

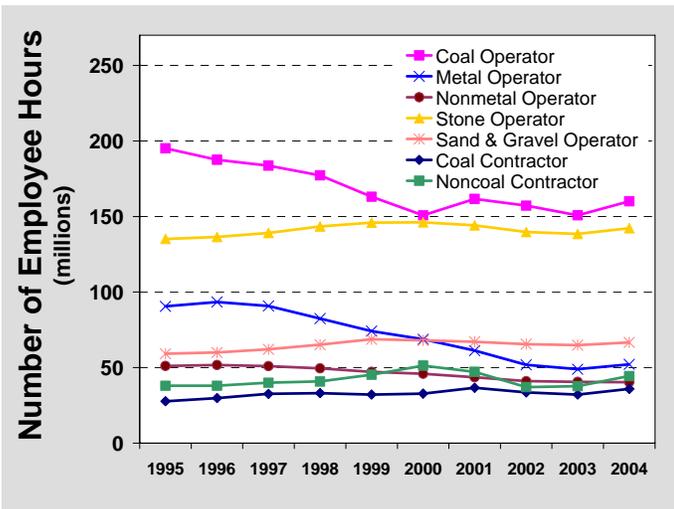
# COAL OPERATOR MINING FACTS – 2004

In 2004, a total of 2,011 **coal mining operations** reported employment to the Mine Safety and Health Administration (MSHA). Coal mines comprised 13.9% of all mining operations.

- Bituminous mines comprised 92.6% (n=1,863) and anthracite mines 7.4% (n=148) of coal mining operations.
- Approximately 70% of all coal mines were located in three states: Kentucky (28.9%), Pennsylvania (20.7%), and West Virginia (20.5%).

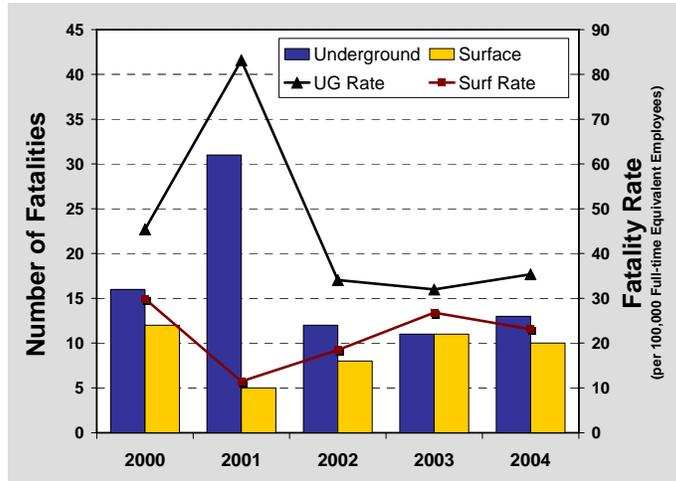
A total of 73,024 **employees**,<sup>1</sup> corresponding to 80,069 full-time equivalent (FTE)<sup>2</sup> employees, were reported by coal mine operators to MSHA.

- Within the mining sectors,<sup>3</sup> coal operators comprised 29.5% of all employee hours reported.
- Underground work locations accounted for 45.9% of employee hours, while surface work locations accounted for 54.1%.<sup>4</sup>



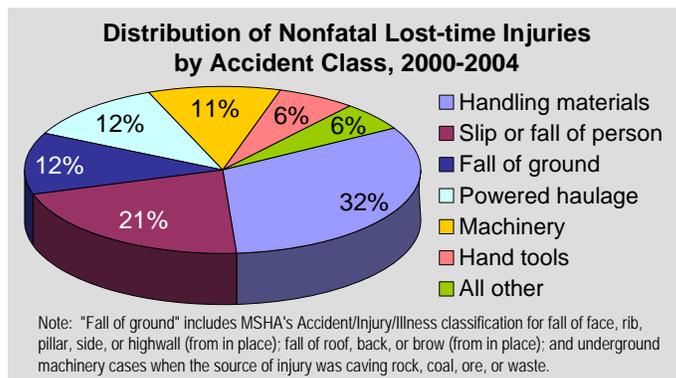
Twenty-three (23) occupational **fatalities** occurred among coal operator employees in 2004, compared to 22 in 2003.

