

Work-related Homicides: The Facts

Work-related homicides decreased 18 percent from 1997 to 1998, and 34 percent from 1994 to 1998. Contrary to popular belief, the majority of these incidents are not crimes of passion committed by disgruntled coworkers and spouses, but rather result from robberies.

ERIC F. SYGNATUR
GUY A. TOSCANO

The news media play an important—if paradoxical—role in efforts to understand and prevent workplace violence. Although extensive media coverage of sensational or shocking workplace violence raises the overall awareness of the hazards, it may inadvertently shift the focus of attention and prevention away from where the primary danger is.

There were 709 work-related¹ homicides in 1998, an 18-percent decrease from the 860 in 1997, according to the BLS Census of Fatal Occupational Injuries (CFOI).² (See chart 1.) In addition, the Federal Bureau of Investigation's crime rate declined more than 6 percent from 1997 to 1998.³ In a seeming contradiction, however, a survey cited by the Bureau of Justice Statistics revealed that a majority of Americans felt that crime had gone up over that same period.⁴

The typical wave of media coverage of workplace homicides might explain much of this inconsistency. Of all work-related fatalities, homicides are the only ones that can be characterized as intentional and, thus, are often deemed more news worthy than other fatalities.

This article uses CFOI data to describe the facts and dispel the myths surrounding job-related homicides.

Data include information about the perpetrators, demographics of the decedents, and other relevant facts about these events, such as the time of the incident, the location, and the type of establishment in which the homicide occurred.

Overview of homicides at work

Homicides accounted for 709 (12 percent) of the 6,026 fatal work-related injuries in 1998, and were the second most common event next to highway crashes (1,431 incidents). While many may assume that most work-related homicides are crimes of passion or anger, committed by disgruntled coworkers, spouses, or acquaintances, this is not the case. After thorough review of the 1998 CFOI data, victim-perpetrator associations—the definition of which includes spouses, robbers, and coworkers, for example—could be identified in 60 percent (428) of the 709 cases. Of the 428 identifiable cases, more than two-thirds involved robbers. Coworkers and former coworkers (15 percent), acquaintances (7 percent), and relatives (4 percent) combined accounted for barely a quarter. (See chart 2.) Of the 281 remaining cases, the majority were probably the result of robberies or attempted robberies.⁵

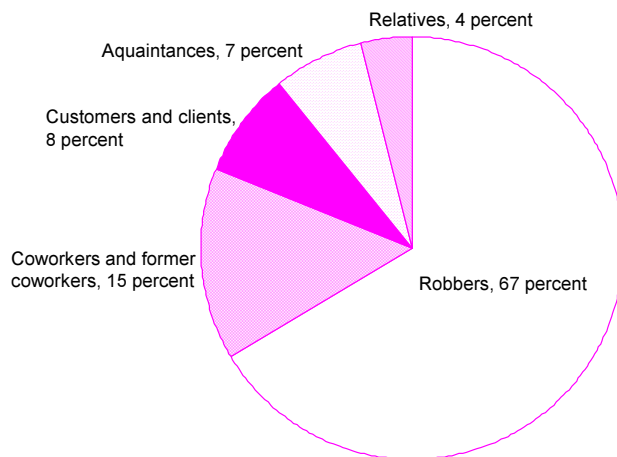
Eric F. Sygnatur and Guy A. Toscano are economists in the Office of Safety, Health, and Working Conditions, Bureau of Labor Statistics.
Telephone: (202) 691-6175
E-mail: cfoistaff@bls.gov

CHART 1. **Work-related homicides, 1992-98**



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

CHART 2. **Percent distribution of work-related homicides by known victim-perpetrator association,¹ 1998**



¹ Victim-perpetrator associations were identified in 428 of the 709 workplace homicides in 1998.
SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Census of Fatal Occupational Injuries

Looking at the entire 1992-98 period, there was a smaller proportion of homicides in which a known association could be identified—53 percent (3,549 of the 6,714 cases)—but the pattern was similar: robbers accounted for 68 percent; coworkers and former coworkers, 13 percent; customers and clients, 7 percent; and acquaintances, 2 percent. Homicides committed by

husbands, wives, boyfriends, girlfriends, former spouses or former boyfriends or girlfriends, and relatives combined accounted for 7 percent of the identifiable work-related homicides in 1998 and, similarly, for 7 percent over the 1992-98 period. (See table 1.)

