Safe and secure at work?: Findings from the 2002 Workplace Risk Supplement

E. Lynn Jenkins^{a,*}, Bonnie S. Fisher^b and Dan Hartley^c

Received 19 February 2010 Accepted 24 June 2010

Abstract. Objective: To examine employee's perception of safety and related workplace safety and prevention issues, including their use of self-protection measures and victimization experience.

Participants: The Workplace Risk Supplement (WRS) to the National Crime Victimization Survey (NCVS) was administered to 55,158 employed respondents who were 16 years or older.

Methods: Trained U.S. Census Bureau interviewers administered the WRS in all households selected for the NCVS during the 6-month reference period from January through June 2002. Responses from the 55,158 WRS respondents were weighted to obtain national estimates, resulting in 142,410,858 cases.

Results: The demographic distribution of WRS respondents is very similar to that of the U.S. labor force. Seven percent of respondents reported that they worried about someone in their workplace attacking them, while nearly 4% experienced victimization. The majority indicated that they felt that their workplace, the neighborhood around their workplace, and places they traveled to as part of their job were either "Very Safe" or "Somewhat Safe" from crime. Six percent carried some type of self protection while at work although this varied by occupation.

Conclusions: Employees largely feel safe from violence while working. Differences in victimization by occupation bolster efforts to focus workplace violence prevention in high-risk occupations.

Keywords: Violence, workplace risk perception, workplace victimization, Workplace Risk Supplement

1. Introduction

The National Crime Victimization Survey (NCVS) estimated 1.7 million workers were victims of violent crimes while at work or on duty each year from 1993 to 1999 [1]. Ongoing since 1972, NCVS data

are obtained bi-annually from a nationally representative sample of 42,000 households comprising nearly 76,000 persons on the frequency, characteristics, and consequences of criminal victimization in the United States. The NCVS measures personal (e.g., rape, robbery) and household property offenses (e.g., burglary, motor vehicle theft), including crimes reported and not reported to law enforcement. A complete discussion of the methods, strengths, and limitations of the NCVS may be found in *Criminal Victimization in the United States*, 2002 [2] and in Cantor and Lynch [3].

A particularly appealing feature of the NCVS for research purposes is its ability to incorporate special

^aDivision of Violence Prevention, National Center for Injury Prevention and Control, Centers for Disease Control and Prevention, Atlanta, GA, USA

^bSchool of Criminal Justice, College of Education, Criminal Justice, and Human Services, Cincinnati, OH, USA ^cAnalysis and Field Evaluations Branch, Division of Safety Research, National Institute for Occupational Safety and Health, Morgantown, WV, USA

^{*}Address for correspondence: E. Lynn Jenkins, Etiology and Surveillance Branch, Division of Violence Prevention, National Center for Injury Prevention and Control, Centers for Disease Control and Prevention, 4770 Buford Highway, M/S F63, Atlanta, GA 30341, USA. Tel.: +1 770 488 3931; Fax: +1 770 488 4222; E-mail: LJenkins@cdc.gov.

supplements. For example, in 2002 a supplement was completed that focused on police public contact [4]. There have also been a series of seven school crime supplements conducted in various years between 1989 and 2007 [5]. In 1983, the Victim Risk Supplement (VRS) to the National Crime Survey included issues such as perceptions of safety at school and at home, fear of crime, neighborhood characteristics as well as questions regarding workplace risks such as the extent of work-related travel, interaction with the public, and perceptions of safety in and around the workplace.

More than two decades ago Lynch [6] analyzed data from the VRS and found that the risk of workplace victimization was more related to the task performed at work than to the demographic characteristics of the person performing the job. Factors related to an increased risk for workplace victimization included routine face-to-face contact with large numbers of people, the handling of money, and jobs that required routine travel or that did not have a single worksite. Using a 1983 crime survey of the metropolitan Washington, DC area, Collins and Cox [7] found results similar to those of Lynch; the delivery of passengers or goods and dealing with the public were the factors associated with an increased risk for workplace assault. Until the present study, information on these issues had not been collected at the national level from a cross-section of employed persons since that time.

