				Event o	r exposur	e leading t	o injury or	illness ⁵	
				Contact w	ith objects	5			
Occupation	Occupation code ³	Private industry ⁴	Total	Struck by object	Struck against object	Caught in or com- pressed or crushed	Fall to lower level	Fall on same level	Slips or trips without fall ⁶
Total		122.2	33.5	17.2	8.0	5.7	8.1	17.6	4.0
Management occupations	11-0000	41.4	8.6	5.7	1.7	.9	4.5	9.1	1.1
Top executives	11-1000	19.6	3.2	2.1	.4	.0	3.6	4.7	.4
Chief executives	11-1010	64.6	6.9	3.4	1.1	2.5	16.8	12.1	1.8
Chief executives	11-1011	64.6	6.9	3.4	1.1	2.5	16.8	12.1	1.8
General and operations managers	11-1020	12.4	2.6	1.9	.3	.1	1.4	3.5	.2
General and operations managers	11-1020	12.4	2.6	1.9	.3	.1	1.4	3.5	.2
Advertising, marketing, promotions, public	11-1021	12.4	2.0	1.9		. 1	1.4	5.5	.2
relations, and sales managers	11-2000	33.8	3.8	1.7	1.3	.5	6.4	5.9	.9
Advertising and promotions managers	11-2000	14.9				5	- 0.4	5.9	.9
0 1 0		-	_	_	_	_	_	_	_
Advertising and promotions managers	11-2011	14.9	- 4.2		-	-	- 7.0		
Marketing and sales managers	11-2020	36.5	4.3	2.0	1.5	.6	7.2	6.0	.9
Marketing managers	11-2021	23.4	1.0	-	-	-	12.2	3.4	-
Sales managers	11-2022	43.1	6.0	2.9	2.0	.9	4.7	7.4	1.2
Public relations managers	11-2030	16.8	-	-	-	-	-	5.5	-
Public relations managers	11-2031	16.8	-				-	5.5	-
Operations specialties managers	11-3000	34.2	10.9	8.7	1.6	.5	2.2	9.2	.6
Administrative services managers	11-3010	14.1	2.1	1.2	.9	-	-	2.5	1.2
Administrative services managers	11-3011	14.1	2.1	1.2	.9	-	-	2.5	1.2
Computer and information systems									
managers	11-3020	7.3	-	-	-	-	-	1.2	-
Computer and information systems									
managers	11-3021	7.3	-	-	-	-	-	1.2	-
Financial managers	11-3030	48.1	14.5	12.5	2.0	-	2.7	19.2	-
Financial managers	11-3031	48.1	14.5	12.5	2.0	-	2.7	19.2	-
Human resources managers	11-3040	31.1	5.2	3.7	-	-	3.2	8.5	2.5
Compensation and benefits managers	11-3041	12.3	-	-	-	_	_	_	-
Training and development managers	11-3042	47.2	18.4	13.4	-	_	-	11.2	-
Industrial production managers	11-3050	25.6	5.5	1.0	2.7	1.5	3.6	3.6	-
Industrial production managers	11-3051	25.6	5.5	1.0	2.7	1.5	3.6	3.6	_
Purchasing managers	11-3060	31.9	8.5	6.3	_	_	_	3.9	_
Purchasing managers	11-3061	31.9	8.5	6.3	_	_	-	3.9	_
Transportation, storage, and distribution									
managers	11-3070	110.1	62.7	55.1	4.9	2.6	5.3	11.0	_
Transportation, storage, and							0.0		
distribution managers	11-3071	110.1	62.7	55.1	4.9	2.6	5.3	11.0	_
Other management occupations	11-9000	75.3	15.0	8.9	3.4	1.9	6.8	15.5	2.5
Agricultural managers	11-9010	9.6	3.3	1.5		1.6		_	
Farm, ranch, and other agricultural	11 3010	0.0	0.0	1.5		1.0			
managers	11-9011	6.6	2.3	.9	_	1.3		_	_
	11-9020	62.0	13.5	.9	1.9		_ 15.2	7.7	6.5
Construction managers						.9 .9			
Construction managers	11-9021	62.0	13.5	10.2	1.9	.9	15.2	7.7	6.5

					Event	or exposure	e leading to ir	njury or illr	ness ⁵			
	Overe	xertion		Exposure		portation			Assaults a	nd violent ac	ts	
Occupation			Repeti-	to harmful	acc	idents	Fires			All other	assaults	All
	Total	In lifting	tive motion	substance or environ- ment	Total	Highway accident	and explosions	Total	Assaults by person	All other assaults	Assaults by animal	other events ^{6,7}
Total	27.9	14.8	3.9	5.6	5.6	3.5	0.2	2.6	1.8	0.8	0.8	13.3
Management occupations	7.5	4.4	1.5	2.3	2.9	1.5	(8)	1.0	.8	.2	.2	2.8
Top executives	-	1.8	.2	.6	3.1	.9	.1	_				.6
Chief executives	5.6	5.5	2	3.3	16.3	4.6	'					.0
		5.5	_		16.3	4.0	_	_	_	_	_	_
Chief executives				3.3		-		_	_	_	_	
General and operations managers	2.8	1.2	.1	.2	.9	.4	-	-	-			.7
General and operations managers	2.8	1.2	.1	.2	.9	.4	-	-	-	-	-	.7
Advertising, marketing, promotions, public												
relations, and sales managers	5.4	2.8	.5	4.5	2.6	2.2	-	.3	-	-	-	3.6
Advertising and promotions managers	-	-	-	-	-	-	-	-	-	_	-	-
Advertising and promotions managers	_	_	-	_	_	_		-	_	_	_	_
Marketing and sales managers	5.7	2.9	.5	5.1	2.7	2.4		_	_	_	_	3.7
Marketing managers	-	1.0	.9	_	3.3	2.9		_	_	_	_	_
Sales managers		3.8		7.7	2.4	2.2		_	_	_	_	5.3
Public relations managers		- 0.0	_					_	_	_	_	4.2
Public relations managers	4.5	_	_	_		_		_		_	_	4.2
	4.3	2.5	1.7	.9		1.2		-		_	_	2.0
Operations specialties managers				.9	2.2		-	.2	.2	_	_	-
Administrative services managers	4.2	-	-	-	2.1	2.1	-	-	_	-	-	.9
Administrative services managers	4.2	-	-	-	2.1	2.1	-	-	-	-	-	.9
Computer and information systems												
managers	1.2	.9	-	-	-	-	-	-	-	-	-	2.1
Computer and information systems												
managers	1.2	.9	-	-	-	-	-	-	-	_	-	2.1
Financial managers	2.7	1.8	2.8	.6	4.0	1.3		-	-	_	-	1.5
Financial managers		1.8	2.8	.6	4.0	1.3		-	_	_	_	1.5
Human resources managers	2.7	2.1	1.5	_	2.3	2.3		-	_	_	_	3.8
Compensation and benefits managers				_				_	_	_	_	
Training and development managers	7.4	7.4	_	_	_	_		_	_	_	_	_
Industrial production managers	6.9	4.7	_	3.1	_	_	_	_	_	_	_	1.4
		4.7	_	-	_	_		_	_	_	_	
Industrial production managers				3.1	_	_		_	_	_	-	1.4
Purchasing managers		9.6	-	_		_	-		_		_	-
Purchasing managers	10.9	9.6	-	-	-	-	-	-	-	-	-	-
Transportation, storage, and distribution												
managers	13.8	5.4	7.9	-	2.4	-	-	-	-	-	-	6.2
Transportation, storage, and												
distribution managers	13.8	5.4	7.9	-	2.4	-	-	-	-	-	-	6.2
Other management occupations	15.8	9.7	3.3	4.4	3.2	2.2	-	3.0	2.3	.7	.7	5.8
Agricultural managers	-	_	-	-	_	-		2.0	-	2.0	2.0	2.5
Farm, ranch, and other agricultural								-				
managers	_	_	_	_	_	_	_	1.9	_	1.9	1.9	1.3
Construction managers	11.4	7.0	_	2.0	3.0	.9	_		_			2.4
		7.0		2.0	3.0	.9	_	_	_	_	_	2.4
Construction managers	11.4	1.0		∠.0	3.0	.9	-	-	_		-	∠.4

				Event o	r exposur	e leading t	o injury or	illness ⁵	
				Contact w	ith objects	6			
Occupation	Occupation code ³	Private industry ⁴	Total	Struck by object	Struck against object	Caught in or com- pressed or crushed	Fall to lower level	Fall on same level	Slips or trips without fall ⁶
Education administrators	11-9030	34.3	8.1	1.3	_	_	3.7	10.4	2.4
Education administrators, preschool and child care center/program	11-9031	34.4							
Education administrators, elementary	11-9031	54.4	_	_	_	_	_	-	_
and secondary school	11-9032	19.8	-	-	-	-	-	-	-
postsecondary	11-9033	49.1	_	_	_	_	7.9	16.1	4.8
Engineering managers	11-9040	2.4	_	_	_	_		_	
Engineering managers		2.4	_	_	_	_	_	_	_
Food service managers	11-9050	108.7	36.5	32.9	2.0	_	3.2	21.7	_
Food service managers	11-9051	108.7	36.5	32.9	2.0	_	3.2	21.7	_
Funeral directors	11-9060	24.0	_	_	_	_	_	_	_
Gaming managers	11-9070	80.2	_	_	_	_	_	_	_
Gaming managers	11-9071	80.2	_	_	_	_	_	_	_
Lodging managers	11-9080	19.0	_	_	_	_	_	7.4	_
Lodging managers	11-9081	19.0	_	_	_	_	_	7.4	_
Medical and health services managers	11-9110	144.4	28.3	8.2	19.5	_	4.4	37.3	4.3
Medical and health services managers	11-9111	144.4	28.3	8.2	19.5	_	4.4	37.3	4.3
Natural sciences managers	11-9120	7.7	_	_	_	_	_	_	_
Natural sciences managers	11-9121	7.7	_	_	_	_	_	_	_
Property, real estate, and community									
association managers	11-9140	63.4	6.4	5.1	1.3	_	11.1	8.0	1.3
Property, real estate, and community			••••	••••					
association managers	11-9141	63.4	6.4	5.1	1.3	_	11.1	8.0	1.3
Social and community service managers	11-9150	80.5	3.5	2.6	_	_	6.5	26.1	_
Social and community service			0.0				0.0	_0	
managers	11-9151	80.5	3.5	2.6	_	_	6.5	26.1	_
Business and financial operations occupations	13-0000	17.5	2.5	1.5	.8	0.2	1.9	4.2	.5
Business operations specialists	13-1000	22.7	3.2	1.7	1.1	.3	2.8	4.1	.6
Buyers and purchasing agents	13-1020	31.3	5.5	3.6	.7	1.0	2.9	5.1	.6
Purchasing agents and buyers, farm								••••	
products	13-1021	18.8	-	-	-	-	-	-	-
Wholesale and retail buyers, except									
farm products	13-1022	57.0	8.5	4.9	1.5	1.9	8.1	8.2	-
Purchasing agents, except wholesale,									
retail, and farm products	13-1023	18.0	3.5	2.6	-	-	-	3.5	-
Claims adjusters, appraisers, examiners,	10 (000								
and investigators	13-1030	50.1	8.0	2.8	5.1	-	17.0	4.1	-
Claims adjusters, examiners, and	40.400								
investigators	13-1031	52.3	8.5	3.0	5.3	-	17.8	4.2	-
Compliance officers, except agriculture,									
construction, health and safety, and	40.40.40	40-							
transportation	13-1040	12.5	3.5	-	2.2	-	-	3.9	-

					Event	or exposure	e leading to ir	njury or illr	ness ⁵			
	Overe	xertion		Exposure		portation			Assaults a	nd violent ac	ts	
Occupation			Repeti-	to harmful	acc	idents	Fires			All other	assaults	All
	Total	In lifting	tive motion	substance or environ- ment	Total	Highway accident	and explosions	Total	Assaults by person	All other assaults	Assaults by animal	other events ^{6,7}
Education administrators Education administrators, preschool	2.4	-	-	-	-	-	-	-	-	_	-	4.5
and child care center/program Education administrators, elementary and secondary school	-	_	_	_	_	-	-	_	_	_	_	_
Education administrators, postsecondary	_	_	_	_	_	_	_	_	_	_	_	7.9
Engineering managers Engineering managers	-	-	-	-	-	-	-	-	_	_	-	-
Food service managers Food service managers		17.3 17.3	11.7 11.7	-	1.2 1.2	-	-	5.2 5.2	5.2 5.2	_		10.1 10.1
Funeral directors Gaming managers	-	-	-		_	_	-	_	_	_	_	_
Gaming managers Lodging managers	-	-	-		_ _	-	-	_	-	-		
Lodging managers Medical and health services managers Medical and health services managers	- 46.4 46.4	- 21.6 21.6	- 1.1 1.1	- 1.3 1.3	- 2.8 2.8	- 1.5 1.5		- 8.1 8.1	- 7.8 7.8		_ _ _	- 10.3 10.3
Natural sciences managers Natural sciences managers	-		-			-	-		_	-		
Property, real estate, and community association managers Property, real estate, and community	32.2	31.4	_	2.3	-	-	-	-	-	-	_	-
association managers Social and community service managers	32.2 6.0	31.4 -	_ _	2.3 5.7	_ 11.6	_ 11.2		_ 10.0	_ 10.0			_ 9.5
Social and community service managers Business and financial operations occupations Business operations specialists Buyers and purchasing agents	6.0 2.3 3.6 10.1	- 1.2 1.8 5.7	- 1.7 2.3 2.3	5.7 .3 .3	11.6 2.0 3.3 1.6	11.2 1.7 2.9 1.3	- - -	10.0 .2 .3	10.0 .1 .2	0.1 1	_ 0.1 _1	9.5 1.9 2.3 2.9
Purchasing agents and buyers, farm products	_	_	_	_	_	-	_	_	_	_	_	_
Wholesale and retail buyers, except farm products	19.8	11.3	3.6	_	3.1	2.6	_	_	_	-	_	3.8
Purchasing agents, except wholesale, retail, and farm products Claims adjusters, appraisers, examiners,	5.2	2.7	1.8	-	.8	.8	-	-	-	-	-	2.5
and investigators Claims adjusters, examiners, and	-	-	4.1	-	6.4	6.2	-	-	-	-	-	8.3
investigators Compliance officers, except agriculture, construction, health and safety, and	_	_	4.4	-	6.7	6.5	-	-	-	_	_	8.3
transportation	-	-	-	-	-	-	-	-	_	-	-	

				Event o	or exposur	e leading t	o injury or	illness ⁵	
				Contact w	ith objects	6			
Occupation	Occupation code ³	Private industry ⁴	Total	Struck by object	Struck against object	Caught in or com- pressed or crushed	Fall to lower level	Fall on same level	Slips or trips without fall ⁶
Compliance officers, except agriculture,									
construction, health and safety, and									
transportation	13-1041	12.5	3.5	_	2.2	_	_	3.9	-
Cost estimators	13-1050	4.7	_	_	-	_	_	.7	-
Cost estimators	13-1051	4.7	_	-	-	_	_	.7	-
Human resources, training, and labor									
relations specialists	13-1070	37.0	3.1	1.3	1.5	_	2.9	6.7	1.1
Employment, recruitment, and									
placement specialists	13-1071	25.8	1.3	1.0	-	-	1.0	5.8	-
Compensation, benefits, and job									
analysis specialists	13-1072	7.5	-	-	-	-	_	3.3	-
Training and development specialists	13-1073	27.4	6.0	1.9	3.2	_	_	4.3	1.1
Logisticians	13-1080	58.2	21.2	13.9	2.8	-	3.5	9.4	-
Logisticians	13-1081	58.2	21.2	13.9	2.8	-	3.5	9.4	-
Management analysts		9.8	-	-	-	-	_	4.3	.7
Management analysts	13-1111	9.8	-	-	-	-	_	4.3	.7
Meeting and convention planners		26.5	9.9	7.4	_	-	_	6.3	-
Meeting and convention planners	13-1121	26.5	9.9	7.4	-	-	_	6.3	-
Financial specialists	13-2000	10.9	1.7	1.3	.4	-	.8	4.5	.5
Accountants and auditors	13-2010	9.7	.4	-	.2	-	.6	4.6	.4
Accountants and auditors		9.7	.4	-	.2	-	.6	4.6	.4
Appraisers and assessors of real estate	13-2020	31.7	-	-	-	-	-	7.5	-
Appraisers and assessors of real estate	13-2021	31.7	-	-	_	-	-	7.5	-
Credit analysts	13-2040	6.2	-	-	-	-	-	3.1	-
Credit analysts	13-2041	6.2	-	-	-	-	-	3.1	-
Financial analysts and advisors	13-2050	8.7	5.5	5.3	-	-	.4	.9	-
Financial analysts	13-2051	6.7	4.7	4.6	-	-	-	.8	-
Personal financial advisors	13-2052	14.7	10.6	10.2	-	-	-	-	-
Insurance underwriters		5.2	-	-	-	-	-	-	-
Loan counselors and officers	13-2070	15.4	-	-	-	-	2.0	9.4	.8
Loan counselors		8.9	-	-	-	-	-	-	-
Loan officers	13-2072	15.9	-	-	-	-	2.0	9.8	.8
Tax examiners, collectors, preparers, and									
revenue agents		8.0	-	-	-	-	-	-	-
Tax preparers		6.2	-	-	-	-	-	-	-
Computer and mathematical occupations		8.4	1.1	.5	.5	-	.9	1.6	.2
Computer specialists		8.2	1.1	.5	.5	-	.8	1.5	.2
Computer programmers		6.2	.9	-	-	-	1.2	-	-
Computer programmers		6.2	.9	-	-	-	1.2	-	-
Computer software engineers Computer software engineers,		2.5	.2	-	-	-	.3	.5	-
applications	15-1031	3.6	-	-	-	-	.5	.7	-

Compliance officers, except agriculture, construction, health and safety, and transportation - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -						Event	or exposure	leading to ir	njury or illr	ness ⁵			
Occupation Repetit iter Binnet iter Binnet iter Total iter Binnet iter Total iter Fine accident Fine accident All other assults All other		Overe	xertion		Exposure					Assaults a	nd violent ac	ts	
Total In lifting motion ment Total Highway explosions Total by person All other assaults Assaults by person eventse other assaults Compliance officers, except agriculture, construction, health and safey, and Cost estimators – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – <	Occupation			Repeti-		acc	Idents	Fires			All other	assaults	All
construction, health and safely, and transportation - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - <		Total	In lifting		or environ-	Total			Total	by	other	by	other events ^{6,7}
Cost estimators - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -	construction, health and safety, and transportation		_	_	_	_	_	_	_	_	_	_	_
Human resources, training, and labor 4.9 1.4 5.7 0.9 8.6 8.1 - 0.7 0.6 - - 2.2 mployment, recruitment, and 3.3 - - 12.8 12.0 - - - 2.2 analysis specialists 3.3 - - - 12.8 12.0 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -	Cost estimators	-	-	-	-	-	-	-	-	-	-	-	-
relations specialists 4.9 1.4 5.7 0.9 8.6 8.1 - 0.7 0.6 - - 2.2 Employment, recruitment, and polations 3.3 - - - 12.8 12.0 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -		-	-	-	-	-	-	-	-	-	-	-	-
Employment, recruitment, and placement specialists. 3 - - - 12.8 12.0 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -													
placement specialists 3.3 - - 12.8 12.0 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -		4.9	1.4	5.7	0.9	8.6	8.1	-	0.7	0.6	-	-	2.2
analysis specialists - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - 10.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0		3.3	-	_	_	12.8	12.0	_	-	_	_	_	_
Training and development specialists 3.7 2.5 1.9 1.7 1.3 1.0 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -													
Logisticians 18.4 11.4 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 - -		-			-		-	-	-	-	-	-	-
Logisticians 18.4 11.4 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - 7.7 7.7 7.7 7.7 - - - - - - 7.7 7.7 - - - - - - - - 7.7 7.7 - - - - - 7.7 7.7 - - - - - -				1.9	1.7	1.3	1.0	-	-	-	-	-	6.4
Management analysts 1.4 4 1.1 - - - - - - - - 1.0 Management analysts 1.4 4 1.1 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - 1.1 - - 1.1 - - - - - - - - - - 1.1 - - 1.1 - 1.1 - - 1.1 - - 1.1 - - 1.1 - - 1.1 - 1.1 - - 1.1 - - 1.1 - 1.1 - 1.1 - 1.1 - 1.1 1.1 - 1.1 1.1 - 1.1 1.1 1.1<				-	-	-	-	-	-	-	-	-	4.0
Maragement analysts 1.4 4 1.1 - 6 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -				-	-	-	-	-	-	-	-	-	4.0
Meeting and convention planners - - - - - - - - - 7.7 Meeting and convention planners - - - - - - - - - - - - 7.7 Meeting and convention planners - - - - - - - - - - - 7.7 Meeting and convention planners - 6 4 1.5 3 6 5 - - - - 1.1 1 - - 1.7 Accountants and auditors - 6 4 1.5 .3 6 5 - - - - 7.7 Appraisers and assessors of real estate - - - - - - - 7.7 7.8 Credit analysts - - - - - - - - - - - - - - - - - - - - -<	Management analysts			1.1	-		-	-	-	-	-	-	1.0
Meeting and convention planners - - - - - - - - - - 77 Financial specialists 5 3 9 2 4 3 - - 1 1 - - 11 Accountants and auditors 6 4 1.5 3 6 5 - - - - - 11 - - 11 - - 11 - - 11 - - 11 - - 11 - - 11 - - 11 - - 11 - - 11 - - 11 - - 11 - - 11 - - 11 - - 11 - - 11 - - 11 - - 11 - - 11 - 11 - 11 - 11 - 11 11 - 11	Management analysts	1.4	.4	1.1	-	.6	_	-	-	-	_	-	1.0
Financial specialists 5 3 9 2 4 .3 - .1 1 - - 1 1 - - 1 1 - - 1 1 - - 1 1 - - 1 1 - - 1 1 - - 1 1 - - 1 1 - - 1 1 - - 1 1 - - 1 1 - - 1 1 - - 1 1 - - 1 1 - - 1 1 - - 1 1 - - 1 1 1 - - 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 <td>Meeting and convention planners</td> <td>-</td> <td>_</td> <td>- </td> <td>-</td> <td>-</td> <td>_</td> <td>- </td> <td>-</td> <td>-</td> <td>_</td> <td>-</td> <td>7.7</td>	Meeting and convention planners	-	_	-	-	-	_	-	-	-	_	-	7.7
Accountants and auditors .6 .4 1.5 .3 .6 .5 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -	Meeting and convention planners	-	_	-	-	-	_	-	-	-	_	-	7.7
Accountants and auditors .6 .4 1.5 .3 .6 .5 - - - - 77 Appraisers and assessors of real estate - - - - - - - - 77 Appraisers and assessors of real estate - - - - - - - - - - 17.5 Credit analysts - - - - - - - - - - - 17.5 Credit analysts - - - - - - - - - 17.5 Gradit analysts - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -	Financial specialists		.3	.9	.2	.4	.3	-	.1	.1	-	-	1.3
Appraisers and assessors of real estate - - - - - - - - 17.5 Appraisers and assessors of real estate - - - - - - - 17.5 Credit analysts - - - - - - - - 17.5 Credit analysts - - - - - - - - 17.5 Credit analysts - - - - - - - - 17.5 Financial analysts - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -<	Accountants and auditors	.6	.4	1.5	.3	.6	.5	-	-	-	-	-	.7
Àppraisers and assessors of real estate - - - - - - - 17.5 Credit analysts - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - </td <td>Accountants and auditors</td> <td>.6</td> <td>.4</td> <td>1.5</td> <td>.3</td> <td>.6</td> <td>.5</td> <td>- </td> <td>-</td> <td>-</td> <td>_</td> <td>_</td> <td>.7</td>	Accountants and auditors	.6	.4	1.5	.3	.6	.5	-	-	-	_	_	.7
Àppraisers and assessors of real estate - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - <td>Appraisers and assessors of real estate</td> <td>-</td> <td>_</td> <td>- </td> <td>-</td> <td>-</td> <td>-</td> <td>- </td> <td>-</td> <td>-</td> <td>_</td> <td>_</td> <td>17.9</td>	Appraisers and assessors of real estate	-	_	-	-	-	-	-	-	-	_	_	17.9
Credit analysts - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -	Appraisers and assessors of real estate	-	_	-	_	-	_	-	-	-	_	_	17.9
Credit analysts - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -	Credit analysts	-	-	-	_	-	_	-	-	-	_	_	-
Financial analysts and advisors - - 7 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -		_	_	-	_	_	_		_	_	_	_	_
Financial analysts - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -	Financial analysts and advisors	-	_	.7	_	-	_	-	-	-	_	_	-
Personal financial advisors - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -			-	-	-	_	-		-	-	_	_	-
Loan counselors and officers - - - - - - - - - - - 2.3 Loan counselors - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - 2.3 - - - - - 2.3 - - - - - -		-	_	-	_	-	_	-	-	-	_	_	-
Loan counselors and officers - - - - - - - - - - - 2.3 Loan counselors - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - 2.3 - - - - - 2.3 - - - - - -	Insurance underwriters	_	_	2.4	_	_	_		_	_	_	_	_
Loan counselors - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -		_	_	-	_	_	_		_	_	_	_	2.3
Loan officers - - - - - - - - - - - - - 2.3 Tax examiners, collectors, preparers, and revenue agents - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -		_	_	-	_	_	_		_	_	_	_	_
Tax examiners, collectors, preparers, and revenue agents - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - 1.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0		_	_	-	_	_	_		_	_	_	_	2.3
revenue agents - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -	Tax examiners, collectors, preparers, and												
Tax preparers - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - 100 000000000000000000000000000000000000		_	_	-	_	_	_	_	_	_	-	-	-
Computer and mathematical occupations 1.9 1.0 .7 .3 .6 .5 - .1 .1 - - 1.0 1.0 .7 .3 .6 .5 - .1 .1 - - 1.0 .7 .3 .6 .5 - .1 .1 - - 1.0 .7 .3 .6 .5 - .1 .1 - - - .5 .5 - .1 .1 - - .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5			_	-	_	_	_		_	_	_	_	_
Computer specialists 1.9 1.1 .7 .3 .6 .5 - .1 .1 - - .5 Computer programmers .9 .8 1.1 - .9 .9 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7		1.9	1.0	.7	.3	.6	.5	_	.1	.1	-	-	1.0
Computer programmers .9 .8 1.1 - .9 .9 .7 - - - - - - - - .7 Computer programmers .9 .8 1.1 - .9 .9 .7 - - - - - - - .7 Computer programmers .9 .8 1.1 - .9 .9 - - - - - .7 Computer software engineers .4 .3 .5 - - - - - - - .7 Computer software engineers, .4 .3 .5 - - - - - - .2	Computer specialists	1.9	1.1						.1	.1	_	_	.9
Computer programmers .9 .8 1.1 - .9 .9 - - - - - .7 Computer software engineers, .4 .3 .5 - - - - - - - - .7 Computer software engineers, .4 .3 .5 - - - - - - - .2								_		_	_	-	.7
Computer software engineers, .4 .3 .5 - - - - - - - - - .2								_	_	_	_	-	.7
Computer software engineers,			-		_		_	_	_	_	_	_	.2
	applications	.6	.4	.6	_	_	_	_	_	_	_	_	_

				Event o	r exposure	e leading t	o injury or	illness ⁵	
				Contact w	ith objects				
Occupation	Occupation code ³	Private industry ⁴	Total	Struck by object	Struck against object	Caught in or com- pressed or crushed	Fall to lower level	Fall on same level	Slips or trips withou fall ⁶
Computer software engineers, systems									
software	15-1032	1.1	-	-	-	-	-	-	-
Computer support specialists	15-1040	17.9	2.4	0.4	1.6	-	1.4	4.2	-
Computer support specialists	15-1041	17.9	2.4	.4	1.6	-	1.4	4.2	-
Computer systems analysts	15-1050	8.8	1.0	.5	.4	-	.7	2.8	-
Computer systems analysts	15-1051	8.8	1.0	.5	.4	-	.7	2.8	-
Database administrators	15-1060	4.1	-	-	-	-	-	-	-
Database administrators	15-1061	4.1	-	-	-	-	-	-	-
Network and computer systems									
administrators Network and computer systems	15-1070	5.9	1.3	-	.8	-	-	-	-
administrators	15-1071	5.9	1.3	_	.8	_	_	_	_
Network systems and data									
communications analysts Network systems and data	15-1080	11.2	2.1	1.4	-	-	1.3	1.7	-
communications analysts	15-1081	11.2	2.1	1.4	_	_	1.3	1.7	_
Mathematical science occupations	15-2000	15.2			_	_	3.2	4.1	_
Operations research analysts	15-2030	17.9	_	_	_	_	5.8		_
Operations research analysts	15-2031	17.9	_	_	_	_	5.8	_	_
Statisticians	15-2040	34.4	_	_	_	_	_	_	_
Statisticians	15-2041	34.4	_	_	_	_	_	_	_
Architecture and engineering occupations	17-0000	24.0	5.0	2.1	1.4	0.7	1.8	3.4	1
Architects, surveyors, and cartographers	17-1000	48.8	16.8	8.1	2.5	1.3	3.8	2.8	· _ ·
Architects, except naval	17-1010	2.3	- 10.0						_
Architects, except landscape and naval	17-1011	2.5	_	_	_	_	_	_	_
Surveyors, cartographers, and	17 1011	2.0							
photogrammetrists	17-1020	157.8	53.0	27.1	8.3	_	12.8	8.8	_
Surveyors	17-1022	180.1	60.5	31.0	9.5	_	14.6	10.1	_
Engineers	17-2000	12.0	1.8	.6	.6	.4	.4	1.2	
Aerospace engineers	17-2010	5.5		0	0			2.5	_
Aerospace engineers	17-2011	5.5	_	_	_	_	_	2.5	_
Chemical engineers	17-2040	10.2	_	_	_	_	_		_
Chemical engineers	17-2040	10.2	_	_	_	_	_	_	_
Civil engineers	17-2050	5.3	1.3	_	_	_	_	_	_
Civil engineers	17-2050	5.3	1.3	_	_	_	_	_	_
Computer hardware engineers	17-2060	4.3		_	_	_	_	_	_
Computer hardware engineers	17-2000	4.3	_	_	_	_	_	_	_
Electrical and electronics engineers	17-2001	5.8	2.2	_	1.5	_	_	.9	_
Electrical engineers	17-2070	8.9	4.0	_	2.7			.9 1.4	
Electronics engineers, except computer Industrial engineers, including health and	17-2072	2.0	-	-		_	-	-	-
safety	17-2110	8.0	1.7	.9	-	_	_	1.7	-

					Event	or exposure	e leading to ir	njury or ill	ness ⁵			
	Overe	xertion		Exposure		portation			Assaults a	nd violent ac	ts	
Occupation			Repeti-	to harmful	acc	idents	Fires			All other	assaults	All
·	Total	In lifting	tive motion	substance or environ- ment	Total	Highway accident	and explosions	Total	Assaults by person	All other assaults	Assaults by animal	other events ^{6,7}
Computer software engineers, systems software	_	_	_	_	_	_	_	_	_	_	_	_
Computer support specialists	4.9	3.0	0.7	_	2.2	1.5	_	_	_	_	_	1.6
Computer support specialists	4.9	3.0	.7	_	2.2	1.5	_	_	_	_	_	1.6
Computer systems analysts	.8		.7	_	.4	- 1.5	_	_	_	_	_	1.6
Computer systems analysts	.8	_	.7	_	.4		_	_	_	_	_	1.6
Database administrators	.0	_		_	.4	_		_	_	_	_	1.0
Database administrators	_	_	_	_	_	_		-	_	_	_	_
Network and computer systems		_		_		_	_	-	_	_	_	_
administrators	1.9	1.0	-	-	-	-	-	-	-	-	-	1.2
Network and computer systems												
administrators	1.9	1.0	-	-	-	-	-	-	-	-	-	1.2
Network systems and data												
communications analysts Network systems and data	-	-	-	2.3	_	-	-	-	-	-	-	_
communications analysts	-	-	-	2.3	-	-	-	-	-	-	-	-
Mathematical science occupations	-	-	3.2	_	-	-	-	-	-	-	-	3.6
Operations research analysts	-	-	5.4	_	-	-	-	-	-	-	-	-
Operations research analysts	-	-	5.4	_	-	_	-	-	-	-	-	-
Statisticians	-	-	-	_	-	_	-	-	-	-	-	16.5
Statisticians	-	-	-	_	-	-	-	-	-	-	-	16.5
Architecture and engineering occupations	4.0	1.9	1.1	1.4	1.1	.6	-	0.1	-	-	-	5.1
Architects, surveyors, and cartographers	2.2	_	1.9	6.5	2.8	.9	-	_	-	-	-	11.0
Architects, except naval	-	_	-	_	-	_	-	-	-	-	-	_
Architects, except landscape and naval	_	_	_	_	_	_		_	_	-	_	_
Surveyors, cartographers, and												
photogrammetrists	7.2	_	6.2	20.4	9.5	3.1	-	-	-	-	-	36.6
Surveyors	8.3	-	7.1	23.3	10.8	3.5	-	_	-	-	_	41.8
Engineers	1.6	1.0	.7	.8	.6	.4		_	_	-	_	4.4
Aerospace engineers		_	_	_		_		_	_	-	_	_
Aerospace engineers		_	_	_	_	_		_	_	_	_	_
Chemical engineers		_	_	_	_	_		_	_	_	_	_
Chemical engineers		_	_	_	_	_		_	_	_	_	_
Civil engineers		_	_	1.7	_	_		_	_	_	_	_
Civil engineers	_	_	_	1.7	_	_		_	_	_	_	_
Computer hardware engineers	_	_	_		_	_		_	_	_	_	_
Computer hardware engineers	_	_	_	_	_	_		_	_	_	_	_
Electrical and electronics engineers	_	_	_	_	_	_	_	_	_	_	_	1.0
Electrical engineers	_	_	_	_	_	_	_	_	_	_	_	1.8
Electronics engineers, except computer	_	_	_	_	_	_		_	_	_	_	
Industrial engineers, including health and				_	_	_	-	-	_	_	_	
safety	1.0	_	_	_	_	_	_	_	_	_	_	1.9
Saloty	1.0		_	_	_			-	_	_	_	1.3

