



Cohen Veterans
Network

Optimizing Firearm Secure Storage Messaging for Military and Veteran Communities: Development, Testing, and Recommendations

Cohen Veterans Network – Institute for Quality

September 2026

With generous support from Face the Fight, Inc.

EXECUTIVE SUMMARY

This project developed and tested six universal firearm secure storage messages designed for use in settings serving military service members and veterans, including mental health settings. Across quantitative and qualitative analyses, no single message, rationale, or communication approach emerged as clearly superior or inferior. Instead, findings suggest that multiple evidence-informed approaches can effectively support firearm safety conversations when delivered respectfully, authentically, and with clear concern for individual wellbeing. Participant feedback highlighted that trust, messenger credibility, and communication style were often more influential than specific message wording, offering practical guidance for organizations seeking to strengthen universal firearm safety and suicide prevention efforts.

KEY RESULTS

- ▶ Diverse participant pool included **279 Cohen Clinic clients** who viewed and rated at least one message.
- ▶ **Likelihood ratings were similar** across all six messages, with mean scores ranging from 2.68 to 2.99 on a 0-4 scale.
- ▶ Participants **did not demonstrate a clear, statistically significant preference** for any specific message, rationale, or communication approach when messages were compared directly.
- ▶ Subgroup analyses found **relatively little variation in message acceptability** across demographic, military affiliation, and firearm ownership groups.
- ▶ Participant's qualitative feedback indicated **broad support for universal firearm safety conversations** when delivered in a respectful and nonjudgmental manner.

KEY TAKEAWAYS

- ▶ **Multiple universal firearm safety message approaches were acceptable** among a diverse group of military service members, veterans, and military family members, including among current firearm owners.
- ▶ Organizations can **employ a range of evidence-informed message options** that best fit their context and clinician or staff comfort.
- ▶ The messenger **trustworthiness and credibility and delivery tone** may be more important than the specific rationale or framing used.
- ▶ **Provider credibility, cultural competence, and trust-building** should be emphasized during training.
- ▶ **Universal firearm safety discussions remain a promising strategy** for suicide prevention among military and veteran populations.

Introduction

Suicide remains a persistent concern in military and veteran communities. Suicide is the leading cause of death among active duty service members (Kaplansky & Toussaint, 2024) and rates remain elevated among veterans compared to their non-veteran peers (U.S. Department of Veterans Affairs, 2024). Lethal means safety counseling (LMSC) has been shown to be an effective strategy in suicide prevention (Mann et al., 2005; Spitzer et al., 2024), but its implementation remains inconsistent (Betz et al., 2018; Marcus et al., 2025; Roszko et al., 2015). Furthermore, delivery of targeted LMSC relies on risk assessments to accurately identify and stratify suicide risk, a significant and enduring challenge. Accurate risk assessment is further complicated in military populations due to on-going stigma and hesitancy to disclose suicidal thoughts and behaviors (Dobscha et al., 2026; Ganzini et al., 2013; Litschi et al., 2025; Louzon et al., 2016). In a study of suicide deaths among VHA patients, over 70% of decedents reported no suicidal thoughts on their most recent PHQ-9 (Louzon et al., 2016), indicating that veterans may be at elevated risk for suicide even in the absence of reported risk factors. Further, lower predicted suicide risk levels based on REACH VET data were associated with firearm involvement in a recent study of veteran suicide decedents (Dent et al., 2025). Firearms are the leading means of suicide among veterans (U.S. Department of Veterans Affairs, 2024) and active duty service members (Kaplansky & Toussaint, 2024) and firearm access contributes to increased risk of suicide in these populations (Anglemeyer et al., 2014). Notably, the risk of suicide is three to four times greater when firearms are stored unlocked and/or loaded (Dempsey et al., 2019), both common practices among veterans (66% and 47%, respectively; Simonetti et al., 2018). Given the inherent difficulty in identifying individual risk (McCarthy et al., 2021) and the role of firearm access in elevating suicide risk, addressing access to lethal means via broader integration of lethal means safety communication across MSOs/VSOs constitutes a high impact prevention strategy.

While preventative lethal means safety counseling is an important approach to address firearm-related harm, many veterans are hesitant to discuss lethal means with medical or mental healthcare providers due to privacy or access restriction concerns (Newell et al., 2021; Polzer et al., 2023). The literature suggests that the effectiveness of secure storage interventions depends on how they are framed, with many veterans expressing a preference for LMSC conversations to be preceded by a rationale (Dobscha et al., 2021; Newell et al., 2021; Pruitt et al., 2022). However, little research has examined effective messaging or specific rationales that veterans find acceptable. Messaging that resonates with one person may mobilize resistance in another, highlighting the need to identify the most effective ways to communicate about secure storage. Firearms account for over 70% of veteran suicide deaths (U.S. Department of Veterans Affairs, 2024), universal secure storage counseling using optimized messaging has the potential to drive meaningful and widespread behavior change, resulting in enhanced motivation for adopting secure storage practices within military communities. By refining messaging to enhance engagement, this project seeks to strengthen the effectiveness of universal secure storage counseling and expand dissemination within military and veteran populations.

Objectives of the Report

This report describes the development and testing of universal firearm secure storage messages designed for use with military and veteran populations. This report addresses three primary objectives: (1) to describe the process by which secure storage messages were developed, including the theoretical and empirical basis for the language and approaches tested; (2) to present findings from acceptability testing, including overall message rankings derived from Bradley-Terry modeling and subgroup analyses examining whether message preferences differ across key demographic and military-affiliated groups; and (3) to translate these findings into actionable recommendations for integrating optimized secure storage messaging into clinical and programmatic contexts.

Methods

Study Design

In this project, we evaluated participants' likelihood of continuing a conversation about secure firearm storage after watching a brief evidence-informed firearm safety message. These messages were short statements (approximately 60 seconds) designed to open a conversation about firearm secure storage in a military and veteran mental health setting. Each message contained a rationale for the conversation and an approach to encourage secure storage in a 2x3 design. Message development is described below.

