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Report to Congressional Requesters

March 2016

WORKPLACE SAFETY AND HEALTH

Additional Efforts Needed to Help Protect Health Care Workers from Workplace Violence

GAO-16-11

GAO Highlights

Highlights of GAO-16-11, a report to congressional requesters

March 2016

WORKPLACE SAFETY AND HEALTH

Additional Efforts Needed to Help Protect Health Care Workers from Workplace Violence

Why GAO Did This Study

Workplace violence is a serious concern for the approximately 15 million health care workers in the United States. OSHA is the federal agency responsible for protecting the safety and health of the nation's workers, although states may assume responsibility under an OSHA-approved plan. OSHA does not require employers to implement workplace violence prevention programs, but it provides voluntary guidelines and may cite employers for failing to provide a workplace free from recognized serious hazards. GAO was asked to review efforts by OSHA to address workplace violence in health care.

GAO examined the degree to which workplace violence occurs in health care facilities and OSHA's efforts to address such violence.

GAO analyzed federal data on workplace violence incidents, reviewed information from the nine states GAO identified with workplace violence prevention requirements for health care employers, conducted a literature review, and interviewed OSHA and state officials.

What GAO Recommends

GAO recommends that OSHA provide additional information to assist inspectors in developing citations, develop a policy for following up on hazard alert letters concerning workplace violence hazards in health care facilities, and assess its current efforts. OSHA agreed with GAO's recommendations and stated that it would take action to address them.

View GAO-16-11. For more information, contact Andrew Sherrill at (202) 512-7215 or sherrilla@gao.gov.

What GAO Found

According to data from three federal datasets GAO reviewed, workers in health care facilities experience substantially higher estimated rates of nonfatal injury due to workplace violence compared to workers overall. However, the full extent of the problem and its associated costs are unknown. For example, in 2013, the most recent year that data were available, private-sector health care workers in in-patient facilities, such as hospitals, experienced workplace violence-related injuries requiring days off from work at an estimated rate at least five times higher than the rate for private-sector workers overall, according to data from the Department of Labor (DOL). The number of nonfatal workplace violence cases in health care facilities ranged from an estimated 22,250 to 80,710 cases for 2011, the most recent year that data were available from all three federal datasets that GAO reviewed. The most common types of reported assaults were hitting, kicking, and beating. The full extent of the problem and associated costs is unknown, however, because according to related studies GAO reviewed, health care workers may not always report such incidents, and there is limited research on the issue, among other reasons.

DOL's Occupational Safety and Health Administration (OSHA) increased its education and enforcement efforts to help employers address workplace violence in health care facilities, but GAO identified three areas for improvement in accordance with federal internal control standards.

- **Provide inspectors additional information on developing citations**. OSHA has not issued a standard that requires employers to implement workplace violence prevention programs, but the agency issued voluntary guidelines and may cite employers for hazards identified during inspections—including violence in health care facilities—under the general duty clause of the Occupational Safety and Health Act of 1970. OSHA increased its yearly workplace violence inspections of health care employers from 11 in 2010 to 86 in 2014. OSHA issued general duty clause citations in about 5 percent of workplace violence inspections of health care employers. However, OSHA regional office staff said developing support to address the criteria for these citations is challenging and staff from 5 of OSHA's 10 regions said additional information, such as specific examples of issues that have been cited, is needed. Without such additional information, inspectors may continue to experience difficulties in addressing the challenges they reported facing.
- **Follow up on hazard alert letters**. When the criteria for a citation are not met, inspectors may issue warnings, known as hazard alert letters. However, employers are not required to take corrective action in response to them, and OSHA does not require inspectors to follow up to see if employers have taken corrective actions. As a result, OSHA does not know whether identified hazards have been addressed and hazards may persist.
- **Assess the results of its efforts to determine whether additional action, such as development of a standard, may be needed**. OSHA has not fully assessed the results of its efforts to address workplace violence in health care facilities. Without assessing these results, OSHA will not be in a position to know whether its efforts are effective or if additional action may be needed to address this hazard.

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Abbreviations

BJS	Bureau of Justice Statistics
BLS	Bureau of Labor Statistics
CFOI	Census of Fatal Occupational Injuries
DOJ	Department of Justice
DOL	Department of Labor
HAL	Hazard Alert Letter
HHS	Department of Health and Human Services
IMIS	Integrated Management Information System
Joint Commission	Joint Commission on Accreditation of Healthcare Organizations
NCVS	National Crime Victimization Survey
NEISS-Work	National Electronic Injury Surveillance System-Work Supplement
NEP	National Emphasis Program
NIOSH	National Institute for Occupational Safety and Health
OIS	Occupational Safety and Health Information System
OSHA	Occupational Safety and Health Administration
OSH Act	Occupational Safety and Health Act of 1970
SOII	Survey of Occupational Injuries and Illnesses
VA	Department of Veterans Affairs

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U.S. GOVERNMENT ACCOUNTABILITY OFFICE
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March 17, 2016

The Honorable Patty Murray
Ranking Member
Committee on Health, Education, Labor and Pensions
United States Senate

The Honorable Robert C. "Bobby" Scott
Ranking Member
Committee on Education and the Workforce
House of Representatives

The Honorable Frederica S. Wilson
Ranking Member
Subcommittee on Workforce Protections
Committee on Education and the Workforce
House of Representatives

The Honorable Joe Courtney
House of Representatives

Workplace violence is a serious concern for the approximately 15 million health care workers in the United States.[1] At the federal level, the Department of Labor's (DOL) Occupational Safety and Health Administration (OSHA) is the agency that has primary responsibility for protecting the safety and health of the nation's workers, and though OSHA does not require employers to have workplace violence prevention programs, the agency issued guidelines to help employers establish such programs. Furthermore, some states have enacted laws requiring health care employers to develop and implement workplace violence prevention programs.

[1]According to data reported by the U.S. Department of Labor's (DOL) Bureau of Labor Statistics (BLS), there were over 667,000 health care employers in the United States in 2014. For the purposes of this report, we used the Department of Health and Human Services' (HHS) National Institute for Occupational Safety and Health's (NIOSH) definition of workplace violence: violent acts (including physical assaults and threats of assaults) directed toward persons at work or on duty. We did not focus on other types of violence, such as self-inflicted violence, bullying, or incivility among health care workers.

You asked us to review efforts by OSHA and states to address workplace violence in health care facilities. This report examines (1) what is known about the degree to which workplace violence occurs in health care facilities and its associated costs, (2) steps OSHA has taken to protect health care workers from workplace violence and assess the usefulness of its efforts, (3) how selected states have addressed workplace violence in health care facilities, and (4) research on the effectiveness of workplace violence prevention programs in health care facilities.

To describe what is known about the degree to which workplace violence occurs in health care facilities and its associated costs, we reviewed federal data sources used by three federal agencies to estimate injuries and deaths related to workplace violence.[2] To assess the reliability of the data, we reviewed agency documentation, interviewed federal officials, and performed electronic testing of required data elements. We determined that the data were sufficiently reliable for purposes of providing information about the number of cases and rates of workplace violence in health care facilities.

To examine the steps OSHA has taken to protect health care workers from such violence, we reviewed relevant federal laws and regulations; analyzed OSHA's guidance, inspection procedures, and enforcement data from 1991 through April 2015;[3] and interviewed OSHA officials. We collected information from all 10 OSHA regional offices on inspector training and how inspectors investigate workplace violence during inspections of health care employers. To assess the reliability of the OSHA enforcement data, we reviewed relevant agency documentation, conducted electronic data testing, and interviewed agency officials. Based on these reviews, we determined that the data were sufficiently reliable

[2]We analyzed 2011-2013 data from BLS's Survey of Occupational Injuries and Illnesses (SOII) and Census of Fatal Occupational Injuries (CFOI), 2011 data from NIOSH's National Electronic Injury Surveillance System-Work Supplement (NEISS-Work), and 2009-2013 data from the Department of Justice's (DOJ) Bureau of Justice Statistics' (BJS) National Crime Victimization Survey (NCVS). The years of data analyzed were generally the most recently available to produce comparable national estimates.

[3]This timeframe covers all of the workplace violence-related inspections of health care employers that had been conducted by OSHA at the time of our data analysis.

for our purposes. We compared OSHA's actions to federal internal control standards.[4]

To describe how selected states have addressed workplace violence in health care facilities, we collected information from state officials in the nine states we identified that have workplace violence prevention requirements for health care employers and reviewed documents provided by the officials.[5] From our search of legal databases; review of related studies; and interviews with federal officials, researchers, and national labor organizations; we identified the following nine states: California, Connecticut, Illinois, Maine, Maryland, New Jersey, New York, Oregon, and Washington. We visited four of these states–California, Maryland, New York, and Washington–which were selected for variation in the length of time their state workplace violence prevention laws have been in place. We did not conduct a nationwide review of state laws or collect information from all 50 states; therefore, other states may also have these types of requirements. During our site visits, we interviewed state officials, visited health care facilities, and held five discussion groups with health care workers. The information we obtained from the states and our site visits is not generalizable.

To describe research on the effectiveness of workplace violence prevention programs, we reviewed studies identified in a literature review on the prevalence and costs of workplace violence in health care and the effectiveness of workplace violence prevention programs. Specifically, we identified studies published in government reports and peer-reviewed journals from January 2004 to June 2015 that were (1) based on original data collection, (2) provided quantitative evidence related to our objectives, (3) provided information related to physical violence against health care workers, and (4) that were sufficiently reliable and methodologically rigorous to include in our review. For further details regarding our scope and methodology, see appendix I.

[4]GAO, *Standards for Internal Control in the Federal Government,* GAO/AIMD-00-21.3.1 (Washington, D.C.: November 1999).

[5]We reviewed information provided by state officials on state requirements, including laws and regulations, for workplace violence prevention programs in health care facilities. The nine selected states may also have other related requirements, such as laws providing criminal penalties for assaults on health care workers, which are not discussed because they are beyond the scope of this report.

We conducted this performance audit from August 2014 to March 2016 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

OSHA and State Responsibilities for Worker Safety and Health

OSHA is responsible for protecting the safety and health of the nation's workers under the Occupational Safety and Health Act of 1970 (OSH Act).[6] OSHA sets and directly enforces occupational safety and health standards for the private sector in about half the states. Occupational safety and health standards are a type of regulation and are defined as standards that require "conditions, or the adoption or use of one or more practices, means, methods, operations, or processes, reasonably necessary or appropriate to provide safe or healthful employment and places of employment."[7] OSHA carries out its enforcement activities through its 10 regional offices and 90 area offices. The remaining states set and enforce their own workplace safety and health standards for employers under a state plan approved by OSHA.[8] In these states, the state agency typically responsible for enforcing workplace safety and health standards is the state department of labor. OSHA conducts two types of inspections to enforce the OSH Act and its standards: unprogrammed and programmed inspections.[9] Unprogrammed

[6]Pub. L. No. 91-596, 84 Stat. 1590 (codified as amended at 29 U.S.C. §§ 553, 651-78).

[7]29 U.S.C. § 652(8). Occupational safety and health standards are referred to as "workplace safety and health standards" in this report. Standards may address both health and safety hazards.

[8]OSHA does not regulate state and local government public sector employers or workers. However, if a state chooses to have its own plan, it must cover these workers. State standards, and their enforcement, must be "at least as effective" as the federal standards. 29 U.S.C. § 667. With some exceptions, federal employers are generally responsible for maintaining their own occupational safety and health programs, consistent with OSHA's regulations. 29 U.S.C. § 668.

[9]OSHA conducted 36,163 inspections in fiscal year 2014 (53 percent were programmed inspections, and 47 percent were unprogrammed inspections).

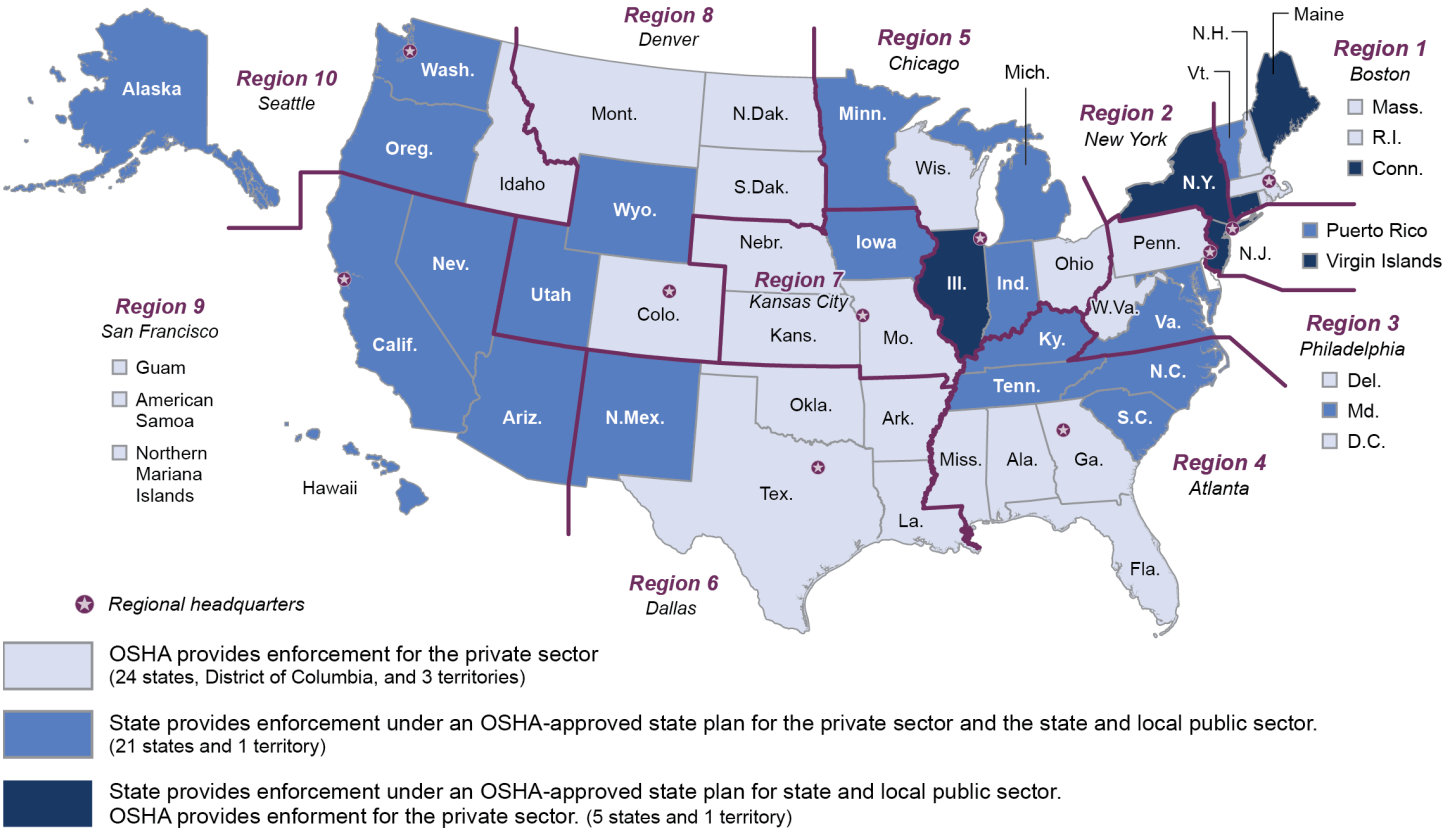
inspections are unplanned and conducted in response to certain events, such as investigating employee complaints, including claims of imminent danger and serious accidents involving fatalities, amputations, and in-patient hospitalizations. Programmed inspections are planned and target industries or individual workplaces based on predetermined criteria, such as those that have experienced relatively high rates of workplace injuries and illnesses. Among states with OSHA-approved state plans, enforcement practices may vary, but states generally are expected to use a similar approach to performing planned and unplanned inspections.[10]

The states with OSHA-approved state plans cover different types of employers in their state. Twenty-one of the states with OSHA-approved state plans are responsible for enforcing workplace safety and health laws and standards at private-sector and state and local government workplaces. Five of the states with OSHA-approved state plans cover state and local government workplaces only, with OSHA providing enforcement for the private sector (see fig. 1).[11]

[10]*OSHA* Instruction CPL 02-00-159, *Field Operations Manual,* October 1, 2015.

