

## Mining Operations

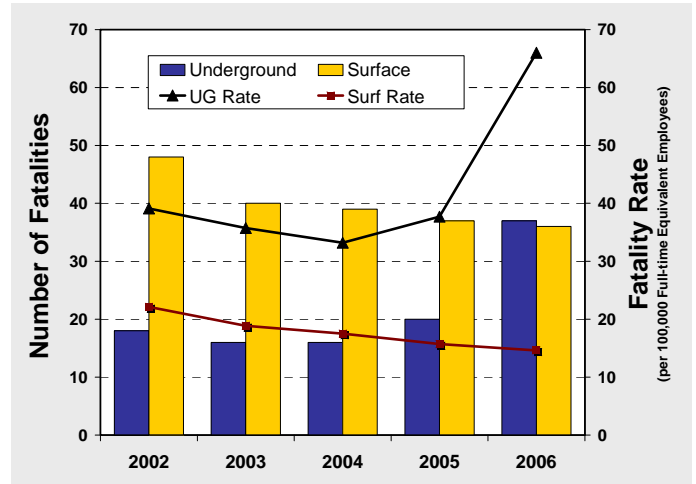
In 2006, 14,885 mining operations reported employment data to the Mine Safety and Health Administration (MSHA).<sup>1</sup> Almost half (48.2%) were sand and gravel mines, followed by stone mines (30.7%), coal mines (14.2%), nonmetal mines (5.0%), and metal mines (1.9%).

## Employees

There were 270,270 mine operator employees,<sup>2</sup> or 276,886 full-time equivalent (FTE)<sup>3</sup> workers. For mine operators, 18.7% of the employee hours were for underground work locations, while 81.3% of the employee hours were for surface work locations.<sup>4</sup>

Of the 93,227 independent contractor employees (or 54,372 FTE workers), 40.0% were coal contractor employees and 60.0% were noncoal contractor employees.

- The fatality rate at underground work locations was 66.0 per 100,000 FTE workers (n=37; 50.7%) compared to the lower rate at surface locations of 14.6 (n=36; 49.3%).

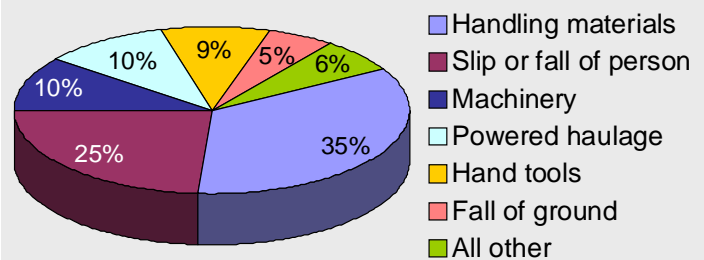


## Nonfatal Lost-time Injuries

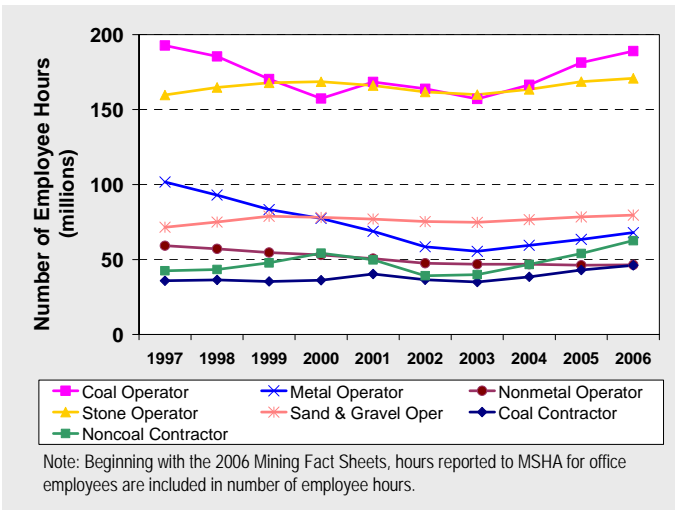
There were 7,988 nonfatal lost-time injuries reported to MSHA in 2006 (2,739 at underground and 5,249 at surface work locations). These injuries occurred at a rate of 2.6 per 100 FTE workers and resulted in a total of 439,742 days lost from work.<sup>5</sup>

- The underground nonfatal lost-time injury rate was greater than the surface injury rate (4.9 vs. 2.1 per 100 FTE workers).
- The back continued to be the most frequently reported body part injured, accounting for 1,484 nonfatal lost-time injuries, 83,719 days lost from work, and 19.0% of all days lost.
- Sprains and strains were the most frequently reported nature of injury (n=3,435; 43.0%).

## Distribution of Nonfatal Lost-time Injuries by Accident Class, 2002-2006



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.



Note: Beginning with the 2006 Mining Fact Sheets, hours reported to MSHA for office employees are included in number of employee hours.

## Fatalities

In 2006, there were 73 occupational mining fatalities, compared to 57 in 2005. The overall fatality rate was 24.2 per 100,000 FTE workers.

