

WHITE PAPER

Disrupting The Kill Chain

How an evidence-based solution can
disrupt the kill chain and save lives

CDR Matthew Brown, USNR

Chief Executive Officer - Chimney Trail Health

Dr. Leah Blain, PhD

Chief Clinical Officer - Chimney Trail Health



THE WILL TO FIGHT AND WIN SERIES



NAVIGATION

01 Introduction

03 The Problem

05 The Solution

07 Concluding with Clinical Foundations

08 About Chimney Trail Health

09 Sources

10 Appendix





4x

Since 2001, we have lost four times as many service members and post-9/11 veterans to suicide than in combat.¹

Military and veteran leaders have been at the forefront of research examining one of the country's most urgent public health issues: suicide.

Nationally, we have invested millions of dollars in this fight, yet suicide rates among our country's protectors are holding above the national average.

This stagnation threatens national security and degrades readiness. **Suicide is now more lethal than engaging enemies on the battlefield.** Since 2001, we have lost four times as many service members and post-9/11 veterans to suicide than in combat.¹ Firearms account for 65% of service member suicides, 63% of military spouse suicides,² and 73.5% of veteran suicides.³

We have a duty to take this persistent threat seriously and act accordingly.



The Cost Of Highly Lethal Means

Suicide affects almost every community and demographic. **One of the most emergent risk factors is access to lethal means—especially firearms, due to their prevalence.**

From a prevention perspective, personal firearms pose a unique challenge: Ownership is both a constitutional right and often a realistic defense need. At the same time, unsecured firearms increase risk. Attempts involving a firearm are almost always fatal;⁴ this is especially alarming since a large proportion of attempts are impulsive and unlikely to be repeated.⁵

Echoing countless studies preceding it, the 2022 SPRIRC final report dedicated 14 of 117 recommendations solely to suicide involving firearms.⁶ This is a clarion call to **enhance personal firearm security and support owners in protecting their peers, families, and communities.**

Failing to answer this call will continue to have tragic—though entirely preventable—costs.

The personal losses caused by suicide are immense. Every preventable suicide also eliminates a trained professional: Basic training costs anywhere from over \$13,000 to \$50,000–\$74,000 per recruit.^{7,8} **Unless leaders act to effectively implement the SPRIRC's lethal means recommendations, unnecessary, costly losses will continue unabated.**

Ignoring Secure Storage Training Is a Dereliction of Duty

More than 65% of service member suicide deaths involved firearms.⁹

95% of military firearm suicides involved a personal weapon, yet only 32% of military personnel practice fully secure storage.¹⁰



Unique Threats In The Digital Age

How external cognitive threats become self-inflicted attacks.

Delaying access to lethal means during an acute, time-limited crisis can nullify an otherwise effective external, yet often invisible, threat.

People in uniform are trained to recognize, anticipate, and respond to many kinds of threats while “on the job.” However, our forces—internal and external—are also the target of threat vectors while off duty. Cognitive attacks via seemingly organic social media campaigns can be very difficult to monitor and counteract.¹¹

At the same time, some groups face elevated risk due to a complex set of factors. Moreover, significant stigma (perceived or real) often keeps service members and law enforcement from disclosing suicidal thoughts.¹²

Combine elevated risk with cognitive warfare, and you have a **direct path for cognitive threats to convert to self-inflicted kinetic attacks.**

Why Normalize Secure Storage?

Translating secure storage practices to personal firearms

Securing firearms is a normal part of military and law enforcement work. Transferring these skills to daily life adds a layer of protection in settings where external cognitive attacks are more active.¹³

Formal lethal means counseling works but has limited impact.¹⁴ Counseling occurs in clinical settings after a disclosure of suicide risk and firearm ownership. When offered free equipment, owners preferred lockboxes over trigger locks, (28% and 14% adoption, respectively)—and adjusting storage practices is more likely when trusted messengers promote tools tailored to owner preferences.^{15,16}

We need a more comprehensive approach. A truly effective solution respects the identities—and understands the preferences and needs—of gun owners.



