NORTH ATLANTIC TREATY ORGANIZATION

SCIENCE AND TECHNOLOGY ORGANIZATION

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STO TECHNICAL REPORT **TR-HFM-218**

Military Suicide Prevention: Report Prepared for NATO Leadership

(Prévention du suicide chez les militaires : Rapport préparé à l'attention des dirigeants de l'OTAN)

Final Report of Research Task Group 218.

Published June 2018

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The views, opinions, and/or findings contained in the NATO RTG HFM-218 Technical Report are those of the authors and should not be construed as an official NATO STO position, policy, or decision, unless so designated by other official documentation. Nor should the views, opinions, and/or findings contained in the report be construed as an official position, policy, or decision of the participating Nations.

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The views, opinions, and/or findings contained in the NATO RTG HFM-218 Technical Report are those of the authors and do not necessarily reflect the views of the Uniformed Services University of the Health Sciences (USUHS) or the United States Government / Department of Defense.

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Military Suicide Prevention: Report Prepared for NATO Leadership

(STO-TR-HFM-218)

Executive Summary

Globally, military personnel are an identified at risk group for suicide. A number of countries and organizations have begun to implement or enhance surveillance of suicide deaths and attempts in the armed forces to better understand the scope of the problem and to generate targeted suicide prevention strategies. Given its ongoing contributions to peace and security on the international stage, the North Atlantic Treaty Organization (NATO) has taken an active stance on the problem of military suicide. Starting in 2008, a Human Factors and Medicine (HFM) Exploratory Team (ET-103) and subsequently a Research Task Group (RTG) 218 were formed to methodically examine the problem of military suicide across NATO countries and to summarize current best practices in military suicide prevention. Its members, based on group consensus, generated a number of key recommendations for NATO leadership.

This executive summary serves as a quick reference guide to highlight the individual recommendation areas provided in the NATO RTG HFM-218 (Military Suicide) Technical Report but represents a uniform program of action. All of the recommendations detailed in the report need to be incorporated into a national military policy on suicide prevention. Countries that do not have a policy in place are encouraged to first develop a strategic framework, to subsequently implement a national military suicide prevention strategy, and to systematically evaluate its future potential impact. Countries that have a policy in place are encouraged to review the recommendations described here to identify gaps and to strategize ways in which to respond in a timely and systematic manner. It is important to note that while increased attention is currently being paid to military suicide prevention, there continues to be a lack of evidence-based practices for reducing suicide deaths among military service members. Thus, the recommendations provided in the Technical Report are based on the consensus opinion of the RTG HFM-218 panel and their understanding of the emerging international scientific literature on the topic of military suicide prevention.

NATO RTG HFM-218 recommendation areas:

- Surveillance of Military Suicide Deaths and Attempts;
- Suicide Death Investigations and Classifications;
- Mental Health Policies;
- Reduction of Harmful Use of Alcohol;
- Multicomponent Interventions;
- Program Evaluations;
- Mental Fitness;
- Awareness Campaigns about Mental Health and Stigma Reduction;
- Access to Care;
- Gatekeeper Training Programs;
- Crisis Helplines for Military Personnel;

- Delivery of Evidence-Based or Evidenced-Informed Suicide Prevention Practices;
- Continuity of Care and Engagement in Aftercare;
- Reducing the Mental Health Gap;
- Targeted Suicide Prevention Training for Primary and Specialty Care Providers;
- Limiting Access to Lethal Means;
- Postvention: Management of Suicide-Related Events;
- Responsible Media Reporting on Military Suicide;
- Research on Military Suicide Prevention; and
- Military Culture of Caring for the Fallen Service Member.

In accordance with the World Health Organization 2015 report, *Preventing Suicide: A Global Imperative*, the RTG HFM-218 Technical Report underscores that military suicide prevention must be recognized globally as a top-priority public health issue. This report's objectives are threefold:

1) To disseminate knowledge about current military suicide surveillance across countries;
2) To promote a global strategy for systematic, standardized, and continuing military suicide surveillance efforts; and
3) To contribute to the understanding, further examination, development, and dissemination of best practices in military suicide prevention.

This multinational collaboration is an important first step towards promoting a global public health strategy for combating military suicide. A new task group, RTG HFM-277 (Leadership Tools for Suicide Prevention), has been formed to continue this international effort.

Prévention du suicide chez les militaires : Rapport préparé à l'attention des dirigeants de l'OTAN

(STO-TR-HFM-218)

Synthèse

Dans l'ensemble, le personnel militaire est un groupe présentant un risque suicidaire. Un certain nombre de pays et d'organisations ont commencé à mettre en œuvre ou faciliter la surveillance des décès par suicide et des tentatives de suicide dans les forces armées pour mieux comprendre l'étendue du problème et établir des stratégies ciblées de prévention du suicide. Etant donné sa contribution à la paix et à la sécurité à l'échelle internationale, l'Organisation du Traité de l'Atlantique Nord (OTAN) a adopté une position active sur le problème du suicide chez les militaires. Une équipe exploratoire (ET-103), puis un groupe de recherche (RTG) 218 sur les facteurs humains et la médecine (HFM) ont été constitués dès 2008 pour examiner méthodiquement le problème du suicide dans les forces armées des pays de l'OTAN et résumer les meilleures pratiques actuelles en matière de prévention du suicide des militaires. Les membres du RTG HFM-218 ont émis, à l'unanimité, des recommandations clés destinées aux dirigeants de l'OTAN.

Cette synthèse est un guide de référence qui met en évidence les domaines dans lesquels le rapport technique du RTG HFM-218 de l'OTAN (Suicide chez les militaires) a émis des recommandations, mais représente un programme d'intervention uniforme. Toutes les recommandations du rapport doivent être incorporées dans une politique nationale de prévention du suicide chez les militaires. Les pays qui n'ont pas mis en place de politique à ce sujet sont encouragés à développer en premier lieu un cadre stratégique, puis à appliquer une stratégie nationale de prévention du suicide dans l'armée et à évaluer systématiquement son futur impact potentiel. Les pays qui ont mis en place une telle politique sont encouragés à passer en revue les présentes recommandations pour identifier leurs propres lacunes et établir des modes de réaction opportuns et systématiques. Nous soulignons que, même si la prévention du suicide chez les militaires fait actuellement l'objet d'une attention accrue, il manque encore des pratiques fondées sur l'expérience pour réduire les décès par suicide dans l'armée. Par conséquent, les recommandations du rapport technique se basent sur l'opinion unanime de la commission RTG HFM-218 et sur sa compréhension de la littérature scientifique internationale qui se constitue au sujet de la prévention du suicide chez les militaires.

Champs de recommandation du RTG HFM-218 de l'OTAN :

- Surveillance des décès par suicide et tentatives de suicide dans l'armée ;
- Enquêtes et classification des décès par suicide ;
- Politiques de santé mentale ;
- Réduction de la consommation nocive d'alcool ;
- Interventions à plusieurs composantes ;
- Evaluation des programmes ;
- Mise en condition mentale ;
- Campagnes de sensibilisation à la santé mentale et de réduction des stigmates ;
- Accès aux soins ;
- Programmes de formation des observateurs ;

- Lignes d'appel pour le personnel militaire en cas de crise ;
- Transmission de pratiques de prévention du suicide fondées sur l'expérience ou éclairées par l'expérience ;
- Continuité des soins et implication dans le suivi ;
- Réduction de la fracture médicale ;
- Formation ciblée à la prévention du suicide à destination des professionnels de santé de premier recours et des médecins spécialisés ;
- Limitation de l'accès aux moyens létaux ;
- Postvention : gestion des événements liés aux suicides ;
- Signalement responsable des suicides militaires aux médias ;
- Recherches sur la prévention du suicide chez les militaires ; et
- Culture militaire de compassion pour les personnes décédées en service actif.

Conformément au rapport de 2015 de l'Organisation mondiale de la santé, *Prévention du suicide, L'état d'urgence mondial*, le rapport technique du RTG HFM-218 souligne que la prévention du suicide dans l'armée doit être reconnue dans le monde entier comme une question de santé publique prioritaire. Les objectifs de ce rapport sont triples :

1) Diffuser les connaissances sur la surveillance actuelle du suicide chez les militaires dans les différents pays ;
2) Encourager une stratégie mondiale de surveillance systématique, normalisée et continue du suicide chez les militaires ; et
3) Contribuer à la compréhension, l'examen approfondi, le développement et la diffusion des meilleures pratiques de prévention du suicide chez les militaires.

Cette collaboration multinationale est une première étape importante vers la promotion d'une stratégie mondiale de santé publique pour lutter contre le suicide dans l'armée. Un nouveau groupe de travail, RTG HFM-277 (Outils de prévention du suicide à l'usage des dirigeants), a été formé pour poursuivre ces travaux internationaux.

INTRODUCTION

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As the second leading cause of death globally among 15 – 29 year-olds, suicide remains a significant public health problem[1]. In 2012, an estimated 804,000 individuals died by suicide worldwide. This translates into one tragic suicide death every 40 seconds, with a rate of 11.4 per 100,000 (15.0 for males and 8.0 for females). Reliable estimates for suicide attempt rates globally are not yet available; however, for every individual dying by suicide, there may be over 20 individuals attempting suicide. In an effort to systematically address the societal burden associated with suicide, 28 countries (14% of all countries in the world) have generated national suicide prevention strategies. Currently, of the WHO 172 member states, only 60 (35%) are recognized as having "good-quality" vital registration data for suicide rate calculations.

Suicide prevention efforts worldwide have focused on a combination of universal, selective, and indicated strategies. Universal strategies target the entire population – for example, a national educational program may focus on helping all its citizens recognize symptoms of depression. Selective strategies target subgroups potentially at risk for suicide – for example, primary care physicians may screen patients for suicidal thoughts. Indicated strategies target high-risk individuals – for example, psychiatric medication and psychotherapy may be provided to individuals who are hospitalized following a suicide attempt.

Globally, military personnel are an identified subgroup at risk for suicide. A number of countries and organizations have begun to implement or enhance their surveillance of suicide deaths and attempts among members of the armed forces in order to best understand the scope of the problem and to generate targeted suicide prevention strategies. The North Atlantic Treaty Organization (NATO) is one such organization and given its ongoing contributions to peace and security on the international stage, it has taken an active stance on understanding the problem of military suicide. With the support of NATO leadership, starting in 2008, an Exploratory Team (ET-103) and subsequently a Research Task Group (RTG HFM-218) were formed to methodically examine the problem of military suicide across NATO countries. Ultimately, the Human Factors and Medicine (HFM) RTG HFM-218 focused its efforts on understanding the scope of military suicide and on summarizing current best practices in military suicide prevention. The members of the group, based on group consensus, have also generated a number of recommendations for NATO leadership on the topic of military suicide.

The main objectives of RTG HFM-218 have included the following:

1) To administer a designed survey to NATO and non-NATO countries in order to enhance understanding of current military suicide prevention efforts, best practices, and potential gaps for each country;
2) To create a platform to organize and make available materials pertaining to international military suicide;

[1] http://www.who.int/mental_health/prevention/suicide/suicideprevent/en/.

3) To prepare a series of white papers covering key topics relevant to NATO leadership and members; and
4) To disseminate the RTG findings at international scientific and/or military non-NATO professional conferences.

This RTG HFM-218 Technical Report is the product of the collective effort of representatives from member countries who made up the working group, who shared information in the spirit of collaboration. In Chapter 1, we summarize findings in written and tabular formats, from surveys on military suicide that were completed by 17 countries (i.e., 14 NATO, 2 Euro-Atlantic Partnership Council, and 1 Partner across the Globe). There are a few data limitations that are important for the reader of this report to keep in mind. First and foremost, the reader is cautioned against using the survey results to compare suicide rates across NATO countries, because this is not scientifically valid. Rates cannot be compared, for a number of reasons. There are variations across nations in calculation of suicide rates, different methods of identifying and recording suicides, and different definitions of suicide. Only the latest year of data for each country is presented in the survey, with the resulting bias this introduces into the data – it may well be that an abnormally bad year for one country may be compared to an abnormally good year for another. In an effort to moderate this problem, each country has a different set of characteristics that have been somewhat captured, which will help to put the data presented in some type of context. Subsequent chapters in this report focus on various topics related to military suicide prevention, such as the process of suicidal behaviour, protective and risk factors, stigma reduction and mental health promotion, the role of leadership, and suicide in the context of the military life cycle. A review of best practices and recommendations is additionally provided. Finally, the working group has prepared 9 White Papers on various topics related to military suicide prevention, and these are included in appendices at the end of this report.

The target audience for this report is the leadership of NATO at all levels, with special emphasis placed on the Committee of the Chiefs of Military Medical Services in NATO (COMEDS), in order to inform action and policy. However, in a larger sense, this report will be of interest to anyone in the general worldwide community who is interested in military suicide prevention in particular. In accordance with the WHO Preventing Suicide: A Global Imperative (2015) report, our broad mission is to highlight that suicide prevention, specifically in relation to military personnel and veterans, must be recognized globally as a top-priority public health endeavour. Through this report, we aim to increase knowledge about current military suicide surveillance across countries. Further, we aim to promote a global strategy for systematic, standardized, and continuous military suicide surveillance efforts. Lastly, we aim to contribute to the understanding, further examination of, development, and dissemination of best practices in military suicide prevention. We conceptualize our effort as an important first step in the global public health strategy in combating military suicide – one that must be sustained and built upon.

Chapter 1 − PUBLIC HEALTH SIGNIFICANCE OF MILITARY SUICIDE ACROSS NATIONS

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ABSTRACT

The World Health Organization (WHO) routinely collects data on suicide to provide surveillance of this significant global public health issue and to make recommendations on suicide prevention. However, to date, the problem of military suicide across countries has not been closely examined. To increase our understanding of military suicide, the NATO Human Factors and Medicine (HFM) Research Task Group (RTG) HFM-218 members designed a questionnaire that was subsequently disseminated through NATO leadership to a number of nations. This chapter provides an overview of the information gathered from 17 nations as a result of this RTG's endeavor. Comparisons of suicide rates across nations cannot be made as nations have different established guidelines for estimating and reporting military suicides, and often each nation reports military suicide rates only for the last year in which the data was collected. However, an examination of the data reveals some general trends, described in this chapter. Most notably, in many nations, death by suicide ranks highly among the leading causes of death in military populations. We recommend that nations develop standardized definitions for military suicide, implement and continually enhance systematic surveillance processes, and share lessons learned on best practices for tracking fatal and non-fatal suicidal behaviors within their military forces.

1.1 INTRODUCTION

This Chapter provides a brief description of findings from data collected by the RTG HFM-218 from various NATO and partner nations on military suicide.

1.1.1 WHO Findings on Suicide

According to the WHO definition, suicide is the act of deliberately killing oneself [1]. Over the past 30 years, the WHO has systematically collected and widely disseminated information on national suicide starting with data from 1979 to the most recent years, collected from a number of nations [2].

In May 2013, the World Health Assembly initiated the first ever Mental Health Action Plan of the WHO, which included world-wide efforts of suicide prevention [3]. Their 2014 report, "Preventing suicide: A global imperative", emphasizes and explains the world-wide public health significance of suicide through systematic reviews of global data and consultation with partners and stakeholders [1].

Data presented in the 2014 WHO report reveals that an estimated 804,000 suicide deaths occurred worldwide in 2012, resulting in a global age-standardized suicide rate of 11.4 deaths per 100,000 people. In 2012, suicides accounted for 50% of all violent deaths in men and 71% in women. Further, suicide is now the second leading cause of death internationally for 15-29 year olds, who are highly a represented population in the uniformed services worldwide [1].

1.1.2 The Need for Suicide Prevention Strategy

In an effort to acknowledge and address these statistics, and initiate efforts towards suicide prevention, the WHO urges nations to develop and/or adopt a national suicide prevention strategy with goals of establishing:

1) Best practices and evidence-based interventions;
2) Short-, medium-, and long-term objectives; and
3) Continued evaluation and future planning.

The 2014 WHO report offers actionable steps and guidelines for nations to develop their own national suicide prevention strategy based upon their unique cultural and social context and available resources. Some of these important suggestions include:

1) Implementing accurate surveillance of suicide-related activities;
2) Restricting access to suicide means;
3) Reducing stigma;
4) Increasing public awareness;
5) Developing guidelines for media reporting that sensationalizes suicide; and
6) Implementing training for health workers, educators, and police and other gatekeepers [1].

1.1.3 First Steps in Suicide Prevention Strategy

The 2014 WHO report highlights the importance of data collection efforts to occur in parallel with the implementation of suicide prevention activities [1]. Countries that have not yet instituted national suicide prevention efforts could begin to formulate a strategic plan by collecting data on suicide-related events. Countries with national suicide prevention strategies already in place[1] could conduct continuing programmatic reviews. A nation's suicide prevention strategy would ideally be data-driven, informed by evaluations of current policy effectiveness and by knowledge of up-to-date suicide prevention research.

Military suicide is an important public health concern for NATO and partner nations. It is important for nation-specific information on military suicide to be collected and publicly disseminated in order to guide the implementation of evidence-based military suicide prevention programs. However, to date and to the best of our knowledge, no systematic international surveillance efforts have been established to track military suicides.

[1] Readers who are interested in knowing which countries have national suicide prevention strategies as of 2012, can refer to Annex A.

To address the noted research and information gap on military suicide, this RTG developed a systematic approach to collecting data from various NATO and partner nations.

1.1.4 The RTG HFM-218 Questionnaire

A questionnaire was designed by the RTG HFM-218 members and submitted to the NATO leadership for dissemination to each nation's Surgeon General or other suitable representatives. In addition, for those nations with existing members actively participating in the RTG HFM-218, the questionnaire was directly disseminated to its members. The NATO leadership invited at least 34 NATO and partner nations for participation in this project. Overall, a total of 14 NATO, 2 Euro-Atlantic Partnership Council, and one Partner across the globe nation participated in this international effort to systematically collect information on military suicide.

1.2 GUIDANCE ON USAGE AND INTERPRETATION OF MILITARY SUICIDE DATA

1.2.1 Brief Note on Problems with Cross-National Comparisons

The members of RTG HFM-218 strongly advise against making cross-national comparisons of the suicide data presented in this chapter. While it is tempting to compare suicide data across nations, such comparisons lack statistical validity. First, we did not find a standardized definition of military suicide across nations. Second, the identification and classification of military suicides across nations varies greatly. Third, the data presented by each nation is only for the last year available. Military suicides may vary by year, and the data we discuss only represents a single time point for each nation. Finally, each nation has very unique characteristics associated with its military structure, culture, and requirements, such as deployment length. As a result, comparisons of military suicide data are beyond the scope of this report, and would be premature based on the given data. No definitive conclusions can be made based on an examination of the data presented in this chapter.

