

INTRODUCTION: The pervasiveness of physical violence in the United States justice system often leads to injury and even violent death for those who are incarcerated. The purpose of this project is to better clarify the differences in death during incarceration between males and females, delineating the differences in demographic features and the circumstances of the violent death including location, injury pattern, and perpetrator. This analysis included legal intervention deaths (victim in custody or in process of custody) including homicide and suicide deaths.

METHODS: This is a report utilizing the multi-state National Violent Death Reporting System (NVDRS) data from the years 2003-2019. The NVDRS collects data on all deaths of violent nature. This includes homicides which include legal intervention deaths which apply to any violent death from a police officer, sheriff, guard, or other law enforcement officer. Data are abstracted from both coroner/medical examiner reports as well as legal proceedings on the demographics of both victims and perpetrators, type of weapon used, and other circumstances of fatal injury. Deaths occurring during incarceration or in process of legal intervention were compared for males and females including demographic characteristics of victims and features surrounding the violent death incident.

RESULTS: Overall, there were 4386 victims of violent death in our analysis with 371 female victims and 4015 male victims. There were 3440 victims of suicide, with 333 female victims and 3107 male victims; suicide was the most common cause of death during incarceration for both females and males (89.756% vs 77.38%; $p < 0.001$). Homicide was less common in females (1.62% vs 14.79%; $p < 0.001$) and legal intervention only occurred in males (2.17%; $p < 0.001$). Male victims were more likely to

be nonwhite race/ethnicity compared to females, while females were more likely to be experiencing homelessness, have documented mental illness, and comorbid substance abuse.