The Complete Marksman Kit

Chimney Trail Health developed the Complete Marksman Kit in direct response to ten SPRIRC recommendations, including five focused on firearms.* Our goal is to empower firearm owners with the tools and knowledge necessary to fully protect themselves, their families, and their communities.

The Complete Marksman Kit includes:



1. EVIDENCE-BASED, SELF-PACED TRAINING TO CRUSH THE COGNITIVE DISTORTIONS THAT DRIVE DESTRUCTIVE ANXIETY AND DEPRESSION.

- CBT GUIDEBOOK



2. SUICIDE PREVENTION RESOURCES AND ACTION STEPS TO SUPPORT PEERS, FAMILY, AND COMMUNITY.



3. TRUSTED FIREARM STORAGE AND GEAR:

- RANGE BAG WITH INTEGRATED COMBINATION LOCK (PATENT PENDING)
- COMBINATION-LOCK GUN CASE
- GUN CLEANING KIT



*See appendix for list of report recommendations addressed.

“

A lockable gun case should be one of the first purchases for a gun owner. People want to buy it, but it ends up being pushed down the list of things to buy.”

- Gabby Franco
Olympian, 2A Advocate



A Secure Storage System

Chimney Trail Health offers proven, evidence-based solutions for firearm security. We developed the Complete Marksman Kit for the firearm-owning community with the goal of reducing risk while respecting owners' core values.

The Complete Marksman Kit is **uniquely designed to enhance secure storage practices without sacrificing rapid access** for personal or home defense. Focus groups, research, and our own experience shaped the development process. From the training language to the lockbox itself, the kit speaks directly to owners' concerns without downplaying the urgency of real risks.

We include high-quality gear that is trusted and widely preferred by military, veterans, and law enforcement. We also know that in half of attempts, the time between thinking about suicide and acting on it was less than 10 minutes,¹⁷ and more secure firearm storage effectively disrupts the impulsive action.¹⁰

The evidence is conclusive: Secure storage makes sense.¹⁸ By focusing on enhancing personal firearm security practices, the kit:

- Protects lives by delaying access during an acute mental health crisis
- Prevents injury to children and family members
- Allows for rapid access when needed for personal defense

The Complete Marksman Kit also extends existing firearm security initiatives, regardless of approach.

The kit was built to easily integrate into existing prevention programs (ACE, ACT, ASSIST, CALM, and REACH) and to increase the effectiveness of other suicide prevention strategies and tools with the addition of a trusted, evidence-based storage solution.

60% lower suicide risk when firearms are locked and unloaded⁵

96% of all firearm owners prefer a lockbox over other methods¹⁵



Built On What Works

The Complete Marksman Kit is more than high-quality gear. Chimney Trail Health integrates decades of clinical research to achieve lasting behavior changes and eliminate suicide risk.

The Complete Marksman Kit integrates principles of Cognitive Behavior training (CBt), to specifically reduce the risks associated with unsecured firearms at home.

Owners will engage in interactive, practical exercises to reflect on their storage practices and strengthen or establish more secure practices at home—including discussing firearm safety with children. These exercises also train owners to quickly identify and defeat cognitive distortions—common, unhelpful thought patterns that can drive anxiety, depression, and suicide.

Finally, the kit trains firearm owners to recognize signs of suicide risk and take action to keep their communities safe. This isn't the rote training most people now tune out—the material is speaking directly to gun owners and their values as defenders and protectors.

Our goal is straightforward: Change storage behaviors and bolster mental resilience. No moral arguments. No veiled attempts to critique ownership or limit rapid access. And no stigma around acknowledging the realities of mental health concerns or external factors that contribute to suicide risk.