				Event o	r exposur	e leading t	o injury or	illness ⁵	
				Contact w	ith objects	3			
Occupation	Occupation code ³	Private industry ⁴	Total	Struck by object	Struck against object	Caught in or com- pressed or crushed	Fall to lower level	Fall on same level	Slips or trips without fall ⁶
Health and safety engineers, except mining safety engineers and inspectors Industrial engineers Marine engineers and naval architects Marine engineers and naval architects Materials engineers Materials engineers	17-2111 17-2112 17-2120 17-2121 17-2130 17-2131	7.4 8.0 34.7 34.7 30.9 30.9	- 1.8 - 11.2 11.2	0.8 	- - - - -			_ 1.5 _ _ _ _	
Mechanical engineers	17-2140	10.1	2.4	-	-	-	-	-	-
Mechanical engineers Mining and geological engineers,	17-2141	10.1	2.4	-	-	-	-	-	-
including mining safety engineers, Mining and geological engineers,	17-2150	67.2	22.9	-	-	-	-	-	-
including mining safety engineers Drafters, engineering, and mapping	17-2151	67.2	22.9	-	-	-	-	-	-
technicians	17-3000	40.7	8.1	3.4	2.8	1.2	3.9	7.9	2.2
Drafters	17-3010	4.2	-	-	-	-	-	-	-
Mechanical drafters	17-3013	2.5	-			-	-	-	-
Engineering technicians, except drafters Electrical and electronic engineering	17-3020	53.8	11.5	4.7	3.7	2.1	5.9	9.9	1.4
technicians	17-3023 17-3026	89.0	17.0	8.8	3.7	3.1	8.9	21.0	2.2
Industrial engineering technicians Mechanical engineering technicians	17-3026	17.6 50.5	23.7	7.8	10.2	_ 5.3	- 6.3	_ 4.0	-
Surveying and mapping technicians	17-3030	92.4	13.7	7.3	6.0	- 5.5	0.3 5.2	22.2	_ 15.7
Surveying and mapping technicians	17-3031	92.4	13.7	7.3	6.0	_	5.2	22.2	15.7
Life, physical, and social science occupations	19-0000	24.5	4.2	2.7	.8	.4	1.4	4.6	1.1
Life scientists	19-1000	19.5	4.2	3.3			_	2.5	1.8
Agricultural and food scientists	19-1010	63.6	13.8	9.4	_	-	-	_	11.1
Soil and plant scientists	19-1013	139.0	-	-	-	-	-	-	24.0
Biological scientists	19-1020	13.3	-	-	-	-	-	-	-
Zoologists and wildlife biologists	19-1023	30.4	-	-	-	-	-	-	-
Conservation scientists and foresters	19-1030	28.5	-	-	-	-	-	-	-
Foresters	19-1032	50.2	-	-	-	-	-	-	-
Medical scientists Medical scientists, except	19-1040	12.5	_	_	_	-	-	3.4	-
epidemiologists	19-1042	12.8	-		-	-	-	3.4	-
Physical scientists	19-2000 19-2030	16.1	1.8	1.1	-	-	-	1.4	_
Chemists and materials scientists Chemists	19-2030 19-2031	5.0 5.6	_	_	_	_	_	_	_
Environmental scientists and							_	_	_
geoscientists Environmental scientists and	19-2040	22.4	-	_	-	-	-	-	_
specialists, including health	19-2041	25.9	-	-	-	-	-	-	-

					Event	or exposure	e leading to ir	ijury or illi	ness ⁵			
	Overe	xertion		Exposure		portation idents			Assaults a	nd violent ac	ts	
Occupation			Repeti-	to harmful	acc	laents	Fires			All other	assaults	All
	Total	In lifting	tive motion	substance or environ- ment	Total	Highway accident	and explosions	Total	Assaults by person	All other assaults	Assaults by animal	other events ^{6,7}
Health and safety engineers, except mining safety engineers and inspectors Industrial engineers	- 1.0	_	_	_	_	_	_	_	_	_	_	- 2.0
Marine engineers and naval architects	- 1.0	_		_	_	_		_	_	_	_	2.0
	_	_	-		_	-	-	-	_	-	_	_
Marine engineers and naval architects		_	_	-	-	-	-	_	_	_	_	-
Materials engineers	8.1	_		-	-	_		_	_	_	_	-
Materials engineers	8.1 2.5	1.8	2.1	1.0	_	_	_	-	_	_	_	.9
Mechanical engineers		1.8	1	-	_	_	_	-	_	_	_	.9
Mechanical engineers Mining and geological engineers,	2.5		2.1	1.0		-	_	_	_	_	_	.9
including mining safety engineers Mining and geological engineers,	22.9	-	-	-	-	-	-	-	-	-	-	-
including mining safety engineers Drafters, engineering, and mapping	22.9	-	-	-	-	_	-	-	_	_	_	-
technicians	9.0	4.2	1.5	1.4	1.6	1.0	-	-	-	_	_	4.9
Drafters	-	_	-	-	-	_	-	-	-	_	_	1.9
Mechanical drafters	-	_	-	-	-	_	-	-	-	-	_	-
Engineering technicians, except drafters Electrical and electronic engineering	11.8	6.9	2.4	1.7	2.1	1.7	-	-	-	_	_	6.8
technicians	14.6	5.7	3.3	3.4	3.0	2.4	_	_	_	_	_	14.4
Industrial engineering technicians	10.4	9.7		_	_	_	_	_	_	_	_	
Mechanical engineering technicians	9.1	4.3	_	_	_	_	_	_	_	_	_	_
Surveying and mapping technicians	23.5	_	_	_	_	_	_	_	_	_	_	3.7
Surveying and mapping technicians	23.5	_	_	_	_	_	_	_	_	_	_	3.7
Life, physical, and social science occupations	4.6	2.5	1.2	2.3	.7	.6	_	0.9	_	0.7	0.7	3.3
Life scientists	2.2		1.2	1.9	1.5	0	_	_	_	_		4.2
Agricultural and food scientists		_				_	_	_	_	_	_	27.6
Soil and plant scientists	_	_	_	_	_	_	_	_	_	_	_	
Biological scientists	4.5	_	_	_	_	_	_	_	_	_	_	_
Zoologists and wildlife biologists		_	_	_	_	_	_	_	_	_	_	_
Conservation scientists and foresters	_	_	_	_	_	_	_	_	_	_	_	_
Foresters	_	_	_	_	_	_	_	_	_	_	_	_
Medical scientists	_	_	_	_	_	_	_	_	_	_	_	_
Medical scientists, except	_											
epidemiologists	4.6	4.4	1.5	- 1.7	_	_	_	_	_	_	_	3.8
Physical scientists Chemists and materials scientists	-			1.7		_		_	_	_	_	3.0
Chemists and materials scientists	_	_	_		_			_	_	_	_	
Environmental scientists and	_	-	-	_	_		-	-	_		-	-
geoscientists	10.6	10.2	-	-	-	-	-	-	_	-	_	7.9
Environmental scientists and specialists, including health	17.7	17.1	-	-	-	-	-	-	_	_	_	-

				Event o	r exposur	e leading t	o injury or	illness ⁵	
				Contact w	ith objects	6			
Occupation	Occupation code ³	Private industry ⁴	Total	Struck by object	Struck against object	Caught in or com- pressed or crushed	Fall to lower level	Fall on same level	Slips or trips without fall ⁶
Social scientists and related workers	19-3000	14.7	0.7				1.4	5.6	0.7
Market and survey researchers	19-3000	14.7	0.7	_		_	1.4	5.8	0.7
	19-3020	12.9	_				1.0	5.8	
Market research analysts		-	_	_	_	_	1.0	5.8 9.9	_
Psychologists	19-3030	21.0	_	-	-	_	-	9.9	-
Clinical, counseling, and school	40.0004	44.0						<u> </u>	
psychologists	19-3031	11.2	-	-	-	-	-	6.6	-
Miscellaneous social scientists and	40.0000	00.0							
related workers	19-3090	39.3	-	-			-		9.9
Life, physical, and social science technicians	19-4000	49.8	11.4	7.0	2.5	1.5	3.2	7.5	1.7
Agricultural and food science technicians Agricultural and food science	19-4010	102.0	24.2	-	12.3	-	-	18.7	-
technicians	19-4011	102.0	24.2	_	12.3	_	_	18.7	_
Biological technicians	19-4020	9.4		_	_	_	_	_	_
Biological technicians	19-4021	9.4	_	_	_	_	_	_	_
Chemical technicians	19-4030	46.9	10.6	7.2	_	_	4.1	6.1	_
Chemical technicians	19-4031	46.9	10.6	7.2	_	_	4.1	6.1	_
Geological and petroleum technicians	19-4040	13.9	- 10.0	1.2		_		- 0.1	
	19-4040	13.9	_	_	_	_	_	_	_
Geological and petroleum technicians				_			_	_	_
Social science research assistants	19-4060	18.7		_				_	-
Social science research assistants	19-4061	18.7	-	-	-	-	-	-	-
Miscellaneous life, physical, and social	10, 1000	00.4		45.5			74	40.5	
science technicians	19-4090	90.4	20.3	15.5	-	-	7.1	10.5	-
Environmental science and protection									
technicians, including health	19-4091	25.5	-	-	-	-	-	12.1	-
Community and social services occupations	21-0000	94.4	11.7	6.9	2.4	2.0	7.2	20.8	3.6
Counselors, social workers, and other									
community and social service specialists	21-1000	99.4	12.4	7.2	2.5	2.2	7.6	21.8	3.7
Counselors	21-1010	114.9	12.2	7.8	2.9	-	8.8	24.5	2.9
Substance abuse and behavioral									
disorder counselors	21-1011	47.4	-	-	-	-	18.0	-	-
Educational, vocational, and school									
counselors	21-1012	125.1	11.0	7.3	3.3	-	7.8	25.3	-
Mental health counselors	21-1014	73.2	4.0	-	-	_	3.5	7.3	3.8
Rehabilitation counselors	21-1015	45.4	6.4	3.6	-	-		9.7	1.9
Social workers	21-1020	98.5	13.7	6.3	3.1	4.0	7.0	28.1	4.3
Child, family, and school social workers	21-1021	35.6	9.0	5.4	3.7	_	_	7.4	_
Medical and public health social	_						45.0		
workers	21-1022	69.3	3.8	-	-	-	15.2	21.9	4.0
Mental health and substance abuse									_
social workers	21-1023	41.4	2.2	-	-	-	3.2	4.8	2.4
Miscellaneous community and social									
service specialists	21-1090	83.2	11.1	7.6	1.4	2.0	7.1	11.5	4.0
Health educators	21-1091	9.6	-	-	-	-	-	-	-

					Event	or exposure	e leading to ir	njury or illr	ness ⁵			
	Overe	xertion		Exposure		oortation idents			Assaults a	nd violent ac	ts	
Occupation			Repeti-	to harmful	acc		Fires			All other	assaults	All
	Total	In lifting	tive motion	substance or environ- ment	Total	Highway accident	and explosions	Total	Assaults by person	All other assaults	Assaults by animal	other events ^{6,7}
Social scientists and related workers	2.5	1.7	_	0.7	0.8	0.7	-	_	_	_	_	1.6
Market and survey researchers	1.9	1.9		-	-	-		-	_	-		1.4
Market research analysts	2.1	2.1	-	-	-	-	-	-	_	-	-	1.5
Psychologists	7.5	-	-	-	-	-	-	-	-	-	-	-
Clinical, counseling, and school												
psychologists Miscellaneous social scientists and	-	_	-	-	-	-	-	-	-	-	_	-
related workers	-	-	-	-	-	—	-	-	-	-	-	-
Life, physical, and social science technicians	9.3	3.0	2.1	5.5	-	—	-	3.1	-	3.0	3.0	4.9
Agricultural and food science technicians Agricultural and food science	9.8	-	-	27.6	-	-	-	-	_	-	_	-
technicians	9.8	-	-	27.6	-	-	-	-	-	-	-	-
Biological technicians	-	-	-	-	-	-	-	-	-	-	-	-
Biological technicians	-	-	-	-	-	_	-	-	-	-	-	-
Chemical technicians	7.7	3.5	-	5.3	-	_	-	-	-	-	-	6.8
Chemical technicians	7.7	3.5	-	5.3	-	_	-	-	_	-	-	6.8
Geological and petroleum technicians	-	-	-	-	-	_	-	-	_	-	-	-
Geological and petroleum technicians	-	-	-	-	-	_	-	-	_	-	_	-
Social science research assistants	-	-	-	-	-	_		-	_	-	_	-
Social science research assistants	-	-	-	-	-	_		-	_	-	_	-
Miscellaneous life, physical, and social												
science technicians	23.5	6.6	3.8	4.0	_	_		9.8	_	9.8	9.8	8.3
Environmental science and protection												
technicians, including health	11.2	_	_	_	_	_		-	_	_	_	_
Community and social services occupations	11.9	5.1	.3	4.6	13.3	10.4	_	13.3	12.9	.3	.3	7.8
Counselors, social workers, and other		0										
community and social service specialists	12.4	5.3	.3	4.9	14.1	11.0		14.1	13.7	.4	.3	8.2
Counselors	18.2	9.2		5.3	12.8	9.4	_	20.7	19.9	.9	.6	9.4
Substance abuse and behavioral		0		0.0		0.11		_0				
disorder counselors	17.1	17.1	_	_	_	_	_	-	_	_	_	_
Educational, vocational, and school												
counselors	9.4	4.5	_	3.2	28.5	12.2		23.1	23.1	_	_	13.8
Mental health counselors	11.1	6.9	_	6.7	_	_		29.4	28.6	_	_	6.5
Rehabilitation counselors	13.6	9.3	_	_	2.0	_		6.6	6.6	_	_	4.4
Social workers	7.0	2.5	_	7.1	16.5	11.4		10.3	10.2	_	_	4.4
Child, family, and school social workers			_		5.4	5.3		8.1	8.1	_	_	3.0
Medical and public health social workers	4.4	1.9	_	3.1	9.7	5.4	_		3.7	_		3.3
Mental health and substance abuse				_	-	-		3.8	-			3.3
social workers	1.9	-	-	15.6	2.3	2.3	-	7.6	7.6	-	-	-
Miscellaneous community and social					10.5	10.5						
service specialists	12.2	4.2	-	1.9	12.6	12.2	-	11.1	11.0	-	-	11.1
Health educators	-	-	-	-	-	-	-	-	-	-	-	

				Event o	r exposure	e leading t	o injury or	illness ⁵	
				Contact w	ith objects	;			
Occupation	Occupation code ³	Private industry ⁴	Total	Struck by object	Struck against object	Caught in or com- pressed or crushed	Fall to lower level	Fall on same level	Slips or trips without fall ⁶
Social and human service assistants	21-1093	86.5	14.9	11.1	1.2	_	8.4	12.5	5.8
Religious workers		12.8	14.9			_	0.4	4.4	5.0
Clergy		9.9	_	_	_	_	_	4.8	_
Clergy		9.9	_	_	_	_	_	4.8	_
Legal occupations		19.3	.7	.4	.3	_	3.2	4.0 6.4	_
5 1		6.7	.7	.4		_	3.2	-	
Lawyers, judges, and related workers			_	_	_	_	_	1.8	-
Lawyers	23-1010	6.7	_	-	_	-	-	1.9	-
Lawyers		6.7	-		-	-		1.9	-
Legal support workers		42.1	2.1	1.1	.9	-	8.7	14.7	-
Paralegals and legal assistants		23.7	2.9	1.6	1.3	-	12.6	3.8	-
Paralegals and legal assistants	23-2011	23.7	2.9	1.6	1.3	-	12.6	3.8	-
Miscellaneous legal support workers Title examiners, abstractors, and		80.7	-	-	_	-	-	37.5	-
searchers	23-2093	111.6	-	-	-	-	-	58.5	-
Education, training, and library occupations		58.5	10.2	5.2	4.3	0.2	2.2	17.0	2.8
Postsecondary teachers	25-1000	16.3	7.4	.6	6.7	-	.5	3.4	1.6
Health teachers, postsecondary Nursing instructors and teachers,	25-1070	7.1	-	-	-	-	-	-	_
postsecondary	25-1072	18.9	_	_	-	_	_	_	-
Arts, communications, and humanities									
teachers, postsecondary	25-1120	2.8	_	_	_	-	_	_	_
Miscellaneous postsecondary teachers	25-1190	39.5	19.1	1.4	17.3	-	_	6.9	4.4
Vocational education teachers.			-						
postsecondary	25-1194	102.3	58.4	_	54.7	_	_	7.6	13.4
Primary, secondary, and special education									
school teachers	25-2000	41.5	8.0	4.7	3.1	_	2.2	15.5	2.1
Preschool and kindergarten teachers	25-2010	60.9	9.8	6.8	2.8	_	3.8	28.3	3.6
Preschool teachers, except special	20 2010	00.0	0.0	0.0	2.0		0.0	20.0	0.0
education	25-2011	66.0	10.6	7.4	3.1	_	4.1	30.7	3.9
Elementary and middle school teachers	25-2020	22.8	6.0	2.6	3.2	_		4.7	.8
Elementary school teachers, except	20 2020	22.0	0.0	2.0	0.2				.0
special education	25-2021	31.9	8.4	3.6	4.6	_	_	6.5	1.2
Secondary school teachers	25-2021	25.3	8.2	3.8	4.0	_	1.7	5.2	1.2
Secondary school teachers, except	20 2000	20.0	0.2	0.0			1.7	0.2	
special and vocational education	25-2031	24.1	7.5	2.9	4.2		1.8	5.2	
Vocational education teachers,	25-2051	24.1	7.5	2.9	4.2	_	1.0	5.2	_
	25-2032	55.2							
secondary school	25-2032	38.3		_		_	_	_	
Special education teachers Special education teachers, preschool,			_	_	_	_	_	-	_
kindergarten, and elementary school Special education teachers, secondary	25-2041	40.5	_	_	_	-	-	-	-
school	25-2043 25-3000	52.4	-	-	-	-	-	-	-
Other teachers and instructors		149.8	22.8	15.2	6.9		4.8	45.2	1.0

					Event	or exposure	e leading to ir	jury or illr	ness ⁵			
	Overe	xertion		Exposure		portation			Assaults a	nd violent ac	ts	
Occupation			Repeti-	to harmful	acc	idents	Fires			All other	assaults	All
	Total	In lifting	tive motion	substance or environ- ment	Total	Highway accident	and explosions	Total	Assaults by person	All other assaults	Assaults by animal	other events ^{6,7}
Social and human service assistants	13.1	3.5	_	1.3	6.9	6.4	_	13.4	13.3	_	_	10.1
Religious workers	3.2	_	_	_	_	_		_	_	_	_	_
Clergy		_	_	_	_	_	_	_	_	_	_	_
Clergy	_	_	_	_	_	_	_	_	_	_	_	_
Legal occupations	.8	.7	3.4	_	2.9	2.8	_	_	_	_	_	1.3
Lawyers, judges, and related workers	0	.,	0.4		4.4	4.3	_					.3
Lawyers	_	[4.4	4.3	_	_	_			
	_	_	_	_	4.4	4.4		_	-	_	_	_
Lawyers	2.3		9.5	_	4.4	4.4	_		-	_	_	3.1
Legal support workers	-	1.9	9.5	-	-	_	_	-	-	_	_	-
Paralegals and legal assistants	1.4	1.0	-	-	-	-	-	-	-	-	-	2.8
Paralegals and legal assistants	1.4	1.0	-	-	-	_	-	-	-	-	-	2.8
Miscellaneous legal support workers Title examiners, abstractors, and	4.3	3.9	29.1	-	-	-	-	-	_	-	_	3.7
searchers	5.2	5.2	43.4	-	-		-	-	-	-	-	-
Education, training, and library occupations	10.5	6.0	1.1	.9	2.2	1.5	-	6.6	6.6	-	-	5.0
Postsecondary teachers	1.1	.6	-	-	-	-	-	1.6	1.6	-	-	-
Health teachers, postsecondary Nursing instructors and teachers,	-	-	-	-	-	-	-	-	—	_	-	_
postsecondary Arts, communications, and humanities	-	-	-	-	-	-	-	-	-	-	-	-
teachers, postsecondary		-		-	_	_	_	- 10	- 4.2	_	_	_
Miscellaneous postsecondary teachers Vocational education teachers,	2.2	1.6	_	_	_	_		4.3	4.3	_	_	_
postsecondary Primary, secondary, and special education	5.7	4.1	_	-	-	-	_	14.0	14.0	_	_	-
school teachers	5.0	4.0	-	.9	.4	—	-	3.3	3.3	-		4.2
Preschool and kindergarten teachers Preschool teachers, except special	4.8	3.0	-	1.0	-	-	-	1.5	1.5	_	_	7.7
education	5.2	3.2	-	1.1	-	-	-	1.6	1.6	-	-	8.3
Elementary and middle school teachers Elementary school teachers, except	8.1	8.0	-	.8	-	-	-	1.5	1.5	_	-	_
special education Secondary school teachers	11.4 _	11.3	_	1.2 -	_	-		2.1 3.8	2.1 3.8			- 3.4
Secondary school teachers, except special and vocational education	-	_	_	-	_	-	-	4.0	4.0	-	-	3.5
Vocational education teachers, secondary school	_	_	_	_	_	_	_	_	_	_	_	_
Special education teachers Special education teachers, preschool,	-	-	-	-	-	-	-	28.0	28.0	-	-	-
kindergarten, and elementary school Special education teachers, secondary	-	-	-	-	-	-	-	31.5	31.5	-	-	-
school	_	-	-	_	-	_	_	34.4	34.4	_	-	_
Other teachers and instructors	35.7	14.5	6.2	_	8.7	8.2		11.7	11.5	_		12.9

					· ·	<u> </u>	- 1. 7 -	illness ⁵	
				Contact w	ith objects	;			
Occupation	Occupation code ³	Private industry ⁴	Total	Struck by object	Struck against object	Caught in or com- pressed or crushed	Fall to lower level	Fall on same level	Slips or trips without fall ⁶
Self-enrichment education teachers		19.4	2.7	_	-	_	_	6.2	_
Self-enrichment education teachers		19.4	2.7	-	-	-	-	6.2	-
Librarians, curators, and archivists	. 25-4000	29.2	-	-	-	-	3.8	6.4	-
Archivists, curators, and museum									
technicians		31.9	-	-	-	-	-	-	-
Curators		42.8	-	-	-	-	-	_	-
Librarians		31.3	-	-	-	-	-	8.7	-
Librarians		31.3	-	-	-	-	-	8.7	-
Library technicians		22.9	-	-	-	-	-	_	-
Library technicians	. 25-4031	22.9	-	-	-	-	-	-	-
Other education, training, and library									
occupations	. 25-9000	104.9	12.0	7.1	2.2	-	2.8	23.3	8.0
Farm and home management advisors	. 25-9020	771.4	341.6	341.6	-	-	-	205.5	-
Farm and home management advisors	25-9021	771.4	341.6	341.6	-	_	-	205.5	-
Instructional coordinators	. 25-9030	32.9	-	-	-	_	-	16.2	-
Instructional coordinators	. 25-9031	32.9	-	_	-	_	-	16.2	-
Teacher assistants	. 25-9040	117.0	11.5	5.8	2.5	_	3.2	23.9	9.8
Teacher assistants	. 25-9041	117.0	11.5	5.8	2.5	_	3.2	23.9	9.8
Arts, design, entertainment, sports, and media									
occupations	. 27-0000	44.9	13.3	8.4	3.2	0.3	2.0	5.0	1.0
Art and design workers	. 27-1000	22.1	7.1	4.8	1.5	.4	1.7	3.1	.4
Artists and related workers	. 27-1010	13.7	7.5	4.9	-	_	-	_	-
Craft artists Fine artists, including painters,	. 27-1012	39.7	37.5	-	-	-	-	-	-
sculptors, and illustrators	. 27-1013	49.5	_	_	_	_	-	_	-
Designers		23.5	7.1	4.8	1.7	_	1.9	3.5	.5
Commercial and industrial designers	. 27-1021	5.4	_	_	_	_	-	_	_
Floral designers		70.5	24.8	12.0	10.1	_	-	10.0	_
Graphic designers		3.5	_	_	_	_	_	1.4	_
Interior designers		9.2	_	_	_	_	_	_	_
Merchandise displayers and window		-							
trimmers	. 27-1026	29.1	10.5	9.5	_	_	4.7	_	_
Set and exhibit designers		69.8	24.6	_	_	_	_	_	_
Entertainers and performers, sports and									
related workers	. 27-2000	151.0	51.7	31.4	13.4	.8	4.3	11.3	2.1
Actors, producers, and directors		33.8	6.5	_	5.3		1.8	4.3	
Actors		85.9	20.7	_	16.4	_	_	12.1	_
Producers and directors	-	11.4	_	_	_	_	_	_	_
Athletes, coaches, umpires, and related									
workers	. 27-2020	262.2	113.7	78.3	19.2	_	3.2	15.2	2.9
Athletes and sports competitors		2,048.9	971.1	646.3	164.0	_		22.2	
Coaches and scouts		68.5	19.5	17.0	2.5	_	3.1	15.5	_

					Event	or exposure	e leading to ir	ijury or illr	ness ⁵			1
	Overe	xertion		Exposure		portation idents			Assaults a	nd violent ac	ts	_
Occupation			Repeti-	to harmful	acc		Fires			All other	assaults	All
	Total	In lifting	tive motion	substance or environ- ment	Total	Highway accident	and explosions	Total	Assaults by person	All other assaults	Assaults by animal	other events ^{6,7}
Self-enrichment education teachers	5.1	4.8	_	_	_	_	_	_	_	_	_	_
Self-enrichment education teachers	5.1	4.8	-	-	-	_		-	_	_	-	-
Librarians, curators, and archivists	4.8	3.5	5.0	-	-	_		-	_	_	-	-
Archivists, curators, and museum	-											
technicians	_	_	_	_	_	_		_	_	_	_	_
Curators	_	_	_	_	_	_		_	_	_	_	_
Librarians	_	_	9.0	_	_	_		_	_	_	_	_
Librarians	_	_	9.0	_	_	_		_	_	_	_	_
Library technicians	_	_	_	_	_	_		_	_	_	_	_
Library technicians		_	_	_	_	_	_	_	_	_	_	_
Other education, training, and library												
occupations	21.2	13.8	1.0	2.0	4.6	1.7	_	20.6	20.6	_	_	9.4
Farm and home management advisors		-			205.5	205.5	_	_	_	_	_	_
Farm and home management advisors	_	_	_	_	205.5	205.5	_	_	_	_	_	_
Instructional coordinators	6.3	_	_	_			_	_	_	_	_	_
Instructional coordinators	6.3	_	_	_	_	_	_	_	_	_	_	_
Teacher assistants	24.9	16.8	1.3	2.2	3.7	_	_	25.3	25.3	_	_	11.2
Teacher assistants	24.9	16.8	1.3	2.2	3.7	_	_	25.3	25.3	_	_	11.2
Arts, design, entertainment, sports, and media	20	10.0			0.1			20.0	20.0			
occupations	4.6	2.1	1.3	1.4	1.7	.9	_	.7	.5	0.2	0.2	13.9
Art and design workers	4.2	2.4	1.4			0	_	'	.0			3.7
Artists and related workers				_	_	_	_	_	_	_	_	
Craft artists	_	_	_	_	_	_	_	_	_	_	_	_
Fine artists, including painters,												
sculptors, and illustrators	_	_	_	_	_	_	_	_	_	_	_	_
Designers	4.8	2.7	1.3	_	_	_	_	_	_	_	_	4.0
Commercial and industrial designers				_	_	_	_	_	_	_	_	
Floral designers	18.0	12.2	_	_	_	_	_	_	_	_	_	10.0
Graphic designers		-	_	_	_	_	_	_	_	_	_	10.0
Interior designers					_							
Merchandise displayers and window	_	_	_	_	-	_	_	-	_	_	_	_
trimmers	7.1	3.1										
Set and exhibit designers					_			_				25.0
Entertainers and performers, sports and	_	_	_	_	_		_	_	_	_	_	25.0
rolated workers	91	1.9	3.0	15	12			2.1	1.3	.7	.7	65.2
related workers Actors, producers, and directors	8.4 3.2	- 1.9	3.0	1.5	1.3	-			1.3		./	16.3
	3.2	-	-	-	-	-	-	_	_			42.9
Actors Producers and directors	3.1	_	_	_	_	-		_	_	-	-	42.9
	3.1		-	-	_		-	-	_	_		4.9
Athletes, coaches, umpires, and related	110		E 0		07			EO	2.0	2.0	2.0	000
workers	14.0	-	5.9	-	2.7	-	-	5.0	2.9	2.0	2.0	98.0
Athletes and sports competitors	62.2	-	59.6	-	-	-	-	23.0	-	-	-	879.4
Coaches and scouts	8.8	-	-	-	2.6	-	-	3.0	3.0	-		13.1

				Event o	or exposure	e leading t	o injury or	illness ⁵	
				Contact w	ith objects	6			
Occupation	Occupation code ³	Private industry ⁴	Total	Struck by object	Struck against object	Caught in or com- pressed or crushed	Fall to lower level	Fall on same level	Slips or trips without fall ⁶
Umpires, referees, and other sports									
officials	27-2023	41.1	_	_	_	_	_	_	_
Dancers and choreographers	27-2030	147.1	23.7	_	17.1	_	_	_	_
Dancers	27-2031	324.4	52.3	_	37.7	_	_	_	_
Musicians, singers, and related workers	27-2031	24.3		_		_	_	_	_
Musicians and singers	27-2042	26.0	_	_	_	_	_	_	_
Media and communication workers	27-3000	15.3	1.3	1.0	l _	_	0.8	3.8	0.9
News analysts, reporters and	21-0000	10.0	1.5	1.0			0.0	5.0	0.5
correspondents	27-3020	40.2	_	_	l _	_	_	6.3	3.9
Reporters and correspondents	27-3022	42.7	_	_	_	_	_	7.1	4.4
Public relations specialists	27-3030	10.8	_			_	_	1.1	
Public relations specialists	27-3031	10.8	_	_	_	_	_	1.1	_
Writers and editors	27-3040	11.6	_				1.3	5.6	
Editors	27-3040	14.8	_	_	_	_	2.0	6.0	_
Technical writers	27-3041	5.4	_			_	2.0	0.0	
Writers and authors	27-3043	10.1	_	_	_	_	_	5.5	_
Miscellaneous media and communication	27-3043	10.1	_	_	_	_	_	5.5	_
workers	27-3090	37.8	9.9	9.0		_	_	10.6	_
Interpreters and translators	27-3091	63.9	3.5	- 3.0				21.7	
Media and communication equipment	27-5051	03.3	_	_	_	_	_	21.7	_
workers	27-4000	38.0	8.4	5.8	1.1	_	2.9	4.7	1.1
Broadcast and sound engineering	27-4000	50.0	0.4	5.0		_	2.5	4.7	1.1
technicians and radio operators	27-4010	33.8	10.5	7.1			_	3.3	
Audio and video equipment technicians	27-4010	55.3	13.9	10.9		_	_	- 5.5	_
Broadcast technicians	27-4012	18.1	6.4	-	_	_	_	_	_
Sound engineering technicians	27-4012	18.5	0.4	_		_		_	_
Photographers	27-4014	52.5	8.0	6.0			5.8	9.1	_
Photographers	27-4020	52.5	8.0	6.0		_	5.8	9.1	_
Television, video, and motion picture	27-4021	52.5	0.0	0.0	-	_	5.0	9.1	_
camera operators and editors	27-4030	26.7							
Camera operators, television, video,	27-4030	20.7	_	_	-	_	-	_	_
and motion picture	27-4031	48.2							
Healthcare practitioners and technical	27-4031	40.2	_	_	-	_	_	_	_
•	29-0000	97.5	10.5	4.9	3.8	1.1	2.5	19.6	3.4
occupations Health diagnosing and treating practitioners	29-0000	97.5 81.6	8.1	4.9 3.6	3.0	.9	2.5 1.9	19.6	3.4
Dietitians and nutritionists	29-1000	138.6	12.6	3.0 8.7	3.0	.9	1.9	94.1	5.0
Dietitians and nutritionists	29-1030	138.6	12.6	8.7 8.7		_	_	94.1 94.1	
Pharmacists	29-1031 29-1050	136.6	2.2	0.7	1.7	_	_	94.1 5.0	
Pharmacists	29-1050	15.1	2.2	_	1.7	_	_	5.0 5.0	
	29-1051 29-1060	4.0	1.0	6	1.7	_	_	5.0	_
Physicians and surgeons Anesthesiologists	29-1060	4.0 8.2	6.4	.0		_	_	1.1	
	29-1061 29-1070	8.2 23.5	6.6	_	6.2	_	_	_ 4.6	_
Physician assistants	29-1070 29-1071	23.5	6.6	_	6.2	_	-	4.6 4.6	-
Physician assistants	29-10/1	23.3	0.0	_	0.2	-	-	4.0	_