[11]In addition to these states, Puerto Rico has an OSHA-approved plan that covers both the private sector and the state and local public sector, and the U.S. Virgin Islands has an OSHA-approved plan that covers the state and local public sector only.

Figure 1: Map Showing Responsibility of OSHA and States in Enforcing Workplace Safety and Health Standards in OSHA's 10 Regions



Source: GAO analysis of Occupational Safety and Health Administration (OSHA) information. | GAO-16-11

Note: With some exceptions, federal employers are generally responsible for maintaining their own occupational safety and health programs, consistent with OSHA's regulations.

Four of the nine states we reviewed–California, Maryland, Oregon, and Washington–are responsible for enforcement for the private sector and the state and local public sector under an OSHA-approved state plan. In the remaining five states–Connecticut, Illinois, Maine, New Jersey, and New York–OSHA provides enforcement for the private sector, while the state is responsible for the state and local public sector.

In addition to workplace safety and health regulation by OSHA and state departments of labor, other federal and state government agencies regulate health care employers in various ways and may have requirements related to workplace violence prevention. For example, states may impose certain licensing requirements on hospitals or other

health care facilities. In addition, the Joint Commission on Accreditation of Healthcare Organizations (Joint Commission), a nonprofit corporation that accredits and certifies health care organizations and programs, also has its own requirements for accreditation purposes.

OSHA Enforcement and Guidelines Related to Workplace Violence Prevention

OSHA does not require employers to have workplace violence prevention programs; however, the agency issued voluntary guidelines in 1996 to help employers establish them.[12] Although there is no federal occupational safety and health standard for workplace violence prevention, OSHA may issue citations to employers for violating a certain provision of the OSH Act–referred to as the general duty clause–which requires employers to provide a workplace free from recognized hazards likely to cause death or serious physical harm.[13] To cite an employer under the general duty clause, OSHA must have evidence that (1) a condition or activity in the workplace presents a hazard to an employee, (2) the condition or activity is recognized as a hazard by the employer or within the industry, (3) the hazard is causing or is likely to cause death or serious physical harm, and (4) a feasible means exists to eliminate or materially reduce the hazard.[14] When OSHA does not have enough evidence to support a citation, it can issue hazard alert letters that warn employers about the dangers of specific industry hazards and provide information on how to protect workers.[15]

[12]These guidelines were revised in 2004 and 2015. OSHA, *Guidelines for Preventing Workplace Violence for Healthcare and Social Service Workers*, OSHA 3148-04R (2015).

[13]The general duty clause requires each employer to "furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees." 29 U.S.C. § 654(a)(1).

[14]According to OSHA officials, these requirements have been developed through case law interpreting the statute. See, for example, *SeaWorld of Florida, LLC v. Perez*, 748 F.3d 1202 (D.C. Cir. 2014) (referencing, among other cases, the landmark case *National Realty and Construction Co. v. Occupational Safety and Health Review Commission*, 489 F.2d 1257 (D.C. Cir. 1973)).

[15]Depending on the circumstances, there may be standards that OSHA may use to cite an employer for employee exposure to workplace violence aside from the general duty clause, such as the Medical Services and First Aid standard, which, among other things, requires employers to ensure there is a person adequately trained to render first aid in the absence of a nearby health care facility to treat injured employees, and to ensure that adequate first aid supplies are readily available. 29 C.F.R. § 1910.151.

OSHA has recordkeeping regulations that require employers to record certain workplace injuries and illnesses.[16] For each work-related injury and illness that results in death, days away from work, restricted work or transfer to another job, loss of consciousness, or medical treatment beyond first aid, the employer is required to record the worker's name; the date; a brief description of the injury or illness; and, when relevant, the number of days the worker was away from work, assigned to restricted duties, or transferred to another job as a result of the injury or illness.[17] Employers with 10 or fewer employees at all times during the previous calendar year and employers in certain low-hazard industries are partially exempt from routinely keeping OSHA injury and illness records.[18]

Federal Data on Nonfatal Workplace Violence

Three federal agencies collect national data on nonfatal workplace violence in health care facilities: BLS, within DOL; NIOSH, within the Department of Health and Human Services (HHS); and BJS, within the Department of Justice (DOJ). The three agencies collect data on different types of workplace violence cases from different sources (see table 1).

[16]See generally 29 C.F.R. pt. 1904. Workplace injury and illness data must also be reported in certain circumstances; for example, injury and illness records may be requested by OSHA or the state agency as part of an inspection, or employers may be required to respond to a BLS survey. In addition, any work-related fatality, in-patient hospitalization, amputation, or loss of an eye must be reported to OSHA. See 29 C.F.R. §§ 1904.39-1904.42.

[17]Employers must also record any "significant injury or illness diagnosed by a physician or other licensed health care professional," even if it does not result in death, days away from work, restricted work or job transfer, loss of consciousness, or medical treatment beyond first aid. 29 C.F.R. § 1904.7.

[18]29 C.F.R. §§ 1904.1-1904.2, and 29 C.F.R. pt. 1904, subpt. B, app. A. However, these employers may be required to keep records upon the written request of OSHA, BLS, or a state agency. OSHA generally considers an industry to be low-hazard if the average workplace injury and illness rate for that industry is below a certain threshold relative to the national average. Sectors of the health care industry considered to be low-hazard and exempt from routine OSHA injury and illness recordkeeping include: physicians' and dentists' offices, offices of other health care practitioners, outpatient care centers, and medical and diagnostic laboratories. For more information on how OSHA determined which industries to exempt, see Occupational Injury and Illness Recording and Reporting Requirements – NAICS Update and Reporting Revisions, 79 Fed. Reg. 56,131 (Sept. 18, 2014).

Table 1: Federal Data Sets with National Data on Nonfatal Workplace Violence in Health Care Facilities.

Agency	Data Set	Types of workplace violence cases reported from this data set	Source
Department of Labor's Bureau of Labor Statistics (BLS)	Survey of Occupational Injuries and Illnesses (SOII)	Nonfatal workplace violence-related injuries requiring workers to take days off from work	*Employers:* BLS surveys a nationally representative sample of employers (about 230,000 establishments).
Department of Health and Human Services' National Institute for Occupational Safety and Health (NIOSH)	National Electronic Injury Surveillance System-Work Supplement (NEISS-Work)	Nonfatal workplace violence-related injuries treated in hospital emergency departments	*Hospitals:* NIOSH collects data from a nationally representative sample of 67 U.S. hospital emergency departments. Coders at participating hospitals review all emergency department records to capture nonfatal work-related injuries.
Department of Justice's Bureau of Justice Statistics (BJS)	National Crime Victimization Survey (NCVS)	Nonfatal assault against employed persons age 16 or older that occurred while they were at work or on duty [a]	*Individuals:* BJS surveys a nationally representative sample of about 90,000 households, comprising nearly 160,000 individuals.

Source: GAO review of agency data documentation. | GAO-16-11

[a]Note: In this report, we are reporting a subset of cases captured in the National Crime Victimization Survey. For details, see appendix I.

Workers in Health Care Facilities Experience Higher Estimated Rates of Nonfatal Workplace Violence than Workers Overall, though the Full Extent of the Problem and Its Costs Are Unknown

Federal Data Show That Workers in Health Care Facilities Have Higher Estimated Rates of Nonfatal Injury Due to Workplace Violence than Workers Overall

Workers in health care facilities experience substantially higher estimated rates of nonfatal injury due to workplace violence compared to workers overall, according to data from three federal data sets we reviewed (see fig. 2).[19] BLS's Survey of Occupational Injuries and Illnesses (SOII) data for 2013 show that the estimated rates of nonfatal workplace violence against health care workers in private-sector and state in-patient facilities–including hospitals and nursing and residential care facilities–are from 5 to 12 times higher than the estimated rates for workers overall, depending on the type of health care facility.[20] More specifically, in 2013 the estimated rate of injuries for all private-sector workers due to such violence that resulted in days away from work was 2.8 per 10,000 workers.[21] In contrast, the estimated rate for private-sector hospital workers was 14.7 per 10,000 workers, and for nursing and residential care workers the rate was 35.3 per 10,000 workers.[22] The estimated rates of nonfatal injury due to workplace violence were highest in state hospitals and nursing and residential care facilities, according to BLS's SOII data. Workers in these state facilities may have higher rates of workplace violence because they work with patient populations that are more likely to become violent, such as patients with severe mental illness who are involuntarily committed to state psychiatric hospitals, according to BLS research.[23] Data from HHS's National Electronic Injury Surveillance System-Work Supplement (NEISS-Work) data set show that in 2011 the estimated rate of nonfatal workplace violence injuries for workers in health care facilities was statistically greater than the estimated rate for all workers. Data from the National Crime Victimization Survey (NCVS) data set show that from 2009 through 2013 health care

[19]All national estimates produced from our analysis of the federal data are subject to sampling errors. See tables in appendix I for the 95 percent confidence intervals for these estimates. Each of these federal data sets capture different types of workplace violence incidents, and the data cover different years.

[20]Nursing and residential care facilities provide residential care combined with either nursing, supervisory, or other types of care as required by the residents.

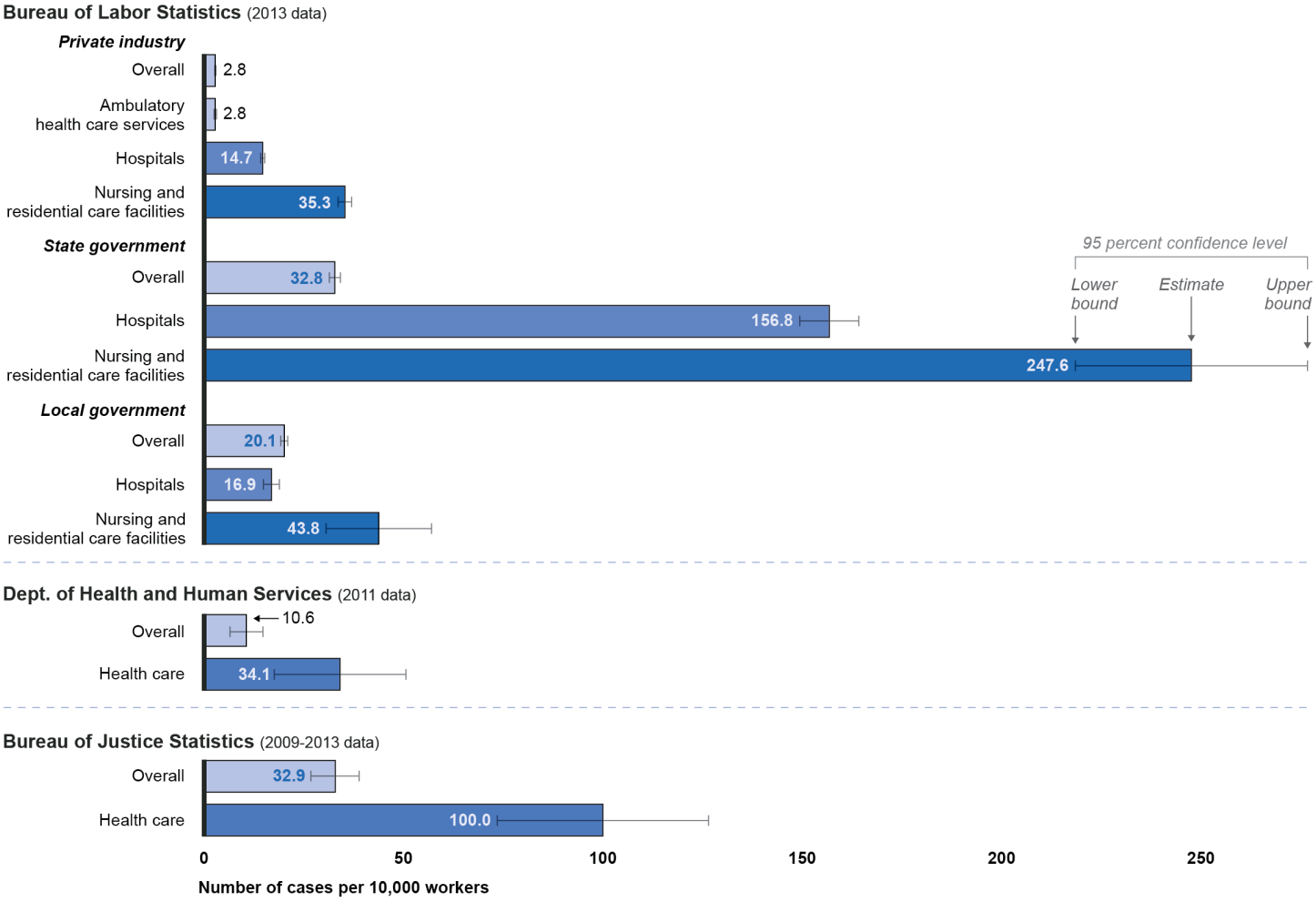
[21]The 95 percent confidence interval for this estimate is from 2.7 to 2.9.

[22]The 95 percent confidence interval for the 14.7 rate is from 14.2 to 15.2. The 95 percent confidence interval for the 35.3 rate is from 33.6 to 37.0.

[23]U.S. Bureau of Labor Statistics, *A look at violence in the workplace against psychiatric aides and psychiatric technicians,* Monthly Labor Review, March 2015.

workers experienced workplace violence at more than twice the estimated rate for all workers (after accounting for the sampling error).[24]

Figure 2: Estimated Rates of Nonfatal Workplace Violence in Health Care by Industry Using Three Federal Data Sets



Source: GAO analysis of data from Bureau of Labor Statistics (BLS) Survey of Occupational Injuries and Illnesses (SOII); Department of Health and Human Services National Electronic Injury Surveillance System-Work Supplement (NEISS-Work); and Bureau of Justice Statistics (BJS) National Crime Victimization Survey (NCVS). | GAO-16-11

[24]According to BJS officials, health care workers have lower rates of nonfatal workplace violence than some other specific occupation groups, such as law enforcement officers. See table 2 in U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics, *Workplace Violence, 1993-2009, National Crime Victimization Survey and the Census of Fatal Occupational Injuries*, (Washington, D.C.: March 2011).

Note: All national estimates produced from our analysis of the federal data are subject to sampling errors. See tables in appendix I for the 95 percent confidence intervals for these estimates. Each of these federal data sets capture different types of workplace violence incidents, and the data cover different years. The BLS data reports the number of nonfatal workplace violence-related injuries that resulted in the health care worker taking days off from work per 10,000 workers. HHS's data reports the number of workplace violence-related injury cases where the health care worker visited the emergency room for treatment per 10,000 workers. The BJS data we are reporting represents the number of health care workers reporting at least one workplace violence-related assault per 10,000 workers. See appendix I for details on the methods used to calculate the rates.

