

Reference Guide for Commonly Used MSHA Employment and Accident/Injury/Illness Data Codes and Descriptions

Notes: See the "MSHA Data User's Guide" for further information.

Computed or recoded variables are outlined in RED.

Codes applicable to Contractors in Address/Employment files are displayed in BLUE.

Variable Availability

Employment
File Only

Accident/Injury/Illness
File Only

Both Employment and
Accident/Injury/Illness Files

UNDERGROUND MINING METHOD

Variable Name: **UMETH**

- 1 Longwall
- 2 Shortwall
- 3 Conventional
- 5 Continuous
- 6 Hand
- 7 Caving
- 8 Other

UNDERGROUND LOCATION

Variable Name: **ULOC**

- 0 Not labeled
- 1 Vertical shaft
- 2 Slope/inclined shaft
- 3 Face
- 4 Intersection
- 5 Underground shop/office
- 6 Other
- 7 Unknown
- 12 Not labeled
- 17 Central Shops
- 30 Preparation Plants
- 99 Office

MSHA DISTRICT OFFICE

Variable Name: **DISTRICT**

- C01 Wilkes Barre, PA (Inactive starting 2013)
 C02 New Stanton, PA (Combined with C01 in 2013)
 C03 Morgantown, WV
 C04 Mt. Hope, WV (Split into C04/C12 in 2010)
 C05 Norton, VA (Added some C06 offices in 2016)
 C06 Pikeville, KY (Inactive starting 2016)
 C07 Barbourville, KY (Added some C06 offices in 2016)
 C08 Vincennes, IN
 C09 Denver, CO
 C10 Madisonville, KY
 C11 Birmingham, AL
 C12 Pineville, WV (Split from C04 in 2010)

- MNC North Central-Deuluth, MN
 MNE Northeast-Warrendale, PA
 MRM Rocky Mountain-Denver, CO
 MSC South Central-Dallas, TX
 MSE Southeast-Birmingham, AL
 MWE Western-Vacaville, CA

CNT Contractor (No district)
 (Address/Employment files only)

ACCIDENT CODE

(Available through 2013)

Variable Name: **ACCCODE**

- 1 Death
- 2 Serious injury
- 3 Entrapment
- 4 Inundation
- 5 Gas or dust explosion
- 6 Mine fire
- 7 Explosives
- 8 Roof fall
- 9 Outburst
- 10 Impounding dam
- 11 Hoisting
- 12 Offsite injury
- 13 Not labeled

CANVASS or CLASS

Variable Name: **CANVASS**

- 1 Anthracite Coal
- 2 Bituminous Coal
- 5 Sand and Gravel
- 6 Stone
- 7 Nonmetal
- 8 Metal
- 9 Contractor
(Address/Employment files only)

Operational SUBUNIT within Mine

Variable Name: **SUBUNIT**

- 1 **Underground operations:** All underground operations. Operations below the surface of the ground. Excavations beneath a roof. Hoisting to the surface.
- 2 **Surface at Underground:** Includes surface shops and yards, tippie physically located at the mine site.
- 3 **Surface:** Strip or open pit mines including associated shops and yards.
- 4 **Auger:** Auger mining operations for coal mines only.
- 5 **Culm Banks:** Reworking of mine dumps or refuse pile. For coal mines only.
- 6 **Dredge:** Mining operations conducted from a platform floating on water.
- 12 **Other Surface:** Brine pumping, etc. For metal/nonmetal only.
- 17 **Independent shops and yards:** Shops and yards not associated with one specific mine. Will have an individual mine-id.
- 30 **Mill or preparation plant:** Mill, preparation plant or breaker operations associated with one specific mine. Includes associated shops and yards.
- 99 **Office:** Professional or clerical workers at the plant or mine.

COMMODITY/ EMPLOYER TYPE

Variable Name: **COMMOD**

- 1 Coal operator
- 2 Metal operator
- 3 Nonmetal operator
- 4 Stone operator
- 5 Sand & gravel operator
- 6 Coal contractor
- 7 Noncoal contractor

PART of BODY AFFECTED

Variable Name: **PARTBODY**

- 100 Head, NEC
- 110 Brain
- 120 Ear(s)
- 121 Ear(s) external
- 122 Ear(s) internal (inc. hearing)
- 130 Eye(s) inc. optic nerve & vision
- 140 Face, NEC
- 141 Jaw (inc. chin)
- 142 Mouth
- 143 Nose
- 144 Face, multiple parts
- 150 Scalp
- 160 Skull
- 170 Head, multiple
- 200 Neck
- 300 Upper extremities, NEC
- 310 Arm, NEC
- 311 Upper arm
- 312 Elbow
- 313 Forearm
- 314 Arm, multiple
- 320 Wrist
- 330 Hand
- 340 Finger(s)
- 350 Upper extremities, multiple
- 400 Trunk, NEC
- 410 Abdomen
- 420 Back
- 430 Chest
- 440 Hips
- 450 Shoulder(s)
- 460 Trunk, multiple
- 500 Lower extremities, NEC
- 510 Leg, NEC
- 511 Thigh
- 512 Knee
- 513 Lower leg
- 514 Leg, multiple
- 520 Ankle
- 530 Foot (not ankle or toes)
- 540 Toe (s)
- 550 Lower extremities, multiple
- 600 Body systems
- 700 Multiple parts
- 800 Body parts NEC
- 900 Unclassified

