

HOW LIKELY ARE VETERANS WHO COMMUNICATE THAT THEY HAVE THOUGHTS OF SUICIDE TO ACTUALLY DIE BY SUICIDE IN THE COMING YEAR?**ABOUT 300 PER 100,000 OR 0.3%**

Stop Soldier Suicide took two approaches to estimating this risk, both resulting in similar estimates. The first was identifying suicide rates that have been published in the literature. We found one article that examined suicide rates among Veterans Health Administration patients during the year following a call to the Veterans Crisis Line (VCL).¹ Even though not all VCL callers were actively thinking about suicide, they chose to reach out for support from a suicide prevention helpline. This study estimated the likelihood of suicide for this population being 298 per 100,000 Veterans.

The second approach combines estimates from different epidemiological studies to estimate the probability of suicide among those who have thoughts of suicide. We used Bayes' theorem² to estimate this probability using information about the probability of suicide in the population, the probability of suicidal thoughts in the population, and the probability of known suicidal thoughts among those who died by suicide. Estimates of each of these inputs are provided below:

- Probability of suicide among Veterans in 2019: 32.8 per 100,000 or 0.000328³
- Probability of thoughts of suicide in the past year in 2019 among those who have ever served in the military: 3.85% or 0.0385⁴
- Probability of a known history of suicidal thoughts among those who served in the military who died by suicide in 2019: 33.8% or 0.338⁵

Based on Bayes' theorem and these inputs, the probability of suicide in the next year among Veterans who share that they have thoughts of suicide is approximately: $0.338 * 0.000328 / 0.0385 = 0.002879$ or 288 per 100,000.

This means that Veterans who share that they have thoughts of suicide are almost 10 times more likely to die by suicide in the coming year than Veterans in the general population.

Another key finding from this work is that two-thirds of Veterans who die by suicide did not share with others that they were thinking about suicide.

To prevent more suicides, the Veteran serving community needs to do a better job helping those who are willing to share that they have thoughts of suicide, changing the culture and reducing stigma so more Veterans are willing to share when they are having thoughts of suicide, creating better suicide risk screening and assessment tools for those who are not willing to specifically say they are having thoughts of suicide, and creating safer environments to prevent impulsive acts of suicide.

If a Veteran tells you that they are having thoughts of suicide, take it seriously and help them get extra support.

¹ Hannemann CM, Katz IR, McCarthy ME, Hughes GJ, McKeon R, McCarthy JF. Suicide mortality and related behavior following calls to the Veterans Crisis Line by Veterans Health Administration patients. *Suicide Life Threat Behav.* 2021 Jun;51(3):596-605. doi: 10.1111/sltb.12722

² Bayes' theorem is that: $P(A|B) = P(B|A) * P(A) / P(B)$

³ U.S. Department of Veterans Affairs, Office of Mental Health and Suicide Prevention. 2022 National Veteran Suicide Prevention Annual Report. 2022. Retrieved November 2, 2022 from https://www.mentalhealth.va.gov/suicide_prevention/data.asp.

⁴ 2019 National Survey on Drug Use and Health. Online analysis: <https://pdas.samhsa.gov/#/survey/NSDUH-2019-DS0001>.

⁵ 2019 National Violent Death Reporting System. Online analysis: <https://wisqars.cdc.gov/nvdrs/>.