IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF MARYLAND

MARYLAND SHALL ISSUE, INC., et al. *

Plaintiffs, *

v. * Civil Action No.: 1:22-cv-00865-SAG

ANNE ARUNDEL COUNTY, MD

Defendant. *

* * * * * * * * * *

DECLARATION OF JAMES MILLER IN SUPPORT OF DEFENDANT'S CROSS-MOTION FOR SUMMARY JUDGMENT AND MOTION IN LIMINE TO EXCLUDE TESTIMONY OF PLAINTIFFS' EXPERT

I, James Miller, subject to penalty of perjury under 28 U.S.C. § 1746, declare as follows:

- 1. I am over the age of 18 and have personal knowledge of all the facts stated in this declaration.
- 2. I am an attorney with Everytown Law and counsel of record for Defendant Anne Arundel County, Maryland, in this matter.
- 3. Attached as Exhibit 1 is a true and correct copy of the expert report of Dr. Alexander McCourt in the present case, dated and signed on July 29, 2022.
- 4. Attached as Exhibit 2 is a true and correct copy of the expert report of Dr. Nilesh Kalyanaraman in the present case, dated and signed on July 29, 2022
- 5. Attached as Exhibit 3 is a true and correct copy of the transcript of the deposition of Plaintiff's expert Gary Kleck, held on September 29, 2022.

- 6. Attached as Exhibit 4 is a true and correct copy of Bill 108-21 enacted by the County Council of Anne Arundel County, Maryland on January 10, 2022.
- 7. Attached as Exhibit 5 is a true and correct copy of the pamphlets prepared and distributed by the Anne Arundel County Health Department pursuant to Bill 108-21. These are one pamphlet titled "Firearms and Suicide Prevention" and a one page insert titled "Do You Have Unresolved Conflicts."
- 8. Attached as Exhibit 6 is a true and correct copy, as of October 19, 2022, of the front webpage of the National Shooting Sports Foundation ("NSSF") website.
- 9. Attached as Exhibit 7 is a true and correct copy, as of October 19, 2022, of a webpage titled "Legislative Action Center" within the NSSF website.
- 10. Attached as Exhibit 8 is a true and correct copy, as of October 19, 2022, of a webpage titled "Suicide Prevention Research" within the American Foundation for Suicide Prevention ("AFSP") website.
- 11. Attached as Exhibit 9 is a true and correct copy, as of October 19, 2022, of a webpage titled "About AFSP" within the AFSP website.
- 12. Attached as Exhibit 10 is a true and correct copy, as of October 19, 2022, of a webpage titled "Suicide Prevention for Retailers and Ranges" within the NSSF website.
- 13. Attached as Exhibit 11 is a true and correct copy, as of October 19, 2022, of a webpage titled "Suicide Prevention" within the NSSF website.
- 14. Attached as Exhibit 12 is the true and correct copy of a publication by the National Center for Injury Prevention and Control, Division of Violence

Prevention within the United States Centers for Disease Control and Prevention ("CDC") titled "Preventing Suicide: A Technical Package of Policy, Programs, and Practices."

- 15. Attached as Exhibit 13 is the true and correct copy of a publication by the National Institute of Mental Health ("NIMH") within the National Institutes of Health ("NIH") titled "Frequently Asked Questions About Suicide."
- 16. Attached as Exhibit 14 is the true and correct copy of a publication by the Maryland Department of Health ("MDH") titled "Risk Factors of Suicide."
- 17. Attached as Exhibit 15 is a true and correct copy of a webpage, as of October 19, 2022, titled "Risk factors, protective factors, and warning signs" within the American Foundation for Suicide Prevention ("AFSP") website.
- 18. Attached as Exhibit 16 is a true and correct copy of a webpage, as of October 21, 2022, titled "Risk and Protective Factors" within the United States Centers for Disease Control and Prevention ("CDC") website.
- 19. Attached as Exhibit 17 is a true and correct copy, as of October 19, 2022, of a webpage titled "Crisis Response System," otherwise known as the "Warmline," on the Anne Arundel County Mental Health Agency, Inc. website.
- 20. Attached as Exhibit 18 is a true and correct copy of excerpts of the transcript of the deposition of John Walker, Rule 30(b)(6) witness for Plaintiff Pasadena Arms, held on September 7, 2022 in the present case.

- 21. Attached as Exhibit 19 is a true and correct copy of excerpts of the transcript of the deposition of William Quick, Rule 30(b)(6) witness for Plaintiff Cindy's Hot Shot, held on September 8, 2022, in the present case.
- 22. Attached as Exhibit 20 is a true and correct copy of excerpts of the transcript of the deposition of Micah Schaefer, Rule 30(b)(6) witness for Plaintiff Field Traders, LLC, held on September 8, 2022, in the present case.
- 23. Attached as Exhibit 21 is a true and correct copy of excerpts, with redactions, of the transcript of the deposition of Katherine Novotny, Rule 30(b)(6) witness for Plaintiff Maryland Shall Issue, Inc. ("MSI"), held on September 9, 2022, in the present case.
- 24. Attached as Exhibit 22 is a true and correct copy of excerpts of the transcript of the deposition of Donna Worthy, Rule 30(b)(6) witness for Plaintiff Worth-A-Shot Firearms, held on September 7, 2022, in the present case
- 25. Attached as Exhibit 23 is a true and correct copy of the expert report of Professor Gary Kleck in the present case, dated on August 25, 2022.
- 26. Attached as Exhibit 24 is a true and correct copy of a February 2018 Statement of the American Association of Suicidology Regarding the Role of Firearms in Suicide and the Importance of Means Safety in Preventing Suicide Deaths.
- 27. Attached as Exhibit 25 is a true and correct copy of excerpts of the glossary of the CDC publication Principles of Epidemiology in Public Health Practice:

 An Introduction to Applied Epidemiology and Biostatistics (3d Ed.) (2012).

