FORGING NEW FRONTIERS 2023 >>>>

Methods: This retrospective cross-sectional study used the Pediatric Hospital Information System (PHIS) database to identify children 0-21 years old with hospital encounters for snake bites from January 1, 2016, through December 31, 2022. Data elements collected included sex, race and ethnicity, intensive care unit (ICU) charge flag, urbanicity, U.S. region, disposition, severity of illness, length of stay, and antivenin administration. U.S. regions were categorized based on the United States Census Bureau Regions and Divisions. Frequencies and Chi-Square analysis were used to characterize the populations.

Results: There were 2,663 pediatric encounters for snake bites included in the study population, with patients primarily being male (61%), living in a Southern state (82%) and with a median age of 9.3 years (IQR: 5.5-13.1). Almost 82% of the patients were hospitalized for their injuries and 52% received antivenin at the children's hospital. Admitted children were significantly younger (p<0.0003) and more likely to live in non-urban zip codes (p<0.01), despite the majority of the study population having urban zip codes (72%). Rural children were also more likely to receive antivenin (p<0.01) than urban children.

Conclusions: There is significant variation in pediatric snake bites by U.S. region and rurality. Barriers to access to healthcare and antivenin may have led to more severe illness and subsequent hospitalization for injured rural children. Our findings could be helpful in directing allocations of antivenin and education about pediatric snake bite management to hospitals in areas with higher volumes of pediatric snake bites.

Objectives: 1. There was variation in patient characteristics and outcomes of pediatric hospitalizations related to snake bites in the United States. 2. A majority of children were hospitalized for their injuries and lived in Southern states. 3. Rural children were more likely to be admitted and receive antivenin.

A National Study of Rural Youth's Exposure to Firearm Violence and Attitudes Towards Firearm Safety Measures



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Background: Youth have become leading voices of concern as the epidemic of firearm deaths and injuries in the United States continues and worsens. The objective of our study's was to investigate rural adolescent's personal experiences with firearm-related violence, and their attitudes towards firearms and gun violence prevention strategies.

Methods: At the 2021 National FFA (formerly Future Farmers of America) Convention & Expo, a convenience sample of attendees were administered an anonymous survey at the University of Iowa Stead Family Children's Hospital injury prevention booth. The survey explored their personal experiences with firearm-associated deaths and injuries, and their attitudes regarding firearm-related issues and safety measures. After data were compiled, descriptive (frequencies), bivariate (chi-square, Fisher's exact test) and multivariable

logistic regression analyses were performed using Stata 15.1 (StataCorp, College Station, Texas).

Results: 3,206 adolescents that were 13-18 years old participated in the survey with nearly half (45%) reporting they lived on a farm or ranch, 34% living in the country but not on a farm and 21% from a town. About 10% of participants had personally seen someone threatened with a firearm. Nearly half (46%) stated they knew someone who had been killed or injured by gunfire. Most agreed that a firearm safety course (75%) and background checks (74%) should be mandatory before purchasing a firearm (including sales and gifts between private citizens). One-half agreed that there should be laws requiring safe storage (both locked and unloaded) of firearms in homes, 18% disagreed. Nearly two-fifths (38%) agreed that parents should ask families where their children visit whether they have firearms stored unlocked. Overall, 31% agreed there should be a national database of all privately owned firearms, 35% disagreed. Only 21% agreed healthcare providers should ask parents about firearm storage in the home, 58% disagreed. Overall, those from farms were less likely to agree with firearm safety measures. Over three-quarters agreed a firearm in the home made it safer with nearly half (48%) strongly agreeing.

Conclusions: A majority of adolescent participants supported some firearm safety measures including required training and background checks. However, they do not agree with a number of other measures, some that are major components of firearm injury prevention efforts of organizations like the American Academy of Pediatrics. We did find that many rural youth's lives had been affected by the threat of firearm violence and by firearm-related deaths and injuries. Our study did not investigate the effects of firearm violence on participants' mental health and wellbeing, but future studies addressing this question seem highly justified. Rural firearm injury prevention programs should explore the basis for present attitudes and how they might be best modified to improve safety practices.

Objectives: 1. To understand the degree of exposure rural youth have to firearm-related violence and its resultant injuries and deaths. 2. To be able to state some of the general attitudes youth have about firearm issues. 3. To be able to list at least three factors that might influence youth's attitudes regarding firearms.

Intentionality of Pediatric Firearm Injuries Based on Area Deprivation Index



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Background: Between 2012 and 2014, on average 1300 children under the age of 18 died each year because of a firearm related injury in the United States. Studies have shown that socioeconomic differences influence many health-related issues, including the overall number of firearm related injuries; however, the specific ways in which they affect pediatric firearm injuries is less well known. The Area Deprivation Index (ADI) is an objective measure used to stratify the level of socioeconomic disadvantage based on zip codes. This study aimed to divide locations into groups based on ADI and assess the intentionality of firearm injuries based on ADI in both rural