

# A Mixed Methods Investigation of Self-Harm and Suicidal Behaviours in the UK Armed Forces

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## Executive Summary

Self-harm, suicidal behaviours (i.e., suicidal thoughts and suicide attempts), and death by suicide are complex and multi-faceted, influenced by both military and non-military factors across the lifespan.

This work found that among a sample of approximately 4,000 UK serving and ex-serving personnel:

- A minority reported lifetime self-harm (8%) and lifetime suicide attempts (6%).
- A moderate proportion reported lifetime suicidal thoughts (36%).
- Mental health comorbidities (such as post-traumatic stress disorder [PTSD], common mental disorders [e.g., anxiety and depression], and loneliness) increased risk of self-harm and suicidal behaviours (ranging from two to seven times more likely).
- Higher levels of perceived social support reduced the risk of self-harm and suicidal behaviours by approximately half.

Additional qualitative work with 15 ex-serving personnel suggested:

- There are unique barriers to help-seeking for self-harm and suicidal behaviours, including embarrassment and shame, and the societal hierarchy of health conditions (i.e., the way certain health conditions are prioritised, stigmatised, or viewed as more or less legitimate and deserving of support).

To reduce the incidence and impact of these behaviours among serving and ex-serving personnel, there is a need for co-ordinated action across multiple domains including Defence, policy and healthcare.

Recommendations include to:

1. Continue targeted mental health and suicide prevention strategies.
2. Develop an equivalent suicide prevention strategy for ex-serving personnel.
3. Promote step-change in organisational culture to reduce stigma.
4. Improve access to, and awareness of, support available to serving and ex-serving personnel.
5. Enhance military cultural competency among clinicians.

**Context:** Rates of self-harm and death by suicide are relatively rare in the UK Armed Forces and are typically lower or comparable to the UK general population.<sup>1-5</sup> To date, there has been limited existing research exploring: 1) suicidal thoughts and suicide attempts in the UK Armed Forces; 2) when UK serving and ex-serving personnel engage in self-harm and suicidal behaviours (i.e., pre-, peri- or post-service); and 3) help-seeking experiences for these behaviours using in-depth qualitative research.

**Aim:** The overall aim of this PhD was to investigate self-harm and suicidal behaviours in the UK Armed Forces, including an exploration of the rates, associated factors, timing, and help-seeking experiences.

**Methods:** This mixed methods, multiphase PhD investigation was made up of three sub-studies:

1. A **systematic review** on the risk and protective factors associated with self-harm, suicidal thoughts, suicide attempts and death by suicide among serving and ex-serving personnel of the UK Armed Forces, Canadian Armed Forces, Australian Defence Force and New Zealand Defence Force.

2. A **secondary data analysis** of data from Phase 3 (2014-2016)<sup>6</sup> and Phase 4 (2022-2023)<sup>7</sup> of the King's Centre for Military Health Research health and wellbeing cohort study (approximately 4,000 participants).
3. **Qualitative semi-structured interviews** with a subsample of UK ex-serving personnel who endorsed self-harm, suicidal thoughts, and/or suicide attempts in Phase 4 of the cohort study (15 participants).