Participants were each shown two randomly assigned messages. After each video, participants were asked "Based on the video you just watched, how likely are you to continue the conversation?" and responded on a 5-pt Likert scale with choices of "*Extremely Unlikely, Unlikely, Neutral (50/50), Likely, Extremely Likely.*" These likelihood ratings were weighted on a 0-4 scale. Participants also were asked to respond to two open-ended questions to explain what they liked and didn't like about the message they had just heard. After viewing both videos, participants were asked to select which video they preferred and to explain why via an open-ended question.

This study was reviewed by WCG Institutional Review Board and received an exempt determination (CVN-10).

Message Development

Messages were developed through an iterative process involving literature review and stakeholder input from our clinical training team. Our literature review included existing studies of military service member and veteran preferences related to firearm discussions in clinical environments (Dobscha et al., 2021; Hoyt et al., 2021; Newell et al., 2021; Pruitt et al., 2022; Richards et al., 2021; Stanley et al., 2024) and acceptability and preference of specific firearm messaging (Anestis et al., 2022; Karras et al., 2022; Khazanov et al., 2024; Marino et al., 2018; Pallin et al., 2019). Based on this review, we identified two dimensions that appear to impact the acceptability of firearm safety messaging in military and veteran communities. Several articles highlighted the preference for these discussions to be preceded by a rationale

(Dobscha et al., 2021; Karras et al., 2022; Khazanov et al., 2024; Newell et al., 2021; Richards et al., 2021), however, little data was provided on specific rationales that were acceptable. Research also addressed several approaches for firearm safety conversations, including gun-friendly perspectives (Anestis et al., 2022), demonstrating cultural competency (Newell et al., 2021; Pruitt et al., 2022;), relying on lived experience anecdotes (Baker et al., 2026), and collaboratively discussing alternative storage options that also address firearm function for individuals (Hoyt et al., 2021). These findings were considered against their utility in a universal message to open a discussion about firearm safety. We elected to use a 2x3 design, pairing two rationales with three approaches (see Figure 1 for message descriptors and Appendix I for complete text). Rationales included risks from unsecured firearm (Dobscha et al., 2021; Karras et al., 2022; Khazanov et al., 2024) and concern for client wellbeing (Dobscha et al., 2021), and approaches included positive descriptive norms (Dobscha et al., 2021; Karras et al., 2022), acknowledgment of firearm importance (Anestis et al., 2022; Marino et al., 2018; Newell et al., 2021; Pallin et al., 2019, Pruitt et al., 2022; Smith, 2025), and empowerment/temporary measure (Pallin et al., 2019, Stanley et al., 2024). All messages included the same two examples of possible safe firearm storage options (“using cable locks or gun safes”), neither of which represent the most restrictive measures. Once messages were drafted, stakeholders with clinical experience and expertise in communications provided feedback on specific language used in each message. Changes were iteratively discussed to balance research needs, clinical best practices, and effective communication standards. Messages were recorded by a professional actress who was instructed to maintain consistency between separate deliveries of the same rationales and approaches to limit the influence of tonal and body language variations between recordings of repeated message elements.

	Approach 1: Positive Descriptive Norms	Approach 2: Acknowledge Firearm Importance	Approach 3: Empowerment Voluntary & Temporary
Rationale 1: Risk-based	Message 1	Message 2	Message 3
Rationale 2: Care & Concern	Message 4	Message 5	Message 6

Figure 1. Descriptions of message rationales and approaches

Recruiting

Participants were recruited from within the client population of Cohen Veterans Network. To be eligible for this study participants had to be at least 18 years of age and have received mental health services. Invitations to participate were shown to current Cohen clients in three distinct settings: following teletherapy sessions occurring on CVNs Organizational Zoom Platform, after online check-in for therapy sessions, and after completing the client experience survey offered after the client’s first therapy session. All

prospective participants completed a screening survey to ensure they met inclusion criteria and completed the informed consent process.

Analysis

Descriptive statistics were used to describe sample characteristics and summarize average likelihood rating for each message. Subgroup analyses examined variations in likelihood ratings across key demographic characteristics, including military connection (service member, veteran, family), race/ethnicity, age group, and history of firearm ownership for all categories with 10 or more participants. Preferences among paired video messages were evaluated using Bradley-Terry modeling (Bradley & Terry, 1952), which estimates the relative likelihood that one message will be preferred over another in head-to-head comparisons. Separate models examined preferences for individual messages as well as broader message components, including rationale and approach. Open-text responses were reviewed descriptively to identify and summarize recurring feedback relating to elements of the recorded messages that participants liked, disliked, and considered important when selecting a preferred message.