Whether as an independent offering or an element integrated into existing prevention programs, **Chimney Trail Health ensures that adoption of the Complete Marksman Kit is easy, scalable, and sustainable.**

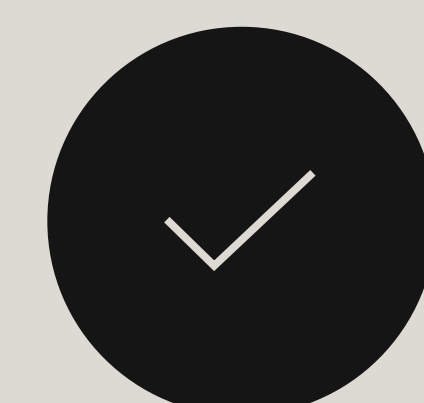


Owning a firearm doesn't make someone suicidal. But having a loaded firearm at home increases the risk of dying by suicide by four to six times.¹⁹



Security Starts With Chimney Trail Health

Chimney Trail Health offers trusted, scalable lethal means security training and equipment designed specifically for our communities. Whether you're enhancing prevention programs, supporting service members or veterans, or promoting a broader culture of safety, the Complete Marksman Kit is:



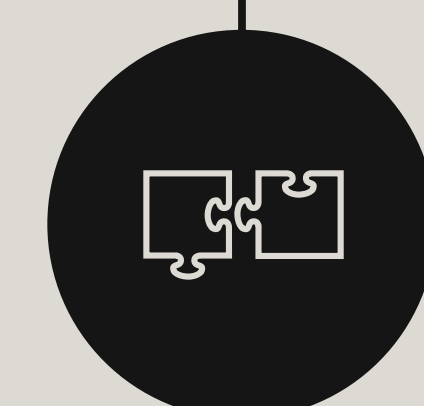
TRUSTED AND
VETTED BY OWNERS



EVIDENCE-BASED



DESIGNED FOR QUICK
DEPLOYABILITY



EASILY INTEGRATED
INTO CURRENT PROGRAMS

“

Far too often we learn that a service member bought a gun on base only after they used it to kill themselves.

