

# METAL OPERATOR MINING FACTS—2008

## Mining Operations

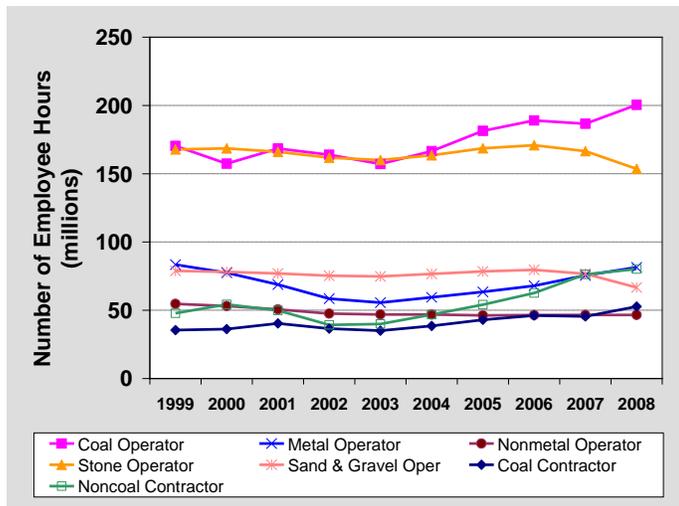
In 2008, a total of 293 metal mining operations reported employment to the Mine Safety and Health Administration (MSHA).<sup>1</sup> Metal mines were the smallest mining sector, comprising 2.0% of all mining operations.

- Gold mines comprised 45.4% (n=133) of all metal mining operations. Other common types of metal mines were iron ore (n=40; 13.7%) and copper ore (n=38; 13.0%).
- Nevada had the largest number of metal mines (n=47; 16.0%), followed by Alaska (n=32; 10.9%).

## Employees

A total of 39,126 employees,<sup>2</sup> corresponding to 40,682 full-time equivalent (FTE)<sup>3</sup> employees, were reported by metal mine operators.

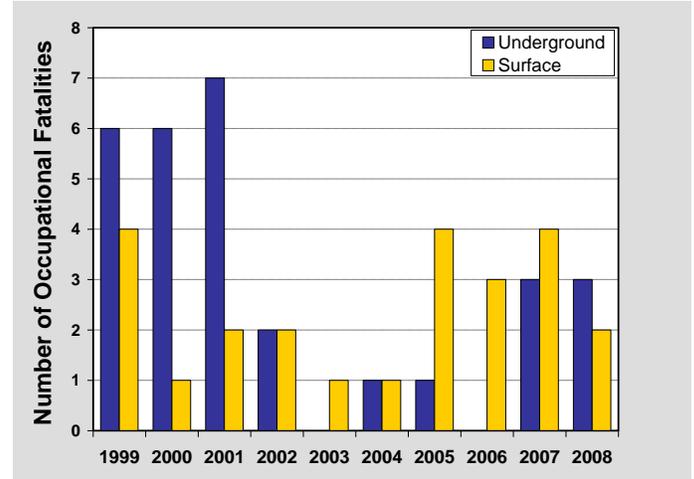
- Within the mining sectors,<sup>4</sup> metal mine operator employees accounted for 11.9% of all employee hours reported to MSHA.
- Metal operator employee hours were reported for both underground (14.4%) and surface (85.6%) work locations.<sup>5</sup>



## Fatalities

Five occupational fatalities occurred among metal mine operator employees in 2008, compared to seven fatalities in 2007.

- The metal mine operator fatality rate was 13.8 [95% confidence interval (CI): 4.5, 32.2] fatalities per 100,000 FTE employees.

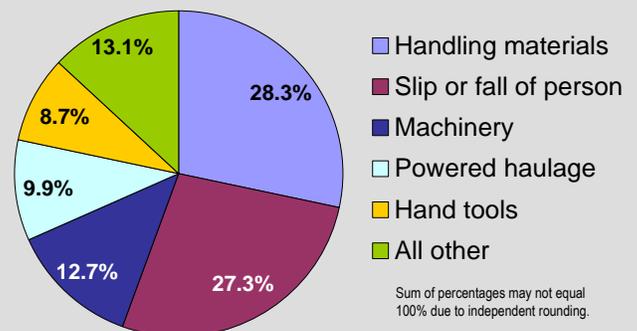


## Nonfatal Lost-time Injuries

There were 812 nonfatal lost-time injuries (163 at underground and 649 at surface work locations) among metal operator employees occurring at an overall rate of 2.2 [CI: 2.1, 2.4] injuries per 100 FTE employees. A total of 40,598 days lost from work<sup>6</sup> resulted from these injuries.