Fatal homicides due to bombings or explosions occurred in 5 of the 7

years studied and resulted in 138 fatalities. The vast majority of these resulted from the bombing of the Oklahoma City Federal building in 1995.

Homicides by occupation

The workers most likely to fall victim to robbery-associated homicides are those that engage in cash transactions. Other environmental factors that may lead to increased risk of homicide include: Working alone or in small numbers, working in high-crime areas, and selling or guarding valuable property. A study conducted by Rosemary J. Erickson, President of Athena Research Corporation, indicates that establishments or locations (especially small stores) with few people and easy escape routes (such as nearby highways) are more suitable targets for thefts and therefore more prone to homicides.⁶ Occupations that fit these characteristics are diverse, from managers to sales workers, guards to taxicab drivers. Police also rank among the high-risk occupations because their work places them directly into violent situations. Table 2 shows occupations with the highest rates of work-related homicides in 1998.

Taxicab drivers and chauffeurs. Taxicab drivers and chauffeurs have the highest homicide rate of any occupation, 17.9 fatalities per 100,000 workers, or 36 times the risk of all employed individuals. This group comprises 0.2 percent of employed workers in the United States, but accounts for about 7 percent of work-related homicides. These workers are particularly vulnerable because they work alone, take nocturnal trips to secluded areas, and exchange cash on-hand. This occupational classification also includes drivers on regular routes, such as airport to airport transfers, and drivers for limousine-style services. Because of the clientele served, the regularity of the drivers' routine, and the alternative to cash payment methods used, the latter activities have a low relative risk of homicide. Therefore, the work-related homicide rate for "cabbies" is probably understated.

Public police and detectives. Public police and detectives suffer the second-highest fatality rate from homicide, 4.4 fatalities per 100,000 workers. “Good training, teamwork, and special equipment such as bullet-resistant vests and helmets minimize the number of injuries and fatalities to law enforcement personnel. Nevertheless, the risks associated with pursuing speeding or fleeing motorists, apprehending criminals, and dealing with public disorders often are life threatening for the officer.”⁷ Apprehending criminals puts police in frequent contact with lawbreakers: “In 1998, [public] law enforcement agencies nationwide made an estimated 14.5 million arrests for all criminal infractions excluding traffic violations.”⁸ Homicides led all other causes of fatalities to police over the 1992-98 period, accounting for almost half of their deaths. The second leading event for police was highway crashes, which accounted for 34 percent of their fatal work-related injuries.

Private guards and police. Private guards and police suffered about three-quarters as many homicides in 1998 as did public police (39 and 52, respectively). Their rate of fatal injury from homicide was 4.1 per 100,000 workers, a statistically insignificant difference when compared to public police.⁹ Their similar risk reflects the similarities in duties. Guards are often hired to deter crime, protect valuables, escort individuals, assuage volatile situations, and investigate “hot” crime scenes where the perpetrator may still be present.

Executives, administrators, and managers. This occupational group represents about 15 percent of the working population, including such occupations as legislators, postmasters, purchasing managers, chief executives, and real estate managers. Their overall rate of fatal injury from homicides mirrors that of the general population (0.5 per 100,000 workers), but one occupation within the category suffered a disproportionate share:

Managers of food serving and lodging establishments. This occupation accounted for 36 work-related homicides in 1998, resulting in a fatality rate of 2.5 (5 times greater than the general working population). The vast majority of these fatalities, much like those suffered by cooks, waitresses, and other food and lodging establishment employees, were due to robberies.

Truckdrivers. Robbery was also the primary motive behind homicides to truckdrivers. Many of these homicides occurred while the trucks were parked so that the drivers could make a delivery or rest. During these stops, truckdrivers’ valuable cargo and personal belongings made attractive targets. Over the 1992-98 period, assaults and violent acts were the third leading event resulting in trucker fatalities, surpassed only by transportation accidents and contact with objects and equipment.¹⁰ The trucker fatality rate from work-related homicides was 0.7 per 100,000 workers in 1998.

Homicides by industry

Occupational profiling provides the most detailed look at the causes and victims of work-related homicides, especially because occupational duties remain similar across industries. However, there are certain developments by industry worthy of mention.

Retail trade and services. These industries combined accounted for nearly 60 percent of all work-related homicides in 1998, 286 (40 percent) and 137 (19 percent), respectively. In retail trade, food stores such as grocery stores and bakeries incurred 104 homicides, followed by eating and drinking places with 69, and automotive dealers and service stations—mostly gas stations—with 36. The services industry did not have similar clusters of homicides. Instead, they were spread out among different service establishments: legal services; social services; guards and armored car services; hotels; personal services, including laundry, cleaning, and

beauty shops; automobile repair and parking services; health services, including hospitals, home health care, and clinics; and many others.

