

DATE: March 18, 2023

TO: Chair Kropf, Vice Chairs Andersen and Wallan, and

Members of the House Committee on Judiciary

FROM: Ryan Hassan, MD, MPH, FAAP

Member of the Oregon Pediatric Society

SUBJECT: Support for HB 2006 & SB 527 – Raising Age for Firearm Possession & Purchase

My name is Ryan Hassan, MD, MPH, FAAP. I am a pediatrician practicing in Happy Valley and a member of the Oregon Pediatric Society and the American Academy of Pediatrics. We support HB 2006 and SB 527 to raise the minimum age to purchase or possess a firearm to age 21. If passed, this legislation will reduce the number of children injured or killed in Oregon each year.

Scope of the Problem

Though it has been highly politicized, gun violence is a public health issue. Guns are now the leading cause of fatal injury in the United States, more common than motor vehicle collisions.

In 2017 in the US, 23,854 people died by suicide with a gun; 14,542 people were intentionally killed by gun injuries; and 486 people died of unintentional gun injuries. About 10% of these deaths occur in children and adolescents. Among US adolescents 15-19 years old, gun homicides are the second leading cause of death; gun suicides are the third (1).

Oregon is no different from the rest of the country when it comes to gun violence. In 2017, 528 Oregonians died by firearms, and 83% of firearm deaths in Oregon are suicides. From 2013 – 2016 in Oregon, guns were responsible for 62% of all homicides, including 90% of all gangrelated homicides, 65% of all intimate partner violence homicides, and 92% of homicidesuicides (39).

This appears to be a uniquely American problem. Forty-nine times as many young adults die by guns in the US compared to other high-income countries. In fact, for every ten children under age 15 killed by guns globally, nine live in the US (2). This is not a reflection of our rates of mental illness, as gun-interest groups claim. Other countries with similar rates of mental illness and stricter gun laws have significantly lower rates of gun deaths than the US. This year, there will be more than 35,000 people who die from gun injuries in the US, including about 3,000 children. Today, seven children will wake up ready for a normal day, and be shot and killed. Tomorrow, the same thing will happen again.

Financial Burden

Though the greatest cost of gun violence is measured in lives lost, it also poses a significant financial burden. Gun violence costs Americans more than \$730 million per year in hospital



costs, most of which comes from Medicaid and low-income self-paying patients (6). The medical cost of treating gun injuries in children alone was over \$330 million in 2010 (1). The cost of lost productivity from gun violence is significantly higher. In 2000, the cost of lost productivity was \$16.6 billion for gun assaults and homicides, and \$16.3 billion for self-inflicted gun injuries and suicide (7).

Risks of Gun Ownership

Despite these stark statistics, many Americans believe that owning a gun makes them safer. This has been thoroughly disproven. Guns in the home in urban areas are associated with three times the risk of homicide and five times the risk of suicide (19, 20). Guns in the home are also 22 times more likely to be used in a domestic homicide, suicide, or unintentional shooting than to be used in self-defense (8). Carrying a gun during an assault increases the risk of being shot by 400% (21).

Perhaps the greatest risk of gun ownership is the risk of pediatric suicide. Multiple individual-level and ecologic studies have found that adolescents' risk for suicide increases as their access to guns does (11-16), even for adolescents without prior psychiatric diagnoses. We know that suicides in youth are often impulsive, and easy access to lethal weapons increases the risk: 90% of suicide attempts with guns result in death, compared to less than 5% of suicide attempts using less lethal means like medications or sharp objects (9, 10). Of the 107 Oregon youth who committed suicide in 2017, 47% did so by firearm, and firearms are responsible for 54% of all suicides in Oregon (38).

Effects of Legislation

Epidemiologists have studied gun legislation directly and found that it can be quite effective. Stricter gun laws are significantly associated with reduced firearm-related deaths on national and state levels (29, 30), while laws that relax gun restrictions are associated with more gun deaths (31). States with the strictest gun laws also have the lowest numbers of hospital visits for gun injuries (30). Laws that specifically reduce children's and adolescents' access to guns reduce deaths from unintentional shootings by as much as 23% and suicides by as much as 8.3% (32-34). These laws also lead families with preschool-aged children to store their guns more safely (35), and reduce the number of students who report carrying a gun in the last 30 days (37). When we regulate guns, our children are safer.

