

### Coal Mine Fatalities By Type

<u>Type</u>	2007		2008		2009		2010	
	<u>Underground</u>	<u>Surface</u>	<u>Underground</u>	<u>Surface</u>	<u>Underground</u>	<u>Surface</u>	<u>Underground</u>	<u>Surface</u>
Electrical	0	0	1	1	0	0	0	0
Exp. Vessels Under Pressure	0	0	0	0	0	0	0	0
Exp. and Breaking Agents	0	1	0	0	0	0	0	0
Fall/Slide Material	1	0	0	0	0	0	0	1
Fall of Face/Rib/Highwall	9	2	0	1	1	0	3	0
Fall of Roof or Back	3	0	4	0	2	0	3	0
Fire	0	0	0	0	0	0	0	0
Handling Material	1	0	0	0	0	1	0	0
Handtools	0	0	0	0	0	0	0	0
NonPowered Haulage	0	0	0	0	0	0	0	0
Powered Haulage	1	3	7	3	2	6	4	4
Hoisting	0	0	0	0	1	1	0	0
Ignition/Explosion of Gas/Dust	0	0	0	0	0	0	29	1
Inundation	0	0	0	0	0	0	0	0
Machinery	2	2	3	7	0	1	2	1
Slip/Fall of Person	0	8	0	1	1	1	0	0
Step/Kneel on Object	1	0	0	0	0	0	0	0
Striking or Bumping	0	0	0	0	0	0	0	0
<u>Other</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>2</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>0</u>
Subtotals	18	16	15	15	7	11	41	7
<b>Total</b>		<b>34</b>		<b>30</b>		<b>18</b>		<b>48</b>

### Metal & Non-metal Mine Fatalities By Type

<u>Type</u>	2007		2008		2009		2010	
	<u>Underground</u>	<u>Surface</u>	<u>Underground</u>	<u>Surface</u>	<u>Underground</u>	<u>Surface</u>	<u>Underground</u>	<u>Surface</u>
Electrical	0	1	1	1	0	1	0	1
Exp Vessels Under Pressure	0	0	0	0	0	0	0	1
Exp & Breaking Agents	0	0	0	0	0	0	1	0
Fall/slide Material	0	2	0	3	0	3	3	4
Fall of Face/Highwall	0	0	0	0	0	0	1	0
Fall of Roof/Back/Rib	3	0	3	0	1	0	1	0
Fire	0	0	0	0	0	0	0	0
Handling Material	0	1	0	1	0	0	0	0
Hand Tools	0	2	0	0	0	0	0	0
Non-powered Haulage	0	1	0	0	0	0	0	0
Power Haulage	3	5	3	2	1	4	0	7
Hoisting	0	0	0	0	0	0	0	0
Ignition/Exp.of Gas	0	0	0	0	0	0	0	0
Inundation	0	0	0	0	0	0	0	0
Machinery	1	6	1	2	0	4	1	1
Slip/Fall of Person	1	5	0	5	0	2	0	1
Step/Kneel On Object	0	0	0	0	0	0	0	0
Striking or Bumping	0	0	0	0	0	0	0	0
<u>Other</u>	<u>0</u>	<u>2</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>1</u>
Subtotals	8	25	8	15	2	15	7	16
<b>Total</b>		<b>33</b>		<b>23</b>		<b>17</b>		<b>23</b>

r/ Revised.

### MSHA Classification of Accident Terms:

The accident classification identifies circumstances which contributed most directly to the resulting accident.

**Electrical** - Accidents in which the electric current is most directly responsible for the resulting accident.

**Entrapment** - Accidents involving entrapment of persons. **Exploding Vessels Under Pressure** - Accidents involved with bursting of air hoses, air tanks, hydraulic lines, hydraulic hoses, stand pipes, etc., due to internal pressure.

**Explosives and Breaking Agents** - Accidents involving the detonation of manufactured explosives; includes Airdox and Cardox.

**Falling, Rolling, or Sliding Rock or Material of Any Kind** - Accidents caused directly by falling material from the roof or face.

Or, if material was set in motion by machinery, by haulage, by handtools, or while being handled or disturbed, etc., the force that set the material in motion determines the classification. For example, where a rock was pushed over a highwall by a bulldozer and the rock hit another rock which hit and injured a worker--the accident is classified as machinery.

Machinery (a bulldozer) most directly caused the resulting accident.

**Fall of Face, Rib, Pillar, Side, or Highwall (from in place)** - Accidents in this classification include falls of material while barring down or placing props, also pressure pumps and bursts. Not included are accidents in which the motion of machinery or haulage equipment caused the fall either directly or by knocking out support.

**Fall of Roof, Back, or Brow (from in place)** - Underground only - Accidents which include falls while barring down or placing props, also pressure pumps and bursts. Not included are accidents in which the motion of machinery or haulage equipment caused the fall either directly or by knocking out support.

**Fire** - Accidents related to uncontrolled burning of material or mineral in the mine environment. Not included are fires initiated by electricity or by ignition or explosion of gas or dust.

**Handling Material** - Accidents related to handling packaged or loose material while lifting, pulling, pushing, or shoveling. **Handtools** - Accidents related to nonpowered tools. **Nonpowered Haulage** - Accidents related to the motion of nonpowered haulage equipment. Included are accidents involving wheelbarrows, manually pushed mine cars, timber rucks, etc.

**Powered Haulage** - Accidents related to the motion of powered haulage equipment. Included are accidents involving conveyors, front-end loaders, forklifts, shuttle cars, load-haul-dump units, locomotives, railroad cars, haulage trucks, pickups, automobiles, and personnel carriers.

**Hoisting** - Accidents involving cages, skips, ore buckets, and elevators. The accidents results from the action, motion, or failure of the hoisting equipment or mechanism. Included are equipment such as cranes and derricks only when used in shaft

sinking; also suspended work platforms in shafts. Not included is equipment such as chain hoists, come

alongs, and winches. **Ignition or Explosion of Gas or Dust** - Accidents resulting as a consequence of the ignition or explosion of gas or dust.

**Impoundment** - Accidents caused by an unstable condition or failure of an

impoundment, refuse pile, or culm bank requiring emergency preventative action or evacuation of an area.

**Inundation** - Accidents caused by inundation of a surface or underground mine by a liquid (or semi-solid) or a gas.

**Machinery** - Accidents related to the motion of machinery. Included are all electric and air-powered tools and

mining machinery such as drills, tuggers, winches, slushers, draglines, power shovels, loaders, and

compressors. **Slip or Fall of Person (from an elevation or on the same level)** - Accidents include slips or

falls while getting on or off machinery and haulage equipment which is not moving, and slips or falls while

servicing or repairing equipment or machinery. **Stepping or Kneeling on Object** - Accidents are classified

in this category only where the object stepped or kneeled on contributed most directly to the accident.

**Striking or Bumping** - This classification is restricted to those accidents in which an individual, while moving

about, strikes or bumps an object but is not handling material, using handtools, or operating equipment.

**Other** - Accidents not elsewhere classified.

SOURCE: Mine Safety & Health Administration (MSHA)

Updated: June 2011