					Event	or exposure	e leading to ir	jury or illr	ness ⁵			
	Overe	xertion		Exposure		portation idents			Assaults a	nd violent ac	ts	
Occupation			Repeti-	to harmful	acc	Idents	Fires			All other	assaults	All
	Total	In lifting	tive motion	substance or environ- ment	Total	Highway accident	and explosions	Total	Assaults by person	All other assaults	Assaults by animal	other events ^{6,7}
Umpires, referees, and other sports officials Dancers and choreographers Dancers Musicians, singers, and related workers	- - - -	- - - -	- - - -	- - -	- - -	- - -	- - - -	- - -	- - - -	- - - -	- - - -	_ 98.9 218.7 _
Musicians and singers Media and communication workers News analysts, reporters and	1.2	_	0.6	2.2	2.9	_ 1.6	-	_ 0.8	0.7		_	.9
correspondents Reporters and correspondents Public relations specialists	-	- - -	- - -	- - 4.0	13.4 14.8 3.2 3.2	12.8 14.2 -	- - -	- - -	- - -	- - -	- - -	3.4 3.8 -
Public relations specialists Writers and editors Editors Technical writers	-	_ _ _	- - -	4.0 - - -	3.2 - - -		- - -	- - -		- - - -	_ _ _	
Writers and authors Miscellaneous media and communication workers	-	-	-	-	-	-	-	-	-	-	-	-
Interpreters and translators Media and communication equipment workers	- 10.1	- 6.5	-	- 2.5	- 3.1	- 1.9	-	-	-	_	_	- 4.4
Broadcast and sound engineering technicians and radio operators Audio and video equipment technicians	10.9 19.7	5.9 13.7	-	-	_	-	-	-	-	_	_	2.9 6.3
Broadcast technicians Sound engineering technicians	-				-			-	-			
Photographers Photographers Television, video, and motion picture	10.5 10.5	7.2 7.2	-	4.4 4.4	7.2 7.2	4.8 4.8		-	-	_	_	4.3 4.3
camera operators and editors Camera operators, television, video, and motion picture	5.3 _	-	-	-	-	-	-	-	-	-	_	7.6 14.5
Healthcare practitioners and technical occupations	35.4	16.5	1.5	4.1	2.8	2.1	(8)	7.1	4.2	2.9	2.8	10.6
Health diagnosing and treating practitioners Dietitians and nutritionists Dietitians and nutritionists	30.4 16.2 16.2 1.2	11.7 7.3 7.3 .8	.8 - - 1.2	3.4 7.7 7.7	2.8 - - -	2.2 - -		4.7 - -	3.8 - -	.9 _ _ _	.9 _ _ _	8.3 - - 4.0
Pharmacists Pharmacists Physicians and surgeons Anesthesiologists	1.2 .6	.0 .8 _	1.2 1.2 -		- - -	_ _ _	- - -	_ _ 3	_ _ 3	_ _ _		4.0 4.0 .3
Physician assistants Physician assistants	3.5	-		-	-	-		- 3.1 3.1	3.1 3.1			-

				Event o	r exposure	e leading t	o injury or	illness ⁵	
				Contact w	ith objects	5			
Occupation	Occupation code ³	Private industry ⁴	Total	Struck by object	Struck against object	Caught in or com- pressed or crushed	Fall to lower level	Fall on same level	Slips or trips withou fall ⁶
Registered nurses	29-1110	124.6	12.4	5.4	4.6	1.5	2.9	27.3	4.
Registered nurses	29-1111	124.6	12.4	5.4	4.6	1.5	2.9	27.3	4.
Therapists	29-1120	78.4	6.7	3.3	2.3		2.7	12.0	2
Occupational therapists	29-1122	99.5	4.5	3.8		_		4.1	
Physical therapists	29-1123	42.2	3.7	2.2	_	_	_	2.3	_
Radiation therapists	29-1124	104.3			_	_	_		_
Recreational therapists	29-1125	54.2	_	_	_	_	_	_	_
Respiratory therapists	29-1126	99.8	11.3	5.8	4.3	_	5.0	29.0	3
Speech-language pathologists	29-1120	17.6				_			_
Veterinarians	29-1130	44.3	_	_	_	_	_	_	_
Veterinarians	29-1131	44.3	_	_	_	_	_	_	_
Health technologists and technicians	29-2000	125.3	14.3	7.3	4.9	1.4	3.5	22.4	4
Clinical laboratory technologists and	20 2000	120.0	14.0	1.0		1.4	0.0	22.7	- T
technicians	29-2010	88.8	15.6	10.2	3.5	1.2	6.2	14.6	2
Medical and clinical laboratory	20 2010	00.0	10.0	10.2	0.0		0.2	11.0	
technologists	29-2011	25.6	4.3	2.8	1.4	_	2.9	4.8	_
Medical and clinical laboratory	20 20 11	20.0		2.0			2.0		
technicians	29-2012	158.6	28.1	18.5	5.9	2.5	9.9	25.6	4
Dental hygienists	29-2020	7.8	2.1	_	_	_	_	_	_
Dental hygienists	29-2021	7.8	2.1	_	_	_	_	_	-
Diagnostic related technologists and									
technicians	29-2030	98.1	17.5	9.0	6.5	1.4	1.9	11.9	2
Cardiovascular technologists and			_				_	-	
technicians	29-2031	105.8	11.3	_	5.9	_	_	16.1	-
Diagnostic medical sonographers	29-2032	76.2	26.0	_	22.8	_	_	6.6	-
Nuclear medicine technologists	29-2033	30.2	_	_	_	_	_	_	-
Radiologic technologists and									
technicians	29-2034	108.7	18.0	12.9	3.4	1.4	2.6	13.2	3
Emergency medical technicians and									
paramedics	29-2040	349.9	26.8	14.6	8.3	1.4	12.1	31.3	8
Emergency medical technicians and				-					
paramedics	29-2041	349.9	26.8	14.6	8.3	1.4	12.1	31.3	8
Health diagnosing and treating									
practitioner support technicians	29-2050	106.0	15.4	7.3	5.2	1.9	1.5	16.1	4
Dietetic technicians	29-2051	57.9	-	_	-	_		33.3	-
Pharmacy technicians	29-2052	28.1	3.3	2.0	.9	_	.8	5.0	2
Psychiatric technicians	29-2053	307.6	43.9	24.5	12.3	-	_	43.9	7
Respiratory therapy technicians	29-2054	90.7	13.9	-	-	-	_	16.3	-
Surgical technologists	29-2055	214.6	46.7	27.9	12.1	5.1	-	52.6	13
Veterinary technologists and									
technicians	29-2056	241.4	22.4	-	12.7	4.5	_	6.2	-
Licensed practical and licensed vocational									
nurses	29-2060	140.9	12.3	5.9	4.5	1.5	2.7	38.0	5

			-		Event	or exposure	leading to ir	njury or illr	ness ⁵			
	Overe	xertion		Exposure		portation idents			Assaults a	nd violent ac	ts	
Occupation			Repeti-	to harmful	acc	Idents	Fires			All other	assaults	All
	Total	In lifting	tive motion	substance or environ- ment	Total	Highway accident	and explosions	Total	Assaults by person	All other assaults	Assaults by animal	other events ^{6,7}
Registered nurses	48.9	18.1	1.0	4.6	3.4	3.2	_	6.5	6.2	0.3	0.3	12.8
Registered nurses	48.9	18.1	1.0	4.6	3.4	3.2		6.5	6.2	.3	.3	12.8
Therapists		14.6	.8	7.1	7.4	3.3		2.6	2.2	_	_	8.1
Occupational therapists	52.8	37.2		22.3	_	_		_	_	_	_	10.8
Physical therapists	23.9	8.9	_	_	2.6	_		_	_	_	_	6.8
Radiation therapists	51.4	_	_	15.6	_	_		_	_	_	_	_
Recreational therapists	_	_	_	_	_	_		14.7	14.7	_	_	15.7
Respiratory therapists	27.3	14.6	_	8.3	4.7	4.7	_	_	_	_	_	8.4
Speech-language pathologists		-	_	_				_	_	_	_	_
Veterinarians	_	_	_	_	_	_		42.6	_	42.6	42.6	_
Veterinarians	_	_	_	_	_	_		42.6	_	42.6	42.6	_
Health technologists and technicians Clinical laboratory technologists and	44.4	24.8	2.7	5.2	3.0	1.9	0.1	11.1	4.9	6.2	6.2	14.5
technicians	17.1	9.4	9.0	11.1	-	-	-	2.4	1.6	.8	.8	9.7
technologists	4.1	1.6	3.6	-	-	-	-	-	-	-	-	3.3
technicians	31.6	17.9	14.9	22.2	-	-	-	4.5	2.9	1.6	1.6	16.8
Dental hygienists Dental hygienists	_	_	_	_	_	_	_	_	_	_		_
Diagnostic related technologists and technicians	44.5	20.3	3.6	4.9	_	_		.7	.7	_	_	9.9
Cardiovascular technologists and	_		5.0	4.9	-	_		. '	.7	_	_	
technicians	45.2	21.1	-	-	-	-	-	-	-	-	-	24.9
Diagnostic medical sonographers	33.7	19.1	4.6	-	-	-	-	-	-	-	-	-
Nuclear medicine technologists Radiologic technologists and	15.9	10.7	-	-	-	-	-	-	-	-	-	-
technicians Emergency medical technicians and	49.9	21.4	3.8	7.1	-	_	-	1.1	1.1	-	_	8.9
paramedics Emergency medical technicians and	177.6	127.8	-	6.6	26.2	15.4	-	5.2	3.5	-	-	54.7
paramedics	177.6	127.8	-	6.6	26.2	15.4	-	5.2	3.5	-	-	54.7
practitioner support technicians	16.4	7.2	2.3	3.4	.4	-	-	35.4	8.4	27.0	26.9	10.5
Dietetic technicians		-	-		-	_	-	-	-	-	-	14.2
Pharmacy technicians	3.3	2.3	1.5	2.8	-	-	-	-	-	-	-	7.7
Psychiatric technicians	46.7	19.2	-	-	-	-	-	140.0	137.6	-	-	17.1
Respiratory therapy technicians	-	- 17.0			-	-	-	-	-	-	-	-
Surgical technologists Veterinary technologists and	56.8	17.9	8.0	8.7	-	_	-	-	-	-	-	24.8
technicians Licensed practical and licensed vocational	19.7	14.1	-	-	-	_	-	187.2	-	187.2	187.2	3.7
nurses	51.1	22.0	.8	5.1	2.8	2.0	-	8.0	7.4	.6	.6	14.2

				Event o	r exposur	e leading t	o injury or	illness ⁵	
				Contact w	ith objects	;			
Occupation	Occupation code ³	Private industry ⁴	Total	Struck by object	Struck against object	Caught in or com- pressed or crushed	Fall to lower level	Fall on same level	Slips or trips without fall ⁶
Licensed practical and licensed vocational nurses	29-2061	140.9	12.3	5.9	4.5	1.5	2.7	38.0	5.6
Medical records and health information	29-2001	140.9	12.5	5.9	4.5	1.5	2.1	30.0	5.0
technicians	29-2070	63.9	5.8	1.9	3.9		4.7	17.1	1.5
Medical records and health information	29-2070	03.9	5.0	1.9	5.9	_	4.7	17.1	1.5
technicians	29-2071	63.9	5.8	1.9	3.9	_	4.7	17.1	1.5
Opticians, dispensing	29-2071	18.7	5.6	1.9	3.9	_	4./	17.1	- 1.0
Opticians, dispensing	29-2080	18.7	_	_	_	_	_	12.4	_
Miscellaneous health technologists and	29-2001	10.7	-	-	_	_	-	12.4	_
technicians	29-2090	300.3	32.2	16.8	11.1	3.3	8.1	34.9	5.1
Other healthcare practitioners and technical	29-2090	300.3	3Z.Z	10.0	11.1	3.3	0.1	54.9	5.1
•	29-9000	62.1	12.7	3.0	7.5		26	9.6	
occupations Occupational health and safety specialists	29-9000	02.1	12.7	3.0	1.5	_	3.6	9.0	_
and technicians	29-9010	76.5	12.7		7.3		6.5	9.0	
Occupational health and safety	29-9010	70.5	12.7	_	1.3	_	0.5	9.0	_
	29-9011	69.0	12.4					7.3	
specialists	29-9011	69.0	12.4	-	-	_	_	7.3	_
Occupational health and safety	29-9012	102.6							
technicians	29-9012	102.0	-	-	_	_	-	_	_
Miscellaneous health practitioners and technical workers	29-9090	53.1	12.8	_	7.6			9.9	
	31-0000	262.1	29.1	15.7	7.0	3.2	5.4	43.6	8.6
Healthcare support occupations Nursing, psychiatric, and home health aides	31-1000	345.3	36.6	20.2	9.5	3.2	5.4 6.7	43.0 53.9	0.0 9.7
Nursing, psychiatric, and home health	31-1000	545.5	30.0	20.2	9.5	3.0	0.7	55.9	9.7
aides	31-1010	345.3	36.6	20.2	9.5	3.8	6.7	53.9	9.7
Home health aides	31-1010	135.0	13.1	6.9	2.8	.6	0.7 7.2	23.0	9.7 3.5
Nursing aides, orderlies, and	31-1011	135.0	13.1	0.9	2.0	.0	1.2	23.0	3.5
	31-1012	465.3	49.4	27.6	13.6	5.9	6.2	71.1	13.2
attendants	31-1012	1,118.6	49.4	76.9	22.7	5.9	18.3	190.3	33.4
Psychiatric aides Occupational and physical therapist	31-1013	1,110.0	104.4	70.9	22.1	_	10.5	190.5	33.4
assistants and aides	31-2000	70.9	3.7	2.8				13.2	
	31-2000	70.9	5.7	2.0	_	_	-	13.2	_
Occupational therapist assistants and	31-2010	93.2						12.5	
aides Occupational therapist assistants	31-2010	93.2	_	_	-	_	_	12.5	_
· · ·	31-2011	91.7	_	-	_	_		12.5	_
Occupational therapist aides	31-2012	98.4 63.9	4.5	3.4	-	_	-	_ 13.4	_
Physical therapist assistants and aides Physical therapist assistants	31-2020	40.9	4.5	5.9	_	_	_	5.8	
Physical therapist assistants Physical therapist aides		40.9 94.7		5.9				23.6	
Other healthcare support occupations	31-2022	128.1	17.7	8.6	5.7	2.5	- 3.3	23.6	7.6
Massage therapists	31-9000	66.4	9.8	0.0	<u> </u>	2.0	3.3	11.1	0.1
Massage therapists	31-9010	66.4	9.8 9.8	_		_		11.1	-
Miscellaneous healthcare support	31-9011	00.4	9.0	_	-	-	-	11.1	-
	31-9090	130.1	18.0	8.7	5.8	2.6	3.3	28.3	7.8
occupations Dental assistants	31-9090	32.6	6.3	.8	5.6 .9	2.0	3.3	28.3 8.2	14.1
Dental assistants	31-3031	32.0	0.5	.0	.9	-	-	0.2	14.1

				п	Event	or exposure	e leading to in	njury or illi	ness ⁵			1
	Overe	xertion		Exposure		portation idents			Assaults a	nd violent ac	ts	
Occupation			Repeti-	to harmful	acc		Fires			All other	assaults	All
	Total	In lifting	tive motion	substance or environ- ment	Total	Highway accident	and explosions	Total	Assaults by person	All other assaults	Assaults by animal	other events ^{6,7}
Licensed practical and licensed												
vocational nurses Medical records and health information	51.1	22.0	0.8	5.1	2.8	2.0	-	8.0	7.4	0.6	0.6	14.2
technicians Medical records and health information	9.5	3.3	3.9	1.9	-	-	-	-	-	-	-	18.8
technicians	9.5	3.3	3.9	1.9	-	-	-	-	-	-	-	18.8
Opticians, dispensing Opticians, dispensing Miscellaneous health technologists and	-	-	-	-	-	-	-	-	-	-	-	-
technicians	165.0	118.5	3.8	11.6	3.5	3.5	-	13.1	12.9	-	_	23.0
occupations	15.4	8.9	-	6.2	2.0	-	-	4.2	4.2	-	-	6.4
and technicians Occupational health and safety	23.7	17.0	-	12.4	-	-	-	-	-	-	-	8.5
specialists Occupational health and safety	29.6	21.0	-	_	-	-	-	-	-	-	_	9.7
technicians Miscellaneous health practitioners and	-	-	-	-	-	-	-	-	_	-	_	_
technical workers	10.2	3.8	-	-	-	-	-	6.9	6.9	-	-	5.1
Healthcare support occupations Nursing, psychiatric, and home health aides	115.1 168.8	47.7 68.7	3.3 2.3	9.9 8.6	5.3 7.3	4.4 6.1	0.2	21.0 24.3	17.1 22.7	4.0 1.6	3.9 1.6	20.7 26.7
Nursing, psychiatric, and home health			_	0.0	_	0.1	.+	24.5	22.1	1.0	1.0	_
aides Home health aides	168.8	68.7 20.6	2.3	8.6 4.5	7.3	6.1 10.6	.4	24.3 6.7	22.7 3.8	1.6 2.9	1.6 2.9	26.7 13.6
Nursing aides, orderlies, and	50.9		-	_	12.3		-	-		-	_	
attendants Psychiatric aides Occupational and physical therapist	244.5 184.5	99.9 60.3	3.7	11.1 15.5	2.7 70.7	2.2 51.8	.6 –	28.1 399.4	27.3 398.0	.8	.8 _	34.7 50.1
assistants and aides Occupational therapist assistants and	35.6	10.1	-	-	-	-	-	13.6	13.6	-	_	2.8
aides	70.6	9.6	_	-	-	-	-	-	-	-	-	-
Occupational therapist assistants	72.9	-	-	-	-	-	-	-	-	-	-	-
Occupational therapist aides Physical therapist assistants and aides	62.8 24.5	_ 10.3	_	-	-	-	-	_ 17.6	_ 17.6	_	_	2.2
Physical therapist assistants and aldes	24.5	7.7	_	_	_	_	_	- 17.0	- 17.0	_	_	
Physical therapist addistants		13.8	_	_	_	_	_	40.4	40.4	_	_	_
Other healthcare support occupations		12.7	5.3	13.3	2.1	1.7	-	15.7	7.0	8.7	8.7	11.4
Massage therapists	8.8	_	9.8	-	_	-		-	-	-	-	19.5
Massage therapists Miscellaneous healthcare support	8.8	-	9.8	-	-	-	-	-	-	-	_	19.5
occupations Dental assistants	24.4 -	13.1 -	5.2 -	13.7 3.7	2.2	1.7 -		16.2 -	7.2 -	9.0	9.0	11.1 -

				Event o	r exposur	e leading t	o injury or	illness ⁵	
				Contact w	ith objects	\$			
Occupation	Occupation code ³	Private industry ⁴	Total	Struck by object	Struck against object	Caught in or com- pressed or crushed	Fall to lower level	Fall on same level	Slips or trips without fall ⁶
Madical accistante	31-9092	51.3	3.6	2.4			0.8	6.0	3.2
Medical assistants					_	_	0.0	6.2	3.2
Medical equipment preparers	31-9093	165.5	23.6	16.1	-			74.3	-
Medical transcriptionists	31-9094	11.0	-	-	-	-	3.2	2.6	-
Pharmacy aides	31-9095	183.9	35.5	23.4	11.5	-	4.0	17.8	-
Veterinary assistants and laboratory									
animal caretakers	31-9096	207.2	11.0	8.6		-		-	
Protective service occupations	33-0000	116.9	13.9	7.3	5.1	1.0	9.7	27.6	5.2
First-line supervisors/managers, protective									
service workers	33-1000	96.6	-	-	-	-	26.3	18.9	-
First-line supervisors/managers, law									
enforcement workers	33-1010	175.2	-	-	-	-	-	_	-
Fire fighting and prevention workers	33-2000	92.5	25.0	_	-	-	_	-	-
Fire fighters	33-2010	91.7	27.6	_	-	-	_	_	-
Fire fighters	33-2011	91.7	27.6	_	-	_	_	_	_
Law enforcement workers	33-3000	349.3	56.1	49.5	_	_	18.1	68.1	14.5
Bailiffs, correctional officers, and jailers	33-3010	347.9	62.3	59.8	_	_	_	64.5	_
Correctional officers and jailers	33-3012	348.5	62.4	59.9	_	_	_	64.6	_
Parking enforcement workers	33-3040	656.1	-	_	_	_	_	-	_
Parking enforcement workers	33-3041	656.1	_	_	_	_	_	_	_
Police officers	33-3050	331.1	37.6	_		_	_ 50.0		_
Police and sheriff's patrol officers	33-3051	358.9	50.3	_	_	_	58.2	76.7	_
			50.5	_		_	50.2	70.7	_
Transit and railroad police	33-3052	265.1	-						-
Other protective service workers	33-9000	112.9	13.3	6.6	5.1	1.1	8.8	27.3	5.1
Animal control workers	33-9010	1,520.1	-	-	-	-	-	-	-
Animal control workers	33-9011	1,520.1	-	-	-	-	-	_	-
Private detectives and investigators	33-9020	29.6	5.2	-	-	-	-	-	-
Private detectives and investigators	33-9021	29.6	5.2	-	-	-	-	-	-
Security guards and gaming surveillance									
officers	33-9030	109.2	12.6	6.2	5.2	.7	8.7	27.9	5.5
Gaming surveillance officers and									
gaming investigators	33-9031	423.7	51.0	_	-	-	_	114.4	-
Security guards	33-9032	107.8	12.4	6.2	5.1	.7	8.7	27.5	5.4
Miscellaneous protective service workers	33-9090	149.7	26.1	15.2	6.1	4.8	14.2	31.6	3.1
Crossing guards	33-9091	144.3	41.3	41.3	_	_	_	22.5	_
Lifeguards, ski patrol, and other									
recreational protective service workers	33-9092	190.8	25.7	11.6	9.6	_	20.9	43.4	_
Food preparation and serving related	00 0002	100.0	20.7	11.0	0.0		20.0	40.4	
occupations	35-0000	107.5	35.1	20.1	9.1	3.1	3.4	23.8	5.4
Supervisors, food preparation and serving	33-0000	107.5	55.1	20.1	9.1	3.1	5.4	20.0	5.4
	25 1000	140.0	20.4	40.4	E 7	E 4	0.7	07.0	6.0
workers	35-1000	118.6	30.4	18.1	5.7	5.1	2.7	27.2	6.9
First-line supervisors/managers, food	05 4046								
preparation and serving workers	35-1010	118.6	30.4	18.1	5.7	5.1	2.7	27.2	6.9
Chefs and head cooks	35-1011	142.3	66.7	53.6	4.9	-	3.2	9.6	3.4

					Event	or exposure	e leading to in	njury or illr	ness ⁵			
	Overe	xertion		Exposure		portation idents			Assaults a	nd violent ac	ts	
Occupation			Repeti-	to harmful	acc		Fires			All other	assaults	All
	Total	In lifting	tive motion	substance or environ- ment	Total	Highway accident	and explosions	Total	Assaults by person	All other assaults	Assaults by animal	other events ^{6,7}
Medical assistants Medical equipment preparers Medical transcriptionists Pharmacy aides	10.7 47.0 - 21.1	3.1 34.1 - 18.8	7.5 6.1 2.4	5.1 _ _ 92.0	- - -		- - - -	5.5 - - -	5.5 - - -	- - - -	- - - -	8.4 8.3 - 7.1
Veterinary assistants and laboratory animal caretakers Protective service occupations	25.6 9.2	22.0 4.1	_ .4	22.2 6.3	_ 14.4	_ 11.2		139.8 16.3	_ 12.7	139.8 3.6	139.8 3.4	_ 13.8
First-line supervisors/managers, protective service workers First-line supervisors/managers, law	10.6	7.1	-	-	9.9	9.6	-	13.8	13.8	-	-	10.2
enforcement workers Fire fighting and prevention workers	_ 18.3	_ 18.3			-							- 17.0 18.8
Fire fighters Fire fighters Law enforcement workers	- 45.3	_ _ 25.3	_ _ _	_ 37.4	_ 28.6	- 21.7		_ 35.2	- 31.0		-	18.8 45.4
Bailiffs, correctional officers, and jailers Correctional officers and jailers Parking enforcement workers	53.8 53.9 -	31.2 31.2 -	_ _ _	46.0 46.1 -	24.2 24.3 –			41.1 41.2 -	39.5 39.5 –			42.3 42.3 –
Parking enforcement workers Police officers Police and sheriff's patrol officers	- - -	_ _ _	- - -		_ 38.1 _				- - -			- 59.7 52.6
Transit and railroad police Other protective service workers Animal control workers	- 8.3 120.4	- 3.3 82.7	3	- 5.9 116.1	_ 14.4 _	_ 11.1 _		- 16.2 1,113.0	_ 12.4 _	- 3.7	- 3.6	- 13.2 98.0
Animal control workers Private detectives and investigators Private detectives and investigators	120.4 120.4 - -	82.7 - -	 	116.1 - -	- 7.6 7.6	- - 7.6 7.6	- - -	1,113.0 1,113.0 – –	- - -	1,113.0 1,113.0 - -	1,113.0 1,113.0 – –	98.0 98.0 7.6 7.6
Security guards and gaming surveillance officers Gaming surveillance officers and	8.1	3.3	.2	3.4	15.1	11.7	-	14.5	13.6	.9	.7	13.0
gaming investigators Security guards Miscellaneous protective service workers Crossing guards	88.0 7.7 10.1 -	43.6 3.1 -	2 	- 3.4 36.2 -	_ 15.0 6.9 19.3	- 11.7 4.3	- - -	43.5 14.4 3.9 –	43.5 13.5 - -	9 	7 	45.9 12.9 15.6 23.5
Lifeguards, ski patrol, and other recreational protective service workers Food preparation and serving related	10.2	-	_	62.6	-	_	-	-	_	_	_	19.2
occupations Supervisors, food preparation and serving	14.4	10.0	2.0	13.9	.8	.4	0.1	1.1	1.1	.1	.1	7.6
workers First-line supervisors/managers, food preparation and serving workers	21.0 21.0	13.2 13.2	3.0 3.0	8.8 8.8	1.0 1.0	.9 .9		6.5 6.5	6.5 6.5	_	_	10.9 10.9
Chefs and head cooks	27.3	9.7	1.9	14.6	-	-	-	-	-	-	-	15.2

				Event o	r exposur	e leading t	o injury or	illness ⁵	
				Contact w	ith objects	6			
Occupation	Occupation code ³	Private industry ⁴	Total	Struck by object	Struck against object	Caught in or com- pressed or crushed	Fall to lower level	Fall on same level	Slips or trips without fall ⁶
First-line supervisors/managers of food preparation and serving workers Cooks and food preparation workers Cooks Cooks, fast food Cooks, institution and cafeteria	35-1012 35-2000 35-2010 35-2011	115.2 133.7 117.6 29.9 261.3	25.3 47.9 39.8 4.5 75.8	13.1 31.3 26.7 - 47.6	5.8 9.9 7.2 – 17.4	5.6 4.2 3.4 2.9 8.3	2.6 3.3 2.1 – 2.1	29.7 23.8 17.9 2.8 52.7	7.4 4.8 4.9 - 5.8
Cooks, restaurant		134.5	52.3	37.7	8.6	2.7	3.7	13.7	8.0
Cooks, short order Food preparation workers		37.8 178.4	8.9 70.4	3.7 44.0	4.9 17.4	6.5	- 6.8	12.3 40.1	4.6
Food preparation workers	35-2021	178.4	70.4	44.0	17.4	6.5	6.8	40.1	4.6
Food and beverage serving workers		83.5	26.5	13.4	8.5	2.5	2.4	22.5	4.9
Bartenders		60.1	32.8	22.6	5.5	.9	2.3	5.0	7.9
Bartenders		60.1	32.8	22.6	5.5	.9	2.3	5.0	7.9
Fast food and counter workers Combined food preparation and serving		77.1	25.2	8.4	9.8	4.2	2.7	17.2	2.9
workers, including fast food		76.5	24.8	7.9	9.9	3.6	3.0	17.6	2.3
Counter attendants, cafeteria, food concession, and coffee shop	35-3022	80.9	27.9	11.6	8.7	7.6	.9	14.6	6.5
Waiters and waitresses		70.8	19.8	12.6	5.7	.5	.5 1.7	25.3	5.9
Waiters and waitresses		70.8	19.8	12.6	5.7	.5	1.7	25.3	5.9
Food servers, nonrestaurant		415.1	115.2	76.7	30.3	6.0	5.4	123.3	14.8
Food servers, nonrestaurant		415.1	115.2	76.7	30.3	6.0	5.4	123.3	14.8
Other food preparation and serving related									
workers	. 35-9000	150.0	50.5	27.1	13.6	1.6	9.2	26.7	8.0
Dining room and cafeteria attendants and									
bartender helpers	. 35-9010	106.4	43.5	19.7	20.8	1.0	13.1	15.0	4.2
Dining room and cafeteria attendants	35-9011	106.4	43.5	19.7	20.8	1.0	13.1	15.0	4.2
and bartender helpers Dishwashers		100.4	50.6	33.9	7.8	1.0	4.2	13.5	5.3
Dishwashers		109.7	50.6	33.9	7.8	1.7	4.2	13.5	5.3
Hosts and hostesses, restaurant, lounge,	00 0021	100.7	00.0	00.0	1.0	1.1	7.4	10.0	0.0
and coffee shop	. 35-9030	90.0	6.7	1.4	4.0	1.1	8.7	44.9	16.5
lounge, and coffee shop	. 35-9031	90.0	6.7	1.4	4.0	1.1	8.7	44.9	16.5
Building and grounds cleaning and maintenance occupations	. 37-0000	255.6	65.0	35.1	18.8	7.6	19.2	42.2	8.6
Supervisors, building and grounds cleaning and maintenance workers First-line supervisors/managers, building	. 37-1000	227.6	35.4	20.8	9.4	4.4	14.6	37.6	9.4
and grounds cleaning and maintenance workers	. 37-1010	227.6	35.4	20.8	9.4	4.4	14.6	37.6	9.4
First-line supervisors/managers of housekeeping and janitorial workers	37-1011	210.9	47.0	30.1	13.0	3.0	13.6	50.8	7.4

