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 victim 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 violent death. During this analysis, suicide 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 incident.

Results: Overall, there were 4386 victim deaths of violent death in our analysis with 371 female victims and 4015 male victims. There were 3440 victim deaths 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 (89.75% 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 have nonwhite race/ethnicity compared to females, while females were more likely to have experienced homelessness, have documented mental illness, and committed substance abuse.

Background: Almost all United States departments of corrections have reported an increase in prisoner numbers in recent years, with poor outcomes such as overcrowding and short-staffed prisons (Daniel, 2004). More inmates may engage in increased conflict and interaction with prison staff and fellow inmates because of less space. There is potential for violent behavior among a large population of inmates living in proximity to a concern for prison officials and staff.

Conclusion: The prevalence of female inmate mental health treatment could either be the result of increased efforts to prevent suicide or interventions to prevent suicide with their current treatment being ineffective. Understanding psychopathic and substance use disorders is necessary for appropriate intervention for those vulnerable populations, especially female inmates.