Public sector. In 1998, the public sector had 93 homicides, or 13 percent of work-related homicides; almost half occurred to police and detectives. No other government occupation had more than 5 fatalities. The Federal Government accounted for 17 homicides; State governments, 21; and local governments, which suffered the greatest share of homicides in this industry, 55. (See table 3.)

Demographic and other profiles for homicides

Job-related homicides can and do occur everywhere—be it on the farm or in an office or private residence. (Job-related homicides occurring at private residences primarily involve maintenance workers or police officers in the line of duty and usually do not involve robberies.) However, the majority of work-related homicides occur in public business establishments where money is handled, such as grocery stores, convenience stores, restaurants, and cafes. Other common locations include parking lots and garages, and streets. Immigrants and the self-employed suffered a disproportionate share of job-related homicides, largely because they work in high-risk occupations, such as taxicab drivers and cashiers at grocery stores.¹¹

Time of day. Another common misconception about work-related homicides is that they’re primarily a “late-night” occurrence. The data show that in 1998, there were about as many homicides from 8 a.m. to noon as there were between 8 p.m. and midnight. The 4-hour periods with the fewest homicides actually occurred between midnight to 4 a.m., and 4 a.m. to 8 a.m. With the preceding two exceptions, the frequency of work-related homicides seems about equal throughout the day. (See chart 3.) The data do show, however, that the number of job-related homicides is higher be-

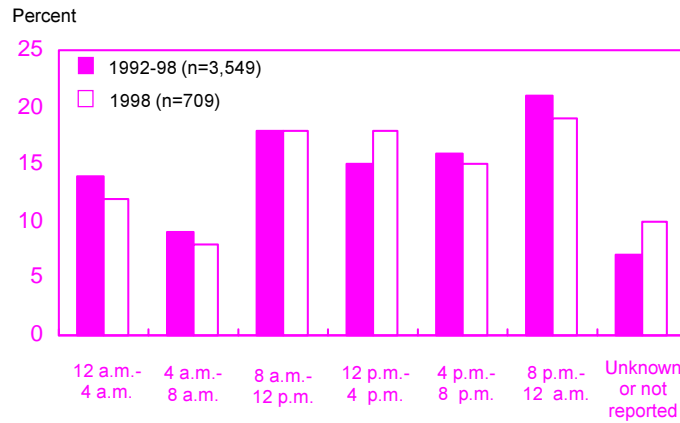
tween 8 p.m. and 4 a.m. for “night-time” occupations like taxicab drivers, grocery store operators, and proprietors of eating and drinking places.

Sex. Although women account for nearly half of the workforce, they suffered 23 percent of the homicides in 1998 and 19 percent over the 1992-98 period. However, homicides were, by far, the leading manner in which women were fatally injured while in work status. Overall, women accounted for 7 percent of all work-related fatalities. During the 1992-98 period, men accounted for 93 percent of work-related fatalities and 81 percent of homicides.

Race and ethnicity. Blacks, Asians, and other minorities face a higher risk of homicide than their proportions of the workforce would suggest. They comprise about a third of all job-related homicide victims and a sixth of the workforce. Their higher rate is explained in part by their disproportionate share of the workforce in occupations for which the homicide rate is high, such as taxicab drivers and managers and proprietors of small business establishments. Blacks, for example, represent 11 percent of the total labor force but account for 26 percent of taxicab drivers and chauffeurs.¹² Hispanics accounted for about a sixth of all homicides, double their share of the workforce.

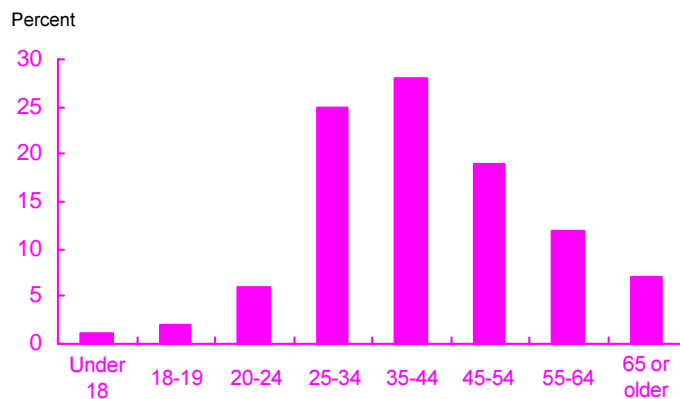
Age. In 1998, individuals 25 to 55 years of age accounted for the most work-related homicides and likewise comprised most of the workforce. Individuals 35 to 44 years of age accounted for 28 percent of work-related homicides, followed by 25- to 34-year-olds with 25 percent. The age bracket with the fewest homicides was youths under age 18, with 7 work-related homicides, or fewer than 1 percent. This is consistent with the 7-year pattern for 1992-98, during which youths averaged 11 homicides per year.¹³ (See chart 4.)