Research also suggests that nonfatal workplace violence is prevalent in in-patient health care facilities. Although their results are not generalizable, three studies that surveyed hospital workers found that 19 to 30 percent of workers in a general hospital setting who completed the surveys reported being physically assaulted at work sometime within the year prior to each study (see app. II for more information on these studies).[25] In addition, a study that surveyed staff in a psychiatric hospital found that 70 percent of staff reported being physically assaulted within the last year.[26]

Moreover, BLS data indicate that reported nonfatal workplace violence against health care workers has increased in recent years. Such cases reported by employers in BLS's SOII increased by about 12 percent over 2 years, from an estimated 22,250 reported cases in 2011 to an estimated 24,880 in 2013.[27] We also examined the estimated rates of workplace violence reported by employers in BLS's SOII by the type of

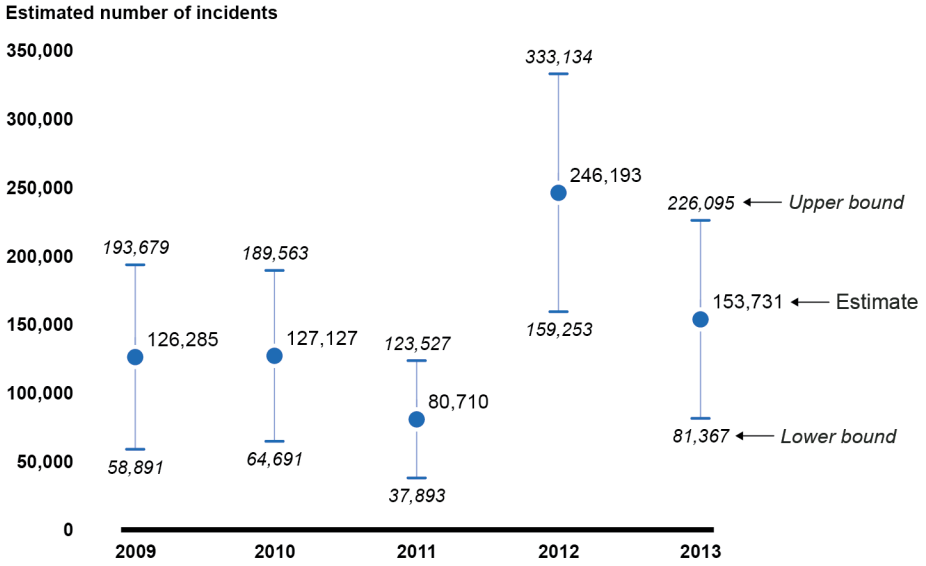
[25]See Campbell and others (2014), Pompeii and others (2015), and Speroni and others (2014) in table 13 of appendix II. One of the studies surveyed workers from a mix of hospitals and other health care facilities.

[26]In two other studies, 3 percent of substance abuse counselors and 14 percent of home health care workers who completed the surveys reported experiencing physical violence. The differences in the definition of workplace violence used, the sample of health care workers surveyed, and the methodology used may explain, at least in part, the relatively wide range of estimates of the prevalence of physical assaults reported in these studies.

[27]We calculated these estimates of incidence by adding statistically independent estimates from three large industry segments (ambulatory health care services, hospitals, nursing and residential care facilities) broken down further by ownership type (private, state government, local government). These estimates do not include state and local government ambulatory health care services because BLS was not able to publish an estimate for these categories that were statistically reliable enough to meet BLS publishing standards. The 95 percent confidence interval for the 22,250 estimate is from 21,651 to 22,849. The 95 percent confidence interval for the 24,880 estimate is from 24,215 to 25,545. The estimate for 2011 is statistically different from the 2012 and 2013 estimates at the P=0.05 level of significance. See table 8 in appendix I.

facility and found that there was relatively little change from 2011 through 2013, with the exception of a 70 incidents per 10,000 workers increase in the rate for state nursing and residential care facilities.[28] The estimated number of health care workers reporting at least one workplace violence-related assault in BJS's NCVS survey from 2009 through 2013 varied from year to year with no clear statistical trend (see fig. 3).

Figure 3: Estimated Number of Health Care Workers Reporting at Least One Nonfatal Workplace Violence-Related Assault, 2009-2013



Source: GAO analysis of Bureau of Justice Statistics (BJS) National Crime Victimization Survey (NCVS) data. | GAO-16-11

Nonfatal and fatal workplace violence against health care workers involves different types of perpetrators and violence. For nonfatal violence, patients are the primary perpetrators, according to federal data and studies we reviewed. More specifically, patients were the perpetrators of an estimated 63 percent of the NEISS-Work cases where

[28]In 2011, the estimated rate of nonfatal injuries due to workplace violence that resulted in days away from work for state nursing and residential care workers was177.8 per 10,000 workers (95 percent confidence interval from 161.8, to 193.8). In 2013, the estimated rate for state nursing and residential care workers was 247.6 per 10,000 workers (95 percent confidence interval from 218.5 to 276.7). The 95 percent confidence interval for the 70 incidents per 10,000 workers is from 36.56 to 103.04.

workers in health care facilities came to the emergency department for treatment after experiencing workplace violence-related injuries in 2011.[29] Several of the studies we reviewed also found that patients were the primary perpetrators of nonfatal violence against health care workers, followed by the patient's relatives and visitors (see app. II for more information on these studies). According to NEISS-Work data from 2011, hitting, kicking, and beating were the most common types of nonfatal physical violence reported by workers in health care facilities. As for fatal violence, the BLS Census of Fatal Occupational Injuries reported 38 workers in health care facilities died as a result of workplace violence assaults from 2011 through 2013, representing about 3 percent of all worker deaths due to workplace violence across all industries during those years. Many of the deaths in a health care setting involved a shooting, with many perpetrated by someone the worker knew, such as a domestic partner or co-worker.

Health care workers we interviewed described a range of violent encounters with patients that resulted in injuries ranging from broken limbs to concussions (see table 2).

Table 2: Examples of Workplace Violence Incidents Reported by the Health Care Workers We Interviewed

Health care facilities	Examples of reported workplace violence incidents
Hospitals with emergency rooms	• Worker hit in the head by a patient when drawing the patient's blood and suffered a concussion and a permanent injury to the neck • Worker knocked unconscious by a patient when starting intravenous therapy on the patient
Psychiatric hospitals	• Worker punched and thrown against a wall by a patient and had to have several surgeries. As a result of the injuries, the worker was unable to return to work • Patient put worker in a head-lock, and worker suffered neck pain and headaches and was unable to carry out regular workload • Patient broke health care worker's hand when the health care worker intervened in a conflict between two patients
Residential care facilities	• Patient became upset after being deemed unfit to return home and attacked the worker • Worker hit in the head by a patient and suffered both physical and emotional problems as a result of the incident
Home health care services	• Worker attacked by patient with dementia and had to defend self • Worker was sexually harassed by a patient when the patient grabbed the worker while rendering care

Source: GAO analysis of information from discussion groups with health care workers. GAO-16-11

[29]The 95 percent confidence interval for this estimate is from 52 to 73 percent.

Patient and Work-Related Factors Can Increase a Health Care Worker's Risk of Being Assaulted at Work

Research suggests that patient-related factors can increase the risk of workplace violence. A study that surveyed over 5,000 workers in six hospitals in two states found that patient mental health or behavioral issues were contributing factors in about 64 percent of the patient-perpetrated violent events reported by health care workers who completed the survey, followed by medication withdrawal, pain, illicit drug/alcohol use, and being unhappy with care. [30] In three of our discussion groups, health care workers said working with patients with severe mental illness or who are under the influence of drugs or alcohol contributed to workplace violence in health care facilities.

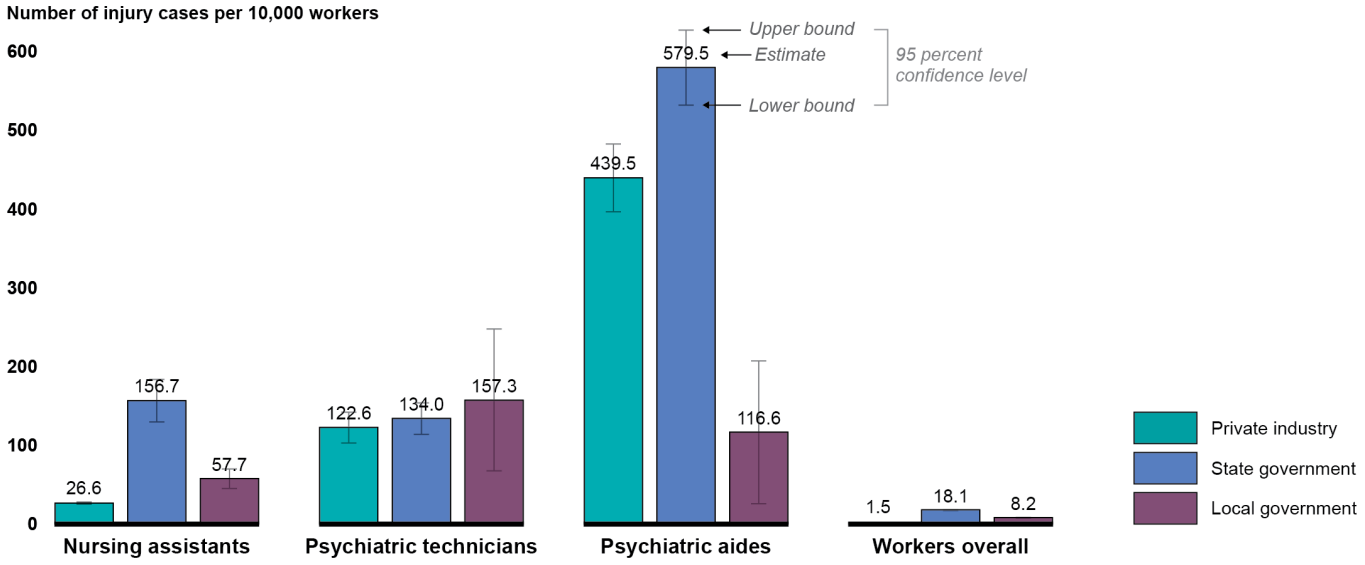
Certain types of health care workers are more often the victims of workplace violence. According to BLS data from 2013, health care occupations like psychiatric aides, psychiatric technicians, and nursing assistants experienced high rates of workplace violence compared to other health care occupations and workers overall (see fig. 4). Furthermore, one study that surveyed over 5,000 workers in six hospitals in two states found that workers in jobs typically involving direct patient care had a higher percentage of physical assaults compared with other types of workers. For example, a higher percentage of nurse's aides reported being physically assaulted within the last year (14 percent) than nurse managers (4.7 percent).[31] Another study that surveyed over 300 staff in a psychiatric hospital found that ward staff, which had the highest levels of patient contact, were more likely than clinical care and supervisory workers to report being physically assaulted by patients.[32]

[30] L. A. Pompeii, A.L. Schoenfisch, H.J. Lipscomb, J.M. Dement, C.D. Smith, and M. Upadhyaya, "Physical Assault, Physical Threat, and Verbal Abuse Perpetrated Against Hospital Workers by Patients or Visitors in Six U.S. Hospitals," *American Journal of Industrial Medicine* (2015).

[31] Pompeii and others, "Physical Assault, Physical Threat, and Verbal Abuse Perpetrated Against Hospital Workers by Patients or Visitors in Six U.S. Hospitals," 6.

[32] E. L. Kelly, A.M. Subica, A. Fulginiti, J.S. Brekke, and R.W. Novaco. "A cross-sectional survey of factors related to inpatient assault of staff in a forensic psychiatric hospital." *Journal of Advanced Nursing*, vol. 71, no. 5, (2015): 1110-1122.

Figure 4: Estimated Rates of Nonfatal Workplace Violence Injury by Occupation and Sector



Source: GAO analysis of data from Bureau of Labor Statistics (BLS) Survey of Occupational Injuries and Illnesses (SOII). | GAO-16-11

Note: All national estimates produced from our analysis of the federal data are subject to sampling errors. See table 9 in appendix I for the 95 percent confidence intervals for these estimates.

The Full Extent of Workplace Violence against Health Care Workers and Its Associated Costs Are Unknown

While the three national datasets we analyzed shed some light on the level of workplace violence committed against health care workers, the full extent of the problem is unknown for three main reasons: 1) differences in the criteria used to record workplace violence cases in the data sets, 2) health care workers not reporting all cases of workplace violence, and 3) employer inaccuracies in reporting cases of workplace violence.

Differences in Criteria Used in the Data Sets

Not all workplace violence cases are included in the three national data sets we reviewed because of the criteria used by each of the data sets. With regard to the first two data sets (SOII and NEISS-Work), workplace violence that does not result in injuries severe enough to require days off from work or an emergency room visit are not included. For the NCVS data, cases that are not considered to be crimes are not included. Table 3 describes the number and types of workplace violence cases recorded in each of these datasets in 2011, the most recent year in which data were available from all three sources.

Table 3: Number of Nonfatal Workplace Violence Cases in Health Care (2011)[a]

Federal data set	Source	Types of workplace violence cases reported from this source	Estimated number of cases in 2011[b]
BLS SOII	Employers	Injuries requiring workers to take days off from work	22,250
HHS NEISS-Work	Hospitals	Injuries resulting in employees going to the hospital emergency department for treatment	64,600
BJS NCVS[c]	Individuals	Assault while working or on duty[d]	80,710

Source: GAO analysis of data from the Department of Labor's (DOL) Bureau of Labor Statistics' (BLS) Survey of Occupational Injuries and Illnesses (SOII), the Department of Health and Human Services National Electronic Injury Surveillance System-Work Supplement (NEISS-Work), and the Department of Justice's Bureau of Justice Statistics' (BJS) National Crime Victimization Survey (NCVS).| GAO-16-11

[a]All national estimates produced from our analysis of the federal data are subject to sampling errors. The 95 percent confidence interval for the BLS estimate of 22,250 cases extends from 21,651 to 22,849. The 95 percent confidence interval for the NEISS-Work estimate of 64,600 cases extends from 33,300 to 95,800. The 95 percent confidence interval for the BJS estimate of 80,710 cases extends from 37,893 to 123,527.

[b]2011 was the most recent year in which data were available from all three sources.

[c]Respondents of the NCVS are asked to report crime experiences occurring in the 6 months preceding the month of interview. According to BJS, there is an acceptable degree of response error inherent in the NCVS as respondents are able to more accurately recall events in a shorter time frame.

[d]Assault includes rape and sexual assault, aggravated assault, and simple assault. We did not report verbal threats of assault or robberies.

Underreporting of Violent Incidents

Health care workers do not formally report all incidents of workplace violence for various reasons. Although the results are not generalizable, estimates of the percentage of cases that are formally reported ranged from 7 to 42 percent in the studies we reviewed (see app. II for more information on these studies).[33] The health care workers surveyed in four of the five studies we reviewed most often reported the violence informally to their supervisors or co-workers. A study that surveyed 762 nurses from one hospital system found that the reasons health care workers provided for not formally reporting the violence included (1) not sustaining serious injuries, (2) inconvenience, and (3) the perception that violence comes with the job.[34] Health care workers in all five of our discussion groups said that they do not report all cases of workplace

[33]See the studies listed in table 14 of appendix II.

[34]K.G Speroni, T. Fitch, E. Dawson, L. Dugan, and M. Atherton. "Incidence and Cost of Nurse Workplace Violence Perpetrated by Hospital Patients or Patient Visitors," *Journal of Emergency Nursing*, vol. 40, no. 3 (2014):218-228.

violence unless they result in a severe injury. Health care workers in four discussion groups also said that they do not report all cases of workplace violence because the reporting process is too burdensome and because management discouraged reporting. Health care workers in two of our discussion groups reported fear of being blamed for causing the attack, losing their job, as well as financial hardships associated with their inability to work due to injury, as reasons for not formally reporting all cases of workplace violence.

