BUREAU OF PRISONS

Evaluating the Impact of Protective Equipment Could Help Enhance Officer Safety
Why GAO Did This Study
The Department of Justice’s (DOJ) Federal Bureau of Prisons (BOP) manages more than 209,000 inmates, up 45 percent between fiscal years 2000 and 2010. As the prison population grows, so do concerns about correctional officer safety. As requested, GAO examined the (1) equipment that BOP and selected state departments of corrections (DOC) provide to protect officers, and the officers’ and other correctional practitioners’ opinions of this equipment; (2) extent to which BOP has evaluated the effectiveness of this equipment, and factors correctional equipment experts consider important to the acquisition of new equipment; and (3) institutional factors correctional accrediting experts reported as impacting officer safety, and the extent to which BOP has evaluated the effectiveness of the steps it has taken in response. GAO reviewed BOP policies and procedures; interviewed BOP officials and officers within BOP’s six regions, selected based on such factors as the level of facility overcrowding; interviewed officials at 14 of the 15 largest state DOCs; and surveyed 21 individuals selected for their expertise in corrections. The results of the interviews cannot be generalized, but provide insight into issues affecting officer safety.

What GAO Found
BOP and 14 state DOCs included in GAO’s review provide a variety of protective equipment to officers, but BOP officers and management have different views on equipment. BOP generally provides officers with radios, body alarms, keys, flashlights, handcuffs, gloves, and stab-resistant vests while on duty, but prohibits them from storing personal firearms on BOP property, with limited exceptions. DOC officials in 14 states GAO interviewed provided examples of equipment they allow officers to carry while on duty that BOP does not—such as pepper spray—and officials in 9 of the 14 states reported allowing officers to store personal firearms on state DOC property. BOP and states provide similar equipment to protect officers in an emergency, such as an inmate riot or attack. Most BOP officers with whom GAO spoke reported that carrying additional equipment while on duty and commuting would better protect officers, while BOP management largely reported that officers did not need to carry additional equipment to better protect them.

BOP has not evaluated the effectiveness of equipment it provides in ensuring officer safety, and correctional equipment experts report that BOP needs to consider a variety of factors in acquisition decisions. Neither the officials nor the experts with whom GAO spoke reported that they were aware of or had conducted evaluations of the effectiveness of equipment in ensuring officer safety, although BOP tracks information necessary to do so in its data systems. By using information in these existing systems, BOP could analyze the effectiveness of the equipment it distributes in ensuring officer safety, thus helping it determine additional actions, if any, to further officer safety and better target limited resources. All of the correctional equipment experts GAO spoke with reported that BOP would need to consider factors such as training, replacement, maintenance, and liability, as well as whether the equipment met performance standards, if it acquired new equipment. These experts suggested that any decision must first be based upon a close examination of the benefits and risk of using certain types of equipment. For example, while state officials reported that pepper spray is inexpensive and effective, a majority of the BOP management officials we spoke with stated that it could be taken by inmates and used against officers.

Correctional accrediting experts most frequently cited control over the inmate population, officer training, inmate gangs, correctional staffing and inmate overcrowding as the institutional factors—beyond equipment—most impacting officer safety. These experts suggested various strategies to address these factors, and BOP reported taking steps to do so, such as conducting annual training on BOP policies, identifying and separating gang members, and converting community space into inmate cells. BOP has assessed the effectiveness of steps it has taken in improving officer safety. For instance, a 2001 BOP study found that inmates who participated in BOP’s substance abuse treatment program were less likely than a comparison group to engage in misconduct for the remainder of their sentence following program completion. BOP utilizes such studies to inform its decisions, such as eliminating programs found to be ineffective.
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Abbreviations

ACA American Correctional Association
ADX Administrative Maximum
AFGE Association of Federal Government Employees
ASCA Association of State Correctional Administrators
BOP Federal Bureau of Prisons
CPL Council of Prison Locals
DCT Disturbance Control Team
DOC Department of Corrections
DOJ Department of Justice
FCC Federal Correctional Complex
FDC Federal Detention Center
LEOSA Law Enforcement Officers Safety Act of 2004
MDC Metropolitan Detention Center
MOU Memorandum of Understanding
NIC National Institute of Corrections
NIJ National Institute of Justice
NIST National Institute of Standards and Technology
NLECTC National Law Enforcement and Corrections Technology Center
OJP Office of Justice Programs
ORE Office of Research and Evaluation
SHU Special Housing Unit
SMU Special Management Unit
SORT Special Operations Response Team
STG Security Threat Group
TASER Thomas A. Swift’s Electric Rifle
USP U.S. Penitentiary

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April 8, 2011

The Honorable Patrick J. Leahy
Chairman
Committee on the Judiciary
United States Senate

The Honorable Dennis Cardoza
House of Representatives

The Department of Justice’s (DOJ) Federal Bureau of Prisons (BOP) operates and manages 116 federal prisons and oversees more than 209,000 federal inmates—a population that grew by 45 percent from fiscal year 2000 through 2010. According to its vision statement, BOP seeks to provide a workplace in which staff perform their duties without fear of injury or assault; however, as the prison population grows, so do concerns over inmate aggression and correctional officer (officer) safety. From fiscal year 2000 through 2010, assaults on staff in BOP facilities increased from 1,188 to 1,696. During this same period, the number of inmates per BOP staff member increased from 4.13 in fiscal year 2000 to 4.82 in fiscal year 2010.

In response to your request, this report describes the equipment available to protect officers—as well as other institutional factors, such as inmate overcrowding and staffing shortages—that affect officer safety. Specifically, the report addresses the following questions:

- What equipment do BOP and selected states provide to protect officers and what are the opinions of BOP officers and other correctional practitioners regarding this equipment?

- To what extent has BOP evaluated the effectiveness of its equipment in ensuring officer safety, and what do correctional equipment experts report as important factors when considering the purchase of new equipment?

- What institutional factors do correctional accrediting experts report as most impacting officer safety, and to what extent has BOP evaluated the effectiveness of the steps it has taken to address these factors?

To address our objectives, we reviewed BOP policies and procedures and interviewed BOP central management, including officials from the Correctional Services Branch, who have primary responsibility for security
issues, including protective equipment, as well as officials from BOP’s Office of Research and Evaluation (ORE), who produce reports and research on corrections-related topics. During these interviews, we discussed BOP’s existing officer safety practices and the institutional factors they report as affecting officer safety, among other topics. We compared BOP’s mechanisms for evaluating the effectiveness of its practices in ensuring officer safety to BOP’s and DOJ’s mission statements and *Standards for Internal Control in the Federal Government.*\(^1\) Further, we visited eight BOP institutions spread across BOP’s six regions and interviewed BOP officials and 68 officers about the institutional factors they report as affecting officer safety. In selecting these institutions, we considered factors such as their location, staff-to-inmate ratio, and level of overcrowding. In addition, we interviewed officials at 14 of the 15 state departments of correction (DOC) with the largest inmate populations to discuss institutional factors they reported as affecting officer safety, measures implemented to address these factors, equipment used to protect officers, and their reported effectiveness.\(^2\) We also interviewed union officials representing BOP officers at the national and local level, as well as officials from a variety of correctional organizations. During our work, we also met with correctional equipment experts from DOJ’s National Institute of Justice (NIJ), NIJ’s National Law Enforcement and Corrections Technology Center (NLECTC), and the Department of Commerce’s National Institute of Standards and Technology (NIST). During these interviews, we obtained the officials’ perspectives on the factors BOP would need to consider if it acquired equipment for its officers. The views of these various institutions, officials, and organizations are not generalizable, but provide valuable insights into issues affecting officer safety. In addition, we surveyed a panel of 30 correctional accrediting experts who advise the American Correctional Association’s Commission on Accreditation and obtained 21 responses on the institutional factors that most affect officer safety and cost effective strategies to address these factors.

We conducted this work from June 2010 to April 2011 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.

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\(^2\)One state did not respond to our requests for an interview.
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. See appendix I for further information on our objectives, scope, and methodology.

Background

BOP’s Institutions and Inmate Population

A component of DOJ, BOP has obligations to confine offenders in a controlled, safe, and humane prison environment, while providing a safe workplace where officers can perform their duties without fear of injury or assault. In fiscal year 2010, $6.2 billion was appropriated for BOP to carry out its mission. For all 116 of its institutions, BOP has dedicated an average of almost $17 million annually from fiscal year 2000 through 2010 to expenditures that include protective equipment for its officers. For all 116 of its institutions, BOP has dedicated an average of almost $17 million annually from fiscal year 2000 through 2010 to expenditures that include protective equipment for its officers. For all 116 of its institutions, BOP has dedicated an average of almost $17 million annually from fiscal year 2000 through 2010 to expenditures that include protective equipment for its officers. For all 116 of its institutions, BOP has dedicated an average of almost $17 million annually from fiscal year 2000 through 2010 to expenditures that include protective equipment for its officers. For all 116 of its institutions, BOP has dedicated an average of almost $17 million annually from fiscal year 2000 through 2010 to expenditures that include protective equipment for its officers. For all 116 of its institutions, BOP has dedicated an average of almost $17 million annually from fiscal year 2000 through 2010 to expenditures that include protective equipment for its officers. For all 116 of its institutions, BOP has dedicated an average of almost $17 million annually from fiscal year 2000 through 2010 to expenditures that include protective equipment for its officers. For all 116 of its institutions, BOP has dedicated an average of almost $17 million annually from fiscal year 2000 through 2010 to expenditures that include protective equipment for its officers. For all 116 of its institutions, BOP has dedicated an average of almost $17 million annually from fiscal year 2000 through 2010 to expenditures that include protective equipment for its officers. For all 116 of its institutions, BOP has dedicated an average of almost $17 million annually from fiscal year 2000 through 2010 to expenditures that include protective equipment for its officers. For all 116 of its institutions, BOP has dedicated an average of almost $17 million annually from fiscal year 2000 through 2010 to expenditures that include protective equipment for its officers. For all 116 of its institutions, BOP has dedicated an average of almost $17 million annually from fiscal year 2000 through 2010 to expenditures that include protective equipment for its officers. For all 116 of its institutions, BOP has dedicated an average of almost $17 million annually from fiscal year 2000 through 2010 to expenditures that include protective equipment for its officers. For all 116 of its institutions, BOP has dedicated an average of almost $17 million annually from fiscal year 2000 through 2010 to expenditures that include protective equipment for its officers. For all 116 of its institutions, BOP has dedicated an average of almost $17 million annually from fiscal year 2000 through 2010 to expenditures that include protective equipment for its officers. For all 116 of its institutions, BOP has dedicated an average of almost $17 million annually from fiscal year 2000 through 2010 to expenditures that include protective equipment for its officers.

In fiscal year 2010, BOP oversaw more than 209,000 inmates, housing more than 170,000 of these inmates in its 116 institutions. In addition, BOP utilizes privately managed secure facilities; residential re-entry centers—also known as halfway houses; bed space secured through agreements with state and local entities; and home confinement to house inmates. In fiscal year 2010, more than 22,000 inmates—or about 11 percent of the 209,000 inmates overseen by BOP—were housed in privately managed facilities, while more than 14,000—or about 7 percent—were housed in residential re-entry centers, bed space secured through agreements with state or local entities, or home confinement.

BOP’s 116 institutions generally have one of four security level designations: minimum, low, medium, and high. The designations depend on the level of security and staff supervision the institution is able to

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4This amount includes all nonsalary obligations for the Correctional Services Branch, which includes the armory and such items as safety equipment, office supplies, and batteries, as well as the initial inventory and equipment provided for new facilities during their activation. This also includes spending on safety shoes provided to all uniformed institution staff, including officers, as well as stab-resistant vests, which BOP began purchasing for officers in fiscal year 2008.
provide, such as the presence of security towers; perimeter barriers; the type of inmate housing, including dormitory, cubicle, or cell-type housing; and the staff-to-inmate ratio. Further, BOP designates some of its institutions as administrative institutions, which specifically serve inmates awaiting trial, or those with intensive medical or mental health conditions, regardless of the level of supervision these inmates require.

To determine the institution in which an inmate is confined, BOP considers the level of security and supervision the inmate requires and that the institution is able to provide; the inmate’s rehabilitation needs; the level of overcrowding at the institution; and any recommendations from the court at the inmate’s sentencing. Table 1 depicts the percentage of inmates incarcerated in BOP institutions, by security level of the institution in fiscal year 2010.

<table>
<thead>
<tr>
<th>Security Level</th>
<th>Inmates Incarcerated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum security</td>
<td>13.23%</td>
</tr>
<tr>
<td>Low security</td>
<td>36.75%</td>
</tr>
<tr>
<td>Medium security</td>
<td>29.48%</td>
</tr>
<tr>
<td>High security</td>
<td>10.86%</td>
</tr>
<tr>
<td>Administrative</td>
<td>9.68%</td>
</tr>
</tbody>
</table>

Source: GAO analysis of BOP data.

*These data do not include inmates in residential re-entry centers, as these do not have security level assignments.

Since fiscal year 2000, BOP’s inmate population has grown by 45 percent, as shown in figure 1.
BOP tracks information related to inmate assaults on staff in two data systems: SENTRY and TRUINTEL.

