



Workplace Violence in Health Care: Recognized but not Regulated

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Abstract

Workplace violence is one of the most complex and dangerous occupational hazards facing nurses working in today's health care environment. This article includes critiques of the conceptual, empirical, and policy progress of the past decade, a discussion of the need for methodologically rigorous intervention effectiveness research, and a description of a joint-labor management research effort aimed at documenting a process to reduce violence in a state mental health system. The development of a typology of workplace violence has advanced our understanding of the relationship of the perpetrator of the violence to the victim and provided a foundation for conceptual frameworks linking etiology and prevention. Even though health care workers may be exposed to four types of violence in the course of their work, the overwhelming majority of threats and assaults against caregivers come from patients (Type II), justifying emphasis on this type of violence. Individual nurses and direct care providers have very little influence over the level of violence in their workplaces, but through collective action are poised to influence policies designed to protect the health care workforce.

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Workplace violence is one of the most complex and dangerous occupational hazards facing nurses working in today's health care environment. The complexities arise, in part, from a health care culture resistant to the notion that health care providers are at risk for patient-related violence combined with complacency that violence (if it exists) "is part of the job." The dangers arise from the exposure to violent individuals combined with the absence of strong violence prevention programs and protective regulations. These factors together with organizational realities such as staff shortages and increased patient acuity create substantial barriers to eliminating violence in today's health care workplace. Agitated clients in mental health facilities and the emergency department, demented elderly patients in medical and geriatric wards, nursing homes and rehabilitation centers, and any patient with a history of assault in mental health, hospital care, and community health are common sources of verbal and physical violence against nurses and other health care providers. This article will include a critique of the conceptual, empirical, and policy progress of the past decade, a discussion of the need for methodologically

rigorous intervention effectiveness research and description of a joint-labor management violence prevention intervention and evaluation research effort aimed at documenting a process to reduce violence in a state mental health system.

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A dozen years after publication of a 1992 review paper identifying violence as an "emerging hazard" in health care ([Lipscomb & Love, 1992](#)), efforts to describe and explain the problem have proliferated in the literature ([Arnetz, Arnetz, & Soderman, 1998](#); [Bensley, Nelson, Kaufman, Silverstein, & Kalat, 1993](#); [Bensley et al., 1997](#); [CDC/NIOSH, 1996b, 2002](#); [Duncan, Estabrooks, & Reimer, 2000](#); [Flannery, Hanson, & Penk, 1994](#); [Hillbrand, Foster, & Spitz, 1996](#); [Lipscomb & Borwegan, 2000](#); [Love & Hunter, 1996](#); [Toscano & Jack, 1996](#); [UIIPRC, 2001](#); [Warchol, 1998](#)) but few intervention studies are described ([Arnetz & Arnetz, 2000](#); [Runyan, Zakocs, & Zwerling, 2000](#)) and only a handful of states have laws addressing workplace violence in health care workplaces ([Lipscomb, Silverstein, Slavin, Cody, & Jenkins, 2002](#)). The federal government has issued voluntary guidelines for health care and social services employers which outline a comprehensive approach to violence prevention based on time-tested principles of occupational safety and health ([U.S. Department of Labor & OSHA, 1996](#); [U.S. Department of Labor & OSHA, 2004](#)). Yet, in spite of the increased scientific attention to the problem, there are very few violence prevention intervention studies on how to prevent violence toward health care workers. The American Nurses Association (ANA), the International Council of Nurses (ICN) and the American Academy of Nursing (AAN) ([Kingma, 2001](#); [Love & Morrison, 2003](#); [Worthington, 1993](#); [Worthington & Franklin, 2001](#)) as well as health care labor unions are calling for increased intervention effectiveness research and more widespread protective regulations.