Table 1. Sample Characteristics

Characteristic	Active Duty Service Member <i>n</i> = 21 ¹	Guard or Reserve <i>n</i> = 17 ¹	Veteran <i>n</i> = 117 ¹	Family <i>n</i> = 83 ¹	None <i>n</i> = 2 ¹	Did not respond <i>n</i> = 39 ¹	Overall <i>N</i> = 279 ¹
Age Group							
18-24	2 (9.5%)	4 (24%)	0 (0%)	9 (11%)	0 (0%)	0 (0%)	15 (5.4%)
25-34	6 (29%)	6 (35%)	17 (15%)	17 (20%)	1 (50%)	0 (0%)	47 (17%)
35-44	5 (24%)	5 (29%)	32 (27%)	26 (31%)	1 (50%)	0 (0%)	69 (25%)
45-54	8 (38%)	2 (12%)	30 (26%)	16 (19%)	0 (0%)	0 (0%)	56 (20%)
55-64	0 (0%)	0 (0%)	23 (20%)	13 (16%)	0 (0%)	0 (0%)	36 (13%)
65+	0 (0%)	0 (0%)	15 (13%)	2 (2.4%)	0 (0%)	0 (0%)	17 (6.1%)
Did not respond	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	39 (100%)	39 (14%)
Gender							
Woman	9 (43%)	6 (35%)	39 (33%)	77 (93%)	1 (50%)	1 (2.6%)	133 (48%)
Man	12 (57%)	10 (59%)	77 (66%)	6 (7.2%)	1 (50%)	0 (0%)	106 (38%)
Non-Binary	0 (0%)	0 (0%)	1 (0.9%)	0 (0%)	0 (0%)	0 (0%)	1 (0.4%)
Did not respond	0 (0%)	1 (5.9%)	0 (0%)	0 (0%)	0 (0%)	38 (97%)	39 (14%)
Race/Ethnicity							
American Indian or Alaska Native	0 (0%)	0 (0%)	1 (0.9%)	2 (2.4%)	0 (0%)	0 (0%)	3 (1.1%)
Asian	0 (0%)	1 (5.9%)	4 (3.4%)	4 (4.8%)	0 (0%)	0 (0%)	9 (3.2%)
Black or African American	2 (9.5%)	2 (12%)	22 (19%)	8 (9.6%)	1 (50%)	0 (0%)	35 (13%)
Hispanic or Latino	6 (29%)	5 (29%)	12 (10%)	14 (17%)	0 (0%)	0 (0%)	37 (13%)
Native Hawaiian or Pacific Islander	0 (0%)	0 (0%)	0 (0%)	1 (1.2%)	0 (0%)	0 (0%)	1 (0.4%)
White	10 (48%)	7 (41%)	51 (44%)	40 (48%)	0 (0%)	0 (0%)	108 (39%)
Other	0 (0%)	0 (0%)	4 (3.4%)	1 (1.2%)	0 (0%)	0 (0%)	5 (1.8%)
Two or more races and/or ethnicities	3 (14%)	0 (0%)	17 (15%)	10 (12%)	1 (50%)	0 (0%)	31 (11%)
Prefer not to answer	0 (0%)	1 (5.9%)	6 (5.1%)	3 (3.6%)	0 (0%)	0 (0%)	10 (3.6%)
Did not respond	0 (0%)	1 (5.9%)	0 (0%)	0 (0%)	0 (0%)	39 (100%)	40 (14%)
Most Recent Service Branch							
Air Force	3 (14%)	1 (5.9%)	16 (14%)	10 (12%)	0 (0%)	0 (0%)	30 (11%)
Army	14 (67%)	13 (76%)	68 (58%)	38 (46%)	1 (50%)	0 (0%)	134 (48%)
Coast Guard	2 (9.5%)	0 (0%)	3 (2.6%)	2 (2.4%)	0 (0%)	0 (0%)	7 (2.5%)
Marines	1 (4.8%)	1 (5.9%)	18 (15%)	13 (16%)	0 (0%)	0 (0%)	33 (12%)
Navy	1 (4.8%)	1 (5.9%)	12 (10%)	15 (18%)	0 (0%)	0 (0%)	29 (10%)
Space Force	0 (0%)	0 (0%)	0 (0%)	2 (2.4%)	0 (0%)	0 (0%)	2 (0.7%)
Did not respond	0 (0%)	1 (5.9%)	0 (0%)	3 (3.6%)	1 (50%)	39 (100%)	44 (16%)
Firearm Ownership Status							
I currently own a firearm	10 (48%)	10 (59%)	79 (68%)	29 (35%)	1 (50%)	0 (0%)	129 (46%)
I have owned a firearm in the past	1 (4.8%)	2 (12%)	15 (13%)	8 (9.6%)	0 (0%)	0 (0%)	26 (9.3%)
I have never owned a firearm	10 (48%)	5 (29%)	23 (20%)	46 (55%)	1 (50%)	0 (0%)	85 (30%)
Did not respond	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	39 (100%)	39 (14%)
Household Firearm Access							
I currently live in a house with a firearm	10 (48%)	11 (65%)	81 (69%)	41 (49%)	1 (50%)	0 (0%)	144 (52%)
I have lived in a house with a firearm in the past	7 (33%)	4 (24%)	25 (21%)	28 (34%)	1 (50%)	0 (0%)	65 (23%)
I have never lived in a house with a firearm	4 (19%)	2 (12%)	11 (9.4%)	14 (17%)	0 (0%)	0 (0%)	31 (11%)
Did not respond	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	39 (100%)	39 (14%)

¹n (%)

Results

Sample Characteristics

A total of 2,678 individuals engaged with the survey, of whom 430 provided consent to participate. Among consenting participants, 279 rated at least one video message and 244 completed the message preference assessment. Participants were primarily female (55%), white (55%), veterans (45%), and current firearm owners (53%). The most common age group was 35-44 years (29%). Among participants who had served in the military, the Army was the most frequently reported branch of service (60%), and Army affiliation was also the most common among family members of service members and veterans (52%). Additional sample characteristics, including sex, age, race/ethnicity, service connection, most recent military branch (for service members and family members), current firearm ownership, and firearm access, are presented in Table 1.

Descriptive Statistics

To examine participant likelihood to continue a conversation about secure firearm storage, we examined mean likelihood ratings for each message. The six messages received similar likelihood ratings overall, with mean scores ranging from 2.68 to 2.99 on the rating scale. Message 6 received the highest average rating ($M = 2.99$, $SD = 1.08$, $n = 88$) while Message 3 received the lowest average rating ($M = 2.68$, $SD = 1.08$, $n = 100$), however these differences were not statistically significant. The remaining messages have mean ratings between 2.79 and 2.87. Standard deviations were relatively consistent across messages, falling between 1.01 (Message 1) and 1.13 (Message 2), suggesting similar levels of variability in participant responses regardless of message viewed. Ridgeline plots (Figure 2) illustrate the distribution of ratings for each message, with responses clustering around neutral and likely categories. Responses for Messages 5 and 6 skewed slightly more towards likely and extremely likely ratings. Across all messages, a few responses were concentrated around extremely unlikely responses. Paired-responses of ratings assigned by each participant are visualized in Figure 3. The most common outcome (67%) was that participants assigned the same rating to both messages viewed. This pattern suggests the differences in message content did not impact willingness to continue the conversation for most participants.

