

## Mining Operations

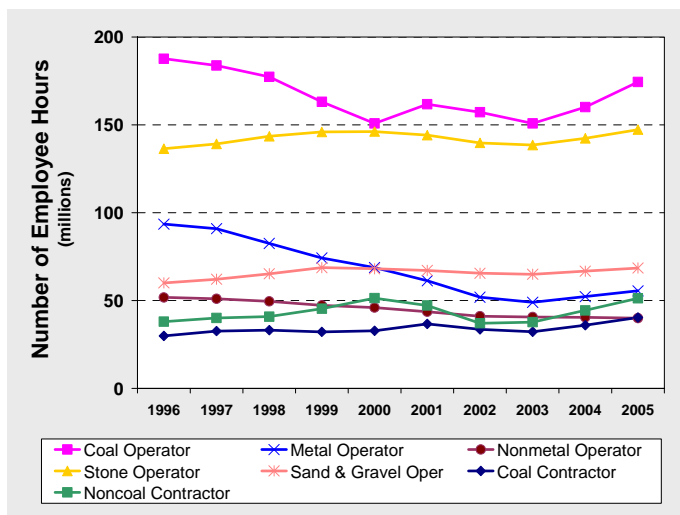
In 2005, a total of 2,063 coal mining operations reported employment to the Mine Safety and Health Administration (MSHA). Coal mines comprised 14.1% of all mining operations.

- Bituminous mines comprised 92.6% (n=1,911) and anthracite mines 7.4% (n=152) of coal mining operations.
- Approximately 70% of all coal mines were located in three states: Kentucky (28.0%), West Virginia (21.8%), and Pennsylvania (20.6%).

## Employees

A total of 78,281 employees,<sup>1</sup> corresponding to 87,184 full-time equivalent (FTE)<sup>2</sup> employees, were reported by coal mine operators to MSHA.

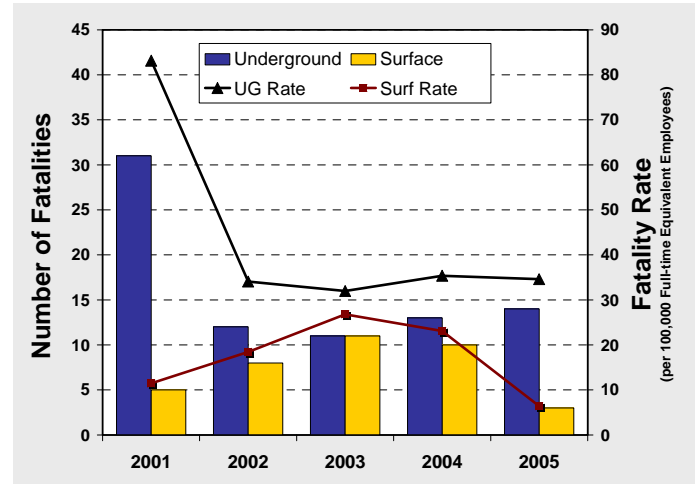
- Within the mining sectors,<sup>3</sup> coal operators comprised 30.2% of all employee hours reported.
- Underground work locations accounted for 46.4% of coal employee hours, while surface work locations accounted for 53.6%.<sup>4</sup>



## Fatalities

Seventeen (17) occupational fatalities occurred among coal operator employees in 2005, compared to 23 in 2004.

- Fatalities among coal operator employees accounted for 29.8% of all mining fatalities.
- The coal operator fatality rate was 19.5 fatalities per 100,000 FTE employees. The underground fatality rate was 34.6 (n=14) compared to a rate of 6.4 (n=3) for surface work locations.

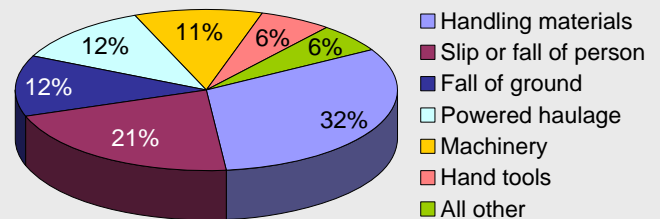


## Nonfatal Lost-time Injuries

There were 3,062 nonfatal lost-time injuries (2,234 at underground and 828 at surface work locations) among coal operator employees occurring at a rate of 3.5 injuries per 100 FTE employees. These injuries resulted in 197,867 days lost<sup>5</sup> from work, comprising nearly 43.0% of days lost across all mining sectors.