- 28. Attached as Exhibit 26 is a true and correct copy of a chapter titled *The effect of firearms on suicide* published by Gary Kleck in a 2019 book titled "Gun Studies: Interdisciplinary Approaches to Politics, Policy, and Practice."
- 29. Attached as Exhibit 27 is a true and correct copy of a study by Gary Kleck titled *Macro-level research on the effect of firearms prevalence on suicide rates* a systematic review and new evidence, published in Social Science Quarterly on May 3, 2019.
- 30. Attached as Exhibit 28 is a true and correct copy of a study by Gary Kleck titled Cross-national Association of Gun Ownership Rates and Suicide Rates: an Analysis of 194 Nations, published in Archives of Suicide Research on May 12, 2021.
- 31. Attached as Exhibit 29 is a true and correct copy of a document titled, "CDC Clear Communication Index: A Tool for Developing and Assessing CDC Public Communication Products, User Guide," authored by the Centers for Disease Control and Prevention, released in August, 2019.
- 32. Attached as Exhibit 30 is a true and correct copy, as of October 19, 2022, of a webpage entitled, "Family Health History and Cancer," on the CDC website.
- 33. Attached as Appendix 1 is a list of social science research that is relevant to the factual statements in the pamphlets prepared and distributed by the Anne Arundel County Health Department pursuant to Bill 108-21. True and correct excerpts of relevant findings from each study are also compiled in Appendix 1.

- 34. Attached as Exhibits 31 to 74 are true and correct copies of the studies listed in Appendix 1. These studies are:
 - a. Exhibit 31, a study by Michael D. Anestis et al. titled *The Association Between State Laws Regulating Handgun Ownership and Statewide Suicide Rates*, published in the American Journal of Public Health in October, 2015.
 - b. Exhibit 32, a study by Michael D. Anestis and Claire Houtsma titled *The Association Between Gun Ownership and Statewide Overall Suicide Rates*, published in Suicide and Life-Threatening Behavior in April, 2018.
 - c. Exhibit 33, a study by Andrew Anglemeyer et al. titled *The Accessibility* of *Firearms and Risk for Suicide and Homicide Victimization Among Household Members: A Systematic Review and Meta-analysis*, published in Annals of Internal Medicine in 2014.
 - d. Exhibit 34, a study by James E. Bailey et al. titled *Risk Factors for Violent Death of Women in the Home*, published in Archives of Internal Medicine on April 14, 1997.
 - e. Exhibit 35, a study by David A. Brent et al. titled *Risk Factors for Adolescent Suicide: A Comparison of Adolescent Suicide Victims With Suicidal Inpatients*, published in the Archives of General Psychiatry in June, 1988.
 - f. Exhibit 36, a study by David A. Brent et al. titled *The Presence and Accessibility of Firearms in the Homes of Adolescent Suicides: A Case-Control Study*, published in the Journal of the American Medical Association on December 4, 1991.
 - g. Exhibit 37, a study by David A. Brent et al. titled *Suicide in Adolescents* with No Apparent Psychopathology, published in the Journal of the American Academy of Child & Adolescent Psychiatry in May, 1993.
 - h. Exhibit 38, a study by David A. Brent et al. titled *Firearms and Adolescent Suicide: A Community Case-Control Study*, published in the American Journal of Diseases of Children in October, 1993.
 - i. Exhibit 39, a study by David A. Brent et al. titled *Suicide in affectively ill adolescents: a case-control study*, published in the Journal of Affective Disorders in July, 1994
 - j. Exhibit 40, a study by Justin T. Briggs and Alexander Tabarrok titled *Firearms and suicides in US states*, published in the International Review of Law and Economics in 2014.

- k. Exhibit 41, a study by Yeates Conwell et al. titled *Access to Firearms* and *Risk for Suicide in Middle-Aged and Older Adults*, published in the July-August 2002 edition of the American Journal of Geriatric Psychiatry.
- 1. Exhibit 42, a study by Marisa K. Crowder and Markus Kemmelmeier titled *Untreated Depression Predicts Higher Suicide Rates in U.S. Honor Cultures*, published in the Journal of Cross-Cultural Psychology in August, 2014.
- m. Exhibit 43, a study by Peter Cummings et al. titled *The Association between the Purchase of a Handgun and Homicide or Suicide*, published in the American Journal of Public Health in June, 1997.
- n. Exhibit 44, a study K.M. Grassel et al. titled Association between handgun purchase and mortality from firearm injury, published in Injury Prevention in March, 2003.
- o. Exhibit 45, a study by David C. Grossman et al. titled *Gun Storage Practices and Risk of Youth Suicide and Unintentional Firearm Injuries*, published in the Journal of the American Medical Association on February 9, 2005.
- p. Exhibit 46, a study by David Hamilton and Augustine J. Kposowa titled Firearms and Violent Death in the United States: Gun Ownership, Gun Control and Mortality Rates in 16 states, 2005-2009, published in the British Journal of Education, Society, and Behavioural Science on February 16, 2015.
- q. Exhibit 47, a study by Arthur L. Kellermann et al. titled *Suicide in the Home in Relation to Gun Ownership*, published in the New England Journal of Medicine on August 13, 1992.
- r. Exhibit 48, a study by Augustine J. Kposowa titled *Association of suicide rates, gun ownership, conservatism and individual suicide risk,* published in Social Psychiatry and Psychiatric Epidemiology in September, 2013.
- s. Exhibit 49, a study by Augustine J. Kposowa titled *Impact of Firearm Availability and Gun Regulation on State Suicide Rates*, published in Suicide and Life-Threatening Behavior in December, 2016.
- t. Exhibit 50, a study by Hsiang-Ching Kung et al. titled *Risk factors for male and female suicide decedents ages 15-64 in the United States*, published in Social Psychiatry and Psychiatric Epidemiology in August, 2003.
- u. Exhibit 51, a study by Hsiang-Ching Kung et al. titled Substance Use, Firearm Availability, Depressive Symptoms, and Mental Health Service