First created in 1974, BOP’s SENTRY system maintains most of BOP’s operational and management information, such as inmate data and property management data, among others. According to the Acting Director of BOP’s Office of Research and Evaluation (ORE), SENTRY was updated in 1997 to capture reports of inmate incidents, including assaults on staff. Assaults on staff can include a variety of violent acts. For instance, BOP officials with whom we spoke provided examples of assaults, such as stabbing a staff member with a homemade weapon, punching or kicking staff, or throwing bodily fluids on a staff member. Assaults are classified as serious or less serious based upon the injury sustained or intended as a result of the assault. For instance, officials at one BOP institution reported that they would classify an assault in which an inmate threw food at an officer as a less serious assault, but an assault in which the officer was stabbed as a serious assault.
To report an inmate assault on a BOP staff member in SENTRY, BOP instructs its personnel to follow the procedures for incident reporting and investigations described in BOP’s Program Statement on *Inmate Discipline and Special Housing Units*. Figure 2 depicts this process.

**Figure 2: BOP’s Incident Reporting Process for Assaults on Staff in Its SENTRY System**

1. **Inmate assault on BOP staff**
2. **BOP staff who witnessed the assault submits an incident report to the shift lieutenant describing the incident, the staff and inmate(s) involved, and the immediate action taken by BOP staff**
3. **BOP investigative staff at the institution conduct an investigation**
4. **An institution’s Unit Discipline Committee considers the outcome of the investigation and administers punishment to the inmate**
5. **Description of inmate assault incident and the disciplinary hearing outcome and case disposition is submitted in SENTRY**

   - Assaults requiring more serious sanctions
   - A regional Disciplinary Hearing Officer conducts an administrative fact-finding hearing and decides whether the inmate is guilty and the type of sanction the inmate will receive

Source: GAO analysis of BOP documents.

In addition to the information captured in SENTRY, BOP’s TRUINTEL system—created in October 2009—provides BOP with a number of capabilities, including an intelligence gathering function that provides real-time information on assaults on staff. Unlike SENTRY, Correctional Services Branch officials reported that TRUINTEL captures only data from the initial incident report, and is not updated based on the subsequent investigation or hearings related to the assault. According to these
officials, TRUINTEL allows managers at BOP institutions to see trends in incidents, including assaults, across BOP institutions.

The Correctional Services Branch officials stated that if an assault on an officer occurs, an individual at the institution—generally the lieutenant on duty—completes a Form 583 Report of Incident (Form 583) in the TRUINTEL system, indicating that the incident was an assault on staff. The lieutenant also records information on the incident’s cause, such as alcohol or a disrespect issue; the inmate(s) involved in the assault; whether restraints were applied to the inmate; and whether any lethal or less-than-lethal weapons were used to resolve the incident. The officer involved in the assault may also submit a description of the incident, which is entered into the Form 583. After the lieutenant completes the Form 583, the institution’s captain generally reviews the report before it is reviewed and finalized by the institution’s warden. Once the warden finalizes the Form 583, managers across BOP institutions can view the information in the TRUINTEL system. Further, following any incident involving an officer’s use of force against an inmate, such as the use of a less-than-lethal weapon, BOP requires that a Form 586 After Action Review Report be completed in TRUINTEL. To complete this report, an after action review committee first meets to review the incident. The facility’s warden, the associate warden responsible for correctional services, the health services administrator, and the captain comprise this review committee and their purpose is to assess the rationale for why the staff involved took the actions or used the equipment they did. The committee also determines if these actions, including the use of any equipment, were appropriate given BOP policy.

Since BOP’s inmate population changes each year, BOP calculates the rate of inmate assaults—both of a serious and less serious nature—per 5,000 inmates incarcerated based on the information submitted in its SENTRY system. For example, in fiscal year 2010, the total number of assaults on staff was almost 1,700, for a rate of about 49 serious and less serious assaults per 5,000 inmates. Figure 3 displays the serious and less serious assaults on BOP staff, as recorded in SENTRY from fiscal year 2000 through 2010. As the trends illustrate, less serious assaults have followed a

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5The term less-than-lethal is used to describe an array of weapons that is not fundamentally designed to kill or cause serious bodily injury, such as pepper spray.

6The data on assaults on staff do not include assaults in privately managed facilities, as these facilities do not employ BOP staff.
generally upward trend, while serious assaults have experienced fewer fluctuations over time.

According to BOP officials from the Correctional Services Branch, upward trends in assault data may be influenced by a number of factors, including the number of inmates affiliated with gangs, the staff-to-inmate ratio in the institutions experiencing assaults, or the opening of additional BOP institutions because inmates incarcerated in these new institutions are not familiar with each other, which can lead to initial tension between the inmates. Correspondingly, the officials explained that the decrease in assaults may be a result of the inmate population at a new institution stabilizing and becoming less tense. In addition, the officials reported that the downward trend in assaults from 2009 to 2010 may be related to BOP creating Special Management Units (SMU) to house inmates who present unique security and management concerns, such as those who participated or had a leadership role in gang activity, by removing them from other BOP facilities.
Correctional Officer Safety
While Off Duty in Public Settings

While these data systems track inmate assaults on staff while staff are on duty, officers may also encounter former inmates or inmates’ families or associates while in the community, including while commuting to and from work. In part due to these potential threats to officers’ safety in their communities, the Law Enforcement Officers Safety Act of 2004 (LEOSA) was passed. LEOSA exempts qualified law enforcement officers and qualified retired law enforcement officers from state and local laws that prohibit carrying concealed firearms. BOP staff who have primary and secondary law enforcement status are “qualified law enforcement officers” as defined by statute and qualify to carry concealed firearms. However, with limited exceptions, BOP prohibits anyone, including officers, from storing personal firearms carried while commuting to and from work on institution property.

The Role of Other Entities in Officer Safety

In addition to BOP, other federal government and nongovernmental organizations also engage in activities that relate to officer safety.

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8Under 18 U.S.C. § 926B, “qualified law enforcement officers” means an employee of a governmental agency who is authorized by law to engage in or supervise the prevention, detection, investigation, or prosecution of, or the incarceration of any person for any violation of the law, and has statutory powers of arrest; is authorized by the agency to carry a firearm; is not the subject of any disciplinary action by the agency which could result in suspension or loss of police powers; meets standards, if any, established by the agency which require the employee to regularly qualify in the use of a firearm; is not under the influence of alcohol or another intoxicating or hallucinatory drug or substance; and is not prohibited by federal law from receiving a firearm. Under 18 U.S.C. § 926C, an individual who is a “qualified retired law enforcement officer,” as defined by statute, and is carrying the proper identification is permitted to carry a concealed firearm.

9Primary position means a position whose primary duties are investigation, apprehension, or detention of individuals suspected or convicted of offenses against the criminal laws of the United States. Secondary position means a position that is clearly in the law enforcement field; is in an organization having a law enforcement mission; and is either supervisory (for example, a position whose primary duties are as a first-level supervisor of law enforcement officers in primary positions) or administrative (for example, an executive, managerial, technical, semiprofessional, or professional position for which experience in a primary law enforcement position, or equivalent experience outside the Federal government, is a prerequisite).

The National Institute of Justice (NIJ) is DOJ’s research, development, and evaluation component. In addition to awarding grants and cooperative agreements to research, develop, and evaluate criminal justice programs, NIJ coordinates various technical working groups comprised of subject matter experts who work in the field of criminal justice to address a variety of law enforcement issues. Three of NIJ’s technical working groups relevant to officer safety in correctional settings are: Institutional Corrections, Personal Protective Equipment, and Less Lethal Technologies. Further, NIJ funds the National Law Enforcement and Corrections Technology Center (NLECTC), which assists state, local, tribal, and federal correctional agencies, as well as law enforcement and criminal justice agencies, in addressing technology needs and challenges, which can help address officer safety.

In addition, BOP’s National Institute of Corrections (NIC) provides training, technical assistance, information services, and policy and program development assistance to federal, state, and local correctional agencies. The NIC also maintains an extensive library of research and evaluations related to corrections, including those related to officer safety.

Further, the Office of Law Enforcement Standards within the National Institute of Standards and Technology (NIST), an agency of the Department of Commerce, helps criminal justice, public safety, emergency responder, and homeland security agencies make decisions, primarily by developing performance standards, measurement tools, operating procedures and equipment guidelines. For instance, NIST has conducted research on the long-term durability of body armor, which is worn by correctional officers to ensure their safety.

The American Correctional Association’s (ACA) Commission on Accreditation provides all accreditations for BOP institutions. The ACA’s standards provide guidance to all correctional organizations on correctional issues such as programming, officer staffing, and officer safety. In order for a correctional institution to be accredited by the ACA, the institution must show compliance in key areas, including officer safety.

Additionally, the Council of Prison Locals (CPL) is the union that represents employees within BOP’s bargaining unit, which includes correctional officers. The CPL is a part of the Association of Federal Government Employees (AFGE), a union that represents federal government employees. There are 105 local CPL branches nationwide that represent employees from BOP’s 116 facilities, and advocate for the interests of their constituents, including officer safety issues.
State Departments of Corrections

In addition to BOP’s role in ensuring the safety of federal correctional officers, state departments of corrections work to ensure the safety of correctional officers working in state institutions. All 50 states have agencies that are responsible for housing the state’s inmate populations. See appendix III for the inmate populations and characteristics in these states as of December 31, 2009.

BOP and Selected States Provide a Variety of Protective Equipment to Officers, but Opinions on Impact of Equipment on Officer Safety Are Mixed

BOP and the selected states with whom we spoke provide their officers with a variety of equipment to protect them. BOP generally requires officers working within the secure perimeter of its institutions to carry a radio, body alarm, and keys while on duty.\(^1\) BOP also provides officers with the option to carry flashlights and wear stab-resistant vests. This policy regarding the equipment worn or carried by officers is largely consistent across BOP facilities. Further, with limited exceptions, BOP prohibits anyone, including officers, from storing personal firearms the officers carried while commuting to and from work on facility property. States have discretion over the equipment they make available to their officers, and officials in the 14 states with whom we spoke provided examples of three types of equipment they allow their officers to carry while on duty that BOP generally does not, including pepper spray and batons. In addition, officials from 9 of the 14 states reported that they allow their officers to store personal firearms that they have carried when commuting to and from work on facility property, which BOP generally does not. However, BOP and states provide similar equipment and weapons—such as less-than-lethal launchers, shotguns, or rubber bullets—to protect their officers in an emergency situation, which can include responding to an inmate riot or attack, removing a noncompliant inmate from a cell, or capturing an escaping inmate. Most BOP officers and union officials with whom we spoke reported that carrying additional equipment while on duty and while commuting to and from work would better protect officers, while BOP management largely reported that officers did not need to carry additional equipment in order to better ensure their safety.

\(^1\)The secure perimeter describes only those areas within a prison complex—exclusive of security towers—that authorized individuals and inmates can access after passing through specific security procedures. A body alarm is a device that officers can sound in case of an emergency or that, for certain models of the alarms, will sound if the officer is in the prone position.
BOP officers working within the secure perimeter of a BOP institution are generally required to carry a radio, body alarm, and keys while on duty. In addition, officers have the option to carry a flashlight, handcuffs, latex or leather gloves, or a stab-resistant vest. These policies are largely consistent across BOP institutions, although officers in certain posts carry additional equipment beyond what the typical officer carries. For instance, officers in armed posts carry a lethal weapon and have the option to wear a ballistic vest while on duty. Further, institutions can request waivers to permit their officers to carry or wear additional equipment. According to BOP officials in the Correctional Services Branch, such waivers are granted when the institution demonstrates that it has a unique need to deviate from BOP’s national policy. For example, BOP approved a waiver for officers working at BOP’s Administrative Maximum (ADX) institution in Florence, Colorado, which houses inmates requiring the tightest controls in BOP, to carry batons while on duty. Similarly, officers working with inmates in SMUs, which house inmates that present unique security and management concerns, such as those who participated or had a leadership role in gang activity, were also granted a waiver to carry batons while on duty. According to BOP, it has granted 5 institutions waivers related to officers carrying additional equipment. These waivers include permitting officers in the ADX and SMUs to carry batons inside the institutions. In addition, BOP granted waivers allowing officers patrolling the perimeter of 3 institutions located in downtown areas to carry smaller canisters of pepper spray than those in BOP’s inventory because the larger size was too cumbersome. Further, BOP reported that it has granted waivers to 25 institutions permitting them to store less-than-lethal munitions closer to, or in some cases inside, Special Housing Units (SHU) in order to provide officers more rapid access to the equipment.

State DOCs determine the type of equipment their officers carry, and officials in the 14 states with whom we spoke provided examples of three types of equipment that they made available to their officers working within

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12 Officers in certain posts, such as compound officers who control inmate movement, are required to carry handcuffs.

13 These armed posts include buses, towers, mobile patrol, fog patrol, and hospital escorted trips.

14 SHUs are separate units within existing facilities that house inmates who must be removed from the general inmate population because of serious violations of BOP rules, or because their continued presence within the general population would pose a serious threat to life, property, self, staff or other inmates, or to the security and operation of the institution.
the secure perimeter of the institution to carry or wear while on duty that BOP generally does not. For example, officials from 10 states reported that their officers were permitted to carry pepper spray. In the case of pepper spray and other equipment, state officials told us that it may be carried or worn by all officers in the state; optional for officers; or dependent on the security level of the institution in which the officer works, the officer’s post, or the warden’s discretion. Table 2 displays the equipment that BOP routinely provides to the majority of its officers to carry or wear while on duty, and the number of officials from the 14 states reporting that their officers carry or wear this equipment.