Conceptual, Empirical, and Policy Progress

Workplace violence is a concept with ambiguous boundaries. The U.S. Occupational Safety and Health Administration (OSHA) and the U.S. Centers for Disease Control National Institute for Occupational Safety and Health (CDC/NIOSH) define workplace violence as "violent acts (including physical assaults and threats of assault) directed toward persons at work or on duty" ([CDC/NIOSH, 1996a](#)). In another definition, workplace violence includes physical and psychological violence, abuse, mobbing or bullying, racial harassment and sexual harassment ([Cooper & Swanson, 2002](#); [International Council of Nurses, 2000](#)) and can include interactions between co-workers, supervisors, patients, families, visitors, and others. The University of Iowa Injury Prevention Research Center classifies most workplace violence into one of four categories ([Cal/OSHA, 1995](#); [UIIPRC, 2001](#)): [Box 1: Types of Workplace Violence](#). These categories were developed to assist researchers and policy makers to target interventions appropriately.

Box 1. Types of Workplace Violence ([UIIPRC, 2001](#))

- **Type I (Criminal Intent):** Results while a criminal activity (e.g., robbery) is being committed and the perpetrator has no legitimate relationship to the workplace.
- **Type II (Customer/client):** The perpetrator is a customer or client at the workplace (e.g., health care patient) and becomes violent while being served by the worker.
- **Type III (Worker-on-Worker):** Employees or past employees of the workplace are the perpetrators.
- **Type IV (Personal Relationship):** The perpetrator usually has a personal relationship with an employee (e.g., domestic violence in the workplace).

This article will limit its focus to violence as defined by OSHA/NIOSH and, more specifically, Type II Workplace Violence. Even though health care workers may be exposed to all four types in the course of their work, the overwhelming majority of threats and assaults against caregivers come from patients, (or their families and visitors) justifying our emphasis on this type of violence ([Lipscomb et al., 2002](#); [Toscano, 1995](#); [UIIPRC, 2001](#)).

Workplace bullying, verbal abuse and sexual harassment from co-workers (or Type III workplace violence), while important to understand in terms of the

workplace psychosocial climate, will not be addressed in this article. The development of this typology of workplace violence has advanced our understanding of the relationship of the perpetrator of the violence to the victim and provided a foundation for conceptual frameworks linking etiology and prevention. Development and evaluation of conceptual models to guide the design and testing of intervention strategies for Type II workplace violence are urgently needed.

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Conceptual Frameworks

Three frameworks, the Haddon Matrix, the National Institute for Occupational Safety and Health/National Occupational Research Agenda (NIOSH/NORA) Organization of Work Framework, and the Broken Windows Theory, represent theoretical perspectives from injury epidemiology, occupational psychology and criminal justice applied to workplace violence prevention. Each theory has been advanced to guide workplace violence research, but none has been sufficiently tested in the published literature. Starting with the Haddon Matrix each will be briefly described.

The Haddon Matrix. This matrix was used to critically evaluate published workplace violence intervention research. This framework proved to be quite effective in guiding injury epidemiology several decades ago ([Haddon, 1972, 1974](#)) but has only recently been suggested for use in workplace violence research ([Runyon, 2000](#)). The Haddon Matrix is a framework designed to apply the traditional public health domains of host, agent and disease to primary, secondary, and tertiary injury factors. When applied to workplace violence, the host is the victim of workplace violence, such as a home health nurse. The agent/vehicle is a combination of the perpetrator and their weapon and the force with which an assault occurs. The environment is divided into two sub-domains: the physical and the social environments. The location of an assault such as the home, street, or hospital ward is as important as the social setting such as patient interaction, presence of co-workers and supervisor support. [Table 1](#) provides a hypothetical application of the Haddon Matrix to workplace violence research in the home visiting workplace setting.

Table 1. An Application of the Haddon Matrix to Workplace Violence Prevention in the Home Health Workplace

Phases	Host	Agent	Physical Environment	Social Environment
Pre-Event (prior to assault)	Knowledge Self-efficacy Training	History of prior violence communicated	Assess objects that could become weapons, actual weapons. Egress.	Visit in pairs, or with escort
Event (assault)	De-escalation Escape techniques Alarms/2-way phones	Reduce lethality of patient via increasing your distance	Egress, alarm, cell phone	Code and security procedures
Post-Event (post-assault)	Medical care/counseling Post-event debriefing	Referral Law enforcement	Evaluate role of physical environment	All staff debrief and learn

It is a classical epidemiological framework that uses a matrix to categorize "pre-event," "event," and "post-event" activities according to the infectious disease vernacular, host (victim), vector (assailant or weapon), and environment. A third dimension allows prevention strategies to be further classified as behavioral, administrative,

or environmental. Strengths of this model include the ability to assess "pre-event" or precursors to violence in order develop primary preventive measures.

