Evaluation of Safety and Security Programs to Reduce Violence in Health Care Settings

FINAL REPORT

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Sponsored by the National Institute for Occupational and Environmental Health
(NIOSH contract 200-2001-08014 and NIOSH R01-OH007934)

September 30, 2001 – September 31, 2006 with ongoing data analysis

Table of Contents

List of abbreviations:

CA = California
NJ = New Jersey
Act = California Hospital Security Act
IIPP = Illness and Injury Prevention Program

ABSTRACT

Objective: Health care workers, especially those providing emergency and psychiatric care, have long been recognized as having a high risk of work-related assault. Nurses are at particularly high risk and they experience the highest reported rates of violence victimization among occupations in the healthcare industry. Although hospital violence is a growing concern, little is known about existing programs or methods to influence hospitals to establish violence prevention and response systems. This study compared workplace violence programs in the high-risk hospital areas of the Emergency Department, the Psychiatric Department, and independent Psychiatric Facilities.

Methods. Participating hospitals were identified through a census of licensed acute care hospitals in California and New Jersey. Acute care hospitals were divided into the categories of Level I and II Trauma Centers, Level III and IV Trauma Centers, Acute Care Hospitals without a designated trauma status, and Psychiatric Facilities. Acute care hospitals without a trauma designation were categorized into those with 300 beds or more and those with fewer than 300 beds. In New Jersey, hospitals were randomly selected within each of these categories to represent the statewide distribution. The size of California made it difficult to collect a random sample from the entire state. The sample was selected from 25 of the 58 counties, representing both urban and rural areas of the state. These counties covered approximately 68% of the California population and 65% of the state's hospitals. In California, 144 hospitals were invited to participate and 134 agreed, for a participation rate of 93%. In New Jersey, 81 hospitals were invited to participate, and 54 agreed, for a response rate of 66.7%.

Information was collected through interviews, a facility walk-through, and review of written policies, procedures, and training material. Programs were scored on the components of training, policies and procedures, security, and environmental approaches.

Results. We found that almost every hospital had taken some steps to reduce violence. Although many hospitals had comprehensive violence prevention programs, many of the programs were severely deficient. When comparing programs in Emergency Departments, California had significantly higher scores for training and policies/procedures, but there was no difference for security and environmental approaches. When comparing Psychiatric Units and Facilities, California had significantly higher scores for policies/procedures, environmental control, and security, but no difference was found for training. In both units, program components were not highly correlated. For example, hospitals with a strong training program were not more likely to have strong policies and procedures.

Conclusions. Most hospitals in California and New Jersey had implemented a workplace violence prevention program, but important gaps were found.

HIGHLIGHTS/SIGNIFICANT FINDINGS

We found that all hospitals had implemented some workplace violence prevention program components. The most commonly found approaches were in the form of security equipment, and all hospitals had purchased at least some types of equipment. However, based on a lack of high correlations between different types of programs, workplace violence prevention programs were not well coordinated.

In California, rates of employee assault decreased following implementation of the Hospital Security Act in emergency departments (-20.3%) and psychiatric units/facilities (-43.7%), and psychiatric units/facilities had higher violent event rates than emergency departments in both the pre- and post- initiative periods. Although psychiatric unit/facility employees are at greater risk of being assaulted than emergency department employees, violent events occurring in both departments are very similar with respect to the circumstances of the event, identity of the perpetrator, and type of weapons used. Employee characteristics are also very similar with respect to occupation, gender and age.

Assaults occurring to emergency department and psychiatric unit/facility employees was tracked using OSHA Logs and Employers' Reports of Occupational Injury and Illness. These sources were used because they are the only standardized reporting systems used across all hospitals. However, these systems capture the more severe outcomes, specifically those that result in at least one full day away from work or restricted work duty. Therefore, less severe outcomes of violent events will likely go unrecorded. This, in combination with employee under-reporting of violent events, suggests that the rates of assault provided in this report are under-estimated and the magnitude of assault outcomes is much greater.

OSHA Logs and Employers' Reports do not provide detailed information about the circumstances of the violent event, which could limit prevention efforts. For example, the specific location of the event was unknown in over 70% of all events and the activity at the time of the event was unspecific in over 40% of all events. Since hospitals are required to maintain OSHA Logs and keep them on the premises for at least three years, they can provide a mechanism for tracking events over time. This could especially be accomplished now that electronic OSHA Log documentation is becoming more mainstream. However, to adequately inform prevention efforts and examine change over time, more detail about the circumstances of the event should be collected and done so in a systematic way.

TRANSLATION OF FINDINGS

We found that almost every hospital had taken some steps to reduce violence. Although many hospitals had comprehensive violence prevention programs, many of the programs were severely deficient. Based on our findings, we have several recommendations:

- Hospitals could benefit greatly from improved surveillance and reporting. Many hospitals did not have written procedures to track and learn from reported violent events. Other hospitals had multiple, independent reporting systems that could not provide an overall picture of the violent events that had occurred. Ongoing examination of reported violent events is the best method to develop evidence-based and tailored programs that work well in each specific hospital environment.

- Enhanced efforts should be made to encourage coordination between health care and security staff. Medical and security staff rarely reported training together, and medical staff often reported dissatisfaction with security staff. The few hospitals that had coordination between medical and security staff reported very high satisfaction rates. Strategic planning should be coordinated with representative from all effected groups.

- Training programs need to be tailored to the specific hospital environment. Specifically, they should include a review of trends in violent events and information on hospital policies, procedures, and security equipment. While most programs addressed the major issues in violence prevention and response, the information was predominantly from an outside source with no integration with specific hospital information. We recommend that systematic evaluations of these training programs be evaluated to identify the most effective and efficient methods to deliver workplace violence training, including training content, length, modality, and trainer fidelity.

- Although all hospitals trained the majority of personnel in the ED and Psychiatric units, no hospitals trained all employees regularly stationed in the unit (for California hospitals, this is specified in the law). The most common omissions from training were physicians and contract employees of all job categories.

- Workplace violence training often occurred on a recurring schedule, and sometimes only once per year. Employees hired just after one of the scheduled training sessions may work in the unit for a very long time before receiving any formal training.

- All hospitals had installed security equipment and made attempts to control the physical environment. While some of these efforts were highly sophisticated, some were uncoordinated and insufficient to protect the unit. We recommend that security equipment be installed in response to specific hazard assessments conducted by trained security personnel in conjunction with their unit staff, and that scientific evaluations be conducted to identify the most effective equipment within different hospital settings.

- Few hospitals had effective systems to communicate and alert staff about the presence of violent patients. The most common system involved writing information within the patient's chart, which is not accessible to non-medical personnel, including security guards.

- In general, security programs were less complete in Psychiatric Units than in Emergency Departments. Psychiatric facilities were less likely to rely on security equipment and security guards, and had less rigorous training programs. They also had higher rates of reported violence.

- Health care workers from the surveyed facilities were not aware of existing sources of information about reducing violence, such as Cal/OSHA or OSHA Guidelines. However, security and risk assessment personnel were more likely to be aware and to use them. Reference to these resources were not present in the printed materials provided for policies or training.

- Rates of employee assault decreased following implementation of the Hospital Security Act in emergency departments (-20.3%) and psychiatric units/facilities (-43.7%), and psychiatric units/facilities had higher violent event rates than emergency departments in both the pre- and post- initiative periods. Although psychiatric unit/facility employees are at greater risk of being assaulted than emergency department employees, violent events occurring in both departments are very similar with respect to the circumstances of the event, identity of the perpetrator, and type of weapons used. Employee characteristics are also very similar with respect to occupation, gender and age.

- Assaults occurring to emergency department and psychiatric unit/facility employees was tracked using OSHA Logs and Employers' Reports of Occupational Injury and Illness. These sources were used because they are the only standardized reporting systems used across all hospitals. However, these systems capture the more severe outcomes, specifically those that result in at least one full day away from work or restricted work duty. Therefore, less severe outcomes of violent events will likely go unrecorded. This, in combination with employee under-reporting of violent events, suggests that the rates of assault provided in this report are under-estimated and the magnitude of assault outcomes is much greater.

- OSHA Logs and Employers' Reports do not provide detailed information about the circumstances of the violent event, which could limit prevention efforts. For example, the specific location of the event was unknown in over 70% of all events and the activity at the time of the event was unspecific in over 40% of all events. Since hospitals are required to maintain OSHA Logs and keep them on the premises for at least three years, they can provide a mechanism for tracking events over time. This could especially be accomplished now that electronic OSHA Log documentation is becoming more mainstream. However, to adequately inform prevention efforts and examine change over time, more detail about the circumstances of the event should be collected and done so in a systematic way.

OUTCOMES/RELEVANCE/IMPACT

Although hospitals are required to address workplace violence prevention, an evidence base to suggest the most effective approaches is not available in the scientific literature. Resources that do exist, such as guidelines for hospital security from Cal/OSHA and OSHA, are not widely used by hospitals that do have programs. This study provides a description of workplace violence program components that have been implemented by a representative sample of hospitals, and hospitals can use these measures as a benchmark for their own programs. The recommendations from this study can also help hospitals identify weaknesses in their own programs so that they can best focus resources to address important issues.

We found that the California law had an important impact on workplace violence prevention programs in California hospitals. Legislation is one of many types of approaches to require that safety components be in place. However, legislation would likely be more effective if mechanisms for enforcement were in place. More importantly, a growing body of evidence about effective strategies would likely be the best incentive for hospitals to devote more resources to safety.

In order to provide an impact from this study, summary results have been presented to many stakeholders. A written summary of overall findings was sent to each participating hospital. Results were presented to each participating research agency, as well as to the New Jersey Hospital Association.

SCIENTIFIC REPORT: PROPRIETARY FINDINGS

I. INTRODUCTION

Scope of the problem. Health care workers, especially those providing emergency and psychiatric care, have long been recognized as having a high risk of work-related assault. The National Crime Victimization Survey reports that between 1992 and 1996 more than 600,000 violent victimizations occurred to workers in the healthcare industry (Warchol, 1997). Nurses are at particularly high risk, with an annual average of 69,500 reported violent victimizations. This corresponds to an annual rate of 24.8 victimizations per 1,000 nurses, which is the highest rate among occupations in the healthcare industry. The rate of assault injuries to psychiatric nurses has been estimated at 16 per 100 employees per year, which exceeds the annual rate of all injuries found in many high risk occupations (Carmel and Hunter, 1989).

A survey of over 1,000 Emergency Department nurses in Pennsylvania indicates that during their careers, 97% experienced verbal abuse, 94% physical threats, and 66% had been physically assaulted (Mahoney 1991). The reported proportion of psychiatric health care workers who report having been assaulted at least once in their careers ranges from 43% to 100% (Poster and Ryan, 1989). Surveys indicate that annually, over half of nurses report being physically assaulted (Erickson and Williams-Evans, 2000; Fernandes, et al., 1999) and that more than a quarter of psychiatric nurses believe that violence is to be expected in their line of work (Poster, 1996).

Risk Factors for violence to health care workers. Violence at work can be categorized into four types based on the relationship of the perpetrator to the business (Peek-Asa et al., 1998; Howard, 1996). Health care workers are at risk primarily from assaults committed by patients, although criminal intent assaults, such as rapes, also occur all too frequently.

The general types of control measures for violence at work fall into the categories of administrative/policy-based practices, employee training, environmental control, and security equipment and personnel. The health care industry, especially hospital emergency departments and psychiatric facilities, experience many of the commonly cited risk factors, including dealing with the public on demand, working in a public and accessible workplace, and providing services to potentially hostile clientele (NIOSH, 1996; Kraus 1996). Risk factors found within the health care setting include the carrying of weapons, early release of patients, long waiting periods, the right of psychiatric patients to refuse treatment, and the use of hospitalization in lieu of incarceration (California Department of Industrial Relations, 1993). Staffing patterns, including decreases in the number and experience level of staff, have also been identified as an important risk (Simonowitz, 1996; Fineberg et al., 1988).

Prevention. A thorough review of administrative approaches to reducing violence at work was conducted by Runyan et al. (2000). Nine evaluations were identified, all of which occurred in health care settings and addressed violence against workers by patients. Five of the evaluations found that employee training programs to manage assaultive behavior led to decreases in the frequency of assaults. Decreases were also found in programs that took administrative approaches such as flagging charts and introducing a management program. Although each study reviewed had methodologic flaws, the evidence supports the ability to reduce assaults through organized approaches.

Surveys of health care workers lend insight into potential prevention approaches. Respondents in a survey of emergency department staff indicated that 95% of staff were in favor of 24-hour security coverage and 68% of workers endorsed training (Fernandes et al., 1999). Other suggestions include maintaining visibility and communication between staff, monitoring entrances and exits, use of alarms, and reporting of events through a central source (Keep et al., 1995).

California Initiatives. In 1993, Cal/OSHA released "Guidelines for Security and Safety of Health Care and Community Service Workers," which was the first statewide effort to control violence in the health care setting. These guidelines are supported by the California requirement that all businesses have an Injury and Illness Prevention Program (IIPP) (Title 8 Section 3203). The IIPP requires all businesses to conduct assessments to identify their workplace hazards and take steps to reduce these risks. The Guidelines officially recognize violence as one of the risk factors in health care settings that must be part of the IIPP program.

Cal/OSHA is the regulatory agency for this provision. An analysis of Cal/OSHA inspections related to violence in the workplace from January 1993 through 1997 found that forty-two (17.2%) of the 237 inspections were conducted in health care facilities. Of these, over 90% were in response to employee complaints. Two of these inspections were in response to a fatal event and approximately 40% in response to a physical assault. The remaining inspections were in response to threats or unsafe conditions. Health care facilities were generally found to have implemented IIPP programs, but few of these were comprehensive or included all required elements.

In response to a growing concern for violence in emergency departments, the California Emergency Nurses Association Government Affairs Committee conducted a survey of California emergency departments in 1990. The objectives of this survey were to determine the magnitude of violence against emergency nurses, practices to deal with violent behavior, and security practices (Keep et al., 1992).

This survey was instrumental to the passage of the California Hospital Security Act (AB508-Speier), implemented in 1993. AB508 introduced new language into the California Health and Safety Code (Section 1257.7) which required all hospitals to conduct a security assessment and respond to identified risks by July 1, 1995. This act, among other things, required acute care facilities to regularly train employees on security and safety measures, to conduct a security and safety assessment and develop a security plan, and to report to local law enforcement within 72 hours all acts of assault and battery against any on-duty hospital personnel that result in injury or involve the use of a firearm or other dangerous weapon.

The survey conducted in 1990 also provided a baseline measure of violent acts and security measures prior to the passage of AB508. In collaboration with the California Emergency Nurses Association, Dr. Peek-Asa has re-surveyed California emergency departments with the objectives of measuring changes in the reported level of violent events and security procedures. This data indicates that security measures in California emergency departments have increased since the original survey but that substantial deficits still exist (Peek-Asa et al., 2002). The regulatory agency to enforce Section 1257.7 is the California Department of Health Services.

New Jersey Initiatives. In New Jersey, the federal Occupational Safety and Health Administration is responsible for the enforcement of workplace safety and health laws for private industry, including most hospitals and health care facilities in the state. While federal OSHA does not have a specific standard on workplace violence, the agency in 1996 issued "Guidelines for Preventing Workplace Violence for Health Care & Social Service Workers." This document

provides information on workplace violence and prevention intended to help employers establish effective violence prevention programs.

JCAHO provides accreditation and certification services for the health care industry in all states. Hospitals are required to have a written security plan and a safety committee for accreditation by JCAHO.

Compliance activity. Currently, neither initiative has an independent process for ensuring or evaluating compliance on a regular basis. Both Cal/OSHA and DHS respond to hospital facilities because of serious events, a large number of events in one facility, or employee complaints. In these responses, assessments of security programs are conducted. Cal/OSHA may also conduct planned inspections of hospitals and other employers. With the greatest number of Cal/OSHA inspections being conducted in response to employee complaints, many hospitals have not been inspected for security issues. However, Cal/OSHA has issued citations in response to violations of security requirements in hospitals (Peek-Asa and Howard, 1998). The only regular security review is conducted by the JCAHO, which reviews hospital security programs for routine hospital licensure. This review is conducted in conjunction with many other activities, and is a paper-only review. Since routine investigations are not conducted, many hospitals may have inadequate programs. This study intended to determine the level of compliance in the absence of routine inspections, and to compare security programs in California with those in a control state. New Jersey was chosen as the control state because it is under the jurisdiction of the Federal Occupational Safety and Health Administration, and thus has none of its own OSHA Guidelines, and has no specific workplace violence legislation that pertains to hospitals.

II. OVERVIEW OF OBJECTIVES, BACKGROUND, AND APPROACH

The overall goal of this research was to evaluate security programs in California and New Jersey. The evaluation included process and outcome components. The process evaluation identified safety protocols and procedures, equipment, training, and environmental and work practice modifications made to reduce workplace violence. These measures were made in respect to the provisions in AB508 and the Cal/OSHA Guidelines. While New Jersey hospitals would have no reason to implement components of these initiatives, they may have had other motivations to implement safety measures. The process evaluation also gauged each hospital's efforts to identify and respond to their individual risks through risk assessments and surveillance activities. The outcome evaluation examined changes in the incidence rate of assault events against employees before and after the initiatives. This report describes the status of security programs within the representative sample of California hospitals. A separate report describes programs in a representative sample of New Jersey hospitals.

III. RESEARCH METHODS

Hospital Sample. A complete census of licensed acute care facilities was obtained from the California Office of Statewide Health Planning and Development (OSHPD) and the New Jersey Department of Health and Senior Services, Health Care Quality and Oversight. Acute care hospitals were divided into the categories of Level I and II Trauma Centers, Level III and IV Trauma Centers, Acute Care Hospitals with 300 beds or more, and Acute Care Hospitals with fewer than 300 beds. In New Jersey, hospitals were randomly selected within each of these categories to represent the statewide distribution. In California, the size of the state made it difficult to collect a random sample from the entire state. The sample was selected from 25 of the 58 counties, representing both urban and rural areas of the state. These counties cover approximately 68% of the California population and 65% of the state's hospitals.

Emergency Departments: From a total of 364 licensed acute care hospitals in California, 125 hospitals were invited to participate and 116 agreed, for a response rate of 93% (Table 1). Level I and II Trauma Centers had the lowest response at 83%, while Level III and IV Trauma Centers and large acute care hospitals had a response of 100%. From a total of 85 licensed acute care hospitals in New Jersey, 77 were invited to participate and 50 agreed for a response rate of 65%. Response was lowest for acute care hospitals and highest for Trauma Centers. Response rates may have been higher in California because the California Department of Health Services has right of workplace access.