- Utilization Among White and African American Suicide Decedents Aged 15 to 64 Years, published in Annals of Epidemiology in September, 2005.
- v. Exhibit 52, a study by Andrew J. Kvisto et al. titled Adolescent Suicide, Household Firearm Ownership, and the Effect of Child Access Prevention Laws, published in the Journal of the American Academy of Child & Adolescent Psychiatry in September 2021.
- w. Exhibit 53, a study by Tyler J. Lane titled *Associations Between Firearm* and Suicide Rates: A Replication of Kleck (2021), published in Archives of Suicide Research on June 10, 2022.
- x. Exhibit 54, a study by Gad Lubin et al. titled *Decrease in Suicide Rates*After a Change of Policy Reducing Access to Firearms in Adolescents: A

 Naturalistic Epidemiological Study, published in Suicide and LifeThreatening Behavior in November, 2010.
- y. Exhibit 55, a study by Matthew Miller et al. titled *Firearm Availability* and *Unintentional Firearm Deaths, Suicide, and Homicide among 5-14* Year Olds, published in the Journal of Trauma, Injury, Infection, and Critical Care in February, 2002.
- z. Exhibit 56, a study by Matthew Miller et al. titled Firearm Availability and Suicide, Homicide, and Unintentional Firearm Deaths Among Women, published in the Journal of Urban Health in March, 2002.
- aa. Exhibit 57, a study by Matthew Miller et al. titled *Household Firearm Ownership and Suicide Rates in the United States*, published in Epidemiology in September, 2002.
- bb. Exhibit 58, a study by Matthew Miller et al. titled *Firearms and Suicide* in the Northeast, published in the Journal of Trauma, Injury, Infection, and Critical Care in September, 2004.
- cc. Exhibit 59, a study by Matthew Miller et al. titled *The association between changes in household firearm ownership and rates of suicide in the United States*, 1981-2002, published in Injury Prevention in 2006.
- dd. Exhibit 60, a study by Matthew Miller et al. titled *Household Firearm Ownership and Rates of Suicide Across the 50 United States*, published in the Journal of Trauma, Injury, Infection, and Critical Care in April, 2007.
- ee. Exhibit 61, a study by Matthew Miller et al. titled Recent psychopathology, suicidal thoughts and suicide attempts in households with and without firearms: findings from the National Comorbidity Study Replication, published in Injury Prevention in August, 2009.
- ff. Exhibit 62, a study by Matthew Miller et al. titled Firearms and Suicide in the United States: Is Risk Independent of Underlying Suicidal

- *Behavior*, published in the American Journal of Epidemiology on August 23, 2013.
- gg. Exhibit 63, a study by Matthew Miller et al. titled *Firearms and suicide* in *US Cities*, published in Injury Prevention in December, 2013.
- hh. Exhibit 64, a study by Matthew Miller et al. titled *Are We Missing Something Pertinent? A Bias Analysis of Unmeasured Confounding in the Firearm-Suicide Literature*, published in Epidemiologic Reviews on January 13, 2016.
- ii. Exhibit 65, a study by Matthew Miller et al. titled Suicide Deaths Among Women in California Living With Handgun Owners vs Those Living With Other Adults in Handgun-Free Homes, 2004-2016, published in Psychiatry Division of the Journal of the American Medical Association on April 22, 2022.
- jj. Exhibit 66, a study by April Opoliner et al. titled *Explaining geographic* patterns of suicide in the US: the role of firearms and antidepressants, published in Injury Epidemiology in December, 2014.
- kk. Exhibit 67, a study by Julie A. Phillips titled Factors Associated With Temporal and Spatial Patterns in Suicide Rates Across U.S. States, 1976-2000, published in Demography in April, 2013.
- ll. Exhibit 68, a study by Thomas Reisch et al. titled *Change in Suicide Rates in Switzerland Before and After Firearm Restriction Resulting From the 2003 "Army XXI" Reform*, published in the American Journal of Psychiatry in September, 2013.
- mm. Exhibit 69, a study by Michael Siegel and Emily F. Rothman titled *Firearm Ownership and Suicide Rates Among US Men and Women,* 1981-2013, published in the American Journal of Public Health in July, 2016.
- nn.Exhibit 70, a study by Nathan D. L. Smith and Ichiro Kawachi titled State-level social capital and suicide mortality in the 50 U.S. states, published in Social Science & Medicine in November, 2014.
- oo. Exhibit 71, a study by David M. Studdert et al. titled *Handgun Ownership and Suicide in California*, published in the New England Journal of Medicine on June 4, 2020.
- pp. Exhibit 72, a study by Daniel W. Webster et al. titled Association between Youth-Focused firearm Laws and Youth Suicides, published in the Journal of the American Medical Association on August 4, 2004.
- qq. Exhibit 73, a study by Douglas J. Wiebe titled *Homicide and Suicide Risks Associated With Firearms in the Home A National Case-Control Study*, published in Injury Prevention in June, 2003.

rr. Exhibit 74, a study by Garen J. Wintemute et al. titled *Mortality Among Recent Purchasers of Handguns*, published in the New England Journal of Medicine on November 18, 1999.