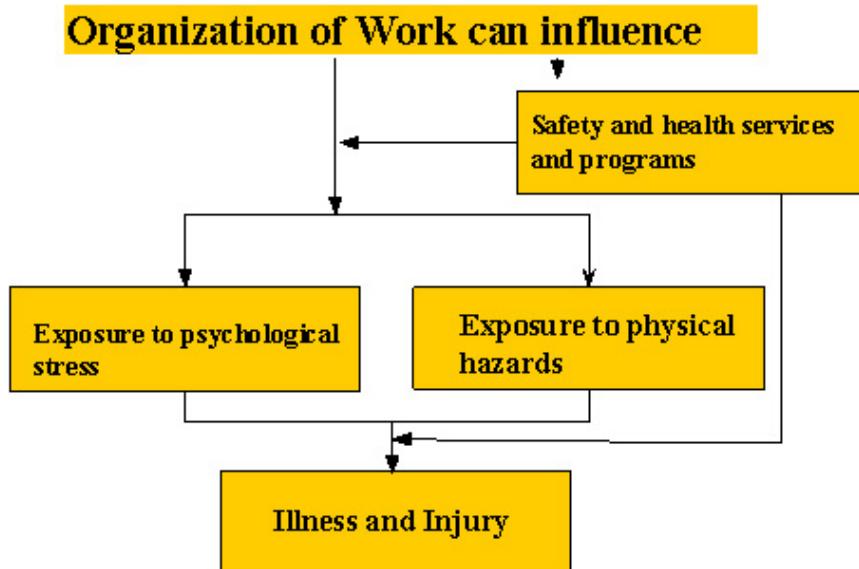
...work
organization...influences
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Work Organization Framework. The National Institute for Occupational Safety and Health/National Occupational Research Agenda Organization of Work team (NIOSH/NORA) developed this model during the multi-stakeholder National Organizational Research Agenda setting process ([U.S CDC/NIOSH, 2001](#)). Organization of work refers to management and supervisory practices, as well as production processes and their influence on the way work is performed. This is defined by NIOSH as "the work processes (the way jobs are designed and performed) and the organizational practices (management and production methods and accompanying human resources policies) that influence job design ([Huang, Feuerstein, & Sauter, 2002](#)). It makes sense to look at work organization especially with the emergence of managed care, the priority given to cost containment, and conversions to for-profit health care institutions over the last two decades ([Lipscomb, 2000](#)). The NIOSH model theorizes that work organization (a multi-level and multi-dimensional construct) influences occupational illness and injury through the availability of occupational health services and activities (for example, violence prevention policies and programs including training and engineering controls such as lighting) and by influencing exposure to psychosocial (i.e., threatening patients, families, and communities) and physical (i.e., violent patients and violence communities) hazards ([McPhaul & Lipscomb, 2003](#)).

In addition to occupational safety and health of the workforce, work organization (or job design) is a potential factor in the context of patient safety and in analyses of the reasons for the current nursing shortage ([JCAHO, 2002](#); [Page & Committee, 2004](#)). One of the most successful occupational safety and health initiatives in health care began as a patient safety program to reduce falls and, by modifying the work organization, evolved into a highly effective program to reduce back injuries in health care workers ([Nelson, 2003](#)). In summary, NIOSH has developed the Work Organization Framework to explain the influence of job design on occupational injuries and it is potentially useful for guiding workplace violence research as well.