Occupation Overescrition Total Exposure Initial method Exposure to motion First- method Tempsortation accidents First- accidents Assaults and volont acts All other assaults All other assaults Assaults All other assau						Event	or exposure	e leading to in	njury or illr	ness ⁵			
Occupation Total Initing Repet. motion motion service motion motion service motion motion service motion motion service motion Total First- acident Total Assaults by parson Juli total Juli animal Juli security Juli animal Juli security Juli animal Juli animal		Overe	xertion		Exposure					Assaults a	nd violent ac	ts	
Total In lifting motion ment or ment Total Highway accident explosions Total by person All obstands Assaults by animal events/r by animal First-line supervisors/managers of food preparation and serving workers 20.4 13.7 2.2 2.4 17.7 10.0	Occupation			Repeti-		acc	Idents	Fires			All other	assaults	All
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$		Total	In lifting		or environ-	Total			Total	by	other	by	
concession, and coffee shop 4.8 3.1 1.2 8.1 3.6 3.6 - - - - - 1.3.1 Waiters and waitresses 6.4 4.0 1.0 6.2 1.0 - - .5 .5 - - 2.9 Food servers, nonrestaurant 67.0 43.7 17.1 34.2 2.5 - - 15.6 14.0 1.6 1.6 20.0 Other food preparation and serving related 0.6 15.1 1.4 14.8 .3 .2 - - - 15.6 14.0 1.6 1.6 20.0 Other food preparation and cafeteria attendants and bartender helpers 20.6 15.1 1.4 14.8 .3 .2 - - - - 18.3 Dining room and cafeteria attendants and bartender helpers 20.7 15.5 1.6 4.4 - - - - - - 4.1 Dishwashers 14.1 10.6 1.8 16.0 - - - - - - - 4	preparation and serving workers Cooks and food preparation workers Cooks, fast food Cooks, fast food Cooks, institution and cafeteria Cooks, restaurant Cooks, short order Food preparation workers Food preparation workers Food and beverage serving workers Bartenders Fast food and counter workers Combined food preparation and serving workers, including fast food	17.5 16.4 10.3 43.1 14.0 6.7 20.8 20.8 10.1 7.5 7.5 10.0	12.5 12.5 9.8 33.9 10.2 1.8 12.4 12.4 7.2 5.7 5.7 7.6	2.0 1.9 - 7.4 1.8 - 2.4 2.4 2.0 .5 .5 2.0	24.4 27.5 12.1 48.0 34.1 8.0 15.9 9.3 1.9 1.9 1.9 11.4	.7 .8 - 1.5 - .4 .9 - .8	.3 .3 - .5 - .3 - .3 - .6	.4 - .7 - - - - - - - - - - -	.1 - - - .8 - .3	- - - - .7 - .7 .1	- - - - - 0.1 - - .1	- - - - - - - - - - 1	8.8 5.9 - 24.9 4.7 1.1 16.8 16.8 4.2 1.9 1.9 4.7
workers 20.6 15.1 1.4 14.8 .3 .2 - - - - - 18.3 Dining room and cafeteria attendants and bartender helpers 20.7 15.5 1.6 4.4 - - - - - - 3.8 Dining room and cafeteria attendants and bartender helpers 20.7 15.5 1.6 4.4 - - - - - - 3.8 Dishwashers 20.7 15.5 1.6 4.4 - - - - - - 3.8 Dishwashers 14.1 10.6 1.8 16.0 - - - - - - 4.1 Hosts and hostesses, restaurant, lounge, and coffee shop 9.4 6.6 - 2.0 - - - - - 1.7 Building and grounds cleaning and maintenance occupations 59.4 30.3 4.2 16.7 8.8 5.7 .1 2.4 1.0 1.4 1.4 29.1 Supervisors, building and grounds cleaning and maintenance workers 68.7	concession, and coffee shop Waiters and waitresses Waiters and waitresses Food servers, nonrestaurant Food servers, nonrestaurant	6.4 6.4 67.0	4.0 4.0 43.7	1.0 1.0 17.1	6.2 6.2 34.2	1.0 1.0 2.5	-	- - -	.5 15.6	.5 14.0			2.9 2.9 20.0
and bartender helpers 20.7 15.5 1.6 4.4 - - - - - - 3.8 Dishwashers 14.1 10.6 1.8 16.0 - - - - - - 4.1 Dishwashers 14.1 10.6 1.8 16.0 - - - - - - 4.1 Hosts and hostesses, restaurant, lounge, and coffee shop 9.4 6.6 - 2.0 - - - - - 4.1 Hosts and hostesses, restaurant, lounge, and coffee shop 9.4 6.6 - 2.0 - - - - - 1.7 Hosts and hostesses, restaurant, lounge, and coffee shop 9.4 6.6 - 2.0 - - - - - 1.7 Building and grounds cleaning and 9.4 6.6 - 2.0 - - - - 1.7 Building and grounds cleaning and 59.4 30.3 4.2 16.7 8.8 5.7 .1 2.4 1.0 1.4	workers Dining room and cafeteria attendants and bartender helpers		_		_	-	.2			-	-	-	
Hosts and hostesses, restaurant, lounge, and coffee shop9.46.6-2.01.7Building and grounds cleaning and maintenance occupations59.430.34.216.78.85.7.12.41.01.41.429.1Supervisors, building and grounds cleaning and maintenance workers	and bartender helpers Dishwashers Dishwashers Hosts and hostesses, restaurant, lounge,	14.1 14.1	10.6 10.6	1.8 1.8	16.0 16.0	_ _	- - -	- - -	-	- - -	- - -	- - -	4.1 4.1
Supervisors, building and grounds cleaning and maintenance workers	Hosts and hostesses, restaurant, lounge, and coffee shop	-			_		_	-	_	_	_	_	
and grounds cleaning and maintenance 68.7 42.7 3.0 13.3 23.3 18.38 .8 21.3	maintenance occupations Supervisors, building and grounds cleaning and maintenance workers						-	.1 _			1.4 _	1.4 _	
First-line supervisors/managers of housekeeping and janitorial workers 49.9 16.7 2.3 17.0 6.9 5.7 - 1.3 1.3 - - 14.4	workers First-line supervisors/managers of							-			-	-	

				Event o	r exposur	e leading t	o injury or	illness ⁵	
				Contact w	ith objects	5			
Occupation	Occupation code ³	Private industry ⁴	Total	Struck by object	Struck against object	Caught in or com- pressed or crushed	Fall to lower level	Fall on same level	Slips or trips without fall ⁶
First-line supervisors/managers of									
landscaping, lawn service, and									
groundskeeping workers	37-1012	250.9	19.1	7.8	4.4	6.4	16.0	19.3	12.1
Building cleaning and pest control workers	37-2000	270.2	59.6	28.3	20.7	7.4	19.2	53.7	9.9
Building cleaning workers	37-2010	270.9	60.4	28.7	20.8	7.6	19.1	55.0	10.2
Janitors and cleaners, except maids	01 2010	210.0	00.1	20.7	20.0	1.0	10.1	00.0	10.2
and housekeeping cleaners	37-2011	262.2	63.0	30.1	19.8	9.4	19.7	46.9	9.4
Maids and housekeeping cleaners	37-2012	273.0	51.9	24.6	20.3	4.6	16.2	66.1	11.5
Pest control workers	37-2012	248.6	32.2	16.9	15.3	4.0	22.7	12.1	
Pest control workers	37-2020	248.6	32.2	16.9	15.3		22.7	12.1	
Grounds maintenance workers	37-3000	240.0	88.1	57.2	16.9	8.9	20.5	13.6	4.8
Grounds maintenance workers	37-3010	225.9	88.1	57.2	16.9	8.9	20.5	13.6	4.8
Landscaping and groundskeeping	07.0044	044.0	70.4	10.0	407		01.1	40.0	47
workers	37-3011	211.0	79.1	49.0	16.7	9.4	21.1	13.2	4.7
Pesticide handlers, sprayers, and									
_applicators, vegetation	37-3012	42.2				-	-	_	
Tree trimmers and pruners	37-3013	508.9	257.1	194.6	26.9	-	9.5	15.9	7.3
Personal care and service occupations	39-0000	124.3	19.8	9.4	5.8	2.4	7.3	23.5	5.3
Supervisors, personal care and service									
workers	39-1000	99.8	13.7	9.2	3.5	-	2.8	22.0	8.7
First-line supervisors/managers of gaming									
workers	39-1010	89.3	24.1	13.8	-	-	-	28.3	-
Gaming supervisors	39-1011	55.6	11.2	-	-	-	-	18.2	-
Slot key persons	39-1012	181.7	59.4	43.2	-	-	-	56.0	-
First-line supervisors/managers of									
personal service workers	39-1020	102.2	11.3	8.1	3.0	-	3.5	20.5	9.7
First-line supervisors/managers of									
personal service workers	39-1021	102.2	11.3	8.1	3.0	_	3.5	20.5	9.7
Animal care and service workers	39-2000	339.8	61.4	10.2	6.0	16.0	17.8	38.2	_
Animal trainers	39-2010	265.5	66.9	31.2	_	_	44.8	_	_
Animal trainers	39-2011	265.5	66.9	31.2	_	_	44.8	_	_
Nonfarm animal caretakers	39-2020	348.8	60.7	7.7	5.1	17.8	14.5	41.0	_
Nonfarm animal caretakers	39-2021	348.8	60.7	7.7	5.1	17.8	14.5	41.0	_
Entertainment attendants and related	00 2021	0.000							
workers	39-3000	92.6	15.8	7.4	4.3	2.6	6.9	18.5	3.4
Gaming services workers	39-3010	81.9	11.1	4.2	4.0	2.0	5.6	22.1	3.9
Gaming dealers	39-3010	78.6	7.2	4.2	3.7		7.1	23.2	5.0
Gaming and sports book writers and	33-3011	/ / 0.0	1.2	-	3.7	-	1.1	23.2	5.0
runners	39-3012	26.1	_	_		_		_	
		-			-		264	-	-
Motion picture projectionists	39-3020	40.0	-	-	-	-	36.4	-	
Motion picture projectionists	39-3021	40.0	-	-	-	-	36.4	-	-
Ushers, lobby attendants, and ticket	00.0000	00 5	_				0-	44-	
takers	39-3030	62.5	5.0	-	-	-	6.7	11.7	6.3

				1	Event	or exposure	e leading to ir	njury or illr	ness ⁵			
	Overe	xertion		Exposure		portation idents			Assaults a	nd violent ac	ts	
Occupation			Repeti-	to harmful	acc	Idents	Fires			All other	assaults	All
	Total	In lifting	tive motion	substance or environ- ment	Total	Highway accident	and explosions	Total	Assaults by person	All other assaults	Assaults by animal	other events ^{6,7}
First-line supervisors/managers of landscaping, lawn service, and groundskeeping workers	94.8	78.9	4.0	8.1	46.2	35.7	_	_	_	_	_	30.8
Building cleaning and pest control workers Building cleaning workers	62.7 64.5	30.3 31.2	5.4 5.5	17.3 17.2	6.2 5.1	4.0 2.8	0.1	2.0 1.6	0.6 .7	1.4 .9	1.3 .9	34.0 32.0
Janitors and cleaners, except maids					-			-		-		
and housekeeping cleaners Maids and housekeeping cleaners Pest control workers	63.7 64.6 5.3	34.7 24.3	6.0 4.7	19.0 12.7 19.0	5.3 4.8 41.9	2.8 2.7 41.7	.2	1.8 1.2 14.6	.6 .5	1.1 .6 14.6	1.0 .6 14.6	27.3 39.3 98.3
Pest control workers	5.3	_	_	19.0	41.9	41.7		14.0	_	14.0	14.0	98.3
Grounds maintenance workers	47.9	26.4	1.3	16.1	11.1	6.4	-	3.9	1.9	1.9	1.9	18.4
Grounds maintenance workers Landscaping and groundskeeping	47.9	26.4	1.3	16.1	11.1	6.4	-	3.9	1.9	1.9	1.9	18.4
workers Pesticide handlers, sprayers, and	46.4	27.9	1.2	15.6	11.4	6.7	-	4.1	2.1	2.0	2.0	14.1
applicators, vegetation	-	-	-	-	-	-	-	-	-	-	-	12.2
Tree trimmers and pruners Personal care and service occupations	103.3 26.1	- 12.2	2.0	6.8 5.0	- 7.5	_ 5.0		_ 11.6	_ 6.8	4.8	4.8	103.9 16.2
Supervisors, personal care and service	-		_	5.0	-	5.0		-		4.0	4.0	_
workers First-line supervisors/managers of gaming	37.1	23.9	-	_	2.1	_	-	3.3	3.3	_	_	8.2
workers	11.5 _	_	_	_	_	-		_	_	-		11.6
Gaming supervisors Slot key persons	_	_	_	_	_	_	_	_	_	_	_	_
First-line supervisors/managers of personal service workers	42.9	28.8	-	-	2.6	_	_	3.8	3.8	_	-	7.5
First-line supervisors/managers of personal service workers	42.9	28.8	_	_	2.6	-	_	3.8	3.8	-	-	7.5
Animal care and service workers	34.8	22.0	2.9	7.5	-	-	-	105.0	-	105.0	105.0	70.4
Animal trainers	17.7	17.7	-	-	-	-	-	114.3	-	114.3	114.3	-
Animal trainers	17.7	17.7	-	-	-	-	-	114.3	-	114.3	114.3	-
Nonfarm animal caretakers Nonfarm animal caretakers	36.8 36.8	22.5 22.5	3.2 3.2	8.4 8.4	_	_	-	103.8 103.8		103.8 103.8	103.8 103.8	78.1 78.1
Entertainment attendants and related								_				
workers	14.5	8.9	4.1	1.8	6.2	-	-	.7	-	-	-	20.6
Gaming services workers	8.9	5.3	15.3	-	-	-	-	-	-	-	-	12.9
Gaming dealers Gaming and sports book writers and	-	-	19.6	-	-	_	-	-	_	_	-	14.0
runners	-	-	-	-	-	-	-	-	-	-	-	-
Motion picture projectionists Motion picture projectionists	_	_	_	_	_	_		_		_		
Ushers, lobby attendants, and ticket takers	15.2	10.9	_	_	_	_	_	_	_	_	_	11.7

				Event o	r exposur	e leading t	o injury or	illness ⁵	
				Contact w	ith objects	5			
Occupation	Occupation code ³	Private industry ⁴	Total	Struck by object	Struck against object	Caught in or com- pressed or crushed	Fall to lower level	Fall on same level	Slips or trips without fall ⁶
Ushers, lobby attendants, and ticket									
takers	39-3031	62.5	5.0	_	_	_	6.7	11.7	6.3
Miscellaneous entertainment attendants							•		
and related workers	39-3090	109.4	22.1	10.8	5.7	3.8	6.4	19.6	2.5
Amusement and recreation attendants	39-3091	100.4	24.8	12.5	5.4	4.6	6.8	14.6	3.1
Costume attendants	39-3092	271.7	_	_	_	_	_	223.7	_
Locker room, coatroom, and dressing								-	
room attendants	39-3093	216.6	38.9	_	23.8	_	15.7	62.9	-
Funeral service workers	39-4000	16.3	_	_	_	_	_	_	-
Embalmers	39-4010	53.7	_	_	_	_	_	-	-
Embalmers	39-4011	53.7	-	-	-	_	_	-	-
Personal appearance workers	39-5000	30.5	10.7	9.7	.8	_	_	6.8	.6
Barbers and cosmetologists	39-5010	33.3	10.5	9.3	1.0	_	_	8.4	-
Hairdressers, hairstylists, and									
cosmetologists	39-5012	34.6	10.9	9.6	1.0	_	_	8.7	-
Miscellaneous personal appearance									
workers	39-5090	21.2	11.4	11.1	-	_	_	-	-
Transportation, tourism, and lodging									
attendants	39-6000	387.9	75.5	29.0	30.0	11.6	16.1	58.5	24.6
Baggage porters, bellhops, and									
concierges	39-6010	162.6	38.4	28.3	7.2	-	8.1	19.1	9.1
Baggage porters and bellhops	39-6011	209.3	50.7	36.9	9.8	-	9.3	21.6	12.0
Concierges	39-6012	45.2	-	-	-	-	_	12.8	-
Tour and travel guides	39-6020	87.6	13.1	-	-	-	22.0	23.9	8.7
Tour guides and escorts	39-6021	95.2	14.1	-	-	-	24.6	26.2	9.8
Transportation attendants	39-6030	592.5	112.2	35.6	49.6	18.1	19.5	90.1	37.5
Flight attendants	39-6031	632.5	121.0	36.3	54.7	19.7	20.7	95.7	39.2
Transportation attendants, except flight									
attendants and baggage porters	39-6032	347.3	58.0	31.0	18.6	-	12.0	56.0	27.1
Other personal care and service workers	39-9000	107.6	12.2	6.8	4.2	.7	8.0	24.1	4.2
Child care workers	39-9010	103.5	12.3	5.7	5.6	.8	5.4	30.4	5.3
Child care workers	39-9011	103.5	12.3	5.7	5.6	.8	5.4	30.4	5.3
Personal and home care aides	39-9020	124.7	11.8	7.8	2.7	.6	5.1	25.2	5.0
Personal and home care aides	39-9021	124.7	11.8	7.8	2.7	.6	5.1	25.2	5.0
Recreation and fitness workers	39-9030	67.7	10.5	5.3	3.7	1.1	4.7	14.2	1.6
Fitness trainers and aerobics								~ -	
instructors	39-9031	17.3	1.5	1.2	-	-		3.8	-
Recreation workers	39-9032	133.0	22.2	10.6	8.2	2.4	10.5	27.6	3.0
Residential advisors	39-9040	39.3	-	-	-	-	-	12.9	-
Residential advisors	39-9041	39.3	-	-		-	-	12.9	-
Sales and related occupations	41-0000	70.1	16.5	9.0	4.9	2.1	3.9	14.3	2.3
Supervisors, sales workers	41-1000	134.4	34.8	16.1	12.8	4.6	7.6	25.6	4.6

Occupation Ushers, lobby attendants, and ticket takers Miscellaneous entertainment attendants and related workers Amusement and recreation attendants Costume attendants Locker room, coatroom, and dressing room attendants Funeral service workers Embalmers Embalmers Personal appearance workers Barbers and cosmetologists Hairdressers, hairstylists, and cosmetologists	Overe Total 15.2 17.5 18.5	In lifting	Repeti- tive motion	Exposure to harmful substance or environ- ment		portation idents Highway	Fires and		Assaults an Assaults	nd violent ac All other	assaults	- All
Ushers, lobby attendants, and ticket takers Miscellaneous entertainment attendants and related workers Amusement and recreation attendants Costume attendants Locker room, coatroom, and dressing room attendants Funeral service workers Embalmers Personal appearance workers Barbers and cosmetologists	15.2 17.5 18.5		tive	harmful substance or environ-			and		Assaults	All other	assaults	1
takers Miscellaneous entertainment attendants and related workers Amusement and recreation attendants Costume attendants Locker room, coatroom, and dressing room attendants Funeral service workers Embalmers Personal appearance workers Barbers and cosmetologists Hairdressers, hairstylists, and	15.2 17.5 18.5			or environ-	Total	Highway		_	Assaults		1	
takers Miscellaneous entertainment attendants and related workers Amusement and recreation attendants Costume attendants Locker room, coatroom, and dressing room attendants Funeral service workers Embalmers Personal appearance workers Barbers and cosmetologists Hairdressers, hairstylists, and	17.5 18.5	10.9				accident	explosions	Total	by person	All other assaults	Assaults by animal	other events ^{6,7}
Miscellaneous entertainment attendants and related workers Amusement and recreation attendants Costume attendants Locker room, coatroom, and dressing room attendants Funeral service workers Embalmers Embalmers Personal appearance workers Barbers and cosmetologists Hairdressers, hairstylists, and	17.5 18.5	10.9										
and related workers Amusement and recreation attendants Costume attendants Locker room, coatroom, and dressing room attendants Funeral service workers Embalmers Personal appearance workers Barbers and cosmetologists Hairdressers, hairstylists, and	18.5		-	-	-	-	-	-	-		-	11.7
Amusement and recreation attendants Costume attendants Locker room, coatroom, and dressing room attendants Funeral service workers Embalmers Personal appearance workers Barbers and cosmetologists Hairdressers, hairstylists, and	18.5	40.0			40.0				ļ		1	07.0
Costume attendants Locker room, coatroom, and dressing room attendants Funeral service workers Embalmers Personal appearance workers Barbers and cosmetologists Hairdressers, hairstylists, and		10.2	-	1.7	10.2	-	-	-	-		-	27.9
Locker room, coatroom, and dressing room attendants Funeral service workers Embalmers Personal appearance workers Barbers and cosmetologists Hairdressers, hairstylists, and		10.3	-	-	13.4	-	-	-	-	-	-	16.1
room attendants Funeral service workers Embalmers Personal appearance workers Barbers and cosmetologists Hairdressers, hairstylists, and	_	-	-	-	-	_	-	-	-	-	(-
Funeral service workers Embalmers Personal appearance workers Barbers and cosmetologists Hairdressers, hairstylists, and	21.4	15.6	_		_				ļ		1	50 F
Embalmers Embalmers Personal appearance workers Barbers and cosmetologists Hairdressers, hairstylists, and	31.4 13.3	15.6 11.4	_	_	-	_	-	_	-		1 -	53.5
Embalmers Personal appearance workers Barbers and cosmetologists Hairdressers, hairstylists, and	53.7	53.7	_	_	_	_	_		_	_	_	-
Personal appearance workers Barbers and cosmetologists Hairdressers, hairstylists, and	53.7	53.7	_	_	_	_	_	_	_	_	_	_
Barbers and cosmetologists Hairdressers, hairstylists, and	1.3	- 55.7	6.0	- 3.6	_	_		_	-	_	_	1.0
Hairdressers, hairstylists, and	1.1	_	7.5	4.0	_	_			_	_	_	.9
	1.1	_	1.5	4.0	_	_	_	_	—		1 -	
	1.2	_	7.9	4.2	_	_	_	_	_	_	_	1.0
Miscellaneous personal appearance	1.2	_	1.5	4.2		_	_	_	-		1 -	1.0
workers	2.1	_	_	2.5	_	_	_	_	_	_	_	_
Transportation, tourism, and lodging	2.1			2.5					ļ		1	
attendants	106.6	44.2	_	33.0	32.3	17.4	_	2.0	_	1.3	1.3	38.6
Baggage porters, bellhops, and	100.0			00.0	02.0			2.0	ļ	1.0	1.0	00.0
concierges	70.9	48.0	_	3.0	3.1	_		_	_ !		- 1	6.7
Baggage porters and bellhops	96.0	67.0	_	_	3.9	_	_	_	_	_	- 1	8.2
Concierges	_	_	_	_	_	_		_	_	_	_	_
Tour and travel guides	_	_	_	_	9.9	_	_	_	_		_	- 1
Tour guides and escorts	_	_	_	_	10.6	_		_	_	_	_	_
Transportation attendants	152.5	52.1	_	58.0	55.0	31.1	_	2.3	_	2.1	2.1	65.2
Flight attendants	161.7	48.3	_	66.5	58.9	31.7	_	2.4	_	2.4	2.4	66.4
Transportation attendants, except flight									ļ		1	
attendants and baggage porters	96.2	75.6	_	_	31.3	27.4	_	_	_		- 1	58.1
Other personal care and service workers	22.5	9.6	.3	2.1	7.6	6.9	_	13.3	12.9	.4	.3	13.2
Child care workers	11.9	5.9	-	1.1	6.2	5.8	_	14.6	14.4		- 1	16.2
Child care workers	11.9	5.9	-	1.1	6.2	5.8	_	14.6	14.4	-	-	16.2
Personal and home care aides	36.8	14.5	-	1.5	12.0	11.1	-	16.8	16.5	-	-	10.2
Personal and home care aides	36.8	14.5	-	1.5	12.0	11.1	-	16.8	16.5	-	-	10.2
Recreation and fitness workers Fitness trainers and aerobics	11.0	5.8	.7	3.9	1.2	1.0	-	4.5	3.9	-	-	15.4
instructors	5.4	5.3	_	_	_	_	_	_	_	_	- 1	5.9
Recreation workers	18.4	6.4	1.5	9.0	2.8	2.2	_	10.2	8.9	_	_	27.8
Residential advisors	4.1	_		-			_	10.0	8.7	_	_	-
Residential advisors	4.1	_	_						-	1		1
Sales and related occupations		1	. –	!	-	I —	_	10.0	8.7		_	
Supervisors, sales workers	17.1	11.3	1.8	- 2.3	- 3.4	_ 2.6	0.1	10.0 1.4	8.7 1.2	2	2	7.1

				Event o	r exposur	e leading t	o injury or	illness ⁵	
				Contact w	ith objects	;			
Occupation	Occupation code ³	Private industry ⁴	Total	Struck by object	Struck against object	Caught in or com- pressed or crushed	Fall to lower level	Fall on same level	Slips or trips withou fall ⁶
First-line supervisors/managers, sales									
workers	41-1010	134.4	34.8	16.1	12.8	4.6	7.6	25.6	4.
First-line supervisors/managers of retail	41 1010	104.4	04.0	10.1	12.0	4.0	7.0	20.0	
sales workers	41-1011	147.4	39.2	17.8	14.4	5.4	8.4	28.8	5.
First-line supervisors/managers of		147.4	00.2	17.0	17.7	0.4	0.4	20.0	0.
non-retail sales workers	41-1012	79.4	16.4	8.9	6.1	1.2	4.1	12.0	2.
Retail sales workers	41-2000	81.8	19.9	12.1	5.5	1.8	4.2	17.0	2.
Cashiers	41-2000	61.5	15.9	8.9	5.1	1.5	1.9	11.7	1
Cashiers	41-2010	60.8	15.8	8.7	5.1	1.5	1.9	11.6	1
Gaming change persons and booth	41 2011	00.0	10.0	0.7	0.1	1.5	1.5	11.0	
cashiers	41-2012	205.4	45.9	36.6	_	_	_	31.8	_
Counter and rental clerks and parts	41-2012	200.4	40.0	50.0				01.0	
salespersons	41-2020	41.7	13.2	11.4	1.5	_	.9	10.0	1.
Counter and rental clerks	41-2020	30.6	12.8	11.4	.5	_		3.0	'
Parts salespersons	41-2022	50.0 59.5	13.9	10.8	3.1	_	2.2	21.2	1
Retail salespersons	41-2022	103.1	23.9	14.6	6.4	2.3	6.3	22.0	3
Retail salespersons	41-2030	103.1	23.9	14.6	6.4	2.3	6.3	22.0	3.
	41-3000	26.5	23.9	.7	.7	2.3 .2	0.3 3.7	6.1	3.
Sales representatives, services				.7		.2	-		· ·
Advertising sales agents	41-3010	21.7	_	_	-	_	1.3	8.3	-
Advertising sales agents	41-3011	21.7					1.3	8.3	-
Insurance sales agents	41-3020	20.6	1.1	-	.6	_	2.4	3.3	
Insurance sales agents	41-3021	20.6	1.1	-	.6	_	2.4	3.3	
Securities, commodities, and financial	44 0000								
services sales agents	41-3030	4.8	.6	-	-	-	1.6	1.0	-
Securities, commodities, and financial									
services sales agents	41-3031	4.8	.6	-	-	-	1.6	1.0	-
Travel agents	41-3040	5.8	-	-	-	-	-	-	-
Travel agents	41-3041	5.8	-	-	-	-	-	-	-
Sales representatives, wholesale and							-		
manufacturing	41-4000	26.9	5.8	1.8	.9	3.1	.9	3.4	
Sales representatives, wholesale and							-		
manufacturing	41-4010	26.9	5.8	1.8	.9	3.1	.9	3.4	
Sales representatives, wholesale and									
manufacturing, technical and scientific							-		
products	41-4011	35.7	9.8	2.3	-	7.2	.6	3.0	-
Sales representatives, wholesale and									
manufacturing, except technical and									
scientific products	41-4012	24.5	4.7	1.7	1.0	1.9	1.0	3.5	1.
Other sales and related workers	41-9000	32.2	4.5	2.0	1.4	.8	2.0	11.1	
Models, demonstrators, and product									
promoters	41-9010	36.5	5.4	-	-	-	-	11.3	-
Demonstrators and product promoters	41-9011	37.1	5.5	-	-	-	-	11.5	-
Real estate brokers and sales agents	41-9020	2.2	_	_	_	_	_	_	_

					Event	or exposure	e leading to ir	njury or illr	ness ⁵			
	Overe	exertion		Exposure		portation			Assaults a	nd violent ac	ts	
Occupation			Repeti-	to harmful	acc	idents	Fires			All other	assaults	All
·	Total	In lifting	tive motion	substance or environ- ment	Total	Highway accident	and explosions	Total	Assaults by person	All other assaults	Assaults by animal	other events ^{6,7}
First-line supervisors/managers, sales												
workers	34.4	21.4	2.4	2.3	6.4	4.8	0.2	2.3	1.9	0.3	0.3	13.9
First-line supervisors/managers of retail												
sales workers	40.2	25.0	2.4	1.8	2.7	1.6	-	2.6	2.3	.2	.2	16.1
First-line supervisors/managers of												
non-retail sales workers	9.6	6.4	2.5	4.3	21.8	18.2	.8	.9	_	.6	.6	4.9
Retail sales workers	20.9	14.1	2.3	3.2	1.2	.7	_	2.0	1.7	.3	.3	8.3
Cashiers	15.6	12.2	3.3	2.6	.5	_	-	3.1	2.7	.4	.4	5.4
Cashiers	15.4	12.1	3.3	2.6	.3	_	-	3.1	2.8	.4	.4	5.4
Gaming change persons and booth												
cashiers	51.2	36.4	-		38.0	-	-	-	_	-	_	_
Counter and rental clerks and parts												
salespersons	7.6	6.1	-	.7	1.1	.8	-	.4	.4	-	-	6.5
Counter and rental clerks	2.9	1.7	-	-	.7	_		-	_	-	-	8.9
Parts salespersons	15.1	13.3	-	-	1.7	1.7		-	_	-	-	2.6
Retail salespersons	27.0	16.8	2.0	4.1	1.7	1.1	_	1.4	1.2	.2	.2	10.6
Retail salespersons	27.0	16.8	2.0	4.1	1.7	1.1		1.4	1.2	.2	.2	10.6
Sales representatives, services	3.8	2.5	1.3	.4	6.6	5.0		.2	_			1.8
Advertising sales agents	4.2	3.2		1.2	3.7	3.1		_	_	_	_	1.2
Advertising sales agents	4.2	3.2	_	1.2	3.7	3.1		_	_	_	_	1.2
Insurance sales agents		_	.8		11.0	10.3	_	_	_	_	_	.9
Insurance sales agents	_	_	.8	_	11.0	10.3	_	_	_	_	_	.9
Securities, commodities, and financial					11.0	10.0						
services sales agents	_	_	_	_	_	_	_	_	_	_	_	_
Securities, commodities, and financial												
services sales agents	_	_	_	_	_	_	_	_	_	_	_	_
Travel agents	_	_	_	_	_	_	_	_	_	_	_	_
Travel agents	_	_	_	_	_	_	_	_	_	_	_	_
Sales representatives, wholesale and												
manufacturing	5.5	3.8	.3	.8	6.6	5.9	_	.2	.1	.1	.1	2.4
Sales representatives, wholesale and	0.0	0.0		.0	0.0	0.0		.2	. 1			2.4
manufacturing	5.5	3.8	.3	.8	6.6	5.9	_	.2	.1	.1	.1	2.4
Sales representatives, wholesale and	0.0	0.0		.0	0.0	0.0			••			2.7
manufacturing, technical and scientific												
products	3.5	2.6	_	.7	16.3	15.1	_	_	_	_	_	1.3
Sales representatives, wholesale and	0.0	2.0		.,	10.0	10.1						1.0
manufacturing, except technical and												
scientific products	6.0	4.1	.4	.8	4.0	3.5	_	.2	.2	_	_	2.7
Other sales and related workers	4.1	2.4	1.0	.0 .8	2.7	2.4		.2	.2	_	_	4.7
Models, demonstrators, and product		2.4	1.0	.0	2.1	2.4		.5	.2			/
promoters	6.9	6.9	_		_	_		_			_	7.4
Domonstrators and product promotors			_	-	_	_	-	-	_	-	_	7.4
Demonstrators and product promoters	7.0	7.0	_	-	_	_		_	_		_	C.1
Real estate brokers and sales agents	-	-	- 1	-	_	_	-	-	_	-	-	

				Event o	r exposur	e leading t	o injury or	illness ⁵	
				Contact w	ith objects	3			
Occupation	Occupation code ³	Private industry ⁴	Total	Struck by object	Struck against object	Caught in or com- pressed or crushed	Fall to lower level	Fall on same level	Slips or trips withou fall ⁶
	44,0000								
Real estate sales agents	41-9022	2.9	_ 1.5	-	-	_	-	9.1	-
Telemarketers	41-9040	22.2	-	0.6	0.8	-	1.2	-	0.8
Telemarketers	41-9041	22.2	1.5	.6	.8	-	1.2	9.1	3.
Miscellaneous sales and related workers	41-9090	112.6	19.1	8.4	5.9	4.0	5.8	37.0	3.0
Door-to-door sales workers, news and									
street vendors, and related workers	41-9091	115.4	_	-	-	-	-	41.3	-
Office and administrative support occupations	43-0000	54.2	10.5	5.2	3.0	1.6	3.2	11.1	2.0
Supervisors, office and administrative									
support workers	43-1000	70.9	12.2	4.6	6.1	.9	2.6	17.8	3.
First-line supervisors/managers of office									
and administrative support workers	43-1010	70.9	12.2	4.6	6.1	.9	2.6	17.8	3.
First-line supervisors/managers of									
office and administrative support									
workers	43-1011	70.9	12.2	4.6	6.1	.9	2.6	17.8	3.
Communications equipment operators	43-2000	41.8	5.3	1.2	3.1		2.0	11.3	1.
Switchboard operators, including									
answering service	43-2010	13.6	1.9	-	1.4	-	_	5.0	-
Switchboard operators, including									
answering service	43-2011	13.6	1.9	_	1.4	_	_	5.0	_
Telephone operators	43-2020	119.3	16.1	_		_	11.2	31.9	_
Telephone operators	43-2021	119.3	16.1	_	_	_	11.2	31.9	_
Financial clerks	43-3000	17.5	2.4	.9	1.2	.2	1.4	5.1	
Bill and account collectors	43-3010	20.8	1.4	.7	.6		1.8	6.5	
Bill and account collectors	43-3011	20.8	1.4	.7	.6	_	1.8	6.5	_
Billing and posting clerks and machine	40 0011	20.0	1.4				1.0	0.0	
operators	43-3020	11.3	1.2	_	.8	_	1.5	3.6	
Billing and posting clerks and machine	40 0020	11.5	1.2		.0		1.5	5.0	-
operators	43-3021	11.3	1.2		.8	_	1.5	3.6	
Bookkeeping, accounting, and auditing	43-3021	11.5	1.2	_	0.	_	1.5	5.0	
	42 2020	12.4	1.0	1	2	2	6	5.6	
clerks	43-3030	12.4	1.0	.4	.2	.2	.6	5.6	-
Bookkeeping, accounting, and auditing	40.0004	40.4	4.0					5.0	
clerks	43-3031	12.4	1.0	.4	.2	.2	.6	5.6	-
Gaming cage workers	43-3040	134.2	20.5	-	-	-	-	36.8	-
Gaming cage workers	43-3041	134.2	20.5	-	-	-	-	36.8	-
Payroll and timekeeping clerks	43-3050	14.3	-	-	-	-	-	6.4	-
Payroll and timekeeping clerks	43-3051	14.3	-	-	-	-	-	6.4	-
Procurement clerks	43-3060	33.6	3.7	-	-	-	-	5.9	3.
Procurement clerks	43-3061	33.6	3.7	-	-	-	-	5.9	3.
Tellers	43-3070	30.2	7.6	2.5	4.5	-	3.4	3.1	1.
Tellers	43-3071	30.2	7.6	2.5	4.5	-	3.4	3.1	1.
Information and record clerks	43-4000	54.9	8.8	4.0	2.2	2.1	3.3	11.7	2.
Credit authorizers, checkers, and clerks	43-4040	24.0	4.7	-	4.0	-	5.0	6.3	-
Customer service representatives	43-4050	62.1	9.2	3.7	2.3	2.6	4.0	13.8	3.

