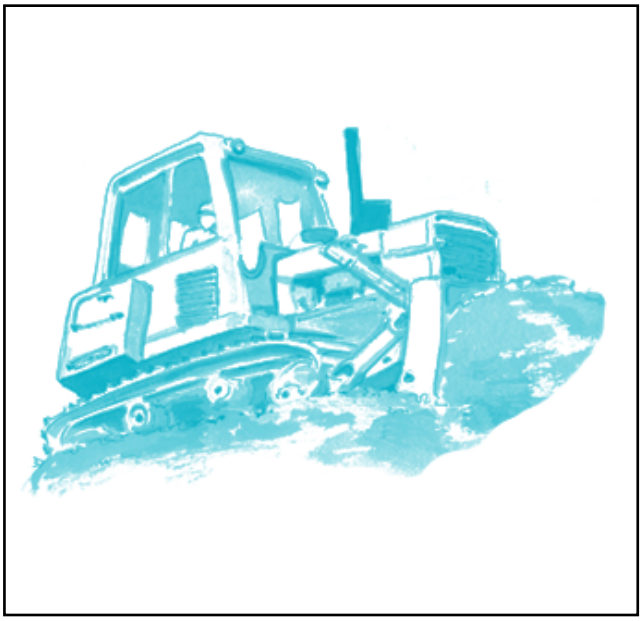

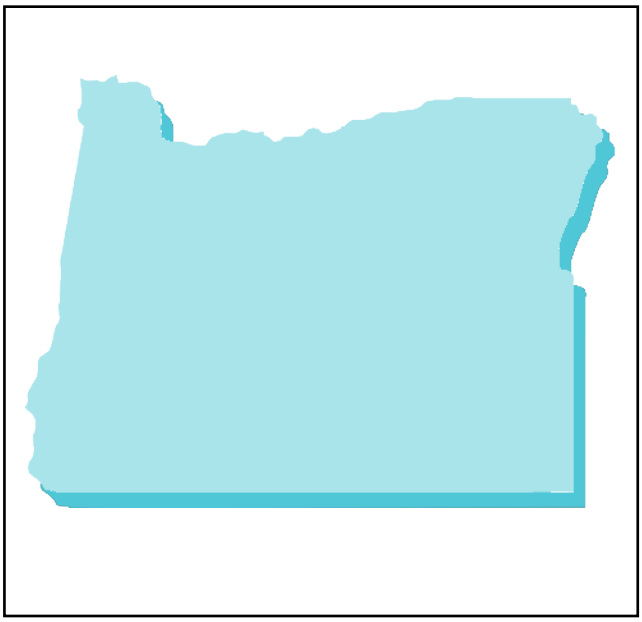

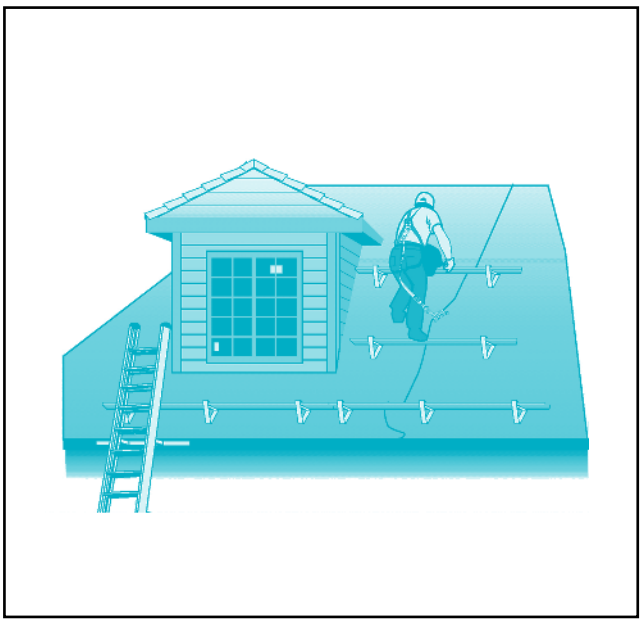

Oregon Occupational Injury and Illness Survey Table and Appendices

Calendar Year 2010

Information Management Division

Oregon Department of Consumer and Business Services

March 2012

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Table 1. Oregon Incidence rates[1] of nonfatal occupational injuries and illnesses by industry and case types, 2010

Industry[2]	NAICS code[3]	2010 Average annual employment[4] (000's)	Total recordable cases	Cases with days away from work, job transfer, or restriction			Other recordable cases
				Total	Cases with days away from work[5]	Cases with job transfer or restriction	
All industries including State and local government[6]		1,559.4	4.0	2.2	1.5	0.8	1.8
Private industry[6]		1,321.8	3.9	2.2	1.5	0.8	1.7
Goods-producing[6]		271.8	4.7	2.7	1.6	1.1	2.0
Natural resources and mining[6,7]		40.0	6.5	3.6	2.2	1.4	2.9
Agriculture, forestry, fishing and hunting[6]	11	38.3	6.6	3.7	2.2	1.5	3.0
Crop production (scope changed in 2009)[6]	111	20.9	6.5	3.6	1.9	1.7	2.9
Fruit and tree nut farming[6]	1113	6.6	4.1	2.3	2.0	0.3	1.8
Greenhouse, nursery, and floriculture production[6]	1114	9.0	7.1	3.8	1.5	2.3	3.3
Forestry and logging	113	5.3	8.5	5.9	5.0	0.9	2.6
Logging	1133	4.9	9.3	6.4	5.5	0.9	2.8
Support activities for agriculture and forestry	115	9.8	5.9	2.9	1.5	1.5	3.0
Support activities for forestry	1153	3.7	9.3	4.2	2.4	1.8	5.1
Mining[7]	21	1.6	1.8	([10])	([10])	([10])	([10])
Construction	23	69.3	4.5	2.5	1.9	0.6	2.0
Construction of buildings	236	16.6	2.9	1.3	0.7	0.5	1.6
Residential building construction	2361	9.6	2.1	0.7	0.3	--	1.4
Nonresidential building construction	2362	7.0	3.9	1.9	1.3	0.7	2.0
Heavy and civil engineering construction	237	9.3	3.5	1.8	0.8	0.9	1.8
Utility system construction	2371	4.0	3.3	1.9	1.3	0.7	1.4
Highway, street, and bridge construction	2373	3.7	5.2	2.3	0.7	1.6	2.9
Specialty trade contractors	238	43.5	5.3	3.1	2.6	0.5	2.2
Foundation, structure, and building exterior contractors	2381	8.2	10.3	8.3	7.0	1.3	2.0
Poured concrete foundation and structure contractors	23811	1.2	5.9	3.4	--	3.0	2.5
Roofing contractors	23816	2.7	7.2	5.3	3.8	1.5	1.9
Building equipment contractors	2382	19.3	3.9	1.7	1.4	0.3	2.2
Electrical contractors	23821	8.6	1.9	0.7	0.3	0.5	1.2
Plumbing, heating, and air-conditioning contractors	23822	9.2	6.3	3.0	2.8	([10])	3.3
Building finishing contractors	2383	10.0	4.7	1.5	0.9	0.7	3.1
Drywall and insulation contractors	23831	2.5	6.5	3.7	1.9	1.8	2.8

See footnotes at end of table.

