

Department of Labor and Human Resources Bureau of Labor Statistics



Puerto Rico

Census of Fatal Occupational Injuries

The Census of Fatal Occupational Injuries (CFOI) is conducted by the Division of Occupational Safety and Health Statistics of the Puerto Rico Department of Labor and Human Resources in cooperation with the U.S. Department of Labor, Bureau of Labor Statistics (BLS).

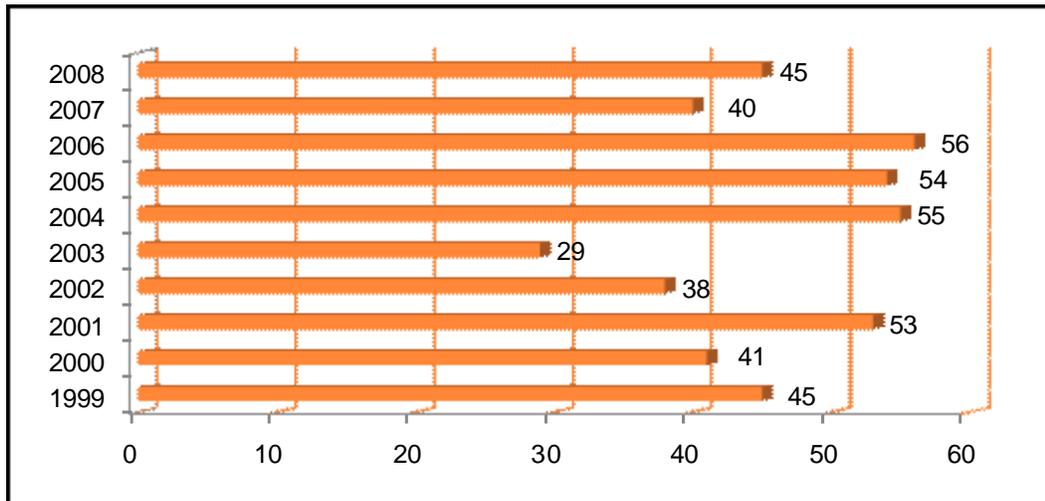
The Census of Fatal Occupational injuries, provides the most complete count of fatal work injuries available. The program uses different data sources to identify, verify and profile traumatic worker injuries (fatal occupational illnesses not associated with traumatic events are excluded). Information about each workplace fatality (occupation and other worker characteristics, equipment being used, and circumstances of the event) is obtained by cross-referencing source documents, such as death certificates, workers' compensation records, newspaper articles, follow back questionnaires, toxicology reports and other administrative records. This method assures count are as complete and accurate as possible.



2008

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Historical Fatality Counts, 1999-2008



The Puerto Rico CFOI program, registered 45 work-related fatalities during 2008, five more than incidents recorded in 2007. The chart presents a historical count of work related fatalities from 1999 through 2008. The highest number of fatal occupational injuries during this period was observed in 2006 with 56 deaths. The lowest number of fatal occupational injuries was 2003 with 29 cases.