Psychiatric Units: From a total of 163 hospitals with psychiatric units in California and 54 in New Jersey, 60 and 47 were invited to participate, respectively. The participation rate in California was 93.3% and in New Jersey was 65.9%.

Psychiatric Facilities: Of 60 independent Psychiatric facilities in California and 11 in New Jersey, 19 and 10, respectively, were invited to participate. The participation rate in California was 94.7% and in New Jersey was 40%.

Tables 1a, 1b, 1c and 1d summarize hospital participation.

Table 1a: Statewide Distribution of Licensed Hospitals, Participation Hospitals, and Participation rate, by hospital type

	California				New Jersey			
Hospitals	**Licensed Hospitals N (%)***	**Total Study Sample ******	**Participation Hospitals N (%) *******	**Participation Rate *********	**Licensed Hospitals N (%)***	**Total Study Sample ****	**Participation Hospitals N (%)*******	**Participation Rate **********
Total	424	144	134	93%	96	81	54	66.7%
Trauma I and II	41 (9.67)	18	15 (11.19)	83%	11 (11.5)	11	10 (18.51)	90.0%
Trauma III and IV	7 (1.65)	2	2 (1.5)	100%	0	0	0	
Acute Care >300 beds	60 (14.15)	23	23 (17.16)	100%	18 (18.75)	15	10 (18.51)	66.7%
Acute Care <300 beds	221 (52.12)	71	65 (48.5)	91.5%	56 (58.33)	45	30 (55.55)	66.7%
Psychiatric Facilities	60 (14.15)	19	18 (13.43)	94.7%	11 (11.45)	10	4 (7.4)	40%
Rural Acute Care <300 beds	30 (7.08)	9	9 (6.7)	100%	Not Applicable			
Rural Trauma I and II	0							
Rural Trauma III and IV	5 (1.18)	2	2 (1.5)	100%				
RUCC 0.00	302 (71.23)	109	99 (73.88)	90.8%	76 (79.16)	64	40 (74)	62.5%
RUCC 1.00	7 (1.65)	4	4 (2.98)	100%	7 (7.29)	5	4 (7.4)	80%
RUCC 2.00	53 (12.50)	12	12 (8.95)	100%	11 (11.45)	10	10 (18.51)	100%
RUCC 3.00	19 (4.48)	5	5 (3.73)	100%	2 (2.08)	2	0	
RUCC 4.00	11 (2.59)	5	5 (3.73)	100%		0	0	
RUCC 5.00	5 (1.18)	5	5 (3.73)	100%		0	0	
RUCC 6.00	17 (4.01)	4	4 (2.98)	100%		0	0	
RUCC 7.00	8 (1.89)	0	0			0	0	
RUCC 8.00	2 (0.47)	0	0			0	0	
RUCC 9.00	0	0	0			0	0	

* Licensed Hospital= Info from Carrie

** Total Study Sample= enrolled, pilot and declined hospitals

*** Participation Hopsitals= enrolled + pilot hospitals

**** Participation Rate = $\frac{\text{\# Enrolled}}{\text{Total Study Sample}}$ X 100

Table 1b: Statewide Distribution of Licensed Hospitals, Participation Hospitals, and Participation rate, by hospital type

Emergency Departments

	California				New Jersey			
Hospitals	**Licensed Hospitals N (%)***	**Total Study Sample ******	**Participation Hospitals N (%) *******	**Participation Rate ********	**Licensed Hospitals N (%)***	**Total Study Sample ****	**Participation Hospitals N (%)*******	**Participation Rate **********
Total	364	125	116	92.8%	85	71	50	70.4%
Trauma I and II	41 (11.26)	18	15 (12.93)	83.3%	11 (12.9)	11	10 (20)	90.9%
Trauma III and IV	7 (1.92)	2	2 (1.7)	100%	0	0	0	
Acute Care >300 beds	60 (16.48)	23	23 (19.82)	100%	18 (21.17)	15	10 (20)	66.7%
Acute Care <300 beds	221 (60.7)	71	65 (56)	91.5%	56 (65.88)	45	30 (60)	66.7%
Rural Acute Care <300 beds	30 (8.24)	9	9 (7.75)	100%	Not Applicable			
Rural Trauma I and II	0							
Rural Trauma III and IV	5 (1.37)	2	2 (1.72)	100%				
RUCC 0.00	257 (70.60)	93	84 (72.4)	90.3 %	65 (77.38)	55	37 (74)	74%
RUCC 1.00	5 (1.37)	3	3 (2.5)	100 %	7 (8.33)	5	4 (8)	80%
RUCC 2.00	47 (12.91)	11	11 (9.5)	100%	10 (11.90)	9	9 (18)	100%
RUCC 3.00	15 (4.12)	5	5 (4.3)	100 %	2 (2.38)	2	0	0
RUCC 4.00	10 (2.75)	5	5 (4.3)	100%	0	0	0	0
RUCC 5.00	4 (1.10)	4	4 (3.4)	100%	0	0	0	0
RUCC 6.00	16 (4.40)	4	4 (3.4)	100%	0	0	0	0
RUCC 7.00	8 (2.20)	0	0	0	0	0	0	0
RUCC 8.00	2 (0.55)	0	0	0	0	0	0	0
RUCC 9.00	0	0	0	0	0	0	0	0

* Licensed Hospital= Info from Carrie

** Total Study Sample= enrolled, pilot and declined hospitals

*** Participation Hospitals= enrolled + pilot hospitals

% = $\frac{\text{Participation Hospitals value}}{\text{Total participating hospitals}} \times 100$

**** Participation Rate = $\frac{\text{\# Enrolled}}{\text{Total Study Sample}} \times 100$

Table 1c: Statewide Distribution of Licensed Hospitals, Participation Hospitals, and Participation rate, by hospital type
Psychiatric Units/Hospitals

	California				New Jersey			
Hospitals	**Licensed Hospitals N (%)***	**Total Study Sample ******	**Participation Hospitals N (%) *******	**Participation Rate *********	**Licensed Hospitals N (%)***	**Total Study Sample ****	**Participation Hospitals N (%)*******	**Participation Rate **********
Total	163	60	56	93.33%	54	47	31	65.9%
Trauma I and II with Psych Unit	25	14	11 (19.6)	78.57%	8	8	7 (22.5)	87.5%
Trauma III and IV with Psych Unit	1	1	1 (1.78)	100%	0			
Acute Care >300 beds with Psych Unit	29	13	13 (23.21)	100%	14	11	7 (22.5)	63.6%
Acute Care <300 beds with Psych Unit	47	13	13 (23.21)	100%	21	18	13 (41.9)	72.2%
Psychiatric Facilities18	60	19	18 (32.14)	94.7%	11	10	4 (12.9)	40%
Rural Acute Care <300 beds with Psych Unit	1	0			Not Applicable			
Rural Trauma I and II with Psych Unit	0	0						
Rural Trauma III and IV with Psych Unit	0	0						
RUCC 0.00	138	53	49 (87.5)	92.45%	46	39	23(74.1)	58.9%
RUCC 1.00	2	1	1 (1.78)	100%	4	4	4 (12.9)	100%
RUCC 2.00	13	3	3 (5.35)	100%	4	4	4 (12.9)	100%
RUCC 3.00	6	2	2 (3.57)	100%	0	0	0	
RUCC 4.00	1	0	0		0	0	0	
RUCC 5.00	1	1	1 (1.78)	100%	0	0	0	
RUCC 6.00	2	0	0		0	0	0	
RUCC 7.00	0	0	0		0	0	0	
RUCC 8.00	0	0	0		0	0	0	
RUCC 9.00	0	0	0		0	0	0	

* Licensed Hospital= Info from Carrie Includes hospitals with licensed psych beds

** Total Study Sample= enrolled, pilot and declined hospitals with licensed psych beds

*** Participation Hospitals= enrolled + pilot hospitals with licensed psych beds % = $\frac{\text{Participation Hospitals value}}{\text{Total participating hospitals}} \times 100$

**** Participation Rate = $\frac{\text{\# Enrolled}}{\text{Total Study Sample}} \times 100$

Table 1d: Statewide Distribution of Licensed Hospitals, Participation Hospitals, and Participation rate, by hospital type
Psychiatric Facilities/Units

	California				New Jersey			
Hospitals	**Licensed Hospitals N (%)***	**Total Study Sample ****	**Participation Hospitals N (%) *****	**Participation Rate ********	**Licensed Hospitals N (%)***	**Total Study Sample ****	**Participation Hospitals N (%)*****	**Participation Rate **********
Total	60	19	18	94.7 %	11	10	4	40 %
Psychiatric Facilities	60	19	18 (100)	94.7 %	11 (11.45)	10	4 (7.4)	40%
RUCC 0.00	45 (75)	16	15 (83.3)	93.75%	10 (90.91)	9	3 (75)	33.33%
RUCC 1.00	2 (3.33)	1	1 (5.5)	100%		0	0	
RUCC 2.00	6 (10)	1	1 (5.5)	100%	1 (9.09)	1	1 (25)	100%
RUCC 3.00	4 (6.67)	0	0			0	0	
RUCC 4.00	1 (1.67)	0	0			0	0	
RUCC 5.00	1 (1.67)	1	1 (5.5)	100%		0	0	
RUCC 6.00	1 (1.67)	0	0			0	0	
RUCC 7.00	0	0	0			0	0	
RUCC 8.00	0	0	0			0	0	
RUCC 9.00	0	0	0			0	0	

* Licensed Hospital= Info from Carrie

** Total Study Sample= enrolled, pilot and declined hospitals

*** Participation Hospitals= enrolled + pilot hospitals % = $\frac{\text{Participation Hospitals value}}{\text{Total participating hospitals}} \times 100$

**** Participation Rate = $\frac{\text{\# Enrolled}}{\text{Total Study Sample}} \times 100$

Hospital Recruitment. Selected hospitals were notified of the project with a letter from the California Department of Health Services or the New Jersey Department of Health and Senior Services. A follow-up phone call was then made to identify the hospital's willingness to participate and to identify the appropriate contacts within the hospital. Hospitals were informed that the security assessments were not being conducted by compliance or regulatory officials, but that these agencies endorse their participation in the project.

Security Program Assessment Protocol. Information about hospital security programs was obtained from conversations with several key informants, an on-site walk-through, and from printed documents provided by the hospital. Key informants included, for each unit, the unit nurse manager, the hospital's Risk Assessment Director or Security Director, and one or two staff members on the unit. Documents requested from each hospital included training materials for medical and security staff, written policies, and forms for reporting violent events.

Violent Event Data. Information about violent events was collected from several sources, when available. We found that surveillance efforts that described violent events were rarely collected as data, and that hospitals generally had several overlapping systems. Outside sources, such as law enforcement records, were difficult to obtain due to government codes limiting public access. In addition, these agencies rarely maintained records of assaultive events occurring on hospital grounds due to lack of surveillance methods initiated by the hospitals. The sources sought and the problems associated with them are described below:

1. Employer's reports of workplace illness and injury. Employer's reports of workplace illness and injury were kept by all hospitals. However, when a form is filled out, it is generally placed in the individual file of the employee. In order to collect information about events, the individual files of each hospital employee would need to be reviewed to identify if an Employer's Report was written, and if this report described a violent event. Access to all individual employee files was infeasible and not allowed under our IRB approval. However, for potential assault events identified from OSHA Logs where confirmation of an intentional act was needed, employee files were requested from Employee Health staff. For most hospitals, access to these files was granted, at which point data were abstracted from the Employers' Report if completed and filed in the employee chart.

2. OSHA logs. OSHA 200 logs were maintained by each hospital, and these were the primary source of event information. However, hospitals are required to keep these reports for only three years, and thus much of the data prior to 1996 (i.e., the pre-initiative period) was not available. Approximately 50%of hospitals had historic data prior to 1996. Furthermore, the OSHA logs often lacked information about the type of event, as well as information about the location, injury, or victim. If an assaultive event could not be verified from the OSHA logs alone, the employee's file was requested.

3. Security and internal hospital surveillance reports. As part of the security assessment, data from security logs and reports were requested and collected from several hospitals. In general, these systems were kept independently from other hospital reporting systems and only included events reported by security guards. These logs and reports were event-specific with little, if any, information about the circumstances surrounding the violent event and whether the guard or a hospital employee was injured. The security logs functioned primarily as a tool for documenting any

incident that security supervisors wanted to pass down from shift to shift. These logs contained brief narratives of the event and rarely included reports on assaults. The security reports functioned primarily as a tool for documenting the time, location and reasons for why a security guard was dispatched. The reasons were generally described in terms of security functions, such as to monitor a patient or subdue a patient, without a description of the violent event that resulted in the initial security call. Since many hospitals did not have computerized security reports or hard-copy reports filed in a centralized area, this source of information was not consistently available across hospitals. In addition, some hospitals would not permit access to security files.

Other internal hospital reporting systems included employee incident reports, supervisor's reports, risk management reports. Rarely were any of these reporting systems maintained electronically, and most hard-copy reports were either stored in individual employee files in Employee Health or in department-specific locations. Identifying and describing each reporting system was attempted, and in most cases, reports were not accessible to research staff. Because hospitals have different internal reporting mechanisms with no defined standard across facilities, we did not use these systems as a primary source of identifying violent events.

IV. CALIFORNIA HOSPITAL SECURITY PROGRAM ASSESSMENTS

A. CALIFORNIA EMERGENCY DEPARTMENTS

1. Profile of participating Emergency Departments

The participating hospitals treated an average of 97 patients per average weekend and 93 per average weekday. The range of treated patients differed markedly, indicated wide variation in the level of patient impact. Waiting time also showed a wide distribution. While 44.7% of hospitals reported a wait of an hour or less for non-critical patients during peak hours, 28.9% reported a wait of longer than two hours. In this category, more than a third reported a wait of more than six hours.

California Emergency Department Profiles

Characteristic	Mean (Range)
Number of patients seen during each 24 hour weekend day	97.13 (7.5 – 400)
Number of patients seen during each 24 hour week day	93.13 (3 – 450)
Average wait time for non-critical patients during peak hours	
≤ 1 Hour	51 (44.7%)
>1 - ≤ 2 Hours	25 (21.9%)
> 2 Hours	33 (28.9%)
Unknown	5 (4.4%)
Did not respond	3
Average wait time for non-critical patients during non-peak hours	90 (78.9%)
≤ 1 Hour	13 (11.4%)
>1 - ≤ 2 Hours	6 (5.3%)
> 2 Hours	5 (4.4%)
Unknown	3
Did not respond	

2. Workplace Violence Training Programs

AB508 requires that all hospitals have workplace violence training for all employees regularly assigned to the Emergency Department. The majority of hospitals (93.1%) did have established workplace violence programs; the exceptions were predominantly small rural hospitals. However, fewer than 10% of training programs included all ED employees in either new hire (7.4%) or recurring (9.3%) training. Physicians, volunteers, and contract employees were the most likely to be excluded from required training. Physicians, who are the primary resource for which patients come to emergency departments, often have little time with individual patients, and their limited availability is one reason for long waiting periods. Although physicians often spend less time with individual patients than nurses, they could play an important role in recognizing and de-escalating patients are in a state of increasing aggression. Volunteers, especially those that interact with patients and/or visitors, should also be included in training if they regularly work in the ED.

Many hospitals used the same program for new hire and recurring training. In hospitals that conducted recurring training only once a year, this could leave significant gaps of up to one year between beginning work in the ED and until the training. Training programs ranged in length from 30 minutes to 16 hours, with the majority lasting between one and five hours. Recurring training was usually of shorter duration, and more likely to include only reading updates or one lecture. Recurring training could become a good opportunity for more skills-based learning, which would require role-playing and interactive training. Large hospitals often hired a contractor to conduct workplace violence training. Training programs conducted by hospital staff were most often conducted by Nurse Managers, Nurse Educators, or Security personnel.

Workplace Violence Prevention Training in the Emergency Department

Description	Response	California	
		New Hire	Recurring
Training	Yes*	108 (93.1%)	
	No*	7 (6%)	
	Unknown*	1 (0.9%)	
	Not Responded*	1	
Training Required for all employees	Yes	8 (7.4%)	10 (9.3%)
	No	100 (92.6%)	98 (90.7%)
Employees who are not included in WPV Training	Nurses	1 (0.9%)	2 (1.9%)
	Physicians	63 (59.4%)	65 (61.3%)
	Unlicensed support staff	3 (2.8%)	2 (1.9%)
	Managers	2 (1.9%)	2 (1.9%)
	Clerical Staff	9 (8.3%)	8 (7.4%)
	Security	17 (15.7%)	17 (16.3%)
	Volunteers	47 (45.2%)	48 (46.2%)
	Contract Employees	44 (42.3%)	46 (45.5%)
	*Per Diem Employees**	2 (2.2%)	2 (2.2%)
	*Temporary Staff**	10 (11%)	10 (11%)
Length of Training	<= 1 hour	19 (18.1%)	33 (31.4%)
	>1 - <= 4 hours	28 (26.7%)	53 (50.5%)
	>4 - <= 8 hours	43 (41%)	9 (8.6%)
	> 8 hours	7 (6.7%)	4 (3.8%)
	Unknown	8 (7.6%)	
	Not Responded	3	
Format used for training	Lecture*	79 (84.9%)	
	Reading prepared material*	86 (92.5%)	
	Didactic/interactive discussions*	73 (78.5%)	
	Role Playing	81 (79.4%)	

* - Questions not applicable to recurrent training

Hospitals included most major topics in their training programs, but also had some important deficits. The majority of training programs were based on existing programs which can be purchased, and these provide a good basis for training. However, only 55.8% of training programs included a review of the hospital's hazard assessment or a review of the hospitals' reported violent events. Nearly half of the programs were not tailored for the specific hospital environment, and this represents an important omission to otherwise comprehensive training programs.