Table 1. Oregon Incidence rates[1] of nonfatal occupational injuries and illnesses by industry and case types, 2010--Continued

Industry[2]	NAICS code[3]	2010 Average annual employment[4] (000's)	Total recordable cases	Cases with days away from work, job transfer, or restriction			Other recordable cases
				Total	Cases with days away from work[5]	Cases with job transfer or restriction	
Manufacturing	31-33	162.5	4.4	2.6	1.4	1.2	1.8
Food manufacturing	311	23.7	6.4	4.4	2.1	2.3	2.0
Fruit and vegetable preserving and specialty food manufacturing	3114	9.6	6.4	4.4	2.3	2.1	1.9
Animal slaughtering and processing	3116	1.3	6.0	3.9	2.1	1.8	2.1
Bakeries and tortilla manufacturing	3118	4.6	6.3	4.6	2.0	2.6	1.7
Other food manufacturing	3119	3.1	5.4	4.1	2.0	2.1	1.2
Beverage and tobacco product manufacturing	312	3.2	5.6	1.5	0.9	([10])	4.2
Wood product manufacturing	321	20.2	5.9	3.6	1.7	1.9	2.4
Sawmills and wood preservation	3211	6.2	8.1	4.9	2.2	2.7	3.2
Sawmills and wood preservation	32111	6.2	8.1	4.9	2.2	2.7	3.2
Sawmills	321113	5.7	8.1	4.8	2.3	2.5	3.3
Wood preservation	321114	0.4	8.0	6.5	([10])	6.1	--
Veneer, plywood, and engineered wood product manufacturing	3212	7.0	4.3	2.7	1.2	1.4	1.6
Veneer, plywood, and engineered wood product manufacturing	32121	7.0	4.3	2.7	1.2	1.4	1.6
Softwood veneer and plywood manufacturing	321212	3.7	5.4	2.9	1.3	1.5	2.5
Other wood product manufacturing	3219	7.1	5.6	3.3	1.7	1.6	2.3
Millwork	32191	5.0	5.4	3.1	1.5	1.5	2.4
Wood window and door manufacturing	321911	2.0	6.1	3.5	1.5	2.1	2.6
Cut stock, resawing lumber, and planing	321912	2.1	5.6	3.2	1.6	1.5	2.5
Other millwork (including flooring)	321918	0.9	3.3	([10])	([10])	([10])	([10])
Paper manufacturing	322	5.2	2.5	1.7	0.9	0.8	0.8
Pulp, paper, and paperboard mills	3221	2.9	2.2	1.4	0.9	0.5	0.8
Paper mills	32212	1.8	3.1	2.1	1.4	([10])	1.0
Converted paper product manufacturing	3222	2.3	2.9	2.1	1.0	1.1	0.8
Printing and related support activities	323	5.7	2.6	1.2	0.8	0.4	1.4
Printing and related support activities	3231	5.7	2.6	1.2	0.8	0.4	1.4
Printing	32311	5.3	2.3	1.1	0.7	0.4	1.1
Commercial lithographic printing	323110	2.6	2.8	1.1	0.7	--	1.8
Chemical manufacturing	325	3.5	2.1	1.7	--	0.6	0.4
Plastics and rubber products manufacturing (scope changed in 2009)	326	4.4	6.0	4.0	2.4	1.6	2.0
Plastics product manufacturing (scope changed in 2009)	3261	3.9	6.2	4.1	2.3	1.8	2.1

See footnotes at end of table

Table 1. Oregon Incidence rates[1] of nonfatal occupational injuries and illnesses by industry and case types, 2010--Continued

Industry[2]	NAICS code[3]	2010 Average annual employment[4] (000's)	Total recordable cases	Cases with days away from work, job transfer, or restriction			Other recordable cases
				Total	Cases with days away from work[5]	Cases with job transfer or restriction	
Nonmetallic mineral product manufacturing	327	4.4	4.5	2.2	1.3	0.9	2.3
Primary metal manufacturing	331	7.2	7.1	4.8	2.7	2.1	2.4
Foundries	3315	4.5	7.8	5.7	3.5	2.2	2.0
Fabricated metal product manufacturing	332	13.6	7.3	3.4	2.1	1.3	3.8
Cutlery and handtool manufacturing	3322	2.2	6.6	4.0	1.3	2.7	2.5
Architectural and structural metals manufacturing	3323	3.3	9.2	6.1	4.0	2.1	3.1
Machine shops; turned product; and screw, nut, and bolt manufacturing	3327	3.0	6.2	1.1	--	([10])	5.1
Machinery manufacturing (scope changed in 2009)	333	9.4	4.5	2.7	1.3	1.4	1.8
Industrial machinery manufacturing (scope changed in 2009)	3332	2.9	2.7	1.7	0.9	0.8	1.0
Computer and electronic product manufacturing	334	34.9	1.0	0.5	0.3	0.2	0.5
Semiconductor and other electronic component manufacturing	3344	25.7	0.9	0.4	0.2	0.2	0.5
Navigational, measuring, electromedical, and control instruments manufacturing (scope changed in 2009)	3345	5.0	1.3	0.8	0.4	0.4	0.5
Electrical equipment, appliance, and component manufacturing	335	2.1	3.1	1.4	([10])	1.0	1.7
Transportation equipment manufacturing (scope changed in 2009)	336	9.8	7.8	4.8	2.1	2.7	3.0
Motor vehicle body and trailer manufacturing	3362	2.3	12.6	6.0	3.4	2.6	6.7
Motor vehicle parts manufacturing	3363	1.6	2.9	2.5	([10])	1.7	([10])
Furniture and related product manufacturing (scope changed in 2009)	337	4.7	2.3	0.9	0.6	([10])	1.4
Miscellaneous manufacturing	339	7.4	2.9	1.4	0.5	0.9	1.5
Service-providing		1,050.0	3.7	2.1	1.4	0.7	1.6
Trade, transportation, and utilities[9]		301.7	4.5	2.8	1.7	1.1	1.7
Wholesale trade	42	69.2	3.2	2.1	1.2	0.9	1.0
Merchant wholesalers, durable goods	423	30.7	2.9	1.9	1.1	0.8	1.0
Merchant wholesalers, nondurable goods	424	25.3	4.4	3.2	1.7	1.4	1.3
Grocery and related product merchant wholesalers	4244	11.1	6.6	4.7	2.9	1.9	1.9
Retail trade	44-45	182.6	4.8	2.9	1.6	1.2	1.9
Motor vehicle and parts dealers	441	21.4	4.4	2.7	1.5	1.1	1.7
Automotive parts, accessories, and tire stores	4413	7.2	6.0	3.9	1.7	2.2	2.2

