

SAND & GRAVEL OPERATOR MINING FACTS—2008

Mining Operations

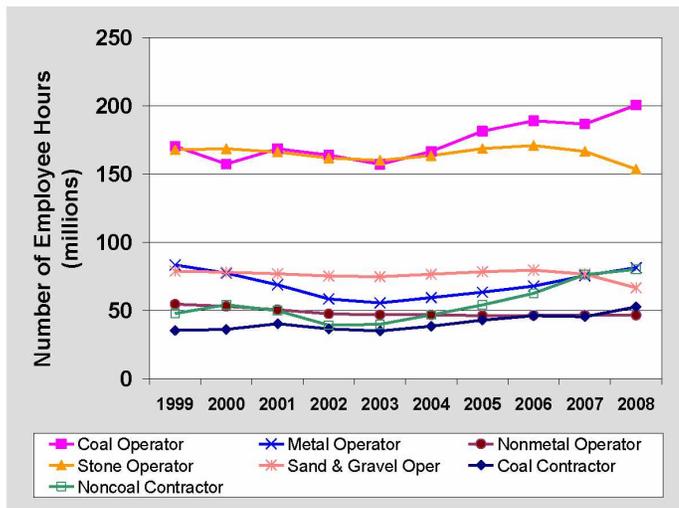
In 2008, a total of 7,132 sand and gravel mining operations reported employment to the Mine Safety and Health Administration (MSHA).¹

- Sand and gravel mines were the largest mining commodity, comprising 47.8% of all mining operations.
- Sand and gravel mines were found throughout all 50 states and Puerto Rico.
- Minnesota had the largest number of sand and gravel mines (n=488; 6.8%).

Employees

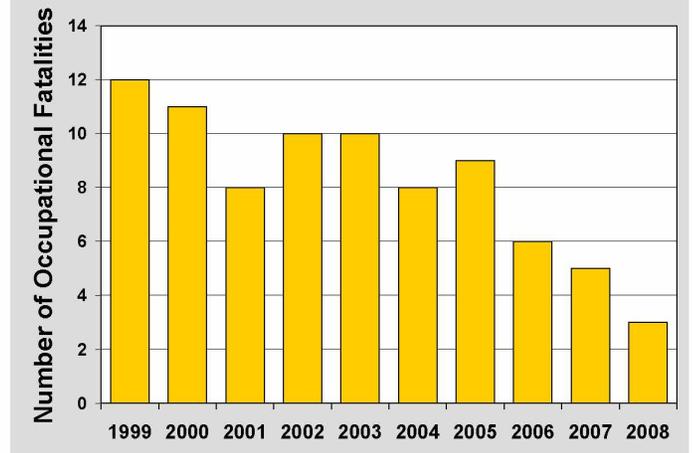
A total of 42,307 employees,² corresponding to 33,343 full-time equivalent (FTE)³ employees, were reported by sand and gravel mine operators.

- Within the mining sectors,⁴ sand and gravel mine operator employees accounted for 9.8% of all employee hours reported to MSHA.
- All sand and gravel operator hours reported were for surface work locations.



Fatalities

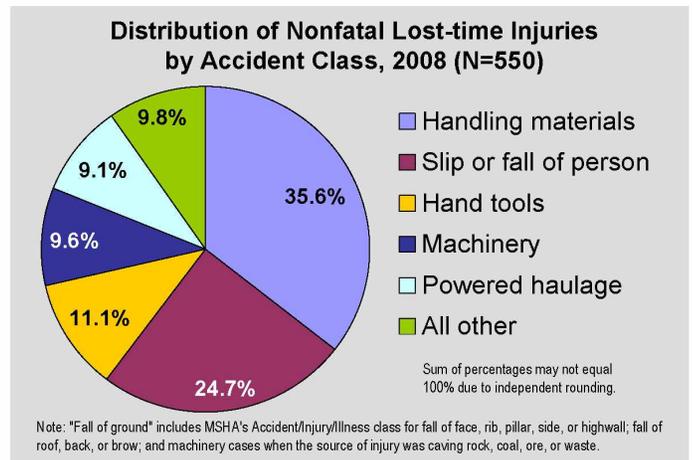
Three occupational fatalities occurred among sand and gravel operator employees in 2008. This compared to five fatalities in 2007.



Nonfatal Lost-time Injuries

There were 550 nonfatal lost-time injuries among sand and gravel operator employees occurring at an overall rate of 1.9 [95% confidence interval (CI): 1.7, 2.1] injuries per 100 FTE employees. A total of 25,912 days lost from work⁵ resulted from these injuries.

- The most frequent classifications of nonfatal lost-time injuries for sand and gravel operator employees involved handling materials (n=196; 35.6%) and slip or fall of person (n=136; 24.7%).
- Sprains and strains were the most frequently reported nature of injury (n=213; 38.7%).
- The back was the most frequently reported body part injured (n=105; 19.1%) followed by fingers (n=88; 16.0%). Back injuries represented 3,697 days lost from work; finger injuries represented 2,623 days lost.



Mine and Employment Characteristics, 2008

Commodity and Type of Employer	Number of Mining Operations ¹			Number of Employees ²			Number of FTE Employees ³		
	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
Operator Total	925	13,982	14,907	50,668	222,828	273,496	56,462	217,750	274,212
	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
Contractor Total	NA	NA	9,595	9,254	109,969	119,223	6,103	60,304	66,407
TOTAL				59,922	332,797	392,719	62,565	278,054	340,620

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
Operator Total	17	30.1	18	9.4	35	14.2	2,394	4.2	3,972	2.1	6,366	2.6
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
Contractor Total	3	NC	14	24.7	17	27.1	206	3.4	776	1.4	982	1.6
TOTAL	20	32.0	32	12.9	52	16.8	2,600	4.2	4,748	1.9	7,348	2.4

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.

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

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

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

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

⁵Includes 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.

To receive documents or other information about occupational safety and health topics, contact NIOSH at

Telephone: 1-800-CDC-INFO (1-800-232-4636)

TTY: 1-888-232-6348

E-mail: cdcinfo@cdc.gov

or visit the NIOSH Web site at www.cdc.gov/niosh.

DHHS (NIOSH) Publication No. 2011-167

SAFER • HEALTHIER • PEOPLE™