STANDARD INDUSTRIAL CLASSIFICATION for Primary Commodity Mined

Variable Name: **SIC** ~ ~ Grouped by normal CANVASS assignments

ANTHRACITE COAL	NONMETAL	STONE
11110 Coal, Anthracite	13111 Oil shale 13112 Oil sand 13113 Oil mining 14460 Sand, industrial; Ground silica/quartz 14530 Clay (fire) 14550 Clay (common) 14590 Clay, Ceramic and refractory NEC 14591 Aplite 14592 Brucite 14593 Feldspar 14594 Kyanite 14595 Magnesite 14596 Shale (common) 14720 Barite 14730 Fluorspar 14740 Potash, soda, & borate minerals NEC 14741 Boron Materials 14742 Potash 14743 Trona 14744 Sodium compounds 14750 Phosphate rock 14760 Salt (rock) 14770 Sulfur 14790 Chemical and fertilizer NEC 14791 Lithium 14792 pigment mineral 14793 Pyrites 14920 Gypsum 14960 Talc, soapstone, & pyrophyllite 14990 Nonmetallic minerals NEC 14991 Asbestos 14992 Gemstones 14993 Gilsonite 14994 Mica 14996 Perlite 14997 Pumice 14998 Vermiculite 28190 Industrial chemicals NEC 28991 Salt (evaporated) 28992 Salt (in brine) 29900 Leonardite	14110 Stone, dimension NEC 14111 Granite (dimension) 14112 Limestone (Dimension) 14113 Marble (dimension) 14114 Sandstone (dimension) 14115 Slate (dimension) 14116 Traprock (dimension) 14119 Mica (dimension) 14220 Limestone (crushed and broken) 14230 Granite (crushed and broken) 14290 Stone, crushed & broken NEC 14291 Marble (crushed & broken) 14292 Sandstone (crushed & broken) 14293 Slate (crushed & broken) 14294 Traprock (crushed & broken) 14296 Mica (crushed & broken) 32410 Cement 32740 Lime
BITUMINOUS COAL		SAND AND GRAVEL
12110 Coal, Bituminous		14410 Sand & gravel 14420 Construction S&G; Sand, common
METAL		CONTRACTOR
10110 Iron ore 10210 Copper Ore 10310 Lead and/or Zinc Ore 10410 Gold (lode and placer) 10440 Silver ores 10510 Aluminum Ore 10611 Chromite 10612 Cobalt 10613 Columbium - Tantalum 10614 Manganese 10615 Molybdenum 10616 Nickel 10617 Tungsten 10920 Mercury 10940 Uranium - vanadium ores 10941 Uranium 10942 Vanadium 10990 Metal ores NEC 10991 Antimony 10992 Beryl 10993 Platinum group 10994 Rare earths 10995 Tin ore 10996 Titanium 10997 Zircon 28191 Alumina (Mill)		99998 Contractor-no SIC (Address/Employment files only)

Office of Mine Safety and Health Research

Pittsburgh Mining Research Division

Surveillance and Statistics Team

Pittsburgh, PA ~ ~ Spokane, WA

September 2016



ACCIDENT/INJURY/ILLNESS CLASSIFICATION

Variable Name: **AII**

ACCIDENT/INJURY

- 1 Electrical
- 2 Entrapment
- 3 Exploding vessels under pressure
- 4 Explosives and breaking agents
- 5 Falling, rolling, or sliding rock or material of any kind
- 6 Fall of face, rib, pillar, side, or highwall (from in place)
- 7 Fall of roof, back, or brow (from in place)
- 8 Fire
- 9 Handling material
- 10 Handtools
- 11 Nonpowered haulage
- 12 Powered haulage
- 13 Hoisting
- 14 Ignition or explosion of gas or dust
- 15 Impoundment
- 16 Inundation
- 17 Machinery
- 18 Slip or fall of person (from an elevation or on the same level)
- 19 Stepping or kneeling on object
- 20 Striking or bumping
- 21 Other (not 1-20)

ILLNESS

- 26 Occupational skin diseases or disorders
- 27 Dust disease of the lungs
- 28 Respiratory conditions due to toxic agents (pneumonitis)
- 29 Poisoning
- 30 Disorders due to physical agents other than toxic materials
- 31 Disorders associated with repeated trauma
- 32 Other occupational illnesses

OCCUPATIONAL INJURY TYPE

Variable Name: **INJTYPE**

- 1 **Occupational fatality**
Degree of Injury = 1; excludes "ZZZZ" contractors and minors under the age of 17.
- 2 **NFDL (Nonfatal, days lost)**
Degree of Injury = 2, 3, 4, and 5
- 3 **NDL (No days lost)**
Degree of Injury = 6
- 4 **Nonoccupational fatality**
Degree of injury = 1 for "ZZZZ" contractors and minors under the age of 17.