-Military Investigator SPRIRC p. 61

**Contact us today to
schedule a consultation
or request a pilot.**

✉ carl@chimneytrail.com

🌐 www.chimneytrailhealth.com



Works Cited

1. Suitt, T. H., III. (2021). **High Suicide Rates among United States Service Members and Veterans of the Post-9/11 Wars** (20 Years of War: A Costs of War Research Series). https://watson.brown.edu/costsofwar/files/cow/imce/papers/2021/Suitt_Suicides_Costs%20of%20War_June%2021%202021.pdf
2. Department of Defense. (2024). **Annual Report on Suicide in the Military**. Calendar Year 2023.
3. Office of Suicide Prevention. (2024, December). **2024 National Veteran Suicide Prevention Annual Report: Part 2 of 2—Report findings**. U.S. Department of Veterans Affairs.
4. Conner A, Azrael D, & Miller M. (2019). Suicide case-fatality rates in the United States, 2007 to 2014: A nationwide population-based study. **Annals of Internal Medicine**. <https://www.acpjournals.org/doi/10.7326/M19-1324>
5. Shenassa, E. D., Rogers, M. L., Spalding, K. L., & Roberts, M. B. (2004). Safer storage of firearms at home and risk of suicide: A study of protective factors in a nationally representative sample. **Journal of Epidemiology & Community Health**, 58(10), 841–848. <https://doi.org/10.1136/jech.2003.017343>
6. Suicide Prevention and Response Independent Review Committee. (2022). **Final report to the Secretary of Defense**. U.S. Department of Defense.
7. Hansbrough, J.J. (2000). **An activity-based cost analysis of recruit training operations at Marine Corps recruit depot, San Diego, California**. (Publication Number ADA380842). [Thesis, U.S. Navy, Naval Postgraduate School]. <http://handle.dtic.mil/100.2/ADA380842>.
8. Kimmon, S. (2018, July 2). OPAT reducing trainee attrition, avoiding millions in wasted training dollars, officials say. **Army News Service**. https://www.army.mil/article/207956/opat_reducing_trainee_attrition_avoiding_millions_in_wasted_training_dollars_officials_say
9. Department of Defense. (2023). **Annual Report on Suicide in the Military**. Calendar Year 2022.
10. Bryan, C. J., Bryan, A. O., Anestis, M. D., et al. (2019). Firearm availability and storage practices among military personnel who have thought about suicide. **JAMA Network Open**, 2(8), e199160
11. Johns Hopkins University & Imperial College London. (2021, May 20). Countering Cognitive Warfare: Awareness and Resilience. **NATO Review**. <https://www.nato.int/docu/review/articles/2021/05/20/countering-cognitive-warfare-awareness-and-resilience/index.html>
12. Wong, E. C., Waymouth, M., McBain, R. K., Schell, T. L., Hindmarch, G., Vidal Verástegui, J., Welch, J., Beckman, R. L., Robbins, M. W., Engel, C. C., & Gore, K. L. (2024). **Perceptions of mental health confidentiality policies and practices in the U.S. military** (RR-A2681-1). RAND Corporation. <https://www.rand.org/t/RR-A2681-1>
13. Deppe, C., & Schaal, G. S. (2024). Cognitive warfare: a conceptual analysis of the NATO ACT cognitive warfare exploratory concept. **Frontiers In Big Data**, 7, 1452129. <https://doi.org/10.3389/fdata.2024.1452129>
14. Spitzer, E., 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, <https://doi.org/10.1093/epirev/mxae001>
15. Rowhani-Rahbar, A. (2023). Firearm storage practices—What constitutes safe? **JAMA Network Open**, 6(3), e231452. <https://doi.org/10.1001/jamanetworkopen.2023.1452>
16. Anestis, M. D., Bond, A. E., Bryan, A. O., & Bryan, C. J. (2021). An examination of preferred messengers on firearm safety for suicide prevention. **Preventive Medicine**, 145, 106452. <https://doi.org/10.1016/j.ypmed.2021.106452>
17. Deisenhammer, E. A., Ing, C.-M., Strauss, R., Kemmler, G., Hinterhuber, H., & Weiss, E. M. (2008). The Duration of the Suicidal Process: How Much Time Is Left for Intervention Between Consideration and Accomplishment of a Suicide Attempt? **Journal of Clinical Psychiatry**, 70(1), 19–24.
18. Mann, J. J., Michel, C. A., & Auerbach, R. P. (2021). Improving suicide prevention through evidence-based strategies: A systematic review. **American Journal of Psychiatry**, 178(7), 611–624. <https://doi.org/10.1176/appi.ajp.2020.20060864>
19. U.S. Army, Directorate of Prevention, Resilience and Readiness (DPRR). (2023, August 25). **Lethal means safety toolkit: Time makes all the difference—Resources for Soldiers, their families, and civilians**. Army Resilience Directorate.



Appendix: SPRIRC Lethal Means Recommendations

The ten recommendations below are from the SPRIRC 2023 final report. Suicide Prevention and Response Independent Review Committee. (2022). **Final report to the Secretary of Defense.** U.S. Department of Defense.

4.1 Modernize the content, delivery, and dosage of suicide prevention education and skill building across the career cycle of military personnel.

4.1.1 Separate training should be developed for different audiences and for intended effect.

4.1.2 Training should be delivered in small groups of service members with similar rank and/or positions instead of mass “one-size-fits-all” training.

4.1.3 The DoD should vary training duration and frequency to maximize engagement and efficacy.

4.1.4 The DoD should allow service members to select from a range of complementary topics and educational materials to meet training requirements.

5.14 Establish standards for DoD-approved firearm safety training requirements.

5.14.1 Require DoD-approved firearm safety training, including refresher and sustainment training every five years.

5.19 Incentivize the acquisition and use of firearm locking devices by providing discounts for firearm locking devices purchased at a Military Exchange.

5.21 Require anyone living on DoD property in military housing to register all privately owned firearms with the installation’s arming authority and to securely store all privately owned firearms in a locked safe or with another locking device.