See footnotes at end of table

Table 1. Oregon Incidence rates[1] of nonfatal occupational injuries and illnesses by industry and case types, 2010--Continued

Industry[2]	NAICS code[3]	2010 Average annual employment[4] (000's)	Total recordable cases	Cases with days away from work, job transfer, or restriction			Other recordable cases
				Total	Cases with days away from work[5]	Cases with job transfer or restriction	
Furniture and home furnishings stores	442	6.0	2.1	1.9	0.8	1.0	([10])
Building material and garden equipment and supplies dealers	444	13.4	6.5	4.4	2.3	2.0	2.2
Building material and supplies dealers	4441	11.5	6.8	4.5	2.2	2.3	2.3
Food and beverage stores	445	37.8	6.7	4.1	2.5	1.6	2.6
Grocery stores	4451	33.0	7.4	4.4	2.8	1.7	2.9
Health and personal care stores	446	7.9	3.0	1.7	--	0.9	--
Gasoline stations	447	10.0	2.0	0.7	0.2	--	--
Clothing and clothing accessories stores	448	15.5	4.1	1.2	1.1	0.2	2.9
Sporting goods, hobby, book, and music stores	451	9.8	3.4	0.7	0.7	([10])	2.7
General merchandise stores	452	37.6	5.6	4.1	2.0	2.1	1.5
Miscellaneous store retailers	453	9.8	3.0	1.9	1.0	0.9	--
Transportation and warehousing[9]	48-49	45.2	5.8	3.9	2.7	1.2	1.9
Air transportation	481	4.0	7.1	4.4	2.9	1.5	2.7
Truck transportation	484	16.5	4.3	2.6	2.0	0.6	1.8
General freight trucking	4841	11.1	4.8	2.9	2.0	0.8	2.0
Specialized freight trucking	4842	5.4	3.1	1.8	1.8	([10])	1.2
Transit and ground passenger transportation	485	4.7	3.4	2.5	1.9	--	0.9
Support activities for transportation	488	6.3	4.7	2.5	1.9	0.6	2.2
Couriers and messengers	492	6.0	15.0	11.4	6.6	4.8	3.6
Warehousing and storage	493	7.1	6.5	5.2	3.4	1.8	1.3
Utilities	22	4.6	3.9	2.0	1.3	0.8	1.9
Utilities	221	4.6	3.9	2.0	1.3	0.8	1.9
Electric power generation, transmission and distribution	2211	3.1	5.3	2.7	1.6	1.1	2.7
Information	51	32.3	1.1	0.3	0.2	0.1	0.8
Publishing industries (except Internet)	511	14.1	0.4	0.1	([10])	([10])	0.2
Telecommunications (scope changed in 2009)	517	6.9	2.4	0.4	0.4	--	2.0
Financial activities		81.4	1.6	0.4	0.3	0.1	1.2
Finance and insurance	52	56.2	0.5	0.1	0.1	([10])	0.3

See footnotes at end of table

Table 1. Oregon Incidence rates[1] of nonfatal occupational injuries and illnesses by industry and case types, 2010--Continued

Industry[2]	NAICS code[3]	2010 Average annual employment[4] (000's)	Total recordable cases	Cases with days away from work, job transfer, or restriction			Other recordable cases
				Total	Cases with days away from work[5]	Cases with job transfer or restriction	
Real estate and rental and leasing	53	25.2	4.6	1.3	0.8	0.5	3.3
Professional and business services		185.3	2.2	1.4	1.2	0.2	0.8
Management of companies and enterprises	55	36.4	1.6	1.1	1.0	0.1	0.6
Administrative and support and waste management and remediation services	56	78.0	3.6	2.4	1.9	0.5	1.2
Administrative and support services (scope changed in 2009)	561	72.9	3.6	2.4	1.9	0.5	1.2
Waste management and remediation services	562	5.2	3.4	1.7	1.3	0.4	1.7
Education and health services		220.5	5.4	2.8	1.7	1.1	2.6
Educational services	61	27.3	1.2	0.4	0.3	0.1	0.8
Educational services	611	27.3	1.2	0.4	0.3	0.1	0.8
Colleges, universities, and professional schools	6113	10.4	1.9	0.8	0.5	0.3	1.0
Health care and social assistance	62	193.1	5.8	3.1	1.9	1.2	2.8
Ambulatory health care services	621	69.6	2.6	1.1	0.7	0.4	1.5
Hospitals	622	51.5	8.1	3.7	2.5	1.2	4.4
Nursing and residential care facilities	623	42.7	9.0	5.4	2.7	2.7	3.5
Social assistance	624	29.4	4.9	3.2	2.2	0.9	1.7
Leisure and hospitality		167.3	3.7	1.8	1.5	0.4	1.9
Arts, entertainment, and recreation	71	22.4	3.7	1.5	1.1	0.4	2.2
Accommodation and food services	72	144.9	3.7	1.9	1.5	0.4	1.9
Accommodation	721	24.8	5.2	3.2	2.1	1.1	2.1
Food services and drinking places	722	120.2	3.4	1.6	1.4	0.2	1.8
Other services, except public administration	81	61.4	3.4	2.4	2.1	0.2	1.0
Repair and maintenance	811	15.1	6.4	5.6	5.5	0.1	0.7

See footnotes at end of table

Table 1. Oregon Incidence rates[1] of nonfatal occupational injuries and illnesses by industry and case types, 2010--Continued