Bottom Line

When car crashes became a leading cause of death in the US, the automobile industry blamed the crashes on drivers. When we found lead in our water and our children's blood, industries that produced leaded gasoline and leaded paint attempted to squelch the data. When we learned that tobacco causes lung cancer, the tobacco industry claimed smoking was safe. In each of these cases, public health professionals and legislators found the courage to fight back against corporate profits for the sake of our children, and passed seat belt and car seat laws,

removed lead from American products, and regulated the sale of tobacco. As a result, tens of thousands of lives have been saved. Today we have an opportunity to find that same courage, and pass legislation that will reduce the number of Oregon children dying from guns each year; because even one dead child is too many. OPS and I urge you to vote yes on HB 2006.

References:

- 1. Centers for Disease Control and Prevention. Injury prevention and control: data and statistics (WISQARS) National Center for Health Statistics system. Available at: www.cdc.gov/injury/wisqrs/index.html. Accessed 3/30/19.
- 2. Grinshteyn E, Hemenway D. Violent death rates: the US compared with other high income OECD countries, 201. *Am J Med*. 2016; 129(3):266-273
- 3. Leventhal JM, Gaither JR, Sege R. Hospitalizations due to firearm injuries in children and adolescents. *Pediatrics*. 2014; 133(2):219-225
- 4. Centers for Disease Control and Prevention. Leading causes of death reports: 1981-1988.
- 5. DiScala C, Sege R. Outcomes in children and young adults who are hospitalized for firearms-related injuries. *Pediatrics*. 2014; 133(2):219-225
- 6. Spitzer SA, Staudenmayer KL, Tennakoon L, Spain DA, Weister TG. Costs and financial burden of initial hospitalizations for firearm injuries in the United States, 2006-2014. *Am J Public Health*. 2017; e1-e5
- 7. Corso PS, Mercy JA, Simon TR, Finkelstein EA, Miller TR. Medical costs and productivity losses due to interpersonal and self-directed violence in the United States. *Am J Prev Med.* 2007; 32(6):474-482
- 8. Kellermann AL, Rivara FP, Rushforth NB, et al. Gun ownership as a risk factor for homicide in the home. *N Engl J Med.* 1993; 329(15):1084-1091
- 9. Elnour AA, Harrison J. Lethality of suicide methods. Inj Prev. 2008; 14(1):39-45
- 10. Gould MS, Greenberg T, Velting DM, Shaffer D. Youth suicide risk and preventive interventions: a review of the past 10 years. *J Am Acad Child Adolesc Psychiatry*. 2003; 42(4):386-405
- 11. Miller M, Hemenway D. The relationship between firearms and suicide: a review of the literature. *Aggress Violent Behav*. 1999; 4(1):59-75
- 12. Miller M, Lippmann SJ, Azrael D, Hemenway D. Household firearm ownership and rates of suicide across the 50 United States. *J Trauma*. 2007;62(4):1029-1034; discussion 1034-1035
- 13. Kung HC, Pearson JL, Wei R. Substance use, firearm availability, depressive symptoms, and mental health service utilization among white and African American suicide decedents aged 15 to 64 years. *Ann Epidemiol.* 2005; 15(8):614-621
- 14. Wiebe DJ. Homicide and suicide risks associated with firearms in the home: a national case-control study. *Ann Emerg Med.* 2003; 41(6):771-782
- 15. Miller M, Azrael D, Hepbrun L, Hemenway D, Lippmann SJ. The association between changes in household firearm ownership and rates of suicide in the United States. 1981-2002. *Inj Prev*. 2006;12(3):178-182
- 16. Miller M, Hemenway D, Azrael D. Firearms and suicide in the northeast. *J Trauma*. 2004; 57(3):626-632
- 17. Brent DA, Perper JA, Moritz G, Baugher M, Schweers J, Roth C. Firearms and adolescent suicide. A community case-control study. *Am J Dis Child*. 1993; 147(10):1066-1071
- 18. Brent DAPJ, Perper J, Moritz G, Baugher M, Allman C. Suicide in adolescents with no apparent psychopathology. *J Am Acad Child Adolesc Psychiatry*. 1993; 32(3):494-500



