

Q. What is lethal means safety?

A. Reducing access to lethal means is a population-level, community-based intervention for suicide prevention that includes firearm restrictions, reducing access to poisons or medications used for overdose, barriers to jumping from lethal heights, and reducing access to any other lethal means (VA/DoD, 2019). When mental health professionals have a patient who has suicidal ideation and/or behaviors, one component of a comprehensive safety plan involves asking about the means by which the patient may consider ending their life and then providing guidance on ways they can implement safety procedures to limit their access to the lethal means.

Q. What is the theoretical model underlying lethal means safety for suicidality?

A. Putting time and space between an at-risk individual and lethal means can save lives. According to Joiner's interpersonal-psychological theory of suicide, an individual who feels like a burden to others and experiences a sense of disconnection from others may be at risk for suicide (Joiner, 2005). Nonetheless, an individual may not necessarily act on their suicidal ideation unless they acquire the capability for suicidal behavior by overcoming the fear of death and pain associated with an attempt (Van Orden, et al., 2010). According to Van Orden et al. (2010), factors such as limiting access to lethal means may block this acquired capability for suicidal behavior. The population-level intervention of reducing access to lethal means builds additional barriers to prevent individuals from acting on the desire to die through the implementation of safety procedures.

Q. Is lethal means safety recommended as a treatment for suicidality in the Military Health System (MHS)?

A. **Yes.** The 2019 VA/DoD Clinical Practice Guideline for the Assessment and Management of Patients at Risk for Suicide suggests reducing access to lethal means to decrease population suicide rates, with a "Weak For" strength of recommendation. This recommendation specifically refers to use of lethal means safety as a population-level intervention.

The MHS relies on the Department of Veterans Affairs (VA)/Department of Defense (DoD) clinical practice guidelines (CPGs) to inform best clinical practices. The CPGs are developed under the purview of clinical experts and are derived through a transparent and systematic approach that includes, but is not limited to, systematic reviews of the literature on a given topic and development of recommendations using a graded system that takes into account the overall quality of the evidence and the magnitude of the net benefit of the recommendation. A further description of this process and CPGs on specific topics can be found on the VA clinical practice guidelines website.

Q. Do other authoritative reviews recommend lethal means safety as an intervention for suicidality?

A. **No.** Other authoritative reviews have not substantiated the use of lethal means safety for suicidality.

Several other recognized organizations conduct systematic reviews and evidence syntheses on psychological health topics using similar grading systems as the VA/DoD CPGs. These include the Agency for Healthcare Research and Quality (AHRQ) and Cochrane.

- AHRQ: No reports on the use of lethal means safety as a treatment of suicidality were identified.
- Cochrane: A 2016 systematic review of psychosocial interventions for self-harm in adults did not include lethal means restriction (Hawton et al., 2016).

Q. Is there any recent research on lethal means safety for suicidality?

A. A July 2019 literature search identified no randomized controlled trials of lethal means safety for suicidality. Research on lethal means safety is currently characterized by studies examining access

to lethal means as a risk factor for suicide (e.g., Zalsman et al., 2016), studies on the impact of means safety counseling on subsequent reductions in the access to lethal means (e.g., Barkin et al., 2008; Runyan et al., 2016), and non-randomized studies looking at the impact of access to lethal means on suicide rates (e.g., Lubin et al., 2010; Knipe et al., 2017; Pirkis et al., 2013; Sale et al., 2018), or looking at the association between handgun access laws and suicide rates (e.g., Anestis & Capron, 2015; Edwards, et al., 2018).

Q. What conclusions can be drawn about the use of lethal means safety in the MHS?

A. There is some evidence to support the use of lethal means restriction as a population-level intervention in the military, including with patients who are at risk for suicide. However, it is not recommended as a stand-alone clinical intervention.

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References

- Anestis, M., & Capron, D. W. (2016). The associations between state veteran population rates, handgun legislation, and statewide suicide rates. *Journal of Psychiatric Research, 74*, 30–34.
- Barkin, S. L., Finch, S. A., Ip, E. H., Scheindlin, B., Craig, J. A., Steffes, J., ... Wasserman, R. C. (2008). Is office-based counseling about media use, timeouts, and firearm storage effective? Results from a cluster-randomized, controlled trial. *Pediatrics, 122*(1), e15–25.
- Department of Veterans Affairs, Department of Defense. (2019). VA/DoD clinical practice guideline for assessment and management of patients at risk for suicide. Version 2.0. Washington, DC: Department of Veterans Affairs/Department of Defense.
- Edwards, G., Nesson, E., Robinson, J. J., & Vars, F. (2018). Looking down the barrel of a loaded gun: The effect of mandatory handgun purchase delays on homicide and suicide. *The Economic Journal, 128*(616), 3117–3140.
- Hawton, K., Witt, K. G., Taylor Salisbury, T. L., Arendsman, E., Gunnell, D., Hazell, P., ... van Heeringen, K. (2016). Psychosocial interventions for self-harm in adults. *Cochrane Database of Systematic Reviews, 5*, CD012189.
- Joiner, T. (2005). *Why people die by suicide*. Cambridge, Massachusetts: Harvard University Press.
- Knipe, D. W., Chang, S. S., Dawson, A., Eddleston, M., Konradsen, F., Metcalfe, C., & Gunnell, D. (2017). Suicide prevention through means restriction: Impact of the 2008-2011 pesticide restrictions on suicide in Sri Lanka. *PLoS One, 12*(3), e0172893.
- Lubin, G., Werbeloff, N., Halperin, D., Shmushkevitch, M., Weiser, M., & Knobler, H. Y. (2010). Decrease in suicide rates after a change of policy reducing access to firearms in adolescents: A naturalistic epidemiological study. *Suicide & Life-Threatening Behavior, 40*(5), 421–424.
- Pirkis, J., Spittal, M. J., Cox, G., Robinson, J., Cheung, Y. T., & Studdert, D. (2013). The effectiveness of structural interventions at suicide hotspots: A meta-analysis. *International Journal of Epidemiology, 42*(2), 541–548.
- Runyan, C. W., Becker, A., Brandspigel, S., Barber, C., Trudeau, A., & Novins, D. (2016). Lethal means counseling for parents of youth seeking emergency care for suicidality. *The Western Journal of Emergency Medicine, 17*(1), 8–14.
- Sale, E., Hendricks, M., Weil, V., Miller, C., Perkins, S., & McCudden, S. (2018). Counseling on Access to Lethal Means (CALM): An evaluation of a suicide prevention means restriction training program for mental health providers. *Community Mental Health Journal, 54*(3), 293–301.
- Van Orden, K. A., Witte, T. K., Cukrowicz, K. C., Braithwaite, S., Selby, E. A., & Joiner Jr., T. E. (2010). The interpersonal theory of suicide. *Psychological Review, 117*(2), 575–600.
- Zalsman, G., Hawton, K., Wasserman, D., van Heeringen, K., Arensman, E., Sarchiapone, M., ... Zohar, J. (2016). Suicide prevention strategies revisited: 10-year systematic review. *Lancet Psychiatry, 3*(7), 646–659.