Table 2. Likelihood ratings

	Mean Likelihood Rating	Standard Deviation	<i>n</i>
Message 1	2.79	1.01	96
Message 2	2.80	1.13	98
Message 3	2.68	1.08	100
Message 4	2.81	1.02	88
Message 5	2.87	1.02	63
Message 6	2.99	1.08	88

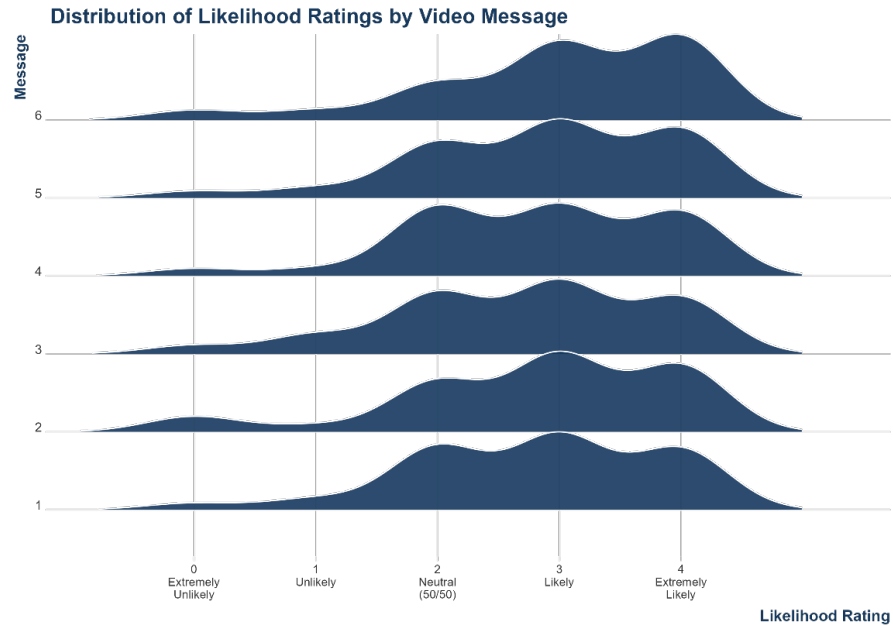


Figure 2. Ridgeline plots of likelihood ratings for each video

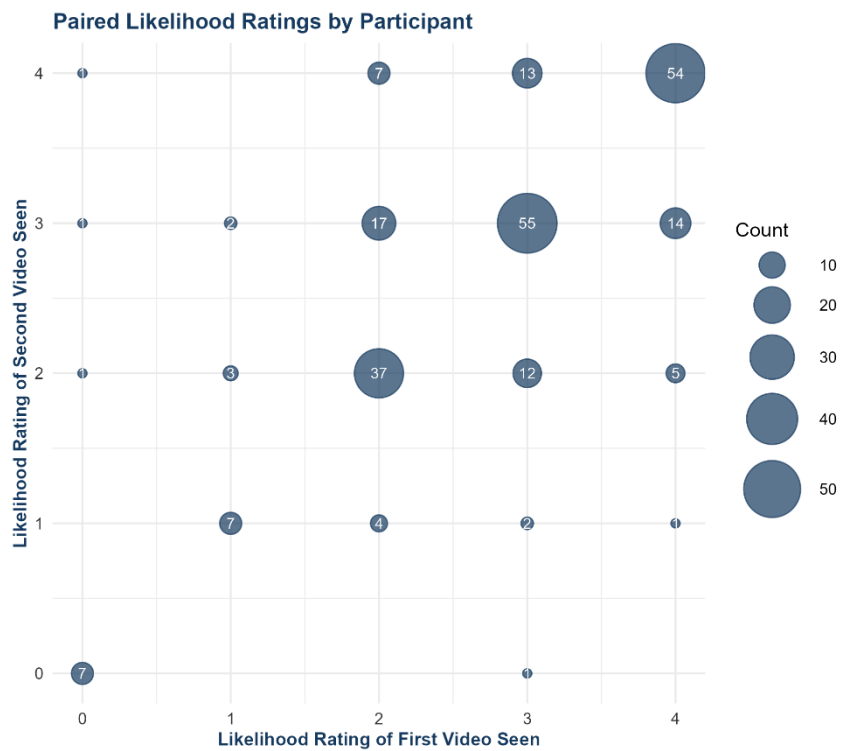


Figure 3. Bubble plot of paired participant responses

Bradley-Terry Model

To examine message preferences, we fit a Bradley-Terry model to paired-comparison data from participants who viewed two randomly assigned video messages and selected their preferred video ($n = 244$). Three participants were excluded from this model due to missing data. The model estimated the relative ability of each video to be selected over competing videos, with video 1 serving as the reference category. Message 5 demonstrated the highest estimated preference ($\beta = 0.28$, $SE = 0.32$, $p = 0.386$) and Message 4 demonstrated the lowest ($\beta = -0.21$, $SE = 0.29$, $p = 0.464$) in comparison to the reference message (Message 1). However, the model did not identify any messages that were consistently preferred or not preferred compared to others in head-to-head comparisons (all $p > .38$).

Table 3. Bradley-Terry message abilities

	Ability Estimate	Standard Error	P-value
Message 1	0.00	0.00	-
Message 2	-0.04	0.28	0.877
Message 3	-0.11	0.27	0.679
Message 4	-0.21	0.29	0.464
Message 5	0.28	0.32	0.386
Message 6	-0.15	0.28	0.604

A secondary Bradley-Terry model was fit to the data to examine preference for message rationales and approaches, with no significant differences in preferences observed. For example, messages using the care and concern rationale were no more likely to be preferred than messages using the risk-based rationale ($\beta = 0.01$, $SE = 0.16$, $p = 0.940$), despite slightly higher average abilities in the model examining individual message ability. Similarly, neither the acknowledge firearm importance approach ($\beta = 0.17$, $SE = 0.21$, $p = 0.393$) nor the empowerment/voluntary & temporary approach ($\beta = -0.03$, $SE = 0.20$, $p = 0.868$) differed significantly from the models reference approach (positive descriptive norms).

Subgroup Analysis (Descriptive Statistics)

Sub-group analyses found relatively little variation in mean likelihood ratings across military affiliation (active duty service member, National Guard or Reserve, veteran, or family), race and ethnicity, gender, and firearm ownership status. Overall, mean likelihood ratings predominantly fell between 2.5 and 3.0, corresponding to neutral to likely willingness to continue the discussion about firearm secure storage. Complete results of sub-group analyses are presented in Appendix II. Collectively, descriptive findings suggest that each of the six messages elicited similar willingness to continue the conversation across diverse participant groups.