Figure 1. NIOSH/NORA Work Organization Framework for Occupational Illness and Injury

Pathways between organization of Work and Illness and Injury (NIOSH/NORA 2002)



Broken Windows Theory. This theory is a community criminal justice theory that embraces the notion that ignoring or tolerating low-level crime creates an environment conducive to more serious crime. Hesketh et al. (2003) argue that when verbal abuse, threats of assault and low level daily violence are tolerated in health care environments more serious forms of violence will follow. To test this theory, more sophisticated and representative measures of verbal threats and low-level assaults must be developed. Current U.S. occupational surveillance systems capture lost work time injuries due to assaults in private sector workplace (U.S. Bureau of Labor Statistics), crime victimizations (including assault) occurring on the job (U.S. Department of Justice, National Crime Victimization Survey), and fatalities in all sectors (U.S. Census for Fatal Occupational Injuries). There is wide-spread agreement that non-fatal assaults without lost work time and verbal threats of assaults are widely under-reported resulting in an incomplete picture of the extent of Type II workplace violence (Bensley et al., 1993; Hesketh et al., 2003; Lion, Snyder, & Merrill, 1981) and an inability to examine the relationship between verbal threats, low level physical assault and more serious forms of assaults and violence.

Magnitude of the Problem

The health care sector continues to lead all other industry sectors in incidence of nonfatal workplace assaults.

The Department of Justice National Crime Victimization Survey (NCVS) for the years 1993 through 1999 found, on average, 1.7 million episodes of victimization at work per year (Duhart, 2001). The health care sector continues to lead all other industry sectors in incidence of nonfatal workplace assaults. In 2000, 48% of all nonfatal injuries from violent acts against workers occurred in the health care sector (BLS, 2001). Nurses, nurse's aides and orderlies suffer the highest proportion of these injuries. Non-fatal assaults on health care workers includes assaults bruises, lacerations, broken bones and concussions but those reported to the Bureau of Labor Statistics (BLS) only include injuries severe enough to result in lost time from work. The median number of days away from work from assault or violent act is five days, with almost a quarter of these injuries resulting in longer than 20 days away from work (BLS, 2002). Even though OSHA's definition includes verbal threats of assaults, the Bureau of Labor

Statistics (BLS), OSHA's data gathering agency, does not collect statistics on verbal threats of assaults.

Hospitals. A recent Canadian study of 8,780 staff nurses from 210 hospitals in two provinces found that 46% experienced one or more types of violence in the last five shifts worked (response rate 52.8% and 48.6% in the two provinces). In this same study, 16.9% and 21.0% of the staff respectively reported experiencing a physical assault in the past five shifts. Physical assault was defined as being spit on, bitten, hit or pushed ([Duncan, 2001](#)). Another finding of this study showed that, 70% nurses do not report the violent incidents.

Emergency Departments. Workplace violence has been studied extensively in mental health and, to a lesser extent, in emergency departments ([Bensley, et, al, 1997](#); [Hesketh, et. al, 2003](#); [Presley & Robinson, 2002](#); [May & Grubbs, 2002](#)). Both Canadian and U.S. researchers have described the prevalence of verbal threats and physical assaults in intensive care, emergency departments, and general wards. One Florida study found that 100% of emergency department nurses experience verbal threats and 82% reported being physically assaulted (n=86, one hospital) while the multi-hospital Canadian survey found 39.9% of emergency nurses reported being threatened with assault and 21.9% reported physical assaults. In both studies the staff on other units also experienced verbal threats and physical assaults at unacceptably high levels, but, not surprisingly, the emergency department staff experienced the highest volume. Explanations for the high level of violence in emergency departments include presence of weapons, frustrations with long waits or medical care, dissatisfaction with hospital policies and the levels of violence in the community served by the emergency department ([Lipscomb & Love, 1992](#); [Lipscomb & Borwegan, 2000](#); [U.S. Department of Labor, 1996, 2004](#); [U.S. CDC/NIOSH, 2002](#))

Mental Health. In the national survey mentioned above ([Duhart, 2001](#)), the victimization rate for mental health professionals and custodial workers was 6.82 per 100 workers compared to a rate of 1.26 per 100 workers across all occupations combined. In a Washington State psychiatric facility, 73% of staff surveyed had reported at least a minor injury related to an assault by a patient during the past year. Only 43% of those reporting moderate, severe, or disabling injuries related to such assaults had filed for workers' compensation. The survey found an assault incidence rate of 43.7 per 100 employees per year for mental health care workers, whereas the hospital incident reports indicated a rate of only 35 per 100 ([Bensley, 1993, 1997](#)). Assault management training in the past year was associated with less severe injuries. Working in isolation, the occupational of mental health technician, and working on the geriatric-medical hospital unit were each associated with more severe injuries in the past year.