1.2.2 Purpose for Data Collection

Military suicide remains an extremely rare statistical event which is often viewed as preventable. Collection and dissemination of data, as presented in this Chapter, is meant to generate specific hypotheses to be tested by military researchers in the years to come. In addition, an examination of data across nations is instrumental in raising awareness among the military community and NATO leadership about the importance of military suicide. Given the lack of systematic surveillance efforts across nations, we hope that the presentation of data made available to our group can serve as the first step in highlighting the need for a more standardized approach to data collection. Finally, given that the targeted audience for this technical report is the NATO leadership, the information presented is aimed at generating lessons learned and informing military operational policies.

1.2.3 Ethical and Responsible Reporting

If the information presented in this Chapter is used by the media, we recommend that ethical and responsible reporting be favoured over sensationalist journalism. Our collective aim must be to reduce the problem of military suicide by maintaining a spirit of collaboration and cooperation across nations. We can achieve this goal by fostering an environment in which fear and secrecy about military suicide is replaced with transparency and a public discussion of our shared responsibility in addressing this important public health issue.

1.3 COUNTRY DESCRIPTIONS

A total of 17 nations have completed the RTG HFM-218 questionnaire. In the sections below, we summarize the information provided by each nation (see Annexes A and B for additional details). Please note that we have done our best to summarize the data as specifically reported by each nation without any alterations in language. We have also routinely referred to data disseminated by the WHO to ensure that correct civilian suicide data is provided for each nation.

1.3.1 Australia

The population for the Commonwealth of Australia is 23,255,218 (55% male) with an average age of 38 years. The military (0.2% of the general population) consists of 50,049 members.

In Australia, the leading cause of death is ischaemic heart disease. Nationally, suicide is the 15th leading cause of death and the rate of suicide is 10.2 per 100,000. For the military, the leading cause of death is land transport crashes. Suicide is the 3rd leading cause of death and the rate of military suicide is not available.

Male/female suicide rate ratio in the general population is 3.4. For the military population, gender suicide-rate related data is not available. Suicide attempt rate for the general population and the military population is not available[2] – 423.6 per 100,000. The three most common suicide methods in the general population are hanging, poisoning by drugs, and poisoning by agents other than drugs; data from the military population is not available. (*Last year reported data for Civilian, 2011; for Military, 2010.*)

1.3.2 Austria

The population for Republic of Austria is 8,426,311 (47% male) with an average age of 44 years. The military (0.4% of the general population) consists of 30,000 members.

In Austria, the leading cause of death is cardiovascular diseases. Nationally, suicide is the 13th leading cause of death and the rate of suicide is 15.1 per 100,000. For the military, the leading cause of death is traffic accidents. Suicide is the 3rd leading cause of death and the rate of military suicide is 27.0 per 100,000 (average rate for 2000 – 2012).

Male/female suicide rate ratio in the general population is 3.6. For the military population, gender suicide-rate related data is not available. Suicide attempt rate in the general population is between 314.0-377.0 per 100,000 [estimated for the years 1994 and 1996], but for the military population – 30.0 per 100,000. The three most common suicide methods in the general population are hanging, poisoning, and shooting; in the military population – shooting, hanging, and being hit by a train. (*Last year reported data for Civilian, 2013; for Military, 2013.*)

1.3.3 Belgium

The population for Belgium is 11,099,154 (49% male) with an average age of 40 years. The military (0.3% of the general population) consists of 31,027 members (93% male) with an average age of 41 years.

In Belgium, the leading cause of death is cardiovascular disease. Nationally, suicide is the 15th leading cause of death and the rate of suicide is 19 per 100,000. For the military, the leading cause of death is not available, and the rate of military suicide is 32 per 100,000.

[2] For the military population, the attempt rate was provided as 0.4%.

Male/female suicide rate ratio in the general population is 2.8. For the military population, suicide rate ratio is 9. Suicide attempt rate data are not available. Information on the most common suicide methods in the general population is not available; in the military population the most common suicide method is hanging. (*Last Year Reported Data for Civilian, 2012; for Military, 2013.*)

1.3.4 Canada

The population for Canada is 34,482,779 (50% male) with an average age of 40 years. The military (0.20% of the general population) consists of 67,449 members (86% male) with an average age of 35 years.

In Canada, the leading cause of death is malignant neoplasms. Nationally, suicide is the 7th leading cause of death and the rate of suicide is 11.5 per 100,000. For the military, the leading cause of death is combat related. Suicide is the 5th leading cause of death and the rate of military suicide is 17.6 per 100,000.

Male/female suicide rate ratio in the general population is 3.4. For the military population, no female suicides were reported. Suicide attempt rate in the general population is 87.0 per 100,000; for the military population, the suicide attempt rate data are not available. The three most common suicide methods in the general population are hanging, poisoning, and firearms; in the military population – hanging, firearms, and poisoning. (*Last Year Reported Data for Civilian, 2009; for Military, 2010.*)

1.3.5 Denmark

The population for Denmark is 5,602,628 (50% male) with an average age of 41 years. The military (0.28% of the general population) consists of 15,800 members (94% male).

In Denmark, the leading cause of death is cancer. Nationally, suicide is the 10th leading cause of death and the rate of suicide is 11.3 per 100,000. For the military, the leading causes of death are not available. The rate of military suicide is 12.7 per 100,000 (average rate for 1990 – 2009).

Male/female suicide rate ratio in the general population is 2.7. For the military population, no female suicides were reported. Suicide attempt rate in the general population is 122.2 per 100,000; for the military population, the suicide attempt rate data are not available. The three most common suicide methods in the general population are hanging, poisoning, and other; in the military population – firearms, hanging, and poisoning. (*Last Year Reported Data for Civilian, 2011; for Military, 1992 – 2013.*)

1.3.6 Estonia

The population for Estonia is 1,339,662 (46% male) with an average age of 40 years. The military (0.43% of the general population) consists of 5,800 members (88% male).

In Estonia, the leading cause of death is disease of the circulatory system. Nationally, suicide is the 9th leading cause of death and the rate of suicide is 14.2 per 100,000. For the military, the leading causes of death and the rate of suicide are not available.

Male/female suicide rate ratio in the general population is 5.9. Suicide attempt rate in the general population is 95.9 per 100,000; for the military population, the suicide attempt rate data are not available. The three most common suicide methods in the general population are hanging, firearms, and other; for the military population the data are not available. (*Last Year Reported Data for Civilian, 2011; for Military, not applicable.*)

1.3.7 Finland

The population for Finland is 5,401,267 (49% male), average age is unavailable. The military (0.16% of the general population) consists of 8,844 members (76.9% male) with an average age of 41 years.

In Finland, the leading cause of death is disease of the circulatory system. Nationally, suicide is the 7th leading cause of death and the rate of suicide is 17.7 per 100,000. For the military, the leading cause of death is road accidents. Suicide is the 2nd leading cause of death and the rate of military suicide is 11.6 per 100,000.

Male/female suicide rate ratio in the general population is 3.2. For the military population, no female suicides were reported. Suicide attempt rate in the general population is 44.0 per 100,000; for the military population, the suicide attempt rate data are not available. The three most common suicide methods in the general population are hanging, poisoning, and firearms; in the military population – shooting, hanging, and jumping. (*Last Year Reported Data for Civilian, 2009; for Military, 2011.*)

1.3.8 France

The population for France is 65,241,000 (48% males) with an average age of 40.5 years. The military (around 0.5% of the general population) consists of 325,583 members (85% male) with an average age of 32.7 years.

In France, the leading cause of death is tumours. Nationally, suicide is the 8th leading cause of death and the rate of suicide in 16.5 per 100,000 (2009). For the military, the leading cause of death is diseases (tumours). Suicide is the 3rd leading cause of death and the rate of military suicide is 20.3 per 100,000 (2009), with the most vulnerable age group being those who are between 40 and 44 years of age.

Male/female suicide rate ratio in the general population is 3.0 and in the military population is 2.7 (2002 – 2012). The suicide attempt rate data for the general population are difficult to track exactly (around 190,000 consultations in emergency departments per year); for the military population, the suicide attempt rate is 35.8 per 100,000 (2002 – 2012). The three most common suicide methods in the general population are hanging, poisoning by drugs, and firearms; in the military population – firearms, hanging, and poisoning by drugs (*Last Year Reported Data for Civilian, 2010; for Military, 2002 – 2012.*)

1.3.9 Germany

The population for Germany is 81,751,600 (49% males) with an average age of 44 years. The military (0.25% of the general population) consists of 205,149 members (91% male).

In Germany, the leading cause of death is disease of the circulatory system. Nationally, suicide is the 12th leading cause of death and the rate of suicide is 11.9 per 100,000. For the military, the leading causes of death are not available. The rate of military suicide is 9.1 per 100,000.

Male/female suicide rate ratio in the general population is 3.0. For the military population, no female suicides were reported. Suicide attempt rate in the general population is 123.0 per 100,000; for the military population, the suicide attempt rate is 16.8 per 100,000. The three most common suicide methods in the general population are hanging, other (unspecified), and other poisoning; in the military population – hanging and other (unspecified). (*Last Year Reported Data for Civilian, 2010; for Military, 2011.*)

1.3.10 Latvia

The population of the Republic of Latvia is 2,041,763 (46% male) with an average age of 42 years. The military (0.25% of the general population) consists of 5,008 members (79% male).

In the general population, the leading cause of death is ischemic heart disease, with suicide ranked as the 5th leading cause of death (military data not available). The suicide rate in the general population is 22.9 per 100,000, with the most vulnerable age group being those who are between 55 – 64 years of age. Within the military population, the suicide rate is 20.0 per 100,000 (average rate for 2003 – 2011).

The male to female suicide rate ratio in the general population is 4.9 (military data not available). Suicide attempt rate in the general population and the military population is not available. The two most common suicide methods in the general population and also in the military population are hanging and firearms. (*Last Year Reported Data for Civilian, 2009; for Military, 2003 – 2011.*)

1.3.11 Lithuania

The population of the Republic of Lithuania is 3,007,700 (46% male) with an average age of 41 years. The military (0.25% of the general population) consists of 12,638 members (91% male) with an average age of 33 years.

Diseases of the circulatory system are the leading cause of death, within the general population, with suicide being ranked as the 6th leading cause of death. Among military personnel, the leading cause of death is traffic accidents and trauma, and suicide is the 2nd leading cause of death. The suicide rate in the general population is 34.1 per 100,000, with the most vulnerable age group being those who are between 45 – 54 years of age. The suicide rate within the military population is not available, and the most vulnerable age group is those who are between 15 – 24 years of age.

The male to female suicide rate ratio in the general population is 5.7 (military data not available). Information on suicide attempt rate for both the general and military population is currently not available. The three most common suicide methods in the general population are hanging, firearms and other (tied), and other poisoning. The three most common suicide methods in the military population are hanging, firearms, and poisoning. (*Last Year Reported Data for Civilian, 2011; for Military, 2012.*)

1.3.12 Netherlands

The population for the Netherlands is 16,792,421 (50% male) with an average age of 40 years. The military (0.32% of the general population) consists of 53,130 members (91% male) with an average age of 33 years.

In the general population, the leading cause of death is cancer, with suicide being ranked as the 4th leading cause of death (military data not available). The suicide rate in the general population is 9.9 per 100,000, where those who are within the ages of 45 – 54 years are deemed to be the most vulnerable group (military data not available).

The male to female suicide rate ratio in the general population is 2.2, whereas the gender suicide-rate related data is not available for the military population. Suicide attempt rate in the general population is 94.0 per 100,000 (military data not available). The three most common suicide methods in the general population are hanging, medication/alcohol/drugs, and jumping in front of train; sufficient data from the military population are not available to date. (*Last Year Reported Data for Civilian, 2011; for Military, not applicable.*)

1.3.13 Romania

The population for Romania is 21,400,000 (49% male) with an average age of 40 years. The military (0.37% of the general population) consists of 80,000 members (92% male) with an average age of 36 years.

Within the general population, cardiovascular disease is the leading cause of death; suicide is ranked as the 11th leading cause of death. For the military population, cardio/cerebrovascular diseases are the leading causes of death (suicide rank not available). The suicide rate in the general population is 12.0 per 100,000, with the most vulnerable age group being those who are between 45 – 54 years of age. Information regarding suicide rates within the active duty military population is not available.

The male to female suicide rate ratio in the general population is 5.7 (military data not available). Information regarding suicide attempt rates is not available for both the general and military populations. The three most common suicide methods in the general population are hanging, intoxication, and jumping from heights; data from the military population is not available. (*Last Year Reported Data for Civilian, 2011; for Military, not applicable*.)

1.3.14 Slovenia

The population for the Republic of Slovenia is 2,055,496 (49% male) with an average age of 42 years. The military (0.36% of the general population) consists of 7,500 members (85% male) with an average age of 35 years.

Within the general population, the leading cause of death is circulatory disease; suicide rank is not available (military data not available). The suicide rate in the general population is 21.9 per 100,000, with the most vulnerable age group being those who are between 55 – 64 years of age (military data not available).

The male to female suicide rate ratio in the general population is 4.8 (military data not available). The three most common suicide methods in the general population (data reported from 2010) are hanging, other, and firearms (military data not available). (*Last Year Reported Data for Civilian, 2009; for Military, not applicable*.)

1.3.15 Turkey

The population of the Republic of Turkey is 76,667,864 (50% male) with an average age of 30 years. The military (0.77% of the general population) consists of 593,708 members.

In the general population, the leading cause of death is cardiovascular disease, with suicide ranked as the 12th leading cause of death. Among military personnel, the leading cause of death is suicide. The suicide rate in the general population is 4.2 per 100,000. Within the military population, the suicide rate is 10.8 per 100,000.

The male to female suicide rate ratio in the general population is 2.6. No women committed suicide in the military in 2013. Suicide attempt rate in the general population is 130.1 per 100,000, for the military population suicide attempt rate is 28.5 per 100,000. The three most common suicide methods in the general population are hanging, gunshots, and jumping from high building. In the military population three most common suicide methods are gunshots, drug use, and jumping from high building. (*Last Year Reported Data for Civilian, 2013; for Military, 2013*.)

1.3.16 United Kingdom

The population for the United Kingdom is 63,182,000 (49% male) with an average age of 40 years. The military (0.25 % of the general population) consists of 159,620 members (90% male) with an average age of 27 years.

Within the general population, the leading cause of death is ischaemic heart diseases; suicide is ranked as the 22nd leading cause of death. In the military population, the leading cause of death is cancer; suicide is the 7th leading cause of death. The suicide rate in the general population is 11.6 per 100,000, with the most vulnerable age group being those who are between 30 – 59 years of age. The suicide rate in the military population for the Army is 12 per 100,000 and 8 per 100,000 for both the Royal Air Force and the Navy.

Male to female suicide rate ratio in the general population is 3.5 and in the military population 1.33. Suicide attempt rate data is unavailable. The three most common suicide methods in the general population are hanging, poisoning, and other. In the military population, the three most common suicide methods are suffocation, firearms, and poisoning. (*Last Year Reported Data for Civilian, 2011; for Military, 2014*.)

1.3.17 United States

The population of the United States is 308,745,538 (49% male) with a median age of 37 years. The military (0.74% of the general population) consists of 2,270,127 [previously 2,270,130] members (84% male) with an average age of 30 years.

Within the general population, the leading cause of death is heart disease, with suicide being ranked as the 10th leading cause of death. For the military population, the leading cause of death is accidents, with suicide being ranked as the 3rd leading cause of death. The suicide rate in the general population is 12.4 per 100,000. The suicide rate in the military population is 18.0 per 100,000.

The male to female suicide rate ratio in the general population is 3.9 (military data not available). Suicide attempt rate in the general population is 150.6 per 100,000 (military data not available). The three most common suicide methods in the general population are firearms, suffocation, and poisoning; in the military population the most common methods are non-military firearms, hanging, and military firearms. (*Last Year Reported Data for Civilian, 2010; for Military, 2011*.)

1.4 CONCLUSIONS

In many countries, death by suicide ranks highly among the leading causes of death within military populations, often much higher than it ranks among the general population. Among the surveyed countries, suicide was ranked from 4th to 22nd among the leading causes of death for the general population. Of the 17 countries that we received data for, seven provided military leading causes of death. Of these surveyed countries suicide was ranked from 2nd to 7th among leading causes of death. However it is important to emphasize that comparisons on ranking of suicide across militaries are not meaningful given the heterogeneity in classification of various means of death across countries. Moreover, in several countries, the military suicide rate (per 100,000) is higher than the suicide rate in the general population. Globally, suicide is the second leading cause of death for 15 – 29 year olds, who are more highly represented in the military than in the civilian population.

1.4.1 Importance of Valid Comparisons

We do not recommend comparisons between military and civilian suicide rates as they are presented in this Report. Because the civilian populations of each nation have not been adjusted to reflect the demographic characteristics of their respective militaries, such comparisons are not statistically advisable.

1.4.2 Suicide Methods

The use of firearms was found to be among the most prevalent suicide methods in the military population across nations. Firearms were used as a method of attempt more frequently by service members than by civilians. This finding raises the issue of means restriction and access to lethal means. From a public health perspective, restriction to suicide means has been proven to be an effective suicide prevention strategy. It is also important to note that in countries where firearm was not a leading method of suicide within the military, nation specific policies on firearm ownership and access may have played a role.

1.4.3 Definition and Registration of Military Suicides

The definitions of suicide and suicide attempt are similar among countries and are mostly based on internationally consistent definitions and classifications (e.g., WHO). Some countries have specific registries for causes of death among their military populations. However, the procedures used to determine 'manner of death' in the military context vary by country (e.g., involvement of civilian and/or military medical professionals may differ).

1.4.4 Need for Systematic Surveillance

Several countries lack routine surveillance systems for collecting and recording military suicide data. Data on causes of death in the military population, including suicide data, was incomplete for about half of the countries surveyed. Data pertaining to suicide attempts and veterans was especially poor.

Systematic surveillance systems to monitor military suicides are urgently needed in NATO and partner countries. Each country should look to appoint a unit responsible for routine suicide data collection and recording. To collect data that can be compared between countries, surveillance units must establish guidelines for data collection, and conduct trainings to ensure data quality. The WHO suicide data collection system for the general population can serve as a model example for military populations.

1.5 ACKNOWLEDGEMENTS

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1.6 REFERENCES

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Chapter 2 − THE PROCESS OF SUICIDAL BEHAVIOUR

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ABSTRACT

The prevention of suicide among military members is a top priority of NATO member nations. An appreciation of the process of suicide can inform prevention efforts. Historical models of suicide provide a background for understanding the development of later, more modern models. Modern models examine the process of suicide from either an individual perspective or from a systematic perspective, but all provide a framework for understanding how suicidal behaviour can develop. A short section on the emerging knowledge on the neurobiology of suicide supplements the framework provided by the more formal models. Recommendations are presented as to how these models can be used to inform suicide prevention efforts.