Qualitative Findings

Support for universal firearm safety messaging

Many participants reported the universal approach to firearm secure storage conversations helped to normalize the discussions about firearm safety, suicide risk and accidental harm. Participants indicated that framing firearm secure storage as a universal concern helped to reduce the impact of stigma surrounding both suicide risk and firearm ownership. Participants appreciated messages that emphasized that anyone can have a mental health crisis, highlighted the importance of protecting children and loved ones from unintentional harm or suicide risk, and provided practical information on accessible and affordable secure storage options.

“Appealing to military audience (values of safety and care for others)”

“Connecting safety to military service, tapping into the sense of duty that may exist in most military members/family, emphasizing “anyone can have a crisis” displaces any blame or shame, highlighting keeping family safe”

“She went into the specific methods of securing fire arms like cable locks and safes. She also gave a good reason as to why not securing firearms is an issue: it increases the likelihood of injury and suicide.”

“straightforward messaging, practical advice, and absence of gun control rhetoric or other triggering messages.”

Diverse preferences for message framing

Preferences relating to message rationales and approaches were highly individualized. Messaging that resonated with some participants generated resistance in others. For example, many participants appreciated the direct nature of the risk-based rationale while others criticized this rationale as too aggressive. Similarly, many participants reacted positively to the “softer” care and concern rationale while others felt this rationale was not genuine as they had no relationship with the messenger. In general, participants positively reviewed messaging that acknowledged the personal importance of firearms, emphasized responsible gun ownership and family safety, or provided information on specific safety steps. A few participants requested that message contents be supported by additional facts relating to unsecured firearm risks. Overall, these findings mirror the quantitative results which showed no clear superiority of any specific message rationale or approach.

“This video provides the reasonings in the beginning first and then transition to the topic, which makes it easier to get to the difficult topic.”

“...it appeals to the commitment to safety that members of the military have and want for their families while still upholding the important message of preventing deaths by suicide.”

Addressing practical concerns about firearm ownership and storage

Participants raised two recurring concerns about message contents. First, a few participants felt the messages did not adequately acknowledge the extensive training and firearm safety knowledge many military-connected firearm owners possess. Second, a few participants noted that messages did not address the tension between maintaining ready firearm access for home protection and access barriers introduced by secure storage. These responses represented a small segment of participants who typically responded that they were unlikely or extremely unlikely to continue the conversation based on either message.

“This message feels as if it was delivered by an individual with limited firearm experience... Let's talk about training as the most fundamental aspect of firearm ownership and safety for yourself, your family, and your community. If you want to have veterans, especially combat veterans, listen to your message, then you need to rethink how you define firearm safety”

“There is still no acknowledgement that firearm safety directing conflicts with rapid access of firearms for protection.”

Importance of respectful and authentic delivery

Open-ended responses frequently addressed the delivery of the messages rather than their contents. Participants responded positively to messages perceived as sincere, direct, respectful, and motivated by genuine concern. Conversely, some participants reported perceiving judgment, condescension, or anti-firearm attitudes regardless of message content. These responses suggest that interpersonal communication style may be as important as message structure when discussing firearm safety and showcase how the same delivery may be perceived differently.

“I appreciated the professional person's tone and delivery, to me it was delivered with compassion, empathy, and kindness. Felt very respected, seen, acknowledged, and not pressured or bullied or belittled and judged for any decision...”

“I don't like how I feel there is a hidden, implied message in the video. For instance, based on her body language and tone, I get the feeling she views firearms as bad.”

Credibility of the messenger

Many participants remarked on the credibility of the messenger, often with conflicting perceptions. Some participants questioned the messenger's knowledge about firearms and firearm safety while others felt she was informed and “seemed like she did her research”. Similarly, tone and body language received opposing comments, with many participants describing her as “warm”, “sincere,” and “caring” and others perceiving them to be judgmental, condescending, and “anti-gun.” Multiple participants remarked that her tone was “monotonous” causing them to lose interest in the message. Others questioned whether the video was “AI [artificial intelligence]” or remarked that use of a recorded video made the message feel scripted and not conversational.

"Same as before, great delivery and exudes respect, kindness, and compassion – empathy. I had to wait a second, her inflection and tone was a little more direct and "strong" "deep." Reminds me as a Service Member, how Senior Leaders address subordinates with this type of information or ask in a "professional" and "courteous" manner."

"I don't like how I feel there is a hidden, implied message in the video. For instance, based on her body language and tone, I get the feeling she views firearms as bad. Which is wrong to say, as they are tools and, like any tool, must be learned to operate safely. This lady never once mentions the most critical component of firearms safety: TRAINING!"

"Similar to the original safety mission of the National Rifle Association, I think this message can only be delivered by someone who introduces themselves as a gun enthusiast and with the perspective of protecting lawful owners from stigma and association with illegal or unsafe use."

Discussion

This study evaluated six universal firearm safety messages in terms of the overall likelihood that participants would be willing to continue a discussion about secure firearm storage and preferences between paired messages. No one message performed significantly better or worse than any other message based on either individual likelihood ratings, paired comparisons between individual videos, or comparisons between message rationale or approach. These findings held true in sub-group analyses, where no significant differences in likelihood ratings were found based on military connection, gender, racial/ethnic identity, or firearm ownership. Qualitative findings echoed quantitative findings, with mixed feedback supporting and critiquing the same elements of message contents and delivery. Overall, these findings indicated that a range of evidence-informed firearm safety messages are appropriate for use in universal messaging and may be tailored to clinician comfort and client response.

Qualitative findings help explain the largely equivalent quantitative performance of the messages. Participant's feedback consistently pointed to factors beyond message wording, particularly trust, authenticity, and delivery style. Participants frequently emphasized that respectful communication, demonstrated concern, and perceived understanding of firearm ownership influenced acceptability more than the specific rationale or framing used. These findings suggest that successful implementation may depend less on identifying the perfect script and more on preparing messengers to have effective conversations.

The findings also reinforce previous concerns regarding trust and firearm-related discussions in mental health settings. While many participants welcomed universal firearm safety conversations, some remained skeptical of discussing firearm ownership with healthcare providers and questioned providers' familiarity with firearm culture. These responses highlight the importance of culturally informed communication and

indicate that provider training should include both suicide prevention principles and firearm-related cultural competence.