CHART 3. Percent distribution of work-related homicides by time of day, 1992-98



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

CHART 4. Percent distribution of work-related homicides by age of worker, 1998



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

Conclusion

Work-related homicides are the second leading cause of job-related fatalities, but, like all job-related fatalities, steps can be taken to reduce their frequency.¹⁴ This basic assumption underscores the need for an accurate accounting of the facts.

- The fact is that coworkers commit a small share of workplace homicides; most result from robberies.
- The fact is that police have a high rate of workplace homicides, but taxicab drivers have a rate 4 times as great.
- The fact is that homicides may occur in all industries and at all times of the day. ■
- The fact is that work-related homicides have decreased—34 percent in the last 4 years.

¹ The terms “job-related” and “work-related” are used interchangeably in this article. Both terms refer to a fatality that occurs: at work; on the work premises; while in work status; or due to an association with the decedent’s employment, including interpersonal interactions, even if the incident occurs outside the workplace.

² The Census of Fatal Occupational Injuries has collected occupational fatality data since 1992, using diverse data sources to identify, verify, and profile fatal work injuries. 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, and reports to Federal and State agencies. This method assures counts are as complete and accurate as possible.

³ *Federal Bureau of Investigation—Uniform Crime Reports—Crime in the United States—1998* (Federal Bureau of Investigation, 1998), Section II, “Crime Index Offenses Reported,” p. 5, on the Internet at <http://www.fbi.gov/ucr/98cius.htm> (visited Dec. 9, 1999).

⁴ “Attitudes toward level of crime in the United

States, selected years 1989-98,” *Sourcebook of Criminal Justice Statistics 1998 Online* (Bureau of Justice Statistics), p. 116, on the Internet at <http://www.albany.edu/sourcebook/1995/pdf/t233.pdf> (visited Dec. 13, 1999).

⁵ Given the diverse, detailed nature of the source documents used to identify job-related fatalities—death certificates, Occupational Safety and Health Administration (OSHA) reports, workers’ compensation claims, follow-up questionnaires, newspaper accounts, and others—it is more likely that victim-perpetrator associations in “high profile” work-related homicides attributable to family, spouses, and coworkers were identified.

⁶ Rosemary J. Erickson, *Armed Robbers and Their Crimes* (Seattle: Athena Research, 1996), pp. 30-51.

⁷ Cindy Clarke and Mark Zak, “Fatalities to Law Enforcement Officers and Firefighters, 1992-97,” *Compensation and Working Conditions*, Summer 1999, pp. 3-4.

⁸ *Federal Bureau of Investigation—Uniform Crime Reports*, Section IV, “Persons Arrested,” p. 209, on the Internet at <http://www.fbi.gov/ucr/98cius.htm> (visited Dec. 9, 1999).

⁹ Confidence interval testing revealed that there is no statistical difference between the fatality rate for public police and detectives and that for private guards and police. That is, at the alpha rate 0.05 and the multiplication factor 2.77, it cannot be said with certainty that public police have a higher fatality rate than private guards.

¹⁰ Peggy Suarez, “The Unforgiving Road: Trucker Fatalities,” *Compensation and Working Conditions*, Winter 1999, pp. 27-28.

¹¹ Janice Windau, “Occupational Fatalities Among the Immigrant Population,” *Compensation and Working Conditions*, Spring 1997, pp. 40-45.

¹² See *Employment and Earnings*, (Bureau of Labor Statistics, January, 1999), pp. 178-83.

¹³ Janice Windau, Eric Sygnatur, and Guy Toscano, “Profile of Work Injuries Incurred by Young Workers,” *Monthly Labor Review*, June 1999, pp. 3-10.

