

An Analysis of Workplace Suicides, 1992-2001

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Over the period from 1992 to 2001, a total of 2,170 workers died from suicide or fatal self-inflicted injuries that occurred while the decedent was at work. These on-the-job suicides accounted for 3.5 percent of the 61,824 total workplace fatalities that occurred over the period. An average of 217 workplace suicides occurred each year, and in no year did the actual number

deviate from the mean by more than 6 percent. These data are from the BLS Census of Fatal Occupational Injuries (CFOI).²

The CFOI data also indicate that the risk of on-the-job suicide was highest for men, older workers, the self-employed, and agricultural workers. In addition, among the individual occupations, managers and administrators, not elsewhere classified,³ incurred the highest number of workplace suicides. However, police and detectives in public service faced the greatest "relative risk" of becoming a victim of workplace suicide.⁴ (See table 1 and table 2.)

On-the-job suicides are defined by the location of the decedent when he or she was killed. If the fatal injury took place at the decedent's place of employment, then it is considered a workplace suicide. Workplace suicides may or may not have been motivated by work-related issues or exposures. In addition, the location-based nature of the definition may inflate the counts for the self-employed and others who may work out of their home, farm, or car. Even with this limitation, CFOI data provide a unique insight into decedents who took their own life at their place of work. This article describes some of the characteristics of those workers who died on the job as a result of suicide or self-inflicted injury over the 1992-2001 period.

Suicide In General Versus Suicide At Work

According to the Centers for Disease Control and Prevention (CDC),⁵ 29,350 Americans committed suicide in 2000, making it the 11th leading cause of death that year (homicide was 14th).⁶ Four times as many men committed suicide in 2000 than did women, and nearly 84 percent of all suicide victims were non-Hispanic whites.

Trends for workplace suicides are similar to those for the general population. However, there were 3 times as many workplace homicides in 2000 than there were workplace suicides. This ratio has been decreasing over time as workplace homicides have decreased and workplace suicides have remained relatively constant. Still, a person at work has a greater likelihood of being killed from homicide than from suicide, whereas in the general population the opposite is true.

Demographics

Men were overwhelmingly more likely to die on the job by taking their own life than were women. From 1992 to 2001, nearly 94 percent of those killed at work as a result of suicide were men. This figure was slightly higher than the percentage of overall work-related fatalities that were men (92 percent).

Another way to look at the risk to various groups is by using the concept of "relative risk." Essentially, relative risk shows how much more or less likely a worker in a particular group is to suffer a workplace fatality compared with the average worker. The relative risk for workplace suicide is 1.73 for men and 0.15 for women. That means that men are 73 percent more likely than the average worker to suffer a fatal self-inflicted workplace injury, and women are 85 percent less likely than the average worker to suffer a fatal self-inflicted workplace injury.

More than one-fourth of all workplace suicides were incurred by workers aged 35 to 44. While this age group had the largest total number of workplace suicides, older workers faced a greater relative risk. In fact, the relative risk for becoming a



workplace suicide victim rose steadily with age: The relative risk was 0.65 for workers under age 25, 0.85 for workers aged 25 to 34, 0.97 for workers aged 35 to 44, 1.23 for workers aged 45 to 54, and 1.34 for workers aged 55 years and older.

White workers made up 79 percent of the workplace suicides that took place from 1992 to 2001, but only 73 percent of all work-related fatalities. Black and Hispanic workers, by contrast, accounted for just 6 percent and 9 percent of workplace suicides, respectively, while making up 10 and 11 percent of the total number of workplace fatalities. White workers also had a higher relative risk in 2001⁸ (1.12) than either black workers (0.41) or Hispanic workers (0.81).

Self-employed workers made up 30 percent of all workplace suicides from 1992 to 2001, but only 20 percent of overall workplace fatalities during the period. Also, the relative risk for self-employed workers from 1999 to 2001 was larger than that of wage and salary workers: 4.15 versus 0.75.