DEGREE of INJURY/ILLNESS

Variable Name: **DEGINJ**

- 0 Reportable no injury accident
- 1 Death, fatal
- 2 Permanent disability, partial or total
- 3 Days away from work only
- 4 Days away AND restricted activity
- 5 Days of restricted activity only
- 6 Injuries w/o death, days away, or restricted activity
- 7 Occupational illness, (NOT 1-6)
- 8 Employee natural caused fatal & nonfatal injury
- 9 Non-employee fatal & nonfatal cases
- 10 All other cases (including first aid)

ACCIDENT TYPE or EVENT

Variable Name: **ATYPE**

- 1 Struck against stationery object
- 2 Struck against moving object
- 3 Struck by concussion
- 4 Struck by falling object
- 5 Struck by flying object
- 6 Struck by rolling object (sliding)
- 7 Struck by powered moving object
- 8 Struck by NEC
- 9 Fall down raise, shaft, or manway underground
- 10 Fall from scaffolds, walkways (elevated), platforms, etc.
- 11 Fall from headframe, derrick, or tower
- 12 Fall from machine, vehicle, or equipment
- 13 Fall from piled material (include coal, rock, ore, or waste)
- 14 Fall from ladders
- 15 Fall down stairs
- 16 Fall to lower level NEC
- 17 Fall to the walkway or working surface
- 18 Fall onto or against objects
- 19 Fall on same level NEC
- 20 Caught in-under-between running or meshing objects
- 21 Caught in-under-between a moving and stationary object
- 22 Caught in-under-between several moving objects
- 23 Caught in-under-between collapsing material or buildings
- 24 Caught in-under-between NEC
- 25 Rubbed or abraded NEC
- 26 Bodily reaction NEC
- 27 Over-exertion in lifting objects
- 28 Over-exertion in pulling or pushing objects
- 29 Over-exertion in welding or throwing objects
- 30 Over-exertion NEC
- 31 Contact with electric current
- 32 Contact with heat (atmosphere or environment)
- 33 Contact with hot objects or substances
- 34 Contact with cold (atmosphere or environment)
- 35 Contact with cold objects or substances
- 36 Inhalation of various noxious substances
- 37 Ingestion of various noxious substances
- 38 Absorption of various noxious substances
- 39 Flash burns (electric)
- 40 Flash burns (welding)
- 41 Drowning
- 42 Not elsewhere classified
- 43 Unclassified, insufficient data
- 44 Accident type without injuries

MINE WORKER ACTIVITY at Time of Injury/Illness

Variable Name: **MWACTIV**

- | | |
|---|--|
| <ol style="list-style-type: none"> 1 Accident recovery (equipment & workers) 2 Advance longwall roof support 3 Blasting; shoot coal 4 Blow gun to blow out drilled holes 5 Brush floor 6 Bar down face, rib or side, etc. 7 Caging; operate elevator; manlift; etc. 8 Cement work; gunite crew, etc. 9 Change house, bathing; changing clothes, etc. 10 Chute, pull or free 11 Clean up 12 Climb in raise/shaft/manway 13 Climb scaffolds/ladders/platforms; headframe/derrick/towers 14 Climb on piled material/ore/rock/timber/stone 15 Couple/uncouple mine car/tractor/jeep, etc. 16 Crawling/kneeling 17 Cross over (conveyor) 18 Double jack 19 Drill face/rib/side/down/rise (NOT ROOF BOLTER) 20 Electrical maintenance/repair 21 Environmental tests/checks 22 Escaping a hazard 23 Get on or off equip. machines, etc. 24 Grinding 25 Hand load; hand shoveling/mucking 26 Handling coal, rock, waste or ore 27 Handling explosives 28 Handling supplies or material, load and unload 29 Handling timber 30 Hand tools (not powered) 31 Hand tools (powered) 32 Hang or reposition tubing/pipe/rope/wire etc. 33 Horseplay 34 Idle (eat lunch, coffee break, etc.) 35 Impactor 36 Inspect equipment 37 Investigate, enter, or work in bins, tanks, etc. 38 Lay or repair railroad track/roadbed, switching tracks, etc. 39 Machine maint./repair 40 Move power cable 41 Moving equipment 42 Observe operations 43 Office and lab work 44 Operating Auger (surface mine) 45 Operating Auger (underground mine) 46 Operating Barge, boat, dredge 47 Operating Bulldozer 48 Operating Coal tippie/crusher/cleaning plant/breaker 49 Operating Continuous miner 50 Operating Conveyor belt (not riding) | <ol style="list-style-type: none"> 51 Operating Cutting machine 52 Operating Fork lift 53 Operating Front-end loader 54 Operating Grader 55 Operating Haulage truck 56 Operating Hoist 57 Operating Jitney 58 Operating Load-haul-dump 59 Operating Loading machine 60 Operating Locomotive (air trammer) 61 Operating Longwall, shear, plow 62 Operating Mantrip 63 Operating Mill equipment 64 Operating Mucking machine 65 Operating Power shovel/dragline/backhoe 66 Operating Rock dust machine 67 Operating Scraper (rig); cans, etc. 68 Operating Shortwall 69 Operating Shuttle car 70 Operating Slusher 71 Operating Utility truck 72 Operating Surface equipment NEC 73 Operating Underground equipment NEC 74 Remove or position hydraulic jack 75 Rerail equipment 76 Ride equipment 77 Roof bolter, drilling 78 Roof bolter, inserting bolt 79 Roof bolter, tramping 80 Roof bolter NEC 81 Sand fill (backfilling stopes w/sand, gob, etc.) 82 Set brattice 83 Set/remove/relocate props 84 Skip pocket (pull/free) 85 Spot cars; drop cars 86 Sprag/block/chock mine cars or other track equip. 87 Supervise 88 Surface construction NEC 89 Timbering (includes lagging and cribbing) 90 Travel to and from work location 91 Ventilation (maintenance/installation) 92 Walking/running 93 Welding and cutting 94 Wetting down working place 95 Working w/solvents 96 Working w/chemicals 97 Working w/noxious materials NEC 98 Other NEC 99 Unknown |
|---|--|