Table 2: Type of Equipment BOP Officers Routinely Carry within Facilities’ Secure Perimeters and Number of Selected States Reporting Availability

<table>
<thead>
<tr>
<th>Type of equipment</th>
<th>Routinely carried by or available to majority of BOP officers?</th>
<th>Number of the 14 selected states with officials reporting that their officers carry or wear equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radio or body alarm</td>
<td>Y</td>
<td>14</td>
</tr>
<tr>
<td>Protective gear*</td>
<td>Y</td>
<td>11</td>
</tr>
<tr>
<td>Handcuffs</td>
<td>Y</td>
<td>8</td>
</tr>
<tr>
<td>Keys</td>
<td>Y</td>
<td>4</td>
</tr>
<tr>
<td>Flashlights</td>
<td>Y</td>
<td>3</td>
</tr>
<tr>
<td>Pepper spray</td>
<td>N</td>
<td>10</td>
</tr>
<tr>
<td>Batons</td>
<td>N*</td>
<td>7</td>
</tr>
<tr>
<td>Conducted energy device, such as an electronic restraint device or TASER*</td>
<td>N</td>
<td>2</td>
</tr>
</tbody>
</table>

Source: GAO analysis based on BOP documents and interviews with BOP management and state officials.

*The protective gear that BOP provides includes stab-resistant vests and gloves. The protective gear that states provide includes gloves, stab-resistant or ballistic vests, face and mouth shields, or gas or CPR masks.

*As previously noted, officers working at BOP’s ADX institution in Florence, Colorado and in SMUs carry batons while on duty.

*TASER is an acronym for Thomas A. Swift’s Electric Rifle.

According to BOP officials with whom we spoke, officers carry limited equipment while on duty because BOP stresses the importance of officers communicating with inmates to ensure officer safety. For instance, management officials at one BOP institution explained that, regardless of the amount of equipment officers carry, inmates will always outnumber officers. Therefore, the officers’ ability to manage the inmates through effective communication, rather than the use of equipment, is essential to
ensuring officer safety. BOP officials reported that carrying additional equipment would impede this communication. For example, according to officials from the Correctional Services Branch, if officers carried equipment in addition to what BOP currently provides, the officers may rely more on this equipment than on their communication with inmates to resolve a situation.

Further, officials in 9 of the 14 states with whom we spoke reported that they allow their officers to store personal firearms that they have carried while commuting to and from work on facility property, while BOP, with limited exceptions, does not allow its officers to store such personal weapons. Specifically, BOP policy prohibits anyone, including officers, from bringing personal firearms into or onto the grounds of any BOP institution without the knowledge or consent of the warden, or storing personal firearms in any vehicle parked on BOP property. According to an official from the Correctional Services Branch, BOP does not permit officers to store personal weapons on BOP property because visitors or inmates working on the institution grounds may be able to gain access to the weapon, which would threaten the security of all individuals at the institution. See table 3 for the state department of corrections’ policies pertaining to personal firearms storage on facility property.

<table>
<thead>
<tr>
<th>State</th>
<th>Does state DOC permit officers to store personal firearms on DOC property while on duty?</th>
<th>If yes, where are personal firearms stored?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alabama</td>
<td>Y</td>
<td>Personal vehicle’s trunk</td>
</tr>
<tr>
<td>Arizona</td>
<td>Y</td>
<td>Lockers at facility’s controlled point of entry</td>
</tr>
<tr>
<td>California</td>
<td>Y</td>
<td>Secure area inside facility’s armory, outside secure perimeter</td>
</tr>
<tr>
<td>Florida</td>
<td>Y</td>
<td>Behind two locks in personal vehicle</td>
</tr>
<tr>
<td>Louisiana</td>
<td>Y</td>
<td>Inside safe in facility’s control center</td>
</tr>
<tr>
<td>Missouri</td>
<td>Y</td>
<td>In a personal vehicle if vehicle is locked and the firearm is in an enclosed, secure area of the vehicle and is concealed from view of any person outside the vehicle</td>
</tr>
<tr>
<td>New York</td>
<td>Y</td>
<td>Inside arsenal in facility</td>
</tr>
<tr>
<td>North Carolina</td>
<td>Y</td>
<td>Inside locked compartment in locked vehicle</td>
</tr>
<tr>
<td>Texas</td>
<td>Y</td>
<td>Inside locked personal vehicle</td>
</tr>
<tr>
<td>Illinois</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Michigan</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Ohio</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Virginia</td>
<td>N</td>
<td></td>
</tr>
</tbody>
</table>

Source: GAO analysis of state DOC interviews.
BOP's policy prohibiting officers from storing personal firearms on BOP property is largely consistent across its institutions; however, there are limited exceptions to this policy. For instance, BOP policy permits wardens to allow officers to bring personal firearms onto BOP grounds. As such, in 1995, the warden at BOP's Metropolitan Detention Center (MDC) in Guaynabo, Puerto Rico issued a local policy permitting officers to store personal firearms in a personal weapons locker outside the facility's secure perimeter while on duty. According to the policy, to store a personal firearm in the MDC's gun locker, officers must first submit a request to the MDC's security officer through the MDC's captain. The request must contain the brand, caliber, and serial number of each weapon to be stored, as well as the number and expiration date of the officer's permit to carry a firearm. Once the request is approved, the officer receives a key to a locked box within the personal weapons locker. To access the personal weapons locker, the officer must first be identified by staff in the MDC's control room on a camera located outside the personal weapons locker. Once identified, the officer is granted access to the personal weapons locker and must log his or her entry in and out of the locker in a log book located inside the locker. Figure 4 depicts the MDC's personal weapons locker and an open locker.
According to officials at the Guaynabo MDC, the policy was enacted when the MDC was constructing an armory and requested approval to build the personal weapons locker attached to the armory; the policy is reviewed annually. The officials reported that officers at the MDC at the time were concerned for their safety due to criminal activity surrounding the institution. For instance, the officials reported that an associate warden at the institution was the victim of an attempted car jacking when leaving work.

Source: GAO.
In addition, officers residing in housing located on BOP property—known as reservation housing—are prohibited from storing personal firearms in their housing, and are instead required to place personal firearms in the institution’s armory for safekeeping. According to BOP, as of January 2011, 32 of its 116 institutions have reservation housing available, and officers at 14 of these 32 institutions store personal firearms in the institution’s armory. The number of firearms stored in the armories at these 14 institutions ranges from 1 to 32, with an average of about 10.

Moreover, BOP has leased parking space for its officers on non-BOP property at 5 of BOP’s institutions, on which BOP’s policy prohibiting the storage of personal weapons does not apply. Depending on the laws of the state in which the officers work, they may legally be able to store their personal firearms in their cars while on duty.

In contrast to what officers carry on a routine basis, in cases of emergency, such as an inmate riot or attack, BOP provides officers with access to a variety of equipment that is largely consistent with what our selected state departments of corrections provide. This equipment includes less-than-lethal weapons, protective gear, and lethal weapons. The equipment is located in specific locations throughout the institutions, such as in secure control rooms, watchtowers in the institutions’ yards, or in the institutions’ armories outside the secure perimeter. Table 4 shows the type of equipment that BOP makes available to its officers in an emergency and the number of officials in the 14 states with whom we spoke who also reported making it available.
Table 4: Type of Equipment BOP Makes Available in Cases of Emergency and Number of States Also Reporting Availability

<table>
<thead>
<tr>
<th>Type of equipment</th>
<th>Present at BOP?</th>
<th>Number of the 14 selected states with officials reporting availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical agent munitions, such as canisters of pepper spray or pepper spray and tear gas grenades that can be dispersed into a crowd</td>
<td>Y</td>
<td>14</td>
</tr>
<tr>
<td>Lethal weapons, including handguns, shotguns, rifles, and submachine guns</td>
<td>Y</td>
<td>12</td>
</tr>
<tr>
<td>Devices to deploy less-than-lethal munitions, such as less-than-lethal launchers which shoot a variety of less-than-lethal munitions</td>
<td>Y</td>
<td>11</td>
</tr>
<tr>
<td>Protective gear, such as helmets, shields, stab-resistant or ballistic vests, gas masks, and gloves</td>
<td>Y</td>
<td>10</td>
</tr>
<tr>
<td>Impact munitions, such as rubber bullets with which to hit inmates to obtain compliance</td>
<td>Y</td>
<td>7</td>
</tr>
<tr>
<td>Batons</td>
<td>Y</td>
<td>7</td>
</tr>
<tr>
<td>Restraint devices, such as handcuffs</td>
<td>Y</td>
<td>7</td>
</tr>
<tr>
<td>Conducted energy devices, such as stun belts, which are placed around an inmate’s waist and can produce an electric shock; electronic stun guns; or stun shields, which produce an electric current across the body of the shield</td>
<td>Y(^c)</td>
<td>7</td>
</tr>
<tr>
<td>Distraction devices, such as devices that produce a loud sound to obtain inmates’ attention</td>
<td>Y</td>
<td>4</td>
</tr>
<tr>
<td>Communication devices, such as radios or bullhorns</td>
<td>Y</td>
<td>4</td>
</tr>
<tr>
<td>Canines, used to keep inmates in a straight line during inmate movements through the institution, detect drugs, or track an escaping inmate</td>
<td>Y(^d)</td>
<td>2</td>
</tr>
<tr>
<td>Barricade removal devices, such as bolt cutters</td>
<td>Y</td>
<td>2</td>
</tr>
<tr>
<td>Metal detectors</td>
<td>Y</td>
<td>1</td>
</tr>
<tr>
<td>Device to regulate the level of gases in the air</td>
<td>N</td>
<td>1</td>
</tr>
</tbody>
</table>

Source: GAO analysis of BOP documentation and interviews with state and BOP officials.

\(^a\) A munition as described by BOP is any projectile that is deployed from less-than-lethal weapons including gas products deployed from grenades or gas canisters.

\(^b\) Shotguns can be used to shoot lethal ammunition or less-than-lethal munitions.

\(^c\) BOP makes stun belts but not electronic stun guns or stun shields available to officers.

\(^d\) BOP does not provide canines to its institutions, but has its institutions enter into memoranda of understanding (MOU) with local law enforcement agencies to utilize canines for contraband detection, when needed. According to officials from the Correctional Services Branch, institutions utilize these canines about every quarter to conduct contraband searches through these MOUs.
The 68 officers, officials from six unions, and management officials from BOP’s Correctional Services Branch and the eight BOP institutions with whom we spoke had different opinions about whether additional equipment would better protect officers. As shown in figure 5, most officers and all the union officials with whom we spoke reported that additional equipment would enhance officer safety, while most management officials reported that additional equipment would not enhance officer safety.

**Figure 5: Opinions Regarding Whether Additional Equipment Provided to Officers While on Duty Would Enhance Their Safety**

<table>
<thead>
<tr>
<th>Category</th>
<th>Enhance in all cases</th>
<th>Enhance in certain cases</th>
<th>Mixed opinions</th>
<th>Would not enhance at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>Officers, N=68</td>
<td>66%</td>
<td>26%</td>
<td>7%</td>
<td>11%</td>
</tr>
<tr>
<td>Union officials, N=6</td>
<td>100%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BOP management, N=9</td>
<td>89%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: GAO analysis of opinions of BOP officers and BOP and union officials.

Note: The samples of officers, union officials and BOP management officials are nonprobability samples. In a nonprobability sample, some elements of the population being studied have no chance or an unknown chance of being selected as part of the sample. Therefore, the views these individuals expressed provide insight, but are not generalizable to all officers, union officials, and BOP management officials.
These officers and officials who said that carrying additional equipment would better ensure safety reported that officer safety would be enhanced if officers carried pepper spray (41 of 45 officers, all union officials, and management officials from one BOP institution); batons (15 of 45 officers); TASERs (4 of 45 officers); or a portable phone (1 officer). Moreover, the officers and officials cited a number of safety benefits to this additional equipment. For instance, 9 officers, officials from four unions, and management at one BOP facility reported that carrying additional equipment would allow officers to defend themselves in case of an attack by an inmate. Four officers reported that carrying additional equipment would help officers deter inmates from engaging in disruptive behavior. For example, 1 officer stated that if an inmate saw an officer carrying a baton, the inmate would be less likely to do something wrong. Further, 4 officers reported that carrying additional equipment could help officers to prevent injuries to inmates, as they could break up fights between inmates more quickly with the additional equipment on hand. However, 7 officers and officials from two unions expressed the need for officers to be trained on the additional equipment in order to enhance their safety.

Five officers also reported that the need to carry additional equipment would depend on the situation. Specifically, 4 of the 5 noted that it could particularly aid officers whose posts included open recreational yards where inmates congregate and the potential for fighting or misconduct was greater.

Eighteen officers and eight BOP management officials that reported that carrying additional equipment would not enhance officer safety cited concerns with the additional equipment. Specifically, officers most frequently cited concerns that the equipment could be taken from the officer and used against him or her by an inmate. BOP management officials most frequently reported that carrying additional equipment might hinder officers’ communication with inmates either because the officer would be more likely to utilize the equipment to prevent an inmate from engaging in misconduct than talk with the inmate, or the inmate would perceive officers carrying additional equipment as more threatening and be less willing to engage in communication with officers.