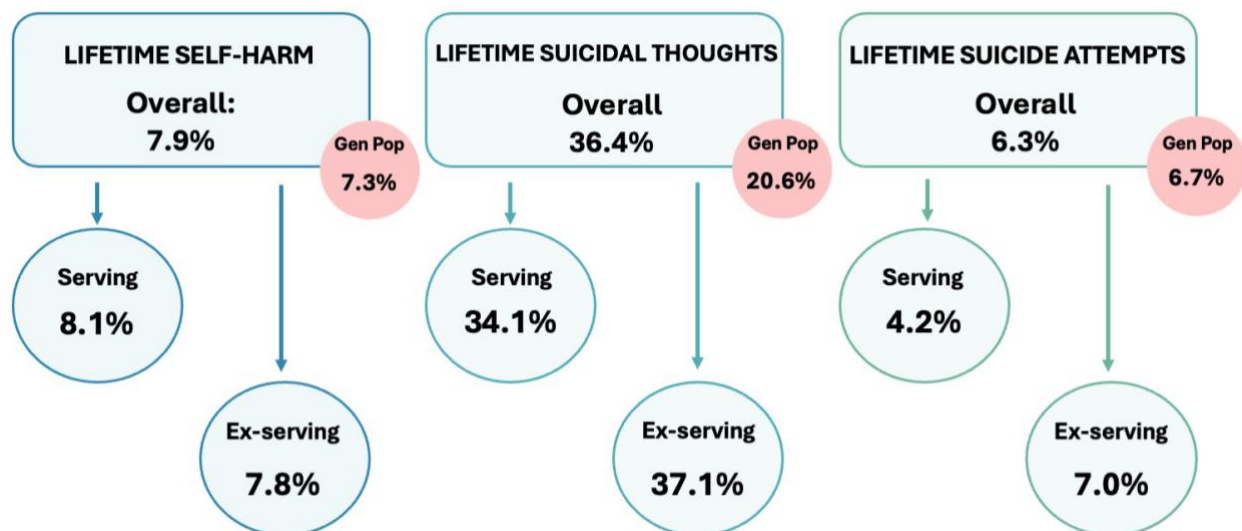
### Key Findings:

#### **Study one: Systematic review (serving and ex-serving personnel)**

- **28 papers** identified - no peer-reviewed papers from New Zealand Defence Force.
- Several **risk factors** (e.g., physical/mental health diagnoses, childhood adversities) for self-harm and suicidal behaviours were identified.
- **Protective factors** were lesser explored (e.g., perceived social support, employment).

#### **Study two: Quantitative study [n=~4,000] (serving and ex-serving personnel)**

### Rates of self-harm and suicidal behaviours:



- Overall rates of lifetime self-harm and lifetime suicide attempts were lower, and rates of lifetime suicidal thoughts were higher, among the sample of serving and ex-serving personnel **compared to a general population** (*gen pop*) sample from the Adult Psychiatric Morbidity Survey 2023/4 (adults 16+ years, England only).<sup>8</sup>

### Factors associated with self-harm and suicidal behaviours:

- Associations were not consistent across the three outcomes of interest and included both **military** and **non-military** factors.
- The most common sociodemographic, pre-enlistment, and military factors which increased risk of self-harm and suicidal behaviours included **marital status** of single/separated/ divorced/widowed, exposure to a higher number of **childhood adversities**, and **medical discharge** from military service (all approximately **two to three** times increased risk).
- Those in the sample with (*vs without*) **comorbid mental health and wellbeing difficulties** (e.g., PTSD/complex PTSD, common mental disorders [e.g., anxiety, depression], alcohol misuse, loneliness) were the most at risk (ranging **two to seven** times more likely).
- Higher levels of **perceived social support** were associated with reduced risk of self-harm and suicidal behaviours (approximately **half** as likely).

### Timing of first and most recent episode of self-harm and suicidal behaviours:

- Preliminary evidence that **during service** is an additional period of risk for self-harm and suicidal behaviours among serving personnel in this sample.
- Together with existing evidence which has indicated pre- and post-service risk, this work suggests there is a **lifecycle of risk** for self-harm and suicidal behaviours among serving and ex-serving personnel, and risk is influenced by military and non-military factors.
- Self-harm and suicidal behaviours among this sample appeared to be **enduring across multiple time periods**.

### **Study three: Qualitative study [n=15] (ex-serving personnel only)**

### Reasons for engaging in self-harm and suicidal behaviours:

- 1) **Exposure to trauma** (before, during, or after military service)
- 2) **Experience of psychological distress** (existing mental health problems, a desire to die, and feelings of despair and failure)
- 3) **Loss and loneliness** (bereavement, relationship difficulties/breakdown, difficulty adjusting following medical discharge, and loneliness and social isolation).