Overviews

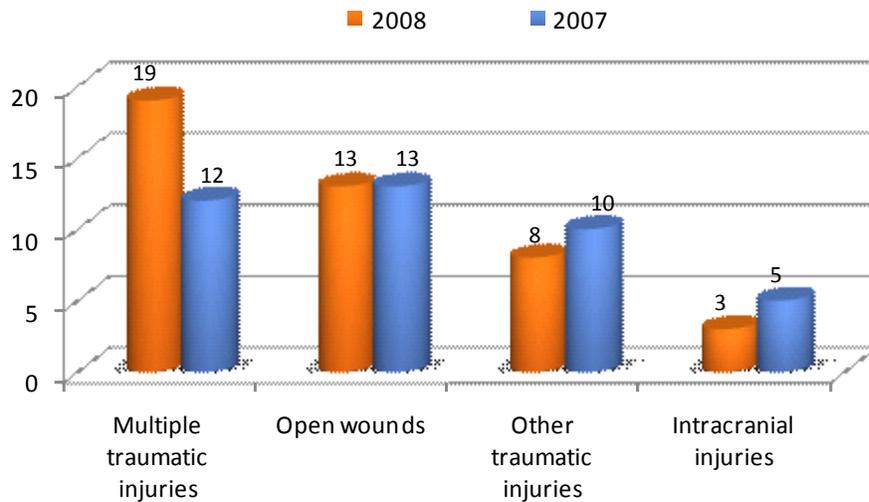
- ⇒ Construction reported the highest number of fatalities with 14 cases or 31.0 percent. Trade, transportation and utilities accounted for 9 cases, an increase of 2 cases, compared to 2007, when reported 7 cases. Professional and business services registered 3 cases, during 2008, three less than last year when reported 6 cases.
- ⇒ The occupational activity of constructing, repairing and cleaning, continues to record the highest number of occupational fatalities with 16 cases or 35.5 percent.
- ⇒ Occupational deaths in Industrial places and premises recorded 37.7 percent of all deaths in 2008.
- ⇒ The workers in the age group 35 to 44 and 45 to 54 years registered the highest number of occupational fatalities in 2008 with 12 deaths or 26.6 percent each.
- ⇒ Construction and extraction occupations continued with the highest number of deaths with 12 cases, one less than recorded in 2007.
- ⇒ Eighty nine percent of all occupational deaths in 2008 were male.

Note: Totals for major categories may include subcategories not shown separately.



Fatal Occupational Injuries by Nature

Multiple traumatic injuries registered the highest number of fatalities with 19 cases (42.2 percent) of all deaths in 2008. Followed by open wounds with 13 cases (28.8 percent), of these, 11 were caused by gunshot wounds. See table 3.



Fatal Occupational Injuries by Part of Body

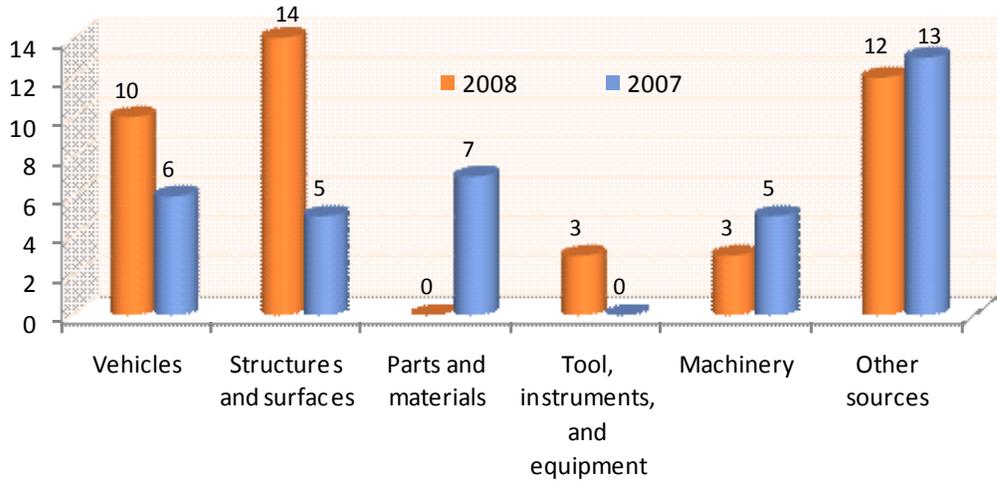
The category of multiple body parts continued registering the greatest number of fatalities during 2008, reported 24 cases or 53.3 percent.

Part of body	2008		2007	
	Cases	Percent	Cases	Percent
Total	45	100.0	40	100.0
Head	6	13.3	7	17.5
Trunk	6	13.3	-	-
Neck	3	0.06	-	-
Body system	6	13.3	6	15.0
Multiples body parts	24	53.3	24	60.0

Note: Totals for major categories may include subcategories not shown separately.