Inaccurate Reporting

OSHA and BLS research indicate that employers do not always record or accurately record workplace injuries in general. Specifically, in a 2012 report OSHA found that for calendar years 2007 and 2008, approximately 20 percent of injury cases reconstructed by inspectors during a review of employee records were either not recorded or incorrectly recorded by the employer.[35] OSHA is working on improving reporting by conducting additional outreach and training for employers on their reporting obligations.[36] BLS research has also found that employers do not report all workplace injury cases in the SOII, and BLS is working on improving reporting by conducting additional research on the extent to which cases are undercounted in the SOII and exploring whether computer-assisted coding can improve reporting.[37]

[35]For example, a case may be recorded but not categorized correctly by the employer as a case that involved days away from work, restricted work activity, or job transfer. OSHA, *Report on the Findings of the Occupational Safety and Health Administration's National Emphasis Program on Recordkeeping and Other Department of Labor Activities Related to the Accuracy of Employer Reporting of Injury and Illness Data*, May 7, 2012.

[36]OSHA also issued a proposed rule in 2013 entitled "Improve Tracking of Workplace Injuries and Illnesses." 78 Fed. Reg. 67,254 (Nov. 8, 2013). According to the agency, the purpose of this rulemaking is to improve workplace safety and health through the collection and use of timely, establishment-specific injury and illness data. The proposed rule would require certain employers to submit certain records electronically to OSHA on a regular basis.

[37]U.S. Bureau of Labor Statistics, *Examining the completeness of occupational injury and illness data: an update on current research*, Monthly Labor Review, June 2014.

Limited Information on the Costs Associated with Workplace Violence

There is limited information available on the associated costs of injuries due to workplace violence in health care. While DOL and HHS collect information on occupational injuries and illnesses due to violence in health care, they do not collect data on the costs.[38] The BJS NCVS survey asks individuals about the medical expenses they incurred as a result of workplace violence; however, our analysis of the data did not identify enough cases to produce a national estimate of the costs. One of the states we reviewed, Washington, provided us with a report about the cost the state incurred due to workplace violence over a 5 year period.[39] The state estimates between $4 million and $8 million each year from 2010 through 2014 in workers' compensation costs for health care workers who were injured from workplace violence and received medical treatment for their injuries.[40] Another state we reviewed, California, analyzed worker's compensation injury data for one of their hospitals from 2003 to 2013. According to state officials, 1,169 of the 4,449 injuries were due to patient assaults and amounted to $16.6 million in worker's compensation costs over this time period. In another study, researchers surveyed nurses from a hospital system in the mid-Atlantic region regarding medical expenses related to work-related assaults against them. They found that of the 106 nurses who reported injuries, the collective costs of treatment and lost wages for the 30 nurses requiring treatment was $94,156.[41]

[38]HHS's Web-based Injury Statistics Query and Reporting System (WISQARS) provides information about the costs of assaults, but does not provide information about the industry in which the assault occurred and users are not able to query specifically for work-related assaults.

[39]Adams, D., Foley, M. Washington State Department of Labor and Industries Safety and Health Assessment and Research for Prevention (SHARP) Program, Olympia, WA. June 29, 2015.

[40]The workers' compensation data do not cover all health care employers in the state, such as self-employed workers and those covered under federal workers' compensation programs.

[41]K.G Speroni, T. Fitch, E. Dawson, L. Dugan, and M. Atherton. "Incidence and Cost of Nurse Workplace Violence Perpetrated by Hospital Patients or Patient Visitors," *Journal of Emergency Nursing*, vol. 40, no. 3 (2014): 218-228.

OSHA Increased Enforcement and Education Efforts, but Inspectors Face Challenges Taking Enforcement Actions and Following up on Hazard Alert Letters

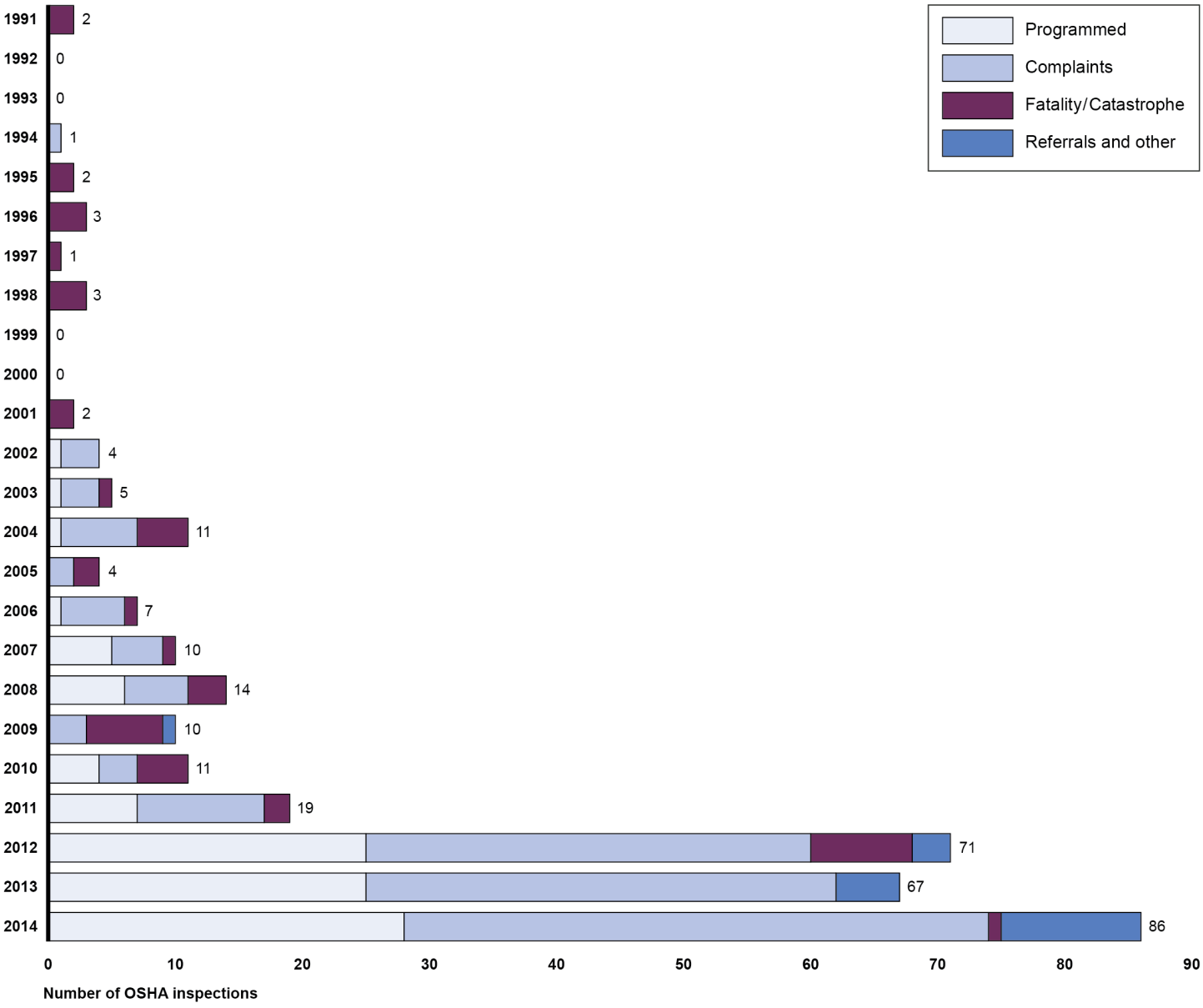
OSHA Increased Its Workplace Violence Inspections of Health Care Employers

OSHA increased its inspections of health care employers for workplace violence from 11 in 2010 to 86 in 2014 (see fig. 5).[42] OSHA officials attribute this increase to a rise in employee complaints and programmed inspections following implementation of a 3-year National Emphasis Program (NEP) targeting nursing and residential care facilities, which began in April 2012.[43] Workplace violence was one of the hazards included as part of the NEP, which required each OSHA region to inspect a minimum number of facilities from a list developed by OSHA's national office of those facilities meeting or exceeding certain injury and illness rates.

[42]This section of the report discusses efforts by federal OSHA in the states where OSHA provides enforcement for the private sector (29 states, District of Columbia, and 4 territories), not state efforts.

[43]OSHA Instruction, CPL 03-00-016, National Emphasis Program–Nursing and Residential Care Facilities. Effective April 5, 2012. This program expired in April 2015. National Emphasis Programs are implemented by OSHA to focus outreach and inspection efforts on specific workplace hazards.

Figure 5: Trends in the Number of OSHA Inspections Involving Workplace Violence in Health Care Facilities by Type of Inspection, Calendar Years 1991-2014

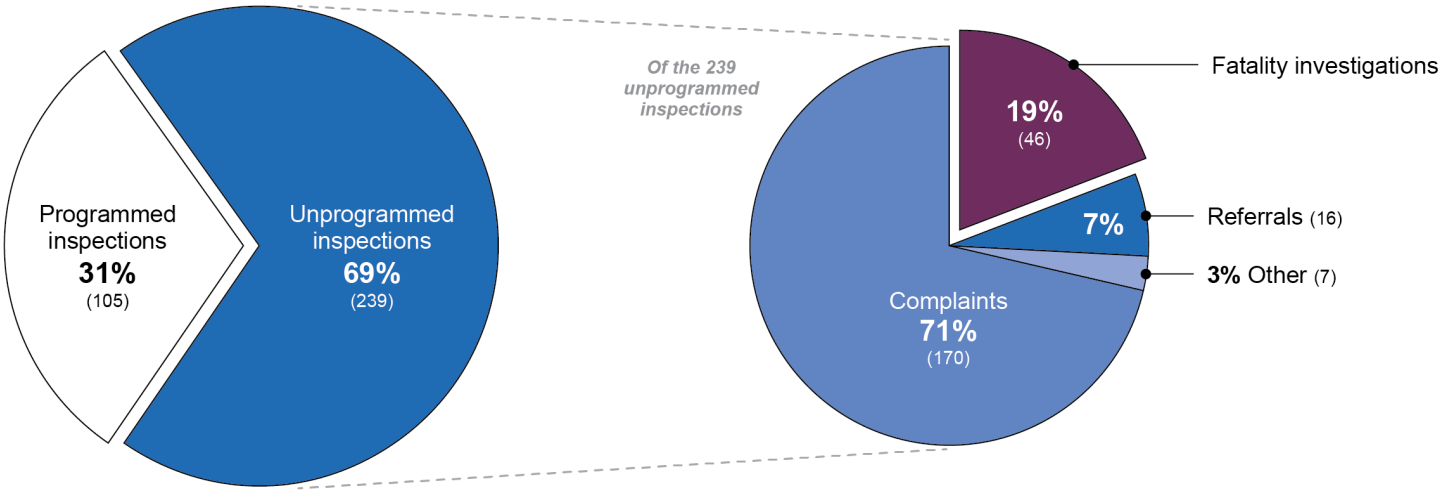


Source: GAO analysis of Occupational Safety and Health Administration (OSHA) enforcement data. | GAO-16-11

Note: OSHA conducted 11 inspections involving workplace violence in health care from January through April 2015. A fatality/catastrophe includes the reported death of a worker or hospitalization of three or more workers. Referrals and other may include, for example, referrals from other federal agencies and follow-up inspections.

OSHA conducted a total of 344 inspections involving workplace violence in the health care sector from 1991 through April 2015. More than two-thirds of the 344 inspections since 1991 were unprogrammed, and over 70 percent of the unprogrammed inspections were conducted in response to complaints (see fig. 6). Sixty percent (205 inspections) of the 344 inspections were conducted by 3 of OSHA's 10 regions. OSHA officials said that the higher number of inspections in certain regions could have been due to them receiving a higher number of workplace violence complaints than other regions. OSHA officials also said that the higher number of inspections in certain regions could have been due to the regions having more experienced workplace violence coordinators and inspectors, which increased their comfort in pursuing workplace violence cases.[44]

Figure 6: OSHA Inspections of Health Care Employers Involving Workplace Violence by Type, 1991-April 2015



Source: GAO analysis of Occupational Safety and Health Administration (OSHA) enforcement data. | GAO-16-11

Note: A fatality/catastrophe includes the reported death of a worker or hospitalization of three or more workers. Referrals and other may include, for example, referrals from other government agencies and follow-up inspections.

[44]OSHA's Regional Administrators designate a workplace violence coordinator in each region to track all workplace violence-related complaints received and inspections conducted involving workplace violence, among other things.

In April 2015, OSHA announced the expiration of the nursing and residential care facilities NEP. However, OSHA determined that the results of the NEP indicated a need for continued focus on efforts to reduce the identified hazards in those sectors, including workplace violence. Consequently, in June of 2015, OSHA issued new inspection guidance stating that all programmed and unprogrammed inspections of in-patient health care facilities–including hospitals and nursing and residential care facilities–are to cover the hazards included in the recently concluded NEP.[45] This new inspection guidance applies to a broader group of health care facilities by including hospitals, in addition to nursing and residential care facilities, which were covered by the NEP. Unlike the NEP, the guidance does not require OSHA area offices to inspect a minimum number of facilities each year.

To determine whether workplace violence is a potential hazard in a facility, OSHA inspectors are directed in an OSHA enforcement directive to take certain steps during inspections, including a review of an employer's workplace injury and illness logs, interviews with employees, and personal observations of potential workplace violence hazards.[46] If there are potential hazards, inspectors are expected to physically inspect and identify any hazards that increase exposure to potential violence, such as lack of appropriate lighting or the absence of security systems. In addition, inspectors are instructed to interview all employees who have observed or experienced any violent acts and review other records, such as police and security reports and workers' compensation records. In addition, inspectors are instructed to determine the violence prevention measures an employer has in place and whether it has provided any related training to its employees. If inspectors determine that a general duty clause or other citation is warranted, they will consult with their regional office management, OSHA's national office, and the Department of Labor's solicitor's office to develop the citation, according to OSHA officials.

[45]OSHA Memorandum, Inspection Guidance for Inpatient Healthcare Settings. Effective June 25, 2015.

[46]OSHA Instruction, CPL 02-01-052, Enforcement Procedures for Investigating or Inspecting Workplace Violence Incidents. Effective September 8, 2011.

OSHA has established various policies and procedures to support its inspectors in conducting workplace violence inspections, including the following:

- **Uniform inspection procedures.** OSHA issued an enforcement directive in 2011 to provide its inspectors with uniform procedures for addressing workplace violence.[47] This directive defines workplace violence, describes the steps for conducting inspections, and outlines the criteria for a general duty clause citation along with descriptions of the types of evidence needed to support each criterion. The directive also requires OSHA regional and area offices to ensure that OSHA inspectors are trained in workplace violence prevention to assist them in understanding specific workplace violence incidents, identify hazard exposure, and assist the employer in abating the hazard.

- **Regional workplace violence coordinators.** Every regional office has a designated workplace violence coordinator who functions as an in-house expert on workplace violence and provides advice and consultation to inspection teams, according to OSHA officials. In addition, according to OSHA officials, the coordinators hold bi-monthly teleconferences with OSHA national office managers to exchange information and discuss strategies for developing workplace violence cases.

- **Inspector training.** According to OSHA officials, all inspectors are required to complete web-based training as part of their initial training that includes four lessons related to workplace violence: (1) defining workplace violence, (2) identifying solutions to the violence, (3) conducting workplace violence inspections, and (4) protecting oneself during an inspection. Three other optional webinars are offered: a 1.5-hour webinar on the 2011 workplace violence enforcement directive that includes discussion of its purpose, procedures for conducting inspections and issuing citations for workplace violence, and resources available for workplace violence inspections. The second is a 1.5-hour webinar that focuses on identifying risks for violence and prevention strategies in health care and social services settings. The third is a 2-hour webinar that includes information on how to conduct inspections as part of the NEP targeting nursing and residential care facilities. Out of 1,026 OSHA staff who were invited to take the

[47]OSHA Instruction, CPL 02-01-052.

optional webinars, OSHA reports 652 staff have completed the webinar on the 2011 directive, 1,023 have completed the one on identifying risks and prevention strategies, and 713 have completed the webinar on the NEP, as of June 2015.