Industry[2]	NAICS code[3]	2010 Average annual employment[4] (000's)	Total recordable cases	Cases with days away from work, job transfer, or restriction			Other recordable cases
				Total	Cases with days away from work[5]	Cases with job transfer or restriction	
State and local government		237.7	4.6	2.2	1.6	0.6	2.4
State government		64.3	3.2	1.8	1.4	0.4	1.4
Goods-producing[6]		2.5	6.6	5.7	2.6	3.1	0.9
Service-providing		61.8	3.0	1.7	1.4	0.3	1.4
Education and health services		33.4	2.7	1.5	1.2	0.3	1.2
Educational services	61	27.8	2.2	0.8	0.6	0.2	1.4
Educational services	611	27.8	2.2	0.8	0.6	0.2	1.4
Health care and social assistance	62	5.7	4.2	3.4	3.0	0.4	0.7
Hospitals	622	--	8.6	7.0	6.2	0.8	1.6
Public administration	92	27.4	3.3	1.8	1.4	0.3	1.6
Justice, public order, and safety activities	922	10.1	3.8	1.9	1.5	0.4	1.9
Justice, public order, and safety activities	9221	10.1	3.8	1.9	1.5	0.4	1.9
Police protection	92212	1.3	5.4	3.0	2.4	([10])	2.4
Correctional institutions	92214	5.3	4.3	2.1	1.7	0.5	2.1
Local government		173.4	5.1	2.3	1.6	0.7	2.8
Service-providing		171.5	5.1	2.3	1.6	0.7	2.8
Trade, transportation, and utilities[9]		9.0	6.4	3.9	3.4	0.5	2.5
Transportation and warehousing[9]	48-49	6.1	7.9	5.1	4.6	0.5	2.8
Transit and ground passenger transportation	485	5.2	8.5	5.7	5.1	--	2.8
Utilities	22	--	3.4	1.5	1.1	([10])	1.9
Education and health services		103.4	4.2	1.4	1.1	0.3	2.7
Educational services	61	96.9	4.2	1.4	1.0	0.3	2.8

See footnotes at end of table

Table 1. Oregon Incidence rates[1] of nonfatal occupational injuries and illnesses by industry and case types, 2010--Continued

Industry[2]	NAICS code[3]	2010 Average annual employment[4] (000's)	Total recordable cases	Cases with days away from work, job transfer, or restriction			Other recordable cases
				Total	Cases with days away from work[5]	Cases with job transfer or restriction	
Educational services	611	96.9	4.2	1.4	1.0	0.3	2.8
Elementary and secondary schools	6111	71.0	4.1	1.3	1.0	0.4	2.8
Health care and social assistance	62	6.5	3.7	1.9	1.7	([10])	1.7
Hospitals	622	2.5	6.8	3.5	3.3	([10])	3.3
Nursing and residential care facilities	623	0.4	7.2	([10])	([10])	([10])	([10])
Public administration	92	48.7	6.5	3.5	2.3	1.3	3.0
Justice, public order, and safety activities	922	8.6	10.2	5.4	3.6	1.8	4.7
Justice, public order, and safety activities	9221	8.6	10.2	5.4	3.6	1.8	4.7
Police protection	92216	3.2	13.7	9.4	7.3	--	--

[1] Incidence rates represent the number of injuries and illnesses per 100 full-time workers and were calculated as: (N/EH) x 200,000 where

N = number of injuries and illnesses
EH = total hours worked by all employees during the calendar year
200,000 = base for 100 equivalent full-time workers (working 40 hours per week, 50 weeks per year)

[2] Totals include data for industries not shown separately.
[3] *North American Industry Classification System* 2007 Edition
[4] Employment is expressed as an annual average and is derived primarily from the BLS-State Quarterly Census of Employment and Wages.
[5] Days-away-from-work cases include those that result in days away from work with or without job transfer or restriction.
[6] Excludes farms with fewer than 11 employees.
[7] Data for mining (Sector 21 in the *North American Industry Classification System* -- United States, 2007) include establishments not governed by the Mine Safety and Health Administration (MSHA) rules and reporting, such as those in oil and gas extraction and related support activities. Data for mining operators in coal, metal, and nonmetal mining are provided to BLS by the Mine Safety and Health Administration, U.S. Department of Labor. Independent mining contractors are excluded from the coal, metal, and nonmetal mining industries. These data do not reflect the changes the Occupational Safety and Health Administration made to its recordkeeping requirements effective January 1, 2002; therefore estimates for these industries are not comparable to estimates in other industries.
[8] Data for mining operators in this industry are provided to BLS by the Mine Safety and Health Administration, U.S. Department of Labor. Independent mining contractors are excluded. These data do not reflect the changes the Occupational Safety and Health administration made to its recordkeeping requirements effective January 1, 2002; therefore estimates for these industries are not comparable to estimates in other industries.
[9] Data for employers in rail transportation are provided to BLS by the Federal Railroad Administration, U.S. Department of Transportation.
[10] Data too small to be displayed.

NOTE: Because of rounding, components may not add to totals. Dash indicates data do not meet publication guidelines.

SOURCE: Bureau of Labor Statistics, U.S. Department of Labor, Survey of Occupational Injuries and Illnesses, in cooperation with participating State agencies.

Appendix A

Glossary

Annual average employment: This is the average number of full- and part-time employees who worked during the calendar year. It includes all classes of employees (administrative, supervisory, clerical, professional, technical, sales, delivery, installation, construction, and service personnel, as well as operating and related workers).

Days away from work, restriction, or job transfer (DART): Days that an employee, due to occupational injury or illness:

- Missed one or more days of work
- Could not perform one or more routine job functions, or work the full day that would have otherwise been worked (job transfer or restriction)
- Could work, but the physician or other licensed health care professional recommended the employee not perform one or more routine job functions, or not work the full day that would have otherwise been worked (job transfer or restriction)
- Had work restriction that only affected one or more routine job functions (job transfer or restriction)
- Worked a partial day of work, except for the day on which the injury occurred or the illness began (job transfer or restriction)

Employment size group: A grouping of establishments within a specified employment range.

Establishment: A single physical location where business is conducted or where services or industrial operations are performed (for example: a factory, mill, store, hotel, restaurant, movie theater, farm, ranch, bank, sales office, warehouse, or central administrative office). It is a single physical location where distinctly separate activities are performed (such as contract construction activities operated from the same physical location as a lumber yard); each activity shall be treated as a separate establishment.

First-aid treatment: One-time treatment and subsequent observation of minor scratches, cuts, burns, splinters, and so forth that do not ordinarily require medical care, even if care is provided by a physician or registered professional.

Hours worked: Total hours worked by all employees. It includes all time on duty, but excludes vacation, holiday, sick leave, and all other nonwork time, even though paid.

Incidence rate (IR): Number of injuries and illnesses per 100 full-time workers per year. The rate is calculated as:

IR	=	(N/EH) x 200,000
where: N	=	number of injuries and illnesses or days away from work, restriction, or job transfer
EH	=	total hours worked by all employees during the calendar year
200,000	=	base for 100 equivalent full-time workers (working 40 hours per week, 50 weeks per year)

Medical treatment: Treatment administered by a physician or a registered professional under the standing orders of a physician. Medical treatment does not include first-aid treatment provided by a physician or registered professional, nor does it include treatment ordinarily considered diagnostic or preventive in nature.

North American Industry Classification System (NAICS): A classification system developed by the Office of Statistical Standards, Executive Office of the President/Office of Management and Budget for use in classifying establishments based on the activities in which they are primarily engaged. NAICS divides the economy into 20 sectors. Establishments are grouped into industries according to the similarity of production processes. Establishments may be classified in 2-, 3-, 4-, 5-, or 6-digit industries, according to the degree of information available.