Over the past several decades, workplace violence has become recognized as an important occupational safety and health issue in the United States as occupational safety and health professionals have documented the magnitude of workplace violence and advocated for greater awareness, increasing security measures as appropriate, and training in how to respond to robberies, deescalate hostile situations and the like. As incidents of workplace victimization potentially threaten the health and safety of millions of employees annually, an important unanswered question remains: how do employees feel with regard to their workplace safety and security? This article provides some insight into employee's perception of safety and related workplace safety and prevention issues, including the use of selfprotection measures and victimization experience, using data from the Workplace Risk Supplement of the National Crime Victimization Survey.

2. Methods

Using the work-related questions from the VRS as a starting point, the Workplace Risk Supplement (WRS)

was developed in 2001 by the National Institute for Occupational Safety and Health (NIOSH), the Bureau of Justice Statistics (BJS), and the U.S Census Bureau with input from academic researchers familiar with the NCVS and particularly with the VRS and workplace victimization issues. The resulting WRS questionnaire contains exact duplicates of many of the questions from the VRS to allow comparison of risk factors over time (e.g., workplace open to the public, handling of money, and perceptions of safety in and around the workplace). Other topics of interest include obtaining measures of employee knowledge regarding workplace violence prevention policies in place by employers, description of any materials or training offered specific to workplace violence prevention, and security measures in place in U.S. workplaces. The purpose of this supplement is to provide data that could be used by policy makers, employers, workers, researchers, and safety, health and security professionals to improve workplace violence prevention efforts.

Trained interviewers employed by the U.S. Census Bureau administered this supplement in all households selected for the NCVS during the six month reference period from January through June 2002 (for details on NCVS methodology, see http://aspe.hhs.gov/hsp/06/ catalog-ai-an-na/NCVS.htm). Within these households, eligible respondents were those who were 16 years or older and were employed in the week immediately preceding the interview or for at least two consecutive weeks at any time in the six months preceding the interview (see NCVS 1-Basic Screen Questionnaire, questions 47a-47c). Eligible respondents were asked the questions from the WRS only after completing their entire NCVS interview. Given the age and employment eligibility criteria, a total of 55,158 persons were identified for inclusion in the WRS. The NCVS household completion rate was 92% and the WRS completion rate was 87% (47,694/55,158). Of those who completed an interview, the response rate for individual survey items was quite high (at least 99%).

Responses from the 55,158 WRS respondents were weighted to obtain national estimates, resulting in 142,410,858 cases. The weighting procedure includes the basic NCVS weights that account for probabilities of selection, probabilities of observation (i.e., nonresponse), and post-stratification adjustment to known population totals (2). In addition, the WRS person weight also includes an adjustment factor for persons that were interviewed for the NCVS but were not interviewed for the WRS. Of note, the weighting strategy does not include adjustment to labor force or em-

Table 1
Demographic characteristics of WRS respondents and the U.S. labor force, 2002

	Workplace Risk Supplement		U.S. Labor For	rce, 2002
	Number	Percent	Number	Percent
Age (in years)				
16-19	7,918,416	5.6	7,724,000	5.4
20-24	14,751,275	10.4	14,702,000	10.3
25-34	30,836,576	21.7	30,831,000	21.6
35-44	37,138,552	26.1	36,998,000	26.0
45-54	31,762,688	22.3	32,036,000	22.5
55-64	15,487,600	10.9	15,863,000	11.1
65+	4,515,752	3.2	4,381,000	3.1
Mean = 39.6 year	rs; Standard Devia	tion = 13.3; Ran	ige: 16–90 years	
Sex				
Males	76,650,197	53.8	76,053,000	53.4
Females	65,760,661	46.2	66,481,000	46.6
Race				
White	120,128,668	84.4	118,569,000	83.2
Black	16,712,580	11.7	16,833,000	11.8
Other	5,569,610	3.9	-	-
Hispanic Origin	16,042,595	11.3	-	-

⁻ Not reported in Employment and Earnings.

ployment totals. All of the tables in this article present results utilizing weighted data.