2.1 INTRODUCTION

There is significant interest among NATO and Partnership for Peace (PfP) nations in the prevention of suicide among military members. This Chapter explores various models of the process of suicidal behaviour. An understanding of the process of suicidal behaviour facilitates the discussion in later chapters in this technical report, where specific prevention strategies and interventions are elaborated. The discussion in this chapter is limited to those civilian models that were deemed to be most applicable to military populations.

2.2 MODELS OF THE PROCESS OF SUICIDAL BEHAVIOUR

The term "suicidal behaviour" in this Chapter refers to both attempted and completed suicide. The act of suicide is seldom, if ever, an isolated event. Suicidal behaviour does not often arise abruptly or occur spontaneously. There is usually a context within which suicidal behaviour occurs. The act of suicide is almost always a process which ends with an individual behaving in a manner which they feel, at a given moment in time, is the only option they have. The implication of this line of reasoning is that there should be opportunities for prevention at various stages in this process. Therefore, an understanding of the various models of suicidal behaviour can inform suicide prevention efforts.

There are a number of models which explore the process of suicide. Most of these models are concerned with the individual and his or her underlying psychological processes that lead to suicidal behaviour. Other models look

at the process of suicide from a systemic perspective. A few of these models will be examined below. These models are presented in order of historical development and the order does not imply a hierarchy of importance.

2.2.1 Historical Models

In an early monograph on suicide prevention, the WHO outlined three models of historical significance in the attempt to understand suicidal behaviours [1]. These three models are:

1) The Medical Model;
2) The Sociological Model; and
3) The Human-Ecological Model.

The Medical Model views suicide as an outcome of a mental disorder. Therefore, the target for preventative action is the treatment of mental disorders. This would be expected to reduce suicidal behaviour.

The Sociological Model was developed from the work of Durkheim in the 1890's. The focus of this model is on social disorganization (loss of social integration and social regulation). The main idea of this model is that the more connected an individual feels to the society around him/her, the less likely that individual is to die by suicide. As social organization declines, suicidal behaviour increases. Prevention efforts therefore, according to this model, should be directed at improving social organization.

The Human-Ecological Model was the first attempt at integrating individual, environmental and social system factors. This model explains the process of suicidal behaviour in terms of an interaction between these three factors. Prevention and intervention efforts should therefore focus on multiple levels. These three models inform the more modern models below, and more or less form a part of each model.

2.2.2 The Cognitive Behavioural Model (Beck)

In 1967, Aaron Beck [2] introduced cognitive theory to explain the origin and treatment of depression and emotional disorders, and his foundational work forms the basis of the cognitive behavioural perspective on suicide today. Beck proposed that suicide arises from a combination of biopsychosocial vulnerabilities, which might predispose a person to develop suicide-related cognitions. Such cognitions take the form of automatic thoughts, associated images, and core beliefs, and it is these cognitions which give rise to suicide-related behaviour.

These suicide-related cognitions and behaviours, along with individual vulnerability factors, can lead to a cognitive state Beck termed the suicide-specific mode [3]. The suicide-specific mode is a state of mind comprised of cognitive, affective, motivational and behavioural patterns that focus themselves around suicide [4], [5]. As these patterns are lived out, they lead to the formation, maintenance, and exacerbation of the suicide-specific mode.

Suicide-related cognitions, as automatic thoughts and associated images, form links with the automated thoughts and associated images of other modes or schemas. As an example, the automatic thought "My life is meaningless and a waste," may become connected to the suicide-related automatic thought "Therefore, my family and friends would be happier if I were gone." Once those thoughts have been linked, the experience of the first thought naturally triggers the experience of the second, suicide-related thought. An individual may also experience an image that activates the suicide mode, such as envisioning himself or herself holding a gun to his or her stomach.

Furthermore, automatic thoughts and associate images about suicide are related to an individual's core beliefs, the essential cognitive elements related to how one views oneself, the world, and the future. Under the influence of stressors or intoxicants, maladaptive core beliefs like "I am worthless" may be activated, and lead an individual to feel paralyzed or hopeless. An individual may experience attentional fixation, a cognitive state in which he or she is unable to focus on anything unrelated to the suicide-specific mode [5]. As information processing bias develops suicide risk increases. The individual experiences a shift is his or her attention, interpretation, memory, and imagery that leads him or her to focus more strongly on the negative aspects of life [5].

Consider the following example of the progression of the suicide-specific mode. A service member's suicide-specific mode is activated due to an internal stressor like the automatic thought "I am weak because I cannot provide for my family," or an external stressor like fighting with a spouse, then drinking. These stressors may trigger the subsequent suicide-specific automatic thought, "I can't deal with this anymore and my family would be better off without me." The service member then becomes extremely hopeless about his future, feels psychological pressure to give behavioural expression to his negative thoughts. Suicide then begins to seem like an immediate and lasting solution for relief from his psychological pain. Jointly, the perception of suicide as a solution to his problem of psychological pain and the physiological effect of alcohol may lead the service member to act on his suicidality.

Other instances [6] of suicide-specific mode activation include:

- Loss-related thoughts and images (e.g., "I could not save my buddy.").
- Hopelessness-related thoughts and images (e.g., "Life is not worth living.").
- Sad or angry affect (e.g., "Others need to understand my pain.").
- Passivity in help seeking (e.g., "No one can help me now.").
- Increased impulsivity (e.g., "I have to act and end this misery now.").

Protective factors such as a strong social network can serve as a buffer against the suicide-specific mode. If protective factors are not present, the frequency, severity, and duration of the suicide-specific mode may increase over time. The suicide-specific mode may require minimal triggers for activation in individuals with greater vulnerabilities and risk factors, such as a prior suicide attempt. The suicide-specific mode may also become chronically activated, such that a service member may experience a stable but continuous activation of the suicide-specific mode throughout the duration of a deployment, for example.

Moreover, it is important to note that a suicidal individual has highly rigid thinking and an inability to effectively solve problems, which may then result in a state of arrested flight [7], [8]. When activated, the suicide-specific mode leads an individual to cease considering reasons for living, become hopeless, feel trapped, and view suicide as the only option [6], [9]. Further, suicide appears as the only option and even as a rational course of action, when the suicide-specific mode is activated [10]. As such, de-activating the suicide-specific mode is a complex task, according to the cognitive behavioural theory of suicide.

2.2.3 Interpersonal Psychological Theory (Joiner)

The interpersonal psychological theory of suicide, developed by Thomas Joiner in 2005 [11], posits that any death by suicide must be foreshadowed by two key components: the desire to die, and the ability to act on that desire. Joiner and colleagues [12] have further proposed that in order to conceive of the wish to die, an individual must have both thwarted belongingness (the perception, whether real or distorted, of not belonging to a social

group) and perceived burdensomeness (the perception of being a physical and/or psychological burden to others).

Joiner's theory proposes that the wish to die, on its own, does not move a person to act on his or her desire. Rather, those with the highest risk for suicide death both wish to die and have the capacity to act on that wish, and this second concept is termed the acquired capability to overcome the fear of lethal injury. Individuals with high acquired capability have overcome the natural instinct for self-preservation due to an increased tolerance for physical pain and a habituation to the instinctual fear of death. Exposure to traumatic or painful events like combat can increase acquired capability, and indeed, a growing body of research demonstrates the relevance of Joiner's model to military populations.

Thwarted belongingness refers to the sense of being disconnected from others, of being isolated or alienated socially. Individuals with thwarted belongingness may hold beliefs that no one truly cares for them, or that those who care, cannot understand the situation or relate to them. This concept is of particular importance for service members, who may face challenges reintegrating into civilian or family like post-deployment and who may feel that others do not understand their experiences of combat or of military culture [13]. To develop suicidal desire, individuals must also have a sense of perceived burdensomeness. They must believe that others' lives would be improved by their absence and that they are a burden on other people. This cognitive distortion leads them to believe that, if they were to die, others would be happier. Individuals who have experienced a life stressor such as combat injury may be expected to develop a sense of perceived burdensomeness.

For service members, acquired capability for suicide may be a particularly potent component of Joiner's model. Exposure to all forms of combat has been shown to predict acquired capability for suicide, but not predict thwarted belongingness or perceived burdensomeness. In support of Joiner's theory that exposure to pain and violence contributes to the ability to act on suicidal urges, the association between acquired capability and combat is much more pronounced for highly aggressive combat events, or those with high exposure to death and injury [14]. Furthermore, re-experiencing of Posttraumatic Stress Disorder (PTSD) symptoms like nightmares, flashbacks, and upsetting memories of trauma may increase acquired capability [15]. These findings have been replicated in a population of deployed military service members; researchers have found that acquired capability and PTSD re-experiencing symptoms were significantly associated, even after controlling for sex and general mental health. Results indicate that the experience of cognitively re-living traumatic events is a form of trauma exposure related to the ability to take one's own life [13]. Finally, acquired capability has been shown to discriminate suicide cases from living controls in a psychological autopsy study of U.S. Air Force personnel [16]. Overall, service members may have lower levels of suicidal desire, but greater ability to act on the desire to die [17] due to exposure to violence and death.

Qualitative research has also found support for Joiner's model. Operation Iraqi Freedom and Operation Enduring Freedom U.S. veterans express feelings of being a burden on family and friends; a loss of self, status, and purpose; and a sense disconnect from the civilian world [18]. They describe their combat experiences having exposed them to pain and having experienced a greater pain tolerance post-deployment. Results suggest that assessing for Joiner's key constructs of perceived burdensomeness, thwarted belongingness, and acquired capability may be a clinically useful practice. In addition, Cox and colleagues [19] reviewed 237 suicide death investigation files, 98 of which included suicide notes left by decedents. The content of the suicide notes was coded by researchers, who found evidence of hopelessness and perceived burdensomeness (36% of cases and 32% of cases, respectively) within the text of the suicide notes that had not been verbally communicated. The perception of thwarted belongingness was also found and was most often communicated both verbally and in the suicide note (30% of cases).

2.2.4 The Mann Model

The widely-used Mann *et al.* model of suicide [20], hereafter referred to as the "Mann model," relates systemic factors that contribute to suicide, and shows how they interact with individual factors such as mental illness and impulsivity, to result in suicidal behaviour. It also targets preventive intervention. A modified version of this model, developed for the Canadian military, is shown in Figure 2-1 [21]. It is possible to adapt the Mann model (Figure 2-1), in order to identify additional targets for preventive intervention that can be specific to military organizations.

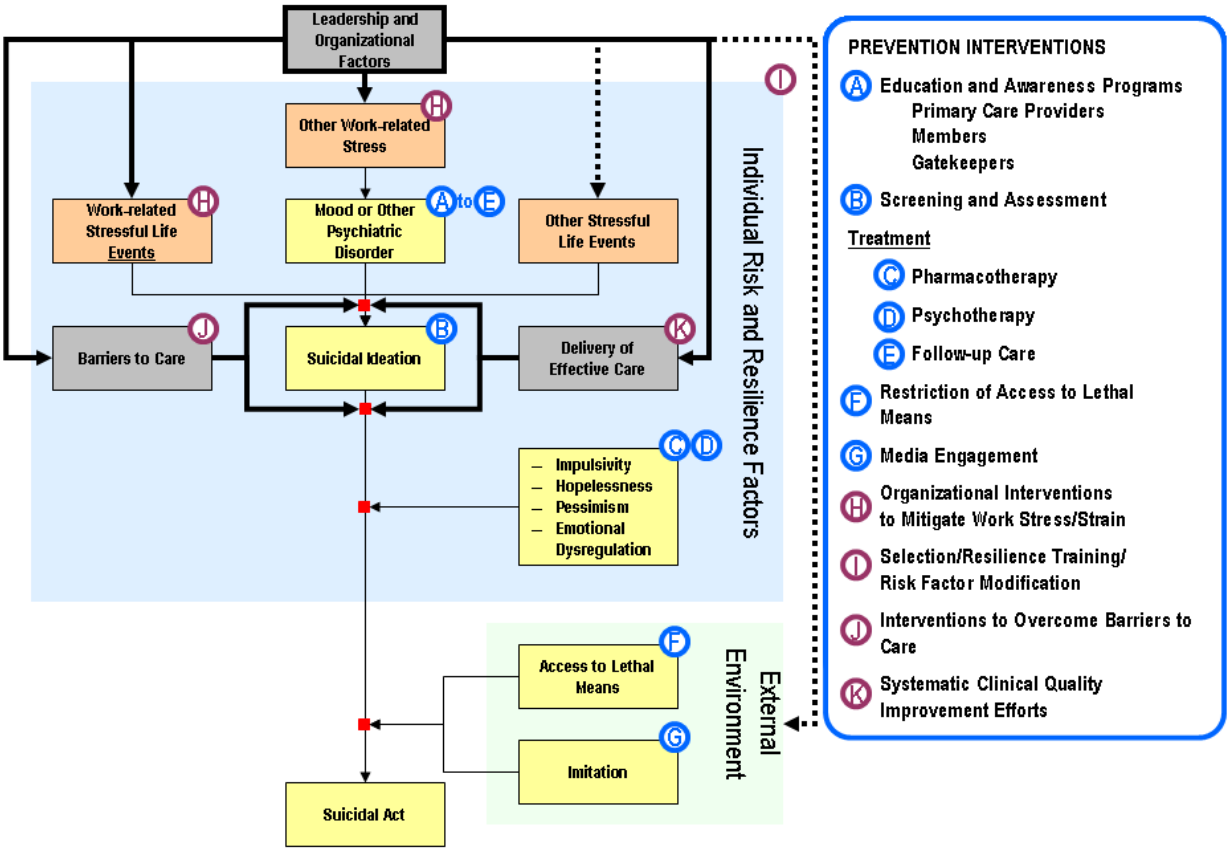

Figure 2-1: The Modified Mann Model Displays Targets for Suicide Prevention in Military Organizations. Reprinted from Ref. [50]. Copyright 2010 by Her Majesty the Queen in Right of Canada as represented by the Minister of National Defence. Reprinted with permission.

Suicidal behaviour begins with suicidal ideation, the thought of killing oneself, which in turn results from stressful life events interacting with mental illness. Mann estimates that 50 to 90 % of those who die by suicide had a mental illness at the time of their death. Unfortunately, over 50% of these people were either undiagnosed or had been under-treated. Though it is possible for significant life stressors to lead to suicidal ideation in a person without mental illness, this likely occurs in a minority of suicides.

Mental disorders are associated with cognitive distortions. For example, an intimate relationship ends, and the depressed patient comes to hopeless, pessimistic conclusions such as "I'll never be happy again." Furthermore,

the social stigma of mental disorders, often magnified by cognitive distortions, can contribute to the "perceived burdensomeness" and "thwarted belongingness" that contribute to suicide.

Stressful life events can disproportionally impact those with mental disorders. The stressful life events that are most commonly associated with suicidal ideation and suicidal behaviours are: intimate relationship difficulties, financial problems, work-related problems (such as unemployment and administrative and/or disciplinary problems), and legal problems.

Factors that facilitate the progression from suicidal ideation to behaviour are worth noting. Impulsivity is a major factor, and may be exacerbated by negative emotions or use of alcohol or drugs. Access to lethal means clearly facilitates suicidal behaviour, especially in conjunction with impulsivity. An individual may also imitate the suicidal behaviour of another upon learning of the suicide of someone he or she knows, someone famous, or someone he or she perceives to be in a situation similar to his or her own. Therefore, an acutely stressed individual with a mental disorder, who is more impulsive and hopeless and also has access to lethal means, may turn to a suicidal act. Each of the steps in the Mann model has specific targets for intervention to interrupt the suicidal process. Circled letters in Figure 2-1 show these opportunities, each of which is reviewed below.

2.2.4.1 Education and Awareness Programs

Educational programs on mental health and suicide prevention increase awareness, improve mental health literacy, and positively affect attitudes. However, reduction of suicide has been disappointing with education programs alone. Nonetheless, all multi-faceted, community based suicide prevention programs that have shown decreases in suicidal behaviour have included an educational component [22]-[25]. Effective military suicide prevention programs have also included an educational component [26]-[29].

2.2.4.2 Screening and Assessment

Screening for suicidal ideation in general health care settings has not been shown to be effective in reducing suicidal behaviour. However, screening for certain mental health problems (e.g., depression) in some settings (e.g., primary care), can be more effective than usual care. Furthermore, in mental health settings, assessing all patients for suicidality is an essential part of quality care [22].

2.2.4.3 Pharmacotherapy

There is evidence that lithium for bipolar disorder and antipsychotics for psychotic disorders improve well-being and attenuate suicide risk. Antidepressants improve well-being and decrease suicidal ideation, on average; however, findings regarding suicidal behaviour are more complex. These medications cause a transient increase in suicide risk in the first weeks of therapy. The effect is most pronounced in younger individuals, who form the bulk of the military population. Over the long term, however, antidepressants reduce suicide risk. Pharmaceutical regulators and practice guidelines emphasize the importance of close monitoring when antidepressants are initiated and when the dose is increased, especially in young people [22].

2.2.4.4 Psychotherapy

Specific psychotherapies for particular disorders, such as some forms of cognitive behavioural therapy for PTSD, improve well-being and functioning. For some patients (notably those with borderline personality disorder) there is evidence that specific psychotherapies, such as dialectical behaviour therapy, reduce suicidal behaviour. While the optimal content of suicide-specific psychotherapy is not yet clear, all effective therapies treat suicidality as an independent problem, as opposed to a symptom of an underlying disorder [22].

2.2.4.5 Systematic Follow-Up for Suicide Attempters and Other High-Risk Patients

The period following a suicide attempt is a period of greatly heightened risk for suicide, so close follow-up is essential. However, failure to follow-up is common. For this reason, systematic efforts to ensure follow-up improve outcomes for those with mental disorders [30] and for suicidal patients in particular [20]-[22].

2.2.4.6 Restriction of Access to Lethal Means

In the general population, restriction of access to lethal means (such as gun control, decreasing the carbon monoxide composition of household gas, requiring catalytic convertors on automobiles, and changes in medication packaging and dispensing practices) is remarkably effective at decreasing suicide rates [31]. Indeed, the most powerful and most consistent interventions for suicide prevention have been those targeting "means reduction." While such interventions may lead to some "means displacement" (a shift to other methods of suicide), sizable benefits in terms of the overall suicide rate are still seen [22].

2.2.4.7 Media Engagement

Suicides of military personnel and veterans are often deemed to be newsworthy. This presents a threat of increased risk of suicide through imitation, and an opportunity for media engagement to attenuate this risk. Organizations such as the Centers for Disease Control (CDC) [32] and the Canadian Psychiatric Association (CPA) [33] have published media guidelines on the responsible reporting of suicides. The last refinement of the Mann model notes that access to lethal means and media reporting of suicides are largely outside of the span of control of most NATO member nations [22].