Nursing Homes and Long Term Care. A cross-sectional mailed survey of unionized nursing home assistants from 49 nursing homes in West Virginia, Ohio, and Kentucky (n=539, response rate 60.2%) found that 58.2% experience assaults with consequences such as major soreness, cuts, bleeds, or bruises lasting overnight *in the past twelve months* and 66.2% report physical contact resulting in minor soreness, superficial abrasions, scratches and small bruises *daily*). A recent review of worker's compensation claims from 1990 to 1997 in Oregon shows that nursing aides/orderlies had the highest overall claims rate (46.40 per 10,000 workers; CI = 39.21 – 53.59) ([McCall & Horwitz, 2004](#)). Examining assaults against caregivers in long term care and geriatric care reveals a high prevalence of daily physical assaults such as spitting, hair pulling, scratching, and slapping ([Gates, Fitzwater, & Meyer, 1999](#); [Lusk, 1992](#); [Menckel & Viitasa, 2002](#)).

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Home and Community Health. It is not possible to estimate with precision the frequency of workplace violence in home and community health settings from published studies. Home health is a rapidly growing employment sector plagued with chronic manpower shortages ([Maryland Healthcare Commission, 2001](#)). The U.S Bureau of Labor Statistics (BLS), reports that for the years 1996 – 2000, there were nine homicides to health care workers in "private residences" ([McGovern et al., 2000](#)). While fatalities attract much attention, home health workers, like other health care workers, are more probably likely to suffer non-fatal threats and assaults. An analysis of West Virginia workers compensation claims in home health workers in 1995 and 1996 showed 27 (7%) of injuries in home health workers occurred from being struck by an object and 24 (6%) by laceration/puncture/foreign body. These injuries may or may not represent assault, however, in the case of "struck by object" violence is a likely explanation ([Gates et al., 1999](#)). A Texas study found that 38% of 364 public health field-workers experienced 611

violent events over the course of their employment. This predominantly non-professional worker population provided sexual and infectious disease follow-up to clients in their homes and places of business in the community ([Schulte, Nolt, Williams, Spinks, & Hellsten, 1998](#)).

Organizational and Environmental Risk Factors

The presence of co-workers has been identified as a potential deterrent to assault in health care.

A recent NIOSH report ([CDC/NIOSH, 2002](#)) summarizes the risk factors for occupational violence to hospital workers. For example, working directly with volatile people, especially those with a history of prior assaultive behavior is a known risk factor for hospital workers. Understaffing, especially during times of increased activity such as meal times and visiting hours, is associated with a higher risk of assaults on hospital workers. Staff working alone or in isolation from other staff are vulnerable to assault. Meals times and times of increased activity on hospital wards appear to result in agitation and violence in some hospitalized individuals. The presence of co-workers has been identified as a potential deterrent to assault in health care. ([CDC/NIOSH, 2002](#))

Transporting patients, long waits for service, inadequate security, poor environmental design and unrestricted movement of the public are associated with increased risk of assault in hospitals and may be significant factors in social services workplaces as well. Finally, lack of staff training and the absence of violence prevention programming are associated with elevated risk of assault in hospitals.