- The underground nonfatal lost-time injury rate was greater than the surface injury rate (5.5 vs. 1.8 per 100 FTE workers).
- The most frequent classification of nonfatal lost-time injuries for coal operator employees involved handling materials (n=886; 28.9%).
- Sprains and strains were the most frequently reported nature of injury (n=1,323; 43.2%).
- The back was the most frequently reported part of the body injured (n=602; 19.7%) and accounted for 39,918 days lost from work.

Distribution of Nonfatal Lost-time Injuries by Accident Class, 2001-2005



Note: "Fall of ground" includes MSHA's Accident/Injury/Illness classification for fall of face, rib, pillar, side, or highwall (from in place); fall of roof, back, or brow (from in place); and underground machinery cases when the source of injury was caving rock, coal, ore, or waste.

## Mining Characteristics, 2005

Commodity and Type of Employer	No. of Mines	No. of Companies	No. of Employees <sup>1</sup>	No. of FTE Employees <sup>2</sup>	Fatality Rate	Nonfatal Lost-time Injury Rate
<b>Coal Operator</b>	<b>2,063</b>	<b>--</b>	<b>78,281</b>	<b>87,184</b>	<b>19.5</b>	<b>3.5</b>
Metal Operator	263	--	26,442	27,773	18.0	2.4
Nonmetal Operator	739	--	19,678	20,014	20.0	2.5
Stone Operator	4,490	--	69,759	73,650	20.4	3.1
Sand and Gravel Operator	7,111	--	37,705	34,258	26.3	2.5
<b>Operator Total</b>	<b>14,666</b>	<b>--</b>	<b>231,865</b>	<b>242,879</b>	<b>20.6</b>	<b>3.0</b>
Coal Contractor	--	2,503	32,639	20,136	24.8	2.7
Noncoal Contractor	--	4,297	46,623	25,590	7.8	1.6
<b>Contractor Total</b>	<b>--</b>	<b>6,800</b>	<b>79,262</b>	<b>45,726</b>	<b>15.3</b>	<b>2.1</b>
<b>TOTAL</b>			<b>311,127</b>	<b>288,605</b>	<b>19.8</b>	<b>2.9</b>

Fatality rates were computed per 100,000 FTE employees. Nonfatal lost-time injury rates were computed per 100 FTE employees.

**Data source:** Publicly released files of employment and accident/injury/illness data collected by MSHA under 30 CFR 50.

**Notes:** All analyses exclude office employees, except for the total number of mining operations. Analyses of fatalities exclude all individuals under 17 years of age and all individuals who were not classified as employees of a mining operator or mining contractor. Further statistical methodology is available on the NIOSH Internet [<http://www.cdc.gov/niosh/mining/statistics/method.htm>].

<sup>1</sup>Number of employees is the average number of persons working at individual establishments during calendar quarters of active operations.

<sup>2</sup>Full-time equivalent employees were computed using reported employee hours (2,000 hours = 1 FTE).

<sup>3</sup>Mining sectors: coal operators, metal operators, nonmetal operators, stone operators, sand and gravel operators, coal contractors, and noncoal contractors.

<sup>4</sup>Surface work locations include surface operations at underground mines (surface shops and yards, tippie physically located at the mine site), surface operations (strip or open pit mines including associated shops and yards), auger mining operations, culm banks (reworking of mine dumps or refuse pile), dredge (mining operations conducted from a platform floating on water), independent shops and yards not associated with a specific mine, and mill or preparation plant.

<sup>5</sup>Includes actual days away from work and/or days of restricted work activity. For permanently disabling injuries only, statutory days charged by MSHA were used if they exceeded the total lost workdays.

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**DHHS (NIOSH) Publication No. 2008-150**

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