NATURE of INJURY/ILLNESS

Variable Name: **NATINJ**

- 100 Amputation or enucleation
- 110 Asphyxia, strangulation, drowning, etc.
- 120 Burn or scald (heat)
- 130 Burn, chemical
- 140 Concussion -- brain, cerebral
- 150 Disease, contagious or infectious
- 160 Contusion, bruise
- 170 Crushing
- 180 Cut, laceration, puncture
- 190 Dermatitis
- 200 Dislocation
- 210 Electric shock, electrocution
- 220 Fracture, chip
- 230 Freezing, frostbite
- 240 Hearing loss or impairment
- 250 Heat stroke, sunstroke, heat cramps, etc.
- 260 Hernia, rupture
- 270 Joint, tendon, or muscle inflammation or irritation
- 280 Poisoning, systemic
- 290 Other pneumoconiosis NEC
- 291 Asbestosis
- 292 Anthracosis
- 293 Black lung (coal workers' pneumoconiosis)
- 294 Silicosis
- 300 Other radiation effects NEC
- 301 Non-Contact electric arc burn
- 302 Laser burn
- 303 Lung cancer, ionizing radiation
- 304 Sunburn
- 310 Scratches, abrasions (superficial wounds)
- 320 Dust in eyes
- 330 Sprain, strains
- 340 Heart attack
- 350 Cerebral hemorrhage - NOT concussion
- 360 Electrical burn
- 370 Multiple injuries
- 380 Occupational diseases NEC
- 390 Other injury NEC
- 400 Unclassified, not determined

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Reduced Set of Regular JOB TITLE (Occupation) -- Variable Name: **JOBTITL2** (Variable discontinued and replaced with **OCCUP** beginning with 2013 data)