					Event	or exposure	e leading to in	njury or illr	ness ⁵			
	Overe	xertion		Exposure		portation idents	-		Assaults a	nd violent ac	ts	
Occupation			Repeti-	to harmful	acc	Idents	Fires			All other	assaults	All
	Total	In lifting	tive motion	substance or environ- ment	Total	Highway accident	and explosions	Total	Assaults by person	All other assaults	Assaults by animal	other events ^{6,7}
Real estate sales agents	_	_	_	_	_	_	_	_	_	_	_	_
Telemarketers		_	1.9	1.6	3.2	3.2	_	_	_	_	_	2.6
Telemarketers	_	_	1.9	1.6	3.2	3.2	_	_	_	_	_	2.6
Miscellaneous sales and related workers	19.2	10.1	1.2		7.9	6.0	_	1.2	1.2	_	_	17.4
Door-to-door sales workers, news and	10.2	10.1	1.2		1.5	0.0		1.2	1.2			17.4
street vendors, and related workers	_	_	_	_	30.7	_		_	_	_	_	_
	12.4	8.3	4.1	1.8	2.1	1.0		1.2	.9	0.3	0.3	5.7
Office and administrative support occupations	12.4	0.3	4.1	1.0	2.1	1.0	-	1.2	.9	0.5	0.5	5.7
Supervisors, office and administrative	12.0		4.0		2.0	4.0			2.0	<u> </u>	<u> </u>	
support workers	13.9	11.1	4.2	2.0	3.6	1.3	-	4.4	3.8	.6	.6	6.6
First-line supervisors/managers of office												
and administrative support workers	13.9	11.1	4.2	2.0	3.6	1.3	-	4.4	3.8	.6	.6	6.6
First-line supervisors/managers of												
office and administrative support												
workers	13.9	11.1	4.2	2.0	3.6	1.3	-	4.4	3.8	.6	.6	6.6
Communications equipment operators	2.4	-	4.5	3.8	1.6	_	-	-	-	-	_	9.2
Switchboard operators, including												
answering service	_	-	2.5	_	_	_	-	-	-	_	_	_
Switchboard operators, including			_									
answering service	_	_	2.5	_	_	_	_	_	_	_	_	_
Telephone operators		_	11.8	_	_	_	_	_	_	_	_	27.5
Telephone operators	11.7	_	11.8	_	_	_		_	_	_	_	27.5
Financial clerks		.9	2.1	1.2	.7	.6		.2	.1	.1	.1	27.5
			5.2	1.2			-	.2			. '	1.7
Bill and account collectors		_			1.2 1.2	1.2 1.2		_	_	_	_	
Bill and account collectors	1.0	-	5.2	1.3	1.2	1.2	-	-	-	-	-	1.7
Billing and posting clerks and machine												
operators	.8	.6	2.4	-	_	-	-	-	-	-	-	.8
Billing and posting clerks and machine	_											_
operators	.8	.6	2.4	-	-	-	-	-	-	-	-	.8
Bookkeeping, accounting, and auditing												
clerks	1.6	.5	1.0	.2	1.1	.8	-	.2	.2	-	-	1.1
Bookkeeping, accounting, and auditing												
clerks	1.6	.5	1.0	.2	1.1	.8	-	.2	.2	_	-	1.1
Gaming cage workers	34.8	25.5	15.6	-	_	_	-	-	-	_	_	-
Gaming cage workers	34.8	25.5	15.6	-	_	-	-	-	-	_	_	-
Payroll and timekeeping clerks		-	1.9	_	_	_	-	-	-	_	_	1.8
Payroll and timekeeping clerks	1.3	_	1.9	_	_	_	_	_	_	_	_	1.8
Procurement clerks	7.5	6.0		_	_	_	_	_	_	_	_	8.5
Procurement clerks	7.5	6.0	_	_	_	_		_	_	_	_	8.5
Tellers		1.5	2.6	4.9	_	-		_			_	5.9
	-	1.5	2.0	4.9	_	_	_	-	_	_	_	5.9
Tellers					-		-					
Information and record clerks		8.7	3.9	2.3	1.3	.5	-	1.4	.7	.7	.6	7.0
Credit authorizers, checkers, and clerks Customer service representatives	- 14.1	_ 10.1	-	- 2.2	_ 1.9	9	-		3		1	7.7
			5.8		10	- a	· _	.4	· · · · · ·	.1		

				Event o	r exposure	e leading t	o injury or	illness ⁵	
				Contact w	ith objects	5			
Occupation	Occupation code ³	Private industry ⁴	Total	Struck by object	Struck against object	Caught in or com- pressed or crushed	Fall to lower level	Fall on same level	Slips or trips withou fall ⁶
Customer service representatives Eligibility interviewers, government	43-4051	62.1	9.2	3.7	2.3	2.6	4.0	13.8	3.
Eligibility interviewers, government	43-4060	70.9	-	-	-	-	-	57.4	-
programs	43-4061	70.9	_	_	_	_	_	57.4	_
File clerks	43-4070	79.6	24.5	23.1	1.3	_	5.3	8.1	_
File clerks	43-4071	79.6	24.5	23.1	1.3	_	5.3	8.1	_
Hotel, motel, and resort desk clerks	43-4080	23.7	1.1	_		_	1.3	5.7	_
Hotel, motel, and resort desk clerks	43-4081	23.7	1.1	_	_	_	1.3	5.7	-
Interviewers, except eligibility and loan	43-4110	25.1	1.1	_	_	_	1.3	8.4	2
Interviewers, except eligibility and loan	43-4111	25.1	1.1	_	_	_	1.3	8.4	2
Library assistants, clerical	43-4120	42.5	_	_	_	_	_	14.4	_
Library assistants, clerical	43-4121	42.5	_	_	_	_	_	14.4	_
Loan interviewers and clerks	43-4130	18.2	_	_	_	_	6.5	3.1	_
Loan interviewers and clerks	43-4131	18.2	_	_	_	_	6.5	3.1	_
Order clerks	43-4150	18.7	1.7	1.3	_	_	_	1.6	_
Order clerks	43-4151	18.7	1.7	1.3	_	_	_	1.6	-
Human resources assistants, except		_		-				-	
payroll and timekeeping Human resources assistants, except	43-4160	11.5	2.3	-	1.9	-	-	3.5	-
payroll and timekeeping	43-4161	11.5	2.3	-	1.9	-	-	3.5	-
Receptionists and information clerks	43-4170	41.2	4.1	2.8	.8	-	1.6	13.2	
Receptionists and information clerks	43-4171	41.2	4.1	2.8	.8	-	1.6	13.2	
Reservation and transportation ticket									
agents and travel clerks Reservation and transportation ticket	43-4180	304.3	72.8	22.5	20.5	23.5	10.9	38.2	12
agents and travel clerks Material recording, scheduling, dispatching,	43-4181	304.3	72.8	22.5	20.5	23.5	10.9	38.2	12
and distributing workers	43-5000	118.5	32.5	18.0	7.8	5.2	5.8	16.5	3
Cargo and freight agents	43-5010	190.8	52.3	33.2	4.0	14.9	-	19.6	-
Cargo and freight agents	43-5011	190.8	52.3	33.2	4.0	14.9	-	19.6	-
Couriers and messengers	43-5020	181.7	14.4	11.4	-	-	5.4	18.1	3
Couriers and messengers	43-5021	181.7	14.4	11.4	-	-	5.4	18.1	3
Dispatchers Police, fire, and ambulance dispatchers	43-5030 43-5031	27.2 40.2	4.6 -	2.6 _	_	-	1.4		1 -
Dispatchers, except police, fire, and	10 5000								.
ambulance	43-5032	26.6	4.8	2.8	-	-	1.5	6.2	1
Meter readers, utilities	43-5040	230.8	41.5	7.7	23.3	-	17.5	39.4	11
Meter readers, utilities	43-5041	230.8	41.5	7.7	23.3	-	17.5	39.4	11
Production, planning, and expediting	42 5060	20.0	7 4	10	0.4		4 -	6.0	10
clerks	43-5060	38.3	7.4	4.3	2.1	.9	1.5	6.2	10
Production, planning, and expediting	42 5064	20.0	74	10	04		4 -	6.0	10
clerks	43-5061	38.3	7.4	4.3	2.1	.9	1.5	6.2	10

				1	Event	or exposure	e leading to in	ijury or illr	ness ⁵			
	Overe	xertion		Exposure		oortation			Assaults a	nd violent ac	ts	
Occupation			Repeti-	to harmful	acc	idents	Fires			All other	assaults	All
	Total	In lifting	tive motion	substance or environ- ment	Total	Highway accident	and explosions	Total	Assaults by person	All other assaults	Assaults by animal	other events ^{6,7}
Customer service representatives Eligibility interviewers, government	14.1	10.1	5.8	2.2	1.9	0.9	-	0.4	0.3	0.1	0.1	7.7
programs Eligibility interviewers, government	-	-	-	-	-	-	-	-	-	-	-	-
programs	-	-	-	-	-	-	-	-	-	-	-	-
File clerks		21.7	3.4	—	-	-	-	-	_	-	-	11.6
File clerks	-	21.7	3.4	—	-	_	-	-	_	-	-	11.6
Hotel, motel, and resort desk clerks	1.1	-	-	-	-	_	-	11.3	11.3	-	-	2.4
Hotel, motel, and resort desk clerks		-	-	-	-	_	-	11.3	11.3	-	-	2.4
Interviewers, except eligibility and loan	2.1	1.1	2.9	2.8	1.2	_	-	-	-	-	-	3.0
Interviewers, except eligibility and loan	2.1	1.1	2.9	2.8	1.2	-	-	-	-	-	-	3.0
Library assistants, clerical		-	-	-	-	-	-	-	-	-	-	-
Library assistants, clerical		-	-	-	-	—	-	-	-	-	-	-
Loan interviewers and clerks		-	1.0	-	-	—	-	-	-	-	-	6.6
Loan interviewers and clerks		-	1.0	-	-	-	-	-	-	-	-	6.6
Order clerks		-	10.7	.9	1.2	-	-	-	-	-	-	1.0
Order clerks Human resources assistants, except		-	10.7	.9	1.2	-	-	-	_	-	-	1.0
payroll and timekeeping Human resources assistants, except	1.8	-	1.6	-	-	-	-	-	_	-	-	-
payroll and timekeeping		-	1.6	-	-	-	-	-	-	-	-	-
Receptionists and information clerks	5.1	2.0	.8	5.1	.5	-	-	3.3	.2	3.1	3.1	6.9
Receptionists and information clerks Reservation and transportation ticket	5.1	2.0	.8	5.1	.5	-	-	3.3	.2	3.1	3.1	6.9
agents and travel clerks Reservation and transportation ticket	126.7	79.8	5.0	3.4	3.8	-	-	-	_	-	-	30.1
agents and travel clerks Material recording, scheduling, dispatching,	126.7	79.8	5.0	3.4	3.8	-	-	-	_	-	-	30.1
and distributing workers	34.8	22.5	3.5	2.0	6.7	2.8	-	.8	.3	.5	.5	12.3
Cargo and freight agents	66.8	47.8	13.1	3.2	5.3	-	-	-	-	-	-	29.5
Cargo and freight agents		47.8	13.1	3.2	5.3	-	-	-	-	-	-	29.5
Couriers and messengers		18.3	4.3	-	86.3	74.9	-	-	-	-	-	20.4
Couriers and messengers		18.3	4.3	-	86.3	74.9	-	-	-	-	-	20.4
Dispatchers	5.4	1.1	1.9	4.0	-	_	-	1.2	1.2	-	-	1.2
Police, fire, and ambulance dispatchers Dispatchers, except police, fire, and	-	-	_	-	-	-	-	-	-	-	-	-
ambulance	5.2	1.2	-	4.2	-	_	-	1.2	1.2	-	-	1.1
Meter readers, utilities Meter readers, utilities	-	_		_	15.2 15.2	13.5 13.5		42.1 42.1	-	41.6 41.6	41.6 41.6	55.4 55.4
Production, planning, and expediting clerks	4.4	1.7	2.0	1.5	3.0	.7		-	_	_	_	2.3
Production, planning, and expediting clerks	4.4	1.7	2.0	1.5	3.0	.7	_	_	_	_	-	2.3

				Event o	r exposur	e leading t	o injury or	illness ⁵	1
				Contact w	ith objects	\$			
Occupation	Occupation code ³	Private industry ⁴	Total	Struck by object	Struck against object	Caught in or com- pressed or crushed	Fall to lower level	Fall on same level	Slips or trips without fall ⁶
Shipping receiving and traffic clarks	43-5070	115.4	32.1	16.9	8.8	4.8	3.4	15.7	3.2
Shipping, receiving, and traffic clerks Shipping, receiving, and traffic clerks	43-5070	115.4	32.1	16.9	8.8	4.8	3.4	15.7	3.2
									-
Stock clerks and order fillers	43-5080	138.1	41.2	23.2	9.6	6.5	8.6	19.6	3.1
Stock clerks and order fillers	43-5081	138.1	41.2	23.2	9.6	6.5	8.6	19.6	3.1
Weighers, measurers, checkers, and	10 5				<u>.</u> .				
samplers, recordkeeping	43-5110	79.0	18.2	6.7	6.1	4.8	4.2	11.4	-
Weighers, measurers, checkers, and									
samplers, recordkeeping	43-5111	79.0	18.2	6.7	6.1	4.8	4.2	11.4	-
Secretaries and administrative assistants	43-6000	20.2	1.5	.7	.6	.1	1.6	7.0	1.3
Secretaries and administrative assistants Executive secretaries and	43-6010	20.2	1.5	.7	.6	.1	1.6	7.0	1.3
administrative assistants	43-6011	22.6	1.6	1.1	.4		2.3	9.2	.7
Legal secretaries	43-6012	36.6	1.9	-	1.2	-	-	7.7	10.4
Medical secretaries	43-6013	28.0	3.1	1.4	.9	_	1.4	12.4	1.7
Secretaries, except legal, medical, and									
executive	43-6014	12.7	.8	_	.6	_	1.3	3.4	.2
Other office and administrative support	40 0014	12.1	.0				1.0	0.4	
workers	43-9000	52.5	7.4	3.5	2.6	.9	4.1	12.2	1.4
Computer operators	43-9010	29.2		5.5	2.0	.5		11.3	1.4
	43-9010	29.2	_	-			_	11.3	1.0
Computer operators	43-9011	29.2	_	-	-	-	_	11.5	1.0
Data entry and information processing	40,0000	01.0	40.5	105		10		44 7	
workers	43-9020	91.8	12.5	10.5	.8	1.0	.8	11.7	-
Data entry keyers	43-9021	97.9	13.6	12.2	.8		.8	13.1	-
Word processors and typists	43-9022	62.3	7.0	-	-	-	-	5.0	-
Insurance claims and policy processing									
clerks	43-9040	35.7	6.9	5.9	.8	-	3.1	8.5	-
Insurance claims and policy processing									
clerks	43-9041	35.7	6.9	5.9	.8	-	3.1	8.5	-
Mail clerks and mail machine operators,									
except postal service	43-9050	127.9	33.8	13.2	9.8	10.1	4.0	19.2	3.4
Mail clerks and mail machine operators,									
except postal service	43-9051	127.9	33.8	13.2	9.8	10.1	4.0	19.2	3.4
Office clerks, general	43-9060	28.5	3.3	1.2	1.3	.2	2.0	7.9	1.0
Office clerks, general	43-9061	28.5	3.3	1.2	1.3	.2	2.0	7.9	1.0
Office machine operators, except									
computer	43-9070	56.9	15.3	9.6	_	3.1	_	2.8	_
Office machine operators, except	10 00/0	00.0	10.0	0.0		0.1		2.0	
computer	43-9071	56.9	15.3	9.6	_	3.1	_	2.8	_
Farming, fishing, and forestry occupations	45-0000	149.8	53.7	28.5	11.2	8.0	_ 14.5	2.0 15.1	6.5
	40-0000	149.0	55.7	20.0	11.2	0.0	14.0	10.1	0.5
Supervisors, farming, fishing, and forestry	45 1000	00 5	20.0	01.0		0.5		7 4	5.0
workers	45-1000	90.5	38.0	21.6	5.7	8.5	-	7.4	5.2
First-line supervisors/managers of	45 4040		<u> </u>						
farming, fishing, and forestry workers	45-1010	90.5	38.0	21.6	5.7	8.5	-	7.4	5.2

					Event	or exposure	e leading to ir	njury or illr	ness ⁵			
	Overe	xertion		Exposure		portation			Assaults a	nd violent ac	ts	
Occupation			Repeti-	to harmful	acc	idents	Fires			All other	assaults	All
	Total	In lifting	tive motion	substance or environ- ment	Total	Highway accident	and explosions	Total	Assaults by person	All other assaults	Assaults by animal	other events ^{6,7}
Shipping, receiving, and traffic clerks	36.4	22.3	3.0	2.8	3.2	0.3	_	0.2	_	_	_	15.3
Shipping, receiving, and traffic clerks	36.4	22.3	3.0	2.8	3.2	.3		.2	-	-	_	15.3
Stock clerks and order fillers	43.1	28.6	3.6	1.3	5.0	.4		.6	0.4	0.2	0.2	11.9
Stock clerks and order fillers	43.1	28.6	3.6	1.3	5.0	.4		.6	.4	.2	.2	11.9
Weighers, measurers, checkers, and		20.0			0.0							
samplers, recordkeeping	18.5	13.5	5.9	3.3	5.6	_	_	_	_	_	_	9.8
Weighers, measurers, checkers, and	10.0	10.0	0.0	0.0	0.0							0.0
samplers, recordkeeping	18.5	13.5	5.9	3.3	5.6	_	_	_	_	_	_	9.8
Secretaries and administrative assistants	2.9	2.1	2.5	1.0	.4	.3	_	.1	_	_	_	1.8
Secretaries and administrative assistants	2.9	2.1	2.5	1.0	.4	.3	_	.1	_	_	_	1.8
Executive secretaries and				_				. '	_		_	
administrative assistants		2.5	1.5	.8	.9	.7	-	-	-	-	-	2.2
Legal secretaries		3.8	6.8	3.6	-	-	-	-	-	-	-	1.5
Medical secretaries	3.1	1.8	2.0	1.9	-	-	-	-	-	-	-	2.1
Secretaries, except legal, medical, and												
executive	2.2	1.5	2.8	.3	.2	-	-	-	-	-	-	1.5
Other office and administrative support												
workers	9.2	6.5	8.5	2.0	1.3	1.0	-	2.1	2.0	.1	.1	4.2
Computer operators	3.4	-	5.5	-	-	-	-	-	-	-	-	5.0
Computer operators	3.4	_	5.5	-	-	_		-	-	-	-	5.0
Data entry and information processing												
workers	14.9	14.3	45.4	.9	-	_		-	-	-	_	5.5
Data entry keyers	17.7	17.2	48.5	.9	_	_		_	_	_	_	3.1
Word processors and typists	_	_	30.5		_	_	_	-	_	_	_	16.7
Insurance claims and policy processing			00.0									
clerks	2.0	1.3	6.2	3.9	1.4	1.3	_	_	_	_	_	3.0
Insurance claims and policy processing	2.0	1.0	0.2	0.0	1.4	1.0						0.0
clerks	2.0	1.3	6.2	3.9	1.4	1.3	_	_	_	_	_	3.0
Mail clerks and mail machine operators,	2.0	1.5	0.2	0.0	1.4	1.5						0.0
except postal service	44.7	26.6	11.6	_	2.0							8.1
	44.7	20.0	11.0	_	2.0	_	_	_	-	_	_	0.1
Mail clerks and mail machine operators,	44.7	26.6	11.0	_	2.0							0.1
except postal service		26.6	11.6		2.0	-	-		2.9		-	8.1
Office clerks, general	5.4	3.9	2.6	.7	.5	.4	-	2.9	-	-	-	2.1
Office clerks, general	5.4	3.9	2.6	.7	.5	.4	-	2.9	2.9	-	-	2.1
Office machine operators, except		40.0	40.0									0.5
computer Office machine operators, except	15.4	10.2	13.2	-	5.7	_	-	-	_	-	_	2.5
computer	15.4	10.2	13.2	-	5.7	-	-	-	-	-	-	2.5
Farming, fishing, and forestry occupations	16.6	7.5	2.2	6.4	8.6	3.2	0.4	7.8	.8	6.9	6.9	18.0
Supervisors, farming, fishing, and forestry												
workers	14.5	7.6	-	_	6.5	5.2	_	7.2	-	7.2	7.2	7.7
First-line supervisors/managers of					2.10							
farming, fishing, and forestry workers	14.5	7.6	_	_	6.5	5.2		7.2	_	7.2	7.2	7.7
					0.0	0.2						

				Event o	r exposur	e leading t	o injury or	illness ⁵	
				Contact w	ith objects	5			
Occupation	Occupation code ³	Private industry ⁴	Total	Struck by object	Struck against object	Caught in or com- pressed or crushed	Fall to lower level	Fall on same level	Slips or trips without fall ⁶
Agricultural workers	45-2000	148.1	50.0	25.4	10.6	8.2	15.9	14.1	6.5
Agricultural workers	45-2000	82.2	50.0	25.4	10.6	0.2	15.9	14.1	0.0
Agricultural inspectors		-	_	_	_	_	_	_	-
Agricultural inspectors	45-2011	82.2	_						-
Animal breeders	45-2020	58.2		-	-	-	-	_	-
Animal breeders	45-2021	58.2	-	-	-	-	-		-
Graders and sorters, agricultural products	45-2040	110.6	28.7	8.5	9.4	8.6	4.7	8.3	-
Graders and sorters, agricultural	45 00 11	440.0	<u> </u>						
products	45-2041	110.6	28.7	8.5	9.4	8.6	4.7	8.3	-
Miscellaneous agricultural workers	45-2090	150.9	51.6	26.5	10.7	8.2	16.7	14.5	6.8
Fishing and hunting workers	45-3000	29.7	_	_	— — — — — — — — — — — — — — — — — — —	-	-	_	-
Forest, conservation, and logging workers	45-4000	256.4	137.2	89.3	29.1	6.0	6.1	39.3	10.6
Forest and conservation workers	45-4010	137.2	-	-	-	-	-	-	-
Forest and conservation workers	45-4011	137.2	-	-	-	-	-	-	-
Logging workers	45-4020	265.9	146.9	96.0	30.7	6.5	6.6	37.1	10.7
Construction and extraction occupations	47-0000	238.7	87.2	48.8	19.0	11.4	34.3	21.5	6.8
Supervisors, construction and extraction									
workers	47-1000	192.7	55.0	27.4	9.1	12.6	34.6	23.7	17.1
First-line supervisors/managers of									
construction trades and extraction									
workers	47-1010	192.7	55.0	27.4	9.1	12.6	34.6	23.7	17.1
First-line supervisors/managers of									
construction trades and extraction									
workers	47-1011	192.7	55.0	27.4	9.1	12.6	34.6	23.7	17.1
Construction trades workers	47-2000	255.9	94.4	52.7	21.3	11.4	36.1	22.4	6.3
Boilermakers	47-2010	76.4	23.0	14.8	-	_	9.1	20.5	_
Boilermakers	47-2011	76.4	23.0	14.8	_	-	9.1	20.5	_
Brickmasons, blockmasons, and	_	_		_			-		
stonemasons	47-2020	212.7	74.2	33.4	27.1	4.1	18.5	19.9	8.8
Brickmasons and blockmasons	47-2021	218.2	83.2	36.7	30.9	4.5	20.6	22.4	10.3
Stonemasons	47-2022	179.1	18.7	13.2	_		_	_	_
Carpenters	47-2030	286.2	126.8	62.9	36.3	12.3	39.1	21.6	4.7
Carpenters	47-2031	286.2	126.8	62.9	36.3	12.3	39.1	21.6	4.7
Carpet, floor, and tile installers and				02.0				2.10	
finishers	47-2040	187.8	51.4	33.4	8.6	_	15.3	4.9	7.4
Carpet installers	47-2040	159.3	42.7	34.0	5.8	_	-	7.1	
Floor layers, except carpet, wood, and	11 2011	100.0	76.1	0-1.0	0.0			1.1	
hard tiles	47-2042	233.2	28.9	16.4	_	_	_	_	_
Floor sanders and finishers	47-2042	178.6	67.6		_	_		_	_
Tile and marble setters	47-2043	195.9	60.5	37.5	12.9	_	28.8	_ 5.2	8.7
Cement masons, concrete finishers, and	47-2044	135.8	00.5	51.5	12.9	-	20.0	J.Z	0.7
terrazzo workers	47-2050	74.3	18.3	6.9	6.3	2.7	7.3	9.4	1.4
	47-2050 47-2051	-		6.9			-	9.4 7.8	
Cement masons and concrete finishers	47-2051 47-2053	74.0 82.9	18.7	6.9	6.5	2.8	7.5	۵.۱	1.5
Terrazzo workers and finishers	47-2053	62.9	-	-	-	-	-	-	-

					Event	or exposure	e leading to in	jury or illr	ness ⁵			
	Overe	xertion		Exposure		portation	-		Assaults a	nd violent ac	ts	
Occupation			Repeti-	to harmful	acc	idents	Fires			All other	assaults	All
	Total	In lifting	tive motion	substance or environ- ment	Total	Highway accident	and explosions	Total	Assaults by person	All other assaults	Assaults by animal	other events ^{6,7}
Agricultural workers	16.3	7.2	2.4	7.0	8.3	2.3	0.5	8.4	0.9	7.5	7.5	18.8
Agricultural inspectors	-	_	_	-	-	_	_	-	_	_	_	_
Agricultural inspectors	-	_	-	-	-	_	-	-	_	_	_	-
Animal breeders	-	-	_	-	-	_	-	-	_	_	_	_
Animal breeders	-	-	-	-	-	_	-	-	_	_	-	-
Graders and sorters, agricultural products Graders and sorters, agricultural	15.5	9.4	6.0	29.6	7.0	-	-	-	-	-	-	10.2
products	15.5	9.4	6.0	29.6	7.0	_	-	-	_	_	_	10.2
Miscellaneous agricultural workers	16.4	7.2	2.2	5.8	8.1	2.0	.5	8.9	1.0	7.9	7.9	19.4
Fishing and hunting workers	-	-	-	-	-	_	-	-	_	_	-	-
Forest, conservation, and logging workers	25.7	11.7	-	-	18.2	17.3	-	-	-	_	-	16.7
Forest and conservation workers	-	-	-	-	-	_	-	-	-	_	-	-
Forest and conservation workers	-	-	-	-	-	-	-	-	-	-	-	-
Logging workers	25.4	12.6	-	-	19.2	18.6	-	-	-	-	-	17.8
Construction and extraction occupations Supervisors, construction and extraction	41.5	22.0	3.7	8.3	7.8	4.8	.6	.7	.4	.4	.4	26.2
workers First-line supervisors/managers of construction trades and extraction	22.4	12.6	3.3	6.8	6.9	5.4	.3	.6	.3	.3	.3	22.0
First-line supervisors/managers of construction trades and extraction	22.4	12.6	3.3	6.8	6.9	5.4	.3	.6	.3	.3	.3	22.0
workers	22.4	12.6	3.3	6.8	6.9	5.4	.3	.6	.3	.3	.3	22.0
Construction trades workers	46.6	24.8	4.0	8.3	7.7	4.7	.6	.0	.3	.3	.3	28.6
Boilermakers	15.8	24.0		- 0.5			.0	0				
Boilermakers Brickmasons, blockmasons, and	15.8	-	-	-	-	-	-	-	-	-	-	_
stonemasons	43.7	28.1	9.8	7.0	6.5	6.1	_	2.3	2.3	_	_	22.0
Brickmasons and blockmasons	40.2	29.1	4.6	7.6	_	_	_	2.7	2.7	_	_	25.5
Stonemasons	65.0	22.1	41.8	_	_	_	_	_	_	_	_	_
Carpenters	57.6	37.4	3.5	3.4	2.4	1.3	_	.4	.3	_	_	26.6
Carpenters Carpet, floor, and tile installers and	57.6	37.4	3.5	3.4	2.4	1.3	-	.4	.3	_	_	26.6
finishers Carpet installers	62.2 69.7	16.8 23.3	9.1 _	1.6 _	5.7 8.6	5.5 -		_	-			30.0 24.4
Floor layers, except carpet, wood, and hard tiles	186.9	_	_	_	_	_	_	_	_	_	_	_
Floor sanders and finishers	_	-	_		-	_	_	_	_	-	-	-
Tile and marble setters Cement masons, concrete finishers, and	31.3	18.0	15.0	_	-	-	-	-	-	-	-	42.7
terrazzo workers	11.4	4.9	_	3.5	8.1	6.8	_	_	_	-	-	13.3
Cement masons and concrete finishers Terrazzo workers and finishers	11.6 —	4.9	-	3.6	8.2	7.0		-	-			13.6