Initial information on the occupation of respondents was taken from the NCVS1- Basic Screen Questionnaire question 48a which asks, "Which of the following best describes your job?" and provides a limited number of broad occupational categories including, "medical profession, mental health services field, teaching profession, law enforcement or security field, retail sales, transportation field, or something else-specify." Within these broad categories, some more specific occupational groups are also listed for respondents to choose from. For example, the medical professional category includes the following responses: physician, nurse, technician, and other-specify. Overall, 68% (n=32,557) of the initial occupation responses were categorized in the 'something else' entry.

For those respondents who completed a computer-assisted telephone interview (CATI), the occupation narrative entries for the "something else" responses were available for categorization ($n=11,918;\,4,413$ blank entries and 7,539 usable entries). Two of the authors read each narrative entry and grouped it into the best comparable major group from the 2000 Standard Occupational Classification (SOC) system (see http://www.bls.gov/soc/home.htm). Federal statistical agencies developed the SOC to provide a universal occupational classification system for workers so that data could be collected, calculated and disseminated [8]. The already categorized responses to the NCVS question 48a (e.g., nurse, law enforcement officer, bar-

tender) (n=15,081) also were recoded according to the SOC system. For example, respondents who indicated their job was in the "teaching profession" were coded into the SOC major group, "Education, Training, and Library Occupations" while respondents who indicated they were employed in the "law enforcement or security field" were coded into the SOC major group, "Protective Service Occupations." A total of 22,265 respondents, 45.7% of the WRS respondents, were coded into SOC categories.

3. Results

Table 1 shows the distribution of the demographic characteristics for WRS respondents and the U.S. labor force for 2002 [9]. As can be seen, the weighted national estimate of the percent of WRS respondents in each of the age, sex, and race categories is similar to the respective U.S. labor force categories. The mean age of WRS respondents was 40 years and the largest proportion of respondents fell into the 35 to 44 years old category. The sample was nearly evenly split between males and females. By race, the largest percentage of respondents were White. Eleven percent of the sample indicated they were of Hispanic origin.

Table 2 displays the length of time respondents worked for their current employer, regular work schedules, and whether the workplace was open to the public. As can be seen, a quarter of respondents had ten or more years with their current employer while 19% had

Table 2
Employment characteristics of WRS respondents

	_	
	Number	Percent
Tenure with current employer		
< 1 year	26,478,644	18.6
1–2 years	28,530,254	20.0
3–5 years	29,034,103	20.4
6–10 years	22,914,942	16.1
10 + years	35,445,940	24.9
Mean = 7.4 years; Standard Deviation	n = 8.5; Range	e: 0.08-
75 years		
Work Schedule		
Most hours between 6am to 6pm	111,001,962	78.0
Other, irregular, rotating shifts	31,274,348	22.0
Workplace open to the public		
Yes	64,119,591	58.9
No	42,250,549	38.8
Other or Combination	2,485,836	2.3

less than one year. The majority of respondents worked some kind of daytime shift and 59% of the workers included in this survey indicated that their workplace was open to the public.

The distribution of respondents by occupational category is shown in Table 3. Of the 46% for which an occupation code could be assigned, the largest proportions of respondents were in the categories sales and related occupations (22%), education, training, and library occupations (20%), and healthcare practitioners, technicians, and other healthcare support occupations (16%).

With regard to job characteristics that have been identified as potentially increasing the risk of workplace violence, Table 4 shows that 67% of respondents never handle or carry cash as part of their work but 19% handle cash every day. The majority of the respondents never had responsibility to guard people or property but this was a primary duty (occurring every day) for 18% of the sample. Forty-one percent of respondents indicate that they had face-to-face contact with between one and 25 people each week; 11% of respondents indicated they had face-to-face contact with 200 or more people each week.