2.2.4.8 Organizational Interventions to Mitigate Workplace Stress

Leadership and organizational factors can have a significant effect on stressors, whether they are related to a specific stressful event (e.g., deployment-related trauma, postings) or to chronic job stress (e.g., overwork, workplace conflict). Work related and non-work-related stressors (indicated by the dotted line in Figure 2-1) are treated separately in the modified model. An arrow linking leadership and organizational factors to barriers to care was added to emphasize the important role of leadership in overcoming barriers to mental health care, especially related to stigma [22].

There is compelling evidence of a strong association between optimal leadership and resistance to traumatic stress on deployment. Optimal leadership neutralizes the deleterious effects of traumatic stress, and it is beneficial for other forms of work stress and strain. Accordingly, interventions to improve leadership should improve well-being of subordinates and thereby lower suicide risk. Other opportunities include policies to limit the duration or frequency of deployments, workplace harassment prevention and intervention, employee assistance programs, and financial counselling. Finally, given that military organizations deliver mental health services, there are opportunities to structure these to minimize barriers to care and optimize the quality of care [22].

2.2.4.9 Selection, Resilience Training, and Risk Factor Modification

In theory, those with significant risk factors could be screened out during recruitment, but attempting to use risk factors for this purpose proves impractical. Accurate assessment of risk factors can be biased by candidates motivated to deceive. Further, many people have at least a few risk factors, but most end up doing well. Finally, such practices may lead to exclusion of an unacceptably high proportion of candidates. As a result, opportunities for using screening and selection as suicide prevention tools are limited. There is growing interest in military

resiliency training, which attempts to increase the psychological fitness of military members in order to help them perform better under adversity and to resist the psychological consequences of trauma and stress. The training is generally felt to be useful; however, convincing evidence of improvements in well-being and functioning is lacking and any impact on suicidal behaviour is speculative. Risk factors for suicide, such as work place stress, administrative problems at work, impulsivity, financial hardship, family stress, and drug and alcohol use are amenable to intervention by military organizations. There is no clear evidence that these measures reduce suicidal behaviours, but addressing these issues is a good leadership practice that can improve the quality of life of military members [22].

2.2.4.10 Interventions to Overcome Barriers to Care

As was mentioned earlier, almost all those who complete suicide have evidence of a mental illness prior to their death, but less than half of those are either identified or are receiving mental health care at the time of their death. As most military organizations deliver their own medical and mental health care, they have opportunities to ensure that barriers to accessing this care are reduced. The modified Mann model (Figure 2-1) emphasizes efforts to overcome barriers to care both before and after the onset of suicidal ideation [22].

2.2.4.11 Systematic Clinical Quality Improvement Efforts

Civilian data suggest a large gap between optimal mental health care and the actual care delivered in most settings. Given that most militaries deliver their own mental health care, they may assess and continuously improve the quality of care they provide. The scale of the military health care system and its high level of vertical and horizontal integration also present incremental opportunities for quality improvement relative to typical civilian care settings. As with efforts to overcome barriers to care, quality improvement efforts can interrupt both the development of suicidal ideation and the progression of suicidal ideation to suicidal acts [22].

2.2.5 Heritability and Neurobiological Perspectives on Suicide

Research findings also support a diathesis-stress model of suicide-related behaviours, meaning that such behaviours result from the interaction between neurobiological vulnerability and triggering stressors such as one or more adverse life events [34]. A number of studies have indicated an association between dysfunctions in the serotonin and norepinephrine systems and suicide [35]-[38]. Studies of the cerebrospinal fluid for those who attempt suicide and those who die by suicide have indicated low levels of serotonin [39]. Additionally, low serotonin levels in the cerebrospinal fluid of those who attempt predicted subsequent attempts [40]. These results support treatment of suicidal ideation and behaviour using medications that target serotonin, such as Selective Serotonin Reuptake Inhibitors (SSRIs).

Trait-dependent risk factors such as suicide ideation and impulsivity are associated with serotonergic dysfunction, whereas state dependent factors like adverse life events or alcohol use have been related to dysfunction of the Hypothalamic-Pituitary-Adrenal (HPA) axis in suicide-related ideation and behaviours. Further, hyper-activation of the HPA in suicidal individuals has been reported [41].

Impulsivity, aggression, depression and suicidality have all been linked to serotonergic dysfunction. Accordingly, genetic research has focused on genes related to the serotonergic system, such as serotonin transporter gene (5-HTTLPR), which is involved in the reuptake of serotonin, into the presynaptic neurons [42]. Research has also focused on Brain-Derived Neurotropic Factor (BDNF), a protein promoting the growth of neurons. Studies to date show that variation on the 5-HTTLPR and BDNF gene can interact with stressful life events to increase risk for suicidal behaviour [43]. Further, with regard to the functional BDNF marker $Val^{66}Met$,

meta-analytic evidence suggests that the Met-carrying genotypes confer risk for suicide [44]. There is no evidence that variance in allele combinations of genes increases suicide risk, with exception of genes involved in the serotonergic system [45].

Though the aetiology of suicide is complex and diverse, epidemiological studies show that suicidal behaviour is partly heritable. A number of family and twin studies have shown modest heritability of suicide ideation and behaviour. Results of two studies [46], [47] show that a family history of suicide doubles the risk of suicide. For instance, children of parents who attempted suicide are six times more likely to attempt than children whose parents did not attempt suicide [48]. A review of twin studies implicates genetic factors in suicide ideation and behaviour, with suicide ideation and attempt emerging as somewhat more highly heritable than suicide completion [49].

Given the considerable evidence that genes, environment, and possibly neurobiological alterations explain the origination and exacerbation of suicidal behaviours, providers are encouraged to carefully assess for family history of suicide, attempted suicide, and suicide ideation. Moreover, providers are encouraged to learn as much as possible about the early life stressors faced by each suicidal service member and the possible neurobiological alterations that may be associated with future suicide risk (e.g., having resulted from traumatic brain injury).

2.3 RECOMMENDATIONS

NATO member nations should be aware of the various models that inform about the process of suicidal behaviours and how they came about.

NATO member nations should use the models of suicidal behaviour to inform prevention strategies.

2.4 CONCLUSIONS

Virtually every military suicide results from the interplay of psychological distress and major life stressors. As such, an effective and comprehensive suicide prevention program will attempt to diminish the factors driving suicidal behaviour, provide timely access to evidence based care for those who need it, and mitigate life stressors. The responsibility for achieving these goals is shared: leadership, health services and the members themselves each play a crucial role. As such, suicide prevention in military organizations is a shared responsibility between a committed and engaged leadership, a high quality health care system providing evidence-based care, and an educated and empowered membership.

Military forces have unique opportunities to influence the factors driving suicidal behaviour in their military members. Few civilian employers have such reach, nor do they have the same ability to control. The models presented above can be used to inform suicide prevention efforts. They can provide health care providers effective tools for communicating with the chain of command on suicide and suicide prevention and for structuring the quality assurance reviews done after each suicide.

Suicide prevention programs attempt to influence all known targets for suicide prevention with evidence based interventions. Even if future gains in terms of reduction of suicide rates are modest, there will be ancillary benefits to the military organizations as a whole, in terms of improved well-being and functioning of its personnel. Such benefits make these efforts worthwhile in and of themselves.

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Chapter 3 − PROTECTIVE AND RISK FACTORS FOR MILITARY SUICIDE

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ABSTRACT

The purpose of this chapter is to give a multi-national perspective on the current understanding of protective[1] and risk factors for suicide and how to use this information in military suicide prevention. Research on civilian and military populations has primarily focused on risk factors for fatal and non-fatal self-directed violence and has often neglected the importance of understanding protective factors. Military leadership has the responsibility to maximize the physical and mental well-being of service members; a solid understanding of protective factors for mental well-being that can subsequently mitigate suicide risk can contribute to improved individual performance and military unit operational effectiveness. Additional research on protective and risk factors for military suicide across nations is needed in order to best inform prevention practices.

3.1 INTRODUCTION

An understanding of protective and risk factors is important in suicide prevention because such an understanding allows organizations such as the military to create targeted suicide prevention efforts. Protective factors need to be emphasized and considered in organizational activities in order to develop resiliency among service members; protective factors are not simply the reverse of risk factors. Notably, the majority of current suicide prevention research in both civilian and military populations has focused on risk factors. However, because stress may be an unavoidable element of military life, more research on protective factors is warranted. Some of the disparity in research between protective and risk factors may be explained by research methodologies commonly employed. Most importantly, suicide is a rare event and this often creates statistical problems in its study. In the past decade, research on risk factors has drawn heavily on registry-based or epidemiological data. There has been little research conducted to better understand protective factors because this would require an investment in qualitative methods which often require an intensive time commitment and sufficient funding. Overall, suicide is not always predictable, but research on protective and risk factors can help military peers, leadership, mental

[1] Authors have used the term "protective" before "risk" to emphasize its importance in preventing suicides.

health specialists, and chaplains contribute to suicide prevention efforts on the individual, community, and population levels.

3.2 DEFINITIONS

- **Protective Factors:** Individual, relational, community, and societal factors that 'buffer individuals from suicidal thoughts and behavior' [1].
- **Risk Factors:** Individual, relational, community, and societal factors that contribute to the risk of suicide.
- **Suicide:** "The act of deliberately killing oneself" [1].
- **Suicide Attempt:** Self-directed violent behaviour with intent to die.
- **Suicide Ideation:** Thoughts about killing oneself that may involve planning a suicide attempt.

3.3 PROTECTIVE FACTORS

3.3.1 Protective Factors in Civilian Populations

3.3.1.1 Restriction of Access to Lethal Means

There is very little research on suicide-related protective factors among civilians. Research, conducted in the 1990s and early 2000, indicates that there is a significant positive association between accessibility to lethal means and suicide events [2], [3]. A later review of published research studies [4] reports a positive association between firearm availability and suicide risk as well as a decline in suicide rates in association with more restrictive gun laws.

3.3.1.2 Social Support

The perception of belongingness, or the feeling of being connected to a social network, is a known buffer against psychological stressors as well as suicide. In fact, high levels of social support and a sense of connectedness are associated with reduced suicide ideation and behaviours [2], [5]. Likewise, the presence of a spouse or significant other or having feelings of responsibility for children can protect against suicide [6].

3.3.1.3 Religion

For some individuals, religion is an avenue for achieving and maintaining a sense of community and social integration. Countries that report higher levels of religiosity have lower suicide rates [7]. Therefore, there is evidence of an inverse relationship between degree of religious commitment and suicide. It is unclear whether reductions in suicidal behaviours associated with religiosity are due to greater moral objections to suicide, lower individual aggression, or some other variable. One possible explanation is that individuals with high religious commitment have a stronger sense of social support and purpose, and more salient reasons for living [8].

3.3.2 Protective Factors in Military Populations

Service members encounter stressors unique to military life and culture. Yet, many aspects of life remain the same, as service members do not differ from civilians with regards to their most basic and fundamental human

needs and psychological functioning. For example, we know from studies among soldiers that a risk factor for suicide can be living alone which corresponds to the important factor of social support found in civilian studies. But living together with a partner is not always a protective factor, due to possible problems in the partnership. Being in a relationship could then be considered a risk and not a protective factor. However, we still need more investigation into protective factors in the military context. For example, soldiers have an increased access to lethal means due to their profession, but greater access to lethal means does not coincide with an increase in suicide rates in military populations.

If we want to better understand protective factors for suicide among service members, we must first ask what factors protect the soldier from suicidal ideation when their current life circumstances would put them at risk. Then, we must ask what factors protect a service member experiencing suicide ideation from taking his or her life. In other words, what stops a service member who has the plan, the method, the right time, and the reason for killing himself or herself from acting on one's suicidal urges? Why do some service members not act on their thoughts? Consider the extreme example of a soldier who has held a loaded weapon in his mouth but not pulled the trigger. He may happen to glance at a photograph of his wife, have the thought 'I can't leave my wife, she loves me and I love her,' and put the gun down. This case is unlike one involving suicide death or attempted suicide, in which a service member has the thought and subsequently acts on it. It also differs from the hypothetical case of a service member who somehow does not act on his suicidal thoughts at the last minute. If the progression between suicidal thoughts and actions is better understood, we could be better equipped to develop evidence-based suicide prevention practices.

3.3.2.1 Earlier Research on Protective Factors

In military populations, reasons to live [9], optimism about the future, problem-solving, coping skills, and strong family/community/social support [10], anecdotally appear to have a protective value and the same seems to hold for service culture, organisational climate, training, and a combined sense of purpose. However, there is a distinct need for more intensive research into individual or life context variables that might protect, or fail to protect, service members from suicide [11]. In the performance of their duties, many personnel will be exposed to traumatic events and separated from their family support network for extended deployments.

A Danish study among soldiers deployed from 1990 to 2009 [12] and a Danish study from 1992 to 2013 [13] show that if soldiers felt that they had positive support from their partner and family whilst on deployment and if they felt supported by the Danish population, this was a protective factor from suicidal thoughts. The results of this extensive survey on 25,000 soldiers shows that protective factors against suicidal ideation include positive support from partner and friends, positive support from superiors, a good homecoming program where soldiers have time to talk with each other and share their experiences, and public support for the Armed Forces. Protective factors in suicide attempters include good home coming and positive support from partner, the intensity of the close relationships with family and friends, someone they can trust to talk to and that the wider society supports the military effort.

Another important protective factor is congruence between a service member's individual values and the conduct required of them as a member of the armed forces. In conclusion, limited research is available on protective factors. However, a good understanding of protective factors in regards to suicide is imperative in order to facilitate early intervention through resilience training.

3.4 RISK FACTORS

3.4.1 Research on Risk Factors in Civilian Life

Risk factors for suicide have received considerably more attention than have protective factors. The major risk factors for suicidal behaviours include psychiatric disorders, personality traits and disorders, alcohol and drug misuse, family and personal history of suicide, extent of social relationships, domestic factors (e.g., living alone), and occupational conditions (e.g., whether employed or not) [14].

3.4.2 Research on Risk Factors in Military Life

Risk factors in military populations can be divided into two groups:

1) Individual, referring to personal biopsychosocial factors and life history; and
2) Collective, referring to shared stressors and challenges experienced by a group.

3.4.2.1 Individual Risk Factors

Research on suicidal ideation and behaviour among soldiers mainly focuses on identifying risk factors for mental illness and trauma. The most prominent individual risk factor for suicide is mental illness. Within that larger framework, depression emerges as the largest contributor to increased suicide risk. The research literature relating to deployed soldiers focuses primarily on physical and psychological complaints [15]. Focus has also been placed on previously deployed service members' use of alcohol [16] and on divorce rates [17]. Other important individual risk factors include history of lifetime suicide attempt; medical illness and war injury; family and intimate relationship failure; stressful life events like death of a friend or family member; mental illness; financial and legal problems; professional failure, demotivation and dissatisfaction; loss of self-esteem; hopelessness; and history of lifetime sexual or mental abuse [16], [18]-[24].

3.4.2.2 Collective Risk Factors

The most important collective risk factor is easy access to weapons. Many of the other notable collective risk factors are indicative of interpersonal difficulties, and include peer rejection, loss of legitimacy of the mission, operational exhaustion, and lack of public recognition. Clinical and research evidence suggest that military deployments are stressful life events. The association between stress and suicide is well established, with stress often serving a precipitating role in suicidal crises [25]. Traumatic events during deployment and exposure to combat is a known contributor to the development of psychiatric disorders such as PTSD, major depressive disorder, and substance abuse/dependence, which are associated with an increased risk for suicide [14], [26].

3.5 RECOMMENDATIONS

The figure below shows protective and risk factors as balanced on opposite ends of a scale, and serves to illustrate potential opportunities for prevention and intervention. Interventions to strengthen protective factors may mitigate the damaging effects of risk factors. Fostering resilience to stressors increases operational effectiveness and reduces suicide risk.

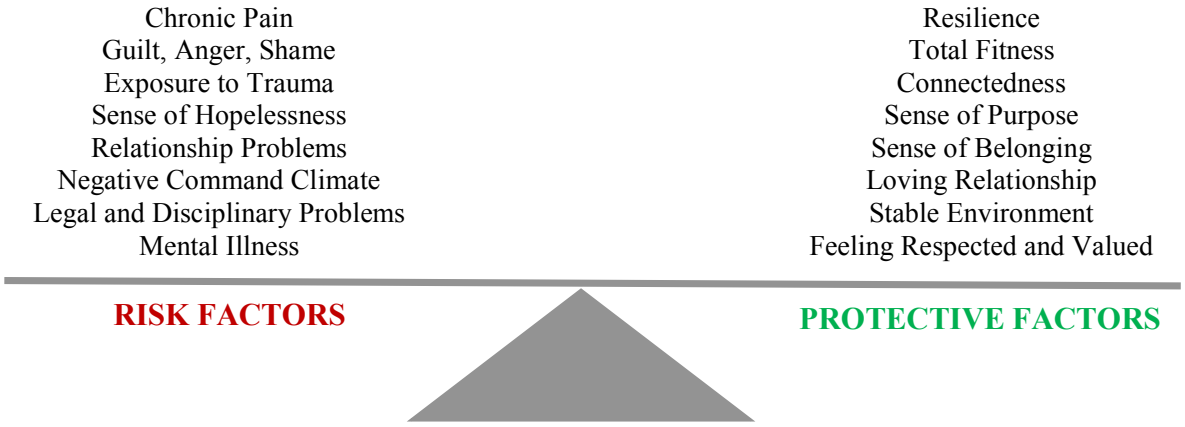

Figure 3-1: Protective and Risk Factors for Military Suicide Prevention.

3.6 CONCLUSION

Military leadership and communities can protect their members from suicide by understanding the factors that promote resiliency and psychological well-being. Future research on military suicide prevention needs to pay special attention to protective factors while advancing our existing knowledge-base on suicide risk factors. For the military member, stress may be truly unavoidable. Therefore, the best strategy to protect oneself from suicide and in fact, to increase overall performance is to learn strategies to problem solve effectively, to seek timely support, and to use health coping strategies such as connection with one's social support network.

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Chapter 4 − STIGMA REDUCTION AND MENTAL HEALTH PROMOTION

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ABSTRACT

This chapter focuses on the identification of key enablers in the military that can facilitate access to mental health care; thus, creating favourable conditions for seeking assistance. Guidelines to assist the chain of command in implementing a reduction in stigma of suicidal service members and gradual change to barriers to care are proposed in this chapter. Evaluation of individual steps through longitudinal studies would further promote mental health and reduce stigmatization in the armed forces. Cumulatively these efforts could alter the suicidal process or even mitigate the risk of suicidal behaviour.