1 Belt/conveyor man/crew	48 Roof bolter mounted (left side)	131 Battery station oper./fan attendant
2 Electrician/helper/wireman	49 Supervisory/management/foreman/boss	133 Drill operator coal/wagon/diamond
3 Hoistman/hoist engineer/helper	50 Shuttle car/ram operator (standard side)	134 Drill helper/chuck tender
4 Mechanic/repairman/helper	52 Tailgate operator	144 Scalper/screen/sizing/tipple plant worker
5 Oiler/greaser	53 Track man/track gang/tamping mach. Oper	145 Sizing/washing/cleaning plant opr/worker
6 Rock duster	54 Brake man/rope rider/car dropper	149 Supervisory/management/foreman/boss
7 Shotfirer/shooter/blaster/helper	57 Stope miner	150 Shuttle/ram car operator
8 Vent man/crew/stop blder/brattice man	58 Drift miner	154 Brake man/rope rider/car dropper
9 Supplier/warehouse man/supply driver	59 Raise miner	160 Clam shell operator
10 Timberman/propman/steel setr/steel worker	59 Shopman/millwright/machinist/bit sharpnr	162 Shopman/millwright/machinist/bit sharpnr
11 Pumper	63 Miner NEC/Ug miner	163 Miner NEC/Surface miner
13 Cleanup man	65 Dispatcher	165 Dispatcher
16 Laborer/utilityman/bull gang	67 Shovel operator	166 Forklift
20 Survey crew	68 Bulldozer/tractor operator	167 Shovel oper. (Stripping/loading)
21 Welder	69 Motorman/swamper/snapper/switchman	168 Bulldozer/tractor oper.
22 Grizzlyman/chute puller/binman	75 Grader operator	169 Motorman/swamper/snapper/switchman
23 Skip tender/top loader/cager/station att	76 Truck driver	170 Auger operator
24 Trainee	82 Front-end-loader operator	171 Auger helper
25 Bobcat	83 Driver/jeep/pickup	172 Barge att/boat oper./dredge oper.
26 Car dump/shake-out/roscoe/loaderhead opr	87 Coal-m/nm sampler/technician/dust sampler	175 Grader/road roller operator
27 Jack-leg/stopper oper./Rock driller	94 Waterline man.plumber,carpenter/painter	176 Truck driver
28 Scoop car/tram/load haul dump operator	99 Unknown or NEC	178 Dragline/crane/backhoe oper.
29 Mucking machine operator	101 Belt man/conveyor crew/vulcanizer	179 Dryer/kiln oper/worker
30 Slusher operator	102 Electrician/helper/wireman	180 Fine coal plant operator
31 Battery charging station/fan attendant	103 Hoistman/hoist engineer/helper	182 Front-end loader/high lift operator
33 Drill helper; Chuck tender	104 Mechanic/repairman/helper	183 Driver/jeep/pickup
34 Drill operator (coal/wagon/diamond)	105 Oiler/greaser	184 Highwall drill oper/helper
35 Continuous miner helper	107 Shotfirer/blaster/shooter/helper	185 Lampman/building repair/maint/janitor
36 Continuous miner operator	109 Supplyman/warehouseman/supply driver	186 Rotary bucket excavator operator
37 Cutting machine helper	113 Cleanup man	187 Coal-m/nm sampler/dust sampler/lab tech
38 Cutting machine operator	115 Cement man/mason/bricklayer	190 Silo/train load out operator
39 Hand loader	116 Laborer/utility man/bull gang	191 Union official/safety rep.
40 Headgate operator	120 Survey crew	192 Engineer(elect/vent/mining)
41 Longwall jacksetter/snaker/helper	121 Welder/blacksmith	193 Weighman/scaleman/timekeeper/clerk
42 Loading machine helper	123 Skiptender/dumper/cager/station att.	194 Plumber/carpenter/painter
43 Loading machine/gathering arm loader opr	124 Trainee	195 Inspector/fire boss/preshifter
44 Longwall operator (tailgate side)	125 Bobcat operator	196 Watchman/guard
45 Rockman/hangup man/chute blaster	126 Car dump/rotary dump/shake-out opr/helpr	197 Yard engine engineer/fireman
46 Roof bolter (single head)	127 Jack-leg/stopper/rock driller	198 Stone finishing/sizing personnel
47 Roof bolter helper (single head)	129 Water attendant	199 Unknown or NEC

STATE (FIPS Code for Location) Variable Name: **STATE**

1 Alabama	33 New Hampshire
2 Alaska	34 New Jersey
4 Arizona	35 New Mexico
5 Arkansas	36 New York
6 California	37 North Carolina
8 Colorado	38 North Dakota
9 Connecticut	39 Ohio
10 Delaware	40 Oklahoma
12 Florida	41 Oregon
13 Georgia	42 Pennsylvania
15 Hawaii	44 Rhode Island
16 Idaho	45 South Carolina
17 Illinois	46 South Dakota
18 Indiana	47 Tennessee
19 Iowa	48 Texas
20 Kansas	49 Utah
21 Kentucky	50 Vermont
22 Louisiana	51 Virginia
23 Maine	53 Washington
24 Maryland	54 West Virginia
25 Massachusetts	55 Wisconsin
26 Michigan	56 Wyoming
27 Minnesota	60 American Samoa
28 Mississippi	66 Guam
29 Missouri	69 Northern Mariana Islands
30 Montana	72 Puerto Rico
31 Nebraska	78 Virgin Islands
32 Nevada	98 Contractor-no state (Address/Employment files only)

MINE TYPE Variable Name: **MINETYPE**

1 Underground metal
2 Underground nonmetal
3 Underground stone
4 Surface metal
5 Surface nonmetal
6 Surface stone
7 Mills - metal
8 Mills - nonmetal
9 Mills - stone
10 Sand & gravel
11 Underground coal
12 Surface coal
13 Mills - coal
14 Contractor (no specific mine type applies)