				Event c	or exposur	e leading t	o injury or	illness ⁵	1
				Contact w	ith objects	5			
Occupation	Occupation code ³	Private industry ⁴	Total	Struck by object	Struck against object	Caught in or com- pressed or crushed	Fall to lower level	Fall on same level	Slips or trips withou fall ⁶
Construction laborers	47-2060	394.0	161.2	103.6	25.2	24.8	48.3	32.4	9
Construction laborers		394.0	161.2	103.6	25.2	24.8	48.3	32.4	9
Construction equipment operators		131.4	35.6	15.3	7.1	6.8	29.0	16.8	3
Paving, surfacing, and tamping	47-2070	131.4	55.0	15.5	/ /.1	0.0	29.0	10.0	
equipment operators	47-2071	19.6	5.0	_		_	_	_	_
Pile-driver operators	47-2072	165.2	115.8	55.0			_		
Operating engineers and other	41-2012	105.2	115.0	55.0	-	-	_	-	-
Construction equipment operators Drywall installers, ceiling tile installers,	47-2073	145.2	38.4	16.4	7.7	7.6	33.1	18.7	4
and tapers	47-2080	171.9	43.3	27.7	10.9	2.3	35.6	11.3	4
Drywall and ceiling tile installers		174.7	45.2	30.1	10.5	1.5	31.7	12.2	5
Tapers		161.4	45.2 36.4	19.1	12.1	5.2	49.7	8.3	
Electricians	47-2082	202.1	58.8	32.9	13.1	6.6	24.6	27.5	
Electricians		202.1	58.8	32.9	13.1	6.6	24.0	27.5	
		-			-	0.0	-	-	13
Glaziers	-	370.2	136.2	102.8	23.5	_	75.1	6.9	
Glaziers	47-2121	370.2	136.2	102.8	23.5		75.1	6.9	13
Insulation workers Insulation workers, floor, ceiling, and	47-2130	204.0	66.3	19.5	20.3	5.2	67.3	13.1	-
wall	47-2131	384.1	120.0	35.7	32.3	10.2	129.5	23.5	-
Insulation workers, mechanical	47-2132	18.2	10.9	-	8.1	-	-	_	
Painters and paperhangers	47-2140	223.8	60.0	30.6	17.7	4.9	67.4	15.8	
Painters, construction and maintenance	47-2141	218.0	58.4	31.2	16.3	5.0	61.3	16.1	
Paperhangers	47-2142	513.1	136.4	-	85.1	-	370.2	_	-
Pipelayers, plumbers, pipefitters, and	17.0450	000.0	007	40.0	00.4			45.5	
steamfitters	47-2150	233.8	80.7	40.3	20.1	8.9	21.6	15.5	8
Pipelayers	47-2151	225.1	79.9	31.6	26.4	16.3	15.5	5.9	(
Plumbers, pipefitters, and steamfitters	47-2152	234.8	80.8	41.3	19.4	8.0	22.3	16.6	8
Plasterers and stucco masons		153.1	28.3	18.1	4.3	-	32.7	19.4	
Plasterers and stucco masons	47-2161	153.1	28.3	18.1	4.3	-	32.7	19.4	
Reinforcing iron and rebar workers	47-2170	173.8	65.4	43.4	10.1	11.4	13.2	16.3	8
Reinforcing iron and rebar workers		173.8	65.4	43.4	10.1	11.4	13.2	16.3	8
Roofers	47-2180	363.2	99.9	61.9	28.1	5.3	64.5	58.6	10
Roofers	47-2181	363.2	99.9 76 2	61.9	28.1	5.3	64.5	58.6	10
Sheet metal workers		199.1	76.3	28.6	17.6	16.0	23.7	17.7	2
Sheet metal workers	47-2211	199.1	76.3	28.6	17.6	16.0	23.7	17.7	2
Structural iron and steel workers		423.8	171.1	101.9	41.6	18.7	60.8	27.5	10
Structural iron and steel workers		423.8	171.1	101.9	41.6	18.7	60.8	27.5	10
Helpers, construction trades	47-3000	150.4	55.0	34.9	13.2	3.8	28.3	9.7	2
Helpers, construction trades	47-3010	150.4	55.0	34.9	13.2	3.8	28.3	9.7	2
Helpersbrickmasons, blockmasons,									
stonemasons, and tile and marble	47 0044	100 7	00 7	00.0		7.0	44.0	7.0	
setters	47-3011	123.7	36.7	26.9	40.0	7.3	11.6	7.9	-
Helperscarpenters	47-3012	74.6	36.5	18.1	12.6	2.4	9.7	3.0	-

					Event	or exposure	e leading to in	ijury or illr	ness ⁵			
	Overe	xertion		Exposure		portation idents			Assaults a	nd violent ac	ts	_
Occupation			Repeti-	to harmful	acc	ldents	Fires			All other	assaults	All
	Total	In lifting	tive motion	substance or environ- ment	Total	Highway accident	and explosions	Total	Assaults by person	All other assaults	Assaults by animal	other events ^{6,}
Construction laborers Construction laborers Construction equipment operators	66.8 66.8 13.3	32.8 32.8 5.3	3.1 3.1 2.6	14.3 14.3 3.3	16.3 16.3 11.0	8.5 8.5 4.4	0.6 .6 .5	1.2 1.2 -	0.9 .9 _	0.2 .2 -	0.2 .2 -	40.4 40.4 15.4
Paving, surfacing, and tamping equipment operators Pile-driver operators		-	-	-	_		-		_			3.7
Operating engineers and other construction equipment operators	14.6	5.7	3.0	3.6	12.1	4.8	.6	-	_	-	_	17.1
Drywall installers, ceiling tile installers, and tapers Drywall and ceiling tile installers	33.3 36.9	20.2 23.9	10.0 9.7	1.5 1.9	_	_	-	_	-	_	_	31.5 30.8
Tapers	20.1 31.8	23.9 6.8 15.5	9.7 11.2 4.4	- 14.4	- - 6.8	- - 5.6	7	-	-	-	-	34.2
Electricians Glaziers	31.8 96.8	15.5 35.1	4.4 3.1	14.4 -	6.8 22.1	5.6 13.4	.7	-	_			26.9
Glaziers Insulation workers	96.8 13.2	35.1 3.7	3.1 2.9	_ 12.0	22.1 -	13.4 _	-	-	-		-	16.3 24.5
Insulation workers, floor, ceiling, and wall Insulation workers, mechanical	26.0	7.3	5.6	23.7	_	_	-	_	-	_	_	46.
Painters and paperhangers Painters, construction and maintenance	32.9 33.6	16.3 16.6	8.1 8.3	6.3 6.4	4.1 4.2	3.7 3.8	-	-	-			23. ⁻ 24.
Paperhangers Pipelayers, plumbers, pipefitters, and	_	-	-	-	-	-	-	-	-	-	-	-
steamfitters Pipelayers Plumbers, pipefitters, and steamfitters	50.9 78.1 47.8	28.2 58.6 24.8	2.3 6.8 1.8	9.3 6.0 9.7	8.2 16.4 7.3	6.4 13.4 5.6	2.4 - 2.1	1.1 - 1.2		.9 - 1.0	.9 _ 1.0	33.3 6.0 36.9
Plasterers and stucco masons Plasterers and stucco masons	18.6 18.6	11.4 11.4			_			_	_			25.4 25.4
Reinforcing iron and rebar workers Reinforcing iron and rebar workers Roofers	27.2 27.2 59.3	15.2 15.2 30.4	- - 2.9	- - 20.9	- - 3.0	- - 1.8	-	- - 2.9	-		-	36. 36. 40.
Roofers Sheet metal workers	59.3 46.4	30.4 26.7	2.9 4.4	20.9 5.9	3.0 1.8	1.8	-	2.9	_			40.
Sheet metal workers Structural iron and steel workers	46.4 91.7 91.7	26.7 46.5 46.5	4.4 5.5 5.5	5.9 7.6 7.6	1.8 4.9 4.9	_ _ _		-	-			19. 43. 43.
Structural iron and steel workers elpers, construction trades Helpers, construction trades Helpersbrickmasons, blockmasons,	91.7 22.8 22.8	46.5 14.7 14.7	5.5 1.6 1.6	7.6 10.1 10.1	4.9 3.5 3.5	2.3 2.3	5 5	_	-			43. 15. 15.
stonemasons, and tile and marble setters Helperscarpenters	31.2 6.6	26.3 2.9	9.8	3.8 9.5	11.6	9.1	-	-	-	-	-	10.

				Event o	r exposur	e leading t	o injury or	illness ⁵	
				Contact w	ith objects	3			
Occupation	Occupation code ³	Private industry ⁴	Total	Struck by object	Struck against object	Caught in or com- pressed or crushed	Fall to lower level	Fall on same level	Slips or trips withou fall ⁶
Helperselectricians	47-3013	134.8	49.7	28.3	16.5	4.5	47.1	4.6	4.1
Helperspainters, paperhangers,									
plasterers, and stucco masons	47-3014	25.3	-	-	-	-	-	11.1	-
Helperspipelayers, plumbers,									
pipefitters, and steamfitters	47-3015	162.2	78.8	62.1	11.7		12.5	5.9	6.0
Helpersroofers	47-3016	49.1	9.2	_	_	-	16.2	_	-
Other construction and related workers	47-4000	216.6	63.1	36.7	12.0	9.1	38.5	21.9	2.0
Construction and building inspectors	47-4010	178.8	26.0	26.0	_	_	13.4	81.3	_
Construction and building inspectors	47-4011	178.8	26.0	26.0	_	_	13.4	81.3	_
Elevator installers and repairers	47-4020	273.3	54.9	40.5	_	8.3	132.5	21.8	_
Elevator installers and repairers	47-4021	273.3	54.9	40.5	_	8.3	132.5	21.8	_
Fence erectors	47-4030	101.7	36.4	17.0	_	12.5	9.5	8.2	_
Fence erectors	47-4031	101.7	36.4	17.0	_	12.5	9.5	8.2	_
Hazardous materials removal workers	47-4040	98.1	24.2	14.7	8.1	-	11.6	-0.2	_
Hazardous materials removal workers	47-4040	98.1	24.2	14.7	8.1	_	11.6	_	
Highway maintenance workers	47-4041	95.6	24.2		0.1		31.5		_
Highway maintenance workers	47-4050	95.6	_	_	_	_	31.5	_	
Rail-track laying and maintenance									_
equipment operators Rail-track laying and maintenance	47-4060	118.5	25.3	12.7	_	-	12.6	-	_
equipment operators Septic tank servicers and sewer pipe	47-4061	118.5	25.3	12.7	-	-	12.6	-	-
cleaners Septic tank servicers and sewer pipe	47-4070	131.4	29.9	10.9	19.0	-	10.2	-	-
cleaners Miscellaneous construction and related	47-4071	131.4	29.9	10.9	19.0	-	10.2	-	-
workers	47-4090	449.3	170.7	91.6	34.2	25.3	67.4	11.9	6.
Extraction workers	47-5000	177.1	93.7	56.0	13.6	21.9	9.9	16.3	
Derrick, rotary drill, and service unit									
operators, oil, gas, and mining	47-5010	72.9	40.7	26.0	3.6	10.8	1.8	8.4	-
Derrick operators, oil and gas	47-5011	120.2	70.5	44.6	8.5	16.5	_	6.7	_
Rotary drill operators, oil and gas Service unit operators, oil, gas, and	47-5012	101.1	55.0	32.5	-	18.5	-	13.1	-
mining	47-5013	21.8	11.1	9.3	_	-	_	6.1	-
Earth drillers, except oil and gas	47-5020	144.9	56.8	18.5	15.1	10.0	12.8	14.9	-
Earth drillers, except oil and gas	47-5021	144.9	56.8	18.5	15.1	10.0	12.8	14.9	-
Explosives workers, ordnance handling		-	39.4						
experts, and blasters	47-5030	96.6	39.4	_	_	-	-	-	-
Explosives workers, ordnance handling	47 5004	00.0	00 A						
experts, and blasters	47-5031	96.6	39.4	-	-	-	-	-	-
Mining machine operators	47-5040	281.9	114.1	57.9	37.1	17.5	28.6	34.2	-
Continuous mining machine operators	47-5041	125.4	72.9	49.8	-	-	-	-	-
Roof bolters, mining	47-5060	923.5	635.7	444.6	55.8	116.0	-	43.0	-

				1	Event	or exposure	e leading to in	ijury or ill	ness ⁵			1
	Overe	xertion		Exposure		portation			Assaults a	nd violent ac	ts	
Occupation			Repeti-	to harmful	acc	idents	Fires			All other	assaults	All
	Total	In lifting	tive motion	substance or environ- ment	Total	Highway accident	and explosions	Total	Assaults by person	All other assaults	Assaults by animal	other events ^{6,7}
Helperselectricians Helperspainters, paperhangers,	14.9	7.0	-	8.9	3.0	-	-	_	-	_	_	-
plasterers, and stucco masons Helperspipelayers, plumbers,	_	_	-	-	-	-	-	-	-	_	-	-
pipefitters, and steamfitters	19.6	9.7	-	2.6	-	-	-	-	-	-	-	31.0
Helpersroofers	-	-	-	22.0	-	-	-	-	-	-	-	-
Other construction and related workers	25.0	9.8	5.4	13.6	23.6	9.5	-	-	-	-	-	21.9
Construction and building inspectors	23.0	-	-	_	27.8	5.2	-	-	-	-	-	-
Construction and building inspectors	23.0	-	-	_	27.8	5.2	-	-	-	-	-	-
Elevator installers and repairers	28.2	14.0	7.3	_	-	_	-	-	-	-	-	18.5
Elevator installers and repairers	28.2	14.0	7.3	_	-	_	-	_	-	_	-	18.5
Fence erectors	19.2	9.7	-	_	-	_		_	-	_	-	18.9
Fence erectors	19.2	9.7	-	_	-	_	-	-	-	_	-	18.9
Hazardous materials removal workers	8.9	8.9	-	23.2	_	_		_	_	_	_	-
Hazardous materials removal workers	8.9	8.9	-	23.2	_	_		_	_	_	_	-
Highway maintenance workers	_	_	-	_	_	_	_	_	_	_	_	_
Highway maintenance workers Rail-track laying and maintenance	-	-	-	_	-	_	-	-	_	_	-	-
equipment operators Rail-track laying and maintenance	20.5	-	-	_	19.7	13.4	-	-	-	_	-	33.9
equipment operators Septic tank servicers and sewer pipe	20.5	-	-	-	19.7	13.4	-	-	-	_	-	33.9
cleaners Septic tank servicers and sewer pipe	25.1	20.4	-	38.6	13.9	-	-	-	-	_	-	-
cleaners Miscellaneous construction and related	25.1	20.4	-	38.6	13.9	-	-	-	-	_	-	-
workers	44.5	15.8	18.3	17.7	50.1	28.7	-	-	-	-		61.5
Extraction workers Derrick, rotary drill, and service unit	32.6	11.9	.6	5.4	5.6	4.1	1.8	-	-	-	-	10.5
operators, oil, gas, and mining	8.9	3.0	-	2.2	2.4	-	1.7	-	-	-	-	5.7
Derrick operators, oil and gas	18.9	8.4	-	_	7.1	_	-	-	-	-	-	9.4
Rotary drill operators, oil and gas Service unit operators, oil, gas, and	7.2	-	-	6.2	_	_	-	-	-	-	-	10.1
mining	-	-	-	-	-	-	-	-	-	-		-
Earth drillers, except oil and gas	38.1	20.4	-	-	-	—	-	-	-	-	-	15.2
Earth drillers, except oil and gas Explosives workers, ordnance handling	38.1	20.4	-	_	-	_	-	-	_	_	-	15.2
experts, and blasters Explosives workers, ordnance handling	43.7	-	-	-	_	_	-	-	-	-	-	-
experts, and blasters	43.7	-	-	-	-	-	-	-	-	-	-	-
Mining machine operators	65.4	26.1	-	6.4	22.7	19.7	-	-	-	-		8.3
Continuous mining machine operators	34.1	-	-	-	-	—	-	-	-	-		-
Roof bolters, mining	199.7	51.5	-	-	-	-	-	-	-	-	-	

				Event o	r exposur	e leading t	o injury or	illness ⁵	
				Contact w	ith objects	;			
Occupation	Occupation code ³	Private industry ⁴	Total	Struck by object	Struck against object	Caught in or com- pressed or crushed	Fall to lower level	Fall on same level	Slips or trips without fall ⁶
Dect holters mining	47 5064	000 5	605.7	1110	55.0	110.0		42.0	
Roof bolters, mining	47-5061	923.5	635.7	444.6	55.8	116.0	-	43.0	-
Roustabouts, oil and gas	47-5070	70.8	42.0	36.5	3.4	_	4.3	_	-
Roustabouts, oil and gas		70.8	42.0	36.5	3.4		4.3	_	-
Helpersextraction workers	47-5080	81.8	45.3	21.4	-	22.2	-	9.2	-
Helpersextraction workers	47-5081	81.8	45.3	21.4	-	22.2	-	9.2	-
Installation, maintenance, and repair	40,0000	0475	740	00.4	47.0	40.0	40.0	47.0	
occupations	49-0000	217.5	74.3	36.4	17.8	12.0	16.8	17.6	6.0
Supervisors of installation, maintenance,	40 4000	70.4		40.0	~ ~ ~			40.4	
and repair workers	49-1000	72.1	21.1	13.2	2.5	4.3	5.7	10.1	1.5
First-line supervisors/managers of	10 1010	70.4	04.4	40.0		10		40.4	4.5
mechanics, installers, and repairers	49-1010	72.1	21.1	13.2	2.5	4.3	5.7	10.1	1.5
First-line supervisors/managers of		70.4	~ ~ ~	10.0				40.4	
mechanics, installers, and repairers	49-1011	72.1	21.1	13.2	2.5	4.3	5.7	10.1	1.5
Electrical and electronic equipment	40.0000	100.0						10 -	
mechanics, installers, and repairers	49-2000	129.3	30.8	11.2	11.5	4.5	18.1	13.5	3.9
Computer, automated teller, and office	10.0010	74.0	40.0						
machine repairers	49-2010	74.3	19.9	14.4	2.5	1.9	5.6	4.1	-
Computer, automated teller, and office	40.0044	74.0	10.0			10	5.0		
machine repairers	49-2011	74.3	19.9	14.4	2.5	1.9	5.6	4.1	-
Radio and telecommunications equipment	40,0000	400.0	40.0	40.0	04.0	0.5	40.0	00 5	0.7
installers and repairers	49-2020	198.2	46.0	12.0	21.2	6.5	19.2	26.5	8.7
Radio mechanics	49-2021	87.0	-	-	-	-	-	-	-
Telecommunications equipment									
installers and repairers, except line			10 -						
installers	49-2022	200.9	46.7	11.8	21.7	6.6	19.7	27.2	8.9
Miscellaneous electrical and electronic									
equipment mechanics, installers, and	40.0000	105.0	05.0						
repairers	49-2090	105.9	25.0	9.0	8.8	4.3	23.3	8.7	2.0
Avionics technicians	49-2091	93.6	22.4	-	-	-	-	10.7	-
Electric motor, power tool, and related	40.0000	400 7				10.0			
repairers	49-2092	162.7	63.3	31.4	-	19.6	-	-	-
Electrical and electronics installers and	40.0000	454.0							
repairers, transportation equipment	49-2093	154.0	39.0	-	-	-	69.0	-	-
Electrical and electronics repairers,	40.0004		40.4						
commercial and industrial equipment	49-2094	40.4	16.4	8.5	-	7.7	-	6.3	2.8
Electrical and electronics repairers,	40.0005								
powerhouse, substation, and relay	49-2095	11.5	-	-	-	-	-	-	-
Electronic equipment installers and	40.0000		cc -						
repairers, motor vehicles	49-2096	51.3	26.7	-	-	-	-	-	-
Electronic home entertainment	40.000-	100.0						o	
equipment installers and repairers	49-2097	186.0	11.2	-	5.3	-	26.1	31.5	-
Security and fire alarm systems installers	10 0000				.				
	49-2098	150.8	34.2	10.3	21.2	-	62.2	7.0	

					Event	or exposure	e leading to in	ijury or illr	ness ⁵			
	Overe	xertion		Exposure		portation			Assaults a	nd violent ac	ts	
Occupation			Repeti-	to harmful	acc	idents	Fires			All other	assaults	
	Total	In lifting	tive motion	substance or environ- ment	Total	Highway accident	and explosions	Total	Assaults by person	All other assaults	Assaults by animal	other events ^{6,7}
Roof bolters, mining	199.7	51.5	_	_	_	-	_	-	_	_	_	_
Roustabouts, oil and gas	5.9	4.4	_	2.4	_	_	3.0	_	_	_	_	11.4
Roustabouts, oil and gas		4.4	_	2.4	_	_	3.0	_	_	_	_	11.4
Helpersextraction workers			_	2.7	_	_	- 5.0	_	_	_	_	10.5
Helpersextraction workers		_		_	_	_		_	_	_	_	10.5
	11.9	_	-	-	-	—		-	_	_	_	10.5
Installation, maintenance, and repair	45.0	00.4		40.0	0.7	5.0	10		0.0	4.0		00.0
occupations	45.8	22.4	4.1	10.9	9.7	5.9	1.2	1.4	0.3	1.2	1.1	29.6
Supervisors of installation, maintenance,												
and repair workers	16.4	5.6	1.0	5.2	2.0	.6	1.1	.4	-	-	-	7.6
First-line supervisors/managers of												
mechanics, installers, and repairers	16.4	5.6	1.0	5.2	2.0	.6	1.1	.4	-	-	-	7.6
First-line supervisors/managers of												
mechanics, installers, and repairers	16.4	5.6	1.0	5.2	2.0	.6	1.1	.4	_	_	-	7.6
Electrical and electronic equipment												
mechanics, installers, and repairers	24.3	9.3	1.9	4.9	12.8	10.8	_	1.2	.5	.7	.7	17.8
Computer, automated teller, and office												
machine repairers	29.4	9.9	1.4	_	6.7	6.3	_	_	_	_	_	6.2
Computer, automated teller, and office	20.4	5.5	1.4		0.7	0.0						0.2
machine repairers	29.4	9.9	1.4	_	6.7	6.3	_					6.2
	29.4	9.9	1.4	-	0.7	0.5		-	_	_	_	0.2
Radio and telecommunications equipment	040			407	44.0	40.0		0.0			10	00.0
installers and repairers		14.4	.9	10.7	14.8	10.0	-	2.8	1.4	1.4	1.3	33.6
Radio mechanics	39.1	39.1	-	-	_	-	-	-	-	-	-	-
Telecommunications equipment												
installers and repairers, except line												
installers	34.8	13.8	.9	10.8	14.7	9.7	-	2.8	1.5	1.4	1.3	34.5
Miscellaneous electrical and electronic												
equipment mechanics, installers, and												
repairers	14.2	5.4	2.8	3.0	14.4	13.6	_	.6	_	_	_	11.9
Avionics technicians	_	_		_	_	_	_	_	_	_	_	42.3
Electric motor, power tool, and related												12.0
repairers	43.4	8.7	_	_	16.1	_	_	_	_	_	_	26.7
Electrical and electronics installers and	43.4	0.7	-	_	10.1	_	_	_	_	_	_	20.7
	21.2	18.9	_		_		_	_				
repairers, transportation equipment	21.2	10.9	-	-	-	_	-	-	_	_	-	-
Electrical and electronics repairers,												
commercial and industrial equipment	-	-	-	2.5	-	-	-	-	-			9.1
Electrical and electronics repairers,												
powerhouse, substation, and relay	-	-	-	-	-	-	-	-	-	-		-
Electronic equipment installers and												
repairers, motor vehicles	-	-	-		-	_	-	-	_	-		12.1
Electronic home entertainment												
equipment installers and repairers	18.3	5.4	8.7	7.0	73.4	71.7		_	_	_	_	5.2
Security and fire alarm systems	.0.0	0.7	0.7	7.5	70.4	,						0.2
	1	1										
installers	19.5	9.5	3.9		9.1	8.1	I – I	_	_	_	_	10.4

				Event o	r exposure	e leading t	o injury or	illness ⁵	
				Contact w	ith objects				
Occupation	Occupation code ³	Private industry ⁴	Total	Struck by object	Struck against object	Caught in or com- pressed or crushed	Fall to lower level	Fall on same level	Slips or trips withou fall ⁶
/ehicle and mobile equipment mechanics,									
installers, and repairers	49-3000	250.4	99.5	49.7	23.7	12.7	12.7	15.1	6
Aircraft mechanics and service									
technicians	49-3010	232.7	55.5	16.1	22.6	11.3	11.9	18.8	17
Aircraft mechanics and service									
technicians	49-3011	232.7	55.5	16.1	22.6	11.3	11.9	18.8	17
Automotive technicians and repairers	49-3020	252.8	110.1	54.2	32.4	12.3	7.5	14.6	4
Automotive body and related repairers	49-3021	232.1	109.2	62.5	23.2	16.5	10.3	8.2	2
Automotive glass installers and									
repairers	49-3022	432.7	238.7	103.8	129.1	-	-	-	-
Automotive service technicians and									
mechanics	49-3023	252.5	106.5	50.7	31.7	11.7	7.0	15.9	5
Bus and truck mechanics and diesel									
engine specialists	49-3030	257.3	80.4	45.2	14.5	8.6	19.1	23.7	4
Bus and truck mechanics and diesel									
engine specialists	49-3031	257.3	80.4	45.2	14.5	8.6	19.1	23.7	4
Heavy vehicle and mobile equipment									
service technicians and mechanics	49-3040	319.9	119.3	72.2	14.6	17.5	34.8	14.9	11
Farm equipment mechanics	49-3041	417.1	197.0	133.0	10.0	16.5	72.3	11.6	-
Mobile heavy equipment mechanics,									
except engines	49-3042	293.1	101.7	60.8	15.7	18.2	26.6	16.5	16
Rail car repairers	49-3043	319.6	98.3	42.2	15.6	15.7	22.7	11.1	-
Small engine mechanics	49-3050	100.6	28.2	15.3	-	-	5.6	-	-
Motorboat mechanics	49-3051	176.0	64.7	24.5	-	-	-	-	-
Motorcycle mechanics	49-3052	106.2	-	-	-	-	-	-	-
Outdoor power equipment and other	40.0050		47.0	40.0					
small engine mechanics	49-3053	42.1	17.2	16.0	-	-	-	-	-
Miscellaneous vehicle and mobile									
equipment mechanics, installers, and	49-3090	209.2	109.5	41.7	8.4	23.8	7.0	7.6	3
repairers Recreational vehicle service	49-3090	209.2	109.5	41.7	0.4	23.0	7.0	7.0	3
technicians	49-3092	137.8	67.1	27.1	21.8		25.9		
Tire repairers and changers	49-3092	238.1	125.3	47.5	7.3	28.8	4.9	8.1	4
Other installation, maintenance, and repair	49-3033	230.1	120.0	47.5	1.5	20.0	4.5	0.1	
occupations	49-9000	243.6	78.8	38.5	18.5	14.6	20.9	21.3	7
Control and valve installers and repairers	49-9010	107.7	69.9	15.2	6.6	47.8		5.7	l _'
Mechanical door repairers	49-9011	58.6	35.8	35.8			_		_
Control and valve installers and	10 0011	00.0	00.0	00.0					
repairers, except mechanical door	49-9012	133.3	87.6	4.5	10.0	72.8	_	8.6	_
Heating, air conditioning, and refrigeration			51.5			. 2.0		0.0	
mechanics and installers	49-9020	313.4	96.8	42.3	37.1	4.7	42.1	18.5	14
Heating, air conditioning, and			50.0						
		1							1

				1	Event	or exposure	e leading to ir	ijury or illi	ness ⁵			1
	Overe	xertion		Exposure		portation idents			Assaults a	nd violent ac	ts	
Occupation			Repeti-	to harmful	acc	Idents	Fires			All other	assaults	All
	Total	In lifting	tive motion	substance or environ- ment	Total	Highway accident	and explosions	Total	Assaults by person	All other assaults	Assaults by animal	other events ^{6,}
Vehicle and mobile equipment mechanics, installers, and repairers Aircraft mechanics and service	55.6	25.6	6.1	9.9	7.3	3.4	1.8	0.9	0.1	0.8	0.8	35.4
technicians Aircraft mechanics and service	62.7	29.4	8.6	9.4	3.1	-	5.1	-	-	-	-	40.2
technicians	62.7	29.4	8.6	9.4	3.1	_	5.1	_	_	_	_	40.2
Automotive technicians and repairers	54.2	24.9	8.4	11.6	7.8	3.4	1.2	.9	_	.8	.8	31.9
Automotive body and related repairers Automotive glass installers and	71.5	27.1	5.4	6.5	-	-	-		-			18.0
repairers Automotive service technicians and	100.9	20.1	-	-	-	-	-	-	-	-	-	39.4
mechanics Bus and truck mechanics and diesel	48.7	24.6	8.9	13.2	9.2	3.7	1.5	1.1	-	1.1	1.1	35.0
engine specialists Bus and truck mechanics and diesel	57.3	20.9	2.5	8.4	5.8	4.6	1.7	1.0	-	-	-	53.
engine specialists Heavy vehicle and mobile equipment	57.3	20.9	2.5	8.4	5.8	4.6	1.7	1.0	-	-	-	53.
service technicians and mechanics	63.0	31.1	1.9	11.6	9.4	2.8	2.1	2.1	_	2.0	2.0	49.0
Farm equipment mechanics Mobile heavy equipment mechanics,	63.0	13.2	-	11.3	-	_	-	_	-	_	_	54.
except engines	58.8	34.4	_	10.7	11.4	2.9	2.0	2.3	_	2.2	2.2	45.
Rail car repairers	86.0	40.5	-	17.2	11.4				_			59.
Small engine mechanics	44.2	17.1	_	6.2	13.1	11.9	_	_	_	_	_	_
Motorboat mechanics	79.7	38.4	_		_	-	_	_	_	_	_	_
Motorcycle mechanics Outdoor power equipment and other	55.1	-	-	-	46.2	43.8	-	-	-	-	-	-
small engine mechanics Miscellaneous vehicle and mobile	11.4	9.3	-	-	_	-	-	-	-	_	_	_
equipment mechanics, installers, and repairers Recreational vehicle service	50.8	32.2	4.1	1.4	4.0	-	3.0	-	-	-	-	18.
technicians Tire repairers and changers	_ 61.9	_ 39.2	_ 5.1		- 4.8	-	- 3.7		-			28. 18.
Other installation, maintenance, and repair occupations	50.1	26.4	3.9	13.8	11.7	7.1	1.1	2.0	.4	1.6	1.6	32.
Control and valve installers and repairers Mechanical door repairers	7.3 -	_	-			_		_	_			15. —
Control and valve installers and repairers, except mechanical door	9.7	_	_	_	_	-	_	_	_	_	_	13.
Heating, air conditioning, and refrigeration mechanics and installers	59.2	28.4	2.8	12.8	15.2	11.1	2.2	11.3	_	11.3	11.2	38.
Heating, air conditioning, and refrigeration mechanics and installers	59.2	28.4	2.8	12.8	15.2	11.1	2.2	11.3	-	11.3	11.2	38.