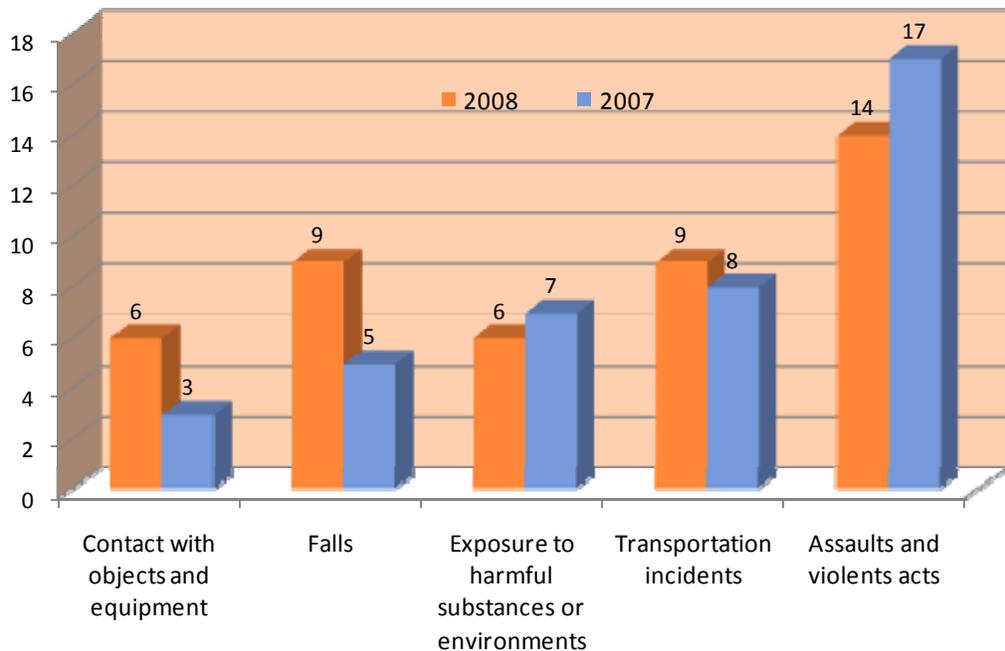
Fatal Occupational Injuries by Source

The category of structures and surfaces registered the highest number of fatalities with 14 cases or 31.1 percent. Followed by other sources, with 12 cases or 24.4 percent, where the bullets were the object that directly caused the death.



Fatal Occupational Injuries by Event

Assaults and violent acts continued to be the main event that caused the largest number of work-related deaths, with a total of 14 cases. This represents 31 percent of all occupational deaths (45), a decrease of 3 cases, when compared with 2007.



Note: Totals for major categories may include subcategories not shown separately.

Fatal Occupational Injuries by Worker Activity and Location

Worker Activity	Number of Cases	Percent	Location	Number of Cases	Percent
Total	45	100.0	Total	45	100.0
Vehicular and transportation operation	12	26.6	Private residence	3	6.6
Constructing, repairing, cleaning	16	35.5	Industrial places and premises	17	37.7
Protective service activities	3	6.6	Street and highway	8	17.7
Tending retail establishment	4	8.8	Public building	10	22.2

The worker activity that continued with the highest number of fatalities during 2008 was constructing, repairing, cleaning with 16 cases or 35.5 percent, a decrease of 3 cases when compared to the 19 cases reported last year. Followed by vehicular and transportation operation with 12 cases, seven more than 5 cases reported last year. See table 3.

Industrial places and premises was the location where most accidents occurred during 2008 with 17 cases. It was followed by public building with 10 cases.