### Help-seeking for self-harm and suicidal behaviours:

- Five distinct but related and interacting themes relating to help-seeking were developed:



- Findings generally **aligned with existing research** on help-seeking for mental health problems among UK military populations.
- Some barrier themes appeared to be more pronounced for help-seeking for self-harm and suicidal behaviours – **embarrassment and shame** as specific aspects of self-stigma, and the **societal hierarchy of health conditions** (i.e., the way certain health conditions are prioritised, stigmatised, or viewed as more or less legitimate and deserving of support).

## Recommendations:

Recommendation	Responsibility
<b>POLICY</b>	
<b>Targeted prevention, intervention, and postvention support</b>	
Ongoing need for <b>targeted prevention</b> - including developing an equivalent Armed Forces Suicide Prevention Strategy and Action Plan <sup>9</sup> for UK ex-serving personnel or to add a supplementary section in the current Suicide Prevention Strategy and Action Plan which is targeted specifically at ex-serving personnel.	<ul style="list-style-type: none"> <li>• MOD</li> <li>• OVA</li> </ul>
Continue to be <b>upfront about the commitments</b> of the Armed Forces Suicide Prevention Strategy, plans to measure/monitor progress of the related Action Plan, and updates on progress towards achieving objectives.	<ul style="list-style-type: none"> <li>• MOD</li> </ul>
Focus on <b>promoting social networks</b> as a key source of support and strengthening connections with family, friends and the wider community to <b>mitigate the impact of loneliness</b> (e.g., peer-to-peer support; integrate military and civilian support groups).	<ul style="list-style-type: none"> <li>• MOD/Tri-Service</li> <li>• OVA</li> <li>• Armed Forces charities</li> </ul>
<b>Organisational culture and promoting mental health awareness</b>	
<b>Promote step-change in organisational culture</b> within the military (e.g., introduce specific leadership positions for culture to create accountability and responsibility).	<ul style="list-style-type: none"> <li>• MOD/Tri-Service</li> </ul>
Continue to <b>promote broader mental health awareness</b> and highlight available support services during and after service through dedicated training and communications campaigns.	<ul style="list-style-type: none"> <li>• MOD/Tri-Service</li> <li>• OVA</li> <li>• Armed Forces charities</li> </ul>
Incorporate <b>mental health education and awareness</b> and <b>transition preparation</b> throughout service.	<ul style="list-style-type: none"> <li>• MOD/Tri-Service</li> <li>• OVA</li> <li>• Armed Forces charities</li> <li>• Career Transition Partnership</li> </ul>
Encourage a <b>better understanding</b> of the consequences of disclosing self-harm and suicidal behaviours during service to promote help-seeking (e.g., training to reduce stigma).	<ul style="list-style-type: none"> <li>• MOD/Tri-Service</li> </ul>
<b>CLINICAL PRACTICE</b>	
<b>Holistic and joined-up approach</b>	
Take a <b>holistic approach</b> and consider a wide range of factors (individual, institutional [i.e., military], and societal) which influence self-harm and suicidal behaviour risk, including comorbid mental health difficulties, and pre-enlistment vulnerabilities.	<ul style="list-style-type: none"> <li>• MOD/Tri-Service</li> <li>• NHS</li> <li>• Armed Forces Charities</li> </ul>
Need for a <b>joined-up approach</b> within and between organisations directly and indirectly responsible for mental health support (including support for self-harm and suicidal behaviours) for UK serving and ex-serving personnel (e.g., convene organisational leads to facilitate timely provision of services).	<ul style="list-style-type: none"> <li>• MOD/Tri-Service</li> <li>• NHS</li> <li>• Armed Forces Charities</li> </ul>

