



Surface Mining Facts - 2003

1. Data from the Mine Safety and Health Administration (MSHA) indicate that a total of 241,502 **employees** worked in surface mining locations in 2003, corresponding to 212,113 full-time equivalent (FTE) workers.^{1,2}
 - Surface employees accounted for 84.6% of all mining employees.
 - The majority of surface employees (73.7%; n = 177,927) were mine operator employees as opposed to contractor employees.
 - Stone operator employees comprised the greatest percentage (27.2%; n = 65,743) of surface employees.³
2. In 2003, 40 occupational mining **fatalities** occurred at surface work locations. The surface work location fatality rate was 18.9 per 100,000 FTE workers.
 - Eleven surface fatalities occurred among coal operator employees, followed by 10 in sand and gravel operator employees and 8 in stone operator employees.
 - Sand and gravel operator employees had the highest surface fatality rate (30.8 per 100,000 FTE employees; n = 10). Coal contractors, coal operators, and noncoal contractors had surface fatality rates of 28.1, 26.8, and 22.1 per 100,000 FTE employees, respectively.
3. Within surface work locations, 5,504 **nonfatal lost-time injuries** resulting in 273,449 lost work days were reported to MSHA in 2003.⁴ The nonfatal lost-time injury rate was 2.6 per 100 FTEs.
 - Stone operators had the highest surface injury rate (3.4 per 100 FTE workers).
 - The highest percentage of nonfatal lost-time injuries was due to handling materials (36.5%; n = 2,011) followed by slips or falls (28.6%; n = 1,575).
 - Sprains and strains accounted for the largest percentage of nature of injury (45.6%; n = 2,510).
 - Among employees working in surface locations, the back was the most frequently reported part of body injured (21.1%; n = 1,163).⁵ The median number of days lost due to back injuries among surface employees was 15.
 - Surface employees with the MSHA job title of "mechanic/repairman/helper" had the most injuries (n = 1,231; 22.4%), followed by those with a job title of "sizing/washing/cleaning plant worker" (n = 921; 16.7%) and "laborer/utility man/bull gang" (n = 693; 12.6%).
4. In 2003, 301 cases of **occupational illnesses** were reported to MSHA for employees in surface work locations.⁶
 - Joint, tendon, or muscle inflammation or irritation accounted for 41.9% (n = 126) of reported occupational illnesses in surface work locations.
 - Thirty-three cases of black lung (coal workers' pneumoconiosis) and seven cases of silicosis were reported to MSHA by employees in surface work locations.
 - There were 74 cases of hearing loss or impairment reported to MSHA (or 24.6% of all occupational illnesses reported) by employees working in surface locations.

Note: All analyses exclude office employees.

¹ Surface production operations include strip mines, surface operations at underground mines, preparation plants, mills, auger mining, culm banks, dredge, and surface shops and yards.

² Computed using reported employee hours (2,000 hours = 1 FTE).

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

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.

⁵ MSHA only reports the most severely injured part of body for accidents involving injury to multiple body parts.

⁶ Because of the complexity of attributing disease causation to the workplace, occupational illnesses may be underreported.



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