



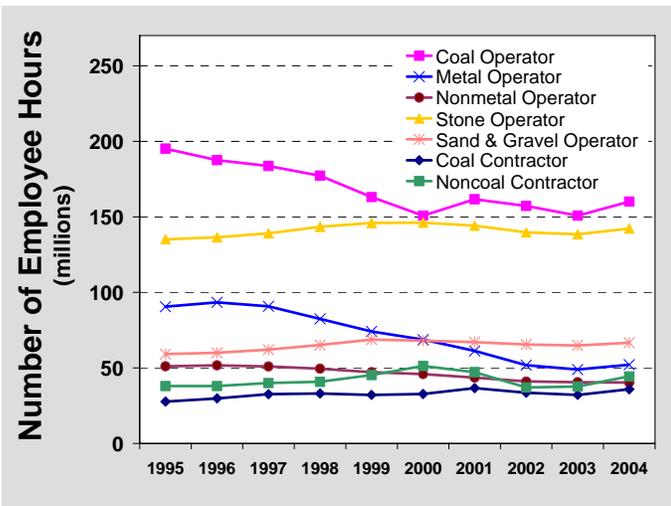
SAND & GRAVEL OPERATOR MINING FACTS – 2004

In 2004, a total of 7,074 **sand and gravel mining operations** reported employment to the Mine Safety and Health Administration (MSHA).

- Sand and gravel mines were the largest mining sector, comprising 48.9% of all mining operations.
- Sand and gravel mines were found throughout all 50 states.

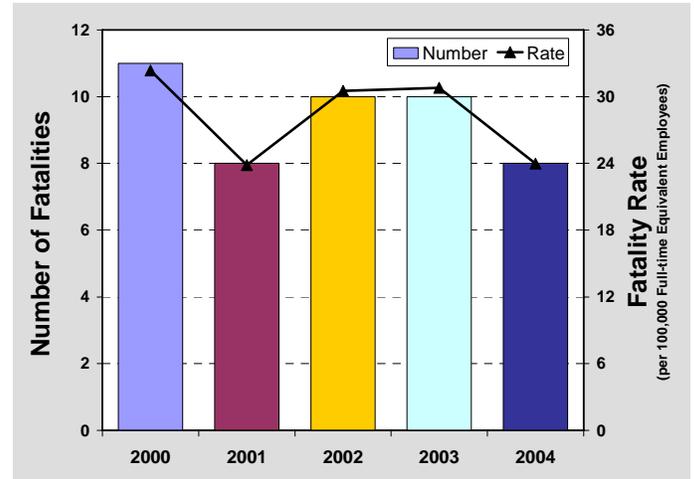
A total of 37,000 **employees**,¹ corresponding to 33,364 full-time equivalent (FTE)² employees, were reported by sand and gravel mine operators.

- Within the mining sectors,³ sand and gravel mine operator employees accounted for 12.3% of all employee hours reported to MSHA.



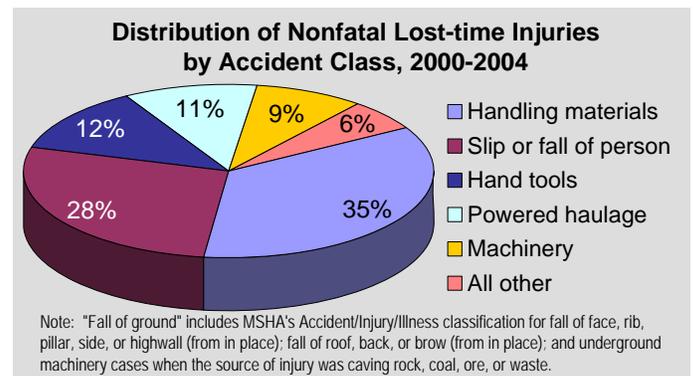
Eight work-related **fatalities** occurred among sand and gravel operator employees in 2004. This compared to 10 fatalities in 2003.

- The sand and gravel mine operator fatality rate was 24.0 fatalities per 100,000 FTE employees.
- Fifty percent of the sand and gravel fatalities in 2004 occurred to employees with the MSHA job title of 'Supervision/management/foreman/boss.'



There were 753 **nonfatal lost-time injuries** among sand and gravel operator employees occurring at a rate of 2.3 injuries per 100 FTE employees. A total of 34,856 days lost⁴ from work resulted from these injuries.

- The most frequent classifications of nonfatal lost-time injuries for sand and gravel operator employees involved handling materials (n=241; 32.0%) and slip or fall of person (n=241; 32.0%).
- Sprains and strains were the most frequently reported nature of injury (n=296; 39.3%).
- The back was the most frequently reported part of the body injured (n=155; 20.6%) followed by fingers (n=105; 13.9%). Back injuries represented 7,919 days lost from work.



In 2004, 20 cases of **occupational illnesses** were reported to MSHA by sand and gravel operators.⁵ This compares to 15 cases reported in 2003.

- Joint, tendon, or muscle inflammation or irritation accounted for the most frequently reported occupational illnesses (n=10; 50.0%).

- There were six cases of hearing loss or impairment reported to MSHA (30.0% of all occupational illnesses reported).
- Other cases of occupational illness reported by sand and gravel mining operations in 2004 included heat stroke, sunstroke, heat cramps, etc. (n=2; 10.0%) and dermatitis (n=2; 10.0%).

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
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
Operator Total	14,478	--	223,078	230,860	18.2	3.2
Coal Contractor	--	2,550	30,228	17,964	27.8	2.6
Noncoal Contractor	--	4,143	42,511	22,198	36.0	1.7
Contractor Total	--	6,693	72,739	40,162	32.4	2.1
TOTAL			295,817	271,022	20.3	3.0

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>].

¹Number 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.

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

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

⁴Includes 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.

⁵Because of the complexity of attributing disease causation to the workplace, occupational illnesses may be underreported.

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