

Creating Healthy Work Environments 2019

State Legislation as a Protective Factor in Adolescent Suicide Rates

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Abstract

Background: Gun injury is a leading cause of death among U.S. children and adolescents with nearly 1,300 killed by guns every year. Approximately 38% of these deaths are suicides which was the second leading cause of death among adolescents. Each state has its own laws regarding guns, but only 32 out of 50 states have child protection or safe storage laws.

Purpose: The purpose of this study was to examine the relationship between state legislation containing child access prevention (CAP) and safe firearm storage laws and adolescent suicide by firearms from the years 2009-2016.

Methods: Secondary analysis of public access data from the CDC's Web-based Injury Statistics Query and Reporting System and to prevent Gun Violence.

Sample: A total of 50 states plus the District of Columbia were included.

Data Analysis: Descriptive analysis of state legislation was conducted. CAP and safe firearm storage laws were coded as present or absent. Suicide rate was determined per state as being above or below the CDC stated national average based on population.

Results: Out of 50 states and the District Columbia a total of 28 have a CAP laws, 12 have safe storage laws and 8 have both. States that had a suicide by firearms rate higher than the national average had a moderately strong and significant correlation with the absence of CAP laws ($r = 0.41$, $p < .05$) and a strong correlation ($r = 0.67$) with the absence safe storage laws ($r = 0.67$, $p < .01$) laws. Thirteen states with a CAP law only and 10 with safe storage laws only, were below the national suicide average. The eight states that have both CAP and safe storage laws were strongly correlated with suicide rates below the national suicide average ($r = 0.67$, $p < .01$).

Conclusion/Implications: Adolescents who have access to guns are more likely to be die by suicide than those who don't have guns. Findings suggest that greater legislation may provide a protective risk reduction factor for adolescent suicide where states with both CAP and safe storage laws are the most protective. Interestingly, in 2014 the eight states with both types of legislation all enacted ACA Medicaid expansion that covers mental health services for the most vulnerable low-income families. Nurses are front line providers that assess family safety at home, school and in the community in addition to providing vital expertise and advocacy that may influence policy in states that have less legislation protecting children from exposure to unsafe firearms in households. State CAP and safe firearm storage legislation offer limited protection from firearm related suicides but provides more than having none at all.

Funding Acknowledgement: This study was supported by a 2018 summer grant from the Villanova University Center for Research and Fellowships. Faculty mentor Elizabeth B. Dowdell, PhD, RN, FAAN.

Title:

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Keywords:

Adolescents, Firearm and Legislation

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Abstract Summary:

Gun injury is a leading cause of death among U.S. children and adolescents, with nearly 1,300 killed by guns every year. This study examines the relationship between firearm legislation and adolescent suicide by firearms on a state by state basis between the years 2009-2016. Nurses are vital to health promotion.

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