Several practical implications emerge. First, organizations should consider offering multiple approved messaging options rather than requiring strict adherence to a single script. Second, training efforts should prioritize communication skills, empathy, and nonjudgmental delivery. Third, implementation strategies should ensure that providers can explain why firearm safety conversations are occurring and how they support client wellbeing. Finally, future messaging efforts may benefit from incorporating additional educational information about firearm-related suicide risk while also addressing common concerns regarding home protection and firearm accessibility.

Taken together, these findings suggest that effective firearm safety communication is less about selecting a single superior message and more about delivering evidence-based messages in a respectful, credible, and client-centered manner. Such flexibility may facilitate broader integration of firearm safety conversations into suicide prevention efforts across military and veteran-serving organizations.

REFERENCES

- Anestis, M. D., Bryan, C. J., Capron, D. W., & Bryan, A. O. (2022). Evaluation of safe firearm storage messaging in a sample of firearm-owning US military service members. *JAMA network open*, 5(10), e2235984.
- Anglemyer, A., Horvath, T., & Rutherford, G. (2014). The accessibility of firearms and risk for suicide and homicide victimization among household members: a systematic review and meta-analysis. *Annals of internal medicine*, 160(2), 101-110.
- Baker, J. C., Anestis, M. D., Meza, K. A., Mocerri-Brooks, J., Bletz, A., Friedman, K., ... & Betz, M. E. (2026). Military spouse and key stakeholder perspectives of effective messaging for US service members on secure storage of personal firearms: a qualitative study. *Injury prevention*, 32(4), 642-647.
- Betz, M. E., Brooks-Russell, A., Brandspigel, S., Novins, D. K., Tung, G. J., & Runyan, C. (2018). Counseling suicidal patients about access to lethal means: attitudes of emergency nurse leaders. *Journal of emergency nursing*, 44(5), 499-504.
- Bradley, R. A., & Terry, M. E. (1952). Rank analysis of incomplete block designs: I. the method of paired comparisons. *Biometrika*, 39(3/4), 324-345.
- Dempsey, C. L., Benedek, D. M., Zuromski, K. L., Riggs-Donovan, C., Ng, T. H. H., Nock, M. K., ... & Ursano, R. J. (2019). Association of firearm ownership, use, accessibility, and storage practices with suicide risk among US Army soldiers. *JAMA network open*, 2(6), e195383.
- Dent, K. R., Cooper, S., & McCarthy, J. F. (2025). The REACH VET program and mortality outcomes among veterans at high risk of suicide. *JAMA network open*, 8(7), e2519513.
- Dobscha, S. K., Clark, K. D., Newell, S., Kenyon, E. A., Karras, E., Simonetti, J. A., & Gerrity, M. (2021). Strategies for discussing firearms storage safety in primary care: Veteran perspectives. *Journal of general internal medicine*, 36(6), 1492-1502.
- Dobscha, S. K., Somohano, V., Niederhausen, M., Hwang, C. S., Carlson, K. F., Bahraini, N., ... & Denneson, L. M. (2026). Limitations of universal suicide risk screening: Accuracy of disclosure among veterans screened in Veterans Health Administration mental health settings. *Psychiatry research*, 117436.
- Ganzini, L., Denneson, L. M., Press, N., Bair, M. J., Helmer, D. A., Poat, J., & Dobscha, S. K. (2013). Trust is the basis for effective suicide risk screening and assessment in veterans. *Journal of general internal medicine*, 28(9), 1215-1221.
- Hoyt, T., Holliday, R., Simonetti, J. A., & Monteith, L. L. (2021). Firearm lethal means safety with military personnel and veterans: Overcoming barriers using a collaborative approach. *Professional psychology: research and practice*, 52(4), 387.
- Kaplansky, G. F., & Toussaint, M. (2024). US Army mortality surveillance in active duty soldiers, 2014–2019. *Medical surveillance monthly report*, 31(5), 2.
- Karras, E., Arriola, N., McCarten, J. M., Britton, P. C., Besterman-Dahan, K., & Stecker, T. A. (2022). Perceptions of public messaging to facilitate help seeking during crisis among US veterans at risk for suicide. *Archives of suicide research*, 26(2), 581-594.
- Khazanov, G. K., Keddem, S., Hoskins, K., Wortzel, H. S., & Simonetti, J. A. (2024). Increasing the acceptability of lethal means safety counseling for firearms: tips and scripts. *Journal of psychiatric practice*, 30(2), 139-146.
- Litschi, M. A., Lancaster, S. L., Linkh, D. J., & Lafferty, M. (2025). “They’ll talk about everything else... but suicidal ideation”: Clinician experiences addressing non-disclosure of suicidal ideation among military-affiliated clients. *Journal of general internal medicine*, 40(15), 3684-3693.
- Louzon, S. A., Bossarte, R., McCarthy, J. F., & Katz, I. R. (2016). Does suicidal ideation as measured by the PHQ-9 predict suicide among VA patients?. *Psychiatric services*, 67(5), 517-522.
- Mann, J. J., Apter, A., Bertolote, J., Beautrais, A., Currier, D., Haas, A., ... & Hendin, H. (2005). Suicide prevention strategies: a systematic review. *Jama*, 294(16), 2064-2074.