Executed this 24th day of October, 2022

James Miller

Appendix 1
Social Science Research on the Relationship Between Firearms Access and Suicide Risk

Exhibit #	Citation	Relevant Findings
31	Michael D. Anestis et al., <i>The Association Between State Laws Regulating Handgun Ownership and Statewide Suicide Rates</i> , AM. J. PUB. HEALTH, Oct. 2015	"[Our] results provide support for the notion that specific laws regulating the ownership of handguns are associated with a range of suicide-related outcomes beyond the effects of poverty and population density." (p. 2064)
32	Michael D. Anestis & Claire Houtsma, <i>The Association</i> Between Gun Ownership and Statewide Overall Suicide Rates, SUICIDE AND LIFE-THREATENING BEHAVIOR, Apr. 2018	"[Our] findings support the notion that access to and familiarity with firearms serves as a robust risk factor for suicide." (p. 204)
33	Andrew Anglemeyer et al., The Accessibility of Firearms and Risk for Suicide and Homicide Victimization Among Household Members; A Systematic Review and Meta-analysis, Annals of Internal Med., Jan. 21, 2014	"Conclusion: Access to firearms is associated with risk for completed suicide and being the victim of homicide." (p. 101)
34	James E. Bailey et al., Risk Factors for Violent Death of Women in the Home, ARCHIVES OF INTERNAL MEDICINE, Apr. 14, 1997	"Having 1 or more guns in the home was independently associated with suicide (adjusted OR, 4.6, 95% CI 1.2-17.5) even after the effects of depression and living alone were taken into consideration." (p. 779)
35	David A. Brent et al., Risk Factors for Adolescent Suicide: A Comparison of Adolescent Suicide Victims With Suicidal Inpatients, ARCHIVES OF GENERAL PSYCHIATRY, June 1988	"CONCLUSION Several putative risk factors for completed suicide among youth have been identified in a comparison of completers and suicidal inpatients: high suicidal intent, diagnosis of bipolar disorder, affective disorder with comorbidity, lack of psychiatric treatment, and availability of firearms in the home." (p. 587)

Exhibit #	Citation	Relevant Findings
36	David A. Brent et al., The Presence and Accessibility of Firearms in the Homes of Adolescent Suicides: A Case- Control Study, JAMA, Dec. 4, 1991	"Conclusions.—The availability of guns in the home, independent of firearms type or method of storage, appears to increase the risk for suicide among adolescents." (p. 2989)
37	David A. Brent et al., Suicide in Adolescents with No Apparent Psychopathology, J. Am. ACAD. CHILD ADOLESCENT PSYCHIATRY, May 1993	"[O]n the basis of this and previous findings associating a firearm in the home and completed suicide, it is clear that removing guns from the home, or at minimum, not storing them loaded, may help prevent suicides in this group." (p. 499)
38	David A. Brent et al., Firearms and Adolescent Suicide: A Community Case-Control Study, AM. J. DISEASES OF CHILDREN, Oct. 1993	"Even after adjusting for differences in rates of psychiatric disorders between suicide victims and controls, the association between suicide and both any gun (odds ratio [OR]=4.4, 95% confidence interval [Cl]=1.1 to 17.5) and handguns (OR=9.4,95% Cl=1.7 to 53.9) in the home were both highly significant." (p. 1066)
39	David A. Brent et al., Suicide in affectively ill adolescents: a case-control study, J. AFFECTIVE DISORDERS, Jul. 1994	"In conclusion, the following may predispose affectively ill youth to suicide: diagnosis of major depression, comorbid substance abuse, previous suicide attempt, legal difficulties, family history of affective illness, substance abuse, and suicidal behavior, and availability of handguns in the home." (p. 200)
40	Justin T. Briggs & Alexander Tabarrok, <i>Firearms and suicides</i> <i>in US states</i> , INT'L REVIEW OF LAW & ECON., 2014	"In brief, we find strong evidence that increases in gun prevalence cause an increase in firearm suicides. Despite substantial substitution of methods, we also see strong evidence that increased gun prevalence causes an increase in overall suicide. The magnitude of this result is not trivial." (p. 187)
41	Yeates Conwell et al., Access to Firearms and Risk for Suicide in Middle-Aged and Older Adults, Am. J. Geriatric Psychiatry, July-August 2002	"Presence of a firearm in the home was associated with increased risk for suicide, even after controlling for psychiatric illness." (p. 407)