4.1 INTRODUCTION

From the Latin root "stigmata", "to stigmatize" signifies "to brand a criminal with a red-hot iron". Today, it has a figurative meaning: "to publically shame someone". Stigma is a sociological concept of discrimination that disqualifies individuals from membership in a particular group; it has also been at times defined as a negative stereotype. According to Erving Goffman [1], stigma occurs when a person appears to have relative differences to the models offered by his/her immediate environment. In the military, group cohesion is critical to accomplish the mission. Confidence and reliability are at the core of group cohesion. Attempting suicide is particularly stigmatizing because it may undermines group cohesion in the armed forces, branding that service member as unreliable.

Our primary goal is to better understand the issue of stigma, and its impact on attitudes toward treatment and help-seeking behaviours in the military. Although health and support services exist in the armed forces of all NATO-member countries, service members in need of mental health care face several barriers to access these services. Several reasons for not seeking help have been reported [2]:

- Do not want it in military records (27%).
- Unit leadership might treat me differently (20%).

- Too embarrassing (17%).
- Harm career (17%).
- Costs [direct and indirect] (15%).
- Do not know where to go to get help (6%).
- No providers in my community (6%).
- Transportation (5%).

Out of these barriers, the majority of these are linked to stigma and the culture and characteristics of military life. Part of the challenge in suicide prevention is assisting military personnel and staff to recognize the warning signs, to enable early detection and to provide timely referrals to the appropriate support services. Treating a suicidal person is a matter for mental health specialists, but the psychosocial support of suicidal individuals in the military is a matter of mind-set and it is everyone's business. We all share this responsibility.

4.2 MILITARY CULTURE AND ORGANIZATION

4.2.1 Military Culture and Suicide

Throughout history, the military has always been characterized by blood, honour, and heroism – a brotherhood of strong, brave, and "invulnerable" men. Such perceptions are preserved and enhanced via powerful role modelling by peers and leadership as well as popular literature and war movies. This occupational imagery attracts and brings together people with similar personality traits, values, and worldviews. Further, this imagery is strengthened by an environment where this type of stoicism may be encouraged and reinforced.

The concept of being an "invincible warrior" is strongly rooted in military culture. The military profession propagates commitment and spirit of sacrifice and implicitly rejects any manifestation of weakness. As a result, some service members may not seek helping services to address their mental health problems. In this context, the act of suicide may sometimes be viewed by the individual as a more acceptable way to deal with one's personal problems, thus avoiding the dishonour of not living up to the ideal.

Yet, military culture and suicide are inherently contradictory. Killing oneself is seen as a betrayal to the core values of the military, because when a service member joins, he or she commits to higher ideals. Suicidal behaviours jeopardize the cohesion and operational readiness of the group and increase the risk of inappropriate use of weapons. The service members who attempt suicide banish themselves and can be seen as deserters. They reject themselves by not living up to their own expectations and they are rejected by the group because they do not live up to their ideals. So, the suffering service members experience a double rejection [3].

From a command perspective, suicidality poses the additional threat of calling command policies and decisions into question. Investigations may refer to possible errors, problems within the unit, or lack of support with potential consequences including legal proceedings. The suicidal service members may be regarded as victims of the system. This makes it easier to understand why command is wary of unstable service members and sees itself as responsible for appropriately responding to a suicidal event in a military unit. This responsibility is enhanced by public opinion and the media, who often see factors specific to the military as the sole cause of suicide.

4.2.2 Shame, Help Seeking, and Ethical Considerations

There is good reason to believe that shame and embarrassment are important causes for the failure of suicidal service members to seek treatment or finish the existing course of treatment. This is based in part on the belief that having a mental illness is shameful or indicates a character flaw. It is important to emphasize that such beliefs are not only inherent to military culture and are, in fact, observed among civilians as well [4]. It is proposed that broad stigma reduction campaigns and more focused educational efforts be put into place to directly address concerns of individuals who avoid needed psychological treatment for fear of negative social and career consequences [5].

Historically, certain militaries have posed sanctions for service members who have attempted suicide. For example, in Germany and the United Kingdom, suicide was against the law. Yet, to date, there is no evidence that such legal limitations on suicide have had an impact on reducing deaths by suicide. Therefore, many nations are no longer prosecuting service members for suicidal behaviour. However, in some cases, the reporting of mental health problems, including suicidal thoughts, may result in negative military career consequences. As a result, measures have to be taken to diminish ethical and role conflicts in military mental health practice and guarantee confidentiality to potential help seekers [6]-[8].

4.3 BARRIERS TO CARE

4.3.1 Individual Barriers

4.3.1.1 Mental Illness

Any individual who is faced with a crisis situation (life events, high levels of stress, operational exhaustion, bullying or sexual harassment) regardless of psychiatric diagnosis can experience a suicidal crisis. A person who wants to end his or her psychological suffering may see no possible options other than suicide. At this stage, he or she is unable to ask for help or advice because of an intense sense of hopelessness. In fact, research reveals that some individuals seek medical care one month before a suicide attempt but do not mention suicidal ideation [9]. Therefore, it is important to remember that not seeking help is not necessarily a reassuring sign, but may also be due to:

- Discomfort in sharing and talking about one's problems.
- Fear of consequences of disclosure.
- Depression accompanied by self-accusation, shame and guilt (feeling undeserving), irritability and anger, a feeling of coming to a standstill, and a sense of incurability [10].
- Posttraumatic Stress Disorder (PTSD), with the incapability of recounting, sharing, and processing traumatic experiences accompanied by feelings of shame and guilt.
- A substance related disorder (e.g. alcohol or drug abuse) and the fear associated with being stigmatized.
- A personality disorder which may predispose the individual to deny existing problems, engage in excessive risk taking behaviours, demonstrate unstable relationships, experience dissociation, avoid social contact, and/or impulsively overcommit [11].

To summarize, various factors may hinder the individual from seeking help, mental illness being one of them. This can exacerbate the condition by decreasing overall well-being, and can lead to a bad prognosis and suicide.

4.3.1.2 Fear and Denial of Mental Illness

Fear and denial of mental illness are still very common. It is easy to discount mental illness because it is frightening to not see the cause of the pain, as can be done with physical conditions. Additionally, persons may feel that they have lost control over their own well-being or ability to cope.

In addition, the words suicide and suicidal are stigmatizing. It is the self-murder (from Latin roots *suicida*, *sui* (oneself) and *caedere* (kill)). Suicide and mental illness can be associated with the notions of infraction, transgression, madness, invisible and unforeseeable danger, failure, moral weakness, violation of social values, and breach of contract with the social group. Some people feel that they might be labelled as weak, lacking faith, coming from bad families or indeed 'mad' if they were to declare their suicidal thoughts [4]. All of these associations are devaluing, which may be unacceptable to the individual, and therefore lead to denial. When we are trying to detect early signs of suicide or trying to reach out to help suicidal individuals, fear and stigma do not help us achieve our aims. The stigma surrounding suicide remains just high enough to discourage many people from talking about their suicidal thoughts.

4.3.2 Social Barriers

Stigmatization of suicide is deeply rooted in our collective thinking and moral judgment, increasing the complexity of our communication and understanding of the suicidal behaviour. Service members' social interactions are influenced by social desirability and military family dynamics. This could have a negative impact on a suicidal individual.

As mentioned above, psychological 'weakness' still remains a taboo in the armed forces. Even consulting a mental health provider is considered by some service members as a kind of weakness, especially in elite units. Psychotherapy is not always considered credible care. Stereotypes about mental health providers are discordant with the societal understanding of a "warrior''.

In addition, in the military, mental health care can be difficult to access, although it may vary by country. Embedded medical care continues to be a protective factor during the deployment cycle or during daily life. If the chain of command does not support obtaining health care (enough time or transport to the health care facilities, etc.), the service member will not have the practical possibility to enter the care process. In addition, a service member may avoid seeking timely services due to concerns about his or her confidentiality. Therefore, mental health providers should do as much as they can to explain the limits of confidentiality and the circumstances that would warrant disclosure to command to the service member.

4.4 STIGMA AND ATTITUDES TOWARD TREATMENT

4.4.1 Attitudes Toward Treatment in the Military

Armed forces within and across nations differ remarkably in their mental health policies and practices. Common problems that occur include treatment being unavailable at the time of need, ineffective treatment due to a lack of evidenced-based intervention, or lack of coordination across different programs. These problems may work against service members' treatment-seeking at the time of need. This is illustrated by research in the United States that suggests that active duty service members with mental health problems have significantly lower rates of utilization of mental health services than National Guard service members, and significantly higher endorsements of stigma [12].

The relationship between suicidal behaviour and mental health issues is well established [13]. It is reasonable to expect that reducing stigma related to mental health treatment among service members also decreases stigma related to suicidal ideation or behaviour. However, the number of programs or interventions is not sufficient to engage service personnel. Research shows that despite numerous campaigns to reduce stigma, many service members continue to believe that treatment will be ineffective or harm their careers. Therefore, to get suicidal service members into treatment remains one of the biggest challenges [14].

The stigma associated with seeking mental health and substance abuse treatment can be seen as a systematic issue, deeply rooted in the traditions of the military [15]. In the armed forces the attitude is one of: "I don't need help, I can handle things myself". This creates a strong stereotype where people are often reluctant to seek treatment. There is a belief that asking for help is associated with appearing weak or ill, or failing their duty in the eyes of their peers and superiors. The three steps of self-stigma are awareness of the stereotype, agreement with it, and applying it to one's self. This has been shown to reduce self-esteem and self-efficacy [16], which is negatively associated with seeking psychological help [5].

Hence, the ambivalence found in the military social group structure towards help seeking behaviours can have a negative effect on the individual service member's behaviour and can be detrimental. If not handled properly, it can lead to the belief that one can or should take care of mental health issues on their own, that psychological issues tend to work themselves out, or treatment will not be effective or have severe adverse side effects. All self-harming behaviours have to be taken seriously and need medical guidance. Mental health care is a specialization. There needs to be a combined approach in conjunction with the chain of command to ensure that non-medical professionals are not assuming sole responsibility of a medical issue. This will ensure that service members receive the help that they need and that the military hierarchy are not making medical decisions.

4.4.2 Key Responsibilities to Counteract Stigma and Barriers to Care

Two main factors are identified to facilitate access to social, psychological, and mental health care in the military:

1) The chain of command; and
2) Health and support services, both of which are the two pillars of mental fitness.

4.4.2.1 The Chain of Command

The chain of command does not have the sole responsibility of helping a suicidal service member. To improve the resources of command, the health services can and should be used as advisors so a trustful collaboration can be created. This close collaboration with the health services team is very important. Research shows that early consultation for a suicidal person with the health services team can improve the prognosis. Sometimes, the service members prefer to get help in a non-military facility. This is due to the fear of a lack of confidentiality. That can be due to the occupational management of military medical services which could adversely affect their career or fitness for duty. However, civilian healthcare specialists may lack the required knowledge about the military environment and culture, fitness requirements, and some clinical presentations of PTSD, which may impede the continuity of care. Military healthcare staff has a good awareness of the service members' experiences during the military cycle. We have to develop a multidisciplinary, proactive approach between commands, medical and psychological teams, social workers, and chaplains to enhance the utilization of military healthcare services.

When a service member is suffering, open communication is the basis for reciprocal trust. The United States Army program "ACE" (Ask, Care, and Escort) is a good model for improving communication between peers,

the service member and command who has the ultimate responsibility for unit safety [13]. This prevention program is effective for reducing stigma and barriers to care before, during and after the suicidal crisis. The immediate superiors, close to the service member, can detect early warning signs. This is achieved by asking directly if the service member has suicidal ideation. Peer and buddy support can be a protective factor and should be actively promoted [2]. Sharing the problems through a buddy network, and reinforcing the social link can break stigma and counteract barriers to care [17].

A disciplinary approach is not the best way to handle suicidal behaviour. Instead, it is necessary to educate leadership about mental health and promote mental health and well-being among the service personnel. Studies show a significant effect of leadership and cohesion on stigma and barriers to care. Service members who rate their leaders more highly and who report high unit cohesion also produce lower scores on both stigma and perceived barriers to care. Thus, positive leadership and unit cohesion can reduce perceptions of stigma and barriers to care [3].

Another important aspect to emphasize is implementing a communication policy that is clear and comprehensive for service members. This communication policy should include procedures and guidelines that create an environment of open communication between service members and leadership. An example is the implementation of mental health or suicide awareness briefings with the support of the mental health specialists during the deployment cycle.

One of the most important challenges for military leadership is to break the taboo about suicide, stigma and mental health issues. In order to change the preconceived ideas about suicide or suicidal crisis among the military community, a well-defined communication plan within military leadership may prove to be useful. Without the support of informed military leaders, any intervention remains ineffective. Support by all levels of military leadership is required to create a permanent change in behaviour.

4.4.2.2 Health and Support Services

The healthcare environment in the military is founded on confidentiality and respect. There is a requirement to have collaboration on pre-existing mental health problems with all healthcare professionals. This would also include: factual information about existing psychotherapy, prior treatment programs and the impact on the individual's fitness for duty. This confidential communication and networking between health care specialists is vital. The following steps are suggested to create confidential communication and networking between health and support services:

- The medical officer should have primary responsibility in a suicidal crisis and therefore needs to be informed as soon as is practical.
- A system is required to ensure that there is good follow up on psychiatric disorders, such as mood disorders, co-morbidities, psychosis, and/or PTSD.
- A good strategy should be developed for dealing with stigma and stress; this can be achieved by implementing a psycho-educational program and discussion groups.
- Ensure transparency on the practices of military mental health professionals to promote trust by the potential help seeker.
- The education of military spokespersons on how to discuss suicide issues within the military (e.g., with the colleagues or with the family from a service member who died by suicide) and with the media (e.g., the WHO guidelines) [18].

Mental health specialists like psychiatrists, psychologists or psychiatric nurses have to take a prominent role in decreasing stigma and fear of mental illness. The following steps are suggested to create confidential communication and networking between specialists:

- Educate and train military leaders of all ranks on barriers to care and stigma.
- Promote help-seeking as an element of each services' core values, like in the U.S. Army Defense Centers of Excellence (DCoE) Real Warriors program [19].
- Reframe help-seeking as a means of performance optimization and include training on recognizing signs of distress in oneself and others.
- Promote vocational rehabilitation as an aspect of performance enhancement.
- Use individual testimonials to highlight the availability of effective care.
- Include other health and support services personnel, such as social workers and chaplains, in training and education.
- Create training and educational programs about military culture for civilian medical personnel.

4.4.3 Promoting Psychological Research on Stigma Reduction in the Military

The importance of evidence-based practices in stigma reduction and psychological health promotion has been highlighted [20]. Psychological research in the military can contribute to the development of evidenced-based practices. It may reveal the characteristics of the military environment which can contribute to stigma. The following steps are suggested when conducting psychological research in the military:

- Systematically collect data and research on service members' access to care, suicidal behaviour, barriers to care, and stigma.
- Develop a system of data analysis that guarantees continuity and consistency.
- Consider data collection instruments that are valid and psychometrically tested in a military population, such as the Barriers to Access Care Evaluation scale (BACE), the Stigma Of Suicide Attempt (STOSA) scale, or the Stigma Of Suicide And Suicide Survivor (STOSASS) scale [21], [22].
- Ensure that all decisions are evidenced-based or evidence-informed and rooted in longitudinal studies.

4.5 CONCLUSIONS AND RECOMMENDATIONS

Any approach to prevent suicide should include removing blame and decreasing stigmatization of the suicidal individual and their family. Scientific and spiritual approaches can work together in order to eliminate stigma and to make people more comfortable with seeking help. Professionals from different disciplines should be collaborating for this common goal.

Finally, the causes of suicide crisis are complex and multi-faceted. The development of a multidisciplinary approach to address suicide is necessary. We suggest a case-by-case study to analyse and assess the barriers and enablers of communication in those that end their life with suicide. A number of recommendations are provided to address these issues, which are documented in the NATO RTG HFM-218 White Paper "Stigma and Barriers to Care". Figure 4-1 provides a visual summary of the chapter.

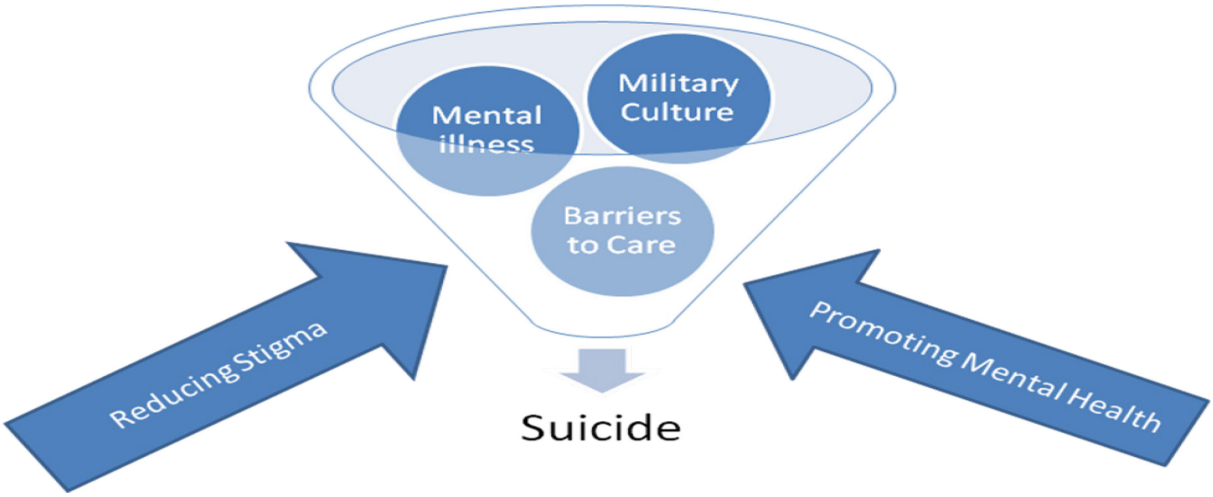

Figure 4-1: Triggers of Suicide are Illustrated in this Figure as Unidentified Mental Illness, Aspects of Military Culture, and Barriers to Care. Two courses of action, elaborated in this chapter, are proposed to decrease the risk of suicide: (1) Reducing stigma; and (2) Promoting mental health.

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Chapter 5 − THE ROLE OF LEADERSHIP IN MILITARY SUICIDE PREVENTION

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ABSTRACT

Numerous studies have shown the significant impact that leadership has on unit cohesion and the well-being of unit members. This chapter aims to reinforce and highlight the key role that leadership plays in suicide prevention. We emphasize that good leadership positively impacts suicide prevention strategies whereas toxic leadership negatively impacts prevention strategies. Recommendations for implementation of strategies to help prevent suicide and improve the morale and mental well-being of service members at both the strategic and tactical/operational level are also provided.