Components of workplace violence training in California Emergency Departments

Components	California	
	New Hire	Recurring
Hospital safety policies and procedures	75 (70.8%)	75 (71.4%)
Hospital hazard assessment / Scope and patterns of violent events	58 (55.8%)	61 (58.7%)
Aggression and violence predicting factors	91 (85.8%)	95 (89.6%)
Characteristics of aggressive and violent patients and victims	80 (86%)	84 (90.3%)
Discussion of role of hospital security and law enforcement personnel	90 (84.9%)	88 (83%)
Verbal methods to diffuse aggressive behavior	93 (87.7%)	96 (90.6%)
Physical maneuvers to diffuse or avoid aggressive behavior	85 (80.2%)	86 (81.1%)
How to report a violent event	89 (84%0	92 (86.8%)
Methods to protect patients and visitors from violence	86 (82.7%)	85 (81.7%)
Self-defense if preventive action does not work*	63 (67.7%)	63 (67.7%)
Obtaining patient history from a patient with violent behavior*	54 (58.1%)	53 (57%)
Restraining Techniques*	68 (73.1%)	70 (75.3%)
Appropriate use of medications as chemical restraints*	54 (58.7%)	52 (56.5%)
Resources available for victims of workplace violence*	65 (69.9%)	66 (71%)

* - Questions not applicable to Pilot study hospitals

A slightly lower proportion of ED staff representatives reported receiving training (91%) than the proportion of hospitals reporting providing training (93.1%), and the distribution of length of training was slightly lower when reported by staff than by managers. However, The majority of staff representatives reported that their workplace violence training was excellent (15.1%) or very good (42.5%). Improvements to programs listed by staff respondents included increased practice of skills, information more specific to the hospital, delivery by someone who knows the hospital environment, and a combination of requests for more and less training.

Emergency Department Staff Rating of Workplace Violence Training

Characteristic	Response	Distribution
Did you receive training about violence-based safety in your workplace	Yes	191 (91%)
	No	18 (8.6%)
	Unknown	1 (0.5%)
	Did not Respond	1
How long was the training on workplace violence?	≤ 1 Hour	48 (25.1%)
	> 1 - ≤ 4 Hours	87 (45.5%)
	> 4 - ≤ 8 Hours	39 (20.4%)

	> 8 Hours	14 (7.3%)
	Self-study	0
	Unknown	3 (1.6%)
	Did not respond	0
How good would you say your overall workplace violence training program is?*	Excellent	27 (15.1%)
	Very Good	76 (42.5%)
	Adequate	59 (33%)
	Not Very good	16 (8.9%)
	Unknown	1 (0.6%)
	Did not respond	0

* - Questions not applicable to Pilot study hospitals

3. Workplace Violence Policies and Procedures

The majority of hospitals had written policies and procedures, which are required by both initiatives as well as by JCAHO. Although Emergency Departments have a much higher risk than the general hospital, only one quarter of ED's had specific written policies and procedures. AB508 requires that policies address multiple types of violence, including violence against employees, against patients, between employees, and by other parties. One third of respondents either didn't know or stated that their hospital did not have policies that addressed employee-on-employee violence or violence against patients or visitors. While it is unlikely that hospitals have no policies regarding violence from sources other than patients, these responses indicate that internal and external threats for violence are not integrated into an overall comprehensive workplace violence prevention policy.

Zero tolerance policies were the most common type of specific policy. However, the content of these policies varied widely. About one third of these policies stated that the hospital had "zero tolerance" for violence against employees; one third stated zero tolerance for violence by employees; a small proportion stated zero tolerance for violence of any kind; and the remainder did not state what the zero tolerance regarded. Furthermore, the majority of these policies did not define what "zero tolerance" meant or how the policy would be carried out.

Workplace Violence Policies in California Emergency Departments

Question	Response	Distribution
Does your hospital have written policies regarding violence in the workplace?	Yes	109 (94.8%)
	No	2 (1.7%)
	Unknown	4 (3.5%)
	Did not respond	2
Does your unit have a separate written policy than the rest of the hospital regarding violence in the workplace?	Yes	29 (25.2%)
	No	82 (71.3%)
	Unknown	4 (3.5%)
	Did not respond	2
Does the policy include Employee-on-Employee violence *	Yes	64 (63.4%)
	No	19 (18.8%)
	Unknown	18 (17.8%)
	Did not respond	2

Does the policy include Violence against employees by patients or visitors *	Yes	80 (78.4%)
	No	9 (8.8%)
	Unknown	13 (12.7%)
	Did not respond	1
Does the policy include Violence against patients or visitors *	Yes	71 (69.6%)
	No	12 (11.8%)
	Unknown	19 (18.6%)
	Did not respond	1
Does your hospital have a "zero-tolerance" policy	Yes	93 (80.2%)
	No	10 (8.6%)
	Unknown	13 (11.2%)
	Did not respond	1

*Question is not applicable to hospitals in Pilot study

4. Workplace violence services and activities

The most common services and activities to reduce or respond to workplace violence are listed in Table IV.F. The majority of hospitals provide services to victims through Employee Health and/or Employee Assistance Programs. These programs provide services for individual staff who have reported victimization in a violent event. Fewer (58.6%) of hospitals provide unit-specific critical incident debriefing in which employees familiar with the unit review each event and discuss methods to reduce similar risks.

Workplace Violence Services and Activities in California Emergency Departments

Question	Response	Distribution
Does your unit do anything specific to monitor or reduce tension in waiting areas?	Yes	94 (83.2%)
	No	19 (16.8%)
	Unknown	0
	Did not respond	4
Does your unit do anything specific to monitor or reduce tension between staff?	Yes	79 (74.5%)
	No	26 (24.5%)
	Unknown	1 (0.9%)
	Did not respond	11
Critical Incident Debriefing	Yes	68 (58.6%)
	No	48 (41.4%)
	Unknown	0
	Did not respond	1
Employee Health	Yes	104 (90.4%)
	No	11 (9.6%)
	Unknown	0
	Did not respond	2
Employee Assistance Programs	Yes	103 (91.2%)
	No	10 (8.8%)
	Unknown	0
	Did not respond	4

5. Resources

Most hospitals were aware and relied on both the Cal/OSHA Guidelines (83.6%) and AB508 (86.2%) to implement their security programs. However, 15 – 20 hospitals in the sample reported not even being aware of these initiatives. These programs were also the least likely to have implemented comprehensive programs.

Use of Existing California Initiatives in Emergency Departments

Question	Response	Distribution
Are you aware that Cal/OSHA has written Guidelines about methods to reduce violence against health care workers?	Yes	97 (83.6%)
	No	19 (16.4%)
	Not Applicable	0
	Did not respond	1
Are you aware of the California Hospital Security Act which requires all acute care and psychiatric facilities to implement a comprehensive security plan?	Yes	100 (86.2%)
	No	16 (13.8%)
	Not Applicable	0
	Did not respond	1

6. Security Features

In general, environmental components of security programs were less common than behavioral or administrative approaches. Nearly one third of hospitals do not have a check-in procedure for visitors, and more than half of hospitals had waiting rooms that were not monitored or were out of visibility of ED staff. Nearly a quarter of hospitals did not have any type of alarm system, either stationary or portable. Only a few hospitals had bolted furniture to the floor.

Security Features of California Emergency Departments

Question	Response	Distribution
Are visitors required to check in?*	Yes	69 (68.3%)
	No	32 (31.7%)
	Unknown	0
	Did not respond	2
Does your unit have stationary panic alarms?*	Yes	76 (75.2%)
	No	22 (21.8%)
	Unknown	3 (3%)
	Did not respond	2
Do staff carry portable panic alarms?*	Yes	7 (6.9%)
	No	95 (93.1%)
	Unknown	0
	Did not respond	1
Do staff carry noise-making devices, such as whistles, to alert other staff of problems?*	Yes	4 (3.9%)
	No	97 (95.1%)
	Unknown	1 (1%)
	Did not respond	1
Are there areas (e.g. seclusion rooms)	Yes	84 (83.2%)

in which patients who have become aggressive can be placed to calm down?*	No	16 (15.8%)
	Unknown	1 (1%)
	Did not respond	2
Is furniture bolted to the floor to avoid its use as a weapon for entrapment?*	Yes	3 (3.2%)
	No	90 (94.7%)
	Unknown	2 (2.1%)
	Did not respond	8

* - Question is not applicable to hospitals in Pilot study

Three quarters of hospitals use security cameras to monitor the ED, and just over half use mirrors to increase visibility. Few hospitals have areas with inadequate lighting, which was defined as light enough to read a newspaper. Nearly half of the hospitals had unrestricted and unmonitored public access through means other than the main entrance. Most ED's reported having areas where employees could be overcome and isolated by potential perpetrators.

Security Equipment in California Emergency Departments

Question	Response	Distribution
ED has security cameras	Yes	
	No	
	Unknown	
	Did not respond	
Are there any areas that do NOT have adequate lighting?*	Yes	8 (8.5%)
	No	82 (87.2%)
	Unknown	4 (4.3%)
	Did not respond	9
Other than the main entrance, are there any areas where the public can enter unrestricted (unlocked and unmonitored)?*	Yes	48 (49.5%)
	No	49 (50.5%)
	Unknown	0
	Did not respond	6
Are mirrors used to enhance visibility?*	Yes	55 (56.1%)
	No	39 (39.8%)
	Unknown	4 (4.1%)
	Did not respond	5
Are there areas within the ED/Psych in which employees can become isolated and are unable to communicate?*	Yes	79 (81.4%)
	No	15 (15.55)
	Unknown	3 (3.1%)
	Did not respond	6

* - Question is not applicable to hospitals in Pilot study

7. Emergency Department Staff reports of experience with violence

Verbal abuse was reported verbal abuse nearly every day or every other day, and only 8% reported no verbal abuse. Threats were reported by 49% of employees, with the majority threatened fewer than 12 times in the last year. Over one-third of staff respondents reported being assaulted in the last year, and more than 15% reported more than one assault. However, 72% of those who were assaulted verbally or physically did not report the event.

Staff Experience with Violent Events in California Emergency Departments

Characteristic	Response	Distribution
In the last year while you have been at work, how frequently were you verbally abused?	None	17 (8.1%)
	1 – 12 times per year	96 (45.9%)
	13 – 48 times per year	52 (24.9%)
	49 – 96 times per year	13 (6.2%)
	> 96 times per year	31 (14.8%)
	Did not respond	2
In the last year while you have been at work, how frequently were you threatened?	None	109 (51.9%)
	1 – 12 times per year	88 (41.9%)
	13 – 24 times per year	6 (2.9%)
	25 – 72 times per year	4 (1.9%)
	> 72 times per year	3 (1.4%)
	Did not respond	1
In the last year while you have been at work, how frequently were you assaulted?	None	127 (60.5%)
	1 – 2 times per year	49 (23.3%)
	3 – 12 times per year	30 (14.3%)
	> 12 times per year	4 (1.9%)
	Did not respond	1
Did you miss at least one day of work because of any of these events?*	Yes	2 (1%)
	No	196 (98.5%)
	Unknown	1 (0.5%)
	Did not respond	0
If you were a victim of either verbal or physical violence, did you fill out a form to report the event?*	Yes	53 (26.6%)
	No	143 (71.9%0
	Unknown	3 (1.5%)
	Did not respond	0

* - Questions not applicable to Pilot study hospitals

B. CALIFORNIA PSYCHIATRIC FACILITIES/UNITS

1. Profile of Participating Hospitals

The average number of beds in the psychiatric units or facilities was 25, with a range of six to 101. Future reference to psychiatric units or facilities will be "units" and will refer to all participating psychiatric departments, wards, or independent facilities. The majority of units had 80% occupancy rates or higher, while a few reported much lower occupancy. The average length of stay was 8.8 days and ranged from four to 18 days. Involuntary admissions (70%) made up the majority of patients, although some units had no involuntary admissions and others had no voluntary admissions.

Psychiatric Unit or Facility Profile

Characteristic	California
	Mean (Range)
Number of beds in unit	25.07 (6 – 101)
Proportion of beds occupied	61.59% (9% – 100%)
Average Length of Stay	8.79 (4 – 18)
Proportion of involuntary admissions	70.04% (0 – 100%)
Proportion of voluntary admissions	27.55% (0 – 100%)

1. Workplace Violence Training Programs

All of the psychiatric facilities had specific workplace violence training. However, few psychiatric facilities were compliant with the AB508 requirement that all staff regularly scheduled to work on the unit be required to attend the training. Physicians were the most likely occupational group to be excluded from mandatory training. Nearly a quarter of facilities did not require clerical staff to bet rained, and more than a third do not require contract employees to be trained.

The majority of workplace violence training programs for newly hired employees lasted between four and eight hours, and over 27% of training programs were over eight hours. Psychiatric facilities used many modalities for their training, with over 90% reporting the use of lectures, reading materials, and didactic/interactive sessions. Role playing was the least likely training technique, but was used by 78% of hospitals.

Workplace Violence Prevention Training in Psychiatric Departments

Description	Response	California	
		New Hire	Recurring
Training	Yes*	54 (100%)	
	No*	0	
	Unknown*	0	
	Not Responded*	0	
Training Required for all employees	Yes	3 (5.6%)	2 (3.7%)
	No	51 (94.4%)	52 (96.3%)
Employees who are not included in WPV Training	Nurses	0	1 (1.9%)
	Physicians	38 (70.4%)	40 (75.5%)
	Unlicensed support staff	1 (1.9%)	3 (5.7%)
	Managers	0	2 (3.8%)

	Clerical Staff	11 (20.4%)	12 (23.1%)
	Security	9 (16.7%)	10 (19.2%)
	Volunteers	14 (26.4%)	13 (25%)
	Contract Employees	20 (39.2%)	22 (44%)
	*Per Diem Employees**	0	1 (2.4%)
	*Temporary Staff**	4 (9.5%)	4 (9.8%)
Length of Training	<= 1 hour	1 (1.9%)	0
	>1 - <= 4 hours	3 (5.6%)	23 (44.2%)
	>4 - <= 8 hours	34 (63%)	18 (34.6%)
	> 8 hours	15 (27.8%)	10 (19.2%)
	Unknown	1 (1.9%)	
	Not Responded	0	
Format used for training	Lecture*	43 (100%)	
	Reading prepared material*	42 (97.7%)	
	Didactic/interactive discussions*	43 (100%)	
	Role Playing	43 (79.6%)	

* - Questions not applicable to Recurrent Training

Psychiatric facilities include many of the training components identified in the California Hospital Security Act and the Cal/OSHA Guidelines. The components least likely to be included were a review of the hospital hazard assessment, discussion of the interaction with security and law enforcement, obtaining a patient history from a patient with violent behavior, and a discussion of resources available for victims of violence.

Components of workplace violence training in California Psychiatric Units or Facilities

Components	California	
	New Hire	Recurring
Hospital safety policies and procedures	47 (90.4%)	43 (84.3%)
Hospital hazard assessment / Scope and patterns of violent events	42 (79.2%)	39 (76.5%)
Aggression and violence predicting factors	52 (98.1%)	49 (96.1%)
Characteristics of aggressive and violent patients and victims	39 (92.9%)	37 (92.5%)
Discussion of role of hospital security and law enforcement personnel	42 (79.2%)	38 (73.1%)
Verbal methods to diffuse aggressive behavior	52 (98.1%)	49 (96.1%)
Physical maneuvers to diffuse or avoid aggressive behavior	52 (98.1%)	49 (96.1%)
How to report a violent event	51 (96.2%)	46 (90.2%)
Methods to protect patients and visitors from violence	48 (92.3%)	45 (90%)
*Self-defense if preventive action does not work**	39 (92.9%)	35 (87.5%)
*Obtaining patient history from a patient with violent behavior**	30 (71.4%)	27 (65.9%)
*Restraining Techniques**	39 (92.9%)	37 (92.5%)
*Appropriate use of medications as chemical restraints**	35 (83.3%)	33 (82.5%)
*Resources available for victims of workplace violence**	32 (78%)	29 (74.4%)

* - Questions not applied to all participating hospitals

All of the psychiatric facility staff respondents reported receiving training on workplace violence prevention. The distribution of the length of recurring training was similar as reported by staff and unit managers. Over 81% of staff reported that their training was excellent or very good.

Staff Responses about Workplace Violence Training Programs in California Psychiatric Facilities and Departments

Characteristic	Response	Distribution
Did you receive training about violence-based safety in your workplace	Yes	85 (100%)
	No	0
	Unknown	0
	Did not Respond	0
How long was the training on workplace violence?	≤ 1 Hour	1 (1.2%)
	> 1 - ≤ 4 Hours	25 (29.8%)
	> 4 - ≤ 8 Hours	41 (48.8%)
	> 8 Hours	17 (20.2%)
	Self-study	
	Unknown	0
	Did not respond	1
How good would you say your overall workplace violence training program is?*	Excellent	37 (43.5%)
	Very Good	32 (37.6%)
	Adequate	14 (16.5%)
	Not Very good	2 (2.4%)
	Unknown	0
	Did not respond	0

* - Questions not applied to all participating hospitals

3. Workplace Violence Policies and Procedures

All psychiatric facilities reported that they had workplace violence policies, excluding one nurse manager who did not know. Nearly a third of the units had workplace violence policies that were specific to their units, which indicates the recognition of increased risk for violence on psychiatric units. Although more than 80% of policies addressed violence against employees by patients and violence against patients by employees, only 67% addressed employee-on-employee violence. Over 80% of hospitals reported having "zero tolerance" policies for workplace violence, but these generally did not define "violence" or the practices or protocols that would be enforced in the policy.

Workplace Violence Policies in California Psychiatric Units and Facilities

Question	Response	Distribution
Does your hospital have written policies regarding violence in the workplace?	Yes	53 (98.1%)
	No	0
	Unknown	1 (1.9%)
	Did not respond	0

Does your unit have a separate written policy than the rest of the hospital regarding violence in the workplace?	Yes	17 (32.7%)
	No	33 (63.5%)
	Unknown	2 (3.8%)
	Did not respond	2
Does the policy include Employee-on-Employee violence *	Yes	29 (67.4%)
	No	6 (14%)
	Unknown	8 (18.6%)
	Did not respond	0
Does the policy include Violence against employees by patients or visitors *	Yes	37 (86%)
	No	1 (2.3%)
	Unknown	5 (11.6%)
	Did not respond	0
Does the policy include Violence against patients or visitors *	Yes	35 (81.4%)
	No	4 (9.3%)
	Unknown	4 (9.3%)
	Did not respond	0
Does your hospital have a "zero-tolerance" policy	Yes	44 (81.5%)
	No	6 (11.1%)
	Unknown	4 (7.4%)
	Did not respond	0

* - Question is not applicable to hospitals in Pilot study

4. Workplace violence services and activities

Nearly 30% of psychiatric facilities did not report specific activities to monitor or reduce tension between staff. Those that did mention such activities included social functions, incentive programs, and efforts to increase reporting and/or communication. One quarter of psychiatric facilities did not report offering critical incident debriefing following violent events. Employee Assistance Programs that respond to workplace violence events were reported by over 86% of facilities.