As shown in Table 5, WRS respondents perceived being relatively safe at work. Only seven percent of the WRS respondents reported that they worried about someone in their workplace attacking them. Of these, 41% said they feared attack by a customer or client, 17% feared attack by a stranger, and 14% feared attack by a patient. Another 14% of those who feared some kind of attack indicated that co-workers were their primary concern. The vast majority of respondents indicated that their workplace, the neighborhood around their workplace, and places they traveled to as part of

their job were either "Very Safe" or "Somewhat Safe" from crime. However 10.5%, or over 3 million workers have to travel as part of their job. Of these, 90% felt "Very Safe" or "Somewhat Safe" from crime in the places they have to travel to as part of their job.

Table 6 presents findings about employee's use of self-protection and employers knowledge of employee's use. Only 6% of respondents indicated that they carried or used some form of self-protection at work or while working. Of these, nearly half (45%) carried mace or pepper spray. Other types of self-protection – firearm (30%), knife (27%), personal alarm device (12%), or weapon used to hit (10%) – were used by a smaller percentage of employees. Of those who reported use of self-protection, 76% indicated that their employer was aware that they were carrying or using these devices.

As can be seen in Table 7, for the leading types of personal protective devices reported, occupational information was available for a varying proportion of the total - specifically, occupational category was coded for a majority (72%) of those who carried a "weapon used to hit" but for just under half (47%) of those reporting carrying or use of a knife. For the respondents where their SOC code was available, the largest proportion of cases in each self-protection category was employed in protective services occupations. Specifically, 72% of the respondents reporting use of a firearm for self-protection and where an occupation code was available, were in the protective services occupational category; the proportions of those reporting use of mace, knife, personal alarm devices, and weapons used to hit that were in the protective services occupational group were 41%, 26%, 27%, and 65%, respectively.

The presence and types of security measures that WRS respondents reported are presented in Table 8. Eighty-four percent of respondents reported that some type of security measures were present in their work-places. Of these, more than half reported receptionists or guards who check people in or a burglar alarm system. Forty-six percent reported the use of surveillance cameras. Other measures such as pass or ID to enter, police or guards for protection, and locked entry or gate during working hours were reported being used less often but still over a quarter of the respondents reported such measures in their workplace (39%, 34%, and 27%, respectively).

Table 9 presents findings about respondents' knowledge of workplace violence policies and training. When asked if their employer had written guidelines regarding workplace violence, 60% of respondents in-

Table 3
Major occupational categories of WRS respondents

Major occupational group (SOC category)	Number	Percent	Adjusted percent*
Management	1,303,964	0.9	2.0
Business and financial operations	1,593,950	1.1	2.5
Computer and mathematical	1,209,084	0.8	1.9
Architecture and engineering	925,109	0.6	1.4
Community and social services	1,726,581	1.2	2.7
Legal	377,696	0.3	0.6
Education, training, and library	12,990,284	9.1	20.0
Arts design, entertainment, sports, and media	865,997	0.6	1.3
Healthcare practitioners, technical, and support	10,415,435	7.3	16.0
Protective service	2,929,235	2.1	4.5
Food preparation and serving	1,358,518	1.0	2.1
Building and grounds cleaning and maintenance	640,647	0.4	1.0
Personal care and service	809,797	0.6	1.2
Sales and related	14,345,818	10.1	22.1
Office and administrative support	2,913,242	2.0	4.5
Construction and extraction	1,663,313	1.2	2.6
Installation, maintenance, and repair	977,510	0.7	1.5
Production	2,619,664	1.8	4.0
Transportation and material moving	4,745,741	3.3	7.3
Other specified occupations [†]	634,285	0.4	1.0
Total specified occupations	65,045,870	45.7	_
Unspecified occupations	77,364,988	54.3	-
Total	142,410,858	100%	_

^{*}Percent based on total number of respondents who reported an NCVS designated occupational category or whose narrative occupation response was coded using the SOC system.
†The category, "Other Specified Occupations" includes respondents in Farming, Fishing, and Forestry occupations; Life, Physical and Social Science Occupations; Marketing Occupations; and, Military-Specific Occupations.