5.1 INTRODUCTION

In previous chapters of this Technical Report, we have outlined the relationship between mental health and suicide, and demonstrated that poor mental health can be a risk factor for suicidal ideation and behaviour. Efforts by military leadership at all levels to promote, enhance, and perpetuate the mental health and well-being of the military personnel under its command would be likely to reduce the risk of suicide in these personnel.

Leadership can be differentiated into two levels:

1) The strategic level where policy is created.
2) The tactical/operational level where the delivery of the policy is implemented.

Command has the obligation and in some countries the legal responsibility for the welfare of service personnel under their command.

Responsibility for the military culture, of a unit or a whole organization, also lies at these two levels. Command has the responsibility to set an atmosphere through policy and guidelines that will promote a strengthening of protective factors. Tactical leadership has a responsibility to implement these polices and guidelines and to lead by example and set the culture within the organization.

Good leadership is an important factor in helping to prevent suicide in the military. To show how leadership can positively influence prevention efforts, we will consider protective factors known to be associated with reduced

suicide risk. A review of those factors, in turn, will frame our recommendations aimed at assisting leaders in promoting a work culture that encourages resilience.

5.2 POSITIVE IMPACT OF LEADERSHIP ON MENTAL WELL-BEING

The role of leadership in producing unit cohesion, and in turn, the role of unit cohesion in the mental health outcomes of a combat unit has been widely studied. There have been hundreds of research articles produced since WWII on these subjects. The findings of these studies are relatively consistent over time, and show that, for example, units with more effective leadership have lower rates of Combat Stress Reaction (CSR) after combat [1]-[11].

Combat stress reaction results from difficulties adjusting to stressful situations or prolonged exposure to stressors. Though CSR is not classified as a mental disorder, it may or may not eventually develop into a mental illness like Posttraumatic Stress Disorder (PTSD). CSR is characterized by decreased reaction time, slowness of thought, difficulty in prioritizing tasks, difficulty in the initiation of routine tasks, preoccupation with minor issues and familiar tasks, indecision, decreased concentration, loss of initiative, demotivation, fatigue and exhaustion. In most NATO countries, CSR is not "medicalized," but rather treated at the unit level with a short period of rest, food, rehydration, relief from all duties, and an expectation of a return to health and duty. The way in which leadership has learned to deal with and influence CSR is a good example of the impact effective leadership has on mental well-being.

When officers and command employ an effective leadership style, their service members feel properly trained and adequately prepared for their missions and job duties. Though effective leadership is not necessarily indicative of warmth or friendliness, the leadership style is generally indicated by a high trust in leaders, which is then directly related to high unit cohesion. High unit cohesion is thought to be a protective factor in reducing suicidal behaviours. High unit cohesion also has a direct impact on a unit's ability to function in any given combat situation, increasing its operational effectiveness. Positive leadership and unit cohesion can reduce unit member perceptions of stigma and barriers to care [12]. Service members who receive a high degree of support from their leaders and fellow unit members will be better equipped to cope with potential stressors before, during, and after deployment.

A study by Hoge and colleagues [2] looked at the link between U.S. Army combat in Iraq and Afghanistan, mental health problems after combat and perceived barriers to care and reported that "effective leadership" was related to a high trust in leadership, resulting in high unit cohesion. High unit cohesion was related to an increased sense of high social support among unit members by individual unit members. Griffith [13] completed a study of the relationship among military unit cohesion, stress, and well-being of unit members. He found that stress increases with a decrease in unit cohesion. Ahronson and Cameron [14] studied the outcomes of military unit cohesion. A key finding of their study was that role satisfaction increased and psychological distress decreased in military unit members as the perception by these members of unit cohesion increased.

Military leadership has a key role to play in the mental health of military members, both before and particularly after combat. This affect appears to operate through the development of unit cohesion. High unit cohesion appears to be protective of CSR, and unit cohesion is directly related to an individual unit member's perception of effective leadership. We can conclude that effective leadership is related to mental health outcomes of both a unit as a whole, and of individual members. Because of the relationship between mental health and well-being and suicide, it could be suggested that effective military leadership is important in the prevention of military suicide.

5.3 NEGATIVE IMPACT OF LEADERSHIP ON SUICIDAL BEHAVIOR

Ineffective leadership can negatively impact service members' mental health and well-being. A particularly detrimental form of ineffective leadership is a toxic leadership style, which has been implicated in certain cases of increased suicidal behaviour. Toxic leadership is defined as a leadership style characterized by a focus on visible short-term mission accomplishment. Such leaders provide superiors with impressive, articulate presentations and enthusiastic responses to missions, but are unconcerned about, or oblivious to, staff or troop morale and/or climate and are seen by the majority of subordinates as arrogant, self-serving, inflexible, and petty [15]. Toxic leadership style, which can afflict all levels of leadership from platoon commanders to higher levels of command, was cited as a major contributor to suicidal behaviour in a study of over 30 individuals in Iraq [16]. The study concluded that toxic leadership was directly involved in 8 suicides in Iraq. These findings show the direct impact of leadership on suicidal behaviours and suicidal ideation of individual soldiers. By extrapolation it may be possible to conclude that leadership can also influence a soldier's well-being in a positive way.

5.4 RECOMMENDATIONS FOR LEADERSHIP

5.4.1 Improving Unit Cohesion and Camaraderie

As shown above, leaders have a significant impact on a unit's cultural atmosphere. The mental health of unit members is supported when leadership promotes an atmosphere which enables individual members to feel that they have a level of responsibility for each other. This can be achieved through individual and group activities that will encourage group cohesiveness (e.g., group or team training that emphasizes the group effort as well as unit activities that focus on shared experiences). These activities should stretch and challenge individuals and groups to instil reliance and a feeling of togetherness.

5.4.2 Enhancing Social Cohesiveness and Belonging

A sense of social cohesiveness and belonging is another protective factor. Service members need to have a feeling that they are a fully accepted part of the unit. At the policy level, leaders can ensure that individuals are not being structurally marginalized based on their social identities. No individual should be excluded from activities on the basis of race, class, gender, religion, or sexuality, for example. This can be ensured at the unit level by adherence to non-discrimination policies and at the higher level by the production and promulgation of policies that protect the rights of individuals and take human diversity into account.

5.4.3 Ensuring a Good Homecoming

Good homecoming requires leadership to sensitize the soldier on what to expect when coming home after a prolonged deployment. For example, leadership could arrange for decompression seminars and talks, which would explain what to expect upon returning home. It is important to give service members time to reacquaint themselves with family and friends and to adjust back to a garrison environment. The individual leader can take an interest in their soldiers, finding out about what home life is like and any experiences or difficulties that they are experiencing.

5.4.4 Strengthening Familial Relationships

Familial Relationships need to be supported to alleviate any difficulties whilst other family members are deployed. Consideration needs to be given to communication networks with the family, so that they feel they are supported and are not the last to know about activities or events that will significantly impact their lives.

Leadership needs to engage with the families and involve them so that they have a greater understanding of the military environment. Leaders conducting face-to-face meetings with families also give a sense of connectedness to the families and there is an acknowledgement of the role and challenges that families face in service life.

5.4.5 Building Resilience

Resilience also plays a critical role in how individuals respond to intense stress such as trauma, illness, major loss, and life events. Resilience essentially means, "to spring back or rebound" from difficult situations; it is not a matter of being spared difficult situations or maintaining an image of strength or a "tough façade." Training programs focused on building resilience should be implemented by leadership. Resilience may also play an important role in preventing suicide and reducing high-risk behaviour. Building resilience results from a combination of factors such as having a sense of belonging to a valued group, connecting with friends, maintaining a network of caring and supportive relationships, having confidence in individual strengths, accepting change as a part of life, and managing strong feelings and impulses.

5.4.6 Fostering Coping Skills

Amongst military members, there can be lower levels of literacy and numeracy; this can impact an individual's ability to manage their finances and have the mechanisms and skills to cope with life challenges. Leaders need to encourage formal educational training to increase educational standards and life skills. Skills-based training in resilience and comprehensive fitness is essential to suicide prevention. Service members trained in maintaining psychological well-being and suicide prevention are significantly more likely to seek counselling and to assist fellow service members in getting professional support.

When individuals exhibit signs of distress, peers, leaders, and family members must have the skills and confidence to recognize the warning signs and respond with the right level of support. Family members generally do not receive adequate education and training in suicide prevention, but they are often the best "detectors" of subtle behavioural changes associated with suicidal risk. Each unit's suicide prevention training and awareness education effort is vital for commanders and leaders to ensure their personnel have the knowledge, skills, and confidence to maintain readiness and a robust "buddy care" system.

5.4.7 Encouraging Help Seeking Behaviour and Reducing Barriers to Care

Access to evidence-based care for distressed service members is extremely important. Wright and colleagues [12] examined the relationship between stigma in military members and barriers to mental health care after combat. As part of this study, they examined the effects of leadership and unit cohesion on mental health stigma and perceived barriers to care, and found that positive leadership and unit cohesion can reduce unit member perceptions of stigma and barriers to care. Leadership can help ensure that those who need proper assessment and treatment can obtain it through the reduction of stigma and barriers to care. Stigma around the subject of mental health is a potent barrier to care for those who may most need it. Leaders need to ensure that there is a culture of openness and that the environment is stigma reducing, fostering a climate that reinforces and supports service members who responsibly seek professional services for matters pertaining to their psychological, ethical, and spiritual well-being.

Concern about stigma in the form of social disapproval or reduced social standing among their peers can deter individuals from seeking help, as can internalized stereotypes around mental health issues. However, concealing behavioural health issues can lead to feelings of isolation and stress, which may then lead to poor decision-making, increased levels of depression or anxiety, and increased frequency and severity of suicidal thoughts.

When healthy support-seeking behaviour is unfairly stigmatized due to stereotypes and limited understanding, it will be feared and avoided. For service members and leaders, there is often the perception that support-seeking behaviour will be detrimental to their careers, or they will be viewed negatively by their peers or those they lead. Mental toughness is seen as a sign of strength in military culture, while seeking assistance may be seen as a sign of weakness or source of shame or embarrassment. The perceived stigma associated with seeking behavioural health support represents a very real barrier to service members who would benefit most from professional support. Keeping behavioural health issues a secret, tends to increase stress, reduce the individual's ability to think clearly, leads to poor decision making, contributes to depression and anxiety, and increases suicidal thinking. Leaders at all levels should encourage support-seeking behaviour and convey no-stigma messages as a routine matter of unit operations.

5.4.8 Providing for Accessible Mental Health Care

We suggest that leaders ensure the establishment of mental health care services, and disseminate information about such programs to increase ease of use. There should be hotline services for crisis intervention and for general information that is available to service members and family members. There should be a good social and mental health support network available; this can be matched to individual and service needs. This should be readily accessible and any barriers to care reduced to allow ease of access. Mental health care should be easily accessible, and we advise policymakers to note, and attempt to resolve, potential barriers to care. Tactical leaders at the unit level need to be knowledgeable of what services are available and should help the soldier in accessing these services.

5.4.9 Disseminating Information and Advocating for Transparency

Leaders need to consider forward planning and how this affects the individual under their command. The military is a changing environment. Leaders need to be aware that individual service members need to be informed of changes in working environments and place of work at the earliest opportunity to ensure that they feel a locus of control over their future. Early information and transparency in decision making processes enables service members to understand any decisions made, gives them adequate time to prepare for the future, and supports their commitment to the military.

The more positive an individual's outlook is for the future, the less likely that individual will be to participate in high risk behaviours. Leadership can influence this positive outlook by taking steps to ensure that individuals are informed in advance of changes in structure that may impact them. Leaders with a problem solving attitude will give soldiers under their command the reassurance that their needs will be met and that their leaders will enable a positive outcome.

5.5 POSTVENTION AFTER A SUICIDE ATTEMPT OR COMPLETED SUICIDE

Leaders guide their units through the loss of a service member due to a completed suicide or through the effects of an attempted suicide. The major objectives, in either scenario, are to support those affected, minimize psychological reactions, strengthen unit cohesion, and maintain mission readiness.

We recommend that the following steps be taken to assist service members and to ensure their safety in cases of **suicide attempts**:

- Assist service members who have attempted suicide with navigating the health care system to receive appropriate care.

- Provide support to service members and family members impacted by a suicide attempt.
- Emphasize and train service members on the vital role that the 'Buddy System' plays in unit cohesion and readiness.
- Improve unit intervention skills, build knowledge, and build confidence to respond to a suicidal risk factors and warning signs.
- Foster a culture that reinforces responsible help-seeking behaviour as an accepted part of being a responsible service member.

In cases of **suicide deaths**, we suggest that leaders use the following points as a guide:

- Provide support to service members and family members impacted by a suicide.
- Ensure service members and family members are connected to support systems. Encourage unit members to discuss and process intense emotions, and to express any concerns.
- Have the facts of the event and balance honest information sharing with the victim's privacy. Be sure not to condemn or glorify their actions.
- Invite an outside facilitator such as a mental health professional/chaplain to support with debriefing.
- Promote the idea that the outcome of a crisis need not be suicide; there are other alternatives.
- Honour the service member and support the funeral as an important part of the healing process for fellow service members and for family members.

5.6 CONCLUSION

Through policies and direct interactions, military leaders may serve as buffers against potential stressors in the lives of their service members. This Chapter offers strategies to boost resilience in service members, and to protect against risk for suicidal ideation and behaviour. Leaders within all levels of the chain of command should know their service members and demonstrate genuine care for them (e.g., family circumstances, living arrangements, interests, financial situation, education, career goals). Leaders need to use available active and passive measures (e.g., urinalysis screening, unit surveys, health and welfare inspections) to identify service members who may be engaging in high-risk behaviour and confidentially direct them to appropriate services. Leaders should strengthen supervisor-subordinate interactions and mentoring skills through training and by building interpersonal relationships with subordinates.

In summary, leaders at all levels have a primary responsibility for maintaining good order and discipline and for having an accurate understanding of their service members. Leaders should role model the positive behaviour they expect from the service members in their charge. Leaders are also reminded that they too are affected by suicide risk and protective factors, and they need to consider their own mental wellbeing and proactively model the behaviours they expect from their subordinates.

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Chapter 6 − MILITARY LIFE CYCLE, PSYCHOLOGICAL FITNESS, AND SUICIDE RISK

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ABSTRACT

Suicide risk can be exacerbated with stress. Each service member comes into military service with a set of biopsychosocial vulnerabilities which may translate into stress. In addition, the transitions that service members face during their military life bring numerous challenges and may cause varying levels of stress. These stressors are a result of the interplay between personal, military service, and organizational factors. This chapter explores the individual stages of the military life cycle and highlights these factors. Strategies are proposed to mitigate the stress related to the transitions between the stages of the military life cycle.

6.1 INTRODUCTION

Military life presents individuals with a process of continual learning. Such learning involves adapting and adjusting to new situations, learning to integrate into new groups, learning to make decisions that may have significant impact, and learning to problem solve new challenges. This process of learning, though exciting and challenging, may prove stressful to some. Part of this perceived stress is due to the pre-existing biopsychosocial structure (both strengths and vulnerabilities) of the individual service member as well as due to the systematic change in the stressors faced by military personnel during their military career. Each station presents new opportunities, yet poses its own challenges, chances for improving, and also an additional set of stressors to which adjustment would be necessary. In order to facilitate optimal adaptation and prevent negative consequences on one's psychological fitness, it is necessary to take a closer look at these individual stages.

6.2 DEFINITION OF MILITARY LIFE CYCLE

The *military life cycle* is the sum of all stages that service members go through during their military life. Some of these stages are repeated throughout their career and others are unique to specific time points.

6.3 STAGES OF MILITARY LIFE CYCLE

The stages of military service are generally the same for everyone in any armed forces. However, the stressors faced during these stages can be very different and depend on many demographic factors (such as age and

gender), military service factors (such as type of service, military rank, career track, and military branch of service), and organizational factors (such as command climate, unit morale, operational tempo). The interplay of these stressors or the cumulative effect of these problems can increase suicide risk [1]. Almost every service member will transition through some of the following stages:

- **Stage 1: Entrance into the Military**
  Entrance into the military organization (i.e., recruitment, selection, reception, and in-processing).
- **Stage 2: Basic Military Training**
  Basic military training, which is designed to integrate the individual into the military culture.
- **Stage 3: Continued Military Training**
  Continued military training which is the initial training at the beginning of a military career to gain skill in an occupational specialty and to adapt to the operational phase, as well as further training later to gain higher qualifications or to change the occupational specialty.
- **Stage 4: Assignments**
  Assignments (abroad or at home) as an initial first duty assignment as well as further assignments.
- **Stage 5: Deployment(s)**
  Deployment(s) into military theatres of operations which in themselves are a cycle composed of the pre-deployment, actual deployment and reintegration sub-stages.
- **Stage 6: End of Military Service**
  End of military service due to the end of contract obligation or discharge for other reasons (e.g., medical, administrative).
- **Stage 7: Retirement**
  Retirement at the end of a military career with the task of redefining a new role and status in society.

6.4 ASSOCIATION BETWEEN CHALLENGES AND STRESSFUL EVENTS SPECIFIC TO EACH STAGE OF THE MILITARY LIFE CYCLE, PSYCHOLOGICAL FITNESS, AND SUICIDE RISK

Every stage of the military life cycle has its own specific challenges which service members have to face and master. How an individual copes with such challenges and associated stressors is strongly dependent on several factors including personal characteristics, cultural background, environmental characteristics, social support, and biopsychosocial vulnerabilities. Difficulties in coping with the specific stressors at different stages of the military life cycle may contribute to poor adaptation and possible negative outcomes, including suicide as a worst case scenario. To get a better idea of the individual challenges posed by each stage of the military life cycle as well as the individual vulnerabilities and protective factors which are instrumental in whether or not a service member successfully copes and adapts, this section will describe each of the stages noted earlier in this chapter.

6.4.1 Stage 1: Entrance into the Military

The first stage of the military life cycle consists of recruitment, selection, reception, and in-processing. At this stage, the main challenge that the prospective service member is faced with is the start of a new life phase. Dependent on the person's motivation, this assessment and induction process can be very critical. Among highly motivated prospects, a negative outcome during the assessment can have dramatic effects on self-worth, self-esteem, and future outlook. Among unmotivated prospects, especially when dealing with conscripts, this phase is highly stressful since it means an induction into a system and lifestyle they do not want to be a part of. The main

stressor during this stage is the assessment process with its implemented filters. The potential vulnerabilities for highly motivated prospects are the subjective lack of other options or dissatisfaction generated by the discrepancy between self-expectation and the organizational demands and needs. For negatively motivated prospects, the vulnerability is related to the fact that they are being forced into a situation they do not want from which escape is not possible. Depending on how negatively a service member views this life change, this can lead to extreme behavioural reactions and suicide risk among those highly vulnerable and sensitive to stress.