				Event o	r exposure	e leading t	o injury or	illness ⁵	
				Contact w	ith objects	;			
Occupation	Occupation code ³	Private industry ⁴	Total	Struck by object	Struck against object	Caught in or com- pressed or crushed	Fall to lower level	Fall on same level	Slips or trips without fall ⁶
Home appliance repairers Home appliance repairers	49-9030 49-9031	181.4 181.4	59.7 59.7	20.9 20.9	27.1 27.1		10.2 10.2	- -	
Industrial machinery installation, repair,	10 00 10	000 5	70.0	44.0	45.0	47.0	40.5	00.7	
and maintenance workers Industrial machinery mechanics Maintenance and repair workers,	49-9040 49-9041	236.5 255.6	79.6 102.8	41.0 47.0	15.3 17.8	17.3 32.6	16.5 12.3	23.7 28.0	5.5 4.2
general	49-9042	238.2	75.7	41.0	15.0	13.3	18.1	24.4	5.9
Maintenance workers, machinery	49-9043	193.8	56.1	25.4	10.1	17.8	15.7	7.7	-
Millwrights	49-9044	175.6	74.8	33.8	14.8	20.1	6.6	11.7	8.1
Line installers and repairers Electrical power-line installers and	49-9050	223.8	47.9	25.4	15.3	3.0	26.8	21.4	13.3
repairers Telecommunications line installers and	49-9051	242.1	62.7	38.7	12.9	7.0	23.0	20.1	9.2
repairers Precision instrument and equipment	49-9052	212.6	38.8	17.3	16.8	-	29.1	22.2	15.9
repairers Camera and photographic equipment	49-9060	80.5	19.4	13.3	3.7	-	3.5	15.9	3.1
repairers	49-9061	182.7	-	-	-	-	-	-	-
Medical equipment repairers	49-9062	37.0	5.4	-	-	-	-	-	-
Musical instrument repairers and tuners	49-9063	54.8	49.9	49.9	-	-	-	-	-
Miscellaneous installation, maintenance,									
and repair workers	49-9090	296.8	100.8	45.3	25.0	17.1	27.3	18.0	7.5
Coin, vending, and amusement									
machine servicers and repairers	49-9091	130.0	34.3	18.5	12.2	-	11.3	19.9	6.9
Commercial divers	49-9092	419.1	130.7	-	-	-	-	137.1	-
Locksmiths and safe repairers	49-9094	25.5	-	-	-	-	-	-	-
Manufactured building and mobile	40,0005	450.0	000 5				_		
home installers	49-9095 49-9096	452.0 284.2	223.5 143.3	- 97.3	22.8	- 19.6	_ 29.3	-	10.5
Riggers Signal and track switch repairers	49-9096 49-9097	204.2	33.1	97.3	22.0	19.0	29.3 49.6	23.7	19.5
Helpersinstallation, maintenance, and	49-9097	202.7	33.1	-	_	-	49.0	_	-
repair workers	49-9098	135.5	50.7	18.4	15.6	11.2	8.0	7.3	4.1
Production occupations	51-0000	175.7	69.3	30.7	12.6	19.9	5.7	17.2	4.2
Supervisors, production workers First-line supervisors/managers of	51-1000	90.5	32.3	13.0	9.1	9.3	3.9	12.2	2.3
production and operating workers First-line supervisors/managers of	51-1010	90.5	32.3	13.0	9.1	9.3	3.9	12.2	2.3
production and operating workers	51-1011	90.5	32.3	13.0	9.1	9.3	3.9	12.2	2.3
Assemblers and fabricators Aircraft structure, surfaces, rigging, and	51-2000	133.0	43.7	21.1	9.8	9.9	5.3	12.0	2.5
Aircraft structure, surfaces, rigging, and Aircraft structure, surfaces, rigging, and	51-2010	309.1	58.0	39.4	14.4	-	7.0	8.6	6.4
systems assemblers	51-2011	309.1	58.0	39.4	14.4	-	7.0	8.6	6.4

					Event	or exposure	e leading to in	ijury or illr	ness ⁵			
	Overe	xertion		Exposure		oortation idents	-		Assaults a	nd violent ac	ts	
Occupation			Repeti-	to harmful	acc	idents	Fires			All other	assaults	All
	Total	In lifting	tive motion	substance or environ- ment	Total	Highway accident	and explosions	Total	Assaults by person	All other assaults	Assaults by animal	other events ^{6,7}
Home appliance repairers Home appliance repairers Industrial machinery installation, repair,	75.6 75.6	63.1 63.1			10.3 10.3	10.3 10.3		-				19.1 19.1
and maintenance workers	52.3	29.5	4.2	14.4	9.4	6.0	1.3	0.7	0.3	0.3	0.3	28.9
Industrial machinery mechanics Maintenance and repair workers,	52.1	23.7	5.0	11.3	7.3	4.6	1.5	-	-	_	_	30.7
general	53.3	32.7	3.8	15.5	10.3	7.1	1.4	.8	.4	.4	.4	29.0
Maintenance workers, machinery Millwrights	52.7 35.4	16.6 15.7	7.0 4.7	14.7 9.0	10.5	_	_	-	-	-	_	26.8 21.6
Line installers and repairers Electrical power-line installers and	41.2	11.4	3.6	10.0	_ 15.8	_ 11.2	_	3.2	1.0	2.2	2.2	40.3
repairers Telecommunications line installers and	56.8	15.2	6.8	9.1	17.6	8.4	-	-	-	-	-	36.0
repairers Precision instrument and equipment	31.7	9.0	1.7	10.6	14.8	12.9	-	4.9	1.4	3.5	3.5	42.9
repairers Camera and photographic equipment	19.1	9.8	-	3.2	4.1	-	-	-	-	_	-	9.7
repairers	-	-	-	-	-	-	-	-	-	-	-	_
Medical equipment repairers Musical instrument repairers and tuners	12.0 _	7.0	_	_	_	_		_	_	-	-	10.7
Miscellaneous installation, maintenance, and repair workers	50.7	25.9	4.9	20.0	19.0	6.9	-	.7	_	_	_	47.5
Coin, vending, and amusement machine servicers and repairers	22.3	11.4	-	-	9.0	8.4	-	-	-	_	_	24.4
Commercial divers Locksmiths and safe repairers	_	_	-	-	-	-	-	_	-	-	-	-
Manufactured building and mobile home installers	_	_	_	_	_	_	_	_	_	_	_	_
Riggers	21.4	12.6		_	_	_		_	_	_	_	36.6
Signal and track switch repairers Helpersinstallation, maintenance, and	33.1	-	-	-	-	-	-	-	-	-	-	51.7
repair workers	34.7	16.1	_	16.1	-	_	-	-	_	_	_	11.6
Production occupations Supervisors, production workers	35.8 15.7	18.8 8.1	13.0 5.7	9.9 4.1	2.1 2.5	.5 .8	.5 .4	.3 .6	.2 .3	.1 .3	.1 .3	17.7 10.7
First-line supervisors/managers of production and operating workers First-line supervisors/managers of	15.7	8.1	5.7	4.1	2.5	.8	.4	.6	.3	.3	.3	10.7
production and operating workers Assemblers and fabricators	15.7 31.3	8.1 15.7	5.7 17.6	4.1 4.1	2.5 .8	.8 .2	.4	.6 .2	.3 .1	.3	.3	10.7 15.4
Aircraft structure, surfaces, rigging, and systems assemblers	60.7	12.4	37.2		.0							124.3
Aircraft structure, surfaces, rigging, and systems assemblers	60.7	12.4	37.2	_	_	_	_	_	_	_	-	124.3
-												

				Event o	r exposur	e leading t	o injury or	illness ⁵	
				Contact w	ith objects	3			
Occupation	Occupation code ³	Private industry ⁴	Total	Struck by object	Struck against object	Caught in or com- pressed or crushed	Fall to lower level	Fall on same level	Slips or trips withou fall ⁶
Electrical, electronics, and									
electromechanical assemblers Electromechanical equipment	51-2020	69.3	16.6	8.8	3.2	3.4	3.8	8.4	0.
assemblers	51-2023	31.3	6.8	-	-		3.1	3.7	-
Engine and other machine assemblers	51-2030	300.5	68.5	32.4	9.7	23.7	74.1	18.5	-
Engine and other machine assemblers	51-2031	300.5	68.5	32.4	9.7	23.7	74.1	18.5	-
Structural metal fabricators and fitters	51-2040	16.5	6.6	3.0	1.9	-	-	2.1	1
Structural metal fabricators and fitters	51-2041	16.5	6.6	3.0	1.9	-	-	2.1	1
Miscellaneous assemblers and fabricators	51-2090	146.0	51.0	24.3	11.6	11.7	4.0	13.3	2
Fiberglass laminators and fabricators	51-2091	127.1	33.8	14.0	12.1	_	_	16.7	_
Team assemblers	51-2092	2.2	.4	.2	.2	_	.1	.3	_
Food processing workers	51-3000	147.2	56.9	24.9	16.0	12.9	2.3	21.0	4
Bakers	51-3010	137.3	44.9	18.6	19.5	5.0	2.4	26.6	2
Bakers	51-3011	137.3	44.9	18.6	19.5	5.0	2.4	26.6	2
Butchers and other meat, poultry, and fish									
processing workers	51-3020	152.2	66.9	29.5	18.0	15.1	1.8	17.3	5
Butchers and meat cutters	51-3021	277.5	141.3	53.8	43.5	33.2	_	34.6	3
Meat, poultry, and fish cutters and									
trimmers	51-3022	100.1	39.0	23.2	7.0	7.3	3.3	9.8	-
Slaughterers and meat packers	51-3023	78.3	19.0	10.0	3.4	5.0	1.6	7.6	15
Miscellaneous food processing workers	51-3090	142.9	41.8	18.5	8.1	14.1	3.2	25.4	3
Food and tobacco roasting, baking, and	0.0000						0	_0	
drying machine operators and tenders	51-3091	268.6	82.8	35.4	20.2	23.7	_	60.7	_
Food batchmakers	51-3092	133.8	40.7	18.4	6.8	14.7	3.1	25.5	3
Food cooking machine operators and							••••		
tenders	51-3093	105.9	24.6	10.4	5.5	8.0	_	8.1	_
Metal workers and plastic workers	51-4000	191.5	89.1	43.4	12.3	21.8	5.5	13.7	3
Computer control programmers and									
operators	51-4010	39.6	17.2	4.9	2.7	7.4	-	3.7	1
Computer-controlled machine tool				_				_	
operators, metal and plastic	51-4011	42.5	18.5	5.2	3.1	8.1	-	3.9	1
Numerical tool and process control		_		-	-	_			
programmers	51-4012	16.2	-	-	-	-	-	-	-
Forming machine setters, operators, and									
tenders, metal and plastic	51-4020	91.2	40.3	13.2	4.1	16.3	3.7	7.5	2
Rolling machine setters, operators, and									
tenders, metal and plastic	51-4023	172.8	72.6	23.9	10.1	30.1	9.8	13.3	4
Machine tool cutting setters, operators,									
and tenders, metal and plastic	51-4030	141.9	75.9	34.4	10.9	23.8	3.1	9.9	2
Cutting, punching, and press machine	_		-					-	
setters, operators, and tenders, metal									
and plastic	51-4031	143.3	81.9	37.7	10.1	28.0	2.8	8.9	2

					Event	or exposure	e leading to in	njury or illr	ness ⁵			
	Overe	xertion		Exposure		portation dents			Assaults a	nd violent ac	ts	-
Occupation			Repeti-	to harmful	acc		Fires			All other	assaults	All
·	Total	In lifting	tive motion	substance or environ- ment	Total	Highway accident	and explosions	Total	Assaults by person	All other assaults	Assaults by animal	other events ^{6,7}
Electrical, electronics, and electromechanical assemblers	12.4	6.1	14.1	3.3	_	_	_	_	_	_	_	9.5
Electromechanical equipment	2.7											
assemblers		-	5.7		_	_			_	_		6.9
Engine and other machine assemblers	68.5	37.5	22.5	5.1	-	-		-	_			38.5
Engine and other machine assemblers	68.5	37.5	22.5	5.1	-	-		-	_	_	_	38.5 2.5
Structural metal fabricators and fitters Structural metal fabricators and fitters	2.4	-	-		-	-	-	-	_		_	2.5
	2.4	-	-	-	-	-	-		-	-		
Miscellaneous assemblers and fabricators	35.7	18.3	19.0	4.5	1.0	0.2	0.2	0.2	-	0.1	0.1	14.3
Fiberglass laminators and fabricators	30.0	10.0	12.1	8.3	-	-	-	-	-	-	-	16.3
Team assemblers	.5	.2	.5		-	-	-		-	-	-	.2
Food processing workers	32.6	19.7	10.3	7.4	.8	-	-	.4	-	-	-	10.8
Bakers	24.1	16.4	9.2	9.6	-	-	-	-	-	-	-	17.7
Bakers Butchers and other meat, poultry, and fish	24.1	16.4	9.2	9.6	-	-	-	-	-	-	-	17.7
processing workers	33.0	20.3	12.8	4.9	1.0	-		.6	-	-	-	7.9
Butchers and meat cutters Meat, poultry, and fish cutters and	70.0	50.3	9.6	6.9	-	-	-	-	_	_	-	10.4
trimmers	19.4	6.4	16.2	5.2	1.2	-		_	_	-	-	4.4
Slaughterers and meat packers	8.8	4.7	12.0	2.2	-	-	-	-	-	_	-	9.9
Miscellaneous food processing workers Food and tobacco roasting, baking, and	38.9	20.8	4.6	12.2	-	-	-	-	-	-	-	12.3
drying machine operators and tenders	71.2	32.2	12.6	12.9	_	-	-	-	_	_	-	17.6
Food batchmakers Food cooking machine operators and	34.5	18.1	5.0	13.4	-	-	-	-	-	-	-	6.3
tenders	34.7	22.2	-	8.7	_	-	-	-	_	_	-	25.2
Metal workers and plastic workers Computer control programmers and	37.2	19.1	9.7	14.9	1.3	.3	.5	.2	0.2	_	-	15.3
operators Computer-controlled machine tool	8.3	3.7	1.3	1.3	-	-	-	-	-	-	-	5.7
operators, metal and plastic Numerical tool and process control	8.9	4.1	1.2	1.4	-	-	-	-	-	-	-	6.3
programmers Forming machine setters, operators, and	-	-	-	-	-	-	-	-	-	-	-	-
tenders, metal and plastic Rolling machine setters, operators, and	17.6	6.0	6.6	2.7	-	-	-	-	-	-	-	10.0
tenders, metal and plastic	34.1	14.9	13.8	5.8	-	-	-	-	_	-	-	18.3
and tenders, metal and plastic Cutting, punching, and press machine setters, operators, and tenders, metal	26.0	13.1	8.9	5.4	.7	_	-	-	-	_	_	9.3
and plastic	27.3	14.6	7.4	1.6	.7	-	-	_	_	-	-	9.6

				Event o	r exposur	e leading t	o injury or	illness ⁵	
				Contact w	ith objects	5			
Occupation	Occupation code ³	Private industry ⁴	Total	Struck by object	Struck against object	Caught in or com- pressed or crushed	Fall to lower level	Fall on same level	Slips or trips withou fall ⁶
Drilling and boring machine tool setters,									
operators, and tenders, metal and									
plastic	51-4032	59.0	37.0	19.1	_	12.9	_	5.3	_
Grinding, lapping, polishing, and buffing	01 1002	00.0	01.0	10.1				0.0	
machine tool setters, operators, and									
tenders, metal and plastic	51-4033	212.2	106.8	46.6	18.4	26.3	3.3	9.5	3.
Lathe and turning machine tool setters,									
operators, and tenders, metal and									
plastic	51-4034	92.6	36.0	10.6	8.2	14.4	6.5	15.4	-
Milling and planing machine setters,									
operators, and tenders, metal and									
plastic	51-4035	101.0	51.1	33.1	7.3	10.7	-	14.4	-
Machinists	51-4040	134.2	76.0	35.4	11.4	15.6	3.2	8.3	3
Machinists	51-4041	134.2	76.0	35.4	11.4	15.6	3.2	8.3	3.
Metal furnace and kiln operators and									
tenders	51-4050	302.1	100.4	64.0	9.4	14.0	12.6	19.0	5.
Metal-refining furnace operators and									
tenders	51-4051	373.2	109.0	65.0	15.3	19.5	12.7	29.5	-
Pourers and casters, metal	51-4052	214.0	89.8	62.9	-	-	12.4	-	-
Model makers and patternmakers, metal									
and plastic	51-4060	88.4	39.8	12.1	13.8	11.4	-	-	-
Model makers, metal and plastic	51-4061	78.5	52.6	-	23.2	-	-	-	-
Patternmakers, metal and plastic	51-4062	100.9	-	-	-	-	-	-	-
Molders and molding machine setters,	F4 4070	400.0	40.4	00.0	10	47.0	2.0	~ ~	
operators, and tenders, metal and plastic	51-4070	132.2	48.1	23.9	4.2	17.2	2.6	6.9	8.
Molding, coremaking, and casting machine setters, operators, and									
tenders, metal and plastic	51-4072	112.5	43.6	21.8	3.2	16.7	2.6	6.1	8
Multiple machine tool setters, operators,	51-4072	112.5	43.0	21.0	3.2	10.7	2.0	0.1	0.
and tenders, metal and plastic	51-4080	35.8	13.4	5.5	1.9	4.3	_	4.2	_
Multiple machine tool setters,	51 4000	00.0	10.4	0.0	1.5	т.5		7.2	
operators, and tenders, metal and									
plastic	51-4081	35.8	13.4	5.5	1.9	4.3	_	4.2	_
Tool and die makers	51-4110	96.0	44.7	13.2	8.3	14.1	_	8.8	_
Tool and die makers	51-4111	96.0	44.7	13.2	8.3	14.1	_	8.8	_
Welding, soldering, and brazing workers	51-4120	305.3	143.4	83.0	14.1	23.4	10.5	18.6	3.
Welders, cutters, solderers, and									
brazers	51-4121	335.8	158.6	90.7	16.0	26.2	10.7	20.8	4.
Welding, soldering, and brazing									
machine setters, operators, and									
tenders	51-4122	76.3	29.5	25.1	-	-	8.4	-	-
Miscellaneous metalworkers and plastic									
workers	51-4190	686.9	274.0	120.3	54.0	78.1	20.7	64.1	15

					Event	or exposure	e leading to ir	ijury or ill	ness ⁵			
	Overe	xertion		Exposure		portation idents			Assaults a	nd violent ac	ts	
Occupation			Repeti-	to harmful	acc		Fires			All other	assaults	All
	Total	In lifting	tive motion	substance or environ- ment	Total	Highway accident	and explosions	Total	Assaults by person	All other assaults	Assaults by animal	other events ⁶
Drilling and boring machine tool setters, operators, and tenders, metal and plastic Grinding, lapping, polishing, and buffing	9.8	_	_	_	_	_	_	_	_	_	_	_
machine tool setters, operators, and tenders, metal and plastic Lathe and turning machine tool setters,	37.1	19.1	20.0	14.8	-	_	-	-	-	_	_	15.
operators, and tenders, metal and plastic Milling and planing machine setters,	13.8	4.7	3.2	11.1	_	_	-	_	_	_	_	4.
operators, and tenders, metal and plastic Machinists	23.6 28.1	11.3 15.4	- 4.3	_ 2.8	_	_	_	-	-	_	_	- 8.
Machinists Metal furnace and kiln operators and	28.1	15.4	4.3	2.8	-	_	-	-	_	_	_	8
tenders Metal-refining furnace operators and tenders	57.9 75.7	25.4 31.2	26.1 41.0	51.6 65.2	5.5 8.7	_	5.4 8.6	_	_	_	_	16. 13.
Pourers and casters, metal Model makers and patternmakers, metal	35.8	18.2	-	34.6	-	-	-	-	-	_	-	19.
and plastic Model makers, metal and plastic	31.0 —	-		_	-	_		_	_	_	_	
Patternmakers, metal and plastic Molders and molding machine setters,	55.7	-	_	-	-	-	-	-	-	-	-	-
operators, and tenders, metal and plastic Molding, coremaking, and casting machine setters, operators, and	25.8	12.1	9.5	19.8	-	_	-	-	_	_	_	9
tenders, metal and plastic Multiple machine tool setters, operators,	21.2	10.5	9.0	14.1	-	_	-	-	-	-	-	6
and tenders, metal and plastic Multiple machine tool setters, operators, and tenders, metal and	9.0	3.7	3.6	1.7	-	_	-	-	-	_	-	2
plastic	9.0	3.7 8.5	3.6 6.5	1.7 6.6	-	-	-	-	-	-	-	2
Tool and die makers	18.8 18.8	8.5 8.5	6.5	6.6	_		-	_	-	_	_	
Tool and die makers Welding, soldering, and brazing workers Welders, cutters, solderers, and	18.8 52.9	8.5 29.5	6.5 8.2	6.6 37.5	2.8	_ 1.6	- 1.5	_	_	_	_	8 25
brazers	57.5	31.6	8.9	41.3	3.1	1.8	1.7	-	-	_	_	28
tenders	18.2	13.7	3.1	8.9	_	_	-	_	-	_	-	-
workers	150.2	75.8	50.1	41.8	6.1	_	-	-	-	-	-	62

				Event o	r exposur	e leading t	o injury or	illness ⁵	
				Contact w	ith objects	\$			
Occupation	Occupation code ³	Private industry ⁴	Total	Struck by object	Struck against object	Caught in or com- pressed or crushed	Fall to lower level	Fall on same level	Slips or trips withou fall ⁶
Heat treating equipment setters, operators, and tenders, metal and									
plastic	51-4191	78.6	29.2	16.1	-	8.6	-	_	-
Lay-out workers, metal and plastic	51-4192	555.5	224.7	129.4	52.7	17.8	18.3	70.3	-
Tool grinders, filers, and sharpeners	51-4194	89.5	48.9	23.1	-	-	-	_	-
Printing workers	51-5000	130.8	51.0	13.0	11.2	25.5	2.9	11.2	3
Bookbinders and bindery workers	51-5010	130.3	40.1	7.7	6.7	23.8	-	17.6	4
Bindery workers	51-5011	113.3	27.7	8.1	6.8	12.3	-	17.4	4
Bookbinders	51-5012	307.1	169.1	_	_	143.2	-	_	_
Printers	51-5020	131.0	53.5	14.2	12.2	25.9	3.4	9.7	3
Job printers	51-5021	54.2	30.2	15.1		14.3	_	_	_
Prepress technicians and workers	51-5022	55.8	12.0	2.7	3.1	6.0	_	13.9	
Printing machine operators	51-5023	171.3	71.7	17.7	17.5	34.7	4.5	10.2	5
Textile, apparel, and furnishings workers	51-6000	107.4	29.5	10.7	7.2	10.5	3.0	10.9	3
Laundry and dry-cleaning workers	51-6010	144.6	38.4	11.0	14.5	12.5	5.0	18.1	7
Laundry and dry-cleaning workers	51-6011	144.6	38.4	11.0	14.5	12.5	5.0	18.1	7
Pressers, textile, garment, and related	01 0011	144.0	00.4	11.0	14.0	12.0	0.0	10.1	· ·
materials	51-6020	85.9	9.6	3.2	_	5.4	_	3.1	_
Pressers, textile, garment, and related	01 0020	00.0	0.0	0.2		0.1		0.1	
materials	51-6021	85.9	9.6	3.2	_	5.4	_	3.1	_
Sewing machine operators	51-6030	81.7	25.2	6.3	4.6	13.1	2.3	8.6	1
Sewing machine operators	51-6031	81.7	25.2	6.3	4.6	13.1	2.3	8.6	1
Shoe and leather workers	51-6040	120.1	59.3	32.9		17.2			· _ '
Shoe and leather workers and repairers	51-6041	41.4		52.5	_		_	_	_
Shoe machine operators and tenders	51-6042	262.3	135.7	81.7	_	_	_	_	_
Tailors, dressmakers, and sewers	51-6050	66.5	14.1	6.2	_	_	_	12.8	_
Sewers, hand	51-6051	65.0	_		_	_	_	-	_
Tailors, dressmakers, and custom	01 0001	00.0							
sewers	51-6052	66.9	17.9	7.8	_	_	_	15.6	_
Textile machine setters, operators, and	51-0052	00.5	17.5	1.0				10.0	
tenders	51-6060	56.1	22.0	9.7	4.0	7.9	1.9	5.5	_
Textile bleaching and dyeing machine	51-0000	50.1	22.0	3.1	4.0	1.5	1.5	5.5	_
operators and tenders	51-6061	93.6	42.6	28.0	11.6	_	_	_	_
Textile cutting machine setters,	01-0001	55.0	42.0	20.0	11.0				
operators, and tenders	51-6062	53.3	16.5	_	_	_	_	9.0	_
Textile knitting and weaving machine	51-0002	55.5	10.5	-	-		-	9.0	_
setters, operators, and tenders	51-6063	36.9	10.7	_	_	5.8	_	_	_
Textile winding, twisting, and drawing	51-0005	50.9	10.7	-	-	5.0	-	-	_
out machine setters, operators, and									
tenders	51-6064	56.9	25.1	9.6		13.2		5.5	
	51-0004	50.9	25.1	9.6	-	13.2	-	5.5	-
Miscellaneous textile, apparel, and	F1 6000	101 4	16.6	26 5	01	0.2	10	10 4	
furnishings workers	51-6090	181.1	46.6	26.5	8.1	9.2	4.8	12.4	3

					Event	or exposure	e leading to in	njury or illr	ness ⁵			1
	Overe	xertion		Exposure		portation idents			Assaults a	nd violent ac	ts	_
Occupation			Repeti-	to harmful	acc	Idents	Fires			All other	assaults	All
	Total	In lifting	tive motion	substance or environ- ment	Total	Highway accident	and explosions	Total	Assaults by person	All other assaults	Assaults by animal	other events ^{6,7}
Heat treating equipment setters, operators, and tenders, metal and plastic	23.6	11.1	_	_	_	_	_	_	_	_	_	_
Lay-out workers, metal and plastic	120.5	83.3	_	18.4	_	_	_	_	_	_	_	86.0
Tool grinders, filers, and sharpeners	13.0	-	13.9	_	_	_	_	_	_	_	_	
Printing workers	32.2	17.4	9.2	5.4	0.8	_	_	0.6	0.5	_	_	13.6
Bookbinders and bindery workers	28.3	15.9	17.7	10.3	_	_	_	-	_	_	_	9.9
Bindery workers	26.5	16.1	14.3	11.3	_	_	_	_	_	_	_	9.5
Bookbinders	47.1	_	53.1	_	_	_	_	_	_	_	_	_
Printers	33.1	17.8	7.2	4.3	.9	_	_	_	_	_	_	14.5
Job printers	8.2	_	_	12.0	_	_	_	_	_	_	_	_
Prepress technicians and workers	9.6	3.8	4.8	_	_	_	_	_	_	_	_	8.3
Printing machine operators	45.9	25.3	9.1	3.7	_	_	-	_	_	_	_	19.5
Textile, apparel, and furnishings workers	24.7	12.8	15.5	6.0	4.9	0.3	_	.3	_	_	_	9.7
Laundry and dry-cleaning workers	46.2	23.3	5.7	8.9	1.2	_	-	1.0	-	_	-	13.1
Laundry and dry-cleaning workers	46.2	23.3	5.7	8.9	1.2	_	-	1.0	-	_	-	13.1
Pressers, textile, garment, and related materials	_	_	_	16.8	_	_	_	_	_	_	_	6.3
Pressers, textile, garment, and related materials	_	_	_	16.8	_	_	_	_	_	_	_	6.3
Sewing machine operators	12.0	6.4	22.3	1.6	_	_	_	_	_	_	_	8.1
Sewing machine operators	12.0	6.4	22.3	1.6	_	_	_	_	_	_	_	8.1
Shoe and leather workers	36.1	16.3	_	_	_	_	_	_	_	_	_	_
Shoe and leather workers and repairers	_	_	_	_	_	_	_	_	_	_	_	_
Shoe machine operators and tenders	87.5	42.7	_	_	_	_	_	_	_	_	_	_
Tailors, dressmakers, and sewers	12.7	_	4.6	7.7	_	_	_	_	_	_	_	10.6
Sewers, hand	_	_	_	_	_	_	_	_	_	_	_	37.5
Tailors, dressmakers, and custom												
sewers Textile machine setters, operators, and	11.5	-	-	9.3	-	-	-	-	-	_	-	-
tenders Textile bleaching and dyeing machine	10.6	4.9	6.2	3.5	-	-	-	-	_	-	-	5.3
operators and tenders Textile cutting machine setters,	15.3	-	-	20.9	-	-	-	-	-	-	-	-
operators, and tenders Textile knitting and weaving machine	14.9	10.5	9.1	-	-	-	-	-	-	-	-	-
setters, operators, and tenders Textile winding, twisting, and drawing	7.6	-	-	_	-	_	-	-	-	_	-	6.9
out machine setters, operators, and tenders	8.8	-	5.0	_	_	-	-	-	_	_	-	7.4
Miscellaneous textile, apparel, and furnishings workers	43.8	27.3	50.6	4.6	-	-	-	-	-	-	-	13.9

				Event o	r exposure	e leading t	o injury or	illness ⁵	
				Contact w	ith objects	3			
Occupation	Occupation code ³	Private industry ⁴	Total	Struck by object	Struck against object	Caught in or com- pressed or crushed	Fall to lower level	Fall on same level	Slips or trips withou fall ⁶
Extruding and forming machine setters,									
operators, and tenders, synthetic and									
glass fibers	51-6091	54.7	25.9	17.9	_	_	_	_	_
Upholsterers	51-6093	199.9	26.5	15.5	7.6	_	8.0	7.9	_
Woodworkers	51-7000	147.7	91.6	42.7	16.7	26.3	5.4	4.4	1.
Cabinetmakers and bench carpenters	51-7010	74.4	44.6	13.6	6.5	15.8	3.0	1.3	2.
Cabinetmakers and bench carpenters	51-7011	74.4	44.6	13.6	6.5	15.8	3.0	1.3	2.
Furniture finishers	51-7020	122.3	44.6	18.2	12.5	13.9	_	_	_
Furniture finishers	51-7021	122.3	44.6	18.2	12.5	13.9	_	_	_
Woodworking machine setters, operators,		_		-	-				
and tenders	51-7040	178.3	114.4	51.1	23.1	36.8	6.9	6.8	1.
Sawing machine setters, operators, and									
tenders, wood	51-7041	229.9	150.2	72.9	28.2	43.7	3.2	10.3	-
Woodworking machine setters,									
operators, and tenders, except sawing	51-7042	146.5	92.2	37.6	19.9	32.5	9.2	4.6	-
Plant and system operators	51-8000	71.8	14.3	7.3	3.0	3.6	6.5	12.6	3.
Power plant operators, distributors, and									
dispatchers	51-8010	29.0	4.0	-	-	-	-	6.0	-
Power plant operators	51-8013	33.1	-	-	-	-	-	5.6	-
Stationary engineers and boiler operators	51-8020	179.5	47.6	15.8	7.5	22.6	17.0	42.8	8
Stationary engineers and boiler									
operators	51-8021	179.5	47.6	15.8	7.5	22.6	17.0	42.8	8
Water and liquid waste treatment plant									
and system operators	51-8030	184.3	26.4	17.2	-	-	23.2	32.8	-
Water and liquid waste treatment plant									
and system operators	51-8031	184.3	26.4	17.2	-	-	23.2	32.8	-
Miscellaneous plant and system operators	51-8090	45.4	8.9	5.6	2.4	-	3.7	5.2	2
Chemical plant and system operators	51-8091	11.4	-	-	-	-	-	-	-
Gas plant operators	51-8092	18.8	-	-	-	-	-	-	-
Petroleum pump system operators,	51-8093	24.2							
refinery operators, and gaugers Other production occupations	51-8093	21.3 254.3	_ 97.1	40.5	16.9	31.7	8.4		6
Chemical processing machine setters,	51-9000	204.5	97.1	40.5	10.9	51.7	0.4	20.0	0
operators, and tenders	51-9010	81.7	17.0	7.5	3.3	4.9	3.9	14.4	1
Chemical equipment operators and	31-3010	01.7	17.0	1.5	5.5	4.5	5.5	14.4	
tenders	51-9011	70.4	9.2	3.3	_	_	5.9	7.6	_
Separating, filtering, clarifying,	01-0011	70.4	5.2	0.0			5.5	7.0	
precipitating, and still machine setters,									
operators, and tenders	51-9012	95.1	26.4	12.6	4.0	7.6	_	22.5	_
Crushing, grinding, polishing, mixing, and	5.00.2	00.1							
blending workers	51-9020	117.7	40.3	17.1	5.2	14.0	4.9	12.9	1

					Event	or exposure	e leading to ir	njury or illı	ness ⁵			
	Overe	xertion		Exposure		portation idents			Assaults a	nd violent ac	ts	
Occupation			Repeti-	to harmful	act		Fires			All other	assaults	All
	Total	In lifting	tive motion	substance or environ- ment	Total	Highway accident	and explosions	Total	Assaults by person	All other assaults	Assaults by animal	other events ^{6,7}
Extruding and forming machine setters, operators, and tenders, synthetic and												
glass fibers		-	-	-	-	-	-	-	-	-	-	-
Upholsterers	55.0	41.0	89.0	-	-	-	-	-	-	-	-	8.3
Woodworkers	29.4	14.0	6.4	1.2	-	-	-	-	-	-	-	6.8
Cabinetmakers and bench carpenters	17.4	10.8	2.4	-	-	-	-	-	-	-	-	3.2
Cabinetmakers and bench carpenters	17.4	10.8	2.4	-	-	-	-	-	-	-	-	3.2
Furniture finishers	35.5	29.5	20.6	-	-	-	-	-	-	-	-	8.6
Furniture finishers	35.5	29.5	20.6	-	-	-	-	-	-	-	-	8.6
Woodworking machine setters, operators,												
and tenders	31.7	11.0	6.0	1.5	_	-	-	-	-	-	-	8.7
Sawing machine setters, operators, and												
tenders, wood Woodworking machine setters,	46.1	17.1	4.2	-	-	_	-	-	-	-	_	11.4
operators, and tenders, except sawing	22.7	7.2	7.0	_	_	_		_	_	_	_	7.0
Plant and system operators	10.8	4.6	-	12.0	2.6	1.6	1.9	-	-	-	-	6.4
Power plant operators, distributors, and												
dispatchers	-	-	-	-	-	-	-	-	-	-	-	7.6
Power plant operators	-	-	-	-	-	-	-	-	-	-	-	10.2
Stationary engineers and boiler operators Stationary engineers and boiler	26.0	11.7	-	20.0	-	_	-	-	_	_	_	8.6
operators Water and liquid waste treatment plant	26.0	11.7	-	20.0	-	_	-	-	-	_	_	8.6
and system operators	29.4	17.4	-	35.0	9.9	8.2	-	-	-	-	-	12.7
Water and liquid waste treatment plant	20.4	17 4		25.0	0.0	0.0						107
and system operators	29.4 7.2	17.4	-	35.0	9.9	8.2		_	_	_	-	12.7
Miscellaneous plant and system operators	1.2	2.5	_	9.8	_	_	1.5	_	_	_	-	4.6
Chemical plant and system operators				4.8	_	_	-	_	_	_	-	-
Gas plant operators Petroleum pump system operators,	-	-	-	_	_	_	-	-	_	_	_	_
refinery operators, and gaugers	6.3	-	-	-	-	-	-	-	-	-	-	-
Other production occupations Chemical processing machine setters,	49.3	26.6	16.5	14.2	3.3	1.0	.8	0.5	0.3	0.2	0.2	29.3
operators, and tenders Chemical equipment operators and	16.4	8.0	3.9	11.2	1.9	_	6.0	-	-	_	_	5.0
tenders	12.3	5.2	3.8	14.0	-	_	10.0	-	-	-	-	4.1
precipitating, and still machine setters, operators, and tenders	21.4	11.4	3.9	7.8	_	_		_	_	_	_	6.2
Crushing, grinding, polishing, mixing, and				_		_		—	_			-
blending workers	30.2	15.1	6.6	10.8	.8	-	-	-	-	-	-	9.0