Nature Of Fatal Self-inflicted Injuries

More than half (54 percent) of all workplace suicides resulted from gunshot wounds. Another 25 percent of workplace suicides were from asphyxiations, strangulations, or suffocations (mostly by hanging), and 11 percent resulted from other poisonings and toxic effects.⁹

Occupation

Victims of workplace suicides were most likely to be employed in managerial and professional specialty occupations. Over the 1992-2001 period, 580 workers in this occupational group committed suicide on the job. Among the remaining civilian occupational groups, there were 359 workplace suicides in technical, sales, and administrative support occupations; 323 in precision production, craft, and repair occupations; 312 in the group operators, fabricators, and laborers; 298 in service occupations; and 175 in farming, forestry, and fishing. Workers in military occupations accounted for 92 workplace suicides over the period.

While workers in farming, forestry, and fishing incurred the fewest total number of workplace suicides, they also faced the highest relative risk (3.41). Among the other broadly defined civilian occupational groups, the relative risks ranged from 0.50 in technical, sales, and administrative support to 1.38 in precision production, craft, and repair. The relative risk for workers in military occupations was 5.39.

Among specific occupations, managers and administrators, not elsewhere classified, incurred 10 percent of all workplace suicides over the 1992-2001 period. Supervisors and proprietors in sales occupations incurred 7 percent of all workplace suicides. Other occupations that had a relatively high number of workplace suicides during the period include mechanics and repairers, except supervisors (6 percent); motor vehicle operators (5 percent); military occupations (4 percent); and police and detectives, including supervisors (4 percent).

Police and detectives in public service (a subset of the larger group police and detectives, including supervisors) had the largest relative risk of all the occupations (6.99). The relative risk also was high for workers in military occupations (5.39) and farmers, except horticultural (4.67). (See table 1.)

Industry

Workers in the services industry accounted for a quarter of all workplace suicides during the 1992-2001 period, while accounting for just 12 percent of all fatal workplace injuries. Similarly, government workers accounted for 16 percent of all workplace suicides, but only 10 percent of overall workplace fatalities. Workers in finance, insurance, and real estate accounted for 4 percent of all workplace suicides, but only 2 percent of overall workplace fatalities. The industry with the highest relative risk of workplace suicide during the 1999-2001 period was agriculture, forestry, and fishing (3.21). In the other private sector industries, the relative risks ranged from 0.63 in services to 1.24 in transportation and public utilities. The relative risk for government workers was 1.22.



Multiple Fatality Incidents¹⁰

There were 61 multiple fatality incidents involving workplace suicides over the 1992-2001 period, leading to a total of 139 deaths. In 50 instances, the person who committed suicide had killed one or more co-workers prior to taking his or her own life. These 50 incidents accounted for 67 deaths to the suicide victim's co-workers. Sixteen of these co-workers were supervisors who were killed in 11 incidents. Ten incidents involved family members shooting other family members, with 6 incidents involving a spouse or an ex-spouse. The most frequently cited reasons for the commission of these murder/suicides were trouble with a co-worker and/or supervisor, dissatisfaction with the job, and marital difficulties.

Conclusion

The average number of workplace suicides occurring each year remained relatively constant from 1992 to 2001, while overall fatalities decreased by 5 percent. Among the various demographic groups, workplace suicides were most often incurred by white workers, male workers aged 35 to 44, and workers who were working for wage and salary. The relative risk for workplace suicides was highest for white workers, male workers, workers aged 55 and over, and self-employed workers. Workplace suicide victims were most likely to work in managerial and professional specialty occupations, while workers in farming, forestry, and fishing had the highest relative risk. Among specific occupations, police and detectives in public service faced the highest relative risk.