Table 4
Job task characteristics for WRS respondents

	Number	Percent
How often carry or handle money?		
Never	94,782,015	66.7
Every day	26,483,482	18.6
At least once a week	8,343,257	5.9
At least once a month	4,458,052	3.1
Less often	8,116,030	5.7
How often guard people or property?		
Never	110,219,709	78.0
Every day	25,073,225	17.7
At least once a week	1,657,793	1.2
At least once a month	856,773	0.6
Less often	3,520,893	2.5
How many people, besides co-workers,	do you have fo	ace-to-face
contact with in an average week?		
None	19,418,725	13.8
1–5 people	22,800,819	16.2
6–25 people	35,292,637	25.1
26–100 people	32,234,945	23.0
101–200 people	12,016,059	8.6
200+ people	15,220,884	10.8
Varies/depends	3,441,819	2.5

dicated that they did while 10% did not know. Fifty-seven percent of respondents had received some kind of written materials from their employer on workplace violence prevention. Of these, 64% had seen a brochure

on workplace violence and 73% had seen a memo regarding reporting of workplace violence incidents. Only 28% of respondents reported having attended or participated in some kind of workplace violence prevention training. Of these, two-thirds had been to a brief seminar or workshop on general workplace violence issues while 46% had been to a seminar or workshop that addressed workplace violence risk factors and specific prevention strategies and 45% had taken hands-on or classroom training in conflict management or deescalation techniques.

Table 10 shows that nearly 4% of respondents reported having experienced a violent victimization at work. Of these, 68% reported only one type of victimization, 18% experienced two types of victimization and 14% experienced three or more types of victimization while working for their current employer. A much larger percent of the WRS respondents reported having experienced violent victimization (82%) in the workplace rather than verbal abuse (19%) or property/institutional victimization (1%). The majority (67%) of those reporting a violent victimization, experienced a simple assault. A third (33%) of those who experienced violence, experienced an aggravated assault and less than

Table 5
Perceptions of safety at work by WRS respondents

·	Number	Percent
Do you worry about someone in your workplace attacking you?**		
YES	7,018,366	6.5
Which someone [†]		
Customer or client	2,902,865	41.4
Stranger	1,218,284	17.4
Co-worker	988,777	14.1
Patient	963,171	13.7
Employee (current or former)	767,022	10.9
Student	517,663	7.4
Others§	415,010	5.8
Supervisor	205,768	2.9
How safe is your workplace from	crime?	
Very safe	56,862,347	52.3
Somewhat safe	43,670,048	40.2
Somewhat unsafe	6,396,137	5.9
Very unsafe	1,738,936	1.6
How safe is the neighborhood ard	ound your workpla	ce?
Very safe	52,232,177	48.6
Somewhat safe	44,029,658	41.0
Somewhat unsafe	8,882,660	8.3
Very unsafe	2,357,523	2.2
How safe are places you have to t	ravel to as part of	your job?††
Very safe	15,122,364	46.4
Somewhat safe	14,263,599	43.8
Somewhat unsafe	2,539,945	7.8
Very unsafe	637,925	2.0

^{*}Question asked to those who work in one location or different locations.

1% of these respondents experienced a rape or a robbery.

As can be seen in Table 11, of those respondents who reported having experienced at least one violent victimization at work, two-thirds were employed in one of three occupational groups: health care practitioners and technical and support occupations; education, training, and library occupations; or, protective service occupations. Among those respondents who experienced a violent victimization, 67% reported that their workplaces were open to the public.

4. Discussion

The WRS represents the first national level survey of a cross-section of employed persons to estimate the extent of exposure to workplace violence risk factors, per-

Table 6
Use of self-protection and employer knowledge as reported by WRS Respondents

	Number	Percent
Do you carry some type of self protection	on at work or	while
working?		
YES	8,469,556	5.9
Type of self protection*		
Mace or pepper spray	3,817,899	45.1
Firearm	2,513,372	29.7
Knife	2,289,849	27.0
Personal alarm device or "screamer"	1,011,315	11.9
Weapon used to hit	844,163	10.0
Keys, whistle, or other weapon	264,931	3.1
or self-protective measure (e.g., stun		
gun, alarm or communication device)		
Does your employer know you use self-p	protection?	
YES	5,027,272	75.8

^{*}Percentages exceed 100% because respondent could give more than one response.

ceptions of safety at work, security measures in place, knowledge of policies, training, and victimization experience. This article presents an initial descriptive analysis of these data. Future manuscripts will address more specific questions using multivariate analysis of risk factors, victimization, and other WRS data. Additionally, future analyses will focus on direct comparisons between the 2002 WRS and the earlier VRS.