Exhibit #	Citation	Relevant Findings
42	Marisa K. Crowder & Markus Kemmelmeier, <i>Untreated</i> Depression Predicts Higher Suicide Rates in U.S. Honor Cultures, JOURNAL OF CROSS- CULTURAL PSYCHOLOGY, Aug. 2014	"Gun ownership was associated with higher suicide rates, thus corroborating previous findings that the availability of firearms serves as an efficient means to commit suicide." (p. 1154)
43	Peter Cummings et al., <i>The</i> Association between the Purchase of a Handgun and Homicide or Suicide, Am. J. Pub. Health, June 1997	"The adjusted relative risk for suicide was 1.9 (95% confidence interval [CI] = 1.4, 2.5) for persons with a history of family handgun purchase from a registered dealerLegal purchase of a handgun appears to be associated with a long-lasting increased risk of violent death." (p. 974)
44	K.M. Grassel et al., Association between handgun purchase and mortality from firearm injury, INJURY PREVENTION, Mar. 2003	"Among Californians who died in 1998, those whose deaths resulted from violence or firearm related injury were more likely than those who died from non-injury causes to have purchased a handgun between 1996 and 1998. [T]his association was strongest among persons dying from suicide" (p. 50)
45	David C. Grossman et al., Gun Storage Practices and Risk of Youth Suicide and Unintentional Firearm Injuries, JAMA, Feb. 9, 2005	"Safe storage practiceswere shown to be protective for unintentional firearm shootings and suicide attempts among adolescents and children." (p. 712)
46	David Hamilton & Augustine J. Kposowa, Firearms and Violent Death in the United States: Gun Ownership, Gun Control and Mortality Rates in 16 states, 2005- 2009, BRITISH J. ED., SOCIETY & BEHAVIOURAL SCIENCE, Feb. 16, 2015	"Results: We find wide variations in mortality rates that are statistically related to variations in the prevalence of guns in the home and the strength of state gun control laws. The incidence of suicide is most affected by the firearms availability and the weakness of gun controls." (p. 85)
47	Arthur L. Kellermann et al., Suicide in the Home in Relation to Gun Ownership, N.E. J. MEDICINE, Aug. 13, 1992	"Conclusions. Ready availability of firearms is associated with an increased risk of suicide in the home." (p. 467)

Exhibit #	Citation	Relevant Findings
48	Augustine J. Kposowa, Association of suicide rates, gun ownership, conservatism and individual suicide risk, SOCIAL PSYCHIATRY AND PSYCHIATRIC EPIDEMIOLOGY, Sept. 2013	"Results showed that firearm availability at the state level is a significant risk factor for individual suicide." (p. 1473)
49	Augustine Kposowa et al., <i>Impact</i> of Firearm Availability and Gun Regulation on State Suicide Rates, SUICIDE AND LIFE-THREATENING BEHAVIOR, Dec. 2016	"Household firearm ownership was strongly associated with both suicide by all mechanisms, and firearm suicide. Storage practices had especially elevated consequences on suicide rates." (p. 678)
50	Hsiang-Ching Kung et al., Risk factors for male and female suicide decedents ages 15-64 in the United States, SOCIAL PSYCHIATRY AND PSYCHIATRIC EPIDEMIOLOGY, Aug. 2003	"In this study, access to firearms was one of the factors most strongly associated with suicide deaths, particularly among persons living alone." (p. 423)
51	Hsiang-Ching Kung et al., Substance Use, Firearm Availability, Depressive Symptoms, and Mental Health Service Utilization Among White and African American Suicide Decedents Aged 15 to 64 Years, ANNALS OF EPIDEMIOLOGY, Sept. 2005	"When compared with natural causes of death, suicide deaths among white decedents were associated with use of mental health services, heavy drinking, marijuana use, depression symptoms, and firearm availability. Suicides by African American decedents were associated only with use of mental health services, marijuana, and firearm availability." (p. 614)
52	Aaron J. Kvisto et al., Adolescent Suicide, Household Firearm Ownership, and the Effect of Child Access Prevention Laws, J. AM. ACAD. CHILD & ADOLESCENT PSYCHIATRY, Sept. 2021	"Conclusion: There is an increased risk of adolescent suicide associated with household firearm ownership, and safe storage provisions are associated with decreased adolescent firearm suicide." (p. 1096)
53	Tyler J. Lane, Associations Between Firearm and Suicide Rates: A Replication of Kleck (2021), ARCHIVES OF SUICIDE RESEARCH, June 10, 2022	"Results: In contrast to Kleck, global analyses with Small Arms Survey data found a significant and positive association between firearm availability and total suicides, as did U.S. analyses." (p. 1)