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Notes

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- 1 Throughout this analysis, the terms "suicide" and "fatal self-inflicted injury" are used interchangeably. As per the Occupational Injury and Illness Classification System (OIICS), suicides and other self-inflicted injuries represent all workplace fatalities that are coded as follows: 6200 self-inflicted injury, unspecified; 6210 suicide, attempted suicide; and 6220 self-inflicted injury or fatality, intent unknown. Also, the 2001 data used in this analysis are preliminary.
- 2 For more on the BLS Census of Fatal Occupational Injuries (CFOI), visit the website http://www.bls.gov/iif/oshcfoi1.htm.
- 3 Managers and administrators, not elsewhere classified, is a broad occupational category in which managers and administrators who do not fall into one of the other managerial occupational categories are classified.
- 4 Relative risk is derived by dividing the fatality rate of a particular group by the fatality rate for the entire population. For instance, if carpenters had a fatality rate of 0.36 and the fatality rate for the entire population was 0.12, the relative risk for carpenters would be 0.36/0.12 or 3. This number shows the risk, relative to the overall population, a particular group bears. In this hypothetical example, carpenters are 3 times more likely than the average worker to commit suicide while at work. Throughout this article, relative risk measures are restricted to the 1999-2001 period because of difficulties in matching CFOI data with employment data for years prior to 1999.
- 5 Data in this section are taken from the Centers for Disease Control website, specifically http://www.cdc.gov/ncipc/factsheets/suifacts.htm. Some figures were also derived using the WISQARS database at http://www.cdc.gov/ncipc/wisqars/. Sites accessed on July 2, 2003.
- 6 In 2000, 12,585 more Americans died from suicide than from homicide.
- 7 See note 4.
- 8 In 2000, CFOI changed the way it reported fatal work injuries by race. Thus, for simplicity, only 2001 data were used for this part of the analysis.
- 9 Other poisonings and toxic effects include carbon monoxide poisoning; toxic effects of food contaminants or noxious food stuffs--nonviral and nonbacterial; lead poisoning; and asphyxia from gas, fumes, and vapors.
- 10 Refers to incidents where decedent killed another person or persons and then killed himself or herself. For this analysis, the suicide must have been considered to be at-work. The other decedents did not have to be working at the time of their deaths.



Table 1. Relative risk of workplace suicide for selected occupations, 1999-2001

Occupation	Relative risk
All Occupations	1.00
Managers and administrators, not elsewhere classified	1.93
Supervisors and proprietors, sales occupations	1.84
Mechanics and repairers, except supervisors	1.82
Vehicle and mobile equipment mechanics, repairers	3.09
Automobile mechanics and apprentices	3.17
Motor vehicle operators	2.06
Truck drivers	2.36
Military occupations	5.39
Police and detectives, including supervisors	5.34
Police and detectives, public service	6.99
Cleaning and building service occupations, except household	1.52
Construction trades, except supervisors	0.99
Guards, including supervisors	2.11
Guards and police, except public service	2.40
Managers, food serving and lodging establishments	2.79
Farmers, except horticultural	4.67
Laborers, except construction	1.91

SOURCE: Bureau of Labor Statistics Census of Fatal Occupational Injuries and Current Population Survery. Resident military data from the Department of Defense were included where appropriate.

Table 2. Workplace suicides: total number and as a percentage of all workplace fatalities, 1992-2001

Occupation	Total number of workplace suicides	Workplace suicides as a percent of all workplace fatalities
All Occupations	2,170	3.5
Managers and administrators, not elsewhere classified	221	10.0
Supervisors and proprietors, sales occupations	155	7.3
Mechanics and repairers, except supervisors	130	4.6
Vehicle and mobile equipment mechanics, repairers	86	6.7
Automobile mechanics and apprentices	44	9.5
Motor vehicle operators	112	1.2
Truck drivers	91	1.1
Military occupations	92	8.1
Police and detectives, including supervisors	86	5.9
Police and detectives, public service	53	5.6
Cleaning and building service occupations, except household	78	9.1
Construction trades, except supervisors	74	1.4
Guards, including supervisors	56	6.1



Occupation	Total number of workplace suicides	Workplace suicides as a percent of all workplace fatalities	
Guards and police, except public service	52	6.6	
Managers, food serving and lodging establishments	54	7.5	
Farmers, except horticultural	53	1.9	
Laborers, except construction	47	2.4	
SOURCE: Bureau of Labor Statistics Census of Fatal Occupational Injuries.			

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