The demographic characteristics of WRS respondents are remarkably similar to the demographic characteristics of the U.S. labor force for the same time period. This lends credibility to the applicability of the findings across the Nation and across various demographic segments. It is not, however, possible to compare the distribution of WRS respondents by occupation to the distribution of occupations across the total employed population or to calculate rates by occupation since a SOC category was available for only 46% of WRS respondents.

The WRS findings are largely positive with regard to workplace violence risk factors reported by this sample of U.S. workers. For example, two-thirds of the respondents reported never carrying or handling money and more than three quarters are never called upon to guard people or property; two of the highest risk work situations for fatal workplace violence. In addition, more than half (56%) of respondents indicated that they have face-to-face contact with 25 or fewer people in an average week. In addition, only 7% of respondents indicated that they worried about someone at work attacking them and nearly 4% indicated that they had experienced a violent victimization while working.

In contrast, surveys of Fortune 1000 companies from 1997 to 2003 conducted by Pinkerton [10] indicate that

 $^{^\}dagger \mbox{Percentages}$ exceed 100% because respondent could give more than one response

[§] Includes known others such as an ex-friend, relative, family member or friend of a coworker, or parent of a student.

^{††}Question only asked to those who work at different locations, who travel in a vehicle, or whose employment involves other travel or combination.

 $\label{eq:Table 7} {\it Table 7}$ Distribution of occupation within leading types of self-protection reported by WRS respondents

Type of self protection	
Mace or pepper spray	3,817,899
(61% have SOC category)	
Protective services occupations	40.6
Sales and related occupations	15.6
Healthcare practitioners, technical, and support occupations	11.7
Education, training, and library occupations	10.8
Firearm	2,513,372
(63% have occupation codes)	
Protective services occupations	71.7
Sales and related occupations	8.8
Transportation and material moving occupations	4.9
Education, training, and library occupations	3.4
Knife	2,289,849
(46% have occupation codes)	
Protective services occupations	25.2
Transportation and material moving occupations	18.4
Sales and related occupations	15.8
Education, training, and library occupations	8.9
Personal alarm device or "screamer"	1,011,315
(68% have occupation codes)	
Protective services occupations	27.2
Healthcare practitioners, technical, and support occupations	17.2
Sales and related occupations	14.8
Education, training, and library occupations	9.2
Weapon used to hit	844,163
(72% have occupation codes)	
Protective services occupations	65.4
Transportation and material moving occupations	9.9
Sales and related occupations	8.1
Education, training, and library occupations	3.6

Table 8
Security measures in workplace as reported by WRS respondents

	Number	Percent
Are there security measures in place where you	work?*	
YES	109,202,520	83.7
Type of security measures [†]		
Receptionist or guard who checks people in	56,250,080	61.6
Burglar alarm system	50,257,934	55.0
Surveillance cameras	42,114,483	46.1
Pass or ID required to enter	35,410,451	38.8
Police or guards for protection	29,953,682	33.8
Locked entry or gate during working hours	24,240,100	26.5
Metal detector	4,811,977	5.3
X-ray inspection of bags/briefcases	2,540,335	2.8
Guard dogs	2,112,303	2.3

^{*}Question only asked to those who work in one location.

workplace violence was identified as the "top security threat" facing corporate America in six of the seven surveys taken during that period. Similarly, there is some level of divergence between the responses of workers in the WRS to those of employers in the BLS Survey of Workplace Violence Prevention (SWVP) with regard

to written workplace violence prevention policies [11]. Specifically, 60% of WRS respondents indicated that their workplace had written guidelines specific to workplace violence while BLS SWVP reports that only 23% of establishments indicated they have formal written workplace violence prevention policies or programs.

