provide specific training on examinations and emphasize aspects of stockpile safety including hazard recognition and safe work practices around stockpiles to all employees.
- Train supervisors and examiners on promptly notifying miners in any affected areas of any conditions that may adversely affect safety or health. Train everyone to recognize potential hazardous conditions that can decrease bank or slope stability and ensure they understand safe job procedures for eliminating hazards.
- Establish and discuss safe work procedures before beginning work. Identify and control all hazards associated with the work to be performed and the methods to properly protect persons.
- Over-steepened slopes may be flattened from the top of the stockpile by using a bulldozer to gradually cut down the slope.

Use the following links to view additional information:		
Preliminary Report	Fatal Alert	Final Report

Focus on your safety goal with purpose!

2020 – Combined Coal and MNM Fatals

July 9 Electrical Georgia

On Thursday, July 9, 2020, a 60-year-old mine superintendent with 36 years experience was electrocuted when he came in contact with energized high-voltage components while attempting to reverse the polarity of a 4,160 VAC circuit. He was switching the leads inside an energized 4,160 VAC enclosure that contained a vacuum circuit breaker and disconnect.

Cited Regulations: 46.7, 56.12017, 56.12039, 56.18002

Root Cause:

- Management did not have policies and procedures to examine, de-energize, lock out, tag, and test high-voltage power sources before work was performed on high voltage circuits.
- Management did not have policies and procedures that required high voltage work to only be performed by miners trained to work on high-voltage electric equipment and circuits.

Best Practices:

- De-energize, lock out, tag out, and test high voltage power sources before work is performed on high voltage circuits.
- Ensure only properly trained and qualified miners perform work on high voltage equipment.
- Establish policies and procedures to examine high voltage equipment prior to work being performed on those circuits.
- Follow these steps before performing electrical work inside a high voltage enclosure:
  - Locate the high voltage visual disconnect that supplies incoming electrical power to the enclosure.
  - Open the visual disconnect to provide visual evidence that the incoming power cable(s) or conductors have been de-energized.
  - Verify circuits are de-energized using properly rated electrical meters and non-contact voltage testers.
  - Lock-out and tag-out the visual disconnect yourself. Never rely on others to do this for you.
  - Wear properly rated and well maintained personal protective equipment, including arc flash protection such as a hood, gloves, shirt and pants.
  - Ground the de-energized conductors.

Use the following links to view additional information:		
Preliminary Report	Fatal Alert	Final Report

Focus on your safety goal with purpose!

2020 – Combined Coal and MNM Fatals

July 24 Machinery Georgia

On Friday, July 24, 2020, two miners were loading explosives from inside an aerial lift's basket when the basket jolted upward into the mine roof, causing the death of one of the miners.

Cited Regulation: Final Report not yet available.

Root Cause: Final Report not yet available.

Best Practices:

- Check all equipment before using it. Report all defects affecting safety to a responsible person for correction.
- Service and maintain hydraulic systems according to the manufacturer's specifications and schedules. Excessive pressure in a hydraulic circuit can drastically alter the control of booms, etc., creating serious hazards.
- Instruct aerial lift users on hazard recognition and safe job procedures to avoid unsafe conditions.
- Train lift operators in safe operating procedures listed in the operator's manual.
- Report equipment malfunctions and remove the equipment from service until repaired.

Use the following links to view additional information:		
Preliminary Report	Fatal Alert	Final Report

2020 – Combined Coal and MNM Fatals

July 29 Powered Haulage Missouri

On Wednesday, July 29, 2020, a miner was injured when his arm became entangled in a stacker conveyor belt. The victim was airlifted to a trauma center where he passed away a week later.

Cited Regulation: Final Report not yet available.

Root Cause: Final Report not yet available.

Best Practices:

- Turn off, lock out power sources and block against motion before removing or bypassing a guard or other safety device to clean, repair, perform maintenance or clear a blockage on a belt conveyor.
- Never clean pulleys or idlers manually while belt conveyors are operating.
- Avoid wearing loose-fitting clothing and keep tools, body parts and long hair away from moving belt conveyor components.
- Train all personnel in safe work procedures.
- Properly guard moving machine parts to protect persons from contact that could cause injury.

Use the following links to view additional information:		
Preliminary Report	Fatal Alert	Final Report

2020 – Combined Coal and MNM Fatals

August 18 Falling/Sliding Material Washington

On Tuesday, August 18, 2020, a 21-year-old miner with 1 year experience entered the cone crusher to remove a blockage of material in the chute. While he was inside the cone crusher, material flowed from the chute engulfing his legs and lower torso. He was extricated by the fire department and flown to the hospital where he died the next day.