OSHA Has Updated and Obtained Feedback on the Usefulness of Its Employer Guidelines for Preventing Workplace Violence

OSHA has developed and disseminated voluntary guidelines and a variety of other informational materials to help educate health care and other employers on preventing workplace violence. As previously discussed, in 2015 OSHA issued an update of its written guidelines for health care and social service employers on preventing and responding to workplace violence.[48] The guidelines identify the components that should be incorporated in a workplace violence prevention program and include checklists for employers to use in evaluating those programs. OSHA has a workplace violence web page with links to the 2015 guidelines, other publications, and resources and materials for employee training related to workplace violence, along with links for obtaining consultation services from OSHA and for filing complaints.[49] In addition, OSHA launched a new webpage in December of 2015 with resources that employers and workers can use to address workplace violence in health care facilities. For example, the webpage links to a new OSHA publication that presents examples of health care facilities' practices related to the five components recommended in OSHA's voluntary guidelines.[50] OSHA also formed an alliance with the Joint Commission to provide employers with information, guidance, and access to training resources to protect their employees' health and safety that includes addressing workplace violence.[51] As part of this alliance, OSHA has disseminated information on preventing workplace violence in health care through publication of three articles in a Joint Commission newsletter, with a fourth article planned.

[48]OSHA, *Guidelines for Preventing Workplace Violence for Healthcare and Social Service Workers*, OSHA 3148-04R (2015). Prior versions of these guidelines were published in 1996 and 2004.

[49]OSHA's workplace violence web page is available at https://www.osha.gov/SLTC/workplaceviolence/index.html. Accessed on November 30, 2015.

[50]OSHA, *Preventing Workplace Violence: A Road Map for Healthcare Facilities*, December 2015.

[51]The Joint Commission on Accreditation of Healthcare Organizations (Joint Commission) is a nonprofit corporation that accredits and certifies health care organizations and programs in the United States.

OSHA officials told us they obtained feedback from stakeholders on the workplace violence prevention guidelines and incorporated stakeholder comments into the final publication of the 2015 guidelines. These stakeholders confirmed the usefulness of OSHA's revised guidelines, according to OSHA officials. OSHA officials also told us the agency has not conducted and does not plan to conduct any type of formal evaluation of the usefulness of these materials due to insufficient resources.

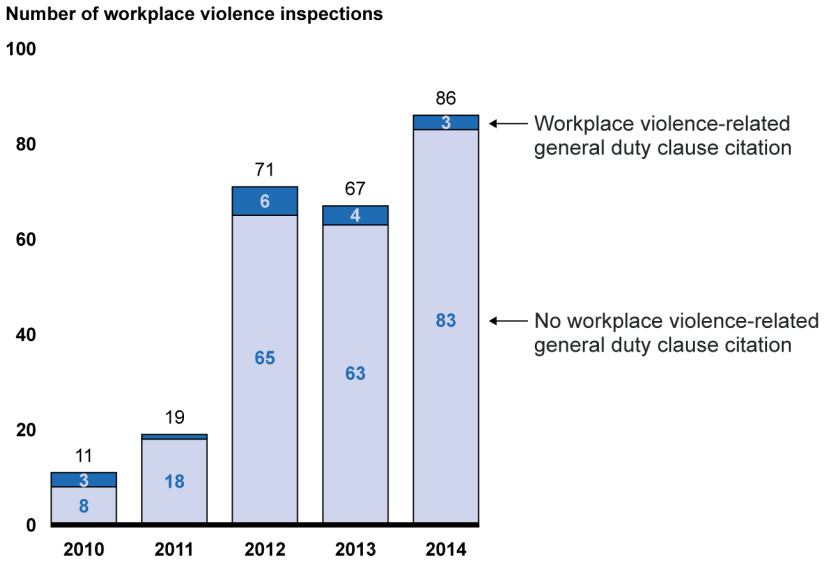
OSHA also funds training on workplace violence prevention for employers and workers. OSHA provided training grants in 2012 and 2013 totaling $254,000 to three organizations that developed workplace violence prevention curricula and trained 1,900 health care workers. Additional training grants totaling over $514,000 were awarded to five organizations in 2014 to be used for programs that include training health care workers and employers in preventing and addressing workplace violence.

Inspectors Reported Facing Challenges Developing Citations and Ensuring That Actions Are Taken to Address Hazard Alert Letters

While the number of inspections involving workplace violence in health care facilities has increased, a relatively small percentage of these inspections resulted in general duty clause citations related to workplace violence. From 1991 through October 2014, OSHA issued 18 general duty clause citations to health care employers for failing to address workplace violence.[52] Seventeen of these citations were issued from 2010 through 2014 (see fig. 7). These citations were issued in about 5 percent of the 344 workplace violence inspections of health care employers that were conducted from 1991 to April 2015.

[52]The information we present about these citations is based on OSHA enforcement data as of April 2015 and does not include any information on whether any of these citations are currently being contested.

Figure 7: Number of OSHA Workplace Violence Inspections at Health Care Employers' Facilities Resulting in a General Duty Clause Citation, Calendar Years 2010-2014



Source: GAO analysis of Occupational Safety and Health Administration (OSHA) enforcement data. | GAO-16-11

Note: Not pictured in this figure is one workplace violence-related general duty clause citation that was issued to a health care employer in 1991. This figure reflects OSHA enforcement data as of April 2015 and does not include any information on whether any of these citations are currently being contested.

All 18 citations arose from unprogrammed inspections. Fourteen of the citations arose from complaints—the most common type of unprogrammed inspection among these cases. For example, in one case, OSHA cited an employer for exposing employees working in a residential habilitation home to the hazard of violent behavior and being physically assaulted by patients with known histories of violence or the potential for violence. OSHA determined that the company failed to identify and abate existing and developing hazards associated with workplace violence. In all 18 of these cases, health care workers had been injured or killed by patients, clients, or residents. We found that the three regions that conducted the highest number of workplace violence inspections also issued the majority of workplace violence-related general duty citations to health care employers. Collectively, the three regions issued 12 of the 18 general duty citations issued since 1991.

Staff from all 10 OSHA regional offices said it was challenging to cite employers for violating the general duty clause when workplace violence is identified as a hazard and staff from 4 OSHA regional offices said it

was challenging to develop these cases within the 6-month statutory time frame required to develop a citation.[53] As described in OSHA's enforcement directive, to cite an employer for violating the general duty clause for a workplace violence hazard, OSHA inspectors must demonstrate that (1) a serious workplace violence hazard exists and the employer failed to keep its workplace free of hazards to which employees were exposed, (2) the hazard is recognized by the employer or within the industry, (3) the hazard caused or is likely to cause death or serious physical harm, and (4) there are feasible abatement methods to address the hazard.[54] Some inspectors and other regional officials from 5 OSHA regional offices said it is difficult to collect sufficient evidence to meet all four criteria during an inspection. For example, two regional officials noted that while injuries may have occurred as a result of workplace violence at facilities they have inspected, the assaults may involve a single employee or a very small number of employees, or the assaults may not be frequent or serious enough to demonstrate a hazard that can cause serious physical harm or death. Another inspector noted that an employer may have a minimal workplace violence prevention program and that it is sometimes difficult to prove that the employer has not done enough to address the hazard.

Staff, including officials and inspectors, from 5 of OSHA's 10 regional offices said it would be helpful to have additional assistance to implement the 2011 workplace violence enforcement directive. They suggested having additional information on how to collect evidence and write up a workplace violence citation, examples of workplace violence issues that have been cited, examples of previously documented workplace violence case files, and examples of citations that have been upheld in court would be helpful. According to federal internal control standards, agency management should share quality information throughout the agency to enable personnel to perform key roles in achieving agency objectives.[55] While OSHA's webinar on the 2011 workplace violence enforcement

[53]OSHA is required to issue citations within 6 months of the occurrence of any violation 29 U.S.C. § 658(c).

[54]OSHA Instruction, CPL 02-01-052, Enforcement Procedures for Investigating or Inspecting Workplace Violence Incidents, Effective September 8, 2011. See also OSHA's Field Operations Manual for the required elements of a general duty clause citation.

[55]See Information and Communications in GAO, *Standards for Internal Control in the Federal Government,* GAO/AIMD-00-21.3.1 (Washington, D.C.: November 1999).

directive provides general guidance on the types of evidence needed to develop a general duty clause citation, it does not provide the types of detailed information proposed by staff. For example, officials from one region said that although the training they received was helpful, assessing workplace violence hazards is new to many inspectors, and additional information would help inspectors fully understand how to inspect, collect evidence, and write up a workplace violence citation. Inspectors from another region suggested the national office provide an updated webinar with lessons learned and examples of what has been cited so inspectors can be consistent in how they develop these cases. Officials from OSHA's national office told us they have considered developing additional training for inspectors on conducting workplace violence inspections and are planning to revise the 2011 enforcement directive. For example, they said that they would like to provide inspectors more specific guidance on developing a workplace violence case in different environments and additional information about the hazards and abatement measures applicable to different health care facilities. OSHA officials said the training would be developed and the directive would be revised by the end of 2016. Without this additional information, inspectors may continue to face challenges in conducting workplace violence inspections and developing citations.

When inspectors identify workplace violence hazards during an inspection, but all the criteria for issuing a general duty clause citation are not met and a specific standard does not apply, inspectors have the option of issuing warning letters to employers, known as Hazard Alert Letters (HAL). These letters recommend that the employer voluntarily take steps to eliminate or reduce workers' exposure to the hazard. The letters describe the specific hazardous conditions identified in an inspection, list corrective actions that can be taken to address them, and provide contact information to seek advice and consultation on addressing the hazards. From 2012 through May 2015, OSHA issued 48 HALs to health care employers recommending actions to address factors contributing to workplace violence. Several of the HALs we reviewed stated that workers had been assaulted, notified the employers that they failed to implement adequate measures to protect their workers from assaults, and recommended the employers take specific steps to better protect their workers.

Agency officials informed us OSHA inspectors are not required to routinely conduct follow-up inspections after issuing HALs, and the uniform inspection procedures from the 2011 enforcement directive do not specify a process for contacting employers to determine whether

hazards and deficiencies have been addressed. They explained, however, that a follow-up inspection would not normally be conducted if the employer or employer representative provides evidence that the hazard has been addressed. According to OSHA officials, if OSHA decides to conduct a follow-up inspection, OSHA's recommended time period for a follow-up with employers is 12 months following employer receipt of the HAL, although this is not required in the inspection procedures from the 2011 enforcement directive. OSHA established a policy in 2007 to follow up on HALs related to ergonomics issues, but this policy does not apply to HALs related to workplace violence issues. [56] OSHA established the ergonomics HAL policy after its ergonomics standard was invalidated under the Congressional Review Act in 2001.[57] The ergonomics HAL follow-up policy outlines a process for contacting employers to determine whether ergonomic hazards and deficiencies identified in the letters have been addressed. OSHA inspectors are directed to schedule a follow-up inspection to determine if the hazards are being addressed if the employer does not respond or responds inadequately.[58]

In addition, OSHA was not able to tell us how many of the 48 health care employers who received HALs for workplace violence issues had follow-up inspections because the follow-up status of HALs is not centrally maintained. Each regional office workplace violence coordinator would have to be contacted to find out the status of each HAL. OSHA has a centralized information system, but has not systematically used it for tracking the status of HALs. While OSHA's information system is capable of tracking the status of HALs, OSHA officials are not sure if regional offices are consistently entering updated information. According to federal

[56]According to NIOSH, the goal of ergonomics is to reduce stress and eliminate injuries and disorders associated with the overuse of muscles, bad posture, and repeated tasks.

[57]Under the Congressional Review Act, if Congress enacts a joint resolution of disapproval within a certain time period after a rule is submitted to Congress, the rule shall not take effect (or shall not continue in effect) and may not be reissued in substantially the same form unless expressly authorized by subsequent law. For a rule to be invalidated, the President must sign the joint resolution of disapproval, or, if vetoed by the President, Congress must override that veto. 5 U.S.C. §§ 801-802. The final rule establishing an ergonomics standard was issued November 14, 2000. Ergonomics Program, 65 Fed. Reg. 68.262 (Nov. 14, 2000). A joint resolution disapproving the ergonomics rule was enacted on March 20, 2001. Pub. L. No. 107-5, 115 Stat. 7 (2001).

[58]OSHA Instruction CPL 02-00-144, Ergonomic Hazard Alert Letter Follow-up Policy, Effective April 11, 2007.

internal control standards, agency management should perform ongoing monitoring as part of the normal course of operations.[59] Without a uniform process to follow up on these HALs, OSHA will not know whether the hazards that placed employees at risk for workplace violence at these facilities continue to exist. In addition, without routine follow up on these cases, OSHA may not obtain the information needed to determine whether a follow-up inspection or other enforcement actions are needed.

OSHA officials acknowledged that it can be challenging to develop a general duty clause citation for workplace violence and cited some potential benefits of having a workplace violence prevention standard. However, officials stated that OSHA is not planning at this time to develop a workplace violence prevention standard because it has identified other workplace hazards that are higher priorities for regulatory action. According to OSHA officials, the potential benefits of having a specific standard include setting clearer expectations for employers, increasing employer implementation of workplace violence prevention programs, and simplifying the process for determining when citations could be issued. Rather than pursuing a standard on workplace violence, the officials stated that OSHA has focused its efforts on increased enforcement using the general duty clause, issuing new guidance, and developing a new webpage for employers and workers with resources for addressing workplace violence in health care facilities.

OSHA officials also highlighted other efforts the agency has taken to reduce workplace violence in health care facilities. These efforts included obtaining feedback from stakeholders on the employer guidelines, establishing a task force to develop a long term agency plan for workplace violence prevention and resources for OSHA staff and the public, and issuing publications on workplace violence prevention strategies. In addition, OSHA officials reported conducting a qualitative and quantitative review of data from its NEP for Nursing and Residential Care Facilities. However, OSHA's review of the NEP entailed summarizing data collected from the regions 6 months after the program began on inspections that resulted in the issuance of ergonomics hazard alert letters. OSHA officials said they did not complete an overall evaluation of the program even though the NEP procedures provided that

[59]See Monitoring in GAO, *Standards for Internal Control in the Federal Government,* GAO/AIMD-00-21.3.1 (Washington, D.C.: November 1999).

the agency do so. The NEP procedures stated that the national office was to collect data relevant to the effectiveness of the program from the regions and complete an evaluation. Additionally, the procedures specified that the evaluation should address the program's role in meeting OSHA's goals, such as the reduction in the number of injuries and abatement measures implemented. An OSHA official we spoke with could not provide a reason why OSHA did not conduct an evaluation of the NEP and was not aware of any plans for the agency to conduct such an evaluation. According to information provided by agency officials, they have not assessed how well OSHA's approach to helping prevent workplace violence is working. According to federal internal control standards, agency management should assess the quality of agency performance over time and correct identified deficiencies. Such assessments involve analyzing data to determine whether the intended outcomes were achieved and identifying any changes that may improve results. Because OSHA has not assessed the results of its education and enforcement efforts, it is not in a position to know whether they have helped, for example, to increase employer awareness and implementation of abatement measures. Assessing how well OSHA's approach is working could inform future efforts to address workplace violence in health care facilities. For example, completing the evaluation of the NEP results could provide OSHA with information to decide whether further action may be needed to address workplace violence hazards. OSHA could also consider cost-effective ways to conduct such assessments, such as reviewing a sample of workplace violence inspections that resulted in hazard alert letters to determine the extent to which employers implemented recommended abatement measures.