 $^{^\}dagger \mbox{Percentages}$ exceed 100% because respondent could give more than one response.

 $\label{eq:table 9} Table 9$ Workplace violence policies and training as reported by WRS respondents

	Number	Percent
Does your employer have written guidelines regarding workplace violence?		
YES	85,539,599	60.1
DO NOT KNOW	13,932,193	9.8
Have you ever received written materials from your employer on workplace violence prevention?		
YES	80,761,369	56.7
Type of written material*		
Brochure on general workplace violence and prevention	51,825,147	64.2
Memo regarding how to report workplace violence	58,749,143	72.7
Memo regarding security measures	47,202,915	58.4
Part of or addressed in general workplace training materials	2,035,315	2.5
Part of or addressed in other formats or materials	3,262,996	4.0
Have you ever attended or participated in workplace violence prevention training?		
YES	40,416,156	28.4
Type of training*		
Brief seminar/workshop on general workplace violence prevention	27,050,508	66.9
Seminar/workshop on general workplace violence risk factors and specific prevention strategies	18,645,483	46.1
Hands-on/classroom training in conflict management or de-escalation techniques	17,972,429	44.5
Hands-on/classroom training in restraint of disruptive persons or management of disruptive behavior	12,727,365	31.5
Part of other safety or security training	898,935	2.2
Part of general workplace training	903,318	2.2
Part of sexual harassment or domestic violence prevention training	801,562	2.0
Part of some other type of training (e.g., self-defense, robbery-prevention)	272,983	0.7

^{*}Percentages exceed 100% because respondent could give more than one response.

 $\label{eq:Table 10} Table~10$ Workplace victimization experiences as reported by WRS respondents

Victimization experiences	Number	Percent
Have you ever experienced workplace violence victimization?		
YES	4,969,591	3.5
Number of types of workplace victimization experienced		
One	3,382,080	68.1
Two	914,665	18.4
Three or more	672,847	13.5
Type of victimization experienced?*		
Violence	4,096,915	82.4
Rape	35,615	0.7
Robbery	3,160	0.1
Simple assault	3,308,837	66.6
Hit, slapped, or knocked you down	1,692,517	34.1
Grabbed, held, tripped, jumped, or pushed you	2,699,021	54.3
Other physical attack/bodily harm	73,952	1.5
Aggravated assault	1,659,075	33.4
Used a gun, knife, or other weapon on you	210,977	4.2
Threatened you with a gun, knife, or other weapon	889,665	17.9
Hit you with an object	995,396	20.0
Verbal abuse/harassment [†]	933,888	18.8
Property [§] /institutional ^{††}	61,607	1.2

 $^{^*\}mbox{Percentages}$ exceed 100% because respondent could have experienced more than one type of victimization.

[†]Includes verbal threats of physical harm, and racial and sexual harassment.

[§]Includes theft and vandalism of personal property.

^{††}Includes crimes against the business such as bomb or anthrax threat or scare and robbery of the business.

Table 11
Violent victimization by occupation and public workplaces as reported by WRS respondents

	Percent experiencing at least one violent victimization
Major occupational group (SOC category)	
Health care practitioners, technical, and support occupations	25.5
Education, training, and library occupations	21.1
Protective service occupations	20.0
Sales and related occupations	12.9
Community and social services occupations	7.7
Workplace open to the public?	
Yes	67.4
No	29.3
Other or combination	3.3

This difference must be interpreted with some caution, however, because both surveys indicate that the likelihood of a workplace having a written policy is substantially higher for larger workplaces and the WRS is a person-based survey (including the self-employed) while the SWVP is an establishment-based survey.

