THE USE AND EFFECTIVENESS OF SAFETY EQUIPMENT IN CORRECTIONAL FACILITIES ACROSS THE UNITED STATES

In partnership with the Association of State Correctional Administrators, CNA collaborated with seven facilities to gather information about officer injuries, use of safety equipment, and policies and procedures related to safety and safety equipment. Using robust qualitative analysis, we derived themes and findings from interviews, incident review panels, and observations of facility operations.

WHY AND HOW WE DID IT

Correctional officers work in dangerous environments that increase their risk of injury. Over the past several decades, new equipment and devices intended to improve correctional officer safety have become increasingly prevalent. But little is known about the specific equipment used in different facilities, the effectiveness of new technology, or the perceptions of safety equipment among the correctional officers. This report builds on a 2010 GAO report which surveyed the Federal Bureau of Prisons and correctional departments in 14 states.

CNA used a multi-case study framework, working with seven correctional facilities, chosen to be geographically representative across the Northeast, South, Midwest, and West regions of the United States.

WE SET OUT TO

Describe what safety equipment modalities are currently used in a sample of state-level adult correctional institutions in the United States.

1. Highlight the rationale for using these modalities.
2. Describe the policy attributes and training associated with these modalities.
3. Lay groundwork for future work regarding the effectiveness of the modalities currently used.
OVERALL FINDINGS
Based on the research we conducted, enhancing correctional officer safety is a matter of training, attitude, purchase and maintenance of personal safety equipment, as well as the purchase and maintenance of other safety equipment (e.g., surveillance systems, radio systems, and detection systems).

POLICIES AND PROCEDURES
Our team made a broad request for all documents pertaining to safety, safety equipment, and related topics. All participating facilities provided operational policies and procedures (including general and post orders) and some facilities also provided training documents.

Of the 157 individual documents, seventy were omitted from this analysis as they covered topics outside the scope of this study. Of the remaining 87 documents, we coded 70 as related to policies and procedures and 17 as related to training.

Policies related to incident reporting and notifications were most common, followed by use of force policies, emergency management and response policies and procedures, and procedures and policies related to inmate searches and contraband.

INCIDENTS REVIEWS
During the on-site visits, our team conducted incident review panels for incidents involving officer injuries. We discussed incident factors such as precipitating events, equipment types used, correctional staff injuries, and inmate behavior.

Many incidents occurred when staff were alone or only had one other staff person with them, and inadequate staffing was explicitly mentioned five times in the incident review interviews.

TYPES OF INJURIES SUSTAINED

<table>
<thead>
<tr>
<th>Type of Injury</th>
<th>Policies and Procedures</th>
<th>Training Documents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head injury</td>
<td>34%</td>
<td></td>
</tr>
<tr>
<td>Body injury</td>
<td>21%</td>
<td></td>
</tr>
<tr>
<td>Body fluid exposure</td>
<td>13%</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>7%</td>
<td></td>
</tr>
</tbody>
</table>

TABLE. TOPICS COVERED BY POLICIES, PROCEDURES, AND TRAINING DOCUMENT

<table>
<thead>
<tr>
<th>Topic</th>
<th>Policies and Procedures</th>
<th>Training Documents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Armory or arsenal (general)</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Body alarms and radio</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Chemical agents</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Emergency management and response</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>Firearms</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Incident reporting and notification</td>
<td>13</td>
<td>0</td>
</tr>
<tr>
<td>Inmate searches and contraband</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>Restraints</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Special teams</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Specific posts (post orders)</td>
<td>14</td>
<td>0</td>
</tr>
<tr>
<td>General safety and training requirements</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Use of force (including cell extractions)</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>Vests</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>
During the course of the study, our team conducted 61 interviews across seven facilities. Participants discussed equipment types, needs, perceived effectiveness, and procurement.

**Equipment Types**

A number of participants expressed the desire for more protective safety equipment, such as vests or upgraded vests (i.e., stab resistant) and stab-resistant gloves.

In all the facilities involved, officers regularly carried basic restraint devices (typically handcuffs) and radios, but no other equipment type was universal across the facilities.

Chemical agents (i.e., oleoresin capsicum (OC) spray and OC grenades) were available in all facilities, but were not standard issue in all facilities.

Another recurring theme when we asked about new equipment types was implementation of electroshock technologies. Participants pointed out that the ability to use electroshock technologies (e.g., TASERs) from further distances would provide a benefit for officer safety. Others, though, noted that electroshock technologies can be unreliable, especially for officers without sufficient training on the equipment.

**Equipment Procurement and Upkeep**

Participants also discussed how their facilities obtain and maintain equipment.

All facilities described having a robust system for tracking and maintaining equipment. Armorers and other personnel that were closely engaged in equipment upkeep described inventory procedures that allow them to identify expired and faulty equipment on a day-to-day basis.

**Non-equipment Findings**

There was a great quote from one officer interviewed. When asked what he thought the most important piece of equipment was, he said “my mouth”.

**DIRECT OBSERVATIONS**

During the course of the study, our team conducted direct observations at six facilities. We completed a total of 5 observation periods at control centers and 28 observation periods on-post with correctional officers and other facility staff.

**Control Centers**

In these facilities, officers noted that officer safety would be improved by use of decentralized storage.

**Equipment Types**

Officers noted that, particularly in chaotic incidents involving multiple parties, OC spray often affects officers as well as inmates.

**Non-equipment Findings**

Staff members noted that a major limitation of the body alarms is that some models do not provide location information. Personnel that did not have assigned duty locations, including non-correctional officer staff such
as counselors and medical staff, noted that response to active body alarms can be delayed if someone’s location is not known.

Officers also noted that new equipment comes with increased responsibility, including the need for additional training and procedures to ensure proper use. This concern was particularly salient for electroshock weapons.

**RECOMMENDATIONS**

The correctional field should re-examine differences across facilities in equipment policies and practices and consider whether consolidation and coordination are in order.

The correctional field should more intensely examine the equipment modalities in use, and the training provided regarding the use of equipment. This may also suggest additional efforts to convince equipment manufacturers to make adjustments to the safety products they develop.

Correctional facility staff believe that increasing the number of staff increases safety, but many are dealing with difficulty in recruitment and retention, an area that warrants further research.

Training for correctional officers in how to deal with agitated inmates and manage conflict, especially involving inmates with mental health issues, would have a positive impact on correctional officer safety.

**WHAT’S NEXT:**

While correctional agencies in this country have made significant strides in their record-keeping and performance monitoring and measurement, they still do not have sufficient data resources to support longitudinal research on the impact of corrections equipment on incidences of officer injury.

In the future, research regarding correctional officer safety and equipment modalities should broaden the range of equipment types considered like radios, and should employ customized longitudinal local data collection efforts to identify specific impacts of equipment usage and officer safety issues.

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**ABOUT CNA**

CNA is a nonprofit research and analysis organization dedicated to the safety and security of the nation. It operates the Center for Naval Analyses — the only Federally Funded Research and Development Center (FFRDC) serving the Department of the Navy — as well as the Institute for Public Research. CNA is dedicated to developing actionable solutions to complex problems of national importance. With nearly 700 scientists, analysts and professional staff, CNA takes a real-world approach to gathering data. Its one-of-a-kind field program places analysts on carriers and military bases, in squad rooms and crisis centers, working side-by-side with operators and decision-makers around the world. CNA supports naval operations, fleet readiness and great power competition. Its non-defense research portfolio includes criminal justice, homeland security and data management.

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