SOURCE of INJURY/ILLNESS Variable Name: **SOURCINJ**

1 Animals, insects, birds, reptiles, (live)	43 Electrical apparatus NEC	85 Molten metal
2 Bodily motion	44 Explosives	86 Metal covers and guards
3 Boilers	45 Flame, fire, smoke NEC	87 Wheels
4 Bags	46 Axe, hammer, sledge	88 Metal NEC (pipe, wire, nails, manhole covers)
5 Barrels, kegs, drums	47 Chisel	89 Broken rock, coal, ore, waste
6 Boxes, crates, cartons	48 Crowbar, pry bar	90 Caving rock, coal, ore, waste
7 Rubber, glass, plastic	49 Knife	91 Landslide (surface only)
8 Containers NEC	50 Wrench	92 Pulverized mineral
9 Brattice curtain	51 Hand tools not powered NEC	93 Sand, gravel, shell
10 Floor, walking surface	52 Abrasive stone or wheel grinder, buffer, polisher, waxer	94 Loose dirt & mud
11 Steps	53 Power saw	95 Mineral items NEC
12 Doors	54 Drill, rotary	96 Noise NEC
13 Storage tanks and bins	55 Drill, percussive	97 Plants, trees, vegetation
14 Dams, locks, ponds, bridges, etc.	56 Impactor, tamper	98 Pumps, fans, compressors, engines, turbines NEC
15 Mine headframe	57 Hand tools, powered NEC	99 Radioactive ore
16 Scaffolds, staging, etc.	58 Heat	100 Radiating substances of equipment NEC
17 Towers, poles, etc.	59 Kilns, melting furnaces, & retorts	101 Soaps, detergents, cleaning compounds NEC
18 Wharfs, docks, etc.	60 Space heaters	102 Steam
19 Buildings & structures, boats & rafts NEC	61 Other heating equipment NEC	103 Passenger cars and pickup trucks
20 Brick, ceramic	62 Cranes, derricks	104 Highway ore carriers, other large trucks, buses
21 Acids and alkalis	63 Elevators, cages, skips, etc.	105 Forklifts, stackers, tractors, etc.
22 Oxygen deficient atmosphere	64 Air hoist	106 Underground narrow gauge rail cars, motors, etc.
23 Noxious mine gases NEC	65 Chain hoist, chain blocks	107 Surface narrow gauge rail cars, motors, etc.
24 Chemicals and chemical compounds NEC	66 Electric hoist	108 Mine jeep, kersey, jitney (rail & nonrail), S&S tractor
25 Mine rescue equipment	67 Longwall supports (chocks and blocks)	109 Nonpowered vehicles (dollies, wheelbarrow, etc.)
26 Apparel NEC, Ring	68 Jacks (not longwall)	110 Vehicles NEC
27 Ice	69 Hoisting apparatus NEC	111 Cribbing
28 Snow	70 Fixed ladders	112 Posts, caps, headers, timber
29 Cold NEC	71 Movable ladders	113 Blocking
30 Coal (processed)	72 Ladders NEC	114 Pallets
31 Kiln products	73 Liquids NEC	115 Railroad ties
32 Methane gas	74 Machines NEC, welder, office machines	116 Wood items NEC
33 Coal & petroleum products NEC	75 Milling, cleaning plant, & breaker machines	117 Ground
34 Chutes and slides	76 Surface mining machines	118 Stairs, steps
35 Belt conveyors	77 Underground mining machines	119 Street, road
36 Longwall conveyor	78 Belts (not conveyor)	120 Working surfaces outside NEC
37 Shaking and vibrating conveyor	79 Chains, ropes, cables (not conveyor)	121 Back, mine roof, hanging wall
38 Conveyors NEC	80 Drums, pulleys, sheaves (not conveyor)	122 Side or rib
39 Motors	81 Mechanical power transmission apparatus NEC	123 Mine floor, bottom, footwall
40 Generators	82 Drill steel (all kinds)	124 Underground NEC
41 Transformers, converters	83 Roof bolts	125 Cement products, concrete blocks, dry grout, etc.
42 Conductors, electric cables and trolley poles	84 Steel rail (all sizes)	126 Water
		127 Miscellaneous NEC

Notes: See the "MSHA Data User's Guide" for further information.

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OCCUPATION of the Regular Job Title -- Variable Name: OCCUP
(Variable replaced JOBTITLE and JOBTITL2 beginning with 2013 data)