Workplace Violence Services and Activities in California Psychiatric Units and Facilities

Question	Response	Distribution
Does your unit do anything specific to monitor or reduce tension between staff?	Yes	42 (79.2%)
	No	9 (17%)
	Unknown	2 (3.8%)
	Did not respond	1
Critical Incident Debriefing	Yes	39 (73.6%)
	No	14 (26.4%)
	Unknown	0
	Did not respond	1
Employee Health	Yes	41 (77.4%)
	No	12 (22.6%)
	Unknown	0
	Did not respond	1
Employee Assistance Programs	Yes	46 (86.8%)

	No	7 (13.2%)
	Unknown	0
	Did not respond	1

5. Resources

Approximately three quarters of psychiatric facilities reported being aware of the Cal/OSHA Guidelines and the California Hospital Security Act.

Use of Existing California Initiatives in Psychiatric Units and Facilities

Question	Response	Distribution
Are you aware that Cal/OSHA has written Guidelines about methods to reduce violence against health care workers?	Yes	42 (77.8%)
	No	12 (22.2%)
	Not Applicable	0
	Did not respond	0
Are you aware of the California Hospital Security Act which requires all acute care and psychiatric facilities to implement a comprehensive security plan?	Yes	39 (73.6%)
	No	14 (26.4%)
	Not Applicable	0
	Did not respond	1

6. Security Features

Just under half of the psychiatric facilities had stationary panic alarms, and only one-fifth had any type of portable panic alarm. Most facilities had places where patients could be taken to calm down and to protect others. Over 86% had furniture that was bolted to the floor to keep it from being used as a weapon.

Security Features of California Psychiatric Units and Facilities

Question	Response	Distribution
Does your unit have stationary panic alarms?*	Yes	21 (48.8%)
	No	20 (46.5%)
	Unknown	2 (4.7%)
	Did not respond	0
Do staff carry portable panic alarms?*	Yes	8 (19%)
	No	33 (78.6%)
	Unknown	1 (2.4%)
	Did not respond	1
Do staff carry noise-making devices, such as whistles, to alert other staff of problems?*	Yes	7 (16.7%)
	No	34 (81%)
	Unknown	1 (2.4%)
	Did not respond	1
Are there areas (e.g. seclusion rooms) in which patients who have become	Yes	41 (95.3%)
	No	2 (4.7%)

aggressive can be placed to calm down?*	Unknown	0
	Did not respond	0
Is furniture bolted to the floor to avoid its use as a weapon for entrapment?*	Yes	37 (86%)
	No	6 (14%)
	Unknown	0
	Did not respond	0

* - Question is not applied to all hospitals

Fewer than 5% of facilities use metal detectors either for the unit or the general hospital. Most of the facilities reported adequate lighting and entry/exit control. More than half of facilities use mirrors to enhance visibility. However, the majority of units have areas in which staff can become isolated.

Security Equipment in California Psychiatric Units and Facilities

Question	Response	Distribution
Do people entering the department have to go through a metal detector, either at the main hospital entrance or the ED/Psych entrance?*	Yes	2 (4.7%)
	No	41 (95.3%)
	Unknown	0
	Did not respond	0
Are there any areas that do NOT have adequate lighting?*	Yes	1 (2.6%)
	No	37 (94.9%)
	Unknown	1 (2.6%)
	Did not respond	4
Other than the main entrance, are there any areas where the public can enter unrestricted (unlocked and unmonitored)?*	Yes	1 (2.4%)
	No	39 (92.9%)
	Unknown	2 (4.8%)
	Did not respond	1
Are mirrors used to enhance visibility?*	Yes	27 (65.9%)
	No	11 (26.8%)
	Unknown	3 (7.3%)
	Did not respond	2
Are there areas within the unit in which employees can become isolated and are unable to communicate?*	Yes	38 (97.4%)
	No	1 (2.6%)
	Unknown	0
	Did not respond	4

* - Question is not applicable to hospitals in Pilot study

7. Psychiatric Unit Staff reports of experience with violence

Psychiatric unit staff reported a high prevalence of violence victimization. One-third of staff reported being a victim of verbal abuse more than 96 times per year. More than half reported being threatened between one and twelve times per year, and 40% reported being assaulted at least once during the past year. However, the majority of staff who reported being victims of any type of violence did not report the event.

Staff Experience with Violent Events in California Psychiatric Units and Facilities

Characteristic	Response	Distribution
In the last year while you have been at work, how frequently were you verbally abused?	None	3 (3.6%)
	1 – 12 times per year	23 (27.4%)
	13 – 48 times per year	18 (21.4%)
	49 – 96 times per year	12 (14.3%)
	> 96 times per year	28 (33.3%)
	Did not respond	1
In the last year while you have been at work, how frequently were you threatened?	None	20 (23.5%)
	1 – 12 times per year	46 (54.1%)
	13 – 24 times per year	6 (7.1%)
	25 – 72 times per year	6 (7.1%)
	> 72 times per year	7 (8.2%)
	Did not respond	0
In the last year while you have been at work, how frequently were you assaulted?	None	51 (60%)
	1 – 2 times per year	24 (28.2%)
	3 – 12 times per year	8 (9.4%)
	> 12 times per year	2 (2.4%)
	Did not respond	0
Did you miss at least one day of work because of any of these events?*	Yes	5 (5.9%)
	No	80 (94.1%)
	Unknown	0
	Did not respond	0
If you were a victim of either verbal or physical violence, did you fill out a form to report the event?*	Yes	36 (42.9%)
	No	47 (56%)
	Unknown	1 (1.2%)
	Did not respond	1

***** - Questions not applicable to Pilot study hospitals

V. CALIFORNIA SURVEILLANCE OF VIOLENT EVENTS

Data for tracking violent events over the pre- and post-initiative periods were abstracted from OSHA Logs and Employers' Reports of Occupational Injury and Illness, as well as security incident reports, supervisor's reports, and employee incident reports. Since the OSHA Logs and Employers' Reports are the only reporting sources consistently used across all participating hospitals, they were selected as the primary sources for preparing surveillance statistics for this final report.

Of the 135 participating hospitals in California, 36 (or, 26.7%) did not report an OSHA- or Employers' Report- recordable (hereafter referred to as "recordable") violent event over the pre- or post- initiative time periods. This does not imply, however, that hospital employees in the emergency departments or psychiatric units were not victims of violent events. There is considerable under-reporting of such events, and when they are reported, they may not be severe enough to be classified as recordable. These non-recordable events are captured in other hospital reporting systems, such as employee incident reports, which have not been analyzed for purposes of this report.

Status of Violent Events Recorded in OSHA Log or
Employers' Report Data Systems for all Enrolled Hospitals, 1992 – 2001.

Hospital Characteristics	Hospitals with Reported Violent Events Number (%)	Hospitals without Reported Violent Events Number (%)
Hospital Type		
Trauma I and II	14 (14.1)	1 (2.8)
Trauma III and IV	2 (2.0)	0
Acute Care >= 300 Beds	18 (18.2)	5 (13.9)
Acute Care < 300 Beds	46 (46.5)	20 (55.6)
Psychiatric Facilities	16 (16.2)	2 (5.6)
Rural Trauma III and IV	0	2 (5.6)
Rural Acute Care	3 (3.0)	6 (16.7)
RUCC		
0	81 (81.8)	19 (52.8)
1	1 (1.0)	3 (8.3)
2	10 (10.1)	2 (5.6)
3	2 (2.0)	3 (8.3)
4	2 (2.0)	3 (8.3)
5	3 (3.0)	2 (5.6)
6	0	4 (11.1)
7	0	0
Psychiatric Unit[1]		
Yes	32 (38.6)	7 (20.6)
No	51 (61.4)	27 (79.4)
Total	99	36

1: Does not include psychiatric facilities in the count.

The majority of hospitals without a recordable violent event over the 10-year period between 1992 and 2001 were smaller facilities, specifically general acute care hospitals with fewer than 300 beds (55.6%) and rural acute care hospitals (16.7%) (Table V.1). Most of the hospitals not recording an event were in highly-populated urban areas in California, which is representative of the statewide distribution of hospitals by urbanicity, and nearly 80% did not have a psychiatric unit.

A. EMERGENCY DEPARTMENTS

1. Rate of Violent Events

The rate of recordable violent events in California hospital emergency departments decreased 20.3% over the pre- and post- initiative time periods. The pre-initiative rate was 0.69 violent events per number of hospitals reporting a recordable event per year. The post-initiative rate was 0.55.

Pre- and Post-Initiative Change in Violent Events, Emergency Departments.

	# Hospitals with Recordable Violent Events	# Violent Events	Rate of Violent Events[1]
Pre-Initiative (1992 – 1995)	31	85	0.69
Post-Initiative (1996 – 2001)	85	236	0.55
Total # Violent Events		321	
Pre-Post Percentage Change in Violent Event Rates			-20.3%

1: Rate of violent events = (# violent events / # hospitals with OSHA-recordable violent events) per year.

Reporting Sources: OSHA Log and Employers' Reports

2. Location of Violent Events

The specific location within the emergency department where the violent event occurred could not be identified from 76.6% of the records. Of those records where the specific location was documented, 12.5% of the events occurred in patient and treatment rooms and another 7.8% occurred in corridors and stairwells (3.1%), admitting and triage areas (2.8%) and at the entrances/exits of the emergency department.

Location within the Emergency Department where the Violent Event Occurred.

Location	Number	Percentage
Admitting / Triage	9	2.8
Corridor / Hallway / Stairwell / Elevator	10	3.1
Bathroom	1	0.3
Entrance / Exit / Restricted Entry	6	1.9
Lobby / Waiting Room	2	0.6
Nurses Station / Pod Area / Office	1	0.3
Patient Room / Treatment Room	40	12.5
Seclusion / Time Out Room	2	0.6
Outdoor Area	3	0.9

Other[1]	1	0.3
Unknown	246	76.6
Total	321	100

1: Other includes: jail ward.
Reporting Sources: OSHA Log and Employers' Reports

3. Time of Violent Events

The time of occurrence for more than 25% of the violent events was not documented in the available reporting sources. Among those events where the time was known, the percentage distribution was similar across time categories, with reported events occurring most frequently between 2:00 PM and 11:59 PM (30.5%).

Time of Violent Events, Emergency Departments.

Time Category (in military time)	Number	Percentage
2200 – 0559	79	24.6
0600 – 1359	56	17.5
1400 – 2159	98	30.5
Unknown	88	27.4
Total	321	100.0

Reporting Sources: OSHA Log and Employers' Reports

4. Activity at the Time of the Event

Nonspecific classifications of the activity leading up to the violent event were documented in 40.2% of the events. These classifications included perpetrators described as "combative", "defiant", or "unruly" without further specification. Over one-third of the events occurred while the employee was restraining or subduing a violent perpetrator, and another 27.7% of the events occurred while the employee was performing routine job functions. The activity leading up to the violent event could not be identified in 15% of the events.

Activity at the Time of the Violent Event, Emergency Departments.

Activity	Number	Percentage[1]
Escorting	5	1.6
Restraining / Subduing	107	33.3
Approaching / Redirecting / Calming / De-escalating	4	1.2
Assisting Co-worker	33	10.3
Medical Care / Nursing Duties / Job Functions	89	27.7
Responding to Code / Intervening / (Physically) Confronting / Taking down / Secluding	21	6.5
Combative / Defiant / Unruly (further unspecified)	129	40.2
Elopement	4	1.2
Unprovoked / Came up from behind	9	2.8
Monitoring / Observing	3	0.9

Talking to Co-worker, Patient, Visitor / Interviewing, Speaking with Patient	1	0.3
Other[2]	3	0.9
Unknown	48	15.0

1: Denominator for percentages is the total number of violent events (n = 321). Total percentage will exceed 100% because a violent event may have more than one activity associated with it.
2: Other includes: difference of opinion (argument), running after patient, walking away from discussion.
Reporting Sources: OSHA Log and Employers' Reports

5. Perpetrator of Violent Events

The majority of recordable violent events were perpetrated by the patient (86.3%). Few events were committed by a current or former employee (4.0%), and none of the events were criminal (e.g., mugging) or domestic in nature. These reports most likely under-estimate perpetrators that are not patients.

Perpetrator of Violent Events, Emergency Departments.

Type of Workplace Violence	Number	Percentage
Type I: Criminal	0	0
Type II: Patient	277	86.3
Type III: Employee	13	4.0
Type IV: Domestic	0	0
Visitor	8	2.5
Unknown	23	7.2
Total	321	100.0

Reporting Sources: OSHA Log and Employers' Reports

6. Type of Weapon

The most common weapons used to commit the violent acts involved perpetrator parts of the body, including the hands (26.8%), feet (12.8%), teeth (10.6%), and head (0.6%) and body fluids such as saliva and urine (15.9%). Nearly 25% of the violent events involved an unspecified part of the perpetrator's body. Other weapons included furniture in a patient room or waiting area (1.2%) and medical instruments used by the employee (e.g., stethoscope) (2.2%). The weapon could not be identified in 15% of the violent events.

Type of Weapon used to Commit the Violent Act, Emergency Departments.

Weapon Type	Number	Percentage[1]
Fists / Hands / Nails	86	26.8
Feet	41	12.8
Gun / Knife / Club, Stick	4	1.2
Teeth / Mouth	34	10.6
Floor / Door / Wall / Window	7	2.2

Body (nonspecific or other body part not captured in an existing code)	77	24.0
Furniture	4	1.2
Medical Supply, Instrument / Office Supply	7	2.2
Food / Utensils / Meal Tray	0	0
Words / Verbal Threat	8	2.5
Head	2	0.6
Body Fluids	51	15.9
Other[2]	9	2.8
Unknown	48	15.0

1: Denominator for percentages is the total number of violent events (n = 321). Total percentage will exceed 100% because a violent event may have more than one weapon associated with it.
2: Other includes: book, car door, pepper spray, radio, shoe, no contact (injured while running after/away from perpetrator).
Reporting Sources: OSHA Log and Employers' Reports

7. Type of Injury

The most common injury sustained by the emergency department employee as a result of the violent was a bruise or contusion (14.0%), followed by a sprain, strain or spasm (10.9%), and exposure to bodily fluids (10.0%). Another 16.2% of the events resulted in a bite (7.8%), abrasion or scratch (5.9%), and a laceration or cut (2.5%) to the employee. Although the reporting sources from which the violent events were extracted, namely OSHA Logs and Employers' Reports, were maintained in the Employee Health Department where the injuries were treated, there were still 14 events where the employee injury could not be identified from existing records.

Type of Injury Sustained by Employees in the Emergency Department as a Result of a Violent Event

Injury Type	Number	Percentage[1]
Abrasion / Scratch	19	5.9
Bite	25	7.8
Laceration / Cut	8	2.5
Bruise / Contusion / Blunt Trauma	45	14.0
Sprain / Strain / Spasm	35	10.9
Dislocation / Fracture	2	0.6
Exposure to Bodily Fluids	32	10.0
No Physical Injury	1	0.3
Puncture Wound	2	0.6
Psychological	1	0.3
Multiple Injuries (non-specified)	1	0.3
Burn	1	0.3
Concussion	3	0.9
Other[2]	2	0.6
Unknown	14	4.4

1: Denominator for percentages is the total number of violent events (n = 321). Total percentage will exceed 100% because a violent event may have resulted in more than one injury.
2: Other includes: head trauma, ruptured bicep.
Reporting Sources: OSHA Log and Employers' Reports

8. Part of the Body Injured

Approximately one-third of all violent events resulted in employee injury to the head, face, and neck areas (31.2%), upper extremities (34.9%), or torso (37.7%). Very few of the reported events resulted in psychological outcomes (2.5%).

Part of Employee's Body Injured as a Result of a Violent Event, Emergency Department.

Part of Body Injured	Number	Percentage[1]
Head / Face / Neck	100	31.2
Arms / Hands (Upper Extremities)	112	34.9
Abdomen / Chest / Back / Shoulder (Torso)	121	37.7
Legs / Hip / Feet (Lower Extremities)	33	10.3
Groin / Buttocks	3	0.9
Multiple Body Parts (not further specified)	9	2.8
Psychological	8	2.5
Other[2]	1	0.3
Unknown	13	4.0

1: Denominator for percentages is the total number of violent events (n = 321). Total percentage will exceed 100% because an employee may have sustained an injury to more than one body part as a result of the violent events.
2: Other includes: respiratory system.
Reporting Sources: OSHA Log and Employers' Reports

9. Employee Demographics

Over half of the victimized employees were women (58.3%), over one-third were male (34.0%), and 7.8% were of unknown gender. The mean age of emergency department employees reporting a recordable violent event was 39.3 years (range = 17 – 61 years). Employee age could not be abstracted from reporting source records for nearly 25% of the events.

Demographics of Employees Injured as a Result of a Violent Event, Emergency Departments.

Demographic	Number	Percentage
Gender		
Male	109	34.0
Female	187	58.3
Unknown	25	7.8
Age (in years)		
Mean	39.3	

Median	39.0
Range	17 – 61
Unknown	n = 76 (23.7%)

Reporting Sources: OSHA Log and Employers' Reports

10. Employee Occupation

Registered nurses were the most frequently assaulted employee in the emergency department (52.6%). Employees with specialized training who provide direct patient care, but who are not licensed, (e.g., ER technician, emergency medical technician) were victims in 9.3% of the violent events, followed by security officers and guards (8.4%). The number of licensed employees providing direct patient care with less than 2 years of specialized training (e.g., licensed practical nurses, licensed vocational nurses) and those employees who are neither licensed nor have specialized training (e.g., nurse's aides/assistants, patient care assistant) were similarly victimized (5.9% each). Few emergency department employees not involved in direct patient care were assaulted.

Occupation of Employee Injured as a Result of a Violent Event, Emergency Department.

Occupation	Number	Percentage
Nurse's Aide / Assistant, Medical Assistant, Patient Care Assistant, Orderly, Critical Care Technician, Health Aide, Sitter / Attendant, Hospital Assistant	19	5.9
Licensed Practical Nurse, Licensed Vocational Nurse, Licensed Psychiatric Technician	19	5.9
Psychiatric Technician / Aide, Behavior Technician, Mental Health Associate / Worker, Mental Health Counselor, ER Technician, Case Manager, Emergency Medical Technician	30	9.3
MD / Physician, Physician Assistant, Nurse Practitioner, Intern / Resident, Pharmacist	5	1.6
Registered Nurse	169	52.6
Police Officer	10	3.1
Security Officer / Guard, Public Service Officer	27	8.4
Maintenance, Housekeeping, Custodial, Food Service, Environmental Services Technician	1	0.3
Social Worker, Mental Health Therapist, Family Therapist, Speech Pathologist, Counselor	1	0.3
Art Therapist, Physical Therapist, Occupational Therapist, Recreational Therapist, Respiratory Therapist	0	0
Administration, Coordinator, Manager, Supervisor, Director, Team Leader	6	1.9
Clerk, Secretary, Administrative Support	10	3.1
Lab Technician, Radiology Technician, Lab Assistant	1	0.3
Other	0	0
Unknown	23	7.2
Total	321	100.0

Reporting Sources: OSHA Log and Employers' Reports

11. Time Away from Work

Although required documentation on OSHA Logs and Employers' Reports, an indicator of whether the assaulted employee missed work or had restricted work duty was missing for 15.3% and 47.0% of the reported events, respectively, and the number of days missed or on restricted duty was unknown in approximately 20% of the events in each case. Among the known information, approximately 25% of the employees missed at least one full day of work as a result of the violent event, and the median number of days missed was 4.0, with a range between 1 and 705 days. Less than 10% of the assaulted employees had restricted work duty following the event. The median number of restricted work days was 9 (range = 1 – 988 days).