- The fatality rate for mine operator employees was 24.4 per 100,000 FTE workers (n=61; 83.6%), while the rate for contractor employees was 23.2 (n=12; 16.4%).
- Coal operators had the highest fatality rate (46.2), followed by noncoal contractors (23.6), coal contractors (22.7), and sand and gravel operators (17.2) per 100,000 FTE workers.

# Mine and Employment Characteristics, 2006

Commodity and Type of Employer	Number of Mining Operations <sup>1</sup>			Number of Employees <sup>2</sup>			Number of FTE Employees <sup>3</sup>		
	Underground	Surface	Total	Underground	Surface	Total	Underground	Surface	Total
Coal Operator	675	1,438	2,113	38,253	47,440	85,693	42,598	51,897	94,495
Metal Operator	92	188	280	4,539	28,335	32,874	4,575	29,397	33,972
Nonmetal Operator	46	695	741	2,374	20,677	23,051	2,415	20,806	23,221
Stone Operator	122	4,451	4,573	1,877	80,706	82,583	2,154	83,247	85,402
Sand and Gravel Operator	NA	7,178	7,178	NA	46,069	46,069	NA	39,796	39,796
<b>Operator Total</b>	<b>935</b>	<b>13,950</b>	<b>14,885</b>	<b>47,043</b>	<b>223,227</b>	<b>270,270</b>	<b>51,742</b>	<b>225,144</b>	<b>276,886</b>
	<b>Number of Companies</b>								
Coal Contractor	NA	NA	2,724	4,762	32,520	37,282	2,903	20,175	23,078
Noncoal Contractor	NA	NA	4,686	1,815	54,130	55,945	1,401	29,893	31,294
<b>Contractor Total</b>	<b>NA</b>	<b>NA</b>	<b>7,410</b>	<b>6,577</b>	<b>86,650</b>	<b>93,227</b>	<b>4,304</b>	<b>50,068</b>	<b>54,372</b>
<b>TOTAL</b>				<b>53,620</b>	<b>309,877</b>	<b>363,497</b>	<b>56,046</b>	<b>275,212</b>	<b>331,258</b>

# Mining Occupational Fatalities and Injuries, 2006

Commodity and Type of Employer	Occupational Fatalities (per 100,000 FTE employees)						Nonfatal Lost-time Injuries (per 100 FTE employees)					
	Underground		Surface		Total		Underground		Surface		Total	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
Coal Operator	36	84.5	6	12.4	42	46.2	2,218	5.2	803	1.7	3,021	3.3
Metal Operator	0	0.0	3	11.9	3	10.1	141	3.1	524	2.1	665	2.2
Nonmetal Operator	0	0.0	0	0.0	0	0.0	73	3.0	344	2.0	417	2.1
Stone Operator	0	0.0	10	13.8	10	13.4	43	2.0	2,038	2.8	2,081	2.8
Sand and Gravel Operator	NA	NA	6	17.2	6	17.2	NA	NA	795	2.3	795	2.3
<b>Operator Total</b>	<b>36</b>	<b>69.6</b>	<b>25</b>	<b>12.6</b>	<b>61</b>	<b>24.4</b>	<b>2,475</b>	<b>4.8</b>	<b>4,504</b>	<b>2.3</b>	<b>6,979</b>	<b>2.8</b>
Coal Contractor	1	34.4	4	20.9	5	22.7	215	7.4	342	1.8	557	2.5
Noncoal Contractor	0	0.0	7	24.8	7	23.6	49	3.5	403	1.4	452	1.5
<b>Contractor Total</b>	<b>1</b>	<b>23.2</b>	<b>11</b>	<b>23.2</b>	<b>12</b>	<b>23.2</b>	<b>264</b>	<b>6.1</b>	<b>745</b>	<b>1.6</b>	<b>1,009</b>	<b>2.0</b>
<b>TOTAL</b>	<b>37</b>	<b>66.0</b>	<b>36</b>	<b>14.6</b>	<b>73</b>	<b>24.2</b>	<b>2,739</b>	<b>4.9</b>	<b>5,249</b>	<b>2.1</b>	<b>7,988</b>	<b>2.6</b>

NA Not applicable.

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

**Notes:** All analyses of accident data exclude office employees. Occupational fatalities exclude all cases under 17 years of age. Further statistical methodology is available on the NIOSH Internet [<http://www.cdc.gov/niosh/mining/statistics/method.htm>].

<sup>1</sup>Mines at which only independent contractors were working did not show any employment and were not counted.

<sup>2</sup>Number of employees is the average number of employees working at individual mines during calendar quarters of active operations.

<sup>3</sup>Full-time equivalent employees computed using reported employee hours (2,000 hours = 1 FTE).

<sup>4</sup>Surface work locations include surface operations at underground mines, surface operations (strip or open pit), auger, culm banks, dredge, other surface operations, independent shops and yards, and mills or preparation plants.

<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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