				Event o	r exposur	e leading t	o injury or	illness ⁵	
				Contact w	ith objects	;			
Occupation	Occupation code ³	Private industry ⁴	Total	Struck by object	Struck against object	Caught in or com- pressed or crushed	Fall to lower level	Fall on same level	Slips or trips withou fall ⁶
Crushing, grinding, and polishing									
machine setters, operators, and									
tenders	51-9021	309.8	134.8	59.7	19.8	41.0	17.3	27.0	_
Grinding and polishing workers, hand	51-9022	44.4	24.4	12.8		8.8	_	_	_
Mixing and blending machine setters,	01 0022		27.7	12.0		0.0			
operators, and tenders	51-9023	82.4	16.7	5.6	1.9	7.4	2.3	12.0	2
Cutting workers	51-9030	243.9	113.6	53.2	14.5	27.8	_	22.6	4
Cutters and trimmers, hand	51-9031	50.5	22.3	11.3	_	6.6	_	_	l _ '
Cutting and slicing machine setters,	01 0001	00.0	22.0	11.0		0.0			
operators, and tenders	51-9032	306.9	143.4	66.8	18.7	34.7	_	28.8	5
Extruding, forming, pressing, and	0.0001			00.0		0		_0.0	
compacting machine setters, operators,									
and tenders	51-9040	149.7	55.2	16.8	7.3	29.9	3.9	8.2	2
Extruding, forming, pressing, and									
compacting machine setters,									
operators, and tenders	51-9041	149.7	55.2	16.8	7.3	29.9	3.9	8.2	2
Furnace, kiln, oven, drier, and kettle									
operators and tenders	51-9050	152.2	58.2	20.5	23.8	13.4	-	11.6	-
Furnace, kiln, oven, drier, and kettle									
operators and tenders	51-9051	152.2	58.2	20.5	23.8	13.4	-	11.6	-
Inspectors, testers, sorters, samplers, and									
weighers	51-9060	158.4	34.4	16.5	7.8	8.0	9.0	30.4	10
Inspectors, testers, sorters, samplers,									
and weighers	51-9061	158.4	34.4	16.5	7.8	8.0	9.0	30.4	10
Jewelers and precious stone and metal									
workers	51-9070	16.3	7.7	-	-	-	-	-	-
Jewelers and precious stone and metal									
workers	51-9071	16.3	7.7	-	-	-	-	-	-
Medical, dental, and ophthalmic	54 0000	00.4	40.0					0.0	
laboratory technicians	51-9080	38.1	19.6	2.4	-	-	-	2.2	-
Dental laboratory technicians	51-9081	42.8	32.9	-	-	-	-	-	-
Medical appliance technicians	51-9082	54.2	-	_	_	_	-	_	-
Ophthalmic laboratory technicians	51-9083	25.4	-	-	-	-	-	-	-
Packaging and filling machine operators	51 0110	140 5	57.0	10.0	447	22.6	27	20.4	
and tenders	51-9110	148.5	57.8	19.8	11.7	23.6	3.7	20.1	4
Packaging and filling machine	51 0111	140 F	E7 0	10.0	117	22.6	27	20.4	
operators and tenders	51-9111	148.5	57.8	19.8	11.7	23.6	3.7	20.1	4
Painting workers	51-9120	136.2	45.3	20.0	10.5	11.7	7.7	13.8	2
Coating, painting, and spraying									
machine setters, operators, and	E1 0101	76 5	06.0	44.0	E 0	6.0	47	64	_
tenders	51-9121	76.5	26.0	14.0	5.2	6.3	1.7	6.4	1
Painters, transportation equipment	51-9122	54.8	9.9	5.9	-	-	5.9	11.9	-

					Event	or exposure	e leading to ir	njury or illi	ness ⁵			1
	Overe	xertion		Exposure		portation cidents			Assaults a	nd violent ac	ts	
Occupation			Repeti-	to harmful	acc	luents	Fires			All other	assaults	All
	Total	In lifting	tive motion	substance or environ- ment	Total	Highway accident	and explosions	Total	Assaults by person	All other assaults	Assaults by animal	other events ⁶
Crushing, grinding, and polishing machine setters, operators, and			05.4	10.5								
tenders	77.4	37.8	25.1	12.5	-	-	-	-	_	-	_	11.
Grinding and polishing workers, hand Mixing and blending machine setters,	5.4	-	_	_	-	-	_	-	_	_	_	5.
operators, and tenders	23.6	12.3	1.9	13.4	-	-	-	-	-	-	-	9.
Cutting workers	42.5	21.7	7.9	2.7	-	-	-	-	-	-	-	48
Cutters and trimmers, hand Cutting and slicing machine setters,	17.4	9.3	-	_	-	-	-	-	-	-	-	-
operators, and tenders Extruding, forming, pressing, and compacting machine setters, operators,	50.7	25.8	9.3	3.6	-	_	-	-	-	_	-	64
and tenders Extruding, forming, pressing, and compacting machine setters,	43.1	26.0	3.7	9.8	-	_	-	-	-	_	-	23
operators, and tenders Furnace, kiln, oven, drier, and kettle	43.1	26.0	3.7	9.8	-	_	-	-	_	-	-	23
operators and tenders Furnace, kiln, oven, drier, and kettle	35.2	16.8	-	16.8	-	-	-	-	-	_	-	15
operators and tenders	35.2	16.8	-	16.8	-	-	-	-	-	-	-	15
nspectors, testers, sorters, samplers, and weighers	34.3	23.0	10.8	4.3	6.1	3.0	0.8	0.6	0.4	-	-	17
Inspectors, testers, sorters, samplers, and weighers	34.3	23.0	10.8	4.3	6.1	3.0	.8	.6	.4	-	-	17
Jewelers and precious stone and metal workers	-	-	-	-	_	_	-	-	-	_	-	-
Jewelers and precious stone and metal workers	-	-	_	-	_	-	-	-	-	-	-	-
Medical, dental, and ophthalmic laboratory technicians	2.6	_	5.2	3.3	_	_	_	_	_	_	_	2
Dental laboratory technicians	_	_	4.4	_	_	_	-	_	_	_	_	-
Medical appliance technicians	_	-	18.7	_	-	_	_	-	_	_	-	-
Ophthalmic laboratory technicians Packaging and filling machine operators	-	-	-	7.9	-	-	-	-	-	_	-	
and tenders	23.6	12.2	12.6	7.0	2.2	-	-	-	_	-	-	16
operators and tenders	23.6	12.2	12.6	7.0	2.2	_		_	_	_	_	16
Painting workers Coating, painting, and spraying machine setters, operators, and	30.6	18.5	7.2	11.4	1.3	_	-	-	_	_	-	15
tenders Painters, transportation equipment	19.3 14.2	10.8 13.6	5.5 3.5	6.2	-	_	_	-	-			5

			Event or exposure leading to injury or illness ⁵								
				Contact w	ith objects	6					
Occupation	Occupation code ³	Private industry ⁴	Total	Struck by object	Struck against object	Caught in or com- pressed or crushed	Fall to lower level	Fall on same level	Slips or trips withou fall ⁶		
Painting, coating, and decorating											
workers	51-9123	462.2	165.6	62.7	40.9	45.6	30.1	41.1	7.		
Photographic process workers and	01 0120	402.2	100.0	02.7	+0.0	40.0	00.1		· · ·		
processing machine operators	51-9130	60.5	11.0	8.4	_	_	13.2	11.4	_		
Photographic process workers	51-9131	195.0	37.2	28.2	_	_	45.2	33.1	_		
Photographic processing machine	01 0101		0								
operators	51-9132	5.2	_	_	_	_	_	_	_		
Semiconductor processors		12.9	_	_	_	_	_	_	_		
Semiconductor processors		12.9	_	_	_	_	_	_	_		
Miscellaneous production workers		457.9	188.6	79.0	31.9	62.4	13.2	44.2	9.		
Cementing and gluing machine	01 0100	107.0	100.0	10.0	01.0	02.1	10.2				
operators and tenders	51-9191	126.1	51.4	15.4	8.3	25.4	_	12.9	_		
Cleaning, washing, and metal pickling	01 0101	120.1	0		0.0	20.1		12.0			
equipment operators and tenders	51-9192	111.3	37.2	_	_	11.4	_	15.3	19.		
Etchers and engravers		106.9	80.6	52.3	_	-	_	_			
Molders, shapers, and casters, except	01 0101	100.0	00.0	02.0							
metal and plastic	51-9195	126.4	53.0	29.2	6.1	15.3	_	7.1	_		
Paper goods machine setters,	01 0100		00.0								
operators, and tenders	51-9196	46.6	20.2	4.8	5.2	10.0	1.7	2.8	_		
Tire builders		205.4	59.7	32.2	9.0	16.4		7.8	_		
Helpers-production workers		69.8	35.1	15.7	5.1	9.3	2.6	2.8			
ransportation and material moving	01 0100	00.0	00.1	10.1	0.1	0.0	2.0	2.0			
occupations	53-0000	285.0	74.0	37.4	17.5	14.1	20.6	32.4	9.		
Supervisors, transportation and material	00 0000	200.0	7 1.0	0111			20.0	02.1			
moving workers	53-1000	107.6	28.4	12.1	9.7	3.5	8.7	15.8	1.		
Aircraft cargo handling supervisors		94.7		_			_	_			
Aircraft cargo handling supervisors		94.7	_	_	_	_	_	_	_		
First-line supervisors/managers of	00 1011	0									
helpers, laborers, and material movers,											
hand	53-1020	164.1	43.7	14.4	18.5	5.0	11.7	25.7	2.		
First-line supervisors/managers of	00 1020	101.1	10.1		10.0	0.0		20.1			
helpers, laborers, and material											
movers, hand	53-1021	164.1	43.7	14.4	18.5	5.0	11.7	25.7	2		
First-line supervisors/managers of											
transportation and material-moving											
machine and vehicle operators	53-1030	55.1	14.4	10.2	1.5	2.2	6.1	6.6	1.		
First-line supervisors/managers of	20.000	00.1						0.0			
transportation and material-moving]										
machine and vehicle operators	53-1031	55.1	14.4	10.2	1.5	2.2	6.1	6.6	1.		
Air transportation workers		98.1	14.4	4.4	5.9	4.1	9.1	5.1	4		
Aircraft pilots and flight engineers		94.5	13.6	3.1	5.9	4.4	9.7	5.3	4.		
Airline pilots, copilots, and flight	00 2010	51.0	10.0	0.1	0.0		0.7	0.0	1		
engineers	53-2011	98.8	13.3	_	6.3	6.0	10.3	3.9	5.		

					Event	or exposure	e leading to in	ijury or illr	ness ⁵			1
	Overe	xertion		Exposure		portation idents			Assaults a	nd violent ac	ts	-
Occupation		In lifting	Repeti- tive motion	to harmful substance or environ- ment	act		Fires	Total	Assaults by person	All other assaults		All
·	Total				Total	Highway accident	and explosions			All other assaults	Assaults by animal	other events ^{6,7}
Painting, coating, and decorating												
workers	93.7	51.1	18.9	44.9	-	-	-	-	-	-	-	53.7
Photographic process workers and												
processing machine operators	9.2	7.0	-	5.6	-	-	-	-	-	-	-	5.7
Photographic process workers Photographic processing machine	28.8	21.2	_	17.6	-	-	-	-	_	-	-	18.6
operators	-	-	-	-	-	-	-	-	-	-	-	-
Semiconductor processors	-	-	-	-	-	-	-	-	-	-	-	-
Semiconductor processors	-	-	-	_	-		-	-	-	-	-	
Miscellaneous production workers Cementing and gluing machine	86.3	44.6	30.5	26.3	4.8	1.4	1.0	0.8	0.5	0.3	0.3	52.4
operators and tenders Cleaning, washing, and metal pickling	19.4	8.1	17.0	12.4	-	-	-	-	_	-	-	8.4
equipment operators and tenders	22.7	10.5	-	-	-	-	-	-	-	-	-	-
Etchers and engravers	-	-	-	-	-	-	-	-	-	-	-	-
Molders, shapers, and casters, except metal and plastic	46.7	29.9	9.7	-	-	-	-	-	_	-	-	5.5
Paper goods machine setters,												
operators, and tenders	10.1	5.6	3.0	2.2	-	-	-	-	-	-	-	5.2
Tire builders	70.0	40.7	18.0	9.5	-	-	-	-	-	-	_	32.3
Helpersproduction workers	13.3	5.0	1.6	8.4	.8	-	-	-	-	-	-	4.1
Transportation and material moving occupations	74.0	38.0	6.3	6.5	27.0	17.0	.2	2.1	1.2	.9	.9	32.6
Supervisors, transportation and material		40.5										40.0
moving workers	28.5	19.5	2.2	2.4	6.5	2.7	-	1.2	1.1	-	-	12.0
Aircraft cargo handling supervisors	35.9	-	-	-	-	-	-	-	-	-	-	-
Aircraft cargo handling supervisors First-line supervisors/managers of	35.9	-	_	_	_	_	_	-	_	_	_	_
helpers, laborers, and material movers,	50.0	35.6	2.9	2.0	7.5	2.8	_	.9				17.7
hand First-line supervisors/managers of helpers, laborers, and material	50.0	55.0	2.9	2.0	7.5	2.0	_	.9	—	_	_	17.7
movers, hand First-line supervisors/managers of	50.0	35.6	2.9	2.0	7.5	2.8	-	.9	-	-	-	17.7
transportation and material-moving												
machine and vehicle operators First-line supervisors/managers of	8.3	4.9	1.6	2.6	5.3	2.2	-	1.5	1.5	-	_	7.0
transportation and material-moving												
machine and vehicle operators	8.3	4.9	1.6	2.6	5.3	2.2	-	1.5	1.5	-	-	7.0
Air transportation workers	33.7	18.3	-	4.0	16.5	8.0		-	_	_	_	9.9
Aircraft pilots and flight engineers	29.6	19.6	-	4.3	16.2	8.6	-	-	-	-	-	10.3
Airline pilots, copilots, and flight engineers	30.7	19.9	_	2.9	20.3	11.3	_	_	_	_	_	11.1

				Event o	or exposur	e leading t	o injury or	illness ⁵	
				Contact w	ith objects	5			
Occupation	Occupation code ³	Private industry ⁴	Total	Struck by object	Struck against object	Caught in or com- pressed or crushed	Fall to lower level	Fall on same level	Slips or trips withou fall ⁶
Commercial pilots	53-2012	83.0	14.4	9.1	_	_	7.8	8.9	-
operations specialists	53-2020	148.1	26.8	_	_	_	_	_	_
Airfield operations specialists	53-2022	257.3	47.1	_	l _	_	_	_	_
Motor vehicle operators	53-3000	327.1	58.2	27.6	16.4	9.7	29.5	44.2	13
Ambulance drivers and attendants, except	00 0000	027.1	00.2	27.0	10.4	0.7	20.0		
emergency medical technicians	53-3010	129.5	18.6	_	_	14.5	31.5	19.1	_
Ambulance drivers and attendants,	00 00 10	120.0	10.0			14.5	51.5	10.1	
except emergency medical									
technicians	53-3011	129.5	18.6			14.5	31.5	19.1	
Bus drivers	53-3020	129.5	18.6	7.2	5.5	2.0	12.5	35.0	18
Bus drivers, transit and intercity	53-3020	456.0	48.8	18.3	12.4	6.6	21.8	67.1	58
Bus drivers, school	53-3021	97.4	7.0	2.9	2.9	0.0	21.0 8.9	22.6	30
Driver/sales workers and truck drivers	53-3030	341.3	63.1	30.1	17.7	10.5	31.7	45.9	13
Driver/sales workers	53-3030	243.2	31.7	16.7	8.9	4.2	21.4	40.7	
			-					-	
Truck drivers, heavy and tractor-trailer	53-3032	348.5	69.5	32.7 30.8	18.6	12.4 9.9	36.2 27.8	45.3	14
Truck drivers, light or delivery services	53-3033	369.5	64.5		20.0			49.3	15
Taxi drivers and chauffeurs	53-3040	269.3	28.0	13.1	8.7	5.2	9.7	30.2	8
Taxi drivers and chauffeurs	53-3041	269.3	28.0	13.1	8.7	5.2	9.7	30.2	8
Rail transportation workers	53-4000	176.3	24.5	10.2	8.8	-	31.9	4.5	2
Locomotive engineers and operators	53-4010	111.6	12.8	4.8	5.1	-	17.9	_	-
Locomotive engineers	53-4011	100.0	10.9	4.1	4.2	-	16.1	_	-
Rail yard engineers, dinkey operators,	50 4040	007.0							
and hostlers	53-4013	207.8	-	-	-	-	30.5	_	-
Railroad brake, signal, and switch									
operators	53-4020	136.5	18.9	6.6	7.4	-	23.7	_	-
Railroad brake, signal, and switch	50 4004	100 5	40.0						
operators	53-4021	136.5	18.9	6.6	7.4	-	23.7	_	-
Railroad conductors and yardmasters	53-4030	290.8	41.8	17.3	15.3	-	56.3	5.9	-
Railroad conductors and yardmasters	53-4031	290.8	41.8	17.3	15.3	-	56.3	5.9	-
Water transportation workers	53-5000	132.1	25.1	11.3	5.5	7.2	5.9	13.5	2
Sailors and marine oilers	53-5010	239.0	51.1	23.0	10.9	15.1	9.7	22.7	4
Sailors and marine oilers	53-5011	239.0	51.1	23.0	10.9	15.1	9.7	22.7	4
Ship and boat captains and operators	53-5020	65.8	8.8	4.3	-	-	-	9.9	-
Captains, mates, and pilots of water	50 5004	74.4		4-				40.4	
vessels	53-5021	71.1	9.6	4.7	-	-	-	10.4	-
Ship engineers	53-5030	43.5	-	-	-	-	-	-	-
Ship engineers	53-5031	43.5	-	-	-	-		-	
Other transportation workers	53-6000	242.7	50.2	23.8	12.1	11.7	17.7	36.5	6
Parking lot attendants		113.8	23.0	16.2	3.6	-	3.6	31.2	7
Parking lot attendants	53-6021	113.8	23.0	16.2	3.6	-	3.6	31.2	7
Service station attendants	53-6030	131.5	16.8	5.1	8.0	-	8.6	33.5	3
Service station attendants	53-6031	131.5	16.8	5.1	8.0	-	8.6	33.5	3

					Event	or exposure	e leading to ir	ijury or illr	ness ⁵			
	Overe	xertion		Exposure		portation			Assaults a	nd violent ac	ts	
Occupation			Repeti-	to harmful substance or environ- ment	acc	idents	Fires		Assaults by person	All other assaults		All
	Total In I	In lifting	tive motion		Total	Highway accident	and explosions	Total		All other assaults	Assaults by animal	other events ^{6,7}
Commercial pilots Air traffic controllers and airfield	26.8	18.9	_	8.1	_	_	-	-	-	-	-	8.2
operations specialists	_	_	-	_	_	_	_	_	_	_	_	_
Airfield operations specialists	_	_	_	_	_	_		_	_	_	_	_
Motor vehicle operators	82.7	35.9	4.5	5.2	45.1	35.7	0.3	3.1	1.6	1.5	1.5	40.7
Ambulance drivers and attendants, except	02	0010		0.2			0.0	0				
emergency medical technicians Ambulance drivers and attendants,	25.9	-	_	-	-	_	-	-	-	_	-	14.4
except emergency medical												
technicians	25.9	-	-	-		_	-	-	-	-	-	14.4
Bus drivers	25.0	7.9	2.6	4.2	54.7	50.2	-	6.8	6.4	-	-	19.2
Bus drivers, transit and intercity	65.8	21.7	7.8	12.6	113.1	105.6	-	21.8	20.2	-	-	38.5
Bus drivers, school	9.3	2.6	-	-	32.2	28.9	-	1.1	1.1	-	-	11.8
Driver/sales workers and truck drivers	88.7	38.5	4.8	5.5	41.2	31.5	.3	2.7	1.1	1.6	1.6	43.6
Driver/sales workers	68.0	30.7	4.3	2.5	30.6	22.6	-	3.6	3.5	-	-	32.7
Truck drivers, heavy and tractor-trailer	85.2	32.2	3.7	4.1	44.3	33.9	.5	1.9	.7	1.2	1.2	43.6
Truck drivers, light or delivery services	103.8	53.2	6.9	9.3	40.0	31.0	-	3.7	.7	3.1	3.1	48.3
Taxi drivers and chauffeurs	61.1	33.2	1.4	2.0	100.0	92.0	-	6.6	5.8	-	-	22.0
Taxi drivers and chauffeurs	61.1	33.2	1.4	2.0	100.0	92.0	-	6.6	5.8	_	-	22.0
Rail transportation workers	23.6		2.0	9.3	31.4	23.3	-	1.9	1.8	_	-	44.9
Locomotive engineers and operators	10.3	-	-	7.7	29.9	24.7	_	-	_	_	-	25.9
Locomotive engineers	8.3	-	-	7.1	29.1	24.4	_	-	_	_	-	22.3
Rail yard engineers, dinkey operators, and hostlers	28.6	_	_	-	40.0	30.5	_	_	_	_	_	59.0
Railroad brake, signal, and switch												
operators Railroad brake, signal, and switch	26.2	-	-	6.9	15.1	8.4	-	-	_	_	-	37.2
operators	26.2	-	-	6.9	15.1	8.4	-	-	-	-	-	37.2
Railroad conductors and yardmasters	38.9	-	-	12.5	45.6	32.3	-	4.4	4.2	_	-	78.6
Railroad conductors and yardmasters	38.9	-	-	12.5	45.6	32.3	-	4.4	4.2	-		78.6
Water transportation workers	22.7	7.9	-	21.5	11.4	_		4.5	_	4.5	4.5	23.7
Sailors and marine oilers	42.6	11.5	-	38.3	20.0	_		11.1	_	11.1	11.1	36.9
Sailors and marine oilers	42.6	11.5	-	38.3	20.0	-		11.1	_	11.1	11.1	36.9
Ship and boat captains and operators Captains, mates, and pilots of water	12.2	6.9	-	-	5.0	-	-	-	-	_	-	20.5
vessels	13.4	7.5	-	-	5.0		_	-	_	-		22.4
Ship engineers	-	-	-	22.1	-	—	_	-	_	-		-
Ship engineers	-	-	-	22.1	-		_	-	_	-		-
Other transportation workers	72.6	46.8	5.2	5.3	22.2	2.7	-	6.2	6.1	_		20.2
Parking lot attendants	5.5	2.6	1.9	4.6	18.6	4.0		2.5	2.3	_	-	16.2
Parking lot attendants	5.5	2.6	1.9	4.6	18.6	4.0		2.5	2.3	_	-	16.2
Service station attendants	33.8	31.5	5.5	_	9.7	_	_	14.6	14.6	_	_	3.2
Service station attendants	33.8	31.5	5.5	_	9.7	_	_	14.6	14.6	_		3.2

			Event or exposure leading to injury or illness ⁵									
				Contact w	ith objects	5						
Occupation	Occupation code ³	Private industry ⁴	Total	Struck by object	Struck against object	Caught in or com- pressed or crushed	Fall to lower level	Fall on same level	Slips or trips without fall ⁶			
Transportation inspectors	53-6050	104.0	_					23.9				
Transportation inspectors	53-6051	104.0	_	_	_	_	_	23.9	-			
Material moving workers	53-7000	279.9	_ 97.9		20.5	 19.8	_ 14.5	23.9 25.6	6.9			
Conveyor operators and tenders	53-7010	70.6	46.4	18.2	7.0	20.4	-	23.0				
Conveyor operators and tenders	53-7010	70.6	46.4	18.2	7.0	20.4	_	3.9	_			
Crane and tower operators	53-7020	180.0	68.6	39.1	6.9	13.4	14.8	30.5	7.0			
Crane and tower operators	53-7020	180.0	68.6	39.1	6.9	13.4	14.8	30.5	7.0			
Dredge, excavating, and loading machine	557021	100.0	00.0	00.1	0.5	10.4	14.0	50.5	1.0			
operators	53-7030	63.2	26.1	13.5	3.2	4.3	4.4	6.3	_			
Excavating and loading machine and	00 / 000	00.2	20.1	10.0	0.2	4.0		0.0				
dragline operators	53-7032	66.8	27.9	14.4	3.4	4.6	4.7	6.7	_			
Hoist and winch operators	53-7040	1.294.4	751.6	298.0		299.0	71.3	76.3	_			
Hoist and winch operators	53-7040	1,294.4	751.6	298.0	_	299.0	71.3	76.3	_			
Industrial truck and tractor operators	53-7050	110.9	34.4	12.4	8.4	7.9	5.9	9.1	3.			
Industrial truck and tractor operators	53-7051	110.9	34.4	12.4	8.4	7.9	5.9	9.1	3.			
Laborers and material movers, hand	53-7060	320.6	113.1	61.7	23.3	22.4	16.7	29.4	7.			
Cleaners of vehicles and equipment	53-7061	200.3	60.4	21.9	24.7	7.7	14.7	30.0	4.			
Laborers and freight, stock, and	00 / 00 /	200.0	00.4	21.0	24.7	1.1	14.7	00.0	- т.			
material movers, hand	53-7062	434.3	154.7	87.3	29.0	30.9	22.8	36.8	10.			
Machine feeders and offbearers	53-7063	130.2	55.7	18.2	19.0	15.9		17.2				
Packers and packagers, hand	53-7064	88.8	29.6	14.7	7.8	5.9	3.5	10.8	1.			
Pumping station operators	53-7070	86.0	18.2	12.6			9.8	11.6	_''			
Gas compressor and gas pumping	50 1010	00.0	10.2	12.0			0.0	11.0				
station operators	53-7071	43.7	_	_	_	_	_	_	_			
Pump operators, except wellhead	001011	10.7										
pumpers	53-7072	27.6	_	_	_	_	_	_	_			
Wellhead pumpers	53-7072	133.9	27.3	23.0		_	17.6	20.7				

					Event	or exposure	e leading to ir	njury or illi	ness ⁵			
	Overexertion			Exposure		portation idents			Assaults a	nd violent ac	ts	-
Occupation			Repeti-	to harmful	400		Fires			All other	assaults	All
		tive motion	substance or environ- ment	Total	Highway accident	and explosions	Total	Assaults by person	All other assaults	Assaults by animal	other events ^{6,7}	
Transportation inspectors Transportation inspectors	-				29.8 29.8	_						18.3 18.3
Material moving workers	74.7	43.6	8.8	7.7	14.0	3.3	0.2	1.1	0.6	0.6	0.5	28.6
Conveyor operators and tenders	14.7	5.5	-	-	-	_		-	_	_	_	-
Conveyor operators and tenders	14.7	5.5	-	-	-	-	-	-	_	_	_	-
Crane and tower operators	13.8	5.7	-	-	-	_		-	_	_	_	41.0
Crane and tower operators Dredge, excavating, and loading machine	13.8	5.7	-	-	-	-	-	-	-	-	-	41.0
operators Excavating and loading machine and	5.8	2.3	-	2.3	4.9	-	-	-	-	-	-	12.1
dragline operators	6.1	2.4	-	2.5	5.3	_	-	-	_	_	-	12.2
Hoist and winch operators	194.1	_	-	-	-	_	-	-	_	_	_	107.0
Hoist and winch operators	194.1	_	-	-	-	_	-	-	_	_	_	107.0
Industrial truck and tractor operators	27.2	15.3	3.3	2.1	14.4	1.4	-	.5	_	_	-	10.3
Industrial truck and tractor operators	27.2	15.3	3.3	2.1	14.4	1.4	-	.5	_	_	-	10.3
Laborers and material movers, hand	87.3	52.0	10.6	9.2	13.8	3.6	.1	1.3	.7	.7	.6	31.5
Cleaners of vehicles and equipment Laborers and freight, stock, and	20.9	8.8	5.7	18.6	23.8	18.2	-	1.5	-	1.4	1.4	20.0
material movers, hand	124.4	74.6	12.6	10.8	17.2	3.0	.2	1.8	1.0	.7	.7	42.3
Machine feeders and offbearers	30.4	16.2	7.7	4.8	-	_	-	-	_	_	-	10.7
Packers and packagers, hand	21.4	13.2	7.4	1.6	2.7	-	-	.3	_	.3	.3	10.0
Pumping station operators Gas compressor and gas pumping	15.6	7.5	-	-	7.7	-	-	-	_	_	_	11.4
station operators Pump operators, except wellhead	-	-	-	-	-	-	-	-	-	-	-	-
pumpers	_	_	_	_	_	_		_	_	_	_	_
Wellhead pumpers	22.5	9.8	-	-	9.9	-	_	-	-	-	-	19.1

TABLE R100. Incidence rates ¹ for nonfatal occupational injuries and illnesses involving days away from work ² per 10,000 full-time
workers by occupation and selected events or exposures leading to injury or illness, 2007 — Continued

		-	Event or exposure leading to injury or illness ⁵									
Occupation				Contact w	ith objects							
	Occupation code ³	Private industry ⁴	Total	Struck by object	Struck against object	Caught in or com- pressed or crushed	Fall to lower level	Fall on same level	Slips or trips without fall ⁶			
Refuse and recyclable material collectors Refuse and recyclable material	53-7080	189.0	55.4	20.7	23.5	7.6	8.1	27.0	2.8			
collectors	53-7081	189.0	55.4	20.7	23.5	7.6	8.1	27.0	2.8			
Shuttle car operators	53-7110	1,288.9	714.0	375.9	251.4	86.7	-	-	-			
Shuttle car operators	53-7111	1,288.9	714.0	375.9	251.4	86.7	-	-	-			
Tank car, truck, and ship loaders	53-7120	50.8	13.9	-	-	-	-	-	-			
Tank car, truck, and ship loaders	53-7121	50.8	13.9	_	_	-	_	_	-			

	Event or exposure leading to injury or illness ⁵													
Occupation	Overexertion			Exposure	Transportation									
			Repeti-	to harmful	accidents		Fires and explosions	Total		All other assaults				
	In lifting	tive	substance or environ- ment	Total	Highway accident	Assaults by person			All other assaults	Assaults by animal	other events ^{6,7}			
Refuse and recyclable material collectors Refuse and recyclable material	45.3	6.8	_	5.1	25.5	9.1	-	_	-	-	-	18.8		
collectors	45.3	6.8	-	5.1	25.5	9.1	-	-	-	-	-	18.8		
Shuttle car operators	216.7	96.3	-	-	199.9	-	-	-	-	-	-	-		
Shuttle car operators	216.7	96.3	-	-	199.9	-	-	-	-	-	-	-		
Tank car, truck, and ship loaders Tank car, truck, and ship loaders	11.0 11.0	-		-	-	-		_		-				

¹ Incidence rates represent the number of injuries and illnesses per 10,000 full-time workers and were calculated as: (N/EH) x 20,000,000 where

 N
 = number of injuries and illnesses

 EH
 = total hours worked by all employees during the calendar year

 20,000,000
 = base for 10,000 equivalent full-time workers (working 40 hours per week, 50 weeks per year)

² Days-away-from-work cases include those that resulted in days away from work, some of which also included job transfer or restriction.

³ Standard Occupational Classification Manual, 2000, Office of Management and Budget

⁴ Excludes farms with fewer than 11 employees.

⁵ Data shown in columns correspond to the following Event codes: Contact with objects, Total = 00-09; Struck by object = 020-029; Struck against object = 010-019; Caught in or compressed or crushed = 030-049; Fall to lower level = 110-119; Fall on same level = 130-139; Slips or trips without fall = 215; Overexertion, Total = 220-229; In lifting = 221; Repetitive motion = 230-239; Exposure to harmful substance or environment = 30-39; Transportation accidents = 40-49; Highway accident = 41; Fires and explosions = 50-52; Assaults and violent acts, Total = 60-63; Assaults by person = 61;

All other assaults = 60, 62, and 63; Assaults by animal = 63; All other events = all remaining codes, including 9999 (Nonclassifiable). These codes are based on the 1992 Occupational Injury and Illness Classification System developed by the Bureau of Labor Statistics.

⁶ Selected estimates for this category were affected by the March 2009 revision, see note below.

- ⁷ Includes nonclassifiable responses.
- ⁸ Data too small to be displayed.

NOTE: Dash indicates data do not meet publication guidelines. Because of rounding and data exclusion of nonclassifiable responses, data may not sum to the totals.

This table was reissued in March 2009 to revise selected estimates within the Mining (NAICS 21) and Railroad Transportation (NAICS 482) industries, and in their respective higher level industry sectors. Characteristic categories affected by the revisions, that appear in this table, are footnoted.

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