

Appendix C: Industries and Occupations at High Risk for Occupational Mortality

For Indicator 16, high-risk industries and occupations had fatal injury rates higher than the national occupational fatality rate reported by the Bureau of Labor Statistics (BLS) Census of Fatal Occupational Injuries (CFOI). The data source for industry and occupation-specific employment is the Current Population Survey (CPS). Prior to 2003, CPS data were coded using the 1990 occupation and industry classification systems developed by the Bureau of the Census. From 2003 on, the CPS has used the 2002 Census occupation and industry classification systems, which are derived from the 2000 Standard Occupational Classification (SOC) and the 2002 North American Industry Classification System (NAICS).

Accompanying each industry in the table is the associated 1990 Bureau of the Census industry code. Note that the table in Appendix A lists industries using Standard Industry Classification (SIC) codes. These two tables are not consistent because the sources of the “high risk” industries differ for Indicator 14 and Indicator 16 (the BLS Annual Survey was used to identify the industries for Indicator 14). The Annual Survey is limited to private sector hired workers while CFOI includes anyone working for pay, including the self-employed. The most appropriate source of data on the total number employed is the Current Population Survey (CPS), which is conducted by the Census Bureau. The CPS utilizes Census Bureau industry codes. The table below also illustrates 1990 Bureau of the Census codes for each occupation listed.

‘High-Risk’ Industries & Occupations, 2000 - 2002

Twenty-seven industries had fatality rates greater than 10 per 100,000 workers in 1998 – more than double the national rate that year which was 4.5 fatalities per 100,000 workers – according to the BLS CFOI. Twenty-four occupations had fatality rates greater than 20 per 100,000 workers. In generating Indicator 16 for years 2000 – 2002, use the following 1990 Census codes to identify industries and occupations with high risk for mortality in the Current Population Survey data.

1990 Census Industry Codes

010	Agricultural crop production
011	Agricultural livestock production
020	Landscape and horticultural services
030	Agricultural services
031	Forestry
032	Fishing, hunting and trapping
040	Metal mining
041	Coal mining
042	Oil and gas extraction
050	Nonmetallic mining and quarrying, except fuel
060	Construction
201	Miscellaneous petroleum and coal products
230	Logging
251	Cement, concrete, gypsum and plaster products
360	Ship and boat building and repair
402	Taxicab service
410	Trucking service
420	Water transportation
471	Sanitary services
500	Wholesale motor vehicles and equipment
531	Wholesale scrap and waste materials
551	Wholesale farm product raw materials
552	Wholesale petroleum products
590	Mobile home dealers
622	Miscellaneous vehicle dealers
650	Liquor stores
752	Electrical repair shops

1990 Census Occupation Codes

226	Airplane pilots and navigators
461	Guides
473	Farmers, except horticultural
475	Managers, farms, except horticultural
477	Supervisors, farm workers
479	Farm workers
496	Timber cutting and logging occupations
498	Fishers
576	Electrician apprentices
577	Electrical power installers and repairers
595	Roofers
597	Structural metal workers
599	Constructions trades, nec
613	Supervisors, extractive occupations
616	Mining machine operators
804	Truck drivers
806	Driver-sales workers
809	Taxicab drivers and chauffeurs
829	Sailors and deckhands
853	Excavating and loading machine operators
855	Grader, dozer, and scraper operators
859	Miscellaneous material moving equipment operators
869	Construction laborers
875	Garbage collectors

‘High-Risk’ Industries & Occupations, 2003 - 2008

Thirty industries had fatality rates greater than 9.5 per 100,000 workers in 2003 – more than double the national rate which was 4.0 per 100,000 workers – according to the BLS CFOI. Fifty-seven occupations had fatality rates greater than 9.5 per 100,000 workers. In generating Indicator 16 for years 2003 – 2008, use the following Census codes to identify industries and occupations with high risk for mortality in the Current Population Survey data.