6.4.2 Stage 2: Basic Military Training

The second stage of the military life cycle is designed to integrate the individual into the military culture. At this stage, the main challenge for the service member is twofold:

1) To successfully adapt to the military environment; and
2) To become an integral part of it.

The main stressors at this stage are related to this transition process, including separation from the family and the home environment, adjustment to military rules, customs and regulations, acquiring a new skill set under pressure, building a new social network and becoming part of a unit at the cost of some loss to one's individuality. However, the training itself also presents inherent stressors due to how some trainings are designed and executed (e.g., involving sleep deprivation, abuse, hazing, dehumanization, deliberate psychological and physical hardship). The main vulnerabilities which can impact psychological fitness and subsequent suicide risk, during this stage, may involve intrapersonal ones such as immaturity, impulsivity, lack of flexibility, limited physical or mental capabilities, and/or personality characteristics.

6.4.3 Stage 3: Continued Military Training

The third stage of the military life cycle is training at the beginning of a military career to gain skill in an occupational specialty as well as further training later to gain higher qualifications or to change the occupational specialty. This stage initially follows basic training and can also be repeated during the course of the military life cycle; it always involves professional development with the main challenge being the mastery of new skill sets and the successful adaptation to a new professional role. The main risks associated with this stage, in terms of psychological fitness and suicide risk, are related to not being able to manage the responsibilities involved with the new role in the military as well as possible demands placed on the service member through his or her other roles in society (e.g., being a father or wife). The main vulnerabilities during this stage are intrapersonal as well as social and may consist of the following: lack of trust in own abilities and competence, unrealistic self-perception, lack of social skills, inadequate self-management, and prioritization.

6.4.4 Stage 4: Assignments

The fourth stage of the military life cycle involves an initial first duty assignment as well as further assignments during the military career. These assignments can be at home or abroad. This stage begins with the first actual assignment or duty posting and can be repeated numerous times throughout a service member's career. The main challenges of this phase are not necessarily in a professional sense since the occupational role may still be the same, but the service member will have to adapt to a new physical and social environment, for instance, moving with the family to a new location, separation from the family, effects on children, integrating into a new unit with a new unit culture, possibly adjusting to foreign environments, and building a new social network. A number of the risks and vulnerabilities observed at this stage can be similar to previous stages in the sense that new or reassignments also involve the filling of a new role in the new unit or duty station and place the same or similar demands on the service member.

6.4.5 Stage 5: Deployment(s)

The fifth stage of the military life cycle involves entry into military theatres of operations which in themselves are a cycle composed of the pre-deployment, actual deployment and reintegration sub-stages. Military deployments pose a number of challenges comparable to the challenges already mentioned in the stages of continued military training and assignments, but also encompass challenges unique to the deployed setting. The main challenges across the deployment cycle are found on both the professional as well as the personal levels. However, when considering the challenges, risks and vulnerabilities inherent to deployments, each individual sub-stage of the deployment cycle still needs to be considered in its own right in order to gain an idea for possible intervention strategies:

- **Pre-deployment –** During the pre-deployment sub-stage, the main professional challenges faced by service members are related to the necessity of refreshing and updating their skill sets, familiarizing themselves with the characteristics of the planned military operation, preparing themselves for the environment and the challenges posed by the operation including possibly extreme, traumatic, and life threatening situations.

  On the personal side, service members are faced with prolonged separation from the family not only during the deployment but also during preparatory training; service members and their spouses/partners and children are confronted with possible worst case scenarios, and they may face personal issues involving finances, insurance, will, and powers of attorney.

  The main risks are an inability to balance the military and familial obligations where the increased demands of deployment preparation may cause a reduction in the amount of time the service member can devote to the family, as well as difficulties in giving up and transferring necessary responsibility to the members of the family remaining at home. The main vulnerabilities for difficulties in psychological fitness and subsequent suicide risk, during this stage, are intrapersonal as well as social such as the inability to communicate and to transfer necessary responsibilities (possibly due to lack of trust, own doubts about capabilities to successfully complete the mission, unrealistic self-perception, or lack of knowledge on necessary preparatory steps).

- **Deployment –** During the deployment itself, the main professional challenges involve adaptation to an environment characterized by climatic extremes, poverty, violence, suffering, hostility, devastation and cultural differences, life or death decisions, role disparity (i.e., warrior versus helper versus observer), rules of engagement, loss of personal freedom and restrictions, the experience of possible traumatic events such as death or serious injury of comrades, and direct combat action.

  On the personal side, the challenges service members face are separation from friends and loved ones, the inability to directly support the family if problems arise, dealing with own fears as well as the fears of loved ones. The main risks for difficulties in psychological fitness and subsequent suicide risk, during this stage, are inadequate professional, moral, and/or mental preparation, low level of unit cohesion, lack of trust in leadership, inadequate after-action reviews, untrustworthiness of allies, and easy access to lethal means.

  The main vulnerabilities are tendencies to self-medicate with alcohol/drugs, negative attitude towards the mission, impulsivity, problematic stress management, unsolved problems at home, communication-related challenges, and little to no access to mental health support.

- **Post-deployment –** During the phase of reintegration following a deployment, service members are faced with numerous challenges involving the transition from a deployed setting to garrison and family life. This means the service member has to redefine his or her role in the military as well as the family setting.

The main risks for difficulties in psychological fitness and subsequent suicide risk, during this stage, are inadequate preparation for the change in one's status and role, deficient reintegration in the family and community, deficient reintegration into the home unit, false perceptions of the soldier's mission, societal disapproval of the mission, lack of social support, and physical impairments due to injuries. The main vulnerabilities are tendencies to self-medicate with alcohol/drugs, difficulty in accepting changes, incapacity to redefine and/or reclaim one's position in the family, negative attitude towards legitimacy of the mission, and communication-related challenges, and little to no access to mental health support.

6.4.6 Stage 6: End of Military Service

The sixth stage of the military life cycle is the end of contract obligation or discharge from the military for other reasons (e.g., medical, administrative). The main challenge faced at this stage of the military life cycle is the reorientation towards a new role in civilian society. The main risks during this stage, once again, for difficulties in psychological fitness and subsequent suicide risk, include inadequate mental and possibly professional preparation for this transition which subsequently leads to a deficient integration into the civilian work force or civilian society in general. The main possible vulnerabilities include inadequate qualifications for civilian positions, loss of identity, an unwillingness to adapt to civilian society, mental changes due to deployment experiences, and/or service related physical and mental impairment.

6.4.7 Stage 7: Retirement

The final stage of the military life cycle is the end of one's military career with the task of defining a new role and status in society. Similar to the end of military service, in general the main challenge at the end of the military life cycle due to retirement is the reorientation into civilian society. This reorientation does not only require the definition of a new role in society but also the acceptance of a major change in status. The main risks for difficulties in psychological fitness and subsequent suicide risk, during this stage, include the loss of social contacts, loss of positive feedback, loss of purpose, inadequate integration into a new role in the family, and lack of positive outlook. The main possible vulnerabilities include experiencing low self-esteem, inadequate social networks, little to no family ties, physical or mental health problems, inability to accept changes, and incapacity to redefine the position in the family and society.

6.5 MILITARY LIFE CYCLE AND RECOMMENDATIONS FOR SUICIDE PREVENTION

Service members and their leaders would possibly benefit from educational campaigns that describe the military life stages and the associated challenges within each stage [2]. This knowledge, awareness, and sensitivity is required in order to structure and implement effective interventions to help service members deal with the specific challenges encountered within each life cycle, as described. For example, unit leaders can foster a sense of comradeship and shared responsibility for the welfare of all unit members – and a sustained effort on this, throughout one's military life stages, can be viewed as very supportive. On the other hand, service members who are aware of the common challenges to be experienced during one's next military life stage can be well-prepared and equipped for an upcoming transition.

Additional strategies to build strength and a sense of confidence for all service members who transition through the military life cycle include the following:

1) Introduce organizational and structural changes that would facilitate adaptation, for example flexible schedule to cope with work/life balance.

2) Create an environment of open communication by listening and being attentive to service members.
3) Propagate a solution-oriented attitude such that challenges can be seen as problems that can be solved independently or with the assistance of others, when needed.
4) Provide educational and counselling opportunities for unit members and leadership who encounter difficulties in adapting.
5) Allot unit members adequate time to cognitively and emotionally make the transition required of them.
6) Recognize early signs of distress among service members who are unsuccessfully managing the military life transitional changes and associated challenges; provide appropriate and timely referrals to help with linkage to mental health care.
7) Create an environment which reduces stigma and encourages help seeking among service members who require mental healthcare, regardless of rank.
8) Educate military families about the stages of the military life cycle such that these individuals can give adequate support.

6.6 REFERENCES

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Chapter 7 − BEST PRACTICES AND RECOMMENDATIONS FOR MILITARY SUICIDE PREVENTION

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ABSTRACT

Military suicide remains a significant public health problem that is preventable. Suicide prevention requires the proactive involvement of all military members as well as leadership. On a daily basis, military members and leaders of all levels may have opportunities to influence the life trajectory of a ***distressed*** *service member who may or may not show the warning signs for suicide. The decisions made about the treatment of this service member within the military unit and within the healthcare system are critical in maximizing the safety of the service member (and possibly the safety of members of his or her unit if risk of violence towards others is present). Well-informed, compassionate, and timely decisions may additionally contribute to a positive and*

proactive leadership climate, enhanced unit cohesion and morale, as well as overall mission readiness and success. Suicidal service members are diverse in terms of their presentation and coping capabilities. Some may separate from the military prematurely due to impaired mental health functioning. Others, upon engagement with various helping resources, may learn to effectively manage their suicidal crises and demonstrate fitness for duty within their military occupational specialty. This Chapter provides a brief description of best practices for military suicide prevention across 17 surveyed nations and provides a list of specific recommendations. Overall, three key messages are highlighted:

1) *Suicidal service members require immediate attention and must not be stigmatized;*
2) *Best practices for suicide prevention exist and their wide dissemination is imperative; and*
3) *Leaders are strategically in an ideal position to ensure that suicidal service members receive timely assistance from mental health, substance use, chaplaincy, and/or family-focused programs.*

7.1 INTRODUCTION

Best practices, in this chapter, refer to evidence-based, evidence-informed, and/or emerging practices recognized in the field of suicidology as beneficial in reducing suicide risk. Evidence-based practices have been evaluated empirically in multiple studies and have been shown to reduce suicide deaths, suicide attempts, and/or suicide-related risk factors such as suicide ideation, depression, and hopelessness [1]-[3]. Given that suicide is a statistically rare event, many of the scientific studies examining it are underpowered. Therefore, the direct and indirect impact of various types of psychosocial and pharmacological interventions is difficult to estimate. Evidence-informed and emerging practices are not as robustly supported, but deserve attention as they may also reduce suicide risk [1]-[2]. Research on military suicide prevention has shown significant growth over the past decade. However, while progress in epidemiologic research (i.e., risk and protective factors) has been made, additional research in military suicide prevention, intervention, and postvention practices is needed.

7.2 PUBLIC HEALTH SIGNIFICANCE OF MILITARY SUICIDE

Suicide is globally the 15th leading cause of death with an age-standardized rate of 11.4 per 100,000. Among individuals between the ages of 30 – 49, suicide is the 5th leading cause of death, and the 2nd leading cause of death among those between the ages of 15 – 29 years old (after traffic accidents) [4]. Suicide accounts for 56% of all violent-related deaths, including those due to interpersonal violence or armed conflict [4].

To understand the significance of military suicide, the RTG HFM-218 collected data from 17 countries (see Chapter 1). Rates of military suicide across these countries can be summarized as follows: approximately 29% (n = 5) at 20.0 per 100,000 or higher, 18% (n = 3) between 15.0 – 19.9 per 100,000, 18% (n = 3) between 10.0-14.9 per 100,000, 6% (n = 1) below 10.0 per 100,000, and 29% (n = 5) with no available rates. Systematic surveillance efforts on military suicide were reported among 65% (n = 11) of surveyed countries, and 29% (n = 5) reported similar surveillance efforts for suicide attempts. While data comparisons across surveyed countries cannot be made due to a number of reasons previously noted (e.g., difference in surveillance processes, manner of death determinations, and reporting timeframe), military suicide appears to be a significant public health issue across all surveyed countries. For countries that did not report military suicide rates, the importance of military suicide was still recognized by nominating a national representative to serve on this RTG.

7.3 BEST PRACTICES IN GLOBAL SUICIDE PREVENTION

The World Health Organization (WHO), in a September 2014 report, titled, *Preventing Suicide: A Global Imperative* describes interventions that can be categorized as universal, selective, and indicated (p. 31) [5].

a) Universal Interventions – Mental health policies; policies to reduce harmful use of alcohol; access to health care; restriction of access to means; responsible media reporting; and raising awareness about mental health, substance use disorders and suicide.

b) Selective Interventions – Interventions for vulnerable groups; gatekeeper training; and crisis helplines.

c) Indicated Interventions – Follow-up and community support; assessment and management of suicidal behaviours; and assessment and management of mental and substance use disorders.

7.4 BEST PRACTICES IN MILITARY SUICIDE PREVENTION

Each of the 17 countries that completed the survey (disseminated by this Research Task Group) were asked to provide a detailed listing of their national as well as military and/or veteran best-practices in suicide prevention. For the purposes of this chapter, we are exclusively focusing on military and/or veteran best-practices as reported by each country. The important message to convey here is that we can all learn from one another. Sharing information about military/veteran suicide prevention programs and strategies across various countries is an important first step in an international effort to address the public health problem of military suicide. Table 7-1 to Table 7-17 present information that each country has reported, organized in the context of national strategies mentioned by the WHO (p. 57) report on preventing suicide [5].

Table 7-1: Military/Veteran-Specific Suicide Prevention Practices Across 17 Surveyed Countries, Organized by the WHO Strategies for Suicide Prevention – AUSTRALIA.

WHO STRATEGY	MILITARY PRACTICES
Surveillance "Increase the quality and timeliness of national data on suicide and suicide attempts."	✓ Yes -Suicide method is not currently recorded.
Means Restriction "Reduce the availability, accessibility and attractiveness of the means to suicide."	-No information provided.
Media "Promote implementation of media guidelines."	-Active in promoting non-stigmatizing language throughout all Defence documents and media responses.
Access to Services "Promote increased access to comprehensive services…"; "Remove barriers to care."	-The ADF Mental Health and Wellbeing Plan 2012-2015.
Training and Education "Maintain comprehensive training programs for identified gatekeepers"; "Improve the competencies of mental health and primary care providers."	-The Australian Defence Force (ADF) Suicide Prevention Program (SPP) consists of 4 levels: a psycho-educational Suicide Awareness brief that is mandatory for all Defence members, the Keep Your Mates Safe (KYMS) – Suicide training, the LivingWorks Australia branded Applied Skills Intervention Skills Training (ASIST), and the Suicide Risk Assessment Training (SRAT) which is for mental health professionals.
Treatment "Improve the quality of clinical care and evidence-based clinical interventions, especially for individuals who present to hospital following a suicide attempt."	-The Defence SPP was formally reviewed by the Australian Institute for Suicide Research and Prevention and Griffith University in 2012 which concluded that the SPP included most components of best practice, compared favourably to those of its allies (e.g., US and Canada) and was in accordance with most of the expert recommendations.
Crisis Intervention "Ensure that communities have the capacity to respond to crises with appropriate interventions."	-See above.
Postvention "Improve response to and caring for those affected by suicide and suicide attempts."	-No information provided.
Awareness "Establish public information campaigns to support the understanding that suicide is preventable."	-Defence members undertake Suicide Awareness training and BattleSMART – a self-resilience training.
Stigma Reduction "Promote the use of mental health services, and services for the prevention of substance abuse and suicide. Reduce discrimination against people using these services."	-Increasing ADF focus on mental health and looking after your own mental health to decrease stigma and barriers to care.
Oversight and Coordination "Establish institutions or agencies to promote and coordinate research, training and service delivery in respect of suicidal behaviours."	-Since 2002, the ADF has developed a suicide prevention approach. The policy framework for suicide is being revised to include Commission of Inquiry recommendations, the ADF Suicide Prevention Program Evaluation recommendations and to include current evidence based clinical interventions. Central to this policy is the revision incorporating the concept that suicide prevention is the responsibility of every Defence employee.

Table 7-2: Military/Veteran-Specific Suicide Prevention Practices Across 17 Surveyed Countries, Organized by the WHO Strategies for Suicide Prevention – AUSTRIA.

WHO STRATEGY	MILITARY PRACTICES
Surveillance "Increase the quality and timeliness of national data on suicide and suicide attempts."	✓ Yes -Suicide deaths and attempts are reported systematically to Operations Command and Control Division. -Data analysis by the Armed Forces Psychological Service.
Means Restriction "Reduce the availability, accessibility and attractiveness of the means to suicide."	-No information provided.
Media "Promote implementation of media guidelines."	-No information provided.
Access to Services "Promote increased access to comprehensive services…"; "Remove barriers to care."	-No information provided.
Training and Education "Maintain comprehensive training programs for identified gatekeepers"; "Improve the competencies of mental health and primary care providers."	-Training of psychological peers: 2 per company. -Training of stress coping ability.
Treatment "Improve the quality of clinical care and evidence-based clinical interventions, especially for individuals who present to hospital following a suicide attempt."	-Troop psychologist deployed with the contingent during the whole deployment. -Alcohol prevention program.
Crisis Intervention "Ensure that communities have the capacity to respond to crises with appropriate interventions."	-Helpline service via phone: 24/7. -Peer system + crisis intervention.
Postvention "Improve response to and caring for those affected by suicide and suicide attempts."	-No information provided.
Awareness "Establish public information campaigns to support the understanding that suicide is preventable."	-Provide information about suicidality and recovery.
Stigma Reduction "Promote the use of mental health services, and services for the prevention of substance abuse and suicide. Reduce discrimination against people using these services."	-Psychoeducation.
Oversight and Coordination "Establish institutions or agencies to promote and coordinate research, training and service delivery in respect of suicidal behaviours."	-No information provided.

Table 7-3: Military/Veteran-Specific Suicide Prevention Practices Across 17 Surveyed Countries, Organized by the WHO Strategies for Suicide Prevention – BELGIUM.