1	Beltman, Conveyor man and belt worker, Mobile bridge carrierman, Feeder operator, conveyor rider	175	Grader operator	376	Haul/Off road/Coal/Ore/Pit/Quarry/Rock/Rubber tire truck driver, Transportation truck driver
2	Electrician, Lineman	176	Truck driver	378	Crane operator, Mobile equipment operator (MEO), Dragline operator, Dropball operator, Rigger
3	Electrician helper	178	Backhoe operator, Trackhoe operator, Crane operator	379	Dryer operator, Kiln operator, Dry plant operator, Fluid operator, Bed dryer operator
4	Maintenance man, Mechanic, Repair/Service man, boilermaker, Fueller, Tire tech, Field service tech	182	Front-end loader operator	380	Fine coal plant operator
5	Mechanic helper	189	Shaftcrew, Shaft repair, Skip tender, Station tender	381	Hoist operator helper
6	Rock duster	199	Miner, NEC	382	Front-end loader, Scraper-loader operator, Pan operator, Payloader, Scraper rig operator
7	Blaster, Shooter, Shotfirer, Explosive worker, Powder gang/monkey	201	Beltman, Conveyor man and belt worker, Mobile bridge carrierman, Feeder operator, Conveyor rider	383	Driller, Highwall helper, Highwall drill helper
8	Stopping builder, Ventilation man, Mason man, Overcast	216	Trackman, Track worker, Track gang	384	Driller, Highwall operator, Highwall drill operator
9	Supply man, Supply worker, Nipper	220	Cage/Cager/Station attendant	385	Lampman, Lamp person
10	Timberman	221	Hoistman, Hoist operator	386	Refuse truck driver, Backfill truck driver, Stock pile truck driver
11	Wireman, Communications man	224	Underground transportation trainee	387	Rotary bucket excavator operator
15	Fan attendant	240	Loader head operator, Roscoe operator	388	Scalper-screen operator
16	Laborer, Bull gang, Faceman, Parts runner, Roustabout, Roof trimmer/scaler	250	Shuttle car operator, Mantrip operator, Ramcar operator, Rail runner, Buggy operator	389	Shaft repair, Skip tender, Station tender
24	Apprentice, Trainee	262	Brakeman, Roperider, Car runner, Spotterman, Snapper, Trip rider, Car rider, Flagman	390	Silo operator, Bin puller, Truck loader
28	Scoop car/Scooptram operator, Load/Haul/Dump (LHD) operator, Teletram operator	265	Dispatcher	391	Boomcat operator, Stripping shovel operator
32	Brattice man/worker	269	Motorman, Motor person, Swamper, Switchman, Locomotive operator	392	Tipple/Top lander/Skip dumper operator, Binman, Topman
33	Drill helper	276	Driver, Jeep driver, Tractor operator	393	Weighman, Scale person
34	Driller operator	289	Shaftcrew, Shaft repair, Skip tender, Station tender	394	Carpenter
35	Continuous miner helper, Coal mole helper, Bridgeman	299	Miner, NEC	395	Water truck operator
36	Continuous miner operator, Coal mole operator	301	Beltman, Conveyor man and belt worker, Mobile bridge carrierman, Feeder operator, Conveyor rider	396	Security guard, Watchman
37	Cutting machine helper, Undercutter operator helper	302	Electrician, Lineman	397	Fireman - locomotive, Railroad clam operator, Timekeeper, Yard engine operator
38	Cutting machine operator, Ripper, Universal operator	303	Electrician helper	398	Groundman, Yardman
39	Hand loader, Hand trammer	304	Maintenance man, Mechanic, Repair/Service man, Boilermaker, Fueller, Tire tech, Field service tech	399	Miner, Prospector, NEC
40	Headgate operator	305	Mechanic helper	402	Master electrician
41	LW Propman, Propman helper, Move crew if LW, Move-up man, Jacksetter, Advanceman LW helper	306	Welder (non-shop)	404	Master mechanic, Foreman, Supervisor
42	Loading machine/Gather arm loader helper	307	Blaster, Shooter, Shotfirer, Explosive worker, Powder gang/monkey	414	Quality control technician, Laboratory technician, Laboratory assistant
43	Gathering arm loader operator, Loading machine operator, Joy loader operator	308	Mason	418	Belt foreman, Maintenance foreman, Maintenance supervisor
44	Longwall operator, Chock operator, Shear operator, Plow operator	309	Supply man, Nipper	423	Draftsman, Surveyor/Transit work supervisor
45	Chute blaster, Rockman, Hang-up man, Raise blaster	310	Scalper-loader operator	430	Assistant mine foreman, Assistant mine manager
46	Roof bolter, Rock bolter, Pinner, Mobile roof support operator (MRS)	311	Wireman, Communications man	449	Mine manager, Mine foreman, Mine owner
47	Roof bolter helper, Rock bolter helper, Pinner helper	312	Belt vulcanizer	456	Assayer, Geologist, Metallurgist, Engineer, Engineer management
48	Roof bolter (Mounted) (Return side)	313	Cleanup man, Cleanup worker	462	Examiner, Fire boss, Pre-shift examiner, Mine examiner
49	Section foreman, Bullgang foreman, Labor foreman, Leadman, Shift boss	314	Coal sampler	464	Inspector
50	Shuttle car operator, Mantrip operator, Ramcar operator, Rail runner, Buggy operator	315	Fan attendant	481	Superintendent
51	Stall driver	316	Laborer, Blacksmith, Bull gang, Parts runner, Roustabout, Pick-up man, Pitman	489	Outside foreman, Leadman
52	Tailgate operator	317	Rodman, Surveyor/Transit helper	494	Prep plant foreman, Supervisor, Mill plant supervisor, Kiln supervisor
53	Utility man, Errand boy, Service truck operator	318	Greaser, Grease man, Oiler, Lube man, Dragline oiler	495	Safety director