The most recent North American Industry Classification System (NAICS) manual was published in 2007. From 2003-2008, the survey establishments were classified in industry groups based on the 2002 NAICS manual. The 1987 Standard Industrial Classification (SIC) manual was used to define industry groups from 1989-2002. Industry groups prior to 1989 used the 1972 SIC manual.

Occupational illness: Any abnormal condition or disorder, not resulting from an occupational injury, caused by exposure to environmental factors associated with employment. It includes acute and chronic illnesses or diseases that may be caused by inhalation, absorption, ingestion, or direct contact. All diagnosed occupational illnesses are recordable.

Occupational injury: Any injury, such as a cut, fracture, sprain, amputation, etc., resulting from a work accident or from exposure involving a single incident in the work environment.

Recordable occupational injuries and illnesses: An injury or illness is recordable if an event or exposure in the work environment causes or contributes to the resulting condition or significantly aggravates a pre-existing injury or illness and results in any of the following:

- Fatality, regardless of the time between the injury and death or the length of illness
- Days away from work
- Nonfatal case without days away from work that results in restriction of work, transfer to another job or termination of employment; requires medical treatment beyond first aid; or results in loss of consciousness. Includes significant injuries or illnesses (cancer, chronic irreversible disease, a fractured or cracked bone, or a punctured eardrum) diagnosed by a physician or other licensed health care professional not classified as fatalities or days-away-from-work cases

Total recordable cases: All recordable occupational injuries and illnesses.

Appendix B

Revisions to the Survey of Occupational Injuries and Illnesses

The annual survey provides estimates of the number and frequency (incidence rates) of workplace injuries and illnesses based on logs kept by employers during the year. These records reflect not only the year's injury and illness experience but also the employers' understanding of which cases are work related under recordkeeping rules declared by the Occupational Safety and Health Administration (OSHA), U.S. Department of Labor.

On Jan. 19, 2001, OSHA revised its requirements for recording occupational injuries and illnesses. These revisions became effective Jan. 1, 2002.

Due to the revised recordkeeping rule, the estimates from the 2002-2010 surveys are not comparable with those from previous years. The survey was not designed to determine the impact of the revision on the estimates of nonfatal occupational injuries and illnesses.

Details about the revised recordkeeping requirements, including a summary of the revisions and a comparison between the old and new requirements, are available from the federal OSHA website at http://www.osha.gov/recordkeeping/index.html or its Office of Public Affairs at 202-693-1999.

Starting in 2009, the Survey of Occupational Injuries and Illnesses lists establishments that are classified by industry based on the 2007 North American Industry Classification System manual, as defined by the Office of Management and Budget. The NAICS recognizes hundreds of new businesses in the U.S. economy, most of which are in the service-providing sector. The NAICS classifies establishments into a detail industry based on the production processes and provided services.

Occupational injury and illness data for coal, metal, and nonmetal mining and for railroad activities were provided by the Department of Labor's Mine

Safety and Health Administration (MSHA) and the Department of Transportation's Federal Railroad Administration (FRA), respectively. Neither of these agencies adopted the revised OSHA recordkeeping requirements in 2002. Therefore, 2010 estimates for these industries are not comparable with estimates for other industries.

Appendix C

Scope of Survey

The survey includes employers in the state of Oregon with at least one employee during calendar year 2010 and includes the following private sector NAICS: Agriculture, forestry, fishing, and hunting (11); Utilities (22); Construction (23); Manufacturing (31-33); Wholesale trade (42); Retail trade (44-45); Transportation and warehousing (48-49); Information (51); Finance and insurance (52); Real estate and rental and leasing (53); Management of companies and enterprises (55); Administrative support and waste management and remediation services (56); Educational services (61); Health care and social assistance (62); Arts, entertainment, and recreation (71); Accommodation and food services (72); and Other services (except public administration) (81). In addition, all state and local government NAICS were included.

Excluded from the survey were the federal government, agricultural production employers with 10 or fewer employees, self-employed individuals, private households, railroad employers, and employers covered by the Coal Mine Health and Safety Act and the Metallic and Nonmetallic Mine Safety Acts. Although railroads and mining, except oil and gas extraction, were excluded from the survey, data for these industries were collected by federal agencies and are included in this report.

A total of 4,327 sample units (including railroad and mining) were selected to participate in the 2010 survey, with 3,912 collectable units. The original and two follow-up mailings, plus telephone calls, resulted in 3,868 usable replies, a 98.9 percent overall usable response rate. About 9.6 percent of the sample units were excluded from the final tabulation from which the usable response rate was generated. The most common reasons for exclusion were that the sample was out of business or was outside the scope of the survey. Other reasons include: a unit's employees may have been included in another unit's survey; the survey may have been a duplicate for the same location; or an adequate address could not be found.

Additional data were obtained to supplement the mailed questionnaires. Data conforming to OSHA definitions for mining enterprises in Oregon were obtained from the Mine Safety and Health Administration (MSHA), which has statutory authority affecting occupational safety and health in coal, metal, and nonmetal mining. MSHA provided data for 296 mining establishments. Data from 19 establishments engaged in railroad transportation were obtained from the Federal Railroad Administration of the Department of Transportation.

In total, the 2010 survey data included reports from more than 3,500 private establishments. One hundred twenty-two reports were received from state government units, and 251 local government units reported.

Survey questionnaire

The survey questionnaire requests information regarding employment, total hours worked, and the tabulation of occupational injuries and illnesses by type (fatalities, days away from work, and nonfatal cases without lost workdays). Additional information is sought regarding the type of illnesses contracted, the number of days away from work, and days of restricted work or job transfer resulting from work-related injuries and illnesses. (See Appendix G for a sample of the survey form and instructions.) Federal grant arrangements specify that the respondent fill out a single reporting form. The data are then used to develop both state and national estimates. This

elimination of reporting duplication by respondents, in conjunction with the use of identical statistical techniques at the state and national levels, ensures maximum comparability of the estimates.

Sample design

The U.S. Bureau of Labor Statistics selected the sample of Oregon's private and public sector employers to produce estimates of the number of occurrences and incidence rates of occupational injuries and illnesses at a certain level of precision. Because the Occupational Safety and Health program required estimates by industry, the universe was first stratified into state government, local government, and private ownership, and then stratified into industries according to the North American Industry Classification System Manual, 2007 Edition.

Studies conducted by the Bureau of Labor Statistics have generated the variance in incidence rates within the specified groups of industries. Using this measure of variance, number of establishments in an industry, and the employment in large establishments, a sample size was determined for each industry. Industries with higher expected incidence rates tend to be subject to more variability and were allotted a proportionately larger sample than industries with lower rates. Industries dominated by a few large establishments required proportionately smaller samples (if all of the large establishments were sampled) than industries composed of small establishments.