¹⁴ Studies, reports, and recommendations regarding workplace homicides abound. A portion include specific prevention programs. Some of these can be found on the Occupational Safety and Health Administration’s Internet site at <http://www.osha-slc.gov/Publications/osha3153.pdf>.

TABLE 1. Work-related homicides by year and victim-perpetrator association, 1992-98

Victim-perpetrator association	Year							Total
	1992	1993	1994	1995	1996	1997	1998	
Total work-related homicides	1,035	1,073	1,080	1,034	927	856	709	6,714
Determined association	428	505	542	622	540	462	428	3,549
Acquaintance	-	3	-	6	14	8	17	52
Bomb/explosion	-	9	3	124	-	-	-	138
Boyfriend (present or former)	8	12	10	9	11	11	9	70
Coworker	48	61	57	95	76	56	63	456
Customer/client	35	31	42	24	56	25	35	248
Girlfriend (present or former)	-	-	-	-	-	-	-	10
Husband (present or former)	20	16	24	14	17	16	11	118
Relative	4	4	4	10	9	5	6	42
Robber	313	366	402	340	357	338	287	2,403
Wife (present or former)	-	3	-	-	-	3	-	12
Undetermined	604	566	533	408	384	392	281	3,165

NOTE: Dash indicates fewer than 3 cases.

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

TABLE 2. Occupations with highest work-related homicide rates, 1998

Occupation ¹	Homicide		Relative standard error ³ (percent)	Annual average employment ⁴ (thousands)
	Number	Rate ²		
All occupations	709	0.5	0.1	131,463
Taxi drivers and chauffeurs	49	17.9	6.2	273
Police and detectives, public	52	4.4	3.0	1,180
Guards and police, except public	39	4.1	3.3	946
Supervisors and proprietors, sales	117	2.5	1.5	4,719
Executive, administrative, managerial	102	.5	7.0	19,054
Managers, food and lodging	36	2.5	2.7	1,453
Cashiers	45	1.5	1.8	3,025
Truckdrivers	22	.7	1.9	3,012

¹ Occupations with more than 20 homicides and employment exceeding 100,000 workers.

² The fatality rate is an experimental measure that represents the number of fatal occupational injuries per 100,000 workers and was calculated as Rate = (N/W) x 100,000 workers where:

N = the number of fatal work injuries, in this case homicides, and
W = the number of workers 16 years of age and older

³ Relative standard errors of the Current Population Survey employment estimates can be used to approxi-

mate confidence ranges for the fatality rates. For example, a confidence range for the taxi drivers' and chauffeurs' rate can be approximated as follows: (Rate) x (Relative standard error) x (Multiplication factor for 9 observations at the 95-percent confidence level) = 17.9 x 0.062 x 2.77 = 3.1. The confidence range for this rate is (17.9) +/- 3.1, or 14.8 to 21.0.

⁴ Annual average employment estimates of employed civilians 16 years of age and older are based on the 1998 Current Population Survey.

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

TABLE 3. Industries with high work-related homicide risk rates, 1998

Industry ¹	Homicide		Relative standard error ³ (percent)	Annual average employment ⁴ (thousands)
	Number	Rate ²		
All industries	709	0.5	0.1	131,463
Transportation and public utilities	69	.9	1.1	7,713
Taxicabs	48	35.8	8.9	134
Retail	286	1.3	.6	22,100
Food stores	104	3.1	1.8	3,325
Eating and drinking places	69	1.0	1.2	6,723
Services	137	.4	.5	37,176
Government	93	.5	.7	18,397
Federal	17	.5	1.8	3,247
State	21	.4	1.4	5,160
Local	55	.6	1.0	9,990

¹ Industries with more than 20 homicides and employment exceeding 100,000 workers.

² The fatality rate is an experimental measure that represents the number of fatal occupational injuries per 100,000 workers and was calculated as Rate = (N/W) x 100,000 workers where:

N = the number of fatal work injuries, in this case homicides, and
W = the number of workers 16 years of age and older

³ Relative standard errors of the Current Population Survey employment estimates can be used to approxi-

mate confidence ranges for the fatality rates. For example, a confidence range for the taxi drivers' and chauffeurs' rate can be approximated as follows: (Rate) x (Relative standard error) x (Multiplication factor for 9 observations at the 95-percent confidence level) = 17.9 x 0.062 x 2.77 = 3.1. The confidence range for this rate is (17.9) +/- 3.1, or 14.8 to 21.0.

⁴ Annual average employment estimates of employed civilians 16 years of age and older are based on the 1998 Current Population Survey.

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