Box 2. Risk for Violence In Hospitals ([NIOSH, 2002](#))

- Working directly with volatile people, especially, if they are under the influence of drugs or alcohol or have a history of violence or certain psychotic diagnoses
- Working when understaffed—especially during meal times and visiting hours
- Transporting patients
- Long waits for service
- Overcrowded, uncomfortable waiting rooms
- Working alone
- Poor environmental design
- Inadequate security
- Lack of staff training and policies for preventing and managing crises with potentially volatile patients
- Drug and alcohol abuse
- Access to firearms
- Unrestricted movement of the public
- Poorly lit corridors, rooms, parking lots, and other areas

Intervention Effectiveness Research Into Violence Prevention

The first report to the nation on workplace violence underscores the lack of systematic national data collection on workplace assaults, the paucity of data evaluating violence prevention strategies and the methodological flaws in published intervention research to date ([UIIPRC, 2001](#)). Runyan et al. ([2000](#)) reviewed the violence prevention intervention literature as background to this report and found 137 papers mentioning violence prevention intervention, however, only nine papers reflected data based intervention evaluations. Virtually all the data based interventions took place in health care. Five studies evaluated violence prevention training interventions, three examined post-incident psychological de-briefing programs and two evaluated administrative controls to prevent violence. All were quasi-experimental, without a formal control group.

For example, Carmel and Hunter ([1990](#)) examined the relationship between participation in training and aggressive behavior by inpatients on 27 inpatient wards in a California State hospital. They found that wards with over 60% of staff attendance at the training experienced much lower rates of injury (7.4/100 staff) than wards that had lesser staff attendance (injury rate of 20.0/200 staff). The ecologic design of this study makes it impossible to determine if the training influenced assault rates in the trained staff. Lehmann, Padilla, Clark, and Loucks' ([1983](#)) work reports on a violence prevention training intervention that evaluated knowledge and confidence levels of employees rather than assault experience. The intervention resulted in significantly higher knowledge and confidence in trained staff ([Carmel & Hunter, 1990](#); [Lehmann et al., 1983](#)). The design of

published violence prevention interventions to date lack systematic rigor in the evaluation; consequently, there is an urgent need for greater reliance on conceptual and theoretical models to guide research as well as stronger evaluation designs that evaluate "process, impact and outcome measures" ([Runyan et al., 2000](#)).

Since Runyan's review paper, Arnetz and Arnetz ([2000](#)) reported on a randomized controlled trial of 47 health care workplaces examining a violence prevention intervention involving "continuous registration" of violent events for one year with "structured feedback" from supervisors. This study found that the intervention hospitals reported significantly more violence incidents than the control hospitals. The authors' attributed this finding to an increased awareness of the violence and improved supervisory support at the intervention facilities.

It is important to determine intervention measures acceptable to direct care staff. Hospital nurses who participated in a cross sectional survey reported the following intervention measures as acceptable: providing specially trained security staff for high risk situations (76.7%), training in techniques for reducing aggression (66.3%), use of metal detectors at the ED entrance (62.8%) and specialized security police protections for staff members when violent patients are hospitalized (60.5%). Nurses felt that post-incident assault services such as medical care, mandatory reporting, immediate discharge or removal of perpetrator, access to counseling, and being able to leave work for the remainder of the day should be made available ([May, 2002](#)).

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None of the intervention studies to date evaluate a comprehensive violence prevention intervention that incorporates the risk/hazard assessment and documents baseline risk factors, assault experience, and violence prevention strategies. Nor do any of the published intervention studies document the organizational process for implementing a violence prevention intervention. Finally, a comparison of post intervention assault experience and risk factors to the pre-intervention levels along with the inclusion of control workplaces is essential to fully evaluate a comprehensive violence prevention intervention ([Robson, Shannon, Goldenhar, & Hale, 2001](#)). One such study was recently completed and preliminary results will be discussed here.

A Joint Labor-Management Violence Prevention Intervention and Evaluation

The OSHA Violence Prevention Guidelines

In 1993, after the murder of a state employee, Cal OSHA (the California OSHA program) published the first set of OSHA guidelines describing the components of a comprehensive workplace violence prevention program. After several years of pressure from a multi-union task force on workplace violence, federal OSHA followed California's lead in 1996, issuing a similar set of guidelines, entitled *Guidelines for Preventing Workplace Violence for Health Care and Social Service Workers*. As described by OSHA, the essential elements in developing a violence prevention program mirror those for any comprehensive safety and health program and include the following:

1. *Management commitment* must be evident in the form of high-level management involvement and support for a written workplace violence prevention policy and its implementation.
2. Meaningful *employee involvement* in policy development, joint management-worker violence prevention committees, post-assault counseling and debriefing, and follow-up are all critical program components.
3. *Worksite analysis* includes regular walk-through surveys of all patient care areas and the collection and review of all reports of worker assault. A successful job hazard analysis must include strategies and policies for encouraging the reporting of all incidents of workplace violence, including verbal threats that do not result in physical injury.
4. *Hazard prevention and control* includes the installation and maintenance of alarm systems in high-risk areas. It may also include the training and posting of security personnel in emergency departments. Adequate staffing is an essential hazard prevention measure, as is adequate lighting and control of access to staff offices and secluded work areas.
5. *Training and education* must include pre-placement and periodic, educationally-appropriate training regarding the risk factors for violence in the health care environment and control measures available to prevent violent incidents. Training should include skills in aggressive behavior identification and management, especially for staff working in the mental health and emergency departments.

The OSHA Violence Prevention guidelines were the basis of a four-year research collaboration (1999-2003) between an academic research team, a state mental health system, and a joint-labor management health and safety committee ([Lipscomb, 2002, 2003](#)). Preliminary work in two state mental health hospitals provided

evidence for the feasibility of implementing the OSHA Violence Prevention Guidelines using a participatory approach to craft facility or ward-specific processes ([Rosen, 1999](#)). The project involved three intervention facilities and three comparison or "usual care" facilities. All facilities had computerized incident reporting capabilities and all facilities provided in-patient care to the high-risk mentally ill. There was a long history of labor involvement in reducing the violence hazard and strong contract language providing for violence prevention activities such as training, data collection and post-assault care. The following provides a brief description of the project activities under each element of the OSHA Violence Prevention Guidelines.

Management commitment and employee involvement. Intervention facilities were chosen based on demonstrated management commitment to violence prevention, willingness to participate in the intervention as designed, and ability to collect computerized violence incident data. Each intervention facility formed a facility level advisory group comprised of direct care staff and management representatives. These labor-management facility advisory committees provided input during each stage of the project and directed every aspect of the intervention at their facilities. A project coordinator who was an employee of the state was responsible for documenting the facility level activities. The coordinator attended the advisory committee meetings and provided minutes for study record.

Box 3. OSHA Violence Prevention Guidelines for Healthcare And Social Services ([OSHA, 3148-01R 2004](#))

- Management Commitment and Employee Involvement
- Worksite Analysis
- Hazard Prevention and Control
- Safety and Health Training
- Recordkeeping and Program Evaluation

Worksite hazard assessment. The project included three hazard analysis activities, staff focus groups, environmental audit, and staff surveys. The focus groups provided a confidential forum for staff to discuss the prevalence of violence in their facilities and their perception of the etiology of the violence. Staff were also asked to recommend strategies to prevent or eliminate violence in their facilities. A professional moderator provided summaries of the findings from the focus groups, which were in turn provided to the facility, project advisory groups (FPAG's) and made available to all staff.

...essential elements [for] a violence prevention program
[include]...management commitment...employee involvement...worksite analysis...hazard prevention and control...training and education.

An architect with experience in security designs conducted the environmental audits in each of the intervention facilities. FPAG members, the study coordinator and principal investigator accompanied the architect on these highly instructional tours. Each facility received a report that included short and long-term recommendations.

The staff survey developed was informed by the focus group findings and reviewed by the FPAG's and state-level advisory group (SPAG). The survey was based on Bensley's ([1993](#)) survey and included questions asking about six progressively more severe levels of violence. These items, including verbal threats of assaults, allowed the project investigators to assess the level of verbal threats and low level physical contact (assault without injury) as well as assaults with mild, moderate, severe, and disabling injuries. Furthermore, questions assessing procedural and communication risk factors, work organization factors including floating, overtime, and mandatory overtime, perceptions of the quality of the OSHA Violence Prevention elements at their facility and perceptions of the quality of violence prevention training were included. The baseline and Time 2 surveys and the computerized incident reports provided cross-sectional measures of violence before and after the two-year intervention period.