The number of injuries and illnesses experienced by an establishment varies according to its number of employees. For this reason, all establishments within an industry were stratified into employment size groups.

The selection of sample units was optimized by distributing the industry sample among the size groups in proportion to the total employment in the industry and the variation in the size groups. Larger establishments, then, were more likely to be part of the sample than small ones. Usually, establishments with more than 100 employees were certain to be sampled, although that figure was lower for industries with a relatively small total work force.

Estimation procedures

The injury and illness data reported by the sampling units in each estimating cell were weighted (multiplied) by the inverse of the sampling ratio. For example, a sampled establishment representing itself and three other establishments was assigned a weight of four. The reported data were multiplied by four in the estimation procedure.

The data were also benchmarked or adjusted for nonresponse and for any new establishments that became part of the universe after the sample was drawn. Benchmarking equalizes the employment in each estimating cell to a known employment for the survey period.

A benchmark factor was calculated for each estimating cell by dividing current employment estimates of the universe, or target employment, by the weighted employment produced from the sample.[1] Weighted data for each industry were then benchmarked to generate final estimates.[2]

Footnotes (Estimation procedures)

1/ $$B = T \Big/ \sum_{i=1}^{S} \sum_{j=1}^{N_i} W_{ji} E_{ji}$$

where:
- B = Benchmark factor for an estimating cell
- T = Target employment for the same estimating cell
- S = Number of size classes in the estimating cell
- N_i = Number of sample units in size class "i"
- W_{ji} = Weight of sample unit "j" in size class "i"
- E_{ji} = Survey employment for sample unit "j" in size class "i"

2/ $$X = \left(\sum_{i=1}^{S} \sum_{j=1}^{N_i} W_{ji} X_{ji} \right) B$$

where:
- X = Benchmarked estimate of characteristics for an estimating cell
- S = Number of size classes in the estimating cell
- N_i = Number of sample units in size class "i"
- W_{ji} = Weight of sample unit "j" in size class "i"
- X_{ji} = Characteristics reported by sample unit "j" in size class "i"
- B = Benchmark factor for an estimating cell

Industrial classification

Reporting units are classified into industries on a production-oriented or supply-based conceptual framework that groups establishments into industries according to similarity in the processes used to produce goods or services. Reporting units were classified according to the 2007 edition of the North American Industry Classification System Manual.

Publication guidelines

The Occupational Safety and Health Survey tabulating system generates injury and illness estimates for more than 1,200 NAICS industry levels in the United States. This publication includes estimates at the three- to six-digit NAICS level in the goods-producing and service-providing sectors and generally at the two- to four-digit NAICS level in government, unless one of the following situations occurs:

- Estimates are for an industry with fewer than three companies. Moreover, if three or more companies are in the industry, the employment of one company cannot constitute more than 60 percent of the employment for the industry. This publication restriction is waived if officials of the concerned companies secure permission in writing.
- 2010 annual average employment for the industry is less than 2,000 with the exception of the mining division.
- The estimate is for an industry whose total-cases-incidence rate relative error exceeds 30.
- The benchmark factor for an estimating cell is less than 0.9 or greater than 1.5.

Data for an unpublished industry are included in the total shown for the more comprehensive industry level of which it is a part.

Appendix D

Instructions for Computing Incidence Rates for an Individual Company

Incidence rates for an individual establishment or company may be calculated by employers by using the same formula used to calculate industry wide incidence rates from the annual Occupational Injury and Illness Survey. Employers may then compare their own work injury and illness rates to the overall rates in their industry in Oregon or the nation.

The formula requires the following: (1) the number of injuries and illnesses and (2) the number of hours actually worked by all employees during the reference period. To produce an overall incidence rate determine the following:

(1) The total number of cases with days away from work, restriction, or job transfer and other recordable cases. This may be done by adding the total for columns H, I, and J on the Log of Work-Related Injuries and Illnesses (OSHA Form 300). To determine the DART rate, add columns H & I only.

(2) The total number of hours actually worked during the year by all employees from payroll or other time records. The hours worked figure should not include any non-work time even though paid, such as vacation, sick leave, holidays, etc. (If actual hours worked are not available for employees paid on commission, salary, by the mile, etc., hours worked may be estimated on the basis of scheduled hours or eight hours per workday.)

The formula for computing the incidence rate is as follows:

$$\frac{\text{(1) Number of injuries and illnesses} \times 200{,}000}{\text{(2) Employee hours worked}} = \text{Incidence rate}$$

This rate represents the number of injuries and illnesses occurring per 200,000 hours of work exposure or 100 full-time equivalent workers. The same base is used in computing the occupational injury and illness rates for Oregon and the nation.

An employer may compute rates for injuries; illnesses; days-away-from-work cases, including days away from work with or without job transfer or restriction; other recordable cases (medical-treatment cases); or the

number of lost workdays. Simply replace the number of injuries and illnesses (1) in the formula with the measure for which the rate is being computed.

It is also possible to compute rates on a monthly, quarterly, or semiannual basis, by department, or any other grouping of employees. The formula, including the constant 200,000, remains the same. However, the time frame or department used for the number of injuries and illnesses (or other measure) should correspond to the hours worked, (2) in the incidence rate formula. For example, to compute a monthly rate, use the number of work injuries and illnesses for the month in the numerator and the number of employee hours worked for that month in the denominator.

Appendix E

Reliability of the Estimates

The incidence rates and case estimates are based on an annual sample of Oregon employers and, as a result, may differ from figures that would have been obtained had a complete census of establishments been possible using the same procedures. As in any survey, the results are subject to errors of response and reporting, as well as sampling variability. Errors of response and reporting are minimized through comprehensive edit procedures and follow-up contact with employers. Errors of sampling variability are minimized through the use of randomized stratified sampling techniques.

The relative standard error is a measure of sampling variability; that is, variations that occur by chance because only a sample of establishments is included in the survey. The relative standard error taken together with the characteristic's estimated value serves to define the confidence intervals or ranges that would include the comparable complete-coverage value. The chances are about two out of three that the estimate would have been produced in the range of one standard error above to one standard error below the estimated value, and about 19 out of 20 that the estimate would have been in the range of two standard errors above and below the estimated value. Furthermore, the chances are about 997 out of 1,000 that the estimated value of the characteristic would have been in the range of three relative standard errors above and below the estimated value.