Exhibit #	Citation	Relevant Findings
54	Gad Lubin et al., Decrease in Suicide Rates After a Change of Policy Reducing Access to Firearms in Adolescents: A Naturalistic Epidemiological Study, SUICIDE AND LIFE-THREATENING BEHAVIOR, Nov. 2010	"We found a 40% decline in the number of suicides annually after the change of policy reducing access to firearms during weekendsThese data clearly emphasize the effectiveness of decreasing access to firearms on suicide prevention" (p. 422)
55	Matthew Miller et al., Firearm Availability and Unintentional Firearm Deaths, Suicide, and Homicide among 5-14 Year Olds, J. TRAUMA, Feb. 2002	"Results: A statistically significant association exists between gun availability and the rates of unintentional firearm deaths, homicides, and suicides." (p. 267)
56	Matthew Miller et al., Firearm Availability and Suicide, Homicide, and Unintentional Firearm Deaths Among Women, J. URBAN HEALTH, Mar. 2002	"Conclusion. Between 1988 and 1997, the suicide, homicide, and unintentional firearm death rates among women were disproportionately higher in states where guns were more prevalent." (p. 26)
57	Matthew Miller et al., Household Firearm Ownership and Suicide Rates in the United States, EPIDEMIOLOGY, Sept. 2002	"Results. In both regional and state-level analyses, for the U.S. population as a whole, for both males and females, and for virtually every age group, a robust association exists between levels of household firearm ownership and suicide rates." (p. 517)
58	Matthew Miller et al., Firearms and Suicide in the Northeast, J. TRAUMA, Sept. 2004	"Results: Firearm prevalence was positively related to the suicide rate, even after controlling for rates of attempted suicide, and could not be accounted for by differences in method-specific case fatality rates." (p. 626)
59	Matthew Miller et al., The association between changes in household firearm ownership and rates of suicide in the United States, 1981-2002, INJURY PREVENTION, 2006	"Conclusion: Changes in household firearm ownership over time are associated with significant changes in rates of suicide for men, women, and children." (p. 178)
60	Matthew Miller, et al., Household Firearm Ownership and Rates of Suicide Across the 50 United States, J. TRAUMA, Apr. 2007	"Conclusion: Household firearm ownership levels are strongly associated with higher rates of suicide, consistent with the hypothesis that the availability of lethal means increases the rate of completed suicide." (p. 1029)

Exhibit #	Citation	Relevant Findings
61	Matthew Miller et al., Recent psychopathology, suicidal thoughts and suicide attempts in households with and without firearms: findings from the National Comorbidity Study Replication, INJURY PREVENTION, Aug. 2009	"The previously reported association between household firearm ownership and heightened risk of suicide is not explained by a higher risk of psychopathology among gun-owning families." (p. 183)
62	Matthew Miller et al., Firearms and Suicide in the United States: Is Risk Independent of Underlying Suicidal Behavior, Am. J. EPIDEMIOLOGY, Aug. 23, 2013	"After controlling for state-level suicide attempt rates (2008–2009), higher rates of firearm ownership (assessed in 2004) were strongly associated with higher rates of overall suicide and firearm suicide, but not with nonfirearm suicide (2008–2009)." (p. 946)
63	Matthew Miller et al., Firearms and suicide in US Cities, INJURY PREVENTION, Dec. 2013	"Higher rates of firearm ownership are strongly associated with higher rates of overall suicide and firearm suicide, but not with non-firearm suicide." (p. e116)
64	Matthew Miller et al., Are We Missing Something Pertinent? A Bias Analysis of Unmeasured Confounding in the Firearm-Suicide Literature, EPIDEMIOLOGIC REVIEWS, Jan. 13, 2016	"The current study strongly suggests that unmeasured confounding alone is unlikely to explain the association between firearms and suicide." (p. 62)
65	Matthew Miller et al., Suicide Deaths Among Women in California Living With Handgun Owners vs Those Living With Other Adults in Handgun-Free Homes, 2004-2016, JAMA PSYCHIATRY, June 2022	"CONCLUSIONS AND RELEVANCE[:] In this study, the rate of suicide among women was significantly higher after a cohabitant of theirs became a handgun owner compared with the rate observed while they lived in handgun-free homes." (p. 582)
66	April Opoliner et al., Explaining geographic patterns of suicide in the US: the role of firearms and antidepressants, INJURY EPIDEMIOLOGY, Dec. 2014	"Conclusion: The prevalence of household firearm ownership is strongly and significantly associated with overall suicide rates, due to its association with firearm suicide rates." (p. 1)

Exhibit #	Citation	Relevant Findings
67	Julie A. Phillips, Factors Associated With Temporal and Spatial Patterns in Suicide Rates Across U.S. States, 1976-2000, DEMOGRAPHY, Apr. 2013	Cultural factors such as alcohol consumption and gun ownership predict state variation in firearm suicide rates but not in nonfirearm suicide rates. Consistent with prior findings (Miller et al. 2007), a higher prevalence of gun ownership increases the rate of firearm suicide, as expected, but there is no concomitant negative association with nonfirearm suicide." (p. 604-05)
68	Thomas Reisch et al., Change in Suicide Rates in Switzerland Before and After Firearm Restriction Resulting From the 2003 "Army XXI" Reform, AM. J. PSYCHIATRY, Sept. 2013	"Conclusions: The restriction of firearm availability in Switzerland resulting from the Army XXI reform was followed by an enduring decrease in the general suicide rate." (p. 977)
69	Michael Siegel & Emily F. Rothman, Firearm Ownership and Suicide Rates Among US Men and Women, 1981-2013, Am. J. Pub. HEALTH, July 2016	"Conclusions. We found a strong relationship between state-level firearm ownership and firearm suicide rates among both genders, and a relationship between firearm ownership and suicides by any means among male, but not female, individuals."
70	Nathan D. L. Smith & Ichiro Kawachi, <i>State-level social capital</i> and suicide mortality in the 50 U.S. states, SOCIAL SCIENCE & MED., Nov. 2014	"[H]igher gun ownership is significantly related to higher rates of suicide for all men, White men, non-Hispanic White men, and all women." (p. 273)
71	David M. Studdert et al., <i>Handgun Ownership and Suicide in California</i> , NEW ENG. J. MED., June 4, 2020	"Rates of suicide by any method were higher among handgun ownersThese rates were driven by much higher rates of suicide by firearm among both male and female handgun owners" (p. 2220)
72	Daniel W. Webster et al., Association between Youth- Focused firearm Laws and Youth Suicides, JAMA, Aug. 4, 2004	"Conclusions: There is evidence that CAP [child access prevention] laws are associated with modest reduction in suicide rates among youth aged 14 to 17 years." (p. 594)
73	Douglas J. Wiebe, Homicide and Suicide Risks Associated With Firearms in the Home A National Case-Control Study, INJURY PREVENTION, Jun. 2003	"Compared with adults in homes with no guns[t]he adjusted OR [occurrence rate] for suicide was 3.44 (95% CI 3.06 to 3.86) for persons with a gun at home." (p. 771)