Days Away from Work and Restricted Work Duty as a Result of a Violent Event, Emergency Department.

Days Away From Work		
	Number	Percentage
Employee Missed at Least 1 Full Day of Work		
Yes	80	24.9
No	192	59.8
Unknown	49	15.3
Number of Days Missed		
Mean	32.2	
Median	4.0	
Range	1 – 705	
Unknown	n = 17 (21.3%)	
Restricted Work Duty		
	Number	Percentage
Employee Had Restricted Work Duty		
Yes	21	6.5
No	149	46.4
Unknown	151	47.0
Number of Restricted Work Days		
Mean	78.2	
Median	9.0	
Range	1 – 988	
Unknown	n = 4 (19.0%)	

Reporting Sources: OSHA Log and Employers' Reports

B. CALIFORNIA PSYCHIATRIC UNITS / FACILITIES

1. Rate of Violent Events

The rate of violent events decreased 43.7% over the pre- and post- initiative periods among psychiatric facilities and hospitals with psychiatric units. This decrease is larger than that found for emergency department events (20.3%). Additionally, both pre- and post- initiative rates were higher in psychiatric units and facilities than in emergency departments.

Pre- and Post-Initiative Change in Violent Events, Psychiatric Unit / Facility.

	# Hospitals with Recordable Violent Events	# Violent Events	Rate of Violent Events[1]
Pre-Initiative (1992 – 1995)	16	343	5.36
Post-Initiative (1996 – 2001)	42	761	3.02
Total # Violent Events		1,104	
Pre-Post Percentage Change in Violent Event Rates			-43.7%

1: Rate of violent events = (# violent events / # hospitals with OSHA-recordable violent events) per year.
Reporting Sources: OSHA Log and Employers' Reports

2. Location of Violent Events

The specific location within the psychiatric unit or facility where the violent event occurred could not be identified from recordable reporting sources in 70.8% of all events. Of the known locations, the majority of events occurred in the corridors and stairwells (8.6%), patient, treatment and therapy rooms (6.6%), common areas such as day rooms and lounges (3.2%), and seclusion or time-out rooms (3.1%).

Location within the Psychiatric Unit / Facility where the Violent Event Occurred.

Location	Number	Percentage[1]
Admitting / Triage	9	0.8
Corridor / Hallway / Stairwell / Elevator	95	8.6
Day Room / Lounge / Classroom / Living Room	35	3.2
Bathroom	14	1.3
Entrance / Exit / Restricted Entry	11	1.0
Lobby / Waiting Room	3	0.3
Nurses Station / Pod Area / Office	30	2.7
Patient Room / Treatment Room / Therapy Room	73	6.6
Seclusion / Time Out Room	34	3.1
Dining Room	5	0.5
Outdoor Area	15	1.4
Other[2]	2	0.2
Unknown	782	70.8

1: Denominator for percentages is the total number of violent events (n = 1,104). Total percentage will exceed 100% because a violent event may have more than one location associated with it.
2: Other includes: courthouse, staff break room. Reporting Sources: OSHA Log and Employers' Reports

3. Time of Violent Events

Nearly two-thirds of the violent events occurred between 6:00 AM and 1:59 PM (33.0%) and between 2:00 PM and 11:59 PM (31.5%). Less than 15% of the events occurred in the late-night / early-morning hours. The time could not be identified in nearly one-quarter of all reported violent events.

Time of Violent Events, Psychiatric Unit / Facility.

Time Category (in military time)	Number	Percentage
2200 – 0559	151	13.7
0600 – 1359	364	33.0
1400 – 2159	348	31.5
Unknown	241	21.8
Total	1,104	100.0

Reporting Sources: OSHA Log and Employers' Reports

4. Activity at the Time of the Event

The types of activities at the time of the violent event were very similar between psychiatric units/facilities and emergency departments. The most common activity was defined by a nonspecific description of "combative", "defiant" or "unruly" perpetrator (44.7%), followed by restraining or subduing an aggressive perpetrator (25.4%), responding to a unit- or facility-wide code requiring the take down of a violent individual (15.3%), and performing routine medical or nursing functions (14.3%). The activity at the time of the event was not documented in 13.1% of the recordable events.

Activity at the Time of the Violent Event, Psychiatric Unit / Facility.

Activity	Number	Percentage[1]
Escorting	87	7.9
Restraining / Subduing	280	25.4
Approaching / Redirecting / Calming / De-escalating	65	5.9
Assisting Co-worker	101	9.1
Medical Care / Nursing Duties / Job Functions	158	14.3
Responding to Code / Intervening / (Physically) Confronting / Taking down / Secluding	169	15.3
Combative / Defiant / Unruly (further unspecified)	494	44.7
Elopement	27	2.4
Unprovoked / Came up from behind	80	7.2
Monitoring / Observing	23	2.1
Talking to Co-worker, Patient, Visitor / Interviewing, Speaking with Patient	5	0.5
Other[2]	12	1.1
Unknown	145	13.1

1: Denominator for percentages is the total number of violent events (n = 1,104). Total percentage will exceed 100% because a violent event may have more than one activity associated with it.
2: Other includes: running after / away from patient, fall, involved in a riot, playing basketball, waiting to go home.
Reporting Sources: OSHA Log and Employers' Reports

5. Perpetrator of Violent Events

Patients were the perpetrators in 95.2% of all reported violent events. Visitors of patients committed 0.6% of the events, and current or former employees perpetrated another 0.2%. None of the events were criminally-motivated or involved a domestic partner or acquaintance. The perpetrator was unknown in 4.0% of the events.

Perpetrator of Violent Events, Psychiatric Unit / Facility.

Type of Workplace Violence	Number	Percentage
Type I: Criminal	0	0
Type II: Patient	1,051	95.2
Type III: Employee	2	0.2
Type IV: Domestic	0	0
Visitor	7	0.6
Unknown	44	4.0
Total	1,104	100.0

Reporting Sources: OSHA Log and Employers' Reports

6. Type of Weapon

The hands (including the fists and nails) were identified as the violent weapon in 35.1% of all events. Other parts of the body used as weapons included the teeth (12.2%), feet (10.2%), and head (1.1%). Bodily fluids, such as saliva and urine, were intentionally splattered on employees in 13.8% of the events. Nonspecific body locations were also identified in 18.0% of all events. Few violent acts were committed using furniture (2.7%), medical supplies (1.0%) or food (1.0%) as weapons. The weapon was not documented in nearly 20% of all reported violent events.

Type of Weapon used to Commit the Violent Act, Psychiatric Unit / Facility.

Weapon Type	Number	Percentage[1]
Fists / Hands / Nails	388	35.1
Feet	113	10.2
Gun / Knife / Club, Stick	3	0.3
Teeth / Mouth	135	12.2
Floor / Door / Wall / Window	41	3.7
Body (nonspecific or other body part not captured in an existing code)	199	18.0
Furniture	30	2.7
Medical Supply, Instrument / Office Supply	11	1.0

Food / Utensils / Meal Tray	11	1.0
Words / Verbal Threat	7	0.6
Head	12	1.1
Body Fluids	152	13.8
Other[2]	12	1.1
Unknown	206	18.7

1: Denominator for percentages is the total number of violent events (n = 1,104). Total percentage will exceed 100% because a violent event may have more than one weapon associated with it.
2: Other includes: ball, book, chemicals / mace, eyeglasses, shoe, no contact (injured while running after/away from perpetrator).
Reporting Sources: OSHA Log and Employers' Reports

7. Type of Injury

More than one-third of the violent events resulted in an employee sustaining a bruise or contusion (35.1%). Other employee injuries included sprains, sprains or spasms (23.4%), exposure to bodily fluids (13.8%), abrasions or scratches (12.1%), and bites (11.6%). In nearly 20% of the reported violent events, the injury could not be identified.

Type of Injury Sustained by Employees in the Psychiatric Unit / Facility as a Result of a Violent Event.

Injury Type	Number	Percentage[1]
Abrasion / Scratch	134	12.1
Bite	128	11.6
Laceration / Cut	59	5.3
Bruise / Contusion / Blunt Trauma	387	35.1
Sprain / Strain / Spasm	258	23.4
Dislocation / Fracture	19	1.7
Exposure to Bodily Fluids	152	13.8
No Physical Injury	2	0.2
Puncture Wound	7	0.6
Psychological	2	0.2
Multiple Injuries (non-specified)	5	0.5
Burn	2	0.2
Concussion	5	0.5
Other[2]	15	1.4
Unknown	196	17.8

1: Denominator for percentages is the total number of violent events (n = 1,104). Total percentage will exceed 100% because a violent event may have resulted in more than one injury.
2: Other includes: gunshot wound, chipped/loose tooth, fluid irritation, ripped hair from head.
Reporting Sources: OSHA Log and Employers' Reports

8. Part of the Body Injured

The head, face and neck (40.0%) and the upper extremities (39.2%) were the two most common areas of the employees' bodies injured as a result of the violent event, followed closely by areas of the torso, including the abdomen, chest, and back (31.6%).

Part of Employee's Body Injured as a Result of a Violent Event, Psychiatric Unit / Facility.

Part of Body Injured	Number	Percentage[1]
Head / Face / Neck	442	40.0
Arms / Hands (Upper Extremities)	433	39.2
Abdomen / Chest / Back / Shoulder (Torso)	349	31.6
Legs / Hip / Feet (Lower Extremities)	155	14.0
Groin / Buttocks	27	2.4
Multiple Body Parts (not further specified)	13	1.2
Psychological	4	0.4
Other[2]	1	0.1
Unknown	32	2.9

1: Denominator for percentages is the total number of violent events (n = 1,104). Total percentage will exceed 100% because an employee may have sustained an injury to more than one body part as a result of the violent events.

2: Other includes: skin.

Reporting Sources: OSHA Log and Employers' Reports

9. Employee Demographics

Just over half of the victimized employees were female (51.4%), and 43.3% were male. The gender could not be identified in 5.3% of the reported events. The mean age of the assaulted employee was 40.7 years, with a range between 19 and 83 years.

Demographics of Employees Injured as a Result of a Violent Event, Psychiatric Unit / Facility.

Demographic	Number	Percentage
Gender		
Male	478	43.3
Female	567	51.4
Unknown	59	5.3
Age (in years)		
Mean	40.7	
Median	40.0	
Range	19 – 83	
Unknown	n = 201 (18.2%)	

Reporting Sources: OSHA Log and Employers' Reports

10. Employee Occupation

Registered nurses (27.1%) and unlicensed staff with specialized training for direct patient care (e.g., psychiatric technicians and aides, mental health workers) (28.6%) were the occupations most at risk for being assaulted on the job. Nearly 15% of unlicensed staff with no specialized training for direct patient care (e.g., nurse's aides and assistants, health aides) were victims of assault. Few violent events were reported by those providing no direct patient care, such as employees in administrative support, maintenance and housekeeping, and laboratory positions.

Occupation of Employee Injured as a Result of a Violent Event, Psychiatric Unit / Facility.

Occupation	Number	Percentage
Nurse's Aide / Assistant, Medical Assistant, Patient Care Assistant, Orderly, Critical Care Technician, Health Aide, Sitter / Attendant, Hospital Assistant	161	14.6
Licensed Practical Nurse, Licensed Vocational Nurse, Licensed Psychiatric Technician	92	8.3
Psychiatric Technician / Aide, Behavior Technician, Mental Health Associate / Worker, Mental Health Counselor, ER Technician, Case Manager, Emergency Medical Technician	316	28.6
MD / Physician, Physician Assistant, Nurse Practitioner, Intern / Resident, Pharmacist	4	0.4
Registered Nurse	299	27.1
Police Officer	26	2.4
Security Officer / Guard, Public Service Officer	44	4.0
Maintenance, Housekeeping, Custodial, Food Service, Environmental Services Technician	14	1.3
Social Worker, Mental Health Therapist, Family Therapist, Speech Pathologist, Counselor	11	1.0
Art Therapist, Physical Therapist, Occupational Therapist, Recreational Therapist, Respiratory Therapist	15	1.4
Administration, Coordinator, Manager, Supervisor, Director, Team Leader	12	1.1
Clerk, Secretary, Administrative Support	42	3.8
Lab Technician, Radiology Technician, Lab Assistant	10	0.9
Other	3	0.3
Unknown	55	5.0
Total	1,104	100.0

Reporting Sources: OSHA Log and Employers' Reports

11. Time Away from Work

Although required fields for completion in OSHA Logs and Employers' Reports, an indicator of whether the employee missed work or had restricted work duty were unknown in 12.6% and 49.1% of all events, respectively. Among the known data, 26.4% of employees experiencing a violent event missed at least one full day of work after the event, and the median number of days missed was 7.0 (range = 1 – 1,332). Just over 10% of assaulted employees were on restricted work

duty following the violent event, and the median number of restricted days was 12.0 (range = 1 – 1,867).

Days Away from Work and Restricted Work Duty as a Result of a Violent Event, Psychiatric Unit / Facility.

Days Away From Work		
	Number	Percentage
Employee Missed at Least 1 Full Day of Work		
Yes	291	26.4
No	674	61.1
Unknown	139	12.6
Number of Days Missed		
Mean	38.0	
Median	7.0	
Range	1 – 1,332	
Unknown	n = 56 (19.2%)	
Restricted Work Duty		
	Number	Percentage
Employee Had Restricted Work Duty		
Yes	117	10.6
No	445	40.3
Unknown	542	49.1
Number of Restricted Work Days		
Mean	49.5	
Median	12.0	
Range	1 – 1,867	
Unknown	n = 20 (17.1%)	

Reporting Sources: OSHA Log and Employers' Reports

VI. NEW JERSEY HOSPITAL SECURITY PROGRAM ASSESSMENTS

A. NEW JERSEY EMERGENCY DEPARTMENTS

1 Profile of participating Emergency Departments

The participating hospitals treated an average of 115 patients per weekend day and 114 per weekday. The range of treated patients differed markedly, indicating wide variation in the level of patient workload. Waiting time also showed a wide distribution. While 40% of hospitals reported a wait of an hour or less for non-critical patients during peak hours, 34% reported a wait of longer than two hours.

New Jersey Emergency Department Profiles

Characteristic	Mean (Range)
Number of patients seen during each 24 hour weekend day	115.23 (40 – 250)
Number of patients seen during each 24 hour week day	113.68 (40 – 250)
Average wait time for non-critical patients during peak hours	
≤ 1 Hour	20 (40%)
>1 - ≤ 2 Hours	12 (24%)
> 2 Hours	17 (34%)
Unknown	1 (2%)
Did not respond	0
Average wait time for non-critical patients during non-peak hours	36 (72%)
≤ 1 Hour	10 (20%)
>1 - ≤ 2 Hours	3 (6%)
> 2 Hours	1 (2%)
Unknown	0
Did not respond	0

15 Workplace Violence Training Programs

The majority of New Jersey hospitals (82%) had violence prevention training for new hires in the emergency department. However, only a small percentage of the training programs included all ED employees in either new hire (10%) or recurring (4.9%) training. Physicians, volunteers, clerical staff and contract employees were the most likely to be excluded from required training. Physicians, who are the primary resource for which patients come to emergency departments, often have little time with individual patients, and their limited availability is one reason for long waiting periods. Although physicians often spend less time with individual patients than nurses, they could play an important role in recognizing and de-escalating patients who are in a state of increasing aggression. Volunteers, especially those that interact with patients and/or visitors, should also be included in training if they regularly work in the ED. Clerical staff are also likely to come into contact with the public and should receive violence prevention training.

Many hospitals used the same program for new hire and recurring training. In hospitals that conducted recurring training only once a year, this could leave significant gaps of up to one year between beginning work in the ED and until the training. Training programs ranged in length from 30 minutes to 16 hours, with the majority lasting one hour or less. Recurring training was usually of shorter duration, and more likely to include only reading updates or one lecture. Recurring training could become a good opportunity for more skills-based learning, which would require role-playing and interactive training. Large hospitals often hired a contractor to conduct workplace violence training. Training programs conducted by hospital staff were most often conducted by Nurse Managers, Nurse Educators, or Security personnel.

Workplace Violence Prevention Training in the Emergency Department

Description	Response	New Jersey	
		New Hire	Recurring
Training	Yes*	41 (82%)	
	No*	8 (16%)	
	Unknown*	1 (0.9%)	
	Not Responded*	1	
Training Required for all employees	Yes	4 (10%)	2 (4.9%)
	No	37 (90%)	39 (95.1%)
Employees who are not included in WPV Training	Nurses	0	0
	Physicians	29 (71%)	27 (77.1%)
	Unlicensed support staff	4 (10%)	4 (11.4%)
	Managers	6 (15%)	5 (12.2%)
	Clerical Staff	18 (44%)	17 (47.2%)
	Security	5 (12%)	6 (16.7%)
	Volunteers	24 (60%)	20 (57.1%)
	Contract Employees	17 (42%)	16 (44.4%)
	*Per Diem Employees**	2 (5%)	2 (5.7%)
	*Temporary Staff**	9 (23%)	10 (27.8%)
Length of Training	<= 1 hour	16 (40%)	14 (41.2%)
	>1 - <= 4 hours	8 (20%)	10 (29.4%)
	>4 - <= 8 hours	11 (28%)	7 (20.6%)
	> 8 hours	1 (3%)	0
	Unknown	4 (10%)	2 (5.9%)
	Not Responded	1	7
Format used for training	Lecture*	37 (90%)	
	Reading prepared material*	26 (67%)	
	Didactic/interactive discussions*	33 (83%)	
	Role Playing	26 (67%)	

15 - Questions not applicable to recurrent training

Hospitals included most major topics in their training programs. The majority of training programs were based on existing programs which can be purchased, and these provide a good basis for training. A large percentage of programs lacked a review of the hospital's hazard assessment or a review of the hospitals' reported violent events (39%) and the hospital not obtaining a history of patients with violent behavior (37%).