- The underground nonfatal lost-time injury rate was greater than the surface injury rate (2.8 [CI: 2.4, 3.2] vs. 2.1 [CI: 2.0, 2.3] per 100 FTE workers).
- The most frequent classification of nonfatal lost-time injuries involved handling materials (n=230; 28.3%), followed by slip or fall of person (n=222; 27.3%).
- Sprains and strains were the most frequently reported nature of injury (n=401; 49.4%).
- The back was the most frequently reported body part injured (n=148; 18.2%) and accounted for 5,409 days lost from work.

Distribution of Nonfatal Lost-time Injuries by Accident Class, 2008 (N=812)



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

# Mine and Employment Characteristics, 2008

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	665	1,464	2,129	40,370	49,685	90,055	45,866	54,312	100,178
Metal Operator	105	188	293	5,844	33,282	39,126	5,842	34,840	40,682
Nonmetal Operator	44	676	720	2,579	20,454	23,033	2,725	20,534	23,260
Stone Operator	111	4,522	4,633	1,875	77,100	78,975	2,029	74,720	76,749
Sand and Gravel Operator	NA	7,132	7,132	NA	42,307	42,307	NA	33,343	33,343
<b>Operator Total</b>	<b>925</b>	<b>13,982</b>	<b>14,907</b>	<b>50,668</b>	<b>222,828</b>	<b>273,496</b>	<b>56,462</b>	<b>217,750</b>	<b>274,212</b>
	Number of Companies								
Coal Contractor	NA	NA	3,467	6,262	37,510	43,772	4,105	22,216	26,321
Noncoal Contractor	NA	NA	6,128	2,992	72,459	75,451	1,998	38,088	40,086
<b>Contractor Total</b>	<b>NA</b>	<b>NA</b>	<b>9,595</b>	<b>9,254</b>	<b>109,969</b>	<b>119,223</b>	<b>6,103</b>	<b>60,304</b>	<b>66,407</b>
<b>TOTAL</b>				<b>59,922</b>	<b>332,797</b>	<b>392,719</b>	<b>62,565</b>	<b>278,054</b>	<b>340,620</b>

## Mining Occupational Fatalities and Injuries, 2008

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	12	26.2	6	11.9	18	18.7	2,103	4.6	768	1.5	2,871	3.0
Metal Operator	3	NC	2	NC	5	13.8	163	2.8	649	2.1	812	2.2
Nonmetal Operator	1	NC	1	NC	2	NC	95	3.5	412	2.4	507	2.5
Stone Operator	1	NC	6	9.4	7	10.6	33	1.6	1,593	2.5	1,626	2.5
Sand and Gravel Operator	NA	NA	3	NC	3	NC	NA	NA	550	1.9	550	1.9
<b>Operator Total</b>	<b>17</b>	<b>30.1</b>	<b>18</b>	<b>9.4</b>	<b>35</b>	<b>14.2</b>	<b>2,394</b>	<b>4.2</b>	<b>3,972</b>	<b>2.1</b>	<b>6,366</b>	<b>2.6</b>
Coal Contractor	3	NC	9	43.4	12	48.3	168	4.1	313	1.5	481	1.9
Noncoal Contractor	0	NC	5	13.9	5	13.2	38	1.9	463	1.3	501	1.3
<b>Contractor Total</b>	<b>3</b>	<b>NC</b>	<b>14</b>	<b>24.7</b>	<b>17</b>	<b>27.1</b>	<b>206</b>	<b>3.4</b>	<b>776</b>	<b>1.4</b>	<b>982</b>	<b>1.6</b>
<b>TOTAL</b>	<b>20</b>	<b>32.0</b>	<b>32</b>	<b>12.9</b>	<b>52</b>	<b>16.8</b>	<b>2,600</b>	<b>4.2</b>	<b>4,748</b>	<b>1.9</b>	<b>7,348</b>	<b>2.4</b>

NA Not applicable. NC Not calculated when N is less than 5. 95% CI for rates reported on reverse side. Totals may not sum due to independent rounding.

**Data source:** Publicly released employment and accident/injury/illness data 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>]. Caution should be used when interpreting rates based on a small number of events.

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

<sup>2</sup>Average number of employees working at individual mines during calendar quarters of active operations (includes office workers).

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

<sup>4</sup>Mining sectors include coal operators, metal operators, nonmetal operators, stone operators, sand and gravel operators, coal contractors, and noncoal contractors.

<sup>5</sup>Surface work locations include surface operations at underground mines, surface operations (strip or open pit), dredge, other surface operations, independent shops and yards, and mills or preparation plants.

<sup>6</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. 2011-164

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