Selected States Have Workplace Violence Prevention Requirements Similar to OSHA's Voluntary Guidelines and Have Some Additional Efforts to Address Workplace Violence

All of the nine states we reviewed have enacted laws that require health care employers to establish a plan or program to protect workers from workplace violence. According to our review of information provided by state officials,[60] these states have requirements, either in law or regulation, similar to the components of an effective workplace violence prevention program identified in OSHA's voluntary guidelines (see table 4).[61] Specifically, seven of the nine states require management and worker participation in workplace violence prevention efforts, such as through a committee or other means. Eight of the nine states require health care employers to analyze or assess worksites to identify hazards that may lead to violent incidents. All nine states require health care employers to take steps to prevent or control the hazards, such as changing policies, security features, or the physical layout of the facility. Eight of the nine states also require health care employers to train workers on workplace violence prevention, such as how workers can protect themselves and report incidents. All nine states require health care employers to record incidents of violence against workers, and eight of the states require health care employers to periodically evaluate or review their workplace violence prevention plan or program.

Table 4: Selected States with Requirements Similar to the Components of an Effective Workplace Violence Prevention Program Described in OSHA's Voluntary Guidelines

Components	California	Connecticut	Illinois	Maine	Maryland	New Jersey	New York	Oregon	Washington
Management commitment and worker participation	X	X			X	X	X	X	X
Worksite analysis	X	X	X		X	X	X	X	X
Hazard prevention and control	X	X	X	X	X	X	X	X	X
Training	X	X	X		X	X	X	X	X
Recordkeeping	X	X	X	X	X	X	X	X	X
Program evaluation	X	X	X		X	X	X	X	X

[60]For the purposes of this analysis, we reviewed information provided by state officials on state requirements, including laws and regulations, for workplace violence prevention programs that apply to at least some health care employers or employees, although the coverage of these requirements vary. We did not evaluate the quality or effectiveness of state requirements. For more information on our methodology, see appendix I.

[61]OSHA, *Guidelines for Preventing Workplace Violence for Healthcare and Social Service Workers*, OSHA 3148-04R (2015).

Source: GAO review of information provided by state officials on state requirements, including laws and regulations, for workplace violence prevention in health care facilities and OSHA's Guidelines for Preventing Workplace Violence for Healthcare and Social Service Workers. | GAO-16-11

Note: The components listed in this table are described in OSHA's voluntary guidelines and are therefore not required by OSHA. According to OSHA's guidelines, Recordkeeping and Program Evaluation are one component, but they are separated in this table for illustrative purposes. An "X" in this table indicates that the state requirement addresses the component, based on our analysis, for at least some health care employers or employees, although the coverage of these requirements vary. We confirmed this table with state officials as of December 2015. For more information on our methodology, see appendix I.

According to state officials in the nine states we reviewed, the department of labor is responsible for ensuring compliance with these workplace violence prevention requirements, although in some states the department of health also has oversight responsibilities. In addition, under their OSHA-approved state plans, the state departments of labor in our selected states may issue citations to employers under their jurisdiction for violations of an applicable state standard or the state's equivalent to the general duty clause. Similar to OSHA, state agency oversight activities included investigating complaints and reports of violent incidents, as well as conducting planned inspections. The departments of labor in the states we reviewed conducted varying numbers of inspections of health care employers involving workplace violence issues and in some cases cited employers for violations of their requirements. From 2010 through 2014, state officials from eight of the nine states reported conducting from 2 to 75 inspections[62] of health care employers related to workplace violence.[63] One state did not conduct inspections of health care employers regarding workplace violence.[64] The completed inspections resulted in 0 to 74 reported citations.

In addition to their workplace violence prevention laws, officials in some of the states we reviewed described other efforts to further address workplace violence against health care workers. For example, California, New York, and Oregon have a NIOSH-funded program for tracking and

[62]Variation in the number of inspections may be due in part to differences in the states' enforcement responsibility for workplace safety and health. For example, in five of the states we reviewed, the state provides enforcement only for the state and local public sector.

[63]One of the states provided inspection data that covered a longer period of time because of limitations in the capability of the state's enforcement data system. This state reported a total of 42 inspections of health care employers involving workplace violence issues from 2003 through 2013.

[64]According to state officials, from 2010 through 2014, this state did not have an OSHA-approved state plan. As a result, the state officials indicated they were not responsible for conducting inspections.

investigating work-related fatalities called the Fatality Assessment and Control Evaluation Program. The purpose of this program is to identify risk factors for work-related fatalities and disseminate prevention recommendations. Also, the state of Washington has an independent research program called the Safety and Health Assessment and Research for Prevention Program that conducts research projects on occupational health and safety. In addition, California department of labor officials stated that they are developing a workplace violence prevention standard that will be adopted by July 2016, which officials said would make it easier for inspectors to cite employers for workplace violence issues.

Research on the Effectiveness of Workplace Violence Prevention Programs Is Limited, but a Few Studies Show Positive Results

Relatively few studies have been conducted on the effectiveness of workplace violence prevention programs, limiting what is known about the extent to which such programs or their components reduce workplace violence. After conducting a literature review, we identified five studies that evaluated the effectiveness of workplace violence prevention programs and met our criteria, such as having original data collection and quantitative evidence.[65]

Four of the five studies we reviewed suggest that workplace violence prevention programs can contribute to reduced rates of assault.

- **Three Studies of the Veterans Health Administration system.** In one study, researchers surveyed workers from 142 Department of Veterans Affairs (VA) hospitals in 2002 and identified facility-level characteristics associated with higher and lower rates of assaults. The researchers found that facility-wide implementation of alternate dispute resolution training was associated with reduced assault rates.[66] In a separate study of the VA system, researchers examined the relationship between the implementation of a comprehensive workplace violence prevention program at 138 VA health care

[65]See appendix I for details on the criteria we used for the literature review.

[66]M. J. Hodgson, R. Reed, T. Craig, F. Murphy, L. Lehmann, L. Belton, and N. Warren, "Violence in Healthcare Facilities: Lessons From the Veterans Health Administration," *Journal of Occupational and Environmental Medicine*, vol. 46, no. 11 (2004): 1158-1165.

facilities and changes in assault rates from 2004 through 2009.[67] The workplace violence prevention program included training, workplace practices, environmental controls, and security. The researchers found that facilities that fully implemented a number of training practices experienced a modest decline in assault rates. The training practices included assessing staff needs for training, having trainers present in the facility and actively training, and providing staff training on prevention and management of disruptive behavior and reporting disruptive behavior, among other things. In a third study, researchers described the processes that VA's Veterans Health Administration (VHA) uses to evaluate and manage the risk of assaultive patients. The study stated that VHA's approach included the use of committees made up of various stakeholders to assess threatening patients, and recommendations flagged in veterans' electronic medical records to notify staff of individuals who may pose a threat to the safety of others. Researchers surveyed Chiefs of Staff at 140 VHA hospitals and found that committee processes and perceptions of effectiveness were associated with a reduction in assault rates. For example, facilities that rated their committees as "very effective" were the only facilities that experienced a significant decrease in assault rates from 2009 to 2010.[68]

- **Emergency departments study.** In a fourth study, researchers found mixed results regarding the effect that a workplace violence prevention program had on the rate of assaults.[69] The study was conducted with three emergency departments that implemented the program (intervention sites) and three emergency departments that did not implement the program (comparison sites). Implementation of the program took place in 2010 and included environmental changes, changes in policies and procedures, and staff training. Researchers

[67]D. C. Mohr, N. Warren, M. J. Hodgson, and D. J. Drummond, "Assault Rates and Implementation of a Workplace Violence Prevention Program in the Veterans Health Care Administration," *Journal of Occupational and Environmental Medicine*, vol. 53, no. 5 (2011): 511-516.

[68]M. J. Hodgson, D.C. Mohr, D.J. Drummond, M. Bell, and L. Van Male. "Managing Disruptive Patients in Health Care: Necessary Solutions to a Difficult Problem," *American Journal of Industrial Medicine*, vol. 55 (2012): 1009-1017.

[69]G. L. Gillespie, D. M. Gates, T. Kowalenko, S. Bresler, and P. Succop, "Implementation of a Comprehensive Intervention to Reduce Physical Assaults and Threats in the Emergency Department," *Journal of Emergency Nursing*, vol. 40, no. 6 (2014): 586-591.

measured assault rates in the intervention and comparison sites before and after the workplace violence program was implemented by surveying on a monthly basis over an 18-month period 209 health care workers who volunteered to participate in the study. The researchers found that workers at the intervention sites and the comparison sites reported significantly fewer assaults over the study period. Therefore, the researchers could not conclude that workers at the intervention sites experienced a significantly greater decrease in violence compared with workers at the comparison sites. However, at the facility level, the researchers found that two of the intervention sites experienced a significant decrease in violence, and no individual comparison site had any significant change in assaults.

- **In-patient mental health facilities study.** A fifth study we reviewed found that implementation of a workplace violence prevention program improved staff perceptions of the safety climate in the facility but did not result in an overall change in assault rates. This study evaluated a comprehensive workplace violence prevention program that New York implemented in three state-run, in-patient mental health facilities from 2000 through 2004.[70] The study compared these facilities that implemented the program (intervention sites) with three state-run, in-patient mental health facilities that did not implement the program (comparison sites). Researchers surveyed 319 staff at the intervention sites and found that staff perceptions of management's commitment to violence prevention and employee involvement in the program was significantly improved after the program was implemented. However, an analysis of the change in staff-reported physical assaults did not indicate a statistically significant reduction in assaults at the facility level in either the intervention or comparison sites.

Research also suggests that workplace violence prevention legislation may increase employer adoption of workplace violence prevention programs. Two studies compared the workplace violence prevention programs reported by hospitals and psychiatric facilities in California—which enacted a workplace violence prevention law for hospitals in 1993—to facilities in New Jersey, where a similar law did not exist at the

[70]J. Lipscomb, K. McPhaul, J. Rosen, J. Geiger Brown, M. Choi, K. Soeken, V. Vignola, D. Wagoner, J. Foley, J.F. and P. Porter, "Violence Prevention in the Mental Health Setting: The New York State Experience," Canadian Journal of Nursing Research, vol. 38, no. 4 (2006): 96-117.

time of the study, according to the authors. Information was collected through interviews; facility walk-throughs; and a review of written policies, procedures, and training material. In the first study, researchers compared 116 California hospital emergency departments to 50 New Jersey hospital emergency departments and found that a significantly higher percentage of the California hospitals had written policies and procedures on workplace violence prevention compared to hospitals in New Jersey.[71] In the second study, researchers compared 53 psychiatric units and facilities in California to 30 psychiatric units and facilities in New Jersey and found a higher percentage of California facilities that participated in the study had written workplace violence prevention policies compared to facilities in New Jersey.[72] While New Jersey had a smaller percentage of facilities with written workplace violence prevention policies compared to California, the study found that New Jersey had a higher proportion of facilities (17 of 30 or 71 percent) than in California (25 of 53 or 61 percent) with workplace violence policies that address violence against personnel, patients, and visitors. In a third study, researchers found that rates of assault against employees in selected California hospital emergency departments decreased after enactment of the California law (from 1996 to 2001), whereas the assault rates in selected New Jersey hospital emergency departments increased over this same time period.[73] However, the researchers could not conclude that these differences were attributable to the California law.

Conclusions

Compared to workers overall, health care workers face an increased risk of being assaulted at work, often by the patients in their care. Given the high rate of violence committed against health care workers, particularly in in-patient facilities, there is an increasing need to help ensure that

[71]C. Peek-Asa, C. Casteel, V. Allareddy, M. Nocera, S. Goldmacher, E. O'Hagan, J. Blando, D. Valiante, M. Gillen, and R. Harrison,"Workplace Violence Prevention Programs in Hospital Emergency Departments," Journal of Occupational and Environmental Medicine, vol. 49, no. 7 (2007).

[72]C. Peek-Asa, C. Casteel, V. Allareddy, M. Nocera, S. Goldmacher, E. O'Hagan, D. Valiante, M. Gillen, and R Harrison, "Workplace Violence Prevention Programs in Psychiatric Units and Facilities," *Archives of Psychiatric Nursing*, vol. 23, no. 2 (2009).

[73]C. Casteel, C. Peek-Asa, M. Nocera, J.B. Smith, J. Blando, S. Goldmacher, E. O'Hagan, D. Valliante, and R. Harrison, "Hospital Employee Assault Rates Before and After Enactment of the California Hospital Safety and Security Act," *Annals of Epidemiology*, vol. 19, no. 2 (2009).

health care workers are safe as they perform their work duties. OSHA may issue general duty clause citations to employers who fail to protect their workers from hazardous conditions. While OSHA has increased the number of inspections of workplace violence in health care facilities in recent years, relatively few general duty clause citations resulted from these inspections. Inspectors reported facing challenges in developing the evidence needed to issue these citations, and officials and inspectors from 5 of OSHA's 10 regions said it would be helpful to have additional information to assist them in implementing the 2011 enforcement directive. Without this additional information, inspectors may continue to experience difficulties in addressing challenges they reported facing in developing these citations.

When inspectors do not have enough evidence to issue a general duty clause citation, OSHA inspectors can issue nonbinding hazard alert letters warning employers of a serious safety concern. However, without a policy requiring inspectors to follow-up on hazard alert letters, OSHA will not know whether employers have taken steps to address the safety hazards identified in these letters or whether a follow up inspection is needed. If the situations identified in the letters are left unchecked, health care workers may continue to be exposed to unsafe working conditions that could place them at an increased risk of workplace violence.

OSHA has increased its education and enforcement efforts in recent years to raise awareness of the hazard of workplace violence and to help employers make changes that could reduce the risk of violence at their worksites. However, OSHA has done little to assess the results of its efforts. Without assessing the results of these efforts, OSHA is not in a position to know whether the efforts are effective or if additional action, such as development of a specific workplace violence prevention standard, may be needed.

Recommendations for Executive Action

To help reduce the risk of violence against health care workers, we recommend that the Secretary of Labor direct the Assistant Secretary for Occupational Safety and Health to take the following actions:

- Provide additional information to assist inspectors in developing general duty clause citations in cases involving workplace violence.
- Establish a policy that outlines a process for following up on health care workplace violence-related hazard alert letters.

To help determine whether current efforts are effective or if additional action may be needed, such as development of a workplace violence prevention standard for health care employers, the Secretary of Labor should direct the Assistant Secretary for Occupational Safety and Health to:

- Develop and implement cost-effective ways to assess the results of the agency's efforts to address workplace violence.

Agency Comments and Our Evaluation

We provided a draft of this report to the Departments of Labor (DOL), Health and Human Services (HHS), Justice (DOJ), and Veterans Affairs (VA) for review and comment. We received formal written comments from the DOL and VA, which are reproduced in appendices III and IV. In addition, DOL's Bureau of Labor Statistics, HHS, and DOJ provided technical comments, which we incorporated as appropriate.

In its written comments, DOL's Occupational Safety and Health Administration (OSHA) said it agreed with all three of our recommendations. With regard to our first recommendation, OSHA stated that the agency is in the process of revising its enforcement directive and developing a training course to further assist inspectors. With regard to our second recommendation, OSHA stated that the agency plans to include standardized procedures for following up on hazard alert letters in its revised enforcement directive. With regard to our third recommendation, OSHA stated that it intends to find a cost effective way to gauge its enforcement efforts to determine whether additional measures, such as developing a workplace violence prevention standard for health care workers, is necessary. In addition, OSHA stated that the agency is reviewing past inspections that resulted in citations or hazard alert letters to evaluate how these cases were developed and what measures may improve the process.