Tables

Table 1: Fatal Occupational Injuries to Private Sector Wage and Salary Workers, Government Workers, and Self-Employed Workers by Industry, Puerto Rico, 2008

Industry ¹	Fatalities		Private sector wage and salary workers ²		Government workers ³		Self-employed workers ⁴	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	45	100.0	33	100.0	7	100.0	5	100.0
Goods Producing	17	37.8	15	45.5	--	--	--	--
Construction	15	33.3	13	39.4	--	--	--	--
Construction	15	33.3	13	39.4	--	--	--	--
Construction of buildings.....	8	17.8	7	21.2	--	--	--	--
Residential Building Construction.....	6	13.3	5	15.2	--	--	--	--
Residential Building Construction New Single-family Housing Construction (except operative builders).....	6	13.3	5	15.2	--	--	--	--
Heavy and Civil Engineering Construction.....	3	6.7	--	--	--	--	--	--
Highway, Street, and Bridge Construction.....	3	6.7	--	--	--	--	--	--
Highway, Street, and Bridge Construction.....	3	6.7	--	--	--	--	--	--
Specialty Trade Contractors.....	4	8.9	4	12.1	--	--	--	--
Service providing	28	62.2	18	54.5	6	85.7	4	80.0
Trade, Transportation, and Utilities	12	26.7	7	21.2	3	42.9	--	--
Retail Trade	4	8.9	--	--	--	--	--	--
Transportation and Warehousing	3	6.7	3	9.1	--	--	--	--
Utilities	3	6.7	--	--	3	42.9	--	--
Utilities.....	3	6.7	--	--	3	42.9	--	--
Professional and Business Services	3	6.7	3	9.1	--	--	--	--
Administrative and Support and Waste Management and Remediation	3	6.7	3	9.1	--	--	--	--
Administrative and Support Services.....	3	6.7	3	9.1	--	--	--	--
Leisure and Hospitality	5	11.1	4	12.1	--	--	--	--
Accommodation and Food Services	4	8.9	3	9.1	--	--	--	--
Food Services and Drinking Places.....	4	8.9	3	9.1	--	--	--	--
Limited-Service Eating Places.....	3	6.7	--	--	--	--	--	--
Limited-Service Eating Places.....	3	6.7	--	--	--	--	--	--
Limited-Service Restaurants.....	3	6.7	--	--	--	--	--	--

¹ Classified according to the North American Industry Classification System.

² May include volunteers and workers receiving other types of compensation.

³ Includes fatalities to workers employed by governmental organizations regardless of industry.

⁴ Includes self-employed workers, owners of unincorporated businesses and farms, paid and unpaid family workers, and may include some owners incorporated of businesses or members of partnerships.

⁵ Includes fatalities at all establishments categorized as Mining (Sector 21) in the North American Industry Classification System, including establishments not governed by the Mine Safety and Health injuries Administration (MSHA) rules and reporting, such as those in Oil and Gas Extraction.

NOTE: Totals for major categories may include subcategories not shown separately. Dashes indicate no data reported or data that do not meet publication criteria. Data for 2008 are preliminary.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, in cooperation with State and Federal agencies, Census of Fatal Occupational .

Table 2: Fatal Occupational Injuries Resulting from Transportation Incidents and Homicides by Occupation, Puerto Rico, 2008

Occupation ¹	Total fatalities (number)	Transportation incidents					Homicides		
		Total	Highway incidents	Non-highway incidents	Pedestrian struck by vehicle	All other transportation incidents	Total	Homicides by shooting	All other homicides
Total.....	45	9	4	--	4	--	12	10	--
Protective service occupations.....	4	--	--	--	--	--	--	--	--
Food preparation and serving related occupations.....	3	--	--	--	--	--	3	--	--
Sales and related occupations.....	3	--	--	--	--	--	3	3	--
Supervisors, sales workers.....	3	--	--	--	--	--	3	3	--
First-line supervisors/managers, sales workers.....	3	--	--	--	--	--	3	3	--
Office and administrative support occupations.....	3	--	--	--	--	--	--	--	--
Construction and extraction occupations.....	12	--	--	--	--	--	--	--	--
Construction trades workers.....	12	--	--	--	--	--	--	--	--
Carpenters.....	4	--	--	--	--	--	--	--	--
Carpenters.....	4	--	--	--	--	--	--	--	--
Construction laborers.....	7	--	--	--	--	--	--	--	--
Construction laborers.....	7	--	--	--	--	--	--	--	--
Production occupations.....	4	--	--	--	--	--	--	--	--
Transportation and material moving occupations.....	7	4	3	--	--	--	--	--	--
Motor vehicle operators.....	6	4	3	--	--	--	--	--	--
Driver/sales workers and truck drivers.....	6	4	3	--	--	--	--	--	--
Truck drivers, heavy and tractor-trailer.....	5	3	--	--	--	--	--	--	--

¹Based on the Standard Occupational Classification System.