Hazard prevention and control. Each intervention facility designed its own hazard control strategies based on the findings of their focus groups, their environmental audit, and their staff survey. Control strategies are any

engineering, administrative, or behavioral activities designed to protect workers from violence. For example, improved change of shift communication became a control strategy in one mental health facility, and new personal alarms systems were a control strategy in a different facility. Mid-way through the intervention period, direct care staff were brought together for a series of "solutions-mapping" sessions designed to allow direct care staff and management to work collectively on the issues of highest priority.

The project demonstrated the feasibility of implementing the OSHA Violence Prevention Guidelines in a state mental health system and the ability to modify facility and ward level risk factors for violence. The importance of management commitment toward reducing violence episodes as well as certain work organization risk factors were key predictors of violence in these facilities. The context of implementing a performance-based intervention in three state mental facilities includes factors which the investigators could neither measure nor control including societal crime, state budget deficits, and mental health policy shifts surrounding seclusion and restraints. Yet, the project's findings can be applied to other health care settings as well. Each element of the guidelines is performance-based, but can be uniquely operationalized. For example, not all health care workers are organized in unions, so the employee involvement element might be operationalized using new or existing committees or administrative entities. The importance of a systematic, comprehensive violence prevention approach including upper management and direct care staff cannot be over emphasized. ([Lipscomb, 2003](#)).

Conclusion

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As indicated earlier, workplace violence is a complex issue in today's health care environment and nurses acting on their own have very little influence over the level of violence in their workplaces. Yet nurses as members of health and safety committees, professional associations, collective bargaining units, management teams, community health agencies, and academic centers can make tremendous progress in creating a safer work environment. Conceptual, empirical, and policy advancements of the last decade have been reviewed. A case for more intervention effectiveness research has been made, and an example of an academic, union, and employer partnership has been described. Other successful occupational safety initiatives such as bloodborne pathogen prevention required protective policies in the form of a mandatory OSHA standard as well as integration of staff safety indicators into Joint Commission on Accreditation of Hospitals (JCAHO) inspections. The scientific community, government regulators, health care employers, professional associations, and health care unions should craft a regulation acceptable to all that will reduce the violence endemic in today's health care environment.

Box 4. Workplace Violence Resources

1. OSHA's on-line Hospital e-tool on Workplace Violence - www.osha.gov/SLTC/etools/hospital/hazards/workplaceviolence/viol.html. This e-tool is an excellent comprehensive approach to violence prevention for hospitals and health care employers.
2. Public Employees Federation on-line Resource List for Workplace Violence. www.pef.org/healthandsafety/resource_list_workplace_violence_prevention.htm
3. Guidelines for Preventing Workplace Violence for Health Care and Social Service Workers, Appendix A: Workplace Violence Program Check lists. These workplace check lists were reprinted with permission from the American Nurses Association, Promoting Safe Work Environments for Nurses www.osha.gov/SLTC/workplaceviolence and [www.nursingworld.org/MainMenuCategories/OccidentalEnvironmental/occupationalhealth/workplaceviolence/ANAResources/PreventingWorkplaceViolence.aspx](http://www.nursingworld.org/MainMenuCategories/OccationalandEnvironmental/occupationalhealth/workplaceviolence/ANAResources/PreventingWorkplaceViolence.aspx)
4. Shogren, E. (2004). Be Aggressive Toward Violence. *AJN*, 104(5) – Include practical tips for nurses in handling violence in today's hospitals.

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Dr. Lipscomb is a Professor at the University of Maryland School of Nursing. She is the principal investigator of "Evaluation of OSHA Violence Prevention Guidelines in Mental Health" and two other NIOSH-funded workplace violence projects. She is the author of numerous papers and chapters on workplace violence and has served on the Board of Scientific Counselors for NIOSH. She has been active in occupational health policy and research for over twenty years. She is a professor in the Department of Family and Community Health at the University of Maryland School of Maryland and is directing Ms. McPhaul's dissertation.

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