- 19. Kellermann AL, Rivarra FP, Somes G, et al. Suicide in the home in relation to gun ownership. *N Engl J Med.* 1992; 327(7):467-472
- 20. Bailey JE, Kellermann AL, Somes GW, Banton JG, Rivara FP, Rushforth NP. Risk factors for violent death of women in the home. *Arch Intern Med.* 1997; 157(7):777-782
- 21. Branas CC, Richmond TS, Culhane DP, Ten Have TR, Wiebe DJ. Investigating the link between gun possession and gun assault. *Am J Public Health*. 2009; 99(11):2034-2040
- 22. Parikh K, et al. Hosp Pediatr. May 23, 2017,

http://hosppeds.aappublications.org/content/early/2017/05/19/hpeds.2016-0146

- 23. Jackman GA, Farah MM, Kellermann AL, Simon HK. Seeing is believing: what do boys do when they find a real gun? *Pediatrics*. 2001; 107(6):1247-1250
- 24. Baxley F, Miller M. Parental misperceptions about children and firearms. *Arch Pediatr Adolesc Med.* 2006; 160(5):542-547
- 25. Farah MM, Simon HK, Kellerman AL. Firearms in the home: parental perceptions. *Pediatrics*. 1999; 104(5 pt 1):1059-1063
- 26. Schwebel DC, Lewis T, Simon TR, et al. Prevalence and correlates of firearm ownership in the homes of fifth graders: Birmingham, AL, Houston, TX, and Los Angeles, CA. *Health Educ Behav.* 2014; 41(3):299-306
- 27. Johnson RM, Miller M, Vriniotis M, Azrael D, Hemenway D. Are household firearms stored less safely in homes with adolescents? Analysis of a national random sample of parents. *Arch Pediatr Adolesc Med.* 2006; 160(8):788-792
- 28. Grossman DC, Mueller BA, Riedy C, et al. Gun storage practices and risk of youth suicide and unintentional firearm injuries. *JAMA*. 2005; 293(6):707-714
- 29. Santaella-Tenorio J, Cerda M, Villaveces A, Galea S. What do we know about the association between firearm legislation and firearm-related injuries? *Eidemiol Rev.* 2016; 38(1):140-157
- 30. Simonetti JA, Rowhani-Rahbar A, Mills B, Young B, Rivara FP. State firearm legislation and nonfatal firearm injuries. *Am J Public Health*. 2015; 105(8):1703-1709
- 31. Kalesan B, Mobily ME, Keiser O, Fagan JA, Galea S. Firearm legislation and firearm mortality in the USA: a cross-sectional, state-level study. *Lancet*. 2016; 387(10030):1847-1855
- 32. Cummings P, Grossman DC, Rivara FP, Koepsell TD. State gun safe storage laws and child mortality due to firearms. *JAMA*. 1997; 278(13):1084-1086
- 33. Webster DW, Vernick JS, Zeoli AM, Manganello JA. Association between youth-focused firearm laws and youth suicides. *JAMA*. 2004; 292(5):594-601
- 34. Hepburn L, Azrael D, Miller M, Hemenway D. The effect of child access prevention laws on unintentional child firearm fatalities, 1979-2000. *J Trauma*. 2006; 61(2):423-428
- 35. Prickett KC, Martin-Storey A, Crosnoe R. State firearm laws, firearm ownership, and safety practices among families of preschool-aged children. *Am J Public Health*. 2014; 104(6):1080-1086
- 36. Eaton DK, Kann L, Kinchen S, et al; Centerse for Disease Control and Prevention (CDC). Youth risk behavior surveillance United States, 2011. *MMWR Surveill Summ*. 2012; 61(4)1-162
- 37. Xuan Z, Hemenway D. State gun law environment and youth gun carrying in the United States. *JAMA Pediatr.* 2015; 169(11):1024-1031
- 38. Youth Suicide Intervention and Prevention Plan Annual Report. Oregon Health Authority, Health Systems Division. 2018.
- 39. Oregon Violent Death Reporting System. Oregon Health Authority. www.oregon.gov/oha/PH/DiseasesConditions/InjuryFatalityData. Accessed 3/9/2021.