



Metal Operator Mining Facts - 2003

1. In 2003, a total of 258 **metal mining operations** reported employment to the Mine Safety and Health Administration (MSHA). Metal mines were the smallest mining sector, comprising 1.8% of all mining operations.¹
 - Gold mines comprised 44.2% (n = 114) of all metal mining operations. Other common types of metal mines were iron ore (n = 29; 11.2%), copper ore (n = 28; 10.9%), and lead and/or zinc ore (n = 21; 8.1%).
 - Nevada had the largest number of metal mines (n = 48; 18.6%) followed by Alaska (n = 29; 11.2%).
2. A total of 24,648 **employees**, corresponding to 24,468 full-time equivalent (FTE) employees, were reported by metal mine operators.² This is a 5.7% decrease from the number of FTE metal mine employees reported in 2002.
 - Metal mine operator employees accounted for 9.5% of all employee hours reported to MSHA.
 - The median number of employees at metal mining operations was 12.
 - The largest percentage of metal mine operator employees worked in gold mines (29.6%), followed by copper ore mines (22.5%) and iron ore mines (21.4%).
3. One work-related **fatality** occurred in metal mines in 2003, compared to four in 2002.
 - The metal mine fatality rate was 4.1 per 100,000 FTE employees.
 - The single fatality occurred in a preparation plant or mill. The fatality rate among metal employees at preparation plants and mills was 9.6 per 100,000 FTEs.
4. There were 579 **nonfatal lost-time injuries** among metal mine employees occurring at a rate of 2.4 per 100 FTE employees. These injuries resulted in 21,139 days lost from work.³
 - The median number of days lost from work among metal mine employees with nonfatal lost-time injuries was 18 days.
 - The highest injury rate for metal mine operators was 4.1 per 100 FTE employees at underground work locations (n = 149), compared to an injury rate of 2.1 at surface work locations (n = 432).⁴
 - The most frequent type of accident for metal mine employees involved handling of materials (34.5%; n = 200), followed by slips or falls (30.9%; n = 179). Slips and falls were among the most severe accident types as assessed by the median number of days lost (median = 25).
 - Sprains and strains (n = 303) were the most commonly reported injury. They accounted for 56.9% of the days lost from work. The back (n = 129; 22.3%) was the most frequently reported part of the body injured and accounted for 5,436 lost work days.⁵
 - Among metal mine employees, those with the MSHA job title of "mechanic/repairman/helper" had the greatest number of nonfatal lost-time injuries (n = 147; 25.4%).
5. A total of 63 cases of **occupational illness** were reported to MSHA for metal mine employees.⁶
 - The most frequently reported illness was joint, muscle, or tendon irritation or inflammation (n = 37; 58.7%).
 - Fifteen (23.8%) cases of hearing loss or impairment were reported.

Note: All analyses exclude office employees, except for the total number of metal mining operations.

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

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

³ 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.

⁴ Surface production operations include strip mines, surface operations at underground mines, preparation plants, mills, auger mining, culm banks, dredge, and surface shops and yards.

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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