Similarly, the 68 officers, officials from six unions, and management officials from BOP’s Correctional Services Branch and the eight BOP institutions with whom we spoke had different opinions about whether safety is a concern for officers while they are commuting to and from work. As displayed in figure 6, all of the union officials with whom we spoke reported that safety is a concern for officers when commuting to
and from work, most BOP management officials reported that it was not, and the officers with whom we spoke were evenly split regarding safety concerns while commuting to and from work.

Figure 6: Opinions Regarding Whether Safety While Commuting to and from Work is a Concern for Officers

![Bar chart showing percentages of officers, union officials, and BOP management officials expressing concerns regarding safety while commuting to and from work.]

Source: GAO analysis of opinions of BOP officers and BOP and union officials.

*An additional 2 officers did not provide their views on safety concerns while commuting to and from work.

Note: The samples of officers, union officials and BOP management officials are nonprobability samples. In a nonprobability sample, some elements of the population being studied have no chance or an unknown chance of being selected as part of the sample. Therefore, the views these individuals expressed provide insight, but are not generalizable to all officers, union officials, and BOP management officials.

The officers and officials reporting safety concerns most frequently cited the presence of former inmates, inmates’ families, or associates of inmates in the communities in which officers work who may wish to harm the officers. For instance, one officer explained that he has confiscated contraband from inmates during visiting hours, then later saw the visitors in the community and felt concerned that the visitors might retaliate. In
addition, 2 officers and officials from two unions reported that officers' safety may be at risk when they are wearing their uniforms, either because they are recognized as a BOP officer or other law enforcement personnel. Further, 4 officers, officials from one union and BOP management officials from one institution cited crime in the community or the lack of security in the employee parking lot as a safety concern for officers while commuting to and from work.

The 33 officers who reported that safety while commuting to and from work was not a concern cited a number of reasons, including living in close proximity to the institution in which they work; working in an institution that is in a quiet, non-urban setting; the local community’s positive perception of officers; and officers’ good relationship with inmates. Management officials also reported that officers often change out of their uniforms when commuting to and from work, which mitigates safety concerns during the commute.

Given the varying opinions regarding officer safety concerns while commuting to and from work, the officers, union officials, and BOP management officials with whom we spoke also reported different opinions about whether allowing officers to carry personal firearms to and from work and store them on BOP property would enhance officer safety. As shown in figure 7, most officers and all union officials reported that being permitted to store personal firearms on BOP property would enhance officer safety, while most BOP management officials reported that doing so would not enhance officer safety.
Figure 7: Opinions Regarding Whether Permission to Store Personal Firearms on BOP Property While on Duty Would Enhance Officer Safety

<table>
<thead>
<tr>
<th>Percent reporting</th>
<th>Enhance in all cases</th>
<th>Enhance at other institutions</th>
<th>Would not enhance at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>Officers, N=50</td>
<td>11%</td>
<td>78%</td>
<td>14%</td>
</tr>
<tr>
<td>Union officials, N=6</td>
<td>11%</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>BOP management, N=7</td>
<td>14%</td>
<td>86%</td>
<td></td>
</tr>
</tbody>
</table>

Source: GAO analysis of opinions of BOP officers and BOP and union officials.

*One additional officer reported that he was indifferent about allowing officers to store weapons on BOP property, and an additional three officers did not provide their views.

*Management officials at two additional BOP institutions did not provide a response or were not asked for their views.

Note: The samples of officers, union officials, and BOP management officials are nonprobability samples. In a nonprobability sample, some elements of the population being studied have no chance or an unknown chance of being selected as part of the sample. Therefore, the views these individuals expressed provide insight, but are not generalizable to all officers, union officials, and BOP management officials.

Of the 50 officers reporting that allowing officers to store personal firearms on BOP property would enhance their safety, 7 told us that they would not take advantage of this policy if it were instituted, though they did not elaborate, and another 2 expressed the need for additional training on the firearms before the policy is implemented. The 7 officers who indicated to us that allowing officers to store personal firearms on BOP property would enhance officer safety at another institution reported that...
having the ability to carry a personal firearm to work and store it on BOP property was not necessary to ensure their safety at the current institution at which they work. However, these 7 officers stated that such a policy would better ensure the safety of other officers, such as those working at institutions in large cities.

The 7 officers and six BOP management officials who told us that allowing officers to store personal firearms on BOP property would not enhance officer safety explained their reasons. These reasons included officers not needing to carry firearms during their commute because danger is minimal if non existent, officers having the potential to misuse firearms if not properly trained, and inmates potentially obtaining the firearms if stored in officers’ cars or carried into the facility.

Further, 2 officers at one BOP institution and 2 officers and union officials at a second BOP institution cited additional safety measures that would enhance officer safety while officers are commuting to and from work that did not involve authorization to carry weapons while commuting. Three of these officers and the union officials reported that increased monitoring of the parking lot and checks on visitors’ cars would improve officer safety. One of these three officers and the union officials also stated that posting a guard at the entrance to an institution would enhance officer safety. Finally, one officer told us that staggering officers’ shifts with visiting hours would help improve safety because it would help ensure that visitors would not be able to identify the officers’ cars and then follow them while the officers are off duty.
BOP Has Not Evaluated the Effectiveness of Its Equipment in Ensuring Officer Safety and Correctional Equipment Experts Suggest Several Factors to Consider in Making Equipment Acquisition Decisions

BOP and states provide a variety of equipment to their officers to ensure their safety; however, none of the BOP officials, state correctional officials, and correctional experts with whom we spoke reported that they were aware of or had conducted evaluations of the effectiveness of equipment in ensuring officer safety. If BOP were to acquire new equipment, correctional equipment experts from the National Law Enforcement and Corrections Technology Center (NLECTC), the National Institute of Standards and Technology (NIST), and the National Institute of Justice (NIJ) reported to us that BOP would need to consider factors such as training, replacement, and maintenance costs; potential liability issues; whether the equipment met technical performance standards; and the benefits and risks of using the equipment.

BOP officials from the Correctional Services Branch and BOP’s Office of Security Technology—which is responsible for identifying and evaluating new security-related equipment—reported that their offices had not assessed whether the equipment BOP provides to its officers has improved the officers’ safety. Similarly, officials from NIJ, DOJ’s research, development, and evaluation agency, told us that NIJ has not conducted any evaluations of the effectiveness of the set of equipment that BOP uses in ensuring the safety of its officers. Moreover, BOP’s NIC, which provides technical assistance, training, and information to BOP and state and local correctional agencies, found no record of studies related to officer safety. In addition, officials from BOP’s Office of Research and Evaluation (ORE), which conducts research and evaluations on behalf of BOP, reported that ORE had not conducted such studies.

According to BOP’s mission statement, BOP protects society by confining offenders in prisons that are, among other things, safe, cost-efficient, and appropriately secure. Further, BOP states in its vision statement that it will know that it has realized these goals when, among other things, the workplace is safe and staff perform their duties without fear of injury or assault and BOP is a model of cost-efficient correctional operations. In addition, DOJ stresses the importance of evidence based knowledge in achieving its mission. For instance, when soliciting federally funded research in crime and justice, DOJ’s Office of Justice Programs (OJP)
states that it supports DOJ’s mission by sponsoring research to provide objective, independent, evidence based knowledge to meet the challenges of crime and justice. According to OJP, practices are evidence based when their effectiveness has been demonstrated by causal evidence, generally obtained through outcome evaluations, which documents a relationship between an intervention—including technology—and its intended outcome, while ruling out, to the extent possible, alternative explanations for the outcome. Standards for Internal Control in the Federal Government state that managers need to compare actual performance to planned or expected results throughout the organization and analyze significant differences, as well as that program managers need both operational and financial data to determine whether they are meeting their agencies’ strategic and annual performance plans and meeting their goals for accountability for effective and efficient use of resources.\textsuperscript{15}

Given that BOP’s SENTRY and TRUINTEL systems maintain data on inmates and related incidents, including assaults on officers and the equipment officers utilize in instances where they use force against an inmate, ORE officials reported that such data would allow them to assess the effectiveness of equipment in ensuring officer safety, even though they told us that this assessment may be time intensive. Further, BOP officials from the Office of Security Technology reported that, while they do not assess the impact of equipment on officer safety, they obtain information about the equipment’s performance by obtaining feedback on equipment from those using it at their facilities, such as during a pilot test, and testing whether the equipment performs in accordance with the manufacturer’s intent. While information obtained from these methods helps inform the officials about staff perspectives on the usefulness of the equipment and the equipment’s performance, these methods do not provide information about the equipment’s impact on officer safety. Given BOP’s rising inmate population and the increasing number of inmates per BOP staff member, assessing the effectiveness of officer equipment in a range of scenarios and settings could help BOP better understand which of the equipment it currently provides—or could provide to officers—improves officer safety. For instance, such an assessment might indicate whether the use of a certain piece of equipment appears to prevent injuries, or whether one type of equipment appears to have a greater impact on reducing assaults on officers than another. Conducting such an assessment also could better position BOP to achieve its goal of operating in a cost-efficient manner by

\textsuperscript{15}GAO/AIMD-00-21.3.1.
effectively targeting limited resources to those equipment investments that clearly demonstrate protective benefit.

<table>
<thead>
<tr>
<th>Correctional Equipment Experts Report Equipment Costs Such as Training, Maintenance, and Liability, among Other Factors, to Be Important Considerations in Purchasing New Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Officials from the NLECTC, NIST, and NIJ reported that BOP would need to consider factors such as training, replacement, and maintenance costs; potential liability issues; and whether the equipment met technical performance standards if it acquired new equipment, as well as the price of new equipment. Additionally, these organizations suggested that any decision must first be based on a close examination of the benefits and risks of using certain types of equipment.</td>
</tr>
</tbody>
</table>

Officials from the NLECTC emphasized the need to examine other costs related to equipment acquisition, such as new officer training related to the equipment, and costs related to the frequency of replacing equipment, such as canisters of pepper spray that must be replaced once used or other munitions with contents that must be refilled to maintain their potency. The NLECTC also explained that there are liability issues a facility or a state can incur if officers misuse equipment, are subsequently sued by inmates for their actions, and compelled to pay for associated legal expenses. Officials from NIST stated that it is important to ensure that any new equipment considered meets the technical performance standards, if any, associated with certain types of equipment. For example, officials noted that adherence to standards when purchasing bulletproof vests is critical to ensuring that the materials used in vests have been proven to stop bullets. In addition, experts from NIJ’s Institutional Corrections Technology Working Group suggested assessing where in the field of corrections less-than-lethal weapons have been used and whether the benefits of using certain less-than-lethal weapons outweigh the risks. Table 5 provides examples of what officials from BOP and the 14 state DOCs included in this review cited as benefits and risks associated with the use of specific types of less-than-lethal weapons. |

Table 5 provides examples of what officials from BOP and the 14 state DOCs included in this review cited as benefits and risks associated with the use of specific types of less-than-lethal weapons.
# Table 5: Benefits and Risks of Less-Than-Lethal Weapons Cited by BOP and State Officials

<table>
<thead>
<tr>
<th>Less-than-lethal weapons</th>
<th>Benefits reported by BOP or state DOCs</th>
<th>Risks reported by BOP or state DOCs</th>
</tr>
</thead>
</table>
| Personal pepper spray canister | • Inexpensive  
• Effective in the control of inmates  
• It can be a deterrence to violence if seen by inmates  
• Evidence from one state suggests that the use of this weapon by officers may reduce officer or inmate-on-inmate assault rates  
• The benefit greatly outweighs the risk of the inmate taking from, and using the pepper spray against, an officer | • Inmates could take the pepper spray from officers  
• Potential exists for officers to rely more on pepper spray and less on effective communication with inmates  
• Some officers may be unintentionally exposed to pepper spray when it is used against inmates |
| 37 mm launcher | • Provides a deterrent to inmates when they can see the launcher | • If fired at a part of an individual’s body other than the center of the body’s mass—such as the head—the launchers and their less-than-lethal munitions can cause injury or death |
| Stun shields | • A mere demonstration of the electric charge to inmates is typically all that is required to gain inmate compliance during difficult cell extractions  
• Evidence from one state suggests that staff injury rates decline as a result of use when forcibly removing a noncompliant inmate from a cell | • Can be hazardous if used on inmates who have health problems, such as heart conditions |
| Pepper ball gun<sup>a</sup> | • Compared to other impact weapons, pepper balls provide a lower impact when aimed at the center of the body’s mass | • If the pepper balls do not land near or on the inmate, the effect of the powder is reduced |

Source: GAO analysis of interviews with state and BOP officials.

<sup>a</sup>A pepper ball gun is considered an impact and gas weapon. The gun launches small rubber balls that contain a powder with similar effects to pepper spray.

BOP officials from the Correctional Services Branch stated that they first establish whether new or additional equipment is needed through a variety of means. For example, officials said they obtain information from BOP's
Office of Security Technology about the performance of the equipment, such as through a pilot test; identify trends related to incidents in institutions’ data; and also review feedback from officers and other BOP staff on how well the current inventory of equipment is meeting their needs. Officials stated that the next steps involve reviewing factors such as equipment benefits, risks, and costs related to training and maintenance. Officials also noted that before they acquire new equipment it must undergo a legal review by BOP’s Office of General Counsel.