REFERENCES

- Marcus, S. C., Cullen, S. W., Xie, M., Bridge, J. A., Caterino, J. M., Schmutte, T., & Olfson, M. (2025). Evaluating the effect of routine lethal means counseling in the emergency department on suicide mortality among mental health patients. *AJPM focus*, 4(4), 100336.
- Marino, E., Wolsko, C., Keys, S., & Wilcox, H. (2018). Addressing the cultural challenges of firearm restriction in suicide prevention: a test of public health messaging to protect those at risk. *Archives of suicide research*, 22(3), 394-404.
- McCarthy JF, Cooper SA, Dent KR, Eagan AE, Matarazzo BB, Hannemann CM, ... Katz IR (2021). Evaluation of the recovery engagement and coordination for health – Veterans enhanced treatment suicide risk modeling clinical program in the Veterans health administration. *JAMA network open*, 4(10), e2129900.
- Newell, S., Kenyon, E., Clark, K. D., Elliott, V., Rynerson, A., Gerrity, M. S., ... & Dobscha, S. K. (2021). Veterans are agreeable to discussions about firearms safety in primary care. *The journal of the American Board of Family Medicine*, 34(2), 338-345.
- Pallin, R., Siry, B., Azrael, D., Knoepke, C. E., Matlock, D. D., Clement, A., ... & Betz, M. E. (2019). “Hey, let me hold your guns for a while”: A qualitative study of messaging for firearm suicide prevention. *Behavioral sciences & the law*, 37(3), 259-269.
- Polzer, E. R., Holliday, R., Rohs, C. M., Thomas, S. M., Miller, C. N., Simonetti, J. A., ... & Monteith, L. L. (2023). Women veterans’ perspectives, experiences, and preferences for firearm lethal means counseling discussions. *PLoS one*, 18(12), e0295042.
- Pruitt, L. D., Sung, J. C., & Walker, K. A. (2022). What is “safety”? Lethal means counseling as a cross-cultural communication. *Military psychology*, 34(3), 352-365.
- Richards, J. E., Hohl, S. D., Segal, C. D., Grossman, D. C., Lee, A. K., Whiteside, U., ... & Williams, E. C. (2021). “What will happen if I say yes?” Perspectives on a standardized firearm access question among adults with depressive symptoms. *Psychiatric services*, 72(8), 898-904.
- Roszko, P. J., Ameli, J., Carter, P. M., Cunningham, R. M., & Ranney, M. L. (2016). Clinician attitudes, screening practices, and interventions to reduce firearm-related injury. *Epidemiologic reviews*, 38(1), 87-110.
- Simonetti, J. A., Azrael, D., Rowhani-Rahbar, A., & Miller, M. (2018). Firearm storage practices among American veterans. *American journal of preventive medicine*, 55(4), 445-454.
- Smith, L. (2025). Messenger acceptability for suicide means safety messages for firearm owners: Effects of perceived expertise, trustworthiness, and ideological similarity. *Psychological reports*, 00332941251358213.
- Spitzer, E. G., Stearns-Yoder, K. A., Hoffberg, A. S., Bailey, H. M., Miller, C. J., & Simonetti, J. A. (2024). A systematic review of lethal means safety counseling interventions: Impacts on safety behaviors and self-directed violence. *Epidemiologic reviews*, 46(1), 1-22.
- Stanley, I. H., Bryan, C. J., Bryan, A. O., Capron, D. W., & Anestis, M. D. (2024). Lethal means safety counseling among firearm-owning US National Guard personnel: Hyperarousal symptoms as a moderator of treatment outcomes. *Psychological services*, 21(2), 199.
- U.S. Department of Veterans Affairs, Office of Suicide Prevention. (2024). *2024 National Veteran Suicide Prevention Annual Report, Part 1 of 2: In-Depth Reviews*. Available from: https://www.mentalhealth.va.gov/docs/data-sheets/2024/2024-Annual-Report-Part-1-of-2_508.pdf

Appendix I: Message Contents

Message 1 (Firearms increase risk + positive descriptive norms):

I want to check in with you about something important – firearm safety. Having unsecured firearms in the home can increase the risks of accidental injuries and suicide for you and your family. Anybody can have a moment of crisis, and having easy access to a firearm makes a tragic outcome much more likely. That’s why we talk openly about firearm safety with every client, no matter their mental health status.

I know that responsibility and commitment to protecting others is a huge part of military service. Many people in the military community already take simple steps—like using cable locks or gun safes—to store their firearms responsibly and keep their families safe.

Would you be interested in talking more about firearm safety?

Message 2 (Firearms increase risk + acknowledge firearm importance):

I want to check in with you about something important – firearm safety. Having unsecured firearms in the home can increase the risks of accidental injuries and suicide for you and your family. Anybody can have a moment of crisis, and having easy access to a firearm makes a tragic outcome much more likely. That’s why we talk openly about firearm safety with every client, no matter their mental health status.

I understand that firearms hold a lot of meaning for many in the military community as tools for hunting, recreation, or protection. This may be true for you too. Simple steps—like using cable locks or gun safes—allow you to stay prepared, enjoy your hobbies, and keep your loved ones safe.

Would you be interested in talking more about firearm safety?

Message 3 (Firearms increase risk + empowerment/voluntary & temporary):

I want to check in with you about something important – firearm safety. Having unsecured firearms in the home can increase the risks of accidental injuries and suicide for you and your family. Anybody can have a moment of crisis, and having easy access to a firearm makes a tragic outcome much more likely. That’s why we talk openly about firearm safety with every client, no matter their mental health status.

When it comes to the firearms in your home, you are in control. It’s not about giving something up; it’s about protecting yourself and the people you care about. Taking voluntary and temporary steps—like using cable locks or gun safes—can help you control how your firearms are used.

Would you be interested in talking more about firearm safety?

Message 4 (Care & concern + positive descriptive norms):

My number one priority is making sure you and your loved ones are safe and healthy. That’s why I find it important to talk openly about firearm safety with every client, no matter their mental health status.

Securely storing firearms is one way to make sure your home is safe for everyone, and I want to help you find the right storage option because I care about you and your wellbeing.

I know that responsibility and commitment to protecting others is a huge part of military service. Many people in the military community already take simple steps—like using cable locks or gun safes—to store their firearms responsibly and keep their families safe.

Would you be interested in talking more about firearm safety?

 Message 5 (Care & concern + acknowledge firearm importance):

My number one priority is making sure you and your loved ones are safe and healthy. That's why I find it important to talk openly about firearm safety with every client, no matter their mental health status. Securely storing firearms is one way to make sure your home is safe for everyone, and I want to help you find the right storage option because I care about you and your wellbeing.

I understand that firearms hold a lot of meaning for many in the military community as tools for hunting, recreation, or protection. This may be true for you too. Simple steps—like using cable locks or gun safes—allow you to stay prepared, enjoy your hobbies, and keep your loved ones safe.

Would you be interested in talking more about firearm safety?

 Message 6 (Care & concern + empowerment/voluntary & temporary):

My number one priority is making sure you and your loved ones are safe and healthy. That's why I find it important to talk openly about firearm safety with every client, no matter their mental health status. Securely storing firearms is one way to make sure your home is safe for everyone, and I want to help you find the right storage option because I care about you and your wellbeing.

When it comes to the firearms in your home, you are in control. It's not about giving something up; it's about protecting yourself and the people you care about. Taking voluntary and temporary steps—like using cable locks or gun safes—can help you control how your firearms are used.