Exhibit	Citation	Relevant Findings
#		
74	Garen J. Wintemute et al., Mortality Among Recent Purchasers of Handguns, NEW ENG. J. MED., Nov. 18, 1999	"Conclusions[:] The purchase of a handgun is associated with a substantial increase in the risk of suicide by firearm and by any method. The increase in the risk of suicide by firearm is apparent within a week after the purchase of a handgun and persists for at least six years." (p. 1583)

Index of Exhibits

Ex. #	Description
1	Expert report of Dr. Alexander McCourt
2	Expert report of Dr. Nilesh Kalyanaraman
3	Gary Kleck deposition transcript
4	Anne Arundel County Bill 108-21
5	Anne Arundel County Health Department pamphlets
6	NSSF.org homepage (as of October 19, 2022)
7	NSSF.org Legislative Action Center webpage (as of as of Oct. 19, 2022)
8	AFSP.org Suicide prevention research webpage (as of Oct. 19, 2022)
9	AFSP.org About AFSP webpage (as of Oct. 19, 2022)
10	NSSF.org Suicide Prevention for Retailers and Ranges webpage (as of Oct. 19, 2022)
11	NSSFRealSolutions.org Suicide Prevention webpage (as of Oct. 19, 2022)
12	CDC publication Preventing Suicide: A Technical Package of Policy, Programs, and Practices
13	NIMH publication Frequently Asked Questions About Suicide
14	Maryland Dept. of Health publication Risk Factors for Suicide
15	AFSP.org <i>Risk Factors, protective factors, and warning signs</i> webpage (as of Oct. 19, 2022)
16	CDC.gov Risk and Protective Factors webpage (as of Oct. 21, 2022)
17	Anne Arundel County Mental Health Agency <i>Warmline</i> webpage (as of Oct. 19, 2022)
18	John Walker (Pasedena Arms 30(b)(6) witness) deposition transcript excerpts
19	William Quick (Cindy's Hot Shot 30(b)(6) witness) deposition transcript excerpts
20	Micah Schaefer (Field Traders, LLC 30(b)(6) witness) deposition transcript excerpts
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22	Donna Worthy (Worth-A-Shot Firearms 30(b)(6) witness) deposition transcript excerpts
23	Expert report of Professor Gary Kleck
24	February 2018 Statement of the American Association of Suicidology
25	CDC publication Principles of Epidemiology in Public Health Practice: An Introduction to Applied Epidemiology and Biostatistics excerpts

Ex. #	Description
26	2019 book chapter <i>The effect of firearms on suicide</i> by Gary Kleck
27	2019 article Macro-level research on the effect of firearms prevalence on suicide rates a systematic review and new evidence by Gary Kleck
28	2021 article The Cross-national Association of Gun Ownership Rates and Suicide Rates: an Analysis of 194 Nations by Gary Kleck
29	CDC Clear Communication Index: A Tool for Developing and Assessing CDC Public Communication Products, User Guide
30	CDC.gov Family Health History and Cancer webpage (as of Oct. 19, 2022)

	Social Science Research
Ex. #	Description
31	Michael D. Anestis et al., <i>The Association Between State Laws Regulating Handgun Ownership and Statewide Suicide Rates</i> , Am. J. Pub. Health, Oct. 2015
32	Michael D. Anestis & Claire Houtsma, <i>The Association Between Gun Ownership and Statewide Overall Suicide Rates</i> , SUICIDE AND LIFE-THREATENING BEHAVIOR, Apr. 2018
33	Andrew Anglemeyer et al., The Accessibility of Firearms and Risk for Suicide and Homicide Victimization Among Household Members; A Systematic Review and Meta-analysis, Annals of Internal Med., Jan. 21, 2014
34	James E. Bailey et al., Risk Factors for Violent Death of Women in the Home, ARCHIVES OF INTERNAL MEDICINE, Apr. 14, 1997
35	David A. Brent et al., Risk Factors for Adolescent Suicide: A Comparison of Adolescent Suicide Victims With Suicidal Inpatients, ARCHIVES OF GENERAL PSYCHIATRY, June 1988
36	David A. Brent et al., <i>The Presence and Accessibility of Firearms in the Homes of Adolescent Suicides: A Case-Control Study</i> , JAMA, Dec. 4, 1991
37	David A. Brent et al., Suicide in Adolescents with No Apparent Psychopathology, J. Am. ACAD. CHILD ADOLESCENT PSYCHIATRY, May 1993
38	David A. Brent et al., Firearms and Adolescent Suicide: A Community Case-Control Study, Am. J. DISEASES OF CHILDREN, Oct. 1993
39	David A. Brent et al., Suicide in affectively ill adolescents: a case-control study, J. AFFECTIVE DISORDERS, Jul. 1994
40	Justin T. Briggs & Alexander Tabarrok, <i>Firearms and suicides in US states</i> , INT'L REVIEW OF LAW & ECON., 2014
41	Yeates Conwell et al., Access to Firearms and Risk for Suicide in Middle-Aged and Older Adults, Am. J. Geriatric Psychiatry, July-August 2002