5.24 Develop and implement a multimedia public education campaign to promote secure firearm storage.



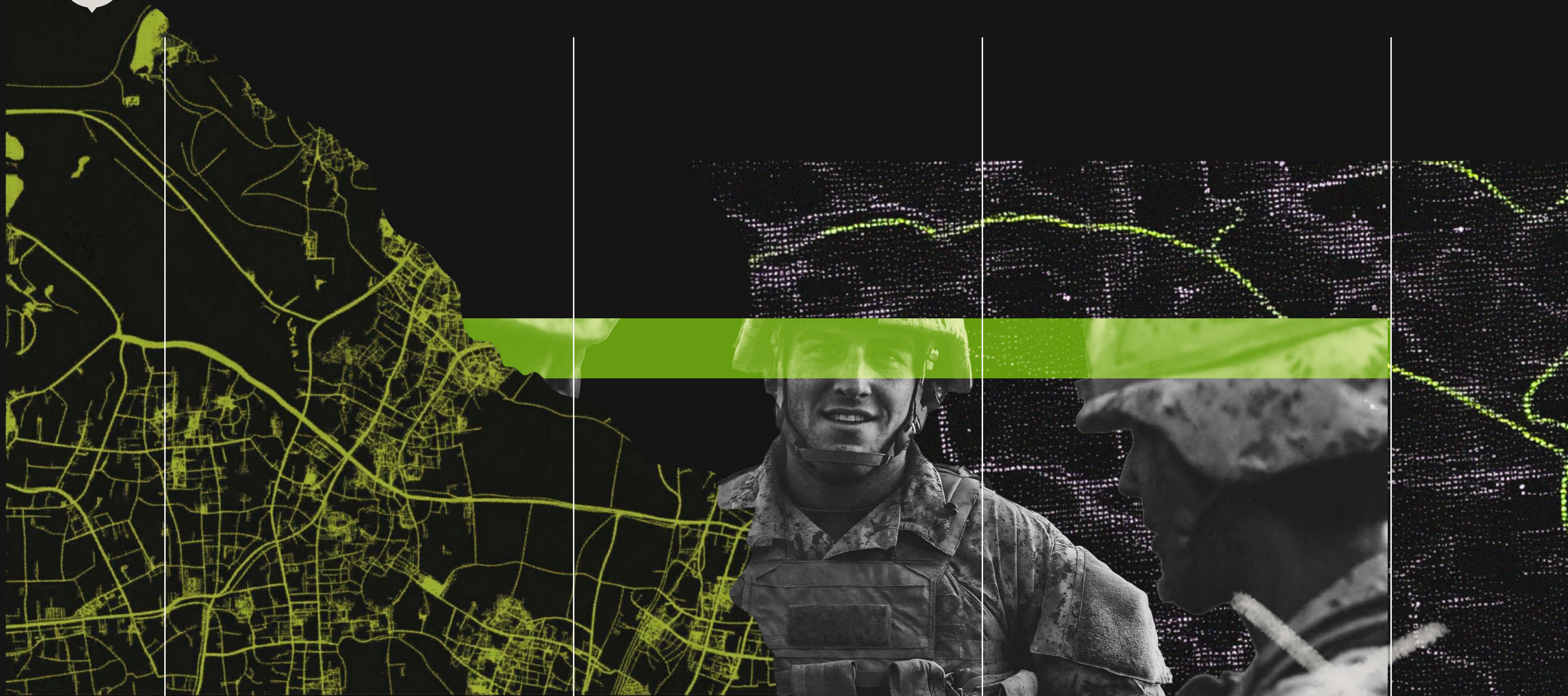
Disrupting The Kill Chain



Disrupting The Kill Chain



Disrupting The Kill Chain



CONTACT

Move Forward

POC: Carl Governale

Phone: +1 (720) 930 5390

Email: carl@chimneytrail.com

Website: www.chimneytrailhealth.com

Get Started
With Chimney Trail



SCAN THE QR CODE.