Would you be interested in talking more about firearm safety?

Appendix II: Sub-group Analyses

Table 4. Mean likelihood rating by military connection

Characteristic	Active Duty Service Member <i>n</i> = 21 ¹	Guard or Reserve <i>n</i> = 17 ¹	Veteran <i>n</i> = 117 ¹	Family <i>n</i> = 83 ¹	Did not respond <i>n</i> = 39 ¹	Overall <i>N</i> = 277 ²
Message 1	3.50 (0.85)	3.00 (1.15)	2.64 (1.07)	2.87 (0.88)	2.33 (0.98)	<i>n</i> = 96; 2.79 (1.01)
Message 2	2.67 (0.82)	2.50 (0.55)	2.67 (1.23)	3.13 (1.08)	2.83 (1.19)	<i>n</i> = 97; 2.79 (1.14)
Message 3	2.22 (1.39)	2.71 (1.11)	2.66 (0.96)	2.85 (1.02)	2.38 (1.51)	<i>n</i> = 99; 2.67 (1.08)
Message 4	3.33 (0.82)	2.50 (0.71)	2.68 (1.12)	2.88 (0.99)	2.78 (0.83)	<i>n</i> = 88; 2.81 (1.02)
Message 5	3.00 (0.00)	4.00 (0.00)	2.91 (0.98)	2.81 (0.98)	2.43 (1.51)	<i>n</i> = 63; 2.87 (1.02)
Message 6	2.75 (1.39)	3.00 (1.05)	3.03 (1.04)	3.04 (0.96)	2.80 (1.79)	<i>n</i> = 86; 2.99 (1.08)

¹Mean (SD)

²*n* = *N* Non-missing; Mean (SD)

Table 5. Mean likelihood rating by gender

Characteristic	Woman <i>n</i> = 133 ¹	Man <i>n</i> = 106 ¹	Did not respond <i>n</i> = 39	Overall <i>N</i> = 278 ²
Message 1	2.78 (1.01)	3.00 (1.02)	2.31 (0.95)	<i>n</i> = 96; 2.79 (1.01)
Message 2	2.95 (1.11)	2.64 (1.13)	2.83 (1.19)	<i>n</i> = 97; 2.78 (1.13)
Message 3	2.70 (1.09)	2.69 (1.01)	2.50 (1.41)	<i>n</i> = 100; 2.68 (1.08)
Message 4	2.93 (1.03)	2.65 (1.04)	2.78 (0.83)	<i>n</i> = 88; 2.81 (1.02)
Message 5	2.90 (0.92)	2.92 (0.98)	2.33 (1.63)	<i>n</i> = 62; 2.85 (1.02)
Message 6	2.96 (1.01)	3.06 (1.08)	2.80 (1.79)	<i>n</i> = 88; 2.99 (1.08)

¹Mean (SD)

²*n* = *N* Non-missing; Mean (SD)

Table 6. Mean likelihood rating by race and ethnicity

Characteristic	Black or African American <i>n</i> = 35 ¹	Hispanic or Latino <i>n</i> = 37 ¹	White <i>n</i> = 108 ¹	Two or more races and/or ethnicities <i>n</i> = 31 ¹	Prefer not to answer <i>n</i> = 10 ¹	Did not respond <i>n</i> = 40 ¹	Overall <i>N</i> = 261 ²
Message 1	3.06 (1.03)	3.00 (1.00)	2.94 (1.01)	2.67 (0.89)	1.33 (1.15)	2.31 (0.95)	<i>n</i> = 92; 2.79 (1.03)
Message 2	2.80 (0.92)	2.85 (0.90)	2.73 (1.30)	3.33 (0.78)	1.75 (1.26)	2.83 (1.19)	<i>n</i> = 91; 2.80 (1.15)
Message 3	2.50 (1.29)	2.62 (1.26)	2.76 (0.99)	2.70 (0.95)	3.67 (0.58)	2.33 (1.41)	<i>n</i> = 95; 2.68 (1.10)
Message 4	2.38 (1.41)	3.07 (0.96)	2.87 (0.99)	2.60 (1.26)	3.33 (0.82)	2.78 (0.83)	<i>n</i> = 79; 2.85 (1.04)
Message 5	2.86 (0.90)	3.00 (0.71)	3.04 (1.08)	2.50 (0.93)	3.50 (0.71)	2.43 (1.51)	<i>n</i> = 57; 2.88 (1.04)
Message 6	3.07 (1.14)	2.85 (1.28)	2.95 (1.05)	3.10 (0.88)	3.50 (0.71)	2.80 (1.79)	<i>n</i> = 83; 2.98 (1.10)

¹Mean (*SD*)

²*n* = *N* Non-missing; Mean (*SD*)

Table 7. Mean likelihood rating by firearm ownership

Characteristic	I currently own a firearm <i>n</i> = 129 ¹	I have owned a firearm in the past <i>n</i> = 26 ¹	I have never owned a firearm <i>n</i> = 85 ¹	Did not respond <i>n</i> = 39 ¹	Overall <i>N</i> = 279 ²
Message 1	3.00 (0.87)	1.91 (1.14)	3.00 (0.98)	2.33 (0.98)	<i>n</i> = 96; 2.79 (1.01)
Message 2	2.77 (1.17)	2.57 (1.40)	2.87 (1.02)	2.83 (1.19)	<i>n</i> = 98; 2.80 (1.13)
Message 3	2.80 (0.98)	2.60 (0.84)	2.57 (1.23)	2.38 (1.51)	<i>n</i> = 100; 2.68 (1.08)
Message 4	2.90 (1.02)	2.88 (1.13)	2.69 (1.06)	2.78 (0.83)	<i>n</i> = 88; 2.81 (1.02)
Message 5	3.00 (1.02)	3.00 (0.63)	2.75 (0.93)	2.43 (1.51)	<i>n</i> = 63; 2.87 (1.02)
Message 6	2.98 (1.14)	3.00 (0.94)	3.03 (0.95)	2.80 (1.79)	<i>n</i> = 88; 2.99 (1.08)

¹Mean (*SD*)

²*n* = *N* Non-missing; Mean (*SD*)