



Metal Operator Mining Facts - 2002

1. In 2002, a total of 256 **metal mining operations** reported employment to the Mine Safety and Health Administration (MSHA). Metal mines were the smallest mining sector,¹ comprising 1.8% of all mining operations.
 - Gold mines comprised 44.1% ($n = 113$) of all metal mining operations. Other types of metal mines were copper ore ($n = 31$; 12.1%), iron ore ($n = 25$; 9.8%), and lead and/or zinc ore ($n = 21$; 8.2%).
 - Nevada is the state with the largest number of metal mines ($n = 53$; 20.7%).
2. A total of 25,543 **employees**, corresponding to 25,938 full-time equivalent (FTE) employees,² were reported by metal mine operators. This is a 15.4% decrease from the number of FTE metal mine employees reported in 2001.
 - Metal mine operator employees accounted for 10% of all employee hours reported to MSHA.
 - The largest proportion of metal mine operator employees worked in gold mines (29.9%), followed by copper ore mines (23.3%).
3. Four work-related **fatalities** occurred in metal mines in 2002, compared to nine in 2001.
 - The metal mine fatality rate was 15.4 per 100,000 FTE employees.
 - The fatality rate was 53.8 per 100,000 FTE employees for underground work locations ($n = 2$) and 18.1 per 100,000 FTE employees at surface work locations ($n = 2$).³
4. There were 640 **nonfatal lost-time injuries** among metal mine employees occurring at a rate of 8.4 per 100 FTE employees. These injuries resulted in 31,258 days lost from work.⁴
 - The median number of days lost from work among metal mine employees with nonfatal lost-time injuries was 20.0 days.
 - The highest injury rate for metal mine operators was 4.0 per 100 FTE employees at underground work locations ($n = 149$), compared to an injury rate of 2.2 at surface work locations ($n = 491$).
 - The most frequent type of accident for metal mine employees involved handling of materials (41.7%), followed by slips or falls (24.1%). These accident types comprised 70.4% of the total days lost from work.
 - Sprains and strains ($n = 315$) were the most commonly reported injury. They accounted for 45.8% of the days lost from work. The back ($n = 129$; 20.2%) was the most frequently reported part of the body injured and accounted for 4,592 days off work.
 - Among metal mine employees, those with a job title of "mechanic/repairman/helper" had the greatest number of nonfatal lost-time injuries ($n = 180$; 28.1%).
5. A total of 106 cases of **occupational illness** were reported to MSHA for metal mine employees.⁵
 - The most frequently reported illness involved joint, muscle, or tendon irritation or inflammation ($n = 50$; 47.2%).
 - Thirty-four (32.1%) cases of hearing loss or impairment were reported.

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); excludes office employees.

³ Surface production operations include strip mines, surface operations at underground mines (excluding preparation plants), auger mining, culm banks, dredge, and surface shops and yards.

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



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