NOTE: Totals for major categories may include subcategories not shown separately. Dashes indicate no data reported or data that do not meet publication criteria. Data for 2008 are preliminary.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, in cooperation with State and Federal agencies, Census of Fatal Occupational Injuries.

Table 3: Fatal Occupational Injuries by Selected Industry, Puerto Rico,

Characteristic	All Industries ¹ 2008	All Industries ¹ 2007
Total:	45	40
Employee status:		
Wage and salary workers	40	33
Self-employed	5	7
Gender:		
Men	40	40
Women	5	--
Age:		
Under 16 years	--	--
16 to 17 years	--	--
18 to 19 years	--	--
20 to 24 years	3	3
25 to 34 years	9	10
35 to 44 years	12	8
45 to 54 years	12	12
55 to 64 years	6	6
65 years and over	--	--
Race or ethnic origin²:		
White, non-Hispanic	--	--
Black, non-Hispanic	--	--
Hispanic or Latino	44	40
American Indian, Aleut, Eskimo	--	--
Asian	--	--
Pacific Islander	--	--
Multiple races	--	--
Other or not reported	--	--
Event or exposure³:		
Contact with objects and equipment	6	3
Struck by object or equipment	3	3
Struck by falling object or equipment	--	--
Caught in or compressed by equipment or objects	--	--
Caught in running equipment or machinery	--	--
Falls	9	5
Fall to lower level	8	5
Fall from ladder	3	--
Fall from roof	--	--
Fall from scaffold, staging	--	--
Exposure to harmful substances or environments	6	7
Contact with electric current	6	5
Exposure to caustic, noxious, or allergenic substances	--	--
Oxygen deficiency (including drowning)	--	--
Transportation incidents	9	8
Highway incidents	4	--
Collision between vehicles, mobile equipment	--	--
Non-collision incidents	--	--

Table 3: Fatal Occupational Injuries by Selected Industry, Puerto Rico,

Characteristic	All Industries ¹ 2008	All Industries ¹ 2007
Non-highway incident, except rail, air, water	--	3
Overturned	--	--
Pedestrian struck by vehicle, mobile equipment	4	4
Aircraft incidents	--	--
Fires and explosions	--	--
Assaults and violent acts	14	17
Homicides	12	15
Self inflicted injuries	--	--
Other or not reported	--	--
Nature³:		
Intracranial injuries	3	5
Other traumatic injuries	8	10
Internal injuries	--	--
Asphyxiations, suffocations	--	--
Drownings	--	--
Electrocutions	6	5
Poisonings, toxic effects	--	--
Open wounds	13	13
Gunshot wounds	11	13
Burns (heat, chemical, etc.)	--	--
Multiple traumatic injuries	19	12
Intracranial injuries and injuries to internal organs	--	--
Part of body³:		
Head	6	7
Trunk	6	--
Chest	3	--
Back	--	--
Neck	3	--
Lower extremities	--	--
Upper extremities	--	--
Body systems	6	6
Multiple	24	24
Worker activity:		
Vehicular and transportation operations	12	5
Using or operating tools, machinery	--	--
Constructing, repairing, cleaning	16	19
Protective service activities	3	5
Materials handling operations	--	--
Physical activities	5	--
Other activities	6	8
Tending a retail establishment	4	6
Not reported	--	--
Location:		
Private residence	3	10
Farm	--	--
Mine, quarry	--	--