- Fatalities among coal operator employees accounted for 41.8% of all mining fatalities.
- The coal operator fatality rate was 28.7 fatalities per 100,000 FTE employees. The underground fatality rate was 35.4 (n=13) compared to a rate of 23.1 (n=10) for surface work locations.



There were 3,132 **nonfatal lost-time injuries** (2,256 at underground and 876 at surface work locations) among coal operator employees occurring at a rate of 3.9 injuries per 100 FTE employees. These injuries resulted in 230,139 days lost<sup>5</sup> from work, comprising nearly 50% of days lost across all mining sectors.

- The underground nonfatal lost-time injury rate was greater than the surface injury rate (6.1 vs. 2.0 per 100 FTE workers).
- The most frequent classification of nonfatal lost-time injuries for coal operator employees involved handling materials (n=915; 29.2%).
- Sprains and strains were the most frequently reported nature of injury (n=1,417; 45.2%).
- The back was the most frequently reported part of the body injured (n=666; 21.3%) and accounted for 58,975 days lost from work.



In 2004, 232 cases of **occupational illnesses** were reported to MSHA by coal operators.<sup>6</sup> This compares to 323 cases in 2003.

- Joint, tendon, or muscle inflammation or irritation accounted for the most frequently reported occupational illnesses (n=107; 46.1%).

- There were 43 cases of hearing loss or impairment reported to MSHA (or 18.5% of all occupational illnesses reported).
- Coal mining operations reported 39 cases (16.8%) of black lung (coal workers' pneumoconiosis). This compares to 107 cases (33.1%) that were reported to MSHA in 2003.

<b>Mining Characteristics, 2004</b>						
<b>Commodity and Type of Employer</b>	<b>No. of Mines</b>	<b>No. of Companies</b>	<b>No. of Employees</b>	<b>No. of FTE Employees</b>	<b>Fatality Rate</b>	<b>Nonfatal Lost-time Injury Rate</b>
<b>Coal Operator</b>	<b>2,011</b>	<b>--</b>	<b>73,024</b>	<b>80,069</b>	<b>28.7</b>	<b>3.9</b>
Metal Operator	251	--	25,205	26,091	7.7	2.1
Nonmetal Operator	741	--	19,432	20,183	5.0	2.7
Stone Operator	4,401	--	68,417	71,153	11.2	3.2
Sand and Gravel Operator	7,074	--	37,000	33,364	24.0	2.3
<b>Operator Total</b>	<b>14,478</b>	<b>--</b>	<b>223,078</b>	<b>230,860</b>	<b>18.2</b>	<b>3.2</b>
Coal Contractor	--	2,550	30,228	17,964	27.8	2.6
Noncoal Contractor	--	4,143	42,511	22,198	36.0	1.7
<b>Contractor Total</b>	<b>--</b>	<b>6,693</b>	<b>72,739</b>	<b>40,162</b>	<b>32.4</b>	<b>2.1</b>
<b>TOTAL</b>			<b>295,817</b>	<b>271,022</b>	<b>20.3</b>	<b>3.0</b>

Data may not add to totals due to independent rounding. Number of employees was rounded at the subunit level of each mine to be consistent with MSHA reporting. 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. 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. Employment numbers were rounded at the subunit level of each mine to be consistent with MSHA reporting.

<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, tipples 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.

<sup>6</sup>Because of the complexity of attributing disease causation to the workplace, occupational illnesses may be underreported.

To receive NIOSH documents or for more information about occupational safety and health topics, contact NIOSH at **1-800-CDC-INFO** (1-800-232-4636) 1-888-232-6348 (TTY) e-mail: [cdcinfo@cdc.gov](mailto:cdcinfo@cdc.gov) or visit the NIOSH Web site at <http://www.cdc.gov/niosh>

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