



## Justice Insights Series: Research Briefs for Policy and Practice

# Do Body Cameras Reduce Injuries During Uses of Force in Jails? Results from a Randomized Trial in a Virginia Detention Center

### Key Takeaways

- When jail deputies wore body-worn cameras, resident injuries during response-to-resistance incidents dropped by 58 percent.
- The likelihood that any given incident resulted in an injury fell from 28.4 percent without cameras to 8.8 percent with cameras.
- This study was the first randomized controlled trial to test the impact of body-worn cameras in a correctional setting, addressing a major gap in research on use of force injuries in jails and prisons.

### Why This Matters

Jail and prison staff sometimes must use force to maintain order and safety, and even necessary, lawful force can result in resident injuries. Despite this, little is known about how often correctional use of force incidents lead to injuries, making it difficult for agencies to know whether interventions such as body-worn cameras can help. Body-worn cameras have already reduced use-of-force incidents and injuries in some policing studies, leading correctional agencies to adopt the technology in the hope of achieving similar benefits.

Research on body-worn cameras in policing has shown mixed results, with some studies finding reductions in use of force and others finding no effect. Research specific to corrections has so far focused only on staff attitudes toward the cameras, not on whether they actually reduce injuries. One related study found that nonlethal weapons, such as pepper spray, reduced resident injuries in a county jail without changing overall use of force levels.

This study fills that gap with one of the first tests of a correctional body-worn camera program, examining whether the cameras reduced resident injuries during response-to-resistance events at the Loudoun County Adult Detention Center in Virginia.

### How the Study Worked

Researchers conducted a one-year randomized controlled trial at the Loudoun County Adult Detention Center, a mid-sized jail with an average daily population of about 222 residents. Each month, the jail's 12 housing and general-purpose units were randomly assigned so that six units had deputies wearing body-worn cameras and six did not. The assignments were repeated each month. Researchers tracked all incidents in which residents resisted deputies, known as response-to-resistance events, and recorded whether any resident injury occurred.

Because units were randomly assigned to have deputies wear body-worn cameras or not, researchers could directly compare injury rates between camera and non-camera units. This approach provides a more reliable way to isolate the effect of the

cameras than simply comparing injury rates before and after the cameras were introduced. Researchers also accounted for factors such as the number of deputies responding, the security level of the unit, and whether residents were male, to ensure differences in injuries weren't explained by those factors.

## What Was Learned

- **Body-worn cameras led to a large reduction in resident injuries.** Units with cameras had 58 percent fewer resident injuries than units without them. This translated to an estimated 0.07 injuries per month in camera units, compared with 0.17 injuries per month in non-camera units.
- **Cameras also reduced the odds that any single incident resulted in resident injury.** After accounting for other factors, incidents involving camera-equipped deputies were far less likely to result in resident injury, with an estimated 8.8 percent of incidents resulting in injury compared to 28.4 percent without cameras.
- **Most incidents and injuries happened in general-purpose areas, not housing units.** Of 97 total incidents and 18 injuries, the majority occurred in areas such as intake, medical, and transportation rather than in resident housing units, with the intake area alone accounting for 43 incidents and 8 injuries.
- **Units housing only male residents had a higher rate of injury.** Although there were only 6 incidents in all-male housing units, 4 of them resulted in injury—a notably higher rate than in female or mixed-sex units.

## What This Means in Practice

**The clearest takeaway for jail and prison administrators is that body-worn cameras meaningfully reduced resident injuries during use-of-force incidents in this facility.** Even though injuries were classified as minor, the reduction still matters: fewer injuries mean less risk to residents, fewer potential legal claims against the agency, and lower costs for medical care and litigation.

The authors note that this was a single mid-sized jail and that the relatively small number of incidents and injuries means the results should be interpreted with some caution. They also point out that deputies' own perceptions of safety did not improve after they were equipped with cameras, suggesting the cameras may work more as a deterrent against excessive force than as a way to change how deputies feel about the people in their custody. The authors encourage agencies to look closely at where incidents and injuries are concentrated, such as intake areas and units housing only male residents, since these may benefit from additional training or other safety measures alongside camera deployment.

### Source article

Lawrence, D. S., Peterson, B. E., White, M. D., Cunningham, B. C., & Coldren, J. R., Jr. (2023). Can body-worn cameras reduce injuries during response-to-resistance events in a jail setting? Results from a randomized controlled trial. *Journal of Criminal Justice*, (88), 102–111. <https://doi.org/10.1016/j.jcrimjus.2023.102111>

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