In its written comments, VA said it agreed with our findings and three recommendations to OSHA, but suggested the recommendations could be more specific regarding the tools and processes necessary to support OSHA inspectors. For example, VA suggested that OSHA should develop measurable and performance based criteria for workplace violence prevention programs in the unique health care environment. We believe that our recommendations appropriately address our findings. VA also stated that our report did not fully describe the specific processes that the Veterans Health Administration uses to protect employees and patients from dangerous patient behaviors and provided a reference to a study about these processes. In response, we reviewed the study and

incorporated its findings in the section of our report on research on the effectiveness of workplace violence prevention programs.

As agreed with your offices, unless you publicly announce the contents of this report earlier, we plan no further distribution until 30 days from the report date. At that time, we will send copies to the Secretaries of Labor, Health and Human Services, Justice, and Veterans Affairs, appropriate congressional committees, and other interested parties. In addition, the report will be available at no charge on the GAO website at http://www.gao.gov. Please contact me on (202) 512-7215 or at sherrilla@gao.gov if you or your staff have any questions about this report. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. Key contributors to this report are listed in appendix VII.

Andrew Sherrill
Director, Education, Workforce,
and Income Security Issues

Appendix I: Objectives, Scope, and Methodology

This report examines: (1) what is known about the degree to which workplace violence occurs in health care facilities and its associated costs, (2) steps OSHA has taken to protect health care workers from workplace violence and assess the usefulness of its efforts, (3) how selected states have addressed workplace violence in health care facilities, and (4) research on the effectiveness of workplace violence prevention programs in health care facilities.

For the purposes of this report, we focused on workplace violence against health care workers. We used the National Institute for Occupational Safety and Health's (NIOSH) definition of workplace violence, which is "violent acts (including physical assaults and threats of assaults) directed toward persons at work or on duty."[1] We did not focus on other types of violence, such as self-inflicted violence, bullying, or incivility among health care workers.

To address these objectives, we:

- analyzed federal data used by three federal agencies to estimate workplace violence-related injuries and deaths in health care facilities;
- reviewed related studies identified in a literature review;
- interviewed federal officials, analyzed enforcement data, and reviewed relevant federal laws, regulations, inspection procedures, and guidelines;
- reviewed selected state workplace violence prevention laws from nine selected states and visited four of the states where we interviewed state officials, health care employers, and workers; and
- interviewed researchers and others knowledgeable about workplace violence prevention in health care facilities.

We conducted this performance audit from August 2014 to March 2016 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our

[1]NIOSH, *Violence: Occupational Hazards in Hospitals*, DHHS (NIOSH) Publication No. 2002-101, 2002.

findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Analysis of Federal Data on Workplace Violence-Related Injuries

To identify what is known about the degree to which workplace violence occurs in health care facilities and its associated costs, we reviewed federal data sources used by three federal agencies to estimate workplace violence-related injuries and deaths. The four national datasets we analyzed collect data on different types of workplace violence incidents from different sources (see table 5). The years of data we analyzed varied by data source, depending on the availability of data and the number of cases needed to develop national estimates, but the dates generally were from 2009 through 2013.[2]

Table 5: Federal Data Sets with National Data on Workplace Violence Incidents

Agency and data set	Years of data analyzed	Type of data reported from this dataset	Source
DOL's Bureau of Labor Statistics (BLS) Survey of Occupational Injuries and Illnesses (SOII)	2011-2013	Nonfatal workplace violence-related injuries involving days away from work	Employers: BLS surveys a nationally representative sample of employers (about 230,000 establishments).
DOL's Bureau of Labor Statistics (BLS) Census of Fatal Occupational Injuries (CFOI)	2011-2013	Fatal workplace violence-related injuries	Federal-state cooperative program that has been implemented in all 50 States and the District of Columbia. Data are compiled by cross-referencing the source records, such as death certificates, workers' compensation reports, and federal and state agency administrative reports.
HHS's National Institute for Occupational Safety and Health (NIOSH) National Electronic Injury Surveillance System-Work Supplement (NEISS-Work)	2011	Nonfatal workplace violence-related injuries treated in hospital emergency departments	Hospitals: NEISS-Work data are collected from a nationally representative sample of 67 U.S. hospital emergency departments. Coders at participating hospitals review all emergency department records to capture nonfatal work-related injuries.

[2]For the SOII and CFOI data, we used data from 2011 through 2013 because BLS began using a new coding system in 2011, and BLS officials told us that data from 2011 to the present are not comparable to previous years. For the NEISS-Work data, 2011 was the most recent year data were available that included complete information, including the worker's industry. For the NCVS data, because there is a limited sample of health care workers who report violent incidents on an annual basis, we combined 5 years of data (2009-2013) to obtain a large enough sample to produce national estimates.

Agency and data set	Years of data analyzed	Type of data reported from this dataset	Source
DOJ's Bureau of Justice Statistics (BJS) National Crime Victimization Survey (NCVS)	2009-2013	Nonfatal assault against employed persons age 16 or older that occurred while they were at work or on duty[a]	Individuals: BJS surveys a nationally representative sample of about 90,000 households, comprising nearly 160,000 individuals.

Source: GAO review of agency data documentation. | GAO-16-11

[a]Note: We are reporting a subset of cases captured in the National Crime Victimization Survey.

We reported the estimated rates of nonfatal workplace violence against workers in health care facilities compared to workers overall (all industries combined) for each relevant data source. The rates of nonfatal workplace violence were calculated so that the base (denominator) was the same across all three data sources (the rate per 10,000 workers). We also reported information related to the health care occupations with high nonfatal workplace violence-related injury rates, the type of violence, and the perpetrator of the violence. For consistency purposes, we used 2011 as the common year of data from the three datasets with nonfatal injury data–BLS's SOII, NIOSH's NEISS-Work, and BJS's NCVS–to report the number of nonfatal workplace violence cases in health care settings recorded in each source.

The number of cases and rates of nonfatal workplace violence-related injury we report includes violence perpetrated against health care workers by other people. For the BLS SOII data, we reported cases where the workplace violence was caused by another person–intentional, unintentional, or unknown–and excluded cases where the violence was self-inflicted or caused by animals or insects. We focused on the health care industry and reported the BLS data for the three health care industry categories BLS uses: ambulatory health care services, hospitals, and nursing and residential care facilities.

The estimated rates and number of workplace violence cases we report from the NCVS represent a subset of the workplace violence cases BJS typically reports. BJS defines assaults as both simple and aggravated, including threats. In addition, BJS defines violence to include all types of physical harm, including sexual assault, robbery, and aggravated and simple assault. We reported assaults, including rape and sexual assault, aggravated assault, and simple assault. We focused on actual assaults because these types of cases are more comparable to the cases we reported from the other federal data sources. We did not include cases of verbal threats of assault or robberies. Health care workers included survey respondents who described their job as working in the medical profession or mental health services field.

We did not report data on the costs of workplace violence or the perpetrators of the violence from BJS's NCVS because of data limitations. The survey asks individuals about the medical expenses they incurred as a result of workplace violence, but our analysis of the data identified 22 cases from 2009 through 2013 where dollar amounts were reported, which was too few cases to produce a national estimate. We decided not to report the perpetrator information from the survey data because BJS officials said that due to a limitation of the survey, it underestimates the number of workplace violence cases in which patients assault workers. Specifically, the variables that describe the relationship of the victim to the perpetrator in the survey are dependent on whether the victim knows the perpetrator. Survey respondents who answer that the perpetrator is a stranger are not subsequently asked if the perpetrator was a patient. Therefore, it is possible that many perpetrators who are patients are coded as strangers.

To assess the reliability of the federal data, we reviewed relevant agency documentation, conducted electronic data testing, compared our results to related information reported by the federal agencies, and interviewed agency officials. Based on these reviews, we determined that the data were sufficiently reliable for the purposes of providing information about the number of cases and rates of workplace violence in the health care industry.

All national estimates produced from our analysis of the federal data are subject to sampling errors. We express our confidence in the precision of our results as a 95 percent confidence interval. This is the interval that would contain the actual population value for 95 percent of the samples the respective agency could have drawn. For estimates derived from BLS's SOII data, we used the agency-provided relative standard errors to estimate the associated confidence intervals. For estimates derived from the NIOSH NEISS-Work supplement, we used the multi-stage cluster sample variance estimation methodology detailed in the agency technical documentation to estimate the associated confidence intervals. For estimates derived from NCVS data, BJS provided us with generalized variance function parameters for the 5 calendar years' worth of survey data, both individually and for all 5 calendar years combined. We used these parameters with formulas for deriving the sampling error of estimated totals and estimated ratios available in the NCVS technical documentation to estimate the associated confidence intervals. The tables below provide the estimates and 95 percent confidence intervals for the data we present in the body of this report.

BLS SOII Data

Table 6: Estimates and 95 percent Confidence Intervals for the Rate of Nonfatal Workplace Violence-Related Injuries Involving Days Away from Work by Selected Industries, 2013

Industry	Rate	Lower bound for confidence interval	Upper bound for confidence interval
Private industry overall	2.8	2.7	2.9
Ambulatory health care services	2.8	2.5	3.1
Hospitals	14.7	14.2	15.2
Nursing and residential care facilities	35.3	33.6	37.0
State government overall	32.8	31.4	34.2
Hospitals	156.8	149.4	164.2
Nursing and residential care facilities	247.6	218.5	276.7
Local government overall	20.1	19.2	21.0
Hospitals	16.9	14.9	18.9
Nursing and residential care facilities	43.8	30.6	57.0

Source: GAO analysis of BLS's SOII data. | GAO-16-11

Note: The rate represents the number of injury cases per 10,000 full-time workers.

Table 7: Estimates and 95 percent Confidence Intervals for the Rate of Nonfatal Workplace Violence-Related Injuries Involving Days Away from Work by Selected Industries, 2011

Industry	Rate	Lower bound for confidence interval	Upper bound for confidence interval
Private industry overall	2.7	2.6	2.8
Ambulatory health care services	2.7	2.3	3.1
Hospitals	13.3	12.8	13.8
Nursing and residential care facilities	31.2	29.7	32.7
State government overall	42.9	37.9	47.9
Hospitals	155.4	145.0	165.8
Nursing and residential care facilities	177.8	161.8	193.8
Local government overall	19.6	18.8	20.4
Hospitals	16.2	14.2	18.2
Nursing and residential care facilities	43.9	32.4	55.4

Source: GAO analysis of BLS's SOII data. | GAO-16-11

Note: The rate represents the number of injury cases per 10,000 full-time workers

Table 8: Estimates and 95 percent Confidence Intervals for Nonfatal Workplace Violence-Related Injuries Involving Days Away from Work in Health Care, 2011-2013

Year	Number of cases	Lower bound for confidence interval	Upper bound for confidence interval
2011	22,250	21,651	22,849
2012	24,600	23,959	25,241
2013	24,880	24,215	25,545

Source: GAO analysis of BLS's SOII data. | GAO-16-11

Note: We calculated these estimates of incidence by adding statistically independent estimates from three large industry segments (ambulatory health care services, hospitals, and nursing and residential care facilities) broken down further by ownership type (private, state government, local government). These estimates do not include state and local government ambulatory health care services because BLS was not able to publish an estimate for these categories that were statistically reliable enough to meet BLS publishing standards.

Table 9: Estimates and 95 percent Confidence Intervals for the Rate of Nonfatal Workplace Violence-Related Injuries Involving Days Away from Work (All industries and selected occupations by sector)

Occupation	Rate	Lower bound for confidence interval	Upper bound for confidence interval
Workers overall			
State government	18.1	17.4	18.8
Local government	8.2	7.8	8.6
Private sector	1.5	1.46	1.54
Nursing assistants			
State government	156.7	129.7	183.7
Local government	57.7	45.3	70.1
Private sector	26.6	25.2	28.0
Psychiatric technicians			
State government	134.0	114.0	154.0
Local government	157.3	67.0	247.6
Private sector	122.6	103.1	142.1
Psychiatric aides			
State government	579.5	531.8	627.2
Local government	116.6	25.9	207.3
Private sector	439.5	396.4	482.6

Source: GAO analysis of BLS's SOII data. | GAO-16-11

Note: The rate represents the number of injury cases per 10,000 full-time workers.

HHS NEISS-Work Data

Table 10: Estimates and 95 percent Confidence Intervals for the Rates of Nonfatal Workplace Violence-Related Injuries Treated in Hospital Emergency Departments (Number of Workers per 10,000 Workers), 2011

Type of worker	Estimate	Lower bound for confidence interval	Upper bound for confidence interval
All workers	10.6	6.5	14.8
Health care workers	34.1	17.6	50.1

Source: GAO analysis of HHS's NEISS-Work data. | GAO-16-11

BJS NCVS Data

Table 11: Estimates and 95 percent Confidence Intervals for the Rates of Nonfatal Workplace Violence-Related Assaults (Number of Workers per 10,000 Workers), 2009-2013

Type of worker	Incidence rate	Lower bound for confidence interval	Upper bound for confidence interval
All workers	32.9	26.8	38.9
Health care workers	100	73.5	126.5

Source: GAO analysis of BJS' NCVS data. | GAO-16-11

Note: The rate represents the number of workers reporting at least one workplace violence-related assault per 10,000 workers.

Table 12: Estimates and 95 percent Confidence Intervals for the Number of Health Care Workers Reporting At Least One Nonfatal Workplace Violence-Related Assault, 2009-2013

Year	Number of cases	Lower bound for confidence interval	Upper bound for confidence interval
2009	126,285	58,891	193,679
2010	127,127	64,691	189,563
2011	80,710	37,893	123,527
2012	246,193	159,253	333,134
2013	153,731	81,367	226,095

Source: GAO analysis of BJS' NCVS data. | GAO-16-11

Review of Related Studies

We conducted a literature review to identify research related to the prevalence of workplace violence and associated costs (objective 1) and the effectiveness of workplace violence prevention programs (objective 4). We searched relevant platforms, such as ProQuest Research Library and Social Services Abstracts, to identify studies published in government reports and peer-reviewed journals from January 2004 to June 2015. We

also consulted with federal officials and researchers we interviewed to identify related research. See appendix VIII for a bibliography of the studies cited in this report.

We screened more than 170 articles and focused our review on U.S. studies identified among this group that met the following additional criteria. First, they were studies based on original data collection rather than reviews of existing literature. Second, they provided quantitative evidence directly related to our research objectives. Lastly, they provided information related to physical violence against health care workers. For example, we eliminated studies that focused solely on verbal abuse, such as bullying or incivility among health care workers.

We conducted detailed reviews of the 32 studies that met these initial screening criteria. Our reviews entailed an assessment of each study's research methodology, including its data quality, research design, and analytic techniques, as well as a summary of each study's major findings and conclusions. We also assessed the extent to which each study's data and methods support its findings and conclusions. We eliminated studies that were not sufficiently reliable and methodologically rigorous for inclusion in our review. For example, we eliminated studies with low survey response rates and studies whose findings were based on information collected from a small number of health care workers. We assessed the methodological sufficiency of each study using internal guidance documents. We determined that 17 of the studies were sufficiently reliable and methodologically rigorous for inclusion in our review.

Review of OSHA's Actions to Protect Health Care Workers from Workplace Violence

To examine the steps OSHA has taken to protect health care workers from workplace violence, we reviewed relevant federal laws and regulations; analyzed OSHA's guidance, inspection procedures, and enforcement data; and interviewed OSHA officials. We also collected information from all 10 OSHA regional offices on inspector training and how inspectors investigate workplace violence during inspections of health care employers.

