

## Acceptability of Video-Based Firearm Safety Education in the Pediatric Emergency Department

**Introduction:** Firearm (FA)-related injuries are a leading cause of death among U.S. youth. Storing FAs locked, unloaded and ammunition locked separately is protective against unintentional and self-inflicted injuries. There is little research on FA safety education for caregivers in Pediatric Emergency Departments (PEDs). Our objective was to compare, in a PED, acceptability of a 3-minute vs 30-second video promoting safe FA storage in homes with children.

**Methods:** We conducted a randomized control trial in a large PED (March-September 2021). Eligible participants were English-speaking caregivers of any patient not critically ill. Participants were surveyed about child safety behaviors (including FA storage) and assigned to watch a 3-minute or 30-second FA safety video. Both described safe storage principles; the longer also included temporary FA removal and a survivor testimonial. The primary outcome was acceptability, measured by responses to “The pediatric emergency room was an appropriate place to show this video”, on an after-video survey. Likert responses of “agree” or “strongly agree” on a 5-point scale were collapsed and compared vs grouped other responses using chi-square differences by subgroup.

**Results:** Of 250 participants, 32.4% had household FAs. Nearly all (99.6%) thought video recommendations were clear and 86.6% liked the videos, with no difference by video length or household FA ownership. Most (77.4%) agreed/strongly agreed that the PED was an appropriate place to show the video; this was higher in non-FA owners (85.2%) compared to FA-owners watching the 30-second video (62.2%;  $p=0.004$ ). Most 78.6% felt doctors should talk about FA storage, with no difference by household FA ownership. More caregivers viewing the longer video felt the length appropriate (99.2%) compared to those viewing the shorter video (81.1%,  $p<.001$ ); more in the 3-minute group reported plans to ask about FAs for their child’s playdates (87.0% vs 68.0%;  $p 0.001$ ).

**Conclusion:** This study shows that video-based FA safety education is acceptable in the PED regardless of household FA ownership. Though both videos were acceptable, more thought the 3-minute was an appropriate length, and the longer video was associated with greater reported intention to assess FA access in the homes where their children play. Video-based safety education can be used to provide consistent and broad education to parents in PEDs and would benefit from study in general EDs and other regions of the country.