

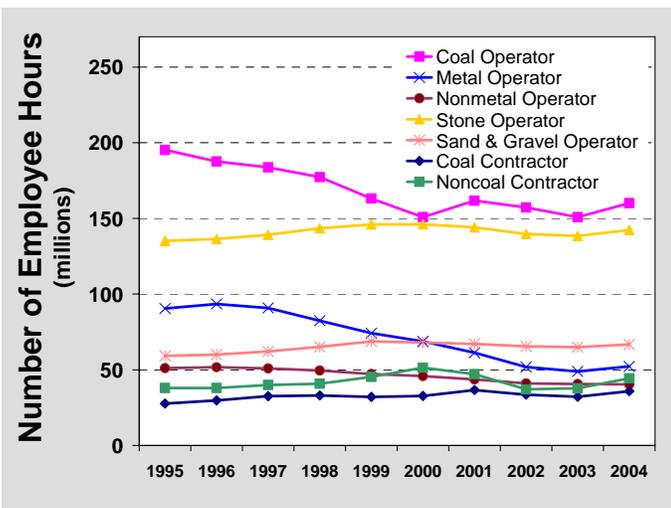
# STONE OPERATOR MINING FACTS – 2004

In 2004, a total of 4,401 **stone mining operations** reported employment to the Mine Safety and Health Administration (MSHA). Stone mines comprised 30.4% of all mining operations.

- Mines producing the primary commodity of limestone (crushed and broken) comprised the largest number of operations (n=2,032; 46.2%).
- Stone mining operations were located in all states and territories except Delaware.
- Of all states, Pennsylvania had the most stone mines (n=379; 8.6%).

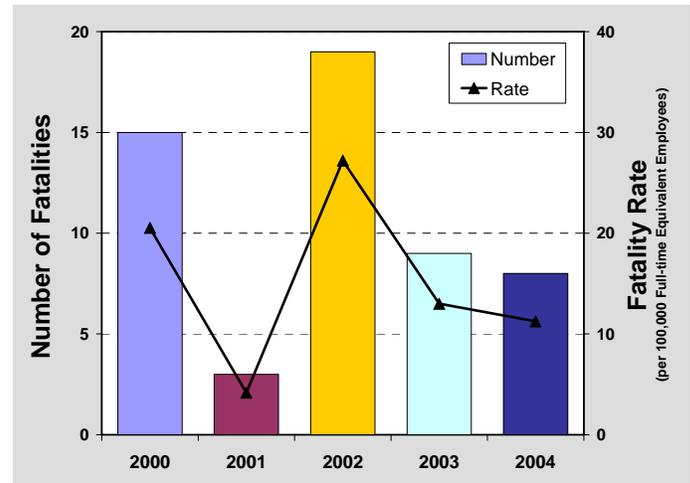
A total of 68,417 **employees**,<sup>1</sup> corresponding to 71,153 full-time equivalent (FTE)<sup>2</sup> employees, were reported to MSHA by stone mine operators in 2004. This was a 2.8% increase in the number of FTE stone operator employees from 2003.

- Within the mining sectors,<sup>3</sup> stone mine operator employees accounted for 26.3% of all employee hours reported.
- Stone operator employee hours were reported for both underground (2.7%) and surface (97.3%) work locations.<sup>4</sup>



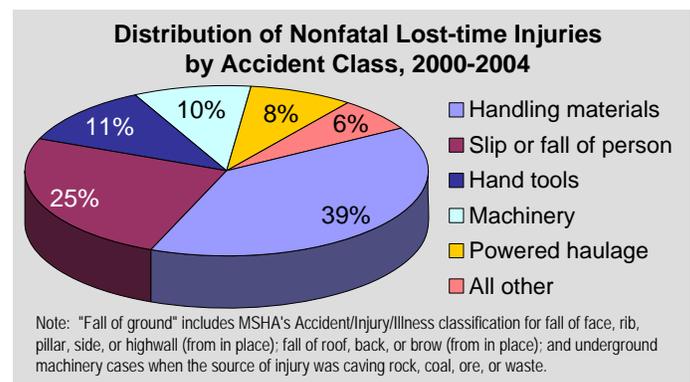
There were eight work-related **fatalities** among stone mine operator employees in 2004. These mining fatalities occurred at surface work locations.

- The stone mine operator fatality rate for all work locations was 11.2 fatalities per 100,000 FTE employees.



There were 2,309 **nonfatal lost-time injuries** (77 at underground and 2,232 at surface work locations) among stone operator employees occurring at a rate of 3.2 injuries per 100 FTE employees. A total of 94,681 days lost<sup>5</sup> from work resulted from these injuries.

- The nonfatal lost-time injury rate for all stone operator employees was 3.2 per 100 FTE workers. The underground work location rate was 3.9, and the surface rate was 3.2.
- The most frequent classification of nonfatal lost-time injuries for stone operator employees involved handling materials (n=915; 39.6%). Sprains and strains were the most frequently reported nature of injury (n=1,045; 45.3%).
- The back was the most frequently reported part of the body injured (n=507; 22.0%) and accounted for 23,666 days lost from work.



In 2004, 89 cases of **occupational illnesses** were reported to MSHA by stone mine operators.<sup>6</sup> This compares to 96 cases in 2003.

- Joint, tendon, or muscle inflammation or irritation accounted for the most frequently reported occupational illnesses (n=35; 39.3%).

- In 2004, there were 16 cases of hearing loss or impairment reported to MSHA (18.0% of all illnesses). This compares to 27 cases (28.1%) reported to MSHA in 2003.
- Other illnesses reported included dermatitis (n=9; 10.1%) and heat stroke, sunstroke, heat cramps, etc. (n=9; 10.1%).

## Mining Characteristics, 2004

| Commodity and Type of Employer | No. of Mines  | No. of Companies | No. of Employees | No. of FTE Employees | Fatality Rate | Nonfatal Lost-time Injury Rate |
|--------------------------------|---------------|------------------|------------------|----------------------|---------------|--------------------------------|
| Coal Operator                  | 2,011         | --               | 73,024           | 80,069               | 28.7          | 3.9                            |
| Metal Operator                 | 251           | --               | 25,205           | 26,091               | 7.7           | 2.1                            |
| Nonmetal Operator              | 741           | --               | 19,432           | 20,183               | 5.0           | 2.7                            |
| <b>Stone Operator</b>          | <b>4,401</b>  | <b>--</b>        | <b>68,417</b>    | <b>71,153</b>        | <b>11.2</b>   | <b>3.2</b>                     |
| 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, tippie physically located at the mine site), surface operations (strip or open pit mines including associated shops and yards), dredge (mining operations conducted from a platform floating on water), other surface operations (brine pumping, etc.), 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  
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