In other areas, there is a great deal of consistency between the responses of workers in the WRS and employers in the SWVP. For example, 84% of WRS respondents reported that their workplace had some type of security measures in place while 72% of employers in SWVP reported having at least one form of security in place. In both surveys, approximately half indicated that some type of electronic surveillance (e.g., camera) was in use. WRS respondents also indicated that a receptionist or guard was in place in more than half of all workplaces. Similarly, over half of employers with 250 or more employees in the SWVP reported the use of staff or security guards to register or check in visitors. With regard to training, 28% of WRS respondents reported having had some kind of workplace violence prevention training; in the SWVP, 20% of private sector establishments had workplace violence prevention training. Of note, the SWVP reveals that larger proportions of public sector workplaces reported having workplace violence prevention training with 32% of local government agencies and 58% of state government agencies reporting offering such training.

With regard to actual incidents of workplace violence, nearly 4% of workers in the WRS reported experiencing some type of victimization while working. The SWVP reports that 5% of private sector establishments reported experiencing a workplace violence incident during the survey period. Again, public sector workplaces differed substantially with 15% of local government agencies and 32% of state government agencies reporting experiencing a workplace violence incident in the previous year.

One critical limitation of the WRS is that SOC category could be determined for just under half of the sample. Given that occupation is one of the primary surrogates we have for workplace risk factors and for targeting prevention efforts, this is an important issue and should be addressed in future research. One step toward improving this is that since July 2001, NIOSH, in partnership with the BJS and the U.S. Census Bureau, has sponsored standardized industry and occupation coding for those respondents to the NCVS that report experiencing a workplace victimization. This will eliminate relying solely on the limited set of occupational categories included in the NCVS 1-Basic Screen Questionnaire.

5. Conclusion

Encouragingly, this cross-section of employed persons largely feels safe from violence while working. Of note, however, are differences observed in the experience of victimization by occupational group. These differences are consistent with previous research and should bolster continued efforts to focus workplace violence prevention efforts in high-risk occupational groups. Future research on workplace victimization should explore risk and protective factors to identify opportunities to transfer successful workplace violence prevention strategies to reduce the risk of victimization for all employees.

Acknowledgement

The findings and conclusions in this report are those of the authors and do not necessarily represent the views of the Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health or National Center for Injury Prevention and Control.

References

- Duhart DT (2001) National Crime Victimization Survey: Violence in the Workplace, 1993–99. Bureau of Justice Statistics Special Report, NCJ 190076.
- [2] Bureau of Justice Statistics (2003) Criminal Victimization in the United States, 2002.
- [3] Cantor D and Lynch JP (2000) Self-report Surveys as Measures of Crime and Criminal Victimization. Measurement and Analysis of Crime and Justice. Criminal Justice 2000; Volume 4, NCJ 182411, U.S. Department of Justice, Washington, DC: U.S. Government Printing Office.
- [4] Bureau of Justice Statistics (2002) Police Public Contact Survey. Supplement to the National Crime Victimization Survey 2002. Form PPCS-1 (5-16-2002).
- [5] Dinkes R, Kemp J, and Baum K (2009) Indicators of School Crime and Safety: 2009. (NCES 2010-012/NCJ 228478), National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education and Bureau of Jus-

- tice Statistics, Office of Justice Programs, U.S. Department of Justice, Washington, DC.
- [6] Lynch JP (1987) Routine activity and victimization at work. J Quantitative Criminol 3, 283-300.
- [7] Collins JJ and Cox BG (1987) Job activities and personal crime victimization: implications for theory. Soc Sci Res 16, 345-360.
- [8] Bureau of Labor Statistics (2006) Standard Occupational Classification (SOC) User Guide, http://www.bls.gov/soc/ socguide.htm, Last updated March 10, 2010, Accessed February 2006.
- [9] Bureau of Labor Statistics (2003) Employment and Earnings, 50 (1).
- [10] Pinkerton (2003) Top Security Threats and Management Issues Facing Corporate America: 2003 Survey of Fortune 1000 Companies.
- [11] Bureau of Labor Statistics (2006) Survey of Workplace Violence Prevention, 2005. USDL 06-1860, U.S. Department of Labor, Washington, DC: US Government Printing Office.