Table 3: Fatal Occupational Injuries by Selected Industry, Puerto Rico, 2008

Characteristic	All Industries ¹ 2008	All Industries ¹ 2007
Industrial place and premises	17	11
Place for recreation or sports	--	--
Street and highway	8	6
Public building	10	9
Residential institutions	--	--
Other or not reported	7	--
Primary source^{3,4}:		
Vehicles	10	6
Highway vehicles	10	6
Automobiles	3	--
Trucks	5	5
Plant and industrial powered vehicles, tractors	--	--
Forklifts	--	--
Tractors	--	--
Structures and surfaces	14	5
Floors, walkways, ground surfaces	10	4
Machinery	3	5
Agriculture and garden machinery	--	--
Construction, logging, and mining machinery	--	3
Material handling machinery	--	--
Parts and materials	--	7
Machine, tool, and electric parts	--	3
Persons, plants, animals, and minerals	--	--
Persons -other than injured worker	--	--
Robber	--	--
Co-worker, former co-worker	--	--
Trees, logs	--	--
Chemicals and chemical products	--	--
Tools, instruments, and equipment	3	--
Containers	--	--
Other	12	13
Bullets and pellets	11	13
Fire, flame, smoke	--	--
Secondary source^{3,5}:		
Vehicles	3	6
Highway vehicles	--	5
Plant and industrial powered vehicles, tractors	--	--
Structures and surfaces	6	3
Floors, walkways, ground surfaces	--	--
Structures	3	--
Machinery	3	--
Parts and materials	4	--
Machine, tool, and electric parts	4	--
Persons, plants, animals, and minerals	13	15
Persons -other than injured worker	13	15
Robber	4	4

Table 3: Fatal Occupational Injuries by Selected Industry, Puerto Rico, 2008

Characteristic	All Industries ¹ 2008	All Industries ¹ 2007
Co-worker, former co-worker	--	4
Trees, logs	--	--
Chemicals and chemical products	--	--
Tools, instruments, and equipment	3	--
Containers	--	--
Other	--	--
Liquids (including water)	--	--
No secondary source	12	11
Occupation:		
Management occupations	--	--
Business and financial operations occupations	--	--
Computer and mathematical occupations	--	--
Architecture and Engineering occupations	--	--
Life, physical, and social science occupations	--	--
Community and social services occupations	--	--
Legal occupations	--	--
Education, training, and library occupations	--	--
Arts, design, entertainment, sports, and media occupations	--	--
Healthcare practitioners and technical occupations	--	--
Healthcare support occupations	--	--
Protective service occupations	4	6
Food preparation and serving related occupations	3	3
Building and grounds cleaning and maintenance occupations	--	--
Personal care and service occupations	--	--
Sales and related occupations	3	3
Office and administrative support occupations	3	--
Farming, fishing, and forestry occupations	--	--
Construction and extraction occupations	12	13
Installation, maintenance, and repair occupations	--	6
Production occupations	4	--
Transportation and material moving occupations	7	7
Military specific occupations ⁶	--	--

¹Mining includes fatalities at all establishments categorized as Mining (Sector 21) in the North American Industry Classification System, including establishments not governed by the Mine Safety and Health Administration (MSHA) rules and reporting, such as those in Oil and Gas Extraction.

²Persons identified as Hispanic or Latino may be of any race. The race categories shown exclude data for Hispanics and Latinos.

³Based on the BLS Occupational Injury and Illness Classification Manual.

⁴The primary source of injury identifies the object, substance, or exposure that directly produced or inflicted the injury. For most transportation incidents, the primary source identifies the vehicle in which the deceased was an occupant. For most falls, the primary source identifies the surface or object contacted.

⁵The secondary source of injury, if any, identifies the object, substance, or person that generated the source of injury or that contributed exposure. For vehicle collisions, the deceased's vehicle is the primary source and the other object (truck, road divider, etc.) is the secondary source. For most homicides, the "bullet" is the primary source and the "perpetrator" is the secondary source. For most falls, the secondary source identifies the equipment or surface from which the worker fell.