54	Discontinued 1/31/2014. Several other codes cover Scoop Car Operator	319	Welder (shop)	496	Union representative
63	Ledgeman/hand, Quarry man	320	Cage/Cager/Station attendant, Aerial tram (outside only)	497	Clerk, Timekeeper, Office worker, Director of sales
67	Power shovel operator	321	Hoistman, Hoist operator	590	Education specialist
68	Bulldozer operator, Universal operator, Heavy equipment operator, Operating engineer	322	Coal strip operator	591	Mineral industrial safety officer
70	Auger operator, Auger Crew Supervisor	323	Transit man, Surveyor/Transit worker	592	Mine safety instructor
75	Grader operator	324	Backhoe operator, Trackhoe operator	593	Safety representative
76	Truck driver	326	Forklift operator	594	Training specialist
78	Backhoe operator, Trackhoe operator, Crane operator	327	Pumper	601	Stoper miner
82	Front-end loader operator	328	Utility man, Shift tech, Service/Dump truck operator	602	Drift miner
89	Shaftcrew, Shaft repair, Skip tender, Station tender	329	Vacuum filter operator, Flotation mill/Concentrator operator, Flotation plant operator	603	Raise miner
99	Miner, NEC	331	Clam/Clamshell operator, Claw operator	604	Mucking machine operator
101	Beltman, Conveyor man and belt worker, Mobile bridge carrierman, Feeder operator, Conveyor rider	333	Drill helper	605	Slusher operator
102	Electrician, Lineman	334	Drill operator	614	Wagon drill operator, Air-track driller, Carriage mounted drill operator
103	Electrician helper	340	Boom operator	615	Rotary drill operator (electric/hydraulic)
104	Maintenance man, Mechanic, Repair/Service man, Boilermaker, Fueller, Tire tech, Field service tech	342	Bit sharpener, Bit grinder, Grinder	618	Diamond drill operator, Core driller, Exploration driller, Longhole driller, Prospect driller
105	Mechanic helper	343	Car trimmer, Car loader, Bin puller, Truck loader	619	Drill helper, Chuck tender
106	Rock duster	345	Crusher attendant/operator, Pan feeder operator/worker	620	Hand scaler
108	Stopping builder, Ventilation man, Mason man, Overcast	347	Froth cell operator, Flotation mill operator, Concentrator operator	621	Raise borer operator
109	Supply man, Supply worker, Nipper	348	Machinist	631	Ground controller
110	Timberman	349	Rotary dump operator, Car dump operator	632	Cement worker, Concrete worker, Form man, Mandoseal man
111	Wireman, Communications man	350	Shuttle car operator, Mantrip operator, Ramcar operator, Rail runner, Buggy operator	634	Hangup worker, Chute blaster
112	Belt vulcanizer	351	Scoop tram operator, Load/Haul/Dump operator	635	Shotcrete, Gunite worker
113	Cleanup man, Cleanup worker	352	Steel worker, Iron metal worker, Iron worker	636	Sandfiller (dry)
114	Coal sampler	353	Trespasser	637	Sandfiller (wet), Slurry operator
116	Laborer, Bull gang, Parts runner, Roustabout, Roof trimmer/scaler	354	Sweeper operator	638	Mechanical scaling worker
117	Rodman, Surveyor/Transit helper	355	Chainman, Surveyor/Transit helper	639	Skip tender, Station tender
118	Greaser, Grease man, Oiler, Lube man, Dragline oiler	356	Rock driller	640	Ball/Rod/Pebble/Hand/Limestone/Dry mill operator, Roller operator
119	Welder	357	Washer operator, Sizing operator	641	Hammer mill operator, Breaker mill operator, Jaw mill operator
122	Coal dump operator	358	Water circuit operator, Slurry operator, Mix operator, Pump operator worker	642	Stone finishing and sizing personnel, Stone/Rock cut/ Polish/Saw operator, Splitter, Cutter, Trimmer
123	Transit man, Surveyor/Transit worker	360	Shopman repair cars, Mechanic	643	Hydrate plant operator
124	Apprentice, Trainee	362	Brakeman, Roperider, Car runner, Spotterman, Snapper, Trip rider, Car rider, Flagman	644	Dry screening plant operator, Screen house operator
128	Scoop tram operator, Load/Haul/Dump operator	363	Ledgeman/hand, Quarry man	646	Leaching operator
146	Roof bolter, Rock bolter, Pinner, Mobile roof support operator (MRS)	364	Janitor	647	Pelletizing operator
149	Bull gang foreman, Labor foreman, Leadman, Section foreman, Shift boss	365	Dispatcher	648	Bagging, Package operator
154	Belt cleaner, Picker	366	Waterboy	649	Refinery worker
156	Rock driller	367	Coal/ore shovel operator, Shovelers, Power shoveler	660	Ramcar operator
157	Pumper	368	Bulldozer operator, Universal operator, Heavy equipment operator, Operating engineer	662	Grizzly worker, Grizzly tender, Grizzlyman, Chute puller, Chute tapper
159	Water line man	369	Motorman, Motor person, Swamper, Switchman, Locomotive operator	664	Hand trammer
160	Shopman	370	Auger operator, Auger Crew supervisor	670	Janitor
163	Ledgeman/hand, Quarry man	371	Auger helper	672	Building repair man, Maintenance
168	Bulldozer operator, Universal operator, Heavy equipment operator, Operating engineer	372	Barge/Boat/Dredge/Towbarge/Towboat/Leach operator, Riverman, Deck hand	673	Lab Technician
170	Car loader	373	Car dropper, Car shake out operator	674	Warehouse, Supply handler
		374	Warehouseman, Bagger, Palletizer/Stacker, Storekeeper, Packager, Fabricator, Cleaning plant operator	675	Plumber, Pipefitter, Millwright
		375	Grader operator, Roadgrader operator	677	Bobcat operator
				678	Painter
				679	Jackhammer operator, Chiphammer operator