Ex. #	Description
42	Marisa K. Crowder & Markus Kemmelmeier, <i>Untreated Depression Predicts Higher Suicide Rates in U.S. Honor Cultures</i> , JOURNAL OF CROSS-CULTURAL PSYCHOLOGY, Aug. 2014
43	Peter Cummings et al., <i>The Association between the Purchase of a Handgun and Homicide or Suicide</i> , Am. J. Pub. Health, June 1997
44	K.M. Grassel et al., Association between handgun purchase and mortality from firearm injury, Injury Prevention, Mar. 2003
45	David C. Grossman et al., Gun Storage Practices and Risk of Youth Suicide and Unintentional Firearm Injuries, JAMA, Feb. 9, 2005
46	David Hamilton & Augustine J. Kposowa, <i>Firearms and Violent Death in the United States: Gun Ownership, Gun Control and Mortality Rates in 16 states, 2005-2009</i> , British J. Ed., Society & Behavioural Science, Feb. 16, 2015
47	Arthur L. Kellermann et al., <i>Suicide in the Home in Relation to Gun Ownership</i> , N.E. J. MEDICINE, Aug. 13, 1992
48	Augustine J. Kposowa, Association of suicide rates, gun ownership, conservatism and individual suicide risk, Social Psychiatry and Psychiatric Epidemiology, Sept. 2013
49	Augustine Kposowa et al., Impact of Firearm Availability and Gun Regulation on State Suicide Rates, SUICIDE AND LIFE-THREATENING BEHAVIOR, Dec. 2016
50	Hsiang-Ching Kung et al., <i>Risk factors for male and female suicide decedents ages</i> 15-64 in the United States, SOCIAL PSYCHIATRY AND PSYCHIATRIC EPIDEMIOLOGY, Aug. 2003
51	Hsiang-Ching Kung et al., Substance Use, Firearm Availability, Depressive Symptoms, and Mental Health Service Utilization Among White and African American Suicide Decedents Aged 15 to 64 Years, Annals of Epidemiology, Sept. 2005
52	Aaron J. Kvisto et al., Adolescent Suicide, Household Firearm Ownership, and the Effect of Child Access Prevention Laws, J. Am. ACAD. CHILD & ADOLESCENT PSYCHIATRY, Sept. 2021
53	Tyler J. Lane, Associations Between Firearm and Suicide Rates: A Replication of Kleck (2021), Archives of Suicide Research, June 10, 2022
54	Gad Lubin et al., Decrease in Suicide Rates After a Change of Policy Reducing Access to Firearms in Adolescents: A Naturalistic Epidemiological Study, SUICIDE AND LIFE-THREATENING BEHAVIOR, Nov. 2010
55	Matthew Miller et al., Firearm Availability and Unintentional Firearm Deaths, Suicide, and Homicide among 5-14 Year Olds, J. TRAUMA, Feb. 2002
56	Matthew Miller et al., Firearm Availability and Suicide, Homicide, and Unintentional Firearm Deaths Among Women, J. Urban Health, Mar. 2002

Ex. #	Description
57	Matthew Miller et al., Household Firearm Ownership and Suicide Rates in the United States, EPIDEMIOLOGY, Sept. 2002
58	Matthew Miller et al., Firearms and Suicide in the Northeast, J. TRAUMA, Sept. 2004
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60	Matthew Miller, et al., <i>Household Firearm Ownership and Rates of Suicide Across the</i> 50 United States, J. TRAUMA, Apr. 2007
61	Matthew Miller et al., Recent psychopathology, suicidal thoughts and suicide attempts in households with and without firearms: findings from the National Comorbidity Study Replication, Injury Prevention, Aug. 2009
62	Matthew Miller et al., Firearms and Suicide in the United States: Is Risk Independent of Underlying Suicidal Behavior, Am. J. EPIDEMIOLOGY, Aug. 23, 2013
63	Matthew Miller et al., <i>Firearms and suicide in US Cities</i> , INJURY PREVENTION, Dec. 2013
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66	April Opoliner et al., Explaining geographic patterns of suicide in the US: the role of firearms and antidepressants, Injury Epidemiology, Dec. 2014
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68	Thomas Reisch et al., Change in Suicide Rates in Switzerland Before and After Firearm Restriction Resulting From the 2003 "Army XXI" Reform, AM. J. PSYCHIATRY, Sept. 2013
69	Michael Siegel & Emily F. Rothman, Firearm Ownership and Suicide Rates Among US Men and Women, 1981-2013, Am. J. Pub. Health, July 2016
70	Nathan D. L. Smith & Ichiro Kawachi, <i>State-level social capital and suicide mortality in the 50 U.S. states</i> , Social Science & Med., Nov. 2014
71	David M. Studdert et al., <i>Handgun Ownership and Suicide in California</i> , NEW ENG. J. MED., June 4, 2020
72	Daniel W. Webster et al., Association between Youth-Focused firearm Laws and Youth Suicides, JAMA, Aug. 4, 2004

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73	Douglas J. Wiebe, <i>Homicide and Suicide Risks Associated With Firearms in the Home A National Case-Control Study</i> , INJURY PREVENTION, Jun. 2003
74	Garen J. Wintemute et al., <i>Mortality Among Recent Purchasers of Handguns</i> , NEW ENG. J. MED., Nov. 18, 1999