



# Nonmetal Operator Mining Facts - 2003

1. In 2003, a total of 734 **nonmetal mining operations** reported employment to the Mine Safety and Health Administration (MSHA). Examples of nonmetal mining operations include, but are not limited to, the mining of clay, shale, barite, potash, trona, phosphate rock, rock salt, gypsum, talc, gemstones, mica, perlite, and pumice.
  - Nonmetal mines comprised 5.1% of all mining operations.
  - Nonmetal mining operations are located in all states and territories except Alaska, Delaware, Maine, New Hampshire, Rhode Island, Puerto Rico, and the Virgin Islands.
  - Mines producing common clay comprised 28.6% (n = 210) of all nonmetal mining operations.
2. A total of 19,333 **employees**, corresponding to 20,314 full-time equivalent (FTE) employees, were reported by nonmetal operators to MSHA.<sup>1</sup> This is a 1% decrease in the number of FTE nonmetal operator employees from 2002.
  - Nonmetal mine operators reported 7.9% of all employee hours to MSHA.
  - The majority of nonmetal operator FTEs worked in preparation plants or mills (n = 12,772; 62.9%).
  - The median number of employees at nonmetal mining operations was 6.
  - The largest portion of nonmetal operator employees worked in common clay mines (27.3%), followed by phosphate rock mines (13.6%) and trona mines (10.0%).
3. There were two work-related **fatalities** in nonmetal mines in 2003, compared to zero in 2002.
  - The nonmetal mine fatality rate was 9.8 per 100,000 FTE employees.
  - Both fatalities occurred in preparation plants or mills. The fatality rate specific to nonmetal operator employees working in preparation plants/mills was 15.7 per 100,000 FTE employees.
4. There were 506 **nonfatal lost-time injuries** among nonmetal mine employees, occurring at a rate of 2.5 per 100 FTE employees. These injuries resulted in 22,125 days lost from work.<sup>2</sup>
  - The median number of days lost from work among nonmetal employees with nonfatal lost-time injuries was 18.0 days.
  - The highest injury rate was in underground operations (3.5 per 100 FTE operator employees), compared to injury rates of 2.5 and 2.0 for processing mills and surface production operations, respectively.<sup>3</sup>
  - The most frequent type of accident for nonmetal employees involved handling of materials (n = 205; 40.5%), followed by slips or falls (n = 128; 25.3%). These accident types together comprised 66.4% of the total days lost from work.
  - Sprains and strains (n = 241) were the most frequently reported injury. They accounted for 50.3% of the days lost from work. The back (n = 105) was the part of the body most frequently reported injured and accounted for 4,934 days lost from work.<sup>4</sup>
  - Among nonmetal employees, those with a job title of "sizing/washing/cleaning plant operator/worker" had the greatest number of nonfatal lost time injuries (n = 161; 31.8%), followed by those classified as "mechanic/repairman/helper" (n = 112; 22.1%).
5. Thirty-six cases of **occupational illness** were reported to MSHA for nonmetal mine employees.<sup>5</sup>
  - The most frequently reported illness involved joint, muscle, or tendon irritation or inflammation (n = 20; 55.6%).
  - Hearing loss or impairment was reported for 12 nonmetal mine operator employees in 2003.

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

<sup>1</sup> Computed using reported employee hours (2,000 hours = 1 FTE).

<sup>2</sup> 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.

<sup>3</sup> Surface production operations include strip mines, surface operations at underground mines, preparation plants, mills, auger mining, culm banks, dredge, and surface shops and yards.

<sup>4</sup> MSHA only reports the most severely injured part of body for accidents involving injury to multiple body parts.

<sup>5</sup> Because of the complexity of attributing disease causation to the workplace, occupational illnesses may be underreported.



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**DHHS (NIOSH) Publication No. 2005-121**