Equipment available to officers is one important part of officer safety; however, there are other factors—such as those related to the movement of inmates throughout the facility and the skills and training of prison personnel—that impact both officers’ safety and the overall safety of the institution. BOP has conducted evaluations to measure the impact of several efforts it has undertaken to address such institutional factors on officer safety, among other outcomes, and officials report using these evaluations to inform BOP operations.

Correctional Accrediting Experts Cited Inmate Management and Officer Training among the Institutional Factors Most Impacting Officer Safety, and BOP Has Evaluated the Effectiveness of Its Efforts in Ensuring Officer Safety
Throughout our audit work, we asked BOP and state correctional officials with whom we spoke to identify institutional factors that impact officer safety, as well as efforts they have made to mitigate these factors’ consequences. We then analyzed their responses and found 14 common institutional factors the BOP and state officials identified. In order to determine which of the 14 factors have the greatest impact on officer safety, we surveyed 30 correctional accrediting experts at the ACA and asked them to rank which of the factors—if they existed in an institution—would pose the greatest threat to officer safety. We received responses from 21 experts who also provided examples of efforts to address these factors that they believe to be cost effective—that is, efforts that strike a balance between their effectiveness in addressing the factor and their implementation costs. See appendix IV for a copy of our survey and appendix V for a full description of each of the 14 factors identified by BOP and state correctional officials. These experts most frequently reported that the existence of ineffective inmate management, insufficient officer training, inmate gangs, correctional officer understaffing, and inmate overcrowding in an institution would most affect officers’ safety.

**Ineffective Inmate Management:** Inmate management refers to the various strategies employed to control and manage the inmate population within a facility. For example, if inmates are not managed effectively, there could be instances where groups of inmates are allowed to congregate, which could lead to increased tension and violence. In one BOP facility a race riot between the Aryan Brotherhood and African-American inmates broke out in the recreation yard on Adolf Hitler’s birthday in April 2008, resulting in injuries and two inmate deaths. After putting up fences that separated the recreation yard into sections, the warden reported that assaults decreased.

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16 These experts—the audit chairs for the ACA’s Commission on Accreditation—routinely advise the commission as to which federal, state, and local correctional institutions should be accredited and were therefore selected based on this knowledge.

17 These 14 factors are: ineffective inmate management, insufficient information sharing among managers and staff within institutions, inmate overcrowding, correctional officer understaffing, insufficient inmate programming, correctional officer complacency, insufficient correctional training, insufficient discipline of inmates following a violation, intoxicated inmates as a result of inmate-manufactured alcohol, disruptive inmate behavior due to the sale and use of illegal drugs, inmate possession and use of unauthorized communication devices, inmate gangs, inmates dissatisfied with food service, and population of inmates with characteristics that may lead to increased violent behavior.
Fifteen of 21 correctional experts reported that ineffective inmate management is one of the most important factors that could jeopardize officer safety. Further, these experts identified examples of potential cost-effective efforts to manage inmates effectively. One expert reported that managers should assess the risk of housing certain inmates together. Once it assesses its population, management can control inmates’ movement accordingly. Another suggested that institutions utilize video cameras and a “pass” system, which allows only those authorized to enter or exit (i.e., pass through) a certain area, to improve monitoring of inmates’ movement. Further, 1 expert stated that institutions should control inmate movement times, and only allow inmates to move when authorized, such as at the top of the hour, while restricting all other movement unless an inmate is accompanied by an escort or otherwise authorized in advance.

BOP and state officials reported making efforts to address inmate management. For instance, BOP employs a direct supervision strategy where officers interact and communicate frequently with inmates, and officials from 3 of the 14 states with whom we spoke reported that they also employ direct supervision over inmates. Officials from another 2 of the 14 states reported that they employ an indirect supervision strategy that minimizes the interaction between officers and inmates by having the supervision take place in a centralized control center within the housing unit. A lieutenant at a facility in one of these states explained that because the facility houses a large number of violent inmates, the state has chosen to apply a less direct supervisory approach to minimize inmate and officer contact. See appendix III for characteristics of state inmates, including types of offenses.

**Insufficient Correctional Training:** Insufficient correctional training refers to a level of training that does not adequately prepare officers to fulfill their duties at their assigned post or other collateral duties they may be asked to perform. For example, one officer we spoke with stated that he felt that officers did not receive enough self defense training, which he indicated would have prevented some of the assaults on staff in his facility since officers would not have to depend on equipment or the backup from other staff to protect themselves.

Seven of 21 correctional experts reported that inadequate officer training—if it exists within an institution—is one of the most important factors jeopardizing officer safety because it could result in officers not having the knowledge and skills to perform their duties safely and effectively. These experts identified some examples of potential cost-effective efforts to address insufficient correctional officer training when
it exists in an institution. Two experts emphasized the need to leverage training provided by local law enforcement agencies, or training provided at no cost to the facility, such as curricula offered through NIC. Another expert recommended that institutions call upon the local law enforcement community for assistance or sharing of training needs. Both this expert and 2 others recommended the use of computer-based training to expand staff access to resources, make training available “anytime,” and combat officer complacency.

Officials from BOP and the 14 state DOCs all agreed on the importance of training. However, none of the officials identified their officer training programs as being insufficient. In addition, 8 of the 68 officers we spoke with expressed criticisms over the training they receive. To ensure that their officers receive adequate training, BOP and the 14 state DOCs included in our review require that officers must complete some form of training prior to working with inmates in a facility. Such training is usually conducted through an academy that can last from 2 to 16 weeks, depending on the prison system. BOP’s training courses at the academy include self defense, “use of force” policies, and gang control in addition to any required firearms certification, and officers also receive training at the facility in which they will be working. In addition, in BOP and 9 of the 14 states with whom we spoke, officers benefit from on-the-job training programs, usually conducted through a shadowing program with a more experienced officer or supervisor. Officials from 2 states with whom we spoke reported that they have such a program and that it has helped them address staffing issues because officers in training provide additional support on a given shift. BOP officers are also required to complete some form of refresher training annually. Further, officers that are members of their institution’s Disturbance Control Team (DCT) or Special Operations Response Teams (SORT) receive additional training on a more frequent basis. Both BOP and state institutions have such teams of officers that are responsible for various duties.

**Inmate Gangs:** Inmate gangs are the organized factions of inmates inside a prison which can be based on an inmate’s race, religion, or geographic origin, commonly referred to in corrections as security threat groups (STG). Many STGs parallel existing street gangs, such as the Bloods and the Crips. These STGs exist primarily to offer protection to their

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18 The Bloods and the Crips are two Los Angeles-based gangs. The Crips originated in the late 1960s and the Bloods formed to defend against the Crips.
members from other STGs and to transport and distribute drugs. For example, the warden at one BOP facility told us that gang participation often encourages inmates to be violent and defiant towards staff and other inmates in order to gain respect from other gang members.

Seven of the 21 correctional experts reported that the presence of inmate gangs in prisons is one of the most important factors impacting officer safety, and identified some examples of potential cost-effective efforts to address inmate gangs. According to one expert, institutions should employ the use of phone systems that allow inmates to call a hotline to talk about gangs; track and manage gang activity and provide this information to hotline staff; and provide training to staff receiving this information or observing suspicious activities. Further, another expert suggested the use of computer assisted tracking of whom the gang leaders are calling and whom they are writing. According to the expert, this electronic mapping of community linkages (prison to the streets) can assist prison staff and law enforcement in monitoring illegal activity and possibly disrupting it. Another expert stated that proper supervision and staff training are critical to controlling gangs, and that gangs cannot be tolerated. In addition, one expert reported that institutions must not allow any type of gang displays, and should transfer gang members to different institutions frequently in order to disrupt gang organization.

Officials at two of the eight BOP institutions and 3 of the 14 states with whom we spoke described specific efforts to identify and manage STGs that are important in order to enhance officer safety and prevent prison violence. For instance, both BOP and the California state prison system reported that they identify STG members when they enter the system through clothing insignia, tattoos, or peer associations, and note if the inmate is identified as a member. One California official reported that the state strives to segregate inmate STG members from other members of their own STGs or rival STGs, to the extent possible. Further, an official from 1 state reported that some of that state’s institutions have a housing unit program dedicated solely for STG members, where they offer assistance aimed to rehabilitate the inmates and draw them away from STGs. Officials in another state prison system with whom we spoke reported that they manage their STG population by segregating the gang members.

**Correctional Officer Understaffing:** Correctional officer understaffing is the level of staffing of officers that is perceived to be inadequate to prevent violence and maintain a safe facility, usually measured by the inmate-to-staff ratio. Specifically, BOP’s ORE conducted a study in 2005
entitled “The Effects of Changing Crowding and Staffing Levels in Federal Prisons on Inmate Violence Rates,” which found that lower inmate-to-staff ratios are correlated with increases in the level of inmate violence in BOP institutions. However, not all officers and officials we spoke with agreed that understaffing impacted officer safety at BOP institutions. For instance, the officers we spoke with most frequently reported understaffing as a factor impacting their safety (39 of 68 officers), with many citing concerns about staffing levels during the evening and night shifts when there is no other support staff present in the unit, while management at two of the eight BOP institutions we visited reported that the current staffing levels at their institutions are adequate to maintain a safe facility.

Staffing post analysis

Texas has evaluated the staff levels and duty posts at each facility across its system, allowing it to look at how many staff each facility has, where these staff are located, and ask whether the staff are posted where they are needed, given inmate movements during daily operations. As a result, Texas was able to identify some posts that it no longer needed and to add posts it needed but did not have.

Source: GAO.

Despite the potential variation in perceptions, 8 of 21 correctional experts reported that officer understaffing is one of the most important factors jeopardizing officer safety and identified some examples of potential cost-effective efforts to address correctional officer understaffing. One expert commented that prisons need to embrace technologies like cameras on walls, and utilize better designs to eliminate blind spots. Another expert stated that in many facilities, correctional officers perform support functions, such as paperwork, that may be effectively done by other staff earning lower salaries. However, the expert commented that hiring too many support staff to perform these functions could affect the ability of a correctional organization to hire more officers. In addition, another expert stated that having officers work 12 hour shifts would increase the staff on each shift. Another expert opined that the most effective strategy is a careful analysis of the institutional officer posts that involves key stakeholders, such as management and officers, and establishes mandatory minimum post numbers, adding more posts only as staffing levels permit.

Officials at two of the eight BOP institutions and 4 of the 14 states with whom we spoke reported employing efforts to address officer understaffing. For example, according to BOP management officials at one institution that has multiple facilities in one location, called a complex, management has implemented a staffing plan referred to as consolidation, which allows them to fill in staffing shortages in one facility with officers from another facility within a complex. BOP management at this institution cited consolidation as an economical strategy to fill critical need posts because they do not have to pay officers overtime. However, BOP union officials at two complexes we visited and 4 out of 68 officers we spoke with expressed unease specifically over the consolidation policy, voicing concerns that at times, they feel less safe if sent to work in
facilities where they were not as familiar with the inmates. For example, at one complex we visited, an officer reported that he was transferred from a medium security facility to cover shifts at the high security facility. This officer shared concerns that because he does not work with high security inmates on a regular basis, he lacks the opportunity to become familiar with various inmates who pose a greater security threat.

**Inmate Overcrowding:** Inmate overcrowding exists when the number of inmates housed in a facility exceeds the rated capacity of a particular facility. BOP defines rated capacity as the number of prisoners that the institution is built to house safely and securely and with adequate access to services providing necessities for daily living and programs designed to support prisoners’ crime-free return to the community. In testimony before the House of Representatives Subcommittee on Commerce, Justice, Science, and Related Agencies in 2009, the BOP Director stated that correctional administrators agree that overcrowding contributes to greater tension, frustration, and anger among the inmate population, which leads to conflict and violence as the inmates’ ability to access basic services are hindered. Further, as BOP described in its 2005 study, where overcrowded conditions exist, more inmates share cells and other living units, and are thus brought together for longer periods with more high risk, violent inmates, creating more potential victims. According to this report, BOP found that an increase in the inmate population as a percentage of a facility’s rated capacity directly correlates with an increase in inmate violence.

Seven of the 21 correctional experts reported that overcrowding is one of the most important factors jeopardizing officer safety. These experts identified some examples of potential cost-effective efforts to address inmate overcrowding. For instance, one expert recommended that inmate programs be carried out in shifts, from the early morning to the late evening, in order to split the amount of inmates between idle time and program time.

To address overcrowding, officials from one of the BOP institutions and 3 of the 14 states with whom we spoke reported converting community space, such as television rooms, into inmate cells to accommodate a larger

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inmate population. This has resulted in trade-offs—to make room in existing housing units to accommodate growing inmate populations, the number of televisions inmates have available to watch has been reduced, which can increase tensions and threaten safety. Further, officials from three of the eight BOP institutions and 3 of the 14 states with whom we spoke stated that they have resorted to double or even triple bunking cells to accommodate the increasing inmate population. This occurs not only within units that house inmates from the general population, but also in the special housing units where inmates are sent for administrative detention or disciplinary segregation. According to BOP, the tradeoff for accommodating a growing population by double and triple bunking cells is the increased level of stress and conflict among inmates that results from living in such close quarters with others.