Training and awareness of healthcare providers	
<p>Ensure that both military and civilian health professionals are <b>well-equipped to support</b> serving and ex-serving personnel. For example:</p> <ul style="list-style-type: none"> <li>- Introducing foundational and refresher <b>training</b> for all health professionals working with serving and ex-serving personnel.</li> <li>- Continuation of <b>NHS Veteran Aware</b> and <b>Veteran Friendly GP Practice</b> accreditation.</li> <li>- Further upskilling on all professionals providing mental health support to serving and ex-serving personnel to <b>improve military cultural competency</b>).</li> </ul>	<ul style="list-style-type: none"> <li>• MOD/Tri-Service</li> <li>• OVA</li> <li>• NHS</li> <li>• Armed Forces Charities</li> </ul>
FUTURE RESEARCH	
Longitudinal and comparative investigations	
Conduct <b>longitudinal investigations</b> to distinguish between pre-, peri-, and post-service factors to identify trends over time and longer-term health and wellbeing outcomes.	<ul style="list-style-type: none"> <li>• Academics</li> <li>• Research Funders (e.g., MOD/OVA, Armed Forces Charities, Research Councils)</li> </ul>
Conduct <b>comparative studies</b> to compare findings between UK military and civilian populations, or between military populations across nations or eras.	<ul style="list-style-type: none"> <li>• Academics</li> <li>• Research Funders</li> </ul>
Explore differences across <b>specific groups</b> - sex (male/female), sexuality (LGBTQ+), ethnicity (ethnic minority groups), service branches (Naval Services/Army/Royal Air Force) or enlistment type (Regular/Reservist).	<ul style="list-style-type: none"> <li>• Academics</li> <li>• Research Funders</li> </ul>
Qualitative insights	
<b>Further qualitative work</b> to build the evidence base for help-seeking experiences for self-harm and suicidal behaviours and how to overcome barriers identified - including among UK serving personnel.	<ul style="list-style-type: none"> <li>• Academics</li> <li>• Research Funders</li> </ul>
Explore differences in help-seeking experiences across <b>specific groups</b> (e.g., specific challenges to accessing help for personnel of minority groups).	<ul style="list-style-type: none"> <li>• Academics</li> <li>• Research Funders</li> </ul>

### **Conclusions:**

- This research provides important empirical evidence to further understanding around self-harm, suicidal thoughts and suicide attempts in the UK Armed Forces. When taken together, the findings of this PhD highlight that self-harm and suicidal behaviours are **complex and multi-faceted**.
- Importantly, both **military and non-military factors** across the lifecycle were found to influence the rates of, and levels of risk for, self-harm and suicidal behaviours among military populations.
- Of note, **all three sub-studies** highlighted the **role of comorbid mental health and wellbeing difficulties** (e.g., probable PTSD, CMD and loneliness) in self-harm and suicidal behaviour risk which also influenced help-seeking decisions and experiences for these behaviours among this population.
- Additionally, this work highlighted the importance of **adequate perceived social support** to mitigate self-harm and suicidal behaviours risk.
- **Recommendations** include to develop a suicide prevention strategy for ex-serving personnel, take a holistic and joined-up approach to self-harm and suicide prevention and intervention, reduce stigma and encourage help-seeking, enhance access to and awareness of available support during and after service, and improve military cultural competency.





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#### **Resources:**

- **Systematic review paper** – [Risk and protective factors for self-harm and suicide behaviours among serving and ex-serving personnel of the UK Armed Forces, Canadian Armed Forces, Australian Defence Force and New Zealand Defence Force: A Systematic Review](#)
- **Qualitative study paper** – [‘Man up and get on with it’: A qualitative exploration of UK ex-serving personnel's experiences of seeking help for self-harm and suicidal behaviours](#)
- **Blog post** – [UK veterans' experiences of seeking help for self-harm and suicidal behaviours: Findings from a qualitative investigation](#)
- **PhD thesis** – [A mixed methods investigation of self-harm and suicidal behaviours in the UK Armed Forces](#)