Components of workplace violence training in New Jersey Emergency Departments

Components	New Jersey	
	New Hire	Recurring
Hospital safety policies and procedures	33 (80.5%)	30 (79%)
Hospital hazard assessment / Scope and patterns of violent events	25 (61%)	21 (57%)
Aggression and violence predicting factors	35 (87.5%)	33 (89%)
Characteristics of aggressive and violent patients and victims	35 (87.5%)	32 (87%)
Discussion of role of hospital security and law enforcement personnel	39 (95.1%)	32 (87%)
Verbal methods to diffuse aggressive behavior	37 (92.5%)	33 (89%)
Physical maneuvers to diffuse or avoid aggressive behavior	32 (78%)	30 (79%)
How to report a violent event	36 (87.8%)	34 (90%)
Methods to protect patients and visitors from violence	32 (78%)	30 (79%)
Self-defense if preventive action does not work	25 (61%)	26 (68%)
Obtaining patient history from a patient with violent behavior	26 (63.4%)	24 (65%)
Restraining Techniques	37 (90.2%)	34 (92%)
Appropriate use of medications as chemical restraints	30 (73.2%)	30 (79%)
Resources available for victims of workplace violence	29 (72.5%)	26 (72%)

A lower proportion of ED staff representatives reported receiving training (74%) than the proportion of hospitals reporting training (82%), and the distribution of length of training was similar for both staff and manager reported. Almost half of the staff representatives reported that their workplace violence training was excellent (10.8%) or very good (35.1%) although 20% reported the training to be "not very good."

Emergency Department Staff Rating of Workplace Violence Training

Characteristic	Response	
		Distribution
Did you receive training	Yes	74 (74%)
about violence-based safety	No	25 (25%)
in your workplace	Unknown	1 (1%)
	Did not Respond	0
How long was the training	≤ 1 Hour	32 (45.1%)
on workplace violence?	> 1 - ≤ 4 Hours	15 (21.1%)
	> 4 - ≤ 8 Hours	19 (26.8%)
	> 8 Hours	3 (4.2%)
	Self-study	0
	Unknown	2 (2.8%)
	Did not respond	3
How good would you say	Excellent	8 (10.8%)
your overall workplace	Very Good	26 (35.1%)

violence training program is?	Adequate	25 (33.8%)
	Not Very good	15 (20.3%)
	Unknown	0
	Did not respond	0

2. Workplace Violence Policies and Procedures

The majority of hospitals (68%) had written policies and procedures, which are required for JCAHO certification. Although Emergency Departments have a much higher risk than the general hospital, only 12% reported specific written policies and procedures for that unit. In California AB508 requires that policies address multiple types of violence, including violence against employees, against patients, between employees, and by other parties. Surprisingly, a large percentage of New Jersey hospitals with written policies included employee-on employee violence (64%), patient or visitor violence against employees ((73%), and violence against patients (58%) in their policies. Zero tolerance policies were the most common type of specific policy found hospital policies and procedures with a 70% affirmation rate.

Workplace Violence Policies in New Jersey Emergency Departments

Question	Response	Distribution
Does your hospital have written policies regarding violence in the workplace?	Yes	34 (68%)
	No	6 (12%)
	Unknown	10 (20%)
	Did not respond	0
Does your unit have a separate written policy than the rest of the hospital regarding violence in the workplace?	Yes	6 (12.2%)
	No	38 (77.6%)
	Unknown	5 (10.2%)????
	Did not respond	1
Does the policy include Employee-on-Employee violence	Yes	29 (64.4%)
	No	11 (24.4%)
	Unknown	5 (11.1%)
	Did not respond	5
Does the policy include Violence against employees by patients or visitors	Yes	33 (73.3%)
	No	8 (17.8%)
	Unknown	4 (8.9%)
	Did not respond	5
Does the policy include Violence against patients or visitors	Yes	26 (57.8%)
	No	12 (26.7%)
	Unknown	7 (15.6%)
	Did not respond	5
Does your hospital have a “zero-tolerance” policy	Yes	35 (70%)
	No	8 (16%)
	Unknown	7 (14%)
	Did not respond	0

3. Workplace violence services and activities

The most common services and activities to reduce or respond to workplace violence are listed in Table IV.F. The majority of hospitals provide services to victims through Employee Health and/or Employee Assistance Programs. These programs provide services for individual staff who have reported victimization in a violent event. Fewer (64.6%) hospitals provide unit-specific critical incident debriefing in which employees familiar with the unit review each event and discuss methods to reduce similar risks.

Workplace Violence Services and Activities in New Jersey Emergency Departments

Question	Response	Distribution
Does your unit do anything specific to monitor or reduce tension in waiting areas?	Yes	42 (89.4%)
	No	4 (8.5%)
	Unknown	1 (2.1%)
	Did not respond	3
Does your unit do anything specific to monitor or reduce tension between staff?	Yes	38 (80.9%)
	No	9 (19.1%)
	Unknown	0
	Did not respond	3
Critical Incident Debriefing	Yes	31 (64.6%)
	No	17 (35.4%)
	Unknown	0
	Did not respond	2
Employee Health	Yes	37 (77.1%)
	No	11 (22.9%)
	Unknown	0
	Did not respond	2
Employee Assistance Programs	Yes	43 (87.8%)
	No	6 (12.2%)
	Unknown	0
	Did not respond	1

5. Security Features

In general, environmental components of security programs were less common than behavioral or administrative approaches. Nearly half the hospitals do not have a check-in procedure for visitors and over one-third did not have isolated areas to keep aggressive patients. Only a few hospitals had bolted furniture to the floor. However, a majority of hospitals (70%) did have stationary panic alarms, but few used portable alarms or other noise-making devices for security purposes.

Security Features of New Jersey Emergency Departments

Question	Response

		Distribution
Are visitors required to check in?	Yes	28 (56%)
	No	22 (44%)
	Unknown	0
	Did not respond	0
Does your unit have stationary panic alarms?*	Yes	35 (70%)
	No	14 (28%)
	Unknown	1(1%)
	Did not respond	0
Does staff carry portable panic alarms?*	Yes	2 (4%)
	No	48 (96%)
	Unknown	0
	Did not respond	0
Does staff carry noise-making devices, such as whistles, to alert other staff of problems?*	Yes	0
	No	50 (100%)
	Unknown	0
	Did not respond	0
Are there areas (e.g. seclusion rooms) in which patients who have become aggressive can be placed to calm down?*	Yes	32 (64%)
	No	18 (36%)
	Unknown	0
	Did not respond	0
Is furniture bolted to the floor to avoid its use as a weapon for entrapment?	Yes	5 (12.2%)
	No	35 (85.4%)
	Unknown	1 (2.4%)
	Did not respond	9

Most hospitals use security cameras to monitor the ED, and over half use mirrors to increase visibility. Few hospitals have areas with inadequate lighting, which was defined as light enough to read a newspaper. Nearly half of the hospitals had unrestricted and unmonitored public access through means other than the main entrance. Most ED's reported having areas where employees could be overcome and isolated by potential perpetrators.

Security Equipment in New Jersey Emergency Departments

Question	Response	Distribution
ED has security cameras	Yes	40 (80%)
	No	6 (12%)
	Unknown	4 (8%)
	Did not respond	0
Are there any areas that do NOT have adequate lighting?	Yes	8 (8.5%)
	No	82 (87.2%)
	Unknown	4 (4.3%)
	Did not respond	9
Other than the main entrance, are there any areas where the public can enter unrestricted (unlocked and unmonitored)?	Yes	48 (49.5%)
	No	49 (50.5%)
	Unknown	0
	Did not respond	6
Are mirrors used to enhance visibility?	Yes	55 (56.1%)

	No	39 (39.8%)
	Unknown	4 (4.1%)
	Did not respond	5
Are there areas within the ED/Psych in which employees can become isolated and are unable to communicate?	Yes	79 (81.4%)
	No	15 (15.55)
	Unknown	3 (3.1%)
	Did not respond	6

6. Emergency Department Staff reports of experience with violence

Verbal abuse was reported nearly every day or every other day, and only 6% reported no verbal abuse. Threats were reported by 61% of employees, with the majority threatened fewer than 12 times in the last year. Almost one-third of staff respondents reported being assaulted in the last year, and more than 18% reported more than one assault. However, 72% of those who were assaulted verbally or physically did not report the event.

Staff Experience with Violent Events in New Jersey Emergency Departments

Characteristic	Response	Distribution
In the last year while you have been at work, how frequently were you verbally abused?	None	6 (6.3%)
	1 – 12 times per year	37 (38.5%)
	13 – 48 times per year	10 (10.4%)
	49 – 96 times per year	17 (17.7%)
	> 96 times per year	26 (27.1%)
	Did not respond	4
In the last year while you have been at work, how frequently were you threatened?	None	38 (39.2%)
	1 – 12 times per year	43 (44.3%)
	13 – 24 times per year	6 (6.2%)
	25 – 72 times per year	6 (6.2%)
	> 72 times per year	4 (4.1%)
	Did not respond	3
In the last year while you have been at work, how frequently were you assaulted?	None	69 (69.7%)
	1 – 2 times per year	18 (18.2%)
	3 – 12 times per year	10 (10.1%)
	> 12 times per year	2 (2%)
	Did not respond	1
Did you miss at least one day of work because of any of these events?	Yes	1 (1%)
	No	93 (98.9%)
	Unknown	0
	Did not respond	6
If you were a victim of either verbal or physical violence, did you fill out a form to report the event?	Yes	25 (26.9%)
	No	67 (72%)
	Unknown	1 (1.1%)
	Did not respond	7

B. NEW JERSEY PSYCHIATRIC FACILITIES/UNITS

1. Profile of Participating Hospitals

The average number of beds in the psychiatric units or facilities was 26, with a range of 14 to 70. Future reference to psychiatric units or facilities will be "units" and will refer to all participating hospital psychiatric departments, wards, or independent facilities. The average occupancy rates were 75%, while a few reported much lower occupancy. The average length of stay was 8.4 days and ranged from four to 30 days. Voluntary admissions (78%) made up the majority of patients, while some units had no involuntary admissions.

Psychiatric Unit or Facility Profile

Characteristic	New Jersey Mean (Range)
Number of beds in unit	26.36 (14 – 70)
Proportion of beds occupied	74.56% (12% – 99%)
Average Length of Stay	8.4 (4 – 30)
Proportion of involuntary admissions	22.9% (0 – 100%)
Proportion of voluntary admissions	77.5% (20 – 100%)

2. Workplace Violence Training Programs

Most New Jersey psychiatric units had specific workplace violence training, but only 32% required this training for all employees associated with the unit. Physicians were the most likely occupational group to be excluded from mandatory training. Volunteers and clerical staff were also likely to be excluded from this training.

Almost half of the workplace violence training programs for newly hired employees lasted a minimum of 4 hours. Psychiatric units used many modalities for their training, including the use of lectures, reading materials, didactic/interactive sessions, and role playing.

Workplace Violence Prevention Training in Psychiatric Units

Description	Response	New Jersey	
		New Hire	Recurring
Training	Yes	28 (93%)	n/a
	No	2 (7%)	n/a
	Unknown	0	n/a
	Not Responded	0	n/a
Training Required for all employees	Yes	9 (32%)	8 (29%)
	No	19 (68%)	20 (71%)
Employees who are not included in WPV Training	Nurses	0	0
	Physicians	15 (54%)	15 (54%)
	Unlicensed support staff	0	0
	Managers	2 (7%)	2 (7%)
	Clerical Staff	8 (29%)	8 (29%)
	Security	3 (11%)	3 (11%)
	Volunteers	8 (29%)	8 (29%)
	Contract Employees	0	19
	Per Diem Employees	1 (4%)	1 (4%)

	Temporary Staff	1 (4%)	2 (7%)
Length of Training	<= 1 hour	3 (11%)	3 (11%)
	>1 - <= 4 hours	9 (32%)	19 (68%)
	>4 - <= 8 hours	13 (46%)	5 (18%)
	> 8 hours	2 (7%)	0
	Unknown	1 (4%)	1 (3.6%)
	Not Responded	0	0
Format used for training	Lecture	26 (93%)	n/a
	Reading prepared material	26 (93%)	n/a
	Didactic/interactive discussions	27 (96%)	n/a
	Role Playing	26 (93%)	n/a

Psychiatric units include many of the training components identified in the California Hospital Security Act and the OSHA Guidelines. The components least likely to be included were a review of the hospital hazard assessment and having resources available for victims of workplace violence. High on the list of components were aggression and violence predicting factors, restraining techniques, how to report a violent event, and verbal methods to diffuse aggressive behavior. Psychiatric Units differed from Emergency Departments in its use of self-defense and obtaining a patient history on a patient with violent behavior components in their training.

Components of workplace violence training in New Jersey Psychiatric Units or Facilities

Components	New Jersey	
	New Hire	Recurring
Hospital safety policies and procedures	25 (89%	22 (88%)
Hospital hazard assessment / Scope and patterns of violent events	17 (61%)	17 (65%)
Aggression and violence predicting factors	28 (100%)	26 (100%)
Characteristics of aggressive and violent patients and victims	28 (100%)	26 (100%)
Discussion of role of hospital security and law enforcement personnel	22 (79%)	20 (77%)
Verbal methods to diffuse aggressive behavior	26 (93%)	25 (96%)
Physical maneuvers to diffuse or avoid aggressive behavior	26 (93%)	25 (96%)
How to report a violent event	27 (96%)	24 (92%)
Methods to protect patients and visitors from violence	26 (93%)	23 (92%)
*Self-defense if preventive action does not work**	24 (86%)	24 (92%)
*Obtaining patient history from a patient with violent behavior**	21 (75%)	20 (77%)
*Restraining Techniques**	27 (96%)	25 (96%)
*Appropriate use of medications as chemical restraints**	26 (93%)	25 (96%)
*Resources available for victims of workplace violence**	17 (61%)	16 (62%)

* - Questions not applied to all participating hospitals

All of the psychiatric unit staff respondents reported receiving training on workplace violence prevention. The distribution of the length of recurring training was similar as reported by staff and unit managers. Over three-quarters of the staff reported that their training was excellent or very good.

Staff Responses about Workplace Violence Training Programs in New Jersey Psychiatric Facilities and Departments

Characteristic	Response	Distribution
Did you receive training about violence-based safety in your workplace	Yes	58 (100%)
	No	0
	Unknown	0
	Did not Respond	0
How long was the training on workplace violence?	≤ 1 Hour	7 (12.1%)
	> 1 - ≤ 4 Hours	24 (41.4%)
	> 4 - ≤ 8 Hours	17 (29.3%)
	> 8 Hours	10 (17.2%)
	Self-study	0
	Unknown	0
	Did not respond	0
How good would you say your overall workplace violence training program is?	Excellent	30 (35.3%)
	Very Good	35 (41.2%)
	Adequate	18 (21.2%)
	Not Very good	2 (2.4%)
	Unknown	0
	Did not respond	0

3. Workplace Violence Policies and Procedures

Most psychiatric units reported that they had workplace violence policies with the exception of 2 units. Forty percent of the units had workplace violence policies that were specific to their units, which indicates the recognition of increased risk for violence on psychiatric units. Most workplace violence policies addressed violence against employees by patients, violence against patients by employees, and employee-on-employee violence. Over 80% of hospitals reported having "zero tolerance" policies for workplace violence, but these generally did not define "violence" or the practices or protocols that would be enforced in the policy.

Workplace Violence Policies in New Jersey Psychiatric Units and Facilities

Question	Response	Distribution
Does your hospital have written policies regarding violence in the workplace?	Yes	24 (80%)
	No	2 (6.7%)
	Unknown	4 (13.3%)
	Did not respond	0
Does your unit have a separate written policy than the rest of the hospital regarding violence in the workplace?	Yes	12 (40%)
	No	16 (53.3%)
	Unknown	2 (6.7%)
	Did not respond	0
Does the policy include Employee-on-Employee violence	Yes	20 (69%)

	No	6 (20.7%)
	Unknown	3 (10.3%)
	Did not respond	1 (3.3%)
Does the policy include Violence against employees by patients or visitors	Yes	21 (72.4%)
	No	6 (20.7%)
	Unknown	2 (6.9%)
	Did not respond	1
Does the policy include Violence against patients or visitors	Yes	21 (72.4%)
	No	6 (20.7%)
	Unknown	2 (6.9%)
	Did not respond	1
Does your hospital have a "zero-tolerance" policy	Yes	25 (83.3%)
	No	3 (10%)
	Unknown	2 (6.7%)
	Did not respond	0

4. Workplace violence services and activities

Nearly all psychiatric units engaged in activities to monitor or reduce tension between staff. Those that did mention such activities included social functions, incentive programs, and efforts to increase reporting and/or communication. Only 17 % of the psychiatric facilities did not report offering critical incident debriefing following violent events. Employee Assistance Programs that respond to workplace violence events were reported by over 86% of facilities.

Workplace Violence Services and Activities in New Jersey Psychiatric Units and Facilities

Question	Response	Distribution
Does your unit do anything specific to monitor or reduce tension between staff?	Yes	28 (96.6%)
	No	1 (3.4%)
	Unknown	0
	Did not respond	1
Critical Incident Debriefing	Yes	25 (83.3%)
	No	5 (16.7%)
	Unknown	0
	Did not respond	0
Employee Health	Yes	29 (96.7%)
	No	1 (3.3%)
	Unknown	0
	Did not respond	0
Employee Assistance Programs	Yes	26 (86.7%)
	No	4 (13.3%)
	Unknown	0
	Did not respond	0

5. Security Features

Almost two-thirds of the psychiatric units had stationary panic alarms, but only one-quarter had any type of portable panic alarm. Most facilities had places where patients could be taken to calm down and to protect others. Only half of the units had furniture that was bolted to the floor to keep it from being used as a weapon.

Security Features of New Jersey Psychiatric Units and Facilities

Question	Response	Distribution
Does your unit have stationary panic alarms?*	Yes	19 (63.3%)
	No	11 (36.7%)
	Unknown	0
	Did not respond	0
Does staff carry portable panic alarms?*	Yes	6 (20%)
	No	24 (80%)
	Unknown	0
	Did not respond	0
Does staff carry noise-making devices, such as whistles, to alert other staff of problems?*	Yes	2 (6.7%)
	No	28 (93.3%)
	Unknown	0
	Did not respond	0
Are there areas (e.g. seclusion rooms) in which patients who have become aggressive can be placed to calm down?*	Yes	27 (90%)
	No	3 (10%)
	Unknown	0
	Did not respond	0
Is furniture bolted to the floor to avoid its use as a weapon for entrapment?*	Yes	14 (51.9%)
	No	13 (48.1%)
	Unknown	0
	Did not respond	3

* - Question is not applied to all hospitals

Fewer than 7% of facilities use metal detectors either for the unit or the general hospital. Most of the facilities reported adequate lighting and entry/exit control. More than half of facilities use mirrors to enhance visibility. However, the majority of units have areas in which staff can become isolated.