However, not all prison systems are experiencing overcrowding; in fact some states, such as Michigan, are experiencing a reduction in their inmate populations. States have employed a variety of mechanisms to reduce their inmate populations in order to alleviate overcrowding, such as reviewing inmates that may be eligible for parole or considering sentence reductions. An official in Michigan with whom we spoke attributed the decline in inmate population in his state to the success of the state’s re-entry programs for inmates, which has reduced recidivism and violations of parole or probation that often bring former inmates back to jail.\footnote{The re-entry concept is the use of programs targeted at promoting the effective reintegration of offenders back to communities upon release from prison and jail.}

BOP’s ORE has conducted evaluations to measure the impact of several efforts on officer safety, among other outcomes, and officials report using these evaluations to inform BOP operations. For instance, in 2001, ORE conducted a study empirically evaluating BOP’s substance abuse treatment program’s effectiveness in reducing prisoner misconduct, which is closely related to officer safety. The study found that treatment program graduates were 74 percent less likely to engage in misconduct between program graduation and release from prison than a comparison group. In addition, in a 2008 study of BOP’s pilot faith-based residential program called Life Connections, BOP’s ORE found that Life Connections participants were less likely to engage in serious misconduct while in the program. Further, ORE has recently begun collecting data for a study to
measure the impact of its SMUs—separate housing for inmates presenting unique security and management concerns, such as those who participated or had a leadership role in gang activity—on misconduct rates at both the institutions from which the inmates were removed as well as the SMUs into which they were placed.

According to the Deputy Assistant Director of BOP’s Information, Policy, and Public Affairs Division, ORE provides interim data and its final evaluations to the BOP Director and executive staff members, as well as NIC—which director is a member of BOP’s executive staff—and other DOJ components, such as OJP. Further, ORE requires its staff to publish their work to make it available publicly to the larger correctional community. This official reported that BOP’s Director and executive staff use information from ORE for a variety of purposes, including operational decision-making and budget formulation. For example, this official reported that ORE provides the BOP Director and the executive staff with interim information related to its ongoing SMU evaluation, which provides BOP management with real-time information to guide its decisions related to the SMUs. In addition, in its 2011 Budget Justification, BOP cited its findings from ORE’s study on the Life Connections Program, which demonstrated reductions in serious inmate misconduct, when providing its rationale for funding for inmate programs. Further, the official reported that, when faced with budget constraints, BOP decided to eliminate its intensive confinement centers—or “boot camps”—after an ORE study found that BOP’s boot camps were not effective at reducing re-arrest.

Conclusions

With an increasing inmate population in BOP institutions, officer safety is continuously at risk. To protect officers from a range of threats, BOP has taken steps, such as providing additional equipment to officers to access in an emergency and routinely conducting officer training to enhance on-the-job responsiveness. Further, in limited cases, BOP has obtained information about the performance of equipment through pilot tests, officer surveys, and comparisons to manufacturer specifications. In addition, BOP has conducted studies looking at whether its efforts to address institutional factors have impacted inmate violence. However, it is difficult for BOP to determine the impact on officer safety of the equipment it provides because it has not used the data it already collects for this evaluative purpose. By conducting evidence-based evaluative research in what equipment effectively protects officers, BOP could be better positioned to dedicate resources to equipment that has the greatest impact on safety.
**Recommendation for Executive Action**

To capitalize on the data BOP already collects and to further DOJ’s evaluation efforts, we recommend that the Attorney General direct the Director of BOP to leverage existing BOP data systems, such as TRUINTEL and SENTRY, as well as the institutional expertise available through NIJ and NIC, as appropriate, to assess the impact of the equipment BOP has provided or could provide to its officers to better protect them in a range of scenarios and settings.

**Agency Comments**

We received written comments on a draft of this report from BOP, which are reproduced in full in appendix VI. BOP concurred with our recommendation and stated that, with the assistance of NIJ and/or NIC, it will conduct a study to evaluate the impact of protective equipment on officer safety. BOP and NIJ also provided technical comments on the report, which we incorporated as appropriate.

We are sending copies of this report to the Attorney General and interested congressional committees. In addition, this report will be available at no charge on the GAO Web site at [http://www.gao.gov](http://www.gao.gov).

Should you or your staff have any questions concerning this report, please contact David Maurer at (202) 512-9627 or by email at maurerd@gao.gov. Contact points from 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.

David C. Maurer  
Director, Homeland Security and Justice Issues
In this report, we describe the equipment available to protect officers as well as other institutional factors, such as inmate overcrowding and staffing shortages, that affect officer safety. Specifically, this report addresses the following questions:

- What equipment do the Bureau of Prisons (BOP) and selected states provide to protect officers and what are the opinions of BOP officers and other correctional practitioners regarding this equipment?

- To what extent has BOP evaluated the effectiveness of its equipment in ensuring officer safety, and what do correctional equipment experts report as important factors when considering the purchase of new equipment?

- What institutional factors do correctional accrediting experts report as most impacting officer safety, and to what extent has BOP evaluated the effectiveness of the steps it has taken to address these factors?

To address all of our objectives, we reviewed existing BOP policies and procedures, such as BOP Program Statements and institution-specific policies, to catalogue the equipment BOP provides to officers and the measures it has implemented to address institutional factors affecting officer safety system-wide. We also interviewed BOP central management, such as officials from the Correctional Services Branch, who help ensure that national policies and procedures are in place that provide a safe, secure institutional environment for inmates and staff, and the Office of Security Technology, who identify and evaluate new security-related equipment. In addition, we interviewed officials from the Office of Research and Evaluation, who produce reports and also research corrections-related topics. During these interviews, we discussed BOP’s existing officer safety practices; the institutional factors they report as affecting officer safety; their views on the effectiveness of the equipment BOP provides, and the measures it has implemented to address these institutional factors; and their mechanisms for evaluating the effectiveness. We compared BOP’s mechanisms for evaluating the effectiveness of its practices in ensuring officer safety to BOP’s and DOJ’s mission statements and Standards for Internal Control in the Federal Government.¹

Further, we visited a total of eight BOP institutions in each of BOP’s six regions. During these visits, we interviewed BOP institutional management officials and observed officer safety practices so that we could accurately reflect BOP management views on officer safety. To obtain the views of officers regarding their safety, we also conducted semistructured interviews with 68 officers who were on duty at the time of our visit. The officers were chosen at random, but were generally posted to the institutions’ housing units or yard. In selecting the institutions to visit, we considered factors such as their location, staff-to-inmate ratio, level of overcrowding, number of assaults on staff, and the security level of the institution. These institutions included Atwater U.S. Penitentiary (USP) and Victorville Federal Correctional Complex (FCC) in California; Florence FCC in Colorado; Allenwood FCC in Pennsylvania; Guaynabo Metropolitan Detention Center (MDC) in Puerto Rico; Beaumont FCC and Houston Federal Detention Center (FDC) in Texas; and Lee USP in Virginia. Because we used a nonprobability sample, our results are not generalizable to all BOP institutions; however, our interviews provided us with insights into the perspectives of management officials and officers at BOP institutions regarding officer safety.

In addition, we contacted the 15 state DOCs with the largest inmate populations and conducted semi-structured interviews with 14 of these 15 DOCs. These states included Alabama, Arizona, California, Florida, Georgia, Illinois, Louisiana, Michigan, Missouri, New York, North Carolina, Ohio, Pennsylvania, Texas, and Virginia. During these interviews, state DOC officials identified equipment their officers use and their perceptions of the equipment’s effectiveness in protecting their officers. In connection with our BOP site visits, we also visited state institutions in 5 of these states: Corcoran State Prison in California, Central Florida Reception Center in Florida, Graterford State Correctional Institution in Pennsylvania, Darrington Unit in Texas, and Coffeewood Correctional Center in Virginia. Due to the overall number of correctional organizations in the United States, we conducted nonprobability sampling, which limits the ability to extrapolate the findings in this report to all correctional organizations. However, this information provided useful insight into state correctional practices.

We also interviewed union officials from the Council of Prison Locals, representing BOP officers, including officials at the national union as well...
Appendix I: Objectives, Scope, and Methodology

as local union officials at five of the eight BOP institutions we visited, in order to obtain their perspectives about the institutional factors they report as affecting officer safety, the measures in place to address these factors, and the equipment BOP uses to protect officers. In addition, we interviewed officials from correctional organizations to determine the institutional factors they report as affecting officer safety, and their perspectives on the equipment used to protect officers and the effectiveness of this equipment and BOP and state officer safety practices. These organizations included the American Correctional Association (ACA), BOP’s National Institute of Corrections (NIC), and the Association of State Correctional Administrators (ASCA). We selected these organizations based on recommendations from the correctional officials with whom we spoke, including BOP and state officials. As we selected a nonprobability sample of the officials at correctional organizations, these opinions are not generalizable. However, they provided important insights into BOP and state correctional practices. In addition, we conducted a literature search to identify and obtain evaluations of the effectiveness of BOP or state officer safety practices, such as those conducted by the states’ or DOJ’s inspectors general.

In addition, to further address our second objective, we interviewed correctional equipment experts from the DOJ’s National Institute of Justice (NIJ), NIJ’s National Law Enforcement and Corrections Training Center (NLECTC), and the Department of Commerce’s National Institute of Standards and Technology (NIST). Officials from these organizations were chosen because of their expertise in correctional equipment. During these interviews, we obtained the officials’ perspectives on the factors BOP would need to consider if it acquired additional personal protective equipment for its officers. As we selected a nonprobability sample of correctional equipment experts, these perspectives are not generalizable. However, they provided valuable insights into equipment considerations.

In order to further develop our third objective, we identified 14 institutional factors that BOP, state DOCs, and correctional experts reported as most affecting officer safety. We then surveyed a panel of 30 correctional accrediting experts who serve as audit chairs for the ACA’s Commission on Accreditation concerning the list of 14 institutional factors that BOP and state DOC officials perceived as affecting officer safety. The

3We were unable to obtain contact information for union officials at the remaining three institutions.
ACA audit chairs ranked which of these factors most affect officer safety when the factors exist in a correctional institution. The ACA audit chairs also provided a list of cost effective strategies that could be used to address these strategies. The ACA audit chairs were selected based upon their expertise in advising the ACA Accrediting Commission as to which correctional institutions in the United States should be accredited, including BOP institutions. The e-mail-based survey was launched on December 10, 2010, and by the close of the survey on December 22, 2010, we had received 21 responses from the 30 experts, for a response rate of 70 percent. We sent one follow up e-mail to the experts on December 16, 2010.

Because our survey was not a sample survey, there are no sampling errors; however, the practical difficulties of conducting any survey may introduce nonsampling errors. For example, differences in how a particular question is interpreted, the sources of information available to respondents, or the types of people who do not respond can introduce unwanted variability into the survey results. We included steps in both the data collection and data analysis stages for the purpose of minimizing such nonsampling errors. In addition, we collaborated with a social science survey specialist to design the survey instrumentation, and the survey was pretested with a subject matter expert at ACA with over 30 years of experience in corrections. From this pretest, we made revisions as necessary. See appendix IV for a copy of our survey.

We conducted this work from June 2010 to April 2011 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.
The figures below depict trends in the characteristics of the Bureau of Prisons' (BOP) total inmate population, including inmates housed in privately managed or contracted facilities, in each fiscal year, from fiscal year 2000 through 2010.

As figure 8 illustrates, the average inmate age increased by more than 2 years from fiscal year 2000 through 2010.

As shown in figures 9 and 10, the percentage of inmates by race, ethnicity, and gender has remained relatively constant throughout this period.
Figure 9: Trends in Percentage of Inmates by Race and Ethnicity from Fiscal Year 2000 through 2010

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Native American</th>
<th>Hispanic</th>
<th>Asian</th>
<th>Black Non-Hispanic</th>
<th>White Non-Hispanic</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>28%</td>
<td>37%</td>
<td>2%</td>
<td>27%</td>
<td>27%</td>
</tr>
<tr>
<td>2001</td>
<td>26%</td>
<td>39%</td>
<td>2%</td>
<td>27%</td>
<td>27%</td>
</tr>
<tr>
<td>2002</td>
<td>27%</td>
<td>39%</td>
<td>2%</td>
<td>27%</td>
<td>27%</td>
</tr>
<tr>
<td>2003</td>
<td>27%</td>
<td>38%</td>
<td>2%</td>
<td>26%</td>
<td>26%</td>
</tr>
<tr>
<td>2004</td>
<td>26%</td>
<td>38%</td>
<td>2%</td>
<td>26%</td>
<td>26%</td>
</tr>
<tr>
<td>2005</td>
<td>27%</td>
<td>38%</td>
<td>2%</td>
<td>27%</td>
<td>27%</td>
</tr>
<tr>
<td>2006</td>
<td>27%</td>
<td>39%</td>
<td>2%</td>
<td>27%</td>
<td>27%</td>
</tr>
<tr>
<td>2007</td>
<td>27%</td>
<td>38%</td>
<td>2%</td>
<td>27%</td>
<td>27%</td>
</tr>
<tr>
<td>2008</td>
<td>27%</td>
<td>38%</td>
<td>2%</td>
<td>27%</td>
<td>27%</td>
</tr>
<tr>
<td>2009</td>
<td>27%</td>
<td>37%</td>
<td>2%</td>
<td>27%</td>
<td>27%</td>
</tr>
<tr>
<td>2010</td>
<td>27%</td>
<td>37%</td>
<td>2%</td>
<td>27%</td>
<td>27%</td>
</tr>
</tbody>
</table>

Source: GAO analysis of BOP data.
As depicted in figure 11, the types of offenses for which BOP inmates are incarcerated have also remained relatively constant, with drug offenses comprising more than half the offenses each fiscal year from 2000 through 2010.
Appendix II: Trends in BOP Inmate Characteristics

Figure 11: Trends in Types of Offenses Committed by BOP Inmates from Fiscal Year 2000 through 2010

Note: “Other offenses” include homicide, aggravated assault, kidnapping, burglary, larceny, property crimes, banking and insurance crime, counterfeiting, embezzlement, court and corrections violations, sex offenses, national security crimes, felonies in the District of Columbia, miscellaneous offenses, and continuing criminal enterprises.