The relative standard errors for the private sector estimates overall are displayed in Table E1 (page 15). The use of these relative standard errors may be clarified by an example. The private sector has an estimated incidence rate for total recordable cases of 3.9 per 100 full-time workers and a relative standard error of 2.8 percent. The chances are two out of three that a complete census would produce a rate between 3.8 and 4.0 and the chances are 19 out of 20 that the rate produced from the complete count would be between 3.7 and 4.1. The chances are 997 out of 1,000, or 99.7 percent of the time, that the rate generated from a complete census would be between 3.6 and 4.2. Similar confidence intervals can be developed for the other survey-generated estimates by using the same methodology described above.

Table E1. Relative standard errors, private sector, Oregon 2010

Division	Percent relative standard errors[2]				
	Total recordable cases	Cases with days away from work, restriction, or job transfer			Other recordable cases
		Total	Cases with days away from work[3]	Cases with job transfer or restriction	
Private sector[1]	2.8	3.6	5.1	3.4	4.2
Agriculture, forestry, fishing, hunting	8.5	10.4	14.5	12.4	11.0
Construction	15.5	25.4	33.0	15.8	18.4
Manufacturing	3.4	3.8	5.7	4.4	5.8
Wholesale trade	10.8	11.8	14.1	13.6	15.9
Retail trade	6.3	6.3	8.0	8.2	10.7
Transportation and warehousing	6.8	7.2	9.2	10.0	9.9
Utilities	24.6	33.4	33.3	38.7	31.0
Information	24.4	35.4	40.6	42.3	29.5
Finance and insurance	29.5	24.0	26.3	32.5	39.0
Real estate, rental and leasing	45.6	28.8	31.2	35.6	64.6
Professional, scientific, and technical services	41.8	65.3	70.8	93.3	34.6
Management of companies and enterprises	35.2	52.9	60.1	29.2	46.4
Admin. and support, waste mgmt., remediation serv.	14.5	19.2	23.2	22.5	17.9
Educational services	29.1	9.8	12.4	11.4	41.8
Health care and social assistance	5.0	6.4	7.7	8.5	5.6
Arts, entertainment, and recreation	16.7	13.0	12.8	23.1	24.0
Accommodation and food services	8.3	13.0	15.9	16.1	10.0
Other services, except public administration	26.7	37.8	42.3	30.3	23.8

[1]Excludes agricultural production employers with 10 or fewer employees.

[2]The relative standard error in the range of one standard error is computed as:

$\%RE(X) = 100 * (\sigma/X)$

%RE(X) = Percentage of relative standard error for the characteristic

σ = The standard deviation for the characteristic

X = Weighted benchmarked estimate of the characteristic

[3]Days-away-from-work cases include those that result in days away from work with or without job transfer or restriction.

Note: Relative standard errors were not calculated for mining (NAICS 21) and rail transportation (NAICS 482).

Appendix F

Recordkeeping Summary

Basic recordkeeping concepts and guidelines are included with instructions inside the form OSHA No. 300 Log. The following summarizes the major recordkeeping concepts and provides additional information to aid in keeping records accurately.

An injury or illness is considered work related if it results from an event or exposure in the work environment. The work environment is primarily composed of the following: (1) the employer's premises and (2) other locations where employees are engaged in work-related activities or are present as a condition of their employment. When an employee is off the employer's premises, the work relationship must be established; when on the premises, this relationship is presumed. The employer's premises encompass the total establishment — not only the primary work facility but also such areas as company storage facilities. In addition to physical locations, equipment or materials used in the course of an employee's work are also considered part of the employee's work environment.

All deaths, days away from work, restricted work or transfer to another job, medical treatment beyond first aid, or loss of consciousness are recordable.

All significant injuries or illnesses diagnosed by a physician or other licensed health care professional are recordable.

Significant work-related cases

Work-related cases involving cancer, chronic irreversible disease, a fractured or cracked bone, or a punctured eardrum must always be recorded under the general criteria at the time of occurrence.

Recordable and nonrecordable injuries

Each case is distinguished by the treatment provided: i.e., if the injury required medical treatment, it is recordable; if only first aid was required, it is not recordable. However, medical treatment is only one of several criteria for determining recordability. Regardless of treatment, if the injury involved loss of consciousness, restriction of work or motion, or transfer to another job, the injury is recordable.

Medical treatment

Medical treatment is the management and care of a patient to combat the disease or disorder. For this rule, medical treatment does not include:

- Visits to a physician or other licensed health care professional solely for observation or counseling
- The conduct of diagnostic procedures, such as X-rays and blood tests, including the administration of prescription medications solely for diagnostic purposes (e.g., eye drops to dilate pupils)
- First aid, as listed below

First-aid treatment

The following are generally considered first-aid treatment (e.g., one-time treatment and subsequent observation of minor injuries) and should not be recorded if the work-related injury does not involve loss of consciousness, restriction of work or motion, or transfer to another job:

(A) Using a nonprescription medication at nonprescription strength (for medications available in both prescription and nonprescription form, a recommendation by a physician or other licensed health care professional to use a nonprescription medication at prescription strength is medical treatment for recordkeeping purposes)

(B) Administering tetanus immunizations (other immunizations, such as hepatitis B vaccine or rabies vaccine, are medical treatment)

(C) Cleaning, flushing, or soaking wounds on the surface of the skin

(D) Using wound coverings such as bandages, Band-Aids™, gauze pads, etc.; or using butterfly bandages or Steri-Strips™ (other wound-closing devices such as sutures, staples, etc., are medical treatment)

(E) Using hot or cold therapy

(F) Using any nonrigid means of support, such as elastic bandages, wraps, nonrigid back belts, etc. (devices with rigid stays or other systems designed to immobilize parts of the body are considered medical treatment for recordkeeping purposes)

(G) Using temporary immobilization devices while transporting an accident victim (e.g., splints, slings, neck collars, back boards, etc.)

(H) Drilling of a fingernail or toenail to relieve pressure, or draining fluid from a blister

(I) Using eye patches

This is a complete list of all first-aid treatments for this standard. Treatment not included in this list is considered medical treatment.

Source: U.S. Department of Labor, Occupational Safety and Health Administration from *Referencing Regulations (Standards - 29 CFR), PART 1904 — Recording and Reporting Occupational Injuries and Illnesses*

U.S. Department of Labor
Bureau of Labor Statistics

Appendix G

Survey of Occupational Injuries and Illnesses, 2010

YOUR RESPONSE IS REQUIRED BY LAW IN 30 DAYS.

Please correct your company address as needed.

For your convenience, you can submit your survey response on our website at https://idcf.bls.gov.

