

## H110 Trends in Officer-Involved Firearm Deaths in Oklahoma From 2005 to 2014

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After attending this presentation, attendees will be able to identify trends associated with officer-involved shooting deaths in the state of Oklahoma from 2005 to 2014. Attendees will be able to evaluate trends over this ten-year period in the number of such fatalities each year and the average number of gunshot wounds identified at autopsy.

This presentation will impact the forensic science community by establishing true numbers of strictly firearm-related fatalities involving law enforcement officers. This will provide the public and forensic community with unbiased statistics about the decedents, death circumstances, and postmortem findings that can then be used to enhance public and officer safety.

**Introduction:** The purpose of this study was to examine the trends associated with officer-involved shooting deaths in the state of Oklahoma over a ten-year period and to establish the number of these deaths that occur each year. These deaths were analyzed to determine if officer-involved firearm deaths are on the rise and if the number of gunshot wounds is similarly increasing. This is deemed necessary due to the prominence of officer-involved firearm fatalities discussed in the media and its perception that Oklahoma has high numbers of such fatalities.

**Methods:** A query of homicide deaths in the state medical examiner's database was conducted. Through retrospective review, the case files of deaths due to shootings by officers of the law were examined for the decedent's demographics, circumstances of death, and postmortem findings.

**Results:** From 2005 to 2014, 142 deaths were identified as being caused by one or more gunshot wounds from a law enforcement firearm. Decedents were primarily male (95%, n=135), White (62%, n=62), and between the ages of 30 years to 39 years (35%, n=50) or 20 years to 29 years (30%, n=42). Deaths most commonly occurred in a residence (30%, n=43) or a roadway (25%, n=36) and involved one (21%, n=30) or two (24%, n=34) gunshot wounds. The number of officer-involved firearm fatalities was found to significantly increase (p=0.018) over the ten-year period, particularly due to a significant increase between 2009 and 2014 (p=0.002); however, while there appears to be an increasing trend in the average number of gunshot wounds identified at autopsy, this is not a significant increase (p=0.495).

**Conclusions:** As hypothesized, the number of individuals killed in officer-involved shootings has increased, with the number of deaths almost quadrupling from 2009 to 2014. Conversely, there has not been an associated increase in the number of gunshot wounds inflicted by law enforcement in these deaths. With increased prevalence of officer-involved firearm fatalities, there is an increased need for a formal tracking system to facilitate public and officer safety.

## Forensic Pathology, Homicide, Officer-Involved Shooting

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