As figure 12 illustrates, the length of the sentence imposed on BOP inmates has been generally stable, with a slight increase in longer sentences from fiscal year 2000 through 2010.
As shown in figure 13, the percentage of inmates associated with a Security Threat Group has fluctuated from fiscal year 2000 through 2010. Specifically, it was generally constant from fiscal year 2000 through 2002, declined slightly in fiscal year 2003, and then steadily increased until fiscal year 2008 when it began to decline in fiscal year 2009 and then again in fiscal year 2010.¹

¹Security Threat Groups refer to inmate gangs, or the organized factions of inmates inside a prison which can be based on an inmate’s race, religion, or geographic origin.
Figure 13: Trend in Percentage of Inmates Affiliated with a Security Threat Group from Fiscal Year 2000 through 2010

Source: GAO analysis of BOP data.
State departments of corrections are responsible for housing the states' inmate populations. The table and figures that follow depict the characteristics of state inmates.

Inmate populations in the 50 states vary in size from each other. Table 6 displays the inmate populations in each state.

### Table 6. Inmate Populations by State as of December 31, 2009

<table>
<thead>
<tr>
<th>State</th>
<th>Number of prisoners under state jurisdiction</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>California</td>
</tr>
<tr>
<td>2</td>
<td>Texas</td>
</tr>
<tr>
<td>3</td>
<td>Florida</td>
</tr>
<tr>
<td>4</td>
<td>New York</td>
</tr>
<tr>
<td>5</td>
<td>Georgia*</td>
</tr>
<tr>
<td>6</td>
<td>Ohio</td>
</tr>
<tr>
<td>7</td>
<td>Pennsylvania</td>
</tr>
<tr>
<td>8</td>
<td>Michigan</td>
</tr>
<tr>
<td>9</td>
<td>Illinois</td>
</tr>
<tr>
<td>10</td>
<td>Arizona*</td>
</tr>
<tr>
<td>11</td>
<td>North Carolina</td>
</tr>
<tr>
<td>12</td>
<td>Louisiana</td>
</tr>
<tr>
<td>13</td>
<td>Virginia</td>
</tr>
<tr>
<td>14</td>
<td>Alabama</td>
</tr>
<tr>
<td>15</td>
<td>Missouri</td>
</tr>
<tr>
<td>16</td>
<td>Indiana</td>
</tr>
<tr>
<td>17</td>
<td>Tennessee</td>
</tr>
<tr>
<td>18</td>
<td>Oklahoma</td>
</tr>
<tr>
<td>19</td>
<td>New Jersey</td>
</tr>
<tr>
<td>20</td>
<td>South Carolina</td>
</tr>
<tr>
<td>21</td>
<td>Wisconsin</td>
</tr>
<tr>
<td>22</td>
<td>Colorado</td>
</tr>
<tr>
<td>23</td>
<td>Maryland</td>
</tr>
<tr>
<td>24</td>
<td>Kentucky</td>
</tr>
<tr>
<td>25</td>
<td>Mississippi</td>
</tr>
<tr>
<td>26</td>
<td>Connecticut*</td>
</tr>
<tr>
<td>27</td>
<td>Washington</td>
</tr>
<tr>
<td>28</td>
<td>Arkansas</td>
</tr>
</tbody>
</table>
Appendix III: Characteristics of State Inmates

<table>
<thead>
<tr>
<th>State</th>
<th>Number of prisoners under state jurisdiction</th>
</tr>
</thead>
<tbody>
<tr>
<td>29 Oregon</td>
<td>14,403</td>
</tr>
<tr>
<td>30 Nevada</td>
<td>12,482</td>
</tr>
<tr>
<td>31 Massachusetts</td>
<td>11,316</td>
</tr>
<tr>
<td>32 Minnesota</td>
<td>9,986</td>
</tr>
<tr>
<td>33 Iowa</td>
<td>8,813</td>
</tr>
<tr>
<td>34 Kansas</td>
<td>8,641</td>
</tr>
<tr>
<td>35 Idaho</td>
<td>7,400</td>
</tr>
<tr>
<td>36 Delaware</td>
<td>6,794</td>
</tr>
<tr>
<td>37 Utah</td>
<td>6,533</td>
</tr>
<tr>
<td>38 New Mexico</td>
<td>6,519</td>
</tr>
<tr>
<td>39 West Virginia</td>
<td>6,367</td>
</tr>
<tr>
<td>40 Hawaii</td>
<td>5,891</td>
</tr>
<tr>
<td>41 Alaska</td>
<td>5,285</td>
</tr>
<tr>
<td>42 Nebraska</td>
<td>4,474</td>
</tr>
<tr>
<td>43 Rhode Island</td>
<td>3,674</td>
</tr>
<tr>
<td>44 Montana</td>
<td>3,605</td>
</tr>
<tr>
<td>45 South Dakota</td>
<td>3,434</td>
</tr>
<tr>
<td>46 New Hampshire</td>
<td>2,731</td>
</tr>
<tr>
<td>47 Vermont</td>
<td>2,220</td>
</tr>
<tr>
<td>48 Maine</td>
<td>2,206</td>
</tr>
<tr>
<td>49 Wyoming</td>
<td>2,075</td>
</tr>
<tr>
<td>50 North Dakota</td>
<td>1,486</td>
</tr>
</tbody>
</table>

Source: DOJ Bureau of Justice Statistics Data.

*Prison population based on custody counts.

In this state, jails—which are correctional facilities that confine persons before or after adjudication and are usually operated by local law enforcement authorities—and prisons form one integrated system. Data include total jail and prison populations.

Figure 14 presents DOJ Bureau of Justice Statistics estimates of sentenced prisoners under state jurisdiction by race and Hispanic origin. As figure 14 shows, the percentage of Hispanic inmates and inmates of “other” races—including American Indians, Alaska Natives, Native Hawaiians, other Pacific Islanders, and persons identifying as two or more races—under state jurisdiction has been increasing from calendar year 2000 to 2009, while the percentage of black and white inmates has decreased or stayed about the same.
Figure 14: Estimated Percentage of Sentenced Prisoners under State Jurisdiction by Race and Hispanic Origin from December 31, 2000 through 2009

<table>
<thead>
<tr>
<th>Year</th>
<th>Other</th>
<th>Hispanic</th>
<th>Black Non-hispanic</th>
<th>White Non-Hispanic</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>36%</td>
<td>16%</td>
<td>16%</td>
<td>36%</td>
</tr>
<tr>
<td>2001</td>
<td>36%</td>
<td>16%</td>
<td>16%</td>
<td>36%</td>
</tr>
<tr>
<td>2002</td>
<td>34%</td>
<td>18%</td>
<td>19%</td>
<td>34%</td>
</tr>
<tr>
<td>2003</td>
<td>35%</td>
<td>19%</td>
<td>19%</td>
<td>35%</td>
</tr>
<tr>
<td>2004</td>
<td>34%</td>
<td>19%</td>
<td>20%</td>
<td>34%</td>
</tr>
<tr>
<td>2005</td>
<td>35%</td>
<td>20%</td>
<td>21%</td>
<td>35%</td>
</tr>
<tr>
<td>2006</td>
<td>35%</td>
<td>21%</td>
<td>21%</td>
<td>35%</td>
</tr>
<tr>
<td>2007</td>
<td>34%</td>
<td>20%</td>
<td>20%</td>
<td>34%</td>
</tr>
<tr>
<td>2008</td>
<td>34%</td>
<td>21%</td>
<td>21%</td>
<td>34%</td>
</tr>
<tr>
<td>2009</td>
<td>34%</td>
<td>21%</td>
<td>21%</td>
<td>34%</td>
</tr>
</tbody>
</table>

Source: GAO analysis of Bureau of Justice Statistics data.

Note: Other races include American Indians, Alaska Natives, Native Hawaiians, other Pacific Islanders, and persons identifying as two or more races. Totals are based on prisoners with a sentence of more than 1 year.

Figure 15 presents DOJ Bureau of Justice Statistics estimates of sentenced prisoners under state jurisdiction by gender from December 31, 2000 through December 31, 2009. As depicted in figure 15, the gender breakdown has remained largely stable over this time period.
Figure 15: Estimated Percentage of Sentenced Prisoners under State Jurisdiction by Gender from December 31, 2000 through 2009

Figure 16 shows the DOJ Bureau of Justice Statistics estimates of the sentenced inmate population under state jurisdiction by the type of offense for which they were convicted, as of the end of 2008, the most currently available data.
Figure 16: Estimated Percentage of Sentenced Prisoners under State Jurisdiction by Type of Offense at Year End 2008

Source: Bureau of Justice Statistics data.

Notes: Year end 2008 data are the most currently available. Percentages do not add to 100 due to rounding.

Violent offenses include murder, manslaughter, rape, other sexual assault, robbery, assault, and other violent crimes. Property crimes include burglary, larceny, motor vehicle theft, fraud, and other property crimes. Other offenses include public-order crimes, which includes weapons, drunk driving, court offenses, commercialized vice, morals and decency offenses, liquor law violations, and other public-order offenses, as well as other, unspecified offenses, including juveniles offenses. Totals are based on prisoners with a sentence of more than 1 year.
Based on responses from Bureau of Prisons (BOP) and state correctional officials with whom we spoke, we identified 14 common institutional factors that impact officer safety. In order to determine which of the 14 factors have the greatest impact on officer safety, we sent the survey below to 30 correctional accrediting experts at the American Correctional Association (ACA) and asked them to rank which of the factors—if they exist in an institution—would pose the greatest threat to officer safety. These experts are the audit chairs for the ACA’s Commission on Accreditation, who advise the commission as to which federal, state, and local correctional institutions should be accredited and were therefore selected based on this knowledge. We received responses from 21 experts, who also provided examples of efforts to address these factors that they believed to be cost effective.

1. Which of the following corrections-related positions do you hold? *Please check one answer.*

<table>
<thead>
<tr>
<th>Corrections management</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrections practitioner, non-management</td>
<td></td>
</tr>
<tr>
<td>Corrections researcher</td>
<td></td>
</tr>
<tr>
<td>Other (please explain below)</td>
<td></td>
</tr>
</tbody>
</table>

2. In general, how much, if at all, does each of the following affect the safety of correctional officers or of other staff performing corrections duties? *Please check one answer for each row.*

<table>
<thead>
<tr>
<th>Item</th>
<th>Not at all</th>
<th>Slightly</th>
<th>Moderately</th>
<th>Significantly</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Ineffective inmate management (e.g., lack of controlled inmate movement, insufficient supervision of inmates)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>b. Insufficient information sharing among managers and staff within institutions</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>c. Inmate overcrowding</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>d. Corrections officer under-staffing</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>e. Insufficient inmate programming (e.g., prison industries, drug rehabilitation, education, recreation)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>f. Corrections officer complacency</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>g. Insufficient corrections training</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>h. Insufficient discipline of inmates following a violation</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>i. Intoxicated inmates as a result of inmate-manufactured alcohol</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>j. Disruptive inmate behavior due to the sale and use of illegal drugs</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
Appendix IV: Survey Sent to American Correctional Association (ACA) Audit Chairs

<table>
<thead>
<tr>
<th>Factor</th>
<th>Not at all</th>
<th>Slightly</th>
<th>Moderately</th>
<th>Significantly</th>
<th>Don't know</th>
</tr>
</thead>
<tbody>
<tr>
<td>k. Inmate possession and use of unauthorized communication devices,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>including cell phones</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>l. Inmate gangs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>m. Inmates dissatisfied with food service</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>n. Population of inmates with characteristics that may lead to increased violent behavior (e.g., younger age, longer sentences, lack of parole opportunities)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. If you would like to elaborate on any of the factors above, please do so in the box below. *The box will expand as you type.*

4. Which three of the following factors do you believe most affect corrections officer safety? *Please check three and no more than three factors in the list below.*

   a. Ineffective inmate management (e.g. lack of controlled inmate movement, insufficient supervision of inmates) ❏
   b. Insufficient information sharing among managers and staff within institutions ❏
   c. Inmate overcrowding ❏
   d. Corrections officer under-staffing ❏
   e. Insufficient inmate programming (e.g., prison industries, drug rehabilitation, education, recreation) ❏
   f. Corrections officer complacency ❏
   g. Insufficient corrections training ❏
   h. Insufficient discipline of inmates following a violation ❏
   i. Intoxicated inmates as a result of inmate-manufactured alcohol ❏
   j. Disruptive inmate behavior due to the sale and use of illegal drugs ❏
   k. Inmate possession and use of unauthorized communication devices, including cell phones ❏
   l. Inmate gangs ❏
   m. Inmates dissatisfied with food service ❏
   n. Population of inmates with characteristics that may lead to increased violent behavior (e.g., younger age, longer sentences, lack of parole opportunities) ❏
5. Besides the factors listed above, if there are any other significant factors affecting corrections officer safety please describe them in the box below. *The box will expand as you type.*