Cited Regulation: Final Report not yet available.

Root Cause: Final Report not yet available.

Best Practices:

- Properly design chutes and crushers to prevent blockages. Install a heavy screen (grizzly) to control the size of material and prevent clogging.
- Equip chutes with mechanical devices such as vibrating shakers or air cannons to loosen blockages, or provide other effective means of handling material, so miners are not exposed to entrapment hazards by falling or sliding material.
- Establish and discuss policies and procedures for safely clearing crushers.
- Train miners to recognize and safely remove all potential hazards before beginning work and when clearing blocked crushers.

Use the following links to view additional information:		
Preliminary Report	Fatal Alert	Final Report

2020 – Combined Coal and MNM Fatals

August 26 Machinery Washington

On Wednesday, August 26, 2020, a 52-year-old crusher foreman with 23 years mining experience was fatally crushed. Two miners were preparing a mobile track mounted jaw crusher for shipping off site. The victim was removing wedges that secured the right hopper extension. When the wedge was removed the extension fell, crushing the victim. (The victim had 4 weeks experience at this mine site.)

Cited Regulation: Final Report is not yet available.

Root Cause: Final Report is not yet available.

Best Practices:

- Block equipment against hazardous motion before dismantling equipment.
- Follow manufacturers' recommendations when dismantling equipment.
- Conduct adequate workplace examinations and correct any defects affecting safety before dismantling equipment.
- Establish and discuss safe work procedures before beginning work.
- Stay clear of suspended loads and raised equipment.
- Position yourself in a safe location and away from potential "red-zone" areas.
- Use ladders or other means of safe access to perform maintenance.
- Train miners to recognize potential hazardous conditions and understand safe job procedures.

Use the following links to view additional information:		
Preliminary Report	Fatal Alert	Final Report

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2020 – Combined Coal and MNM Fatals

September 1 Slip/Fall of Person Texas

On Tuesday, September 1, 2020, a 53-year-old plant helper with 2 years experience fell while attempting to close a hatch on the top of a bulk material trailer. The miner was wearing a fall protection harness, but his lanyard was not attached to a secure anchorage.

Cited Regulation: Final Report is not available yet.

Root Cause: Final Report is not available yet.

Best Practices:

- Encourage the use of automated hatches on tanks and trailers.
- Provide and ensure the use of an effective fall arrest and secure anchorage system.
- Provide safe access to all work areas and ensure truck and trailer access and work platforms are properly designed, maintained, and used.
- Examine work areas and equipment. Don't use unsafe work areas and equipment until repairs are made.
- Refresh miner training on safe work procedures after returning from periods of shutdown, and routinely monitor work habits.

Use the following links to view additional information:		
Preliminary Report	Fatal Alert	Final Report

2020 – Combined Coal and MNM Fatals

September 16 Powered Haulage New Jersey

On Wednesday, September 16, 2020, a fatal accident occurred at a surface sand and gravel mine. A 47-year-old customer truck driver with 20 years mining experience was run over by his dump truck while he was underneath the truck attempting to adjust the brakes. At the time of the accident, the parking brake was not set and the transmission was in drive with the engine running.

Cited Regulation: Final Report is not available yet.
Root Cause: Final Report is not available yet.

Best Practices:

- Before exiting, place the transmission in park, set the parking brake, turn off the engine and activate the hazard warning lights.
- Block equipment against motion and place high visibility cones or other flagging or signage to caution oncoming traffic before working on equipment.
- Maintain equipment braking systems and repair and adjustment as necessary.
- Conduct pre-operational examinations using qualified personnel to identify and repair defects that may affect the safe operation of equipment before it is placed into service.
- Train miners on site-specific hazards.

Use the following links to view additional information:		
Preliminary Report	Fatal Alert	Final Report

#18 – 10/9/2020 – S – Machinery – Bell, Kentucky – Barbourville District

#19 – 10/13/2020 – U – Powered Haulage –Hopkins, Kentucky – Madisonville District

#20 – 10/14/2020 – S – Powered Haulage – Richland, South Carolina – Birmingham District

MSHA investigates all deaths on mine property; however, some deaths are unrelated to mining activity and are not counted in the statistics MSHA uses to assess the safety performance of the mining industry. These deaths are termed "non-chargeable" and include homicides, suicides, deaths due to natural causes, and deaths involving trespassers.

MSHA uses a formal Fatality Review Committee to determine whether a questionable death is chargeable. There are two (2) ***2020 combined (Coal and MNM) mining accidents that are pending chargeability determination.***

Focus on your safety goal with purpose!