⁶Military specific occupations include fatalities to persons identified as resident armed forces regardless of individual occupation listed.

NOTE: Dashes indicate no data or data that do not meet publication criteria. Totals for major categories may include subcategories not shown separately. Data for 2008 are preliminary.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Census of Fatal Occupational Injuries, October 22, 2009.

Appendix

Census of Fatal Occupational Injuries: Work Relationship Criteria

A **work relationship** exists if an event or exposure results in the fatal injury or illness of a person:

- (1) ON the *employer's premises* and the person was there to *work*; or
- (2) OFF the *employer's premises* and the person was there to *work*, or the event or exposure was related to the person's *work* or status as an employee.

The *employer's premises* include buildings, grounds, parking lots, and other facilities and property used in the conduct of business. *Work* is defined as duties, activities, or tasks that produce a product or result; that are done in exchange for money, goods, services, profit, or benefit; and, that are legal activities in the United States. The following are clarifications of the CFOI work relationship criteria.

Traumatic injury

A traumatic injury is any unintentional or intentional wound or damage to the body resulting from acute exposure to energy--such as heat or electricity or kinetic energy from a crash--or from the absence of such essentials as heat or oxygen caused by a specific event, incident, or series of events within a single workday or shift.

Occupational disease (illness)

An occupational disease is defined as a condition produced in the work environment over a period longer than one workday or shift. Usually an illness is due to repetitive factors over a period of time. It may result from systemic infection, repeated stress or strain, exposure to toxins, poisons, fumes, or other continuing conditions of the work environment.

Volunteer workers

Fatalities to volunteer workers who are exposed to the same work hazards and perform the same duties or functions as paid employees and that meet the CFOI work relationship criteria are IN scope.

Institutionalized persons

Fatalities to institutionalized persons, including inmates of penal and mental institutions, sanitariums, and homes for the aged, infirm and needy, are OUT of scope unless they are employed off the premises of their institutions. **Suicides** and **homicides** that meet the CFOI work relationship criteria are IN scope.

Fatal heart attacks and strokes

Are IN scope if they occurred ON or OFF the employer's premises and the person were there to work. Those fatal heart attacks and strokes that occurred under other circumstances are OUT of scope, unless work relationship is verified.

Travel status

Fatal events or exposures that occurred when a person was in travel status are IN scope if the travel was for work purposes or was a condition of employment. The exclusion pertaining to recreational activities also applies to a person who was in travel status.

Recreational activities

Fatal events or exposures that occurred during a person's recreational activities which were not required by the person's employer are OUT of scope.

Commuting

Fatal events or exposures that occurred during a person's normal commute to or from work are OUT of scope.

Off-duty police

Homicides occurring to off-duty police officers are generally IN scope. Other fatalities to off-duty police are in scope if the worker was performing a police-related function, such as directing traffic at the scene of an accident or rescuing someone from a fire.

Undocumented workers

Fatalities to undocumented workers are IN scope provided they meet the other work-relationship criteria.

Source: Bureau Labor Statistics of U.S. Department of Labor.

Hon. Miguel Romero
Secretary

Lcda. Elvira Cancio
Deputy Secretary

Neida Abraham Lourido
Assistant Secretary for Planning, Affairs

Elda Ivelisse Parés Rosado
Director
Bureau of Labor Statistics

Abigail González Hernández
Supervisor
Occupational Injuries,
Illnesses and Fatalities Statistics Division

Sandra M. Ostolaza Tapia
Economist



In cooperation with the U.S. Department of Labor
Bureau Labor Statistics-Regional Office
Boston, Massachusetts

Contact us at:

Department of Labor and Human Resources
Bureau Labor Statistics
PO BOX 195540
San Juan, PR 00919-5540

Phone: (787) 754-5300 Ext. 3058 / 3059
Email: Gonzalez_A@states.bls.gov
Ostolazas@states.bls.gov

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