## Racial Disparity and Disproportionality among Pediatric Firearm Homicide Decedents, 2014-2018

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Background. Firearms are the leading mechanism of injury death among children 0-17 years living in the United States, with approximately 60% of firearm-related deaths attributed to homicide. Despite a 74% increase in pediatric firearm fatalities from 2010-2020, funding restrictions have impeded research advancements. This study aimed to describe the individual and incident-level characteristics of pediatric firearm-related homicide, and to determine how these factors vary by race/ethnicity.

Method. Using 2014-2018 data from 17 states within the National Violent Death Reporting System (NVDRS), we employed a mixed methods approach. International Classification of Diseases, 10th revision and searches using key terms were used to identify the study population. Univariate and regression analysis were used to characterize and compare pediatric firearm decedents. Qualitative content analysis was used to examine factors attributed to firearm-related homicide. The Disproportionality Representation and Disparity Indices were used to examine racial differences among pediatric firearm decedents.

Results. A total of 1,085 pediatric firearm-related homicides were identified; 76% male, 61% non-Hispanic black (NHB), and 79% aged 12-17 years. NHW decedents were more likely to have a firearm-death related to a family conflict, a caregiver perpetrator, drug involvement, and be involved in a homicide-suicide event. In contrast, NHB decedents were more often direct or indirect victims of gang/community violence. Among NHW decedents, the perpetrators were more often a parent/caregiver or friend while NHB decedents were most often killed by strangers. NHB children died by firearm homicide at a rate that was three times greater than would be expected based on their proportion in the general population. NHB children were also 9.0 times as likely to die by firearm homicide as NHW children.

Qualitative analysis revealed two main patterns of contributing factors. First, the suspect was unknown in 35% of the qualitative sample. These deaths were overwhelmingly among older adolescent (16-17 years) NHB males. THC was commonly referenced in these incidents. The second pattern occurred in incidents involving parent perpetrators (20% of the sample). Girls and NHW individuals were overrepresented. Parent perpetrators more often killed multiple children and/or themselves. The remaining incidents involved a wide range of contributing factors, including gang activity, robbery, THC, and mass shootings.

Conclusion. Results support previous findings that NHB children are more susceptible to community violence, but they also suggest that NHW children are particularly vulnerable for firearm violence within the family or household. Future interventions should be tailored to consider these differences.