We estimate it will take you an average of 24 minutes to complete this survey (ranging from 10 minutes to 5 hours per package), including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this information. If you have any comments regarding the estimates or any other aspect of this survey, including suggestions for reducing this burden, please send them to the Bureau of Labor Statistics, Occupational Safety and Health Statistics (1220-0045), 2 Massachusetts Avenue, N.E., Washington, DC 20212. Persons are not required to respond to the collection of information unless it displays a currently valid OMB control number. **DO NOT SEND THE COMPLETED FORM TO THIS ADDRESS.**

The Bureau of Labor Statistics, its employees, agents, and partner statistical agencies, will use the information you provide for statistical purposes only and will hold the information in confidence to the full extent permitted by law. In accordance with the Confidential Information Protection and Statistical Efficiency Act of 2002 (Title 5 of Public Law 107-347) and other applicable Federal laws, your responses will not be disclosed in identifiable form without your informed consent.

OMB No. 1220-0045
BLS-9300 N06

Section 1: Establishment Information

Instructions: Using your completed Calendar Year 2010 *Summary of Work-Related Injuries and Illnesses* (OSHA Form 300A), copy the establishment information into the boxes. If these numbers are not available on your OSHA Form 300A, or if your establishment does not keep records needed to answer (2) and (3) below, you can estimate using the steps that follow on the next page.

1. Enter your account number from the front cover. → ☐
2. Enter the annual average number of employees for 2010. → ☐
3. Enter the total hours worked by all employees for 2010. → ☐

4. Check any conditions that might have affected your answers to questions 2 and 3 above during 2010:

- ❑ Strike or lockout
- ❑ Shutdown or layoff
- ❑ Seasonal work
- ❑ Natural disaster or adverse weather conditions
- ❑ Shorter work schedules or fewer pay periods than usual
- ❑ Longer work schedules or more pay periods than usual
- ❑ Other reason: _____
- ❑ Nothing unusual happened to affect our employment or hours figures

5. Did you have ANY work-related injuries or illnesses during 2010?
   - ❑ Yes. Go to Section 2: Summary of Work-Related Injuries and Illnesses, 2010, directly below.
   - ❑ No. Go to Section 4: Contact Information, on the back cover.

Section 2: Summary of Work-Related Injuries and Illnesses, 2010

Instructions:

1. Refer to the OSHA *Forms for Recording Work-Related Injuries and Illnesses* for the location referenced on the front cover of the survey under "**Report for this Location**." If you prefer, you may enclose a photocopy of your *Summary of Work-Related Injuries and Illnesses* (OSHA Form 300A).
2. If more than one establishment is noted on the front cover of this survey, be sure to include the OSHA Form 300A for all of the specified establishments.
3. If any total is zero on your OSHA Form 300A, write "0" in that total's space below.
4. The **total** Number of Cases recorded in G + H + I + J must equal the **total** Injury and Illness Types recorded in M (1 + 2 + 3 + 4 + 5 + 6).

Number of Cases

Total number of deaths	Total number of cases with days away from work	Total number of cases with job transfer or restriction	Total number of other recordable cases
_____ (G)	_____ (H)	_____ (I)	_____ (J)

Number of Days

Total number of days away from work		Total number of days of job transfer or restriction	
_____ (K)		_____ (L)	

Injury and Illness Types

Total number of …

	(M)		
(1) Injuries	_____	(4) Poisonings	_____
(2) Skin disorders	_____	(5) Hearing loss	_____
(3) Respiratory conditions	_____	(6) All other illnesses	_____

If you had any work-related deaths in 2010, please tell us on the line below where you assigned/classified each death within the list of items (M1) through (M6) provided under ***Injury and Illness Types*** above (e.g., "fatal case was due to injury resulting from fall" or "death resulted from respiratory conditions")_____
_____

Case with Days Away from Work

Tell us about a 2010 work-related injury or illness **only** if it resulted in days away from work. To find out which case(s) you should report, read the instructions at the beginning of ***Section 3: Reporting Cases with Days Away from Work***.

Tell us about the Case

Go to your completed OSHA Form 300. Copy the case information from that form into the spaces below.

Employee's name (column B)	**Job title** (column C)	**Date of injury or onset of illness** (column D)	**Number of days away from work** (column K)	**Number of days of job transfer or restriction** (column L)
_____	_____	____/____/10 *month day year*	_____	_____

Tell us about the Employee

1. **Check the category which *best* describes the employee's regular type of job or work**: (optional)

- ❑ Office, professional, business, or management staff
- ❑ Sales
- ❑ Product assembly, product manufacture
- ❑ Repair, installation or service of machines, equipment
- ❑ Construction
- ❑ Other:_____
- ❑ Healthcare
- ❑ Delivery or driving
- ❑ Food service
- ❑ Cleaning, maintenance of building, grounds
- ❑ Material handling *(e.g.* stocking, loading/unloading, moving, etc.)
- ❑ Farming

2. **Employee's race or ethnic background:** (optional-check one or more)

- ❑ American Indian or Alaska Native
- ❑ Asian
- ❑ Black or African American
- ❑ Hispanic or Latino
- ❑ Native Hawaiian or Other Pacific Islander
- ❑ White
- ❑ Not available

NOTE: You may either answer questions (3) to (13) or attach a copy of a supplementary document that answers them.

3. **Employee's age: _____ *OR* date of birth:** _____/_____/_____ *month day year*

4. **Employee's date hired:** _____/_____/_____ *month day year*

***OR* check length of service at establishment when incident occurred:**

- ❑ Less than 3 months
- ❑ From 3 to 11 months
- ❑ From 1 to 5 years
- ❑ More than 5 years

5. **Employee's gender:**

- ❑ Male
- ❑ Female

Tell us about the Incident

Answer the questions below or attach a copy of a supplementary document that answers them.

6. **Was employee treated in an emergency room?** ❑*yes* ❑*no*

7. **Was employee hospitalized overnight as an in-patient?** ❑*yes* ❑*no*

8. **Time employee began work:** _____ ❑*am* ❑*pm*

9. **Time of event:** _____ ❑*am* ❑*pm* *OR* ❑ *Check if time cannot be determined*

Event occurred: ❑*before* ❑*during* ❑*after* work shift

10. **What was the employee doing just before the incident occurred?** Describe the activity as well as the tools, equipment, or material the employee was using. Be specific. *Examples*: "climbing a ladder while carrying roofing materials"; "spraying chlorine from hand sprayer"; "daily computer key-entry."

11. **What happened?** Tell us how the injury or illness occurred. *Examples*: "When ladder slipped on wet floor, worker fell 20 feet"; "Worker was sprayed with chlorine when gasket broke during replacement"; "Worker developed soreness in wrist over time."

12. **What was the injury or illness?** Tell us the part of the body that was affected and how it was affected; be more specific than "hurt," "pain," or "sore." *Examples*: "strained back"; "chemical burn, hand"; "carpal tunnel syndrome."

13. **What object or substance directly harmed the employee?** *Examples*: "concrete floor"; "chlorine"; "radial arm saw." If this question does not apply to the incident, leave it blank.

N	P	S	E	SS	OCC

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