



Sand and Gravel Mining Facts - 2001

1. In 2001, a total of 7,131 **sand and gravel mining operations** reported employment statistics to the Mine Safety and Health Administration (MSHA).
 - Sand and gravel mines comprised 48.8% of all mining operations, the largest percentage of all mining sectors.¹
 - Sand and gravel mines are distributed throughout all 50 states.
 - The median number of operator employees per sand and gravel mine was 3.0.²
2. A total of 36,957 **employees**, corresponding to 33,544 full-time equivalent (FTE)³ employees, was reported by sand and gravel operators. This is a 1.4% decrease in FTE employees from 2000.
 - About 12% of all employee hours reported to MSHA were among sand and gravel operators employees.
3. Eight work-related **fatalities** occurred among sand and gravel miners in 2001, compared to 11 in 2000.
 - The fatality rate among sand and gravel operator employees was 23.8 per 100,000 FTE employees.
 - The fatality rate per 100,000 FTEs for dredge employees was 42.5 (n = 2), compared to 20.8 for all other surface sand and gravel mine operator employees.
4. There were 881 **nonfatal lost-time injuries** among sand and gravel employees occurring at a rate of 2.6 per 100 FTE employees. A total of 45,894 days lost from work resulted from these injuries.⁴
 - The mean and median days lost from work among sand and gravel employees with nonfatal lost-time injuries were 52.1 and 11.0 days, respectively.
 - Among the most frequently reported types of incidents (greater than 10% of total), the most severe injuries (as measured by the median number of days lost from work) were associated with handling materials (n = 320, median = 13.0), slips or falls (n = 232, median = 12.5), hand tools (n = 103, median = 10.0), and powered haulage (n = 89, median = 9.0).
 - Sprains and strains were the most prevalent injury (41.2%). Among those injury categories with greater than 10% of total injuries, the most severe was fractures and chips (n = 100, median = 33.0). The back was the most frequently reported part of the body injured (19.1%). Back injuries represented 5,151 days lost from work in sand and gravel operator employees.
 - Among sand and gravel operator employees, those with a job title of laborer/utility man/bull gang had the greatest number of nonfatal lost-time injuries (n = 150, 17.0%), followed by those classified as mechanic/repairman/helper (n = 139, 15.8%).
5. Thirty-eight cases of **occupational illness** were reported to MSHA for sand and gravel employees.
 - The most frequently reported illness was associated with repeated trauma, of which 15 were joint, muscle, or tendon irritation or inflammation (39.5%).
 - Despite use of noisy equipment by sand and gravel miners, only two cases of hearing loss or impairment were reported to MSHA in 2001.

¹ Mining sectors: coal operators, metal operators, nonmetal operators, stone operators, sand and gravel operators, coal contractors, and noncoal contractors.

² Excludes office employees.

³ Computed using reported employee hours (2,000 hours = 1 FTE); excludes office employees.

⁴ 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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