Security Equipment in New Jersey Psychiatric Units and Facilities

Question	Response	Distribution
Do people entering the department have to go through a metal detector, either at the main hospital entrance or the ED/Psych entrance?	Yes	2 (6.7%)
	No	28 (93.3%)
	Unknown	0
	Did not respond	0
Are there any areas that do NOT have adequate lighting?*	Yes	3 (10%)
	No	27 (90%)
	Unknown	0

	Did not respond	0
Other than the main entrance, are there any areas where the public can enter unrestricted (unlocked and unmonitored)?*	Yes	3 (10.3%)
	No	26 (89.7%)
	Unknown	0
	Did not respond	1
Are mirrors used to enhance visibility?	Yes	22 (75.9%)
	No	5 (17.2%)
	Unknown	2 (6.9%)
	Did not respond	1
Are there areas within the unit in which employees can become isolated and are unable to communicate?*	Yes	19 (70.4%)
	No	8 (29.6%)
	Unknown	0
	Did not respond	3

6. Psychiatric Unit Staff reports of experience with violence

Psychiatric unit staff reported a high prevalence of violence victimization. Almost half reported being threatened between one and twelve times per year and one-quarter of staff reported being a victim of verbal abuse more than 96 times per year. One-third of staff reported being assaulted at least once during the past year. However, the majority of staff who reported being victims of any type of violence did not report the event.

Staff Experience with Violent Events in New Jersey Psychiatric Units and Facilities

Characteristic	Response	Distribution
In the last year while you have been at work, how frequently were you verbally abused?	None	7 (12.3%)
	1 – 12 times per year	23 (40.4%)
	13 – 48 times per year	7 (12.3%)
	49 – 96 times per year	6 (10.5%)
	> 96 times per year	14 (24.6%)
	Did not respond	1
In the last year while you have been at work, how frequently were you threatened?	None	16 (28.1%)
	1 – 12 times per year	32 (56.1%)
	13 – 24 times per year	2 (3.5%)
	25 – 72 times per year	2 (3.5%)
	> 72 times per year	5 (8.6%)
	Did not respond	1
In the last year while you have been at work, how frequently were you assaulted?	None	37 (64.9%)
	1 – 2 times per year	12 (21.1%)
	3 – 12 times per year	5 (8.8%)
	> 12 times per year	3 (5.3%)
	Did not respond	1
Did you miss at least one day of work because of any of these events?	Yes	4 (7.5%)
	No	49 (92.5%)
	Unknown	0
	Did not respond	5

If you were a victim of either verbal or physical violence, did you fill out a form to report the event?	Yes	22 (41.5%)
	No	31 (58.8%)
	Unknown	0
	Did not respond	5

VII. NEW JERSEY SURVEILLANCE OF VIOLENT EVENTS

Data for tracking violent events in New Jersey hospitals were abstracted from OSHA Logs and Employers' Reports of Occupational Injury and Illness, as well as security incident reports, supervisor's reports, and employee incident reports for the years 1992 to 2001, inclusive. Since the OSHA Logs and Employers' Reports are the only reporting sources consistently used across all participating hospitals, they were selected as the primary sources for preparing surveillance statistics for this final report.

Of the 54 participating hospitals in New Jersey, 9 (16.7%) did not report an OSHA or Employers' Report recordable (hereafter referred to as "recordable") violent event over the study time period. This does not imply, however, that emergency department or psychiatric unit employees in these 9 hospitals were not victims of violent events. There is considerable under-reporting of such events, and when they are reported, they may not be severe enough to be classified as recordable. These non-recordable events are captured in other hospital reporting systems, such as employee incident reports, which have not been analyzed for purposes of this report.

Status of Violent Events Recorded in OSHA Log or Employers' Report Data Systems for all Enrolled Hospitals, 1992 – 2001.

Hospital Characteristics	Hospitals with Reported Violent Events Number (%)	Hospitals without Reported Violent Events Number (%)
Hospital Type		
Trauma I and II	10 (100%)	0
Trauma III and IV	0	0
Acute Care >= 300 Beds	8 (80%)	2 (20%)
Acute Care < 300 Beds	23 (77%)	7 (23%)
Psychiatric Facilities	4 (100%)	0
Rural Trauma III and IV	N/A	N/A
Rural Acute Care	N/A	N/A
RUCC		
0	32 (71.1)	8
1	4	0
2	9	1
3	N/A	N/A
4	N/A	N/A
5	N/A	N/A
6	N/A	N/A
7	N/A	N/A
Psychiatric Unit[1]		
Yes	24	3
No	17	6
Total	45	9

1: Does not include stand-alone psychiatric facilities in the count.

The majority of hospitals without a recordable violent event over the 10-year period between 1992 and 2001 were smaller facilities, specifically general acute care hospitals with fewer than 300 beds (55.6%).

A. NEW JERSEY EMERGENCY DEPARTMENTS

1. Rate of Violent Events

The rate of recordable violent events in New Jersey hospital emergency departments increased 78.8% over the pre- and post- initiative time periods. The pre-initiative rate was 0.33 violent events per number of hospitals reporting a recordable event per year. The post-initiative rate was 0.59.

Pre- and Post-Initiative Change in Violent Events, Emergency Departments.

	# Hospitals with Recordable Violent Events	# Violent Events	Rate of Violent Events[1]
Pre-Initiative (1992 – 1995)	9	12	0.33
Post-Initiative (1996 – 2001)	36	128	0.59
Total # Violent Events		140	
Pre-Post Percentage Change in Violent Event Rates			+78.8%

1: Rate of violent events = (# violent events / # hospitals with OSHA-recordable violent events) per year.
Reporting Sources: OSHA Log and Employers' Reports

2. Location of Violent Events

The specific location within the emergency department where the violent event occurred could not be identified from 45% of the records. Of those records where the specific location was documented, the majority of events (42.1%) occurred in patient and treatment rooms. A much smaller percentage of events occurred in corridors and stairwells (4.3%), admitting and triage areas (2.9%) and at the entrances/exits of the emergency department (3.6%).

Location within the Emergency Department where the Violent Event Occurred.

Location	Number[1]	Percentage[2]
Admitting / Triage	4	2.9
Corridor / Hallway / Stairwell / Elevator	6	4.3
Bathroom	2	1.4
Entrance / Exit / Restricted Entry	5	3.6
Lobby / Waiting Room	4	2.9
Nurses Station / Pod Area / Office	2	1.4
Patient Room / Treatment Room	59	42.1
Seclusion / Time Out Room	4	2.9
Outdoor Area	1	0

Unknown	63	45.0

Reporting Sources: OSHA Log and Employers' Reports
1: Total number of events may exceed 140 due to double counting of an event
2: Denominator for percentages is the total number of violent events (n = 140). Total percentage will exceed 100% because a violent event may have more than one location associated with it.

3. Time of Violent Events

The time of occurrence for more than 38% of the violent events was not documented in the available reporting sources. Among those events where the time was known, the percentage distribution was variable across time categories, with reported events occurring most frequently between 10:00 PM and 5:59 AM (27.1%).

Time of Violent Events, Emergency Departments.

Time Category (in military time)	Number	Percentage
2200 – 0559	38	27.1
0600 – 1359	16	11.4
1400 – 2159	32	22.9
Unknown	54	38.6
Total	140	100.0

Reporting Sources: OSHA Log and Employers' Reports

4. Activity at the Time of the Event

Nonspecific classifications of the activity leading up to the violent event were documented in 31.1% of the events. These classifications included perpetrators described as "combative", "defiant", or "unruly" without further specification. Almost half of the events occurred while the employee was restraining or subduing a violent perpetrator, and another 30% of the events occurred while the employee was performing routine job functions. The activity leading up to the violent event could not be identified in 14.3% of the events.

Activity at the Time of the Violent Event, Emergency Departments.

Activity	Number[1]	Percentage[2]
Escorting	8	5.7
Restraining / Subduing	61	43.6
Approaching / Redirecting / Calming / De-escalating	3	2.1
Assisting Co-worker	8	5.7
Medical Care / Nursing Duties / Job Functions	42	30.0
Responding to Code / Intervening / (Physically) Confronting / Taking down / Secluding	13	9.3
Combative / Defiant / Unruly (further unspecified)	44	31.1
Elopement	8	5.7
Unprovoked / Came up from behind	8	5.7
Monitoring / Observing	6	4.3

Talking to Co-worker, Patient, Visitor / Interviewing, Speaking with Patient	2	1.4
Other[3]	4	2.9
Unknown	20	14.3

1: Total number of events may exceed 140 due to double counting of an event
2: Denominator for percentages is the total number of violent events (n = 140). Total percentage will exceed 100% because a violent event may have more than one activity associated with it.
3: Other includes: difference of opinion (argument), running after patient, walking away from discussion.
Reporting Sources: OSHA Log and Employers' Reports

5. Perpetrator of Violent Events

The majority of recordable violent events were perpetrated by the patient (85%). Two events were criminal (e.g., mugging) and only one event was committed by a current or former employee. No events were domestic in nature. The small number of reports for non-patient perpetrators likely indicate an under-reporting of these type of events.

Perpetrator of Violent Events, Emergency Departments.

Type of Workplace Violence	Number	Percentage
Type I: Criminal	2	1.4
Type II: Patient	119	85.0
Type III: Employee	1	0.7
Type IV: Domestic	0	0
Visitor	5	3.6
Unknown	13	9.3
Total	140	100.0

Reporting Sources: OSHA Log and Employers' Reports

6. Type of Weapon

The most common weapons used to commit the violent acts involved perpetrator parts of the body, including the hands (37.1%), feet (15.7%), teeth (18.6%), and head (0.7%) and body fluids such as saliva and urine (22.9%). A little over 8% of the violent events involved an unspecified part of the perpetrator's body. Other weapons included furniture in a patient room or waiting area (1.4%), and medical instruments used by the employee (e.g., stethoscope) (3.6%). The weapon could not be identified in 20% of the violent events.

Type of Weapon used to Commit the Violent Act, Emergency Departments.

Weapon Type	Number[1]	Percentage[2]
Fists / Hands / Nails	52	37.1
Feet	22	15.7
Gun / Knife / Club, Stick	0	0
Teeth / Mouth	26	18.6

Floor / Door / Wall / Window	4	2.9
Body (nonspecific or other body part not captured in an existing code)	12	8.6
Furniture	2	1.4
Medical Supply, Instrument / Office Supply	5	3.6
Food / Utensils / Meal Tray	0	0
Words / Verbal Threat	0	0
Head	1	0.7
Body Fluids	32	22.9
Other[3]	4	2.9
Unknown	28	20.0

1: Total number of events may exceed 140 due to double counting of an event
2: Denominator for percentages is the total number of violent events (n = 140). Total percentage will exceed 100% because a violent event may have more than one type of weapon associated with it.
3: Other includes: book, car door, pepper spray, radio, shoe, no contact (injured while running after/away from perpetrator).
Reporting Sources: OSHA Log and Employers' Reports

7. Type of Injury

The most common injury sustained by the emergency department employee as a result of the violent was a sprain, strain or spasm (74.3), followed by a bruise or contusion (65.7), abrasion or scratch (37.1%) and exposure to bodily fluids (35.7%). Another 22.1% of the events resulted in a bite and 8.6% in a laceration or cut to the employee. Although the reporting sources from which the violent events were extracted, namely OSHA Logs and Employers' Reports, were maintained in the Employee Health Department where the injuries were treated, there were still 32 events where the employee injury could not be identified from existing records.

Type of Injury Sustained by Employees in the Emergency Department as a Result of a Violent Event

Injury Type	Number[1]	Percentage[2]
Abrasion / Scratch	52	37.1
Bite	31	22.1
Laceration / Cut	12	8.6
Bruise / Contusion / Blunt Trauma	92	65.7
Sprain / Strain / Spasm	104	74.3
Dislocation / Fracture	7	5.0
Exposure to Bodily Fluids	50	35.7
No Physical Injury	5	3.6
Puncture Wound	5	3.6
Psychological	4	2.9
Multiple Injuries (non-specified)	2	1.4
Burn	0	0
Concussion	0	0
Other[3]	7	5.0
Unknown	32	22.9

1: Total number of events may exceed 140 due to double counting of an event

2: Denominator for percentages is the total number of violent events (n = 140). Total percentage will exceed 100% because a violent event may have more than one type of injury associated with it.
3: Other includes: head trauma, ruptured bicep.
Reporting Sources: OSHA Log and Employers' Reports

8. Part of the Body Injured

Approximately one-third of all violent events resulted in employee injury to the head, face, and neck areas (30%), and torso (27.9%). Over half of the injuries from violent events occurred to the upper extremities (53.6). Very few of the reported events resulted in psychological outcomes (2.5%).

Part of Employee's Body Injured as a Result of a Violent Event, Emergency Department.

Part of Body Injured	Number	Percentage[1]
Head / Face / Neck	42	30.0
Arms / Hands (Upper Extremities)	75	53.6
Abdomen / Chest / Back / Shoulder (Torso)	39	27.9
Legs / Hip / Feet (Lower Extremities)	13	9.3
Groin / Buttocks	1	0.7
Multiple Body Parts (not further specified)	1	0.7
Psychological	1	0.7
Unknown	12	8.6

1: Total number of events may exceed 140 due to double counting of an event
2: Denominator for percentages is the total number of violent events (n = 140). Total percentage will exceed 100% because an employee may have sustained an injury to more than one body part as a result of the violent events.
Reporting Sources: OSHA Log and Employers' Reports

9. Employee Demographics

Over half of the victimized employees were males (54.3%), over one-third were female (37.1%), and 8.6% were of unknown gender. The mean age of emergency department employees reporting a recordable violent event was 39 years (range = 20 – 65 years). Employee age could not be abstracted from reporting source records for nearly 35% of the events.

Demographics of Employees Injured as a Result of a Violent Event, Emergency Departments.

Demographic	Number	Percentage
Gender		
Male	76	54.3
Female	52	37.1
Unknown	12	8.6
Age (in years)		
Mean	39.0	

Median	39.0
Range	20 – 65
Unknown	n = 48 (34.3%)

Reporting Sources: OSHA Log and Employers' Reports

10. Employee Occupation

Registered nurses were the most frequently assaulted employee in the emergency department (43.6%) followed by security officers/guards (26.4%). Employees with specialized training who provide direct patient care, but who are not licensed, (e.g., ER technician, emergency medical technician) were victims in 17.1% of the violent events. Few emergency department employees not involved in direct patient care were assaulted.

Occupation of Employee Injured as a Result of a Violent Event, Emergency Department.

Occupation	Number	Percentage
Nurse's Aide / Assistant, Medical Assistant, Patient Care Assistant, Orderly, Critical Care Technician, Health Aide, Sitter / Attendant, Hospital Assistant	10	7.1
Licensed Practical Nurse, Licensed Vocational Nurse, Licensed Psychiatric Technician	0	0
Psychiatric Technician / Aide, Behavior Technician, Mental Health Associate / Worker, Mental Health Counselor, ER Technician, Case Manager, Emergency Medical Technician	24	17.1
MD / Physician, Physician Assistant, Nurse Practitioner, Intern / Resident, Pharmacist	1	0.7
Registered Nurse	61	43.6
Police Officer	1	0.7
Security Officer / Guard, Public Service Officer	37	26.4
Maintenance, Housekeeping, Custodial, Food Service, Environmental Services Technician	0	0
Social Worker, Mental Health Therapist, Family Therapist, Speech Pathologist, Counselor	0	0
Art Therapist, Physical Therapist, Occupational Therapist, Recreational Therapist, Respiratory Therapist	0	0
Administration, Coordinator, Manager, Supervisor, Director, Team Leader	1	0.7
Clerk, Secretary, Administrative Support	0	0
Lab Technician, Radiology Technician, Lab Assistant	0	0
Other	0	0
Unknown	5	3.6
Total	140	100.0

Reporting Sources: OSHA Log and Employers' Reports

11. Time Away from Work

Missed work time or restricted duty due to injury is required recording on OSHA Logs and Employers' Reports. This information was missing on 4.3% and 15.7% of the reported events for days missed and restricted duty respectively. The number of days missed was unknown in approximately 11% of the events in each case. Among the known information, approximately 33% of the employees missed at least one full day of work as a result of the violent event, and the median number of days missed was 4.0, with a range between 1 and 133 days. Approximately 12% of the assaulted employees had restricted work duty following the event. The median number of restricted work days was 12 (range = 2 – 180 days).

Days Away from Work and Restricted Work Duty as a Result of a Violent Event, Emergency Department.

Days Away From Work

	Number	Percentage
Employee Missed at Least 1 Full Day of Work		
Yes	46	32.9
No	88	62.9
Unknown	6	4.3
Number of Days Missed		
Mean	15.4	
Median	4.0	
Range	1 – 133	
Unknown	n = 5 (10.9%)	

Restricted Work Duty

	Number	Percentage
Employee Had Restricted Work Duty		
Yes	17	12.1
No	101	72.1
Unknown	22	15.7
Number of Restricted Work Days		
Mean	25.4	
Median	12.0	
Range	2 – 180	
Unknown	n = 0	

Reporting Sources: OSHA Log and Employers' Reports

B. NEW JERSEY PSYCHIATRIC UNITS / FACILITIES

1. Rate of Violent Events

The rate of violent events increased 15.5% over the pre- and post- initiative periods among psychiatric facilities and hospitals with psychiatric units. This increase is much lower than the one found emergency department events (78.8%). Both pre- and post- initiative rates were higher in psychiatric units and facilities than in emergency departments.

Pre- and Post-Initiative Change in Violent Events, Psychiatric Unit / Facility.

	# Hospitals with Recordable Violent Events	# Violent Events	Rate of Violent Events[1]
Pre-Initiative (1992 – 1995)	5	13	0.65
Post-Initiative (1996 – 2001)	24	108	0.75
Total # Violent Events		121	
Pre-Post Percentage Change in Violent Event Rates			+15.5%

1: Rate of violent events = (# violent events / # hospitals with OSHA-recordable violent events) per year.