2000 Census Industry Code

170	Crop production	4480	Farm product raw materials merchant, wholesalers
180	Animal Production	4490	Petroleum and petroleum product merchant, wholesalers
270	Logging	4680	Other motor vehicle dealers
280	Fishing, hunting, trapping	5680	Fuel dealers
290	Support activities for agriculture and forestry	6090	Water transportation
370	Oil and gas extraction	6170	Truck transportation
380	Coal mining	6190	Taxi and limousine service
470	Nonmetallic mineral mining and quarrying	6280	Scenic and sightseeing transportation
490	Support activities for mining	6290	Services incidental to transportation
770	Construction	7190	Commercial, industrial, and other intangible assets rental and leasing
2570	Cement, concrete, lime, and gypsum product manufacturing	7770	Landscaping services
2590	Miscellaneous nonmetallic mineral product manufacturing	7790	Waste management and remediation services
2770	Foundries	8670	Recreational vehicle parks and camps, and rooming and boarding houses
3770	Sawmills and wood preservation	8690	Drinking places, alcoholic beverages
3780	Veneer, plywood, and engineered wood product manufacturing		
4280	Recyclable material merchant, wholesalers		

2000 Census Occupation Code

200	Farm, ranch, and other agricultural managers	6600	Helpers, construction trades
210	Farmers and ranchers	6720	Hazardous materials removal workers
1520	Petroleum engineers	6760	Miscellaneous construction and related workers
3740	Fire fighters	6800	Derrick, rotary drill, and service unit operators, oil, gas, and mining
3920	Security guards and gaming surveillance officers	6820	Earth drillers, except oil and gas
3940	Crossing guards	6830	Explosives workers, ordnance handling experts, and blasters
4210	First-line supervisors/managers of landscaping, lawn service, and groundskeeping workers	6840	Mining machine operators
4250	Grounds maintenance workers	6910	Roof bolters, mining
4340	Animal trainers	6920	Roustabouts, oil and gas
6000	First-line supervisors/managers of farming, fishing, and forestry workers	6930	Helpers, extraction workers
6050	Miscellaneous agricultural workers	6940	Other extraction workers
6100	Fishers and related fishing workers	7000	First-line supervisors/managers of mechanics, installers, and repairers
6130	Logging workers	7220	Heavy vehicle and mobile equipment service technicians and mechanics
6200	First-line supervisors/managers of construction trades and extraction workers	7260	Miscellaneous vehicle and mobile equipment mechanics, installers, and repairers
6210	Boilermakers	7340	Maintenance and repair workers, general
6250	Cement masons, concrete finishers, and terrazzo workers	7350	Maintenance workers, machinery
6260	Construction laborers	7410	Electronic power-line installers and repairers
6300	Paving, surfacing, and tamping equipment operators	7420	Telecommunications line installers and repairers
6320	Operation engineers and other construction equipment operators	7520	Commercial drivers
6350	Electricians	7610	Helpers--installation, maintenance, and repair workers
6460	Plasterers and stucco masons	8620	Water and liquid waste treatment plant and system operators
6510	Roofers		
6530	Structural iron and steel workers		

9030	Aircraft pilots and flight engineers	9510	Crane and tower operators
9130	Driver/sales workers and truck drivers	9520	Dredge, excavating, and loading machine operators
9140	Taxi drivers and chauffeurs	9650	Pumping station operators
9150	Motor vehicle operators, all other	9720	Refuse and recyclable material collectors
9230	Railroad brake, signal, and switch operators	9750	Material moving workers, all other
9240	Railroad conductors and yardmasters		
9300	Sailors and marine oilers		
9310	Ship and boat captains and operators		

Technical Note:

The list of high-risk industries and occupations will be updated every five years to reflect changes in industries and occupations with high risk for mortality over time. For example, the industries and occupations with high risk for occupational mortality according to the 1998 BLS CFOI Survey may differ somewhat from the high-risk industries and occupations identified through the 2003 BLS CFOI Survey. It is not anticipated that year-to-year changes will have significant effect on comparative or trend analyses, but these changes will be evaluated.

The composition and grouping of industries and occupations changed from the 1990 Census classification system to the 2002 Census classification system. Due to differences between the two coding systems, users should be cautious when comparing indicator 16 results before 2003 with results from later years.