## **References**

1. Rodway C, Ibrahim S, Westhead J, Bojanić L, Turnbull P, Appleby L, et al. Suicide after leaving the UK Armed Forces 1996–2018: A cohort study. Bergman B, editor. PLoS Med [Internet]. 2023 Aug 8;20(8):e1004273. Available from: <https://dx.plos.org/10.1371/journal.pmed.1004273>
2. Ministry of Defence. Suicides in the UK regular armed forces: Annual summary and trends over time 1 January 1984 to 31 December 2024 [Internet]. 2025. Available from: [https://assets.publishing.service.gov.uk/media/67dd4a8964220b68ed6a6f36/UK\\_armed\\_forces\\_suicides\\_1984\\_to\\_2024.pdf](https://assets.publishing.service.gov.uk/media/67dd4a8964220b68ed6a6f36/UK_armed_forces_suicides_1984_to_2024.pdf)
3. Bergman BP, Mackay DF, Pell JP. Suicide among Scottish military veterans: follow-up and trends. Occup Environ Med [Internet]. 2022 Feb;79(2):88–93. Available from: <https://oem.bmj.com/lookup/doi/10.1136/oemed-2021-107713>
4. Ministry of Defence. Deliberate Self Harm (DSH) in the UK Armed Forces. 1 April 2010 – 31 March 2018 [Internet]. 2019. Available from: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/919761/20181221\\_Adhoc\\_Statistical\\_Bulletin\\_DSH\\_in\\_the\\_UK\\_Armed\\_Forces\\_O.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/919761/20181221_Adhoc_Statistical_Bulletin_DSH_in_the_UK_Armed_Forces_O.pdf)
5. Office for National Statistics. Office for National Statistics. 2024. Suicides in UK armed forces veterans, England and Wales: 2021. Available from: <https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/healthandwellbeing/bulletins/suicidesinukarmedforcesveteransenglandandwales/2021>
6. Stevelink SAM, Jones M, Hull L, Pernet D, MacCrimmon S, Goodwin L, et al. Mental health outcomes at the end of the British involvement in the Iraq and Afghanistan conflicts: a cohort study. The British Journal of Psychiatry [Internet]. 2018 Dec 8 [cited 2021 Mar 9];213(6):690–7. Available from: [https://www.cambridge.org/core/product/identifier/S0007125018001757/type/journal\\_article](https://www.cambridge.org/core/product/identifier/S0007125018001757/type/journal_article)
7. Sharp ML, Jones M, Franchini S, Leal R, Hull L, Molloy N, et al. Adverse Mental Health Outcomes and Alcohol Misuse Among UK Armed Forces Personnel: A 20-Year Cohort Study of Military Personnel Who Served During the Iraq and Afghanistan Conflicts [Preprint]. 2024; Available from: <https://www.ssrn.com/abstract=5053147>
8. Butt S, Randall E, Morris S, Appleby L, Hassiotis A, John A, et al. Chapter 4: Suicidal thoughts, suicide attempts and non-suicidal self-harm [Internet]. Leeds; 2025 Jun [cited 2025 Jul 1]. Available from: <https://digital.nhs.uk/data-and-information/publications/statistical/adult-psychiatric-morbidity-survey/survey-of-mental-health-and-wellbeing-england-2023-24/suicidal-thoughts-suicide-attempts-and-self-harm>
9. Ministry of Defence. Armed Forces Suicide Prevention Strategy and Action Plan 2024 [Internet]. 2024. Available from: [https://assets.publishing.service.gov.uk/media/672a18b6541e1dfbf71e8ba6/Armed\\_Forces\\_Suicide\\_Prevention\\_Strategy\\_and\\_Action\\_Plan.pdf](https://assets.publishing.service.gov.uk/media/672a18b6541e1dfbf71e8ba6/Armed_Forces_Suicide_Prevention_Strategy_and_Action_Plan.pdf)