We analyzed enforcement data from two OSHA databases: the Integrated Management Information System (IMIS) database and the Occupational Safety and Health Information System (OIS) database, which replaced

the IMIS system. We analyzed enforcement data from 1991 through April 2015 on federal OSHA inspections, including data on the type of inspection, inspection findings, citations, and penalties.[3] To assess the reliability of the OSHA enforcement data, we reviewed relevant agency documentation, conducted electronic data testing, and interviewed agency officials. Based on these reviews, we determined that the data were sufficiently reliable for our purposes.

Review of Selected States' Efforts to Address Workplace Violence in Health Care Facilities

To examine how selected states have addressed workplace violence in health care settings, we analyzed selected state laws and other information collected from state officials in nine states: California, Connecticut, Illinois, Maine, Maryland, New Jersey, New York, Oregon, and Washington. We focused our review on these nine states because they were the ones we identified from our search of legal databases; related studies; and interviews with federal officials, researchers, and national labor organizations. We did not conduct a nationwide review of state laws or collect information from all 50 states; therefore, other states may have these types of requirements. For the nine states we identified, we reviewed information provided by state officials on state requirements, including laws and regulations, for workplace violence prevention programs in health care settings.[4] We confirmed our descriptions of the selected state requirements with state officials as of December 2015. We did not evaluate the quality or effectiveness of state requirements.

We visited four of these states–California, Maryland, New York, and Washington–selected for variation in the length of time their state workplace violence prevention laws have been in place. During our visits, we interviewed state officials from the state's department of labor and department of health, visited one health care facility in each state, and held discussion groups with health care workers. We visited four health care facilities, including two state psychiatric hospitals, a nursing home,

[3]This timeframe covers all of the workplace violence-related inspections of health care employers that had been conducted by OSHA at the time when we did our data analysis.

[4]We included in our review state requirements for workplace violence prevention programs that apply to at least some health care employers or employees, although the coverage of these requirements vary. The nine selected states may also have other requirements related to workplace violence in health care facilities, such as laws providing criminal penalties for assaults on health care workers, which were beyond the scope of this report.

and a hospital with an emergency department. We selected these types of facilities because BLS data indicate that most workplace violence incidents occur in hospitals and nursing and residential care facilities. During each of the health care facility visits, we met with security, management, and health care workers. We also participated in a guided tour of the facility. The information we obtained from the states and our site visits is not generalizable.

We conducted five nongeneralizable discussion groups with health care workers to learn about their experience with workplace violence. These discussion groups were organized by labor organization officials that represent health care workers. The discussions occurred in Baltimore, Maryland; Los Angeles, California; New York, New York; Seattle, Washington; and Washington, D.C. These locations were selected to align with our selected site visit states. The labor organization officials invited health care workers who had been verbally and/or physically assaulted while performing their duties at work. A total of 54 health care workers participated in the discussion groups. The participants worked in various health care practice areas, including home health, acute care, mental health, and residential care. We asked the health care workers about their experience with workplace violence, whether they received workplace violence prevention training, the factors they consider when deciding whether to report an incident to their employer, the factors that contribute to workplace violence, and what could be done to reduce these incidents. We used their responses to identify themes and illustrative examples. Methodologically, discussion groups are not designed to (1) demonstrate the extent of a problem or to generalize results to a larger population, (2) develop a consensus to arrive at an agreed-upon plan or make decisions about what actions to take, or (3) provide statistically representative samples or reliable quantitative estimates. Instead, they are intended to generate in-depth information about the reasons for the discussion group participants' attitudes on specific topics and to offer insights into their experiences. Because of these limitations, we did not rely entirely on the information collected from the discussion groups, but rather used several different methodologies to corroborate and support our findings.

Appendix II: Summary of Findings from Research

Table 13: Summary of Study Findings Related to Prevalence of Workplace Violence in Health Care Facilities

Study	Methodology	Percentage of sample who reported experiencing workplace violence
Kowalenko and others (2013)	Survey of 213 emergency department workers in six hospitals in two states. Researchers conducted monthly surveys over a 9- month period.	Researchers extrapolated what the results would be for a 12-month period. For those who completed the survey, the researchers extrapolated an average of 5.5 violent events a year per person, including 4 physical threats a year per person, and 1.5 assaults a year per person. Perpetrator: Data on whether the perpetrator was a patient or visitor were not provided.
Speroni and others (2014)	Survey of 762 nurses from one hospital system about their experience with workplace violence in the past 12 months.	For those who completed the survey, 30 percent reported experiencing physical abuse perpetrated by patients, and 54 percent reported experiencing verbal abuse perpetrated by patients. About 4 percent experienced physical abuse by visitors, and about 33 percent experienced verbal abuse by visitors. Perpetrator: Patients were the perpetrators of more verbal and physical violence incidents than visitors.
Pompeii and others (2015)	Survey of over 5,385 workers in six hospitals in two states about their experience with workplace violence in the past12 months.	For those who completed the survey, 39 percent reported experiencing workplace violence as projected to a 12-month prevalence among survey respondents. Subtypes: Assaults (19 percent) Physical threats (19 percent) Verbal abuse (62 percent) Perpetrator: Patient (76 percent) Visitors (24 percent)
Gillespie and others (2014)	Survey of 209 workers from six hospital emergency departments over an 18-month period.	For those who completed the survey, 26 percent of the violent events were physical assaults, and 74 percent were physical threats. Perpetrator: 96 percent of assaults and 86 percent of physical threats were committed by patients.
Campbell and others (2011)	Survey of over 2,000 nurses from four health care facilities in one metropolitan area about their experience with workplace violence in the past 12 months.	For those who completed the survey, 30 percent reported some form of workplace violence, with a prevalence of 19 percent and 20 percent for physical and psychological violence, respectively. Perpetrator: Among those who experienced physical violence, almost all incidents (90 percent) involved a patient as perpetrator, followed by a patient's relative (27 percent).
Kelly and others (2015)	Survey of 348 staff in a psychiatric hospital. Staff rated how often they had been physically assaulted in the past 12 months.	Seventy percent of respondents who completed the survey reported being physically assaulted, and 99 percent reported verbal conflict with patients. Perpetrator: Ninety-nine percent reported experiencing conflict with patients.
Hanson and others (2015)	Survey of about 1,200 homecare workers in one state. Homecare workers reported incidents in the past 12 months.	For those who completed the survey, 14 percent reported someone tried to hit them, but failed; were kicked, bitten, hit with a fist, pushed, grabbed, shoved, or slapped and 21 percent were threatened with violence. Perpetrator: Data on the perpetrators not provided.

Study	Methodology	Percentage of sample who reported experiencing workplace violence
Bride and others (2015)	Survey of 1,890 substance use disorders counselors regarding their experience with workplace violence in substance use disorder treatment settings. Respondents recollected events over their entire employment at the treatment program, which for some respondents meant many years.	For those who completed the survey, 3 percent reported assaults by a patient, 20 percent reported physical threats by a patient, and 51 percent reported verbal abuse by a patient.

Source: GAO analysis of literature on workplace violence in health care facilities. | GAO-16-11.

Table 14: Summary of Study Findings Related to Reporting Workplace Violence Incidents

Study	Methodology	Percent of workers reporting incidents in an employer's reporting system
Arnetz and others (2015)	Survey of over 2,000 workers from one hospital system.	12 percent
Kowalenko and others (2013)	Survey of 213 emergency department workers in six hospitals in two states. It conducted monthly surveys over 9 months to get perspective on health care workers' incidences of violence.	42 percent
Speroni and others (2014)	Survey of 762 nurses from one hospital system about their experience with workplace violence over the past year.	16 percent
Pompeii and others (2015)	Survey of over 5,000 workers in six hospitals in two states about their experience with workplace violence in the previous12 months.	7 percent
Gillespie and others (2014)	Survey of 209 workers from six hospital emergency departments over an 18-month period.	40 percent

Source: GAO analysis of literature on workplace violence in health care facilities. | GAO-16-11.

Appendix III: Comments from the Department of Labor

U.S. Department of Labor

Assistant Secretary for
Occupational Safety and Health
Washington, D.C. 20210

FEB 26 2016

Mr. Andrew Sherrill, Director
Education, Workforce, and Income Security Issues
U.S. Government Accountability Office
441 G Street, NW
Washington, DC 20548

Dear Mr. Sherrill:

Thank you for the opportunity to comment on the Government Accountability Office's (GAO) draft report, *Workplace Safety and Health: Additional Efforts Needed to Help Protect Health Care Workers from Workplace Violence.* The following comments are submitted on behalf of the Department of Labor's (DOL) Occupational Safety and Health Administration (OSHA). OSHA appreciates your detailed review of its work to address the hazard of workplace violence in healthcare settings and generally agrees with GAO's three recommendations. The Agency is committed to assessing and enhancing the effectiveness of its overall enforcement and compliance assistance efforts to address workplace violence, and we welcome your suggestions.

OSHA agrees with GAO's recommendation to provide additional information to assist inspectors in developing citations in workplace violence cases. Consistent with this recommendation, OSHA will continue to seek ways to improve support for its front-line workers. The Agency is currently supporting inspectors developing cases that involve workplace violence in a number of ways. OSHA guidance for conducting these types of investigations specifically provides that Area Directors ensure "early involvement in the investigation by the Regional Workplace Violence Coordinator, Regional Solicitor and the National Office Workplace Violence Program Coordinator." In addition, the national coordinator routinely discusses active cases with the National Solicitor's Office, OSHA regional coordinators and area office staff and has consistently encouraged early communication in these investigations. We will continue to emphasize that coordinators should actively seek input from regional and national OSHA and SOL staff at any time during an investigation.

Other support provided by OSHA to inspectors includes publications, webpages, resources from the OSHA Office of Occupational Medicine and Nursing (OOMN), and training. As GAO notes, in 2015 OSHA updated its guidelines for preventing workplace violence in healthcare and social services, and is currently revising its directive, *Enforcement Procedures for Investigating or Inspecting Workplace Violence Incidents,* CPL 02-01-052, to provide enhanced guidance to OSHA inspectors regarding evidence gathering in cases involving these hazards. The updated directive will highlight the availability of workplace violence coordinators, Regional and National Office Solicitors and OOMN staff for consultation on cases, as well as expanding on investigative techniques necessary to support issuance of general duty citations. OSHA expects to have the directive completed by the end of 2016. To further assist inspectors, OSHA is also

currently planning a 2016 training course for its regional workplace violence coordinators and some inspectors.

OSHA also welcomes GAO's final two recommendations. The Agency intends to include guidance to inspectors in the updated directive to standardize follow-up procedures to hazard alert letters (HALs). In addition, OSHA is developing a study of past inspections that resulted in citations or HALs to evaluate how these cases were developed and what measures may improve the process.

Regarding GAO's final recommendation, OSHA intends to find a cost effective way to gauge its enforcement efforts to determine whether additional measures, such as developing a workplace violence standard for health care workers, is necessary. As to your reference to the Nursing Home National Emphasis Program (NH-NEP), the Agency's internal evaluation results, along with information provided from consultations with our partner agencies and stakeholders, provided strong evidence that OSHA should continue this important enforcement initiative, and others, to reduce the hazard of workplace violence.

OSHA welcomes GAO's evaluation of workplace violence in the healthcare setting and its assessment of our efforts to increase awareness, improve worker protections and hold employers accountable. The Agency will continue to improve our inspection procedures and compliance assistance, within our available resources. OSHA appreciates the opportunity to review and respond to GAO's draft report.

Sincerely,

David Michaels, PhD, MPH

Appendix IV: Comments from the Department of Veterans Affairs

DEPARTMENT OF VETERANS AFFAIRS
WASHINGTON DC 20420

February 16, 2016

Mr. Andrew Sherrill
Director
Education, Workforce,
and Income Security Issues
U.S. Government Accountability Office
441 G Street, NW
Washington, DC 20548

Dear Mr. Sherrill:

The Department of Veterans Affairs (VA) has reviewed the Government Accountability Office's (GAO) draft report, ***"WORKPLACE SAFETY AND HEALTH: Additional Efforts Needed to Help Protect Health Care Workers from Workplace Violence"*** (GAO-16-11). VA agrees with GAO's findings.

The enclosure contains general comments related to the draft report. VA appreciates the opportunity to comment on your draft report.

Sincerely,

Robert D. Snyder
Interim Chief of Staff

Enclosure

Enclosure

Department of Veterans Affairs (VA) Response to
Government Accountability Office (GAO) Draft Report
"WORKPLACE SAFETY AND HEALTH: Additional Efforts Needed to Help Protect Health Care Workers from Workplace Violence"
(GAO-16-11)

General Comments:

The Veterans Health Administration (VHA) appreciates the opportunity and is pleased to provide information about the VHA Workplace Violence Prevention Program (WVPP) to enhance this Government Accountability (GAO) report. VHA also appreciates that GAO has undertaken this comprehensive review of Occupational Safety and Health Administration's (OSHA) workplace violence prevention initiatives and their impact because OSHA's enforcement of occupational safety standards directly impacts VHA.

VA agrees with the three broad recommendations for OSHA. VA also offers that the VHA research and other program documents provided to GAO address a *fundamental enforcement challenge* that is not fully described in the GAO report. As noted in the report, between 60-100 percent of violence in any given health care setting arises from patient care and interactions with patients and their families. A much smaller proportion of non-fatal assaults are between employees.

VHA's WVPP uses both a public health/occupational safety paradigm as well as a safe clinical care paradigm to protect employees and patients from dangerous behaviors. In our view, GAO did not fully describe the specific processes that VHA uses to identify and reduce the safety risk posed by problematic, disruptive and dangerous patient behaviors. The report did not describe VHA's patient record flagging system and interdisciplinary team process (i.e., the Disruptive Behavior Committee (DBC) for ensuring that clinical expertise is integrated into the individualized risk reduction plan for each patient in a system-wide standardized fashion. The DBC represents the integration of the community standard of workplace violence prevention into health care settings so that all staff and patients benefit from being able to refer patients with disruptive behaviors to the DBC.

VHA suggests that the recommendations to OSHA could be more specific regarding the tools and processes necessary to support OSHA inspectors to conduct evidence based audits that will ensure that employers implement effective workplace violence prevention programs. For example, OSHA should develop measurable and performance based criteria for workplace violence prevention programs in the unique health care environment.

VHA believes that involvement of clinical care expertise is required to mitigate patient generated behaviors in the context of health care delivery. In other words, patients may become agitated and violent due to many clinical factors in a health care setting, most of which may not be understood by non-clinical lay people.

1

Enclosure

Department of Veterans Affairs (VA) Response to
Government Accountability Office (GAO) Draft Report
"WORKPLACE SAFETY AND HEALTH: Additional Efforts Needed to Help Protect Health Care Workers from Workplace Violence"
(GAO-16-11)

In support of these comments, VHA offers the following reference:

1. Hodgson, MJ, Mohr, DC, Drummond, DJ, Bell, M and Van Male, L. (2012) Managing Disruptive Patients in Health Care: Necessary Solutions to a Difficult Problem. American Journal of Industrial Medicine 55:1009-1017.

2

Appendix V: GAO Contact and Staff Acknowledgments

GAO Contact

Andrew Sherrill (202) 512-7215 or sherrilla@gao.gov

Staff Acknowledgments

In addition to the contact named above, Mary Crenshaw (Assistant Director), Cathy Roark (Analyst-in-Charge), Hiwotte Amare, Carl Barden, James Bennett, Rachael Chamberlin, David Chrisinger, Sarah Cornetto, Lauren Gilbertson, LaToya King, Linda Kohn, Joel Marus, Ashley McCall, Jean McSween, Kathy Leslie, Terry Richardson, Stacy Spence, Walter Vance, and Kate van Gelder made significant contributions to this report.

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