Reporting Sources: OSHA Log and Employers' Reports

2. Location of Violent Events

The specific location within the psychiatric unit or facility where the violent event occurred could not be identified from recordable reporting sources in 57% of all events. Of the known locations, the majority of events occurred in the corridors and stairwells (13.2%), patient, treatment and therapy rooms (10.7%), common areas such as day rooms and lounges (6.6%), and seclusion or time-out rooms (5.8%).

Location within the Psychiatric Unit / Facility where the Violent Event Occurred.

Location	Number[1]	Percentage[2]
Admitting / Triage	0	0
Corridor / Hallway / Stairwell / Elevator	16	13.2
Day Room / Lounge / Classroom / Living Room	8	6.6
Bathroom	1	0.8
Entrance / Exit / Restricted Entry	0	0
Lobby / Waiting Room	0	0
Nurses Station / Pod Area / Office	4	3.3
Patient Room / Treatment Room / Therapy Room	13	10.7
Seclusion / Time Out Room	7	5.8
Dining Room	1	0.8
Outdoor Area	3	2.5
Unknown	69	57.0

1: Total number of events may exceed 121 due to double counting of an event

2: Denominator for percentages is the total number of violent events (n = 121). Total percentage will exceed 100% because a violent event may have more than one location associated with it.

3. Time of Violent Events

Nearly half of the violent events occurred during the day (between 6:00 AM and 1:59 PM) (33.0%) and evening (between 2:00 PM and 11:59 PM) (31.5%). Less than 15% of the events occurred in the late-night / early-morning hours. The time could not be identified in 42.1% of all reported violent events.

Time of Violent Events, Psychiatric Unit / Facility.

Time Category (in military time)	Number	Percentage
2200 – 0559	18	14.9
0600 – 1359	27	22.3
1400 – 2159	25	20.7
Unknown	51	42.1
Total	121	100.0

Reporting Sources: OSHA Log and Employers' Reports

4. Activity at the Time of the Event

The types of activities at the time of the violent event were very similar between psychiatric units/facilities and emergency departments with the exception of restraining/ subduing an aggressive perpetrator (higher in emergency departments, 43.6% vs. 27.3%. This may indicate better training for psychiatric units/facilities in this activity. The next most common activity was defined by a nonspecific description of "combative", "defiant" or "unruly" perpetrator (28.1%) and performing routine medical or nursing functions (28.1%). These were followed by unprovoked and came up from behind (9.9%), responding to a unit- or facility-wide code requiring the take down of a violent individual (9.1%), and elopement (5.83%). The activity at the time of the event was not documented in 24.8% of the recordable events.

Activity at the Time of the Violent Event, Psychiatric Unit / Facility.

Activity	Number[1]	Percentage[2]
Escorting	6	5.0
Restraining / Subduing	33	27.3
Approaching / Redirecting / Calming / De-escalating	3	2.5
Assisting Co-worker	3	2.5
Medical Care / Nursing Duties / Job Functions	34	28.1
Responding to Code / Intervening / (Physically) Confronting / Taking down / Secluding	11	9.1
Combative / Defiant / Unruly (further unspecified)	34	28.1
Elopement	7	5.8
Unprovoked / Came up from behind	12	9.9
Monitoring / Observing	1	0.8
Talking to Co-worker, Patient, Visitor / Interviewing, Speaking with Patient	3	2.5

Other[3]	5	4.1
Unknown	30	24.8

1: Total number of events may exceed 121 due to double counting of an event
2: Denominator for percentages is the total number of violent events (n = 121). Total percentage will exceed 100% because a violent event may have more than one activity associated with it.
3: Other includes: running after / away from patient, fall, involved in a riot, playing basketball, waiting to go home.
Reporting Sources: OSHA Log and Employers' Reports

5. Perpetrator of Violent Events

Patients were the perpetrators in 95% of all reported violent events. None of the events were criminally-motivated, involved a domestic partner or employee. The perpetrator was unknown in the other 5.0% of the events.

Perpetrator of Violent Events, Psychiatric Unit / Facility.

Type of Workplace Violence	Number	Percentage
Type I: Criminal	0	0
Type II: Patient	115	95.0
Type III: Employee	0	0
Type IV: Domestic	0	0
Visitor	0	0
Unknown	6	5.0
Total	121	100.0

Reporting Sources: OSHA Log and Employers' Reports

6. Type of Weapon

The hands (including the fists and nails) were identified as the violent weapon in over half the events (57.9%). Other parts of the body used as weapons included the teeth (13.2%), feet (5%), and head (0.8%). Bodily fluids, such as saliva and urine, were intentionally splattered on employees in 14% of the events. Nonspecific body locations were also identified in 2.5% of all events. Few violent acts were committed using furniture (0.8%), medical supplies (0.8%) or food (0.8%) as weapons. The weapon was not documented in nearly 22% of all reported violent events.

Type of Weapon used to Commit the Violent Act, Psychiatric Unit / Facility.

Weapon Type	Number[1]	Percentage[2]
Fists / Hands / Nails	70	57.9
Feet	6	5.0
Gun / Knife / Club, Stick	0	0
Teeth / Mouth	16	13.2
Floor / Door / Wall / Window	6	5.0
Body (nonspecific or other body part not captured in an existing code)	3	2.5

Furniture	1	0.8
Medical Supply, Instrument / Office Supply	1	0.8
Food / Utensils / Meal Tray	1	0.8
Words / Verbal Threat	0	0
Head	1	0.8
Body Fluids	17	14.0
Other[3]	2	1.7
Unknown	26	21.5

1: Total number of events may exceed 121 due to double counting of an event
2: Denominator for percentages is the total number of violent events (n = 121). Total percentage will exceed 100% because a violent event may have more than one weapon associated with it.
3: Other includes: ball, book, chemicals / mace, eyeglasses, shoe, no contact (injured while running after/away from perpetrator).
Reporting Sources: OSHA Log and Employers' Reports

7. Type of Injury

More than one-third of the violent events resulted in an employee sustaining a sprain, strain or spasm (34.7%). Other employee injuries included bruise, contusion, blunt trauma (22.3%), abrasions or scratches (17.4%), exposure to bodily fluids (12.4%), and bites (11.6%). In nearly 17% of the reported violent events, the injury could not be identified.

Type of Injury Sustained by Employees in the Psychiatric Unit / Facility as a Result of a Violent Event.

Injury Type	Number[1]	Percentage[2]
Abrasion / Scratch	21	17.4
Bite	14	11.6
Laceration / Cut	5	4.1
Bruise / Contusion / Blunt Trauma	27	22.3
Sprain / Strain / Spasm	42	34.7
Dislocation / Fracture	1	0.8
Exposure to Bodily Fluids	15	12.4
No Physical Injury	2	1.7
Puncture Wound	0	0
Psychological	0	0
Multiple Injuries (non-specified)	0	0
Burn	1	0.8
Concussion	0	0
Unknown	20	16.5

1: Total number of events may exceed 121 due to double counting of an event
2: Denominator for percentages is the total number of violent events (n = 121). Total percentage will exceed 100% because a violent event may have resulted in more than one injury.
Reporting Sources: OSHA Log and Employers' Reports

8. Part of the Body Injured

The upper extremities (47.9%) and the head, face and neck (42.1%) were the two most common areas of the employees' bodies injured as a result of the violent event, followed by areas of the torso, including the abdomen, chest, and back (33.1%).

Part of Employee's Body Injured as a Result of a Violent Event, Psychiatric Unit / Facility.

Part of Body Injured	Number[1]	Percentage[2]
Head / Face / Neck	51	42.1
Arms / Hands (Upper Extremities)	58	47.9
Abdomen / Chest / Back / Shoulder (Torso)	40	33.1
Legs / Hip / Feet (Lower Extremities)	6	5.0
Groin / Buttocks	1	0.8
Multiple Body Parts (not further specified)	2	1.7
Psychological	0	0
Other	0	0
Unknown	3	2.5

1: Total number of events may exceed 121 due to double counting of an event

2: Denominator for percentages is the total number of violent events (n = 121). Total percentage will exceed 100% because an employee may have sustained an injury to more than one body part as a result of the violent events.

Reporting Sources: OSHA Log and Employers' Reports

9. Employee Demographics

Over half of the victimized employees were female (54.5%), and 36.4% were male. The gender could not be identified in almost 10% of the reported events. The mean age of the assaulted employee was 40 years, with a range between 19 and 66 years. Age was unknown in almost half the reported events (40.5%)

Demographics of Employees Injured as a Result of a Violent Event, Psychiatric Unit / Facility.

Demographic	Number	Percentage
Gender		
Male	44	36.4
Female	66	54.5
Unknown	11	9.1
Age (in years)		
Mean	40.0	
Median	38.0	
Range	19 – 66	
Unknown	n = 49 (40.5%)	

Reporting Sources: OSHA Log and Employers' Reports

10. Employee Occupation

Registered nurses (29.8%) and unlicensed staff with specialized training for direct patient care (e.g., psychiatric technicians and aides, mental health workers) (32.2%) were the occupations most at risk for being assaulted on the job. Nearly 13% of unlicensed staff with no specialized training for direct patient care (e.g., nurse's aides and assistants, health aides) were victims of assault. Few violent events were reported by those providing no direct patient care, such as employees in administrative support, maintenance and housekeeping, and laboratory positions.

Occupation of Employee Injured as a Result of a Violent Event, Psychiatric Unit / Facility.

Occupation	Number	Percentage
Nurse's Aide / Assistant, Medical Assistant, Patient Care Assistant, Orderly, Critical Care Technician, Health Aide, Sitter / Attendant, Hospital Assistant	15	12.4
Licensed Practical Nurse, Licensed Vocational Nurse, Licensed Psychiatric Technician	5	4.1
Psychiatric Technician / Aide, Behavior Technician, Mental Health Associate / Worker, Mental Health Counselor, ER Technician, Case Manager, Emergency Medical Technician	39	32.2
MD / Physician, Physician Assistant, Nurse Practitioner, Intern / Resident, Pharmacist	3	2.5
Registered Nurse	36	29.8
Police Officer	0	0
Security Officer / Guard, Public Service Officer	10	8.3
Maintenance, Housekeeping, Custodial, Food Service, Environmental Services Technician	1	0.8
Social Worker, Mental Health Therapist, Family Therapist, Speech Pathologist, Counselor	2	1.7
Art Therapist, Physical Therapist, Occupational Therapist, Recreational Therapist, Respiratory Therapist	2	1.7
Administration, Coordinator, Manager, Supervisor, Director, Team Leader	1	0.8
Clerk, Secretary, Administrative Support	1	0.8
Lab Technician, Radiology Technician, Lab Assistant	0	0
Other	0	0
Unknown	6	5.0
Total	121	100.0

Reporting Sources: OSHA Log and Employers' Reports

11. Time Away from Work

Missed work time or restricted duty due to injury is required recording on OSHA Logs and Employers' Reports. This information was missing on 2.5% and 10.7% of the reported events for days missed and restricted duty, respectively. The number of days missed was unknown in 6.3% of the events. Among the known data, 39.7% of employees experiencing a violent event missed at least one full day of work after the event, and the median number of days missed was 2.0 (range = 1 – 195). Over 11% of assaulted employees were on restricted work duty following the violent event, and the median number of restricted days was 14.5 (range = 2 – 48).

Days Away from Work and Restricted Work Duty as a Result of a Violent Event, Psychiatric Unit / Facility.

Days Away From Work

	Number	Percentage
Employee Missed at Least 1 Full Day of Work		
Yes	48	39.7
No	70	57.9
Unknown	3	2.5
Number of Days Missed		
Mean	10.3	
Median	2.0	
Range	1 – 195	
Unknown	n = 3 (6.3%)	

Restricted Work Duty

	Number	Percentage
Employee Had Restricted Work Duty		
Yes	14	11.6
No	94	77.7
Unknown	13	10.7
Number of Restricted Work Days		
Mean	17.2	
Median	14.5	
Range	2 – 48	
Unknown	n = 0	

Reporting Sources: OSHA Log and Employers' Reports

VIII. CONCLUSIONS AND RECOMMENDATIONS

Hospitals in California had all responded to some extent to the California Hospital Security Act, although there was a broad range of programs in place. While some hospitals had organized and integrated programs, others were piecemeal and disorganized. The majority of hospitals had ongoing workplace violence training programs, and although none were comprehensive enough to comply to the letter of the legislation, most were thorough. All hospitals had implemented some types of environmental approaches to prevention, which was usually in the form of security equipment. The environmental approach, however, was often the least developed aspect of the security program.

We commend the majority of hospitals for the steps they have taken to protect their employees. However, we found some consistent areas which suggest potential for improved protection and/or improved efficiency.

- Surveillance of workplace violence events is uncoordinated and inefficient. A number of hospitals have multiple sources, most of which are flawed by under-reporting and not accessible for use in ongoing intervention planning. Most hospitals had multiple avenues for reporting events, but no hospitals coordinated all of these reporting sources. For example, it was common to find separate reporting systems maintained by Security and by Employee Health Departments with no integration of the two sources. The two sources usually collected different information, with security focused on the characteristics of the event and Employee Health focused on the employee. Most hospitals did not have an electronic database for use in examining trends or characteristics of violent events. When these databases were present, they were most often maintained by security or risk management. We recommend that a standardized protocol be developed to document assaults occurring to employees to comply with the Hospital Security Act. Because Security does not respond to all events and Employee Health will only see employees who present with injuries, these assault forms should be completed by the assaulted employee. In addition, each form should have some indicator of whether the employee was seen in Employee Health for treatment of injuries and whether security responded (and completed a report) of the event.

- Nursing staff, especially within the Emergency Department, were often not satisfied with their interactions with security personnel. This was true even in hospitals that had highly trained and well-staffed security departments. Our findings have two important implications with regard to security personnel. First, hospitals need to have a clearly defined role for security guards, and medical personnel need to understand this role. Second, medical and security personnel might benefit from working more closely together, such as through shared training and committee experiences.

- Overall, training programs included the major topics appropriate for workplace violence. However, hospital training programs were very diverse. For medical personnel training, this diversity was evident in many ways:
    - the materials were developed from many different sources
    - formats varied from reading material to lecture to hands-on training
    - the time allotted for orientation and re-training varied from less than an hour to three days
    - the training was delivered by different individuals, including nurses, security guards, and contract educators

We recommend that systematic evaluations of these training programs be evaluated to identify the most effective and efficient methods to deliver workplace violence training, including training content, length, modality, and trainer fidelity.

- Although all hospitals trained the majority of personnel in the ED and Psychiatric units, no hospitals trained all employees regularly stationed in the unit, as specified in the language of the law. The most common omissions from training were physicians and contract employees of all job categories.

- Workplace violence training often occurred on a recurring schedule, and sometimes only once per year. Employees hired just after one of the scheduled training sessions may work in the unit for a very long time before receiving any training.

- Training programs rarely included a specific review of hospital violence trends or the hospital hazard assessment. Training programs were most often based on existing formats, which are a good basis. However, they do not provide information about the specific hospital environment. The majority of training programs used lectures and/or prepared materials, but fewer used interactive sessions or role playing, which are more suitable to teach specific skills.

- All hospitals had installed security equipment and made attempts to control the physical environment. While some of these efforts were highly sophisticated, some were uncoordinated and insufficient to protect the unit. We recommend that security equipment be installed in response to specific hazard assessments conducted by trained security personnel, and that scientific evaluations be conducted to identify the most effective equipment within different hospital settings.

- Few hospitals had effective systems to communicate about the presence of violent patients. The most common system used a tag within the chart, which is not accessible to non-medical personnel, including security guards.

- In general, security programs were less complete in psychiatric units than in Emergency Departments. Psychiatric facilities were less likely to rely on security equipment and security guards, and had less rigorous training programs. They also had higher rates of reported violence.

- Rates of employee assault decreased following implementation of the Hospital Security Act in emergency departments (-20.3%) and psychiatric units/facilities (-43.7%), and psychiatric units/facilities had higher violent event rates than emergency departments in both the pre- and post- initiative periods. Although psychiatric unit/facility employees are at greater risk of being assaulted than emergency department employees, violent events occurring in both departments are very similar with respect to the circumstances of the event, identity of the perpetrator, and type of weapons used. Employee characteristics are also very similar with respect to occupation, gender and age.

- Assaults occurring to emergency department and psychiatric unit/facility employees was tracked using OSHA Logs and Employers' Reports of Occupational Injury and Illness. These sources were used because they are the only standardized reporting systems used across all hospitals. However, these systems capture the more severe outcomes, specifically those that result in at least one full day away from work or restricted work duty. Therefore, less severe outcomes of violent events will likely go unrecorded. This, in combination with employee under-reporting of violent events, suggests that the rates of assault provided in this report are under-estimated and the magnitude of assault outcomes is much greater.

- OSHA Logs and Employers' Reports do not provide detailed information about the circumstances of the violent event, which could limit prevention efforts. For example, the specific location of the event was unknown in over 70% of all events and the activity at the time of the event was unspecific in over 40% of all events. Since hospitals are required to maintain OSHA Logs and keep them on the premises for at least three years, they can provide a mechanism for tracking events over time. This could especially be accomplished now that electronic OSHA Log documentation is becoming more mainstream. However, to adequately inform prevention efforts and examine change over time, more detail about the circumstances of the event should be collected and done so in a systematic way.

- Many of the facilities were not aware of the Hospital Security Act or the Cal/OSHA Guidelines. Security and Risk Assessment personnel were more likely to be aware and to use them. Reference to these initiatives were not present in the printed materials provided for policies or training.

PUBLICATIONS

Peek-Asa C, Casteel C, Allareddy V, Nocera M, Goldmacher S, OHagan E, Blando J, Valiante D, Gillen M, Harrison R. Workplace Violence Prevention Programs in Hospital Emergency Departments. Journal of Occupational and Environmental Health. In press.

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INCLUSION OF GENDER AND MINORITY SUBJECTS

This study collected information about hospital facilities, and it was considered as a two-part study by the agencies Institutional Review Boards for human subject protection. The first part of the study collected information at the facility level about the workplace violence prevention programs. Some of this information was collected from hospital employees based on their occupation in the hospital, but we did not collect any personal information about them. Their input regarding the hospital security programs were solicited based on their occupation within the hospital, and not in any way on gender or minority status. Thus, we do not have any information about gender and minority status for individuals who provided information about the facility.

We examined secondary information about reported workplace assaults on the OSHA logs. These logs often included information about gender, but did not include information about minority status. This secondary data analysis did not enroll "subjects", and was deemed expedited by all Institutional Review Boards.

INCLUSION OF CHILDREN

This study did not include children.

MATERIALS AVAILABLE FOR OTHER INVESTIGATORS

This study collected confidential information from medical care facilities. Information from this study cannot be released due to the need to protect confidentiality.