6. The next questions ask you to provide examples(s) of strategies to address each factor that you believe to be cost-effective. Please answer as many as you can.

a. What are example(s) of cost effective strategies to address Ineffective inmate management (e.g., lack of controlled inmate movement, insufficient supervision of inmates)? *The box will expand as you type.*


b. What are example(s) of cost effective strategies to address Insufficient information sharing among managers and staff within institutions? *The box will expand as you type.*


c. What are example(s) of cost effective strategies to address Inmate overcrowding? *The box will expand as you type.*


d. What are example(s) of cost effective strategies to address Corrections officer under-staffing? *The box will expand as you type.*
Appendix IV: Survey Sent to American Correctional Association (ACA) Audit Chairs

e. What are example(s) of cost effective strategies to address Insufficient inmate programming (e.g., prison industries, drug rehabilitation, education, recreation)? The box will expand as you type.

f. What are example(s) of cost effective strategies to address Corrections officer complacency? The box will expand as you type.

g. What are example(s) of cost effective strategies to address Insufficient corrections training? The box will expand as you type.

h. What are example(s) of cost effective strategies to address Insufficient discipline of inmates following a violation? The box will expand as you type.

i. What are example(s) of cost effective strategies to address Intoxicated inmates as a result of inmate-manufactured alcohol? The box will expand as you type.

j. What are example(s) of cost effective strategies to address Disruptive inmate behavior due to the sale and use of illegal drugs? The box will expand as you type.
k. What are example(s) of cost effective strategies to address Inmate possession and use of unauthorized communication devices, including cell phones? *The box will expand as you type.*

l. What are example(s) of cost effective strategies to address Inmate gangs? *The box will expand as you type.*

m. What are example(s) of cost effective strategies to address Inmates dissatisfied with food service? *The box will expand as you type.*

n. What are example(s) of cost effective strategies to address Population of inmates with characteristics that may lead to increased violent behavior (e.g., younger age, longer sentences, lack of parole opportunities)? *The box will expand as you type.*

7. If you have any additional comments concerning correctional officer safety, please type them in the box below. *The box will expand as you type.*
## Appendix V: Institutional Factors That Impact Officer Safety and Examples of Mitigating Strategies Either Used by BOP or State DOCs or Suggested by Correctional Accrediting Experts

Table 7 lists the institutional factors that the officers and officials with whom we spoke reported impacted officer safety. It also provides examples of strategies to mitigate these factors that BOP or state officials reported using or that correctional accrediting experts we surveyed suggested.

<table>
<thead>
<tr>
<th>Factors affecting officer safety</th>
<th>Examples of strategies to address factors</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Insufficient inmate programming</strong></td>
<td>In its institutions, the Bureau of Prisons (BOP) makes a variety of programming available to inmates, including employment opportunities in the Federal Prison Industries Program, and educational programming, such as coursework to obtain a General Educational Development certificate.</td>
</tr>
<tr>
<td></td>
<td>• An official from one state reported that its department offers a variety of inmate programming, including educational classes, drug rehabilitation programs, cooking classes, and vocational training, including a barber program. In addition, the department provides inmates with employment opportunities in its correctional enterprises, which manufacture all of the department's furniture, cleaning supplies, and soap, and the officers' uniforms and inmates' clothing.</td>
</tr>
<tr>
<td></td>
<td>• One expert suggested using volunteers and community service programs to provide inmate programming, providing education programs by correspondence courses, and shifting assets to programs that reach a larger portion of the inmate population.</td>
</tr>
<tr>
<td><strong>Population of inmates with characteristics that may lead to more violent behavior</strong></td>
<td>Officials at one BOP institution reported that they train their officers in how to relate to their inmate population, which is now younger, less educated, and unused to structure in their lives.</td>
</tr>
<tr>
<td></td>
<td>• One expert stressed the need to improve the inmate classification process so that inmates are placed in facilities that are equipped to handle their behavior, as well as enhanced staff training.</td>
</tr>
<tr>
<td><strong>Correctional officer complacency</strong></td>
<td>Officials at one BOP institution reported that, after finding that officers were not routinely performing required duties, such as pat searches, they placed a greater emphasis on training and staff development, and worked to make their training more practical for staff by clearing out housing units in order to allow staff to participate in mock scenarios in a more real-world setting.</td>
</tr>
<tr>
<td></td>
<td>• An official from one state told us that the department has established a maximum ceiling on the number of years that an officer can retain the same post, and provides officers with the opportunity to trade posts with another officer to &quot;stay fresh&quot; by taking on a new post. Further, the department allows officers to shadow another officer before taking on a new position alone so that the officer can become better acquainted with the facility and the inmates before working independently.</td>
</tr>
<tr>
<td></td>
<td>• One expert suggested conducting regular “vulnerability tests” in which officers are tested with real-world situations to see how they perform. If the officers do not perform well, the expert stated that this should be used as a learning opportunity. Further, the expert suggested that officers should rotate posts, particularly if the duties of the post may lead to officer boredom.</td>
</tr>
</tbody>
</table>
## Appendix V: Institutional Factors That Impact Officer Safety and Examples of Mitigating Strategies Either Used by BOP or State DOCs or Suggested by Correctional Accrediting Experts

<table>
<thead>
<tr>
<th>Factors affecting officer safety</th>
<th>Examples of strategies to address factors</th>
</tr>
</thead>
</table>
| Insufficient discipline of inmates following a violation     | - An official from one state reported that the department provides inmates with the sanctions of potential violations in writing to make inmates aware that their actions will have consequences. Further, the department refers many assaults committed by inmates for criminal prosecution, and takes such assaults very seriously.  
- One expert stated that correctional organizations should create disciplinary procedures that are easier to enact, and create a “ticket” scenario in which the officer and inmate involved in a violation can officially, but simply, resolve the violation and agree on the appropriate discipline without having to go through the institution disciplinary process. |
| Intoxicated inmates as a result of inmate manufactured alcohol | - Officials at two BOP institutions reported that they conduct shakedowns of inmates to search for homemade alcohol and punish the inmates who are caught with it. One of these institutions also conducts breathalyzer tests on the inmates.  
- One expert suggested that facilities should identify the materials that inmates are using to make the intoxicants and then take steps to regulate the availability of these materials. |
| Insufficient information sharing among managers and staff within institutions | - The warden at one BOP institution stated that the institution developed a “Bus Report” to improve its information sharing among staff regarding new inmates. This report provides staff with information on all new inmates arriving at the facility.  
- One expert reported that placing a large television screen on which critical information is posted in locations that officers access is a relatively inexpensive way to ensure that officers at each shift can obtain updated information. |
| Inmate possession of unauthorized communication devices       | - Officials at one BOP institution reported that the institution’s use of body orifice scanners—which detect anything metal on the individual sitting in the chair attached to the scanner—have helped identify contraband cell phones in the facility.  
- An official from one state identified a number of strategies the department has taken to identify contraband cell phones at its facilities, including the use of employee and visitor searches, the installation of additional metal detectors, and the use of dogs to detect cell phones. In addition, the state has recently passed a statute making it illegal to bring a cell phone into a prison.  
- One expert emphasized the need to conduct proper searches of staff, visitors, volunteers, mail, and packages entering a facility. In addition, the expert stated that staff must monitor the visiting process, and screen both visitors and inmates during visitation. |
| Disruptive inmate behavior due to the sale and use of illegal drugs | - BOP officials reported that BOP utilizes machines that can detect drug residue as well as canines to detect drugs, conducts contraband searches and shakedowns, and administers breathalyzer tests.  
- An official from one state reported that the department conducts random drug testing, and scans entrants into the facility with machines that can detect drug residue.  
- One expert suggested the use of a drug offender classification program modeled on one developed by the Pennsylvania DOC which would identify and classify inmates involved in the sale and use of illegal drugs, place them in a separate drug offender program that includes sanctions and rewards for their behavior, and conduct intensive drug testing. |
| Inmates dissatisfied with food service                         | - BOP employs a standardized national menu at all of its institutions so that all inmates receive the same food.  
- One expert stated that the facility staff should obtain inmate input about the food, and that facility management should eat the meals the inmates eat on a weekly basis. The expert also stated that the facility could supplement its meals with farm produce occasionally. |
Appendix V: Institutional Factors That Impact Officer Safety and Examples of Mitigating Strategies Either Used by BOP or State DOCs or Suggested by Correctional Accrediting Experts

<table>
<thead>
<tr>
<th>Factors affecting officer safety</th>
<th>Examples of strategies to address factors</th>
</tr>
</thead>
</table>
| Ineffective inmate management    | • At one BOP facility we visited, lines are painted on the floor on both sides of a corridor to distinguish the area where inmates walk from the area designated for staff.  
• An official from one state explained that the department employs a “rule of five” strategy in which officers immediately separate inmates if more than five members of the same security threat group are congregated together. In addition, the department staggers the times at which inmates utilize the recreation yard and the dining facilities.  
• One expert reported that institutions should utilize video cameras and a “pass” system, which allows only those authorized to enter or exit (i.e., pass through) a certain area, to improve monitoring of inmates’ movement. |
| Inmate overcrowding              | • Officials from one of the BOP institution and 3 of the 14 states with whom we spoke reported converting community space, such as television rooms, into inmate cells to accommodate a larger inmate population.  
• One state official reported that the department has added temporary beds in its facilities, contracted with private prisons to obtain bed space, and put up tents at its low security facility to house inmates.  
• One expert recommended that inmate programs be carried out in shifts, from the early morning to the late evening, in order to split the amount of inmates between idle time and program time. |
| Correctional officer understaffing| • Officials at one BOP institution that has multiple facilities in one location, called a complex, have implemented a staffing plan referred to as consolidation, which allow them to fill in staffing shortages in one facility with officers from another facility within the complex.  
• Officials from one state told us that the department has recently created a “correctional trainee” employment classification so that these trainees can be hired and placed in a facility prior to the start of the next correctional academy class, thus reducing the lag time between when the officer is hired and when he or she reports to work at a facility. While in the trainee classification, these officers are required to work alongside another officer; however, the officials explained that the trainees still provide additional “eyes and ears” at the facility.  
• One expert reported that prisons need to embrace technologies like cameras on walls, and utilize better designs to eliminate blind spots, so that additional staff are not needed for monitoring. |
| Insufficient correctional training| • BOP’s Special Operations Response Teams (SORT) attend Crisis Management Training, which is an intensive full-time, weeklong program that trains officers in certain specialized skills, such as escorting high risk inmates, conducting hostage negotiations, and breaching prison doors and fences, among other skills.  
• An official from one state reported that state law requires that its officers receive 8 weeks of training at a correctional academy, followed by eight weeks of on-the-job training in which the officer shadows a more experienced officer before the new officer can begin work.  
• One expert recommended that institutions call upon the local law enforcement community for assistance or sharing of training needs. |
| Inmate gangs                      | • To manage inmate gangs in one BOP facility, the warden met directly with the leadership of rival security threat groups to discuss their integration into the general population and received assurances that the integration would go smoothly. During our visit, institution management indicated that so far the groups had not had any altercations.  
• An official in one state explained that the department operates a special unit that rehabilitates gang members.  
• One expert reported that institutions must not allow any type of gang displays, and should transfer gang members to different institutions frequently in order to disrupt gang organization. |

Source: GAO analysis of interviews with BOP and state officials, and surveys of accrediting experts.
Appendix VI: Comments from the Bureau of Prisons

U.S. Department of Justice
Federal Bureau of Prisons

April 5, 2011

David C. Maurer, Director
Homeland Security & Justice Issues
Government Accountability Office
Seattle, WA 98104

Dear Mr. Maurer:

The Bureau of Prisons (BOP) appreciates the opportunity to formally respond to the Government Accountability Office's draft report entitled Bureau of Prisons: Evaluating the Impact of Protective Equipment Could Help Enhance Officer Safety.

We have completed our review of the draft report. Our response to the Recommendation for Executive Action is as follows:

Recommendation: To capitalize on the data BOP already collects and to further DOJ’s evaluation efforts, we recommend that the Attorney General direct the Director of BOP to leverage existing BOP data systems, such as TRUINTEL and SENTRY, as well as the institutional expertise available through NIJ and NIC, as appropriate, to assess the impact of the equipment BOP has provided or could provide to its officers in better protecting them in a range of scenarios and settings.

Response: The Bureau concurs with this recommendation and with the assistance of NIJ and NIC, will conduct a study to evaluate the impact of protective equipment on officer safety.

If you have any questions regarding this response, please contact R. J. Marberry, Assistant Director, Program Review Division, at (202) 353-2302.

Sincerely,

Harley G. Lappin
Director

cc: Richard Theis, Assistant Director
Audit Liaison Group, JMD
Appendix VII: GAO Contact and Acknowledgments

GAO Contact

David C. Maurer, (202) 512-9627 or maurerd@gao.gov

Acknowledgments

In addition to the contact named above, key contributors to this report were Joy Gambino, Assistant Director; Jill Evancho, Analyst-In-Charge; Christian Montz, Julia Becker Vieweg, and Miriam Rosenau. Michele Fejfar assisted with design and methodology; Willie Commons III provided legal support; Pedro Almoguera provided economic expertise; and Katherine Davis provided assistance in report preparation.
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