WHO STRATEGY	MILITARY PRACTICES
Surveillance "Increase the quality and timeliness of national data on suicide and suicide attempts."	⊗ No -Collect data about military suicide but there is no systematic surveillance on suicide death/attempt within the military.
Means Restriction "Reduce the availability, accessibility and attractiveness of the means to suicide."	-No information provided.
Media "Promote implementation of media guidelines."	-No information provided.
Access to Services "Promote increased access to comprehensive services…"; "Remove barriers to care."	-No information provided.
Training and Education "Maintain comprehensive training programs for identified gatekeepers"; "Improve the competencies of mental health and primary care providers."	-Information and prevention campaign in 2013.
Treatment "Improve the quality of clinical care and evidence-based clinical interventions, especially for individuals who present to hospital following a suicide attempt."	-Mental health care in the Military Hospital in Brussels.
Crisis Intervention "Ensure that communities have the capacity to respond to crises with appropriate interventions."	-No information provided.
Postvention "Improve response to and caring for those affected by suicide and suicide attempts."	-No information provided.
Awareness "Establish public information campaigns to support the understanding that suicide is preventable."	-An information and prevention campaign in 2013.
Stigma Reduction "Promote the use of mental health services, and services for the prevention of substance abuse and suicide. Reduce discrimination against people using these services."	-Developed a system of "person of trust" inside the military unit.
Oversight and Coordination "Establish institutions or agencies to promote and coordinate research, training and service delivery in respect of suicidal behaviours."	-Created working group on suicide prevention.

Table 7-4: Military/Veteran-Specific Suicide Prevention Practices Across 17 Surveyed Countries, Organized by the WHO Strategies for Suicide Prevention – CANADA.

STRATEGY	MILITARY PRACTICES
Surveillance "Increase the quality and timeliness of national data on suicide and suicide attempts."	✓ Yes -Systematic surveillance of military suicides since 1995.
Means Restriction "Reduce the availability, accessibility and attractiveness of the means to suicide."	-Restriction of access to lethal means.
Media "Promote implementation of media guidelines."	-Responsible media reporting of suicides.
Access to Services "Promote increased access to comprehensive services…"; "Remove barriers to care."	-Systematic efforts to overcome barriers to mental health care across the entire Canadian Forces system.
Training and Education "Maintain comprehensive training programs for identified gatekeepers"; "Improve the competencies of mental health and primary care providers."	-Education and awareness programs for Canadian Forces leadership and general membership. -Selection, resilience training, and primary risk factor reduction through health promotion programs.
Treatment "Improve the quality of clinical care and evidence-based clinical interventions, especially for individuals who present to hospital following a suicide attempt."	-Screening and assessment of members for mental health disorders at various points in the career, during Periodic Health Examinations and Pre/Post-Deployment Screening. -Provision of evidence-based, high quality health care, including mental health (pharmacotherapy and psychotherapy).
Crisis Intervention "Ensure that communities have the capacity to respond to crises with appropriate interventions."	-Provision of evidence-based, high quality health and mental health care.
Postvention "Improve response to and caring for those affected by suicide and suicide attempts."	-Systematic follow-up of high risk patients.
Awareness "Establish public information campaigns to support the understanding that suicide is preventable."	-Education and awareness programs for Canadian Forces leadership and general membership.
Stigma Reduction "Promote the use of mental health services, and services for the prevention of substance abuse and suicide. Reduce discrimination against people using these services."	-A public health approach to the prevention of suicide – includes reduction of stigma and barriers to care.
Oversight and Coordination "Establish institutions or agencies to promote and coordinate research, training and service delivery in respect of suicidal behaviours."	-Implementation of organizational policies and programs for the Canadian Forces to mitigate work stress and to prevent suicide.

Table 7-5: Military/Veteran-Specific Suicide Prevention Practices Across 17 Surveyed Countries, Organized by the WHO Strategies for Suicide Prevention – DENMARK.

STRATEGY	MILITARY PRACTICES
Surveillance "Increase the quality and timeliness of national data on suicide and suicide attempts."	⊗ No
Means Restriction "Reduce the availability, accessibility and attractiveness of the means to suicide."	-No information provided.
Media "Promote implementation of media guidelines."	-No information provided.
Access to Services "Promote increased access to comprehensive services…"; "Remove barriers to care."	-No information provided.
Training and Education "Maintain comprehensive training programs for identified gatekeepers"; "Improve the competencies of mental health and primary care providers."	-No information provided.
Treatment "Improve the quality of clinical care and evidence-based clinical interventions, especially for individuals who present to hospital following a suicide attempt."	-No information provided.
Crisis Intervention "Ensure that communities have the capacity to respond to crises with appropriate interventions."	-No information provided.
Postvention "Improve response to and caring for those affected by suicide and suicide attempts."	-No information provided.
Awareness "Establish public information campaigns to support the understanding that suicide is preventable."	-No information provided.
Stigma Reduction "Promote the use of mental health services, and services for the prevention of substance abuse and suicide. Reduce discrimination against people using these services."	-No information provided.
Oversight and Coordination "Establish institutions or agencies to promote and coordinate research, training and service delivery in respect of suicidal behaviours."	-No information provided.

Table 7-6: Military/Veteran-Specific Suicide Prevention Practices Across 17 Surveyed Countries, Organized by the WHO Strategies for Suicide Prevention – ESTONIA.

STRATEGY	MILITARY PRACTICES
Surveillance "Increase the quality and timeliness of national data on suicide and suicide attempts."	⊗ No
Means Restriction "Reduce the availability, accessibility and attractiveness of the means to suicide."	-No information provided.
Media "Promote implementation of media guidelines."	-No information provided.
Access to Services "Promote increased access to comprehensive services…"; "Remove barriers to care."	-No information provided.
Training and Education "Maintain comprehensive training programs for identified gatekeepers"; "Improve the competencies of mental health and primary care providers."	-No information provided.
Treatment "Improve the quality of clinical care and evidence-based clinical interventions, especially for individuals who present to hospital following a suicide attempt."	-The brochure (*Guidelines for promoting mental health and prevention of suicidal behaviour in Defence Forces*) has been published to prepare mental health training and establish suicide prevention practice in Estonian Defence Forces.
Crisis Intervention "Ensure that communities have the capacity to respond to crises with appropriate interventions."	-No information provided.
Postvention "Improve response to and caring for those affected by suicide and suicide attempts."	-No information provided.
Awareness "Establish public information campaigns to support the understanding that suicide is preventable."	-No information provided.
Stigma Reduction "Promote the use of mental health services, and services for the prevention of substance abuse and suicide. Reduce discrimination against people using these services."	-No information provided.
Oversight and Coordination "Establish institutions or agencies to promote and coordinate research, training and service delivery in respect of suicidal behaviours."	-The policy for veterans has been officially settled and approved by Ministry of Defence. Course of action is described including compilation of veterans' database and suggestions of registry and screening options.

Table 7-7: Military/Veteran-Specific Suicide Prevention Practices Across 17 Surveyed Countries, Organized by the WHO Strategies for Suicide Prevention – FINLAND.

STRATEGY	MILITARY PRACTICES
Surveillance "Increase the quality and timeliness of national data on suicide and suicide attempts."	⊗ No -All deaths are reported to Defence Command.
Means Restriction "Reduce the availability, accessibility and attractiveness of the means to suicide."	-No information provided.
Media "Promote implementation of media guidelines."	-No information provided.
Access to Services "Promote increased access to comprehensive services…"; "Remove barriers to care."	-Easy access to psychosocial support and health care services.
Training and Education "Maintain comprehensive training programs for identified gatekeepers"; "Improve the competencies of mental health and primary care providers."	-Suicide prevention is part of educational materials for conscripts and military members on crisis prevention and mental health.
Treatment "Improve the quality of clinical care and evidence-based clinical interventions, especially for individuals who present to hospital following a suicide attempt."	-Rehabilitation exercises and two-day meeting after deployments for crisis management personnel, to give information on psychosocial support and services.
Crisis Intervention "Ensure that communities have the capacity to respond to crises with appropriate interventions."	-Crisis line for conscripts (Non-Government Organization [NGO] in collaboration with Defence Forces); Crisis line for veterans (NGO in collaboration with Defence Forces); Health care nurse line for conscripts.
Postvention "Improve response to and caring for those affected by suicide and suicide attempts."	-No information provided.
Awareness "Establish public information campaigns to support the understanding that suicide is preventable."	-Suicide prevention is part of educational materials for conscripts and military members on crisis prevention and mental health.
Stigma Reduction "Promote the use of mental health services, and services for the prevention of substance abuse and suicide. Reduce discrimination against people using these services."	-Stigma reduction is a challenge among conscripts and military personnel but paid attention to.
Oversight and Coordination "Establish institutions or agencies to promote and coordinate research, training and service delivery in respect of suicidal behaviours."	-No information provided.

Table 7-8: Military/Veteran-Specific Suicide Prevention Practices Across 17 Surveyed Countries, Organized by the WHO Strategies for Suicide Prevention – FRANCE.

STRATEGY	MILITARY PRACTICES
Surveillance "Increase the quality and timeliness of national data on suicide and suicide attempts."	✓ Yes -Systematic surveillance of suicide within the military. Instruction N° 1000 /DEF/DCSSA/AST/TEC/2 du 8 novembre 2001 relative à la surveillance épidémiologique dans les armées. The weekly epidemiological message and the specific reporting form for all death causes are sent by the medical officer to the French military epidemiology and public health centre.
Means Restriction "Reduce the availability, accessibility and attractiveness of the means to suicide."	-Service weapons can be found in the armoury at the beginning of a mission and are returned at the end, or left in the rack by the French Gendarmes who do not need them during breaks. -A commanding officer and/or a medical officer may forbid the carrying of firearms for medical reasons.
Media "Promote implementation of media guidelines."	-No information provided.
Access to Services "Promote increased access to comprehensive services…"; "Remove barriers to care."	-A continuous medical vigilance made by the medical officer during regular medical visits and in high risk situations, particularly during and after operations (action plan for PTSD screening since 2011). -Suicide prevention may also include the armed forces chaplains and the social workers.
Training and Education "Maintain comprehensive training programs for identified gatekeepers"; "Improve the competencies of mental health and primary care providers."	-Training and awareness for the professional environment – what are the warning signs? A module on the prevention of self-aggressive behaviours in the military environment could be included in the training of military schools. -Medical courses on suicide and posttraumatic stress disorder for the medical officers.
Treatment "Improve the quality of clinical care and evidence-based clinical interventions, especially for individuals who present to hospital following a suicide attempt."	-Military hospital protocol for prevention of suicide risk. -PTSD action plan in the French armed forces (n°564/DEF/DCSSA/AST/TEC du 10 mars 2011).
Crisis Intervention "Ensure that communities have the capacity to respond to crises with appropriate interventions."	-Intervention of the medical officer.
Postvention "Improve response to and caring for those affected by suicide and suicide attempts."	-No information provided.
Awareness "Establish public information campaigns to support the understanding that suicide is preventable."	-The medical officer may conduct awareness sessions in military units about warning signs and about how to help a colleague with suicidal thoughts.

STRATEGY	MILITARY PRACTICES
Stigma Reduction "Promote the use of mental health services, and services for the prevention of substance abuse and suicide. Reduce discrimination against people using these services."	-Soldier is often afraid to speak about his pain, and appears to be stigmatized or fragile in the context of the ideal values set forth by the institution. Prevention is the responsibility of the medical officer, of those in command, and of each member of the military community bonded by an "esprit de corps."
Oversight and Coordination "Establish institutions or agencies to promote and coordinate research, training and service delivery in respect of suicidal behaviours."	-No information provided.

Table 7-9: Military/Veteran-Specific Suicide Prevention Practices Across 17 Surveyed Countries, Organized by the WHO Strategies for Suicide Prevention – GERMANY.

STRATEGY	MILITARY PRACTICES
Surveillance "Increase the quality and timeliness of national data on suicide and suicide attempts."	✓ Yes
Means Restriction "Reduce the availability, accessibility and attractiveness of the means to suicide."	-No information provided.
Media "Promote implementation of media guidelines."	-No information provided.
Access to Services "Promote increased access to comprehensive services…"; "Remove barriers to care."	-No information provided.
Training and Education "Maintain comprehensive training programs for identified gatekeepers"; "Improve the competencies of mental health and primary care providers."	-No information provided.
Treatment "Improve the quality of clinical care and evidence-based clinical interventions, especially for individuals who present to hospital following a suicide attempt."	-The Bundeswehr (unified armed forces of Germany) has comprehensive support services together with the psychological service and the military chaplaincy designed specifically to help soldiers in need.
Crisis Intervention "Ensure that communities have the capacity to respond to crises with appropriate interventions."	-No information provided.
Postvention "Improve response to and caring for those affected by suicide and suicide attempts."	-No information provided.
Awareness "Establish public information campaigns to support the understanding that suicide is preventable."	-No information provided.
Stigma Reduction "Promote the use of mental health services, and services for the prevention of substance abuse and suicide. Reduce discrimination against people using these services."	-No information provided.
Oversight and Coordination "Establish institutions or agencies to promote and coordinate research, training and service delivery in respect of suicidal behaviours."	-No information provided.

Table 7-10: Military/Veteran-Specific Suicide Prevention Practices Across 17 Surveyed Countries, Organized by the WHO Strategies for Suicide Prevention – LATVIA.

STRATEGY	MILITARY PRACTICES
Surveillance "Increase the quality and timeliness of national data on suicide and suicide attempts."	⊗ No
Means Restriction "Reduce the availability, accessibility and attractiveness of the means to suicide."	-No information provided.
Media "Promote implementation of media guidelines."	-No information provided.
Access to Services "Promote increased access to comprehensive services…"; "Remove barriers to care."	-No information provided.
Training and Education "Maintain comprehensive training programs for identified gatekeepers"; "Improve the competencies of mental health and primary care providers."	-Basic psychological training for all new soldiers (e.g., adaptation, communication, practical stress management, conflicts, problem solving). -Special programme for prevention of suicide.
Treatment "Improve the quality of clinical care and evidence-based clinical interventions, especially for individuals who present to hospital following a suicide attempt."	-Support before Deployment (e.g., stress management, debriefing techniques, psychological process in group). -Support during international military operation. -Family support programs, rehabilitation after missions (e.g., group therapy, rehabilitation).
Crisis Intervention "Ensure that communities have the capacity to respond to crises with appropriate interventions."	-No information provided.
Postvention "Improve response to and caring for those affected by suicide and suicide attempts."	-No information provided.
Awareness "Establish public information campaigns to support the understanding that suicide is preventable."	-No information provided.
Stigma Reduction "Promote the use of mental health services, and services for the prevention of substance abuse and suicide. Reduce discrimination against people using these services."	-No information provided.
Oversight and Coordination "Establish institutions or agencies to promote and coordinate research, training and service delivery in respect of suicidal behaviours."	-No information provided.

Table 7-11: Military/Veteran-Specific Suicide Prevention Practices Across 17 Surveyed Countries, Organized by the WHO Strategies for Suicide Prevention – LITHUANIA.

STRATEGY	MILITARY PRACTICES
Surveillance "Increase the quality and timeliness of national data on suicide and suicide attempts."	✓ Yes
Means Restriction "Reduce the availability, accessibility and attractiveness of the means to suicide."	-No information provided.
Media "Promote implementation of media guidelines."	-No information provided.
Access to Services "Promote increased access to comprehensive services…"; "Remove barriers to care."	-Increasing knowledge about seeking help, reducing stigma.
Training and Education "Maintain comprehensive training programs for identified gatekeepers"; "Improve the competencies of mental health and primary care providers."	-Providing psychological education to service members and leaders on problem solving, recognizing stress signs, managing stress, coping during deployment and transition to civilian life. -Training buddy/volunteers, chaplains, and medical specialists. -Development of deployment psychological training and support, preparing information lists, meetings with family members before, during, and after deployment.
Treatment "Improve the quality of clinical care and evidence-based clinical interventions, especially for individuals who present to hospital following a suicide attempt."	-Collaboration with other institutions in early detection of adaptation problems. -Consulting and treating patients with mental disorders. -Developing research projects in suicide prevention practices.
Crisis Intervention "Ensure that communities have the capacity to respond to crises with appropriate interventions."	-No information provided.
Postvention "Improve response to and caring for those affected by suicide and suicide attempts."	-No information provided.
Awareness "Establish public information campaigns to support the understanding that suicide is preventable."	-Increasing knowledge about seeking help, reducing stigma.
Stigma Reduction "Promote the use of mental health services, and services for the prevention of substance abuse and suicide. Reduce discrimination against people using these services."	-Increasing knowledge about seeking help, reducing stigma. -Creating orders about leaders' role in reducing stigma, unit morale maintenance, managing traumatic event.
Oversight and Coordination "Establish institutions or agencies to promote and coordinate research, training and service delivery in respect of suicidal behaviours."	-No information provided.

Table 7-12: Military/Veteran-Specific Suicide Prevention Practices Across 17 Surveyed Countries, Organized by the WHO Strategies for Suicide Prevention – NETHERLANDS.

STRATEGY	MILITARY PRACTICES
Surveillance "Increase the quality and timeliness of national data on suicide and suicide attempts."	⊗ No
Means Restriction "Reduce the availability, accessibility and attractiveness of the means to suicide."	-No information provided.
Media "Promote implementation of media guidelines."	-No information provided.
Access to Services "Promote increased access to comprehensive services…"; "Remove barriers to care."	-No information provided.
Training and Education "Maintain comprehensive training programs for identified gatekeepers"; "Improve the competencies of mental health and primary care providers."	-No information provided.
Treatment "Improve the quality of clinical care and evidence-based clinical interventions, especially for individuals who present to hospital following a suicide attempt."	-No information provided.
Crisis Intervention "Ensure that communities have the capacity to respond to crises with appropriate interventions."	-No information provided.
Postvention "Improve response to and caring for those affected by suicide and suicide attempts."	-No information provided.
Awareness "Establish public information campaigns to support the understanding that suicide is preventable."	-No information provided.
Stigma Reduction "Promote the use of mental health services, and services for the prevention of substance abuse and suicide. Reduce discrimination against people using these services."	-No information provided.
Oversight and Coordination "Establish institutions or agencies to promote and coordinate research, training and service delivery in respect of suicidal behaviours."	-No information provided.

Table 7-13: Military/Veteran-Specific Suicide Prevention Practices Across 17 Surveyed Countries, Organized by the WHO Strategies for Suicide Prevention – ROMANIA.

STRATEGY	MILITARY PRACTICES
Surveillance "Increase the quality and timeliness of national data on suicide and suicide attempts."	✓ Yes -Because suicide data is collected by various military and civilian structures, it is difficult to get together all data and for this reason, there is no centralized statistics. -Military suicide methods are unknown.
Means Restriction "Reduce the availability, accessibility and attractiveness of the means to suicide."	-No information provided.
Media "Promote implementation of media guidelines."	-No information provided.
Access to Services "Promote increased access to comprehensive services…"; "Remove barriers to care."	-No information provided.
Training and Education "Maintain comprehensive training programs for identified gatekeepers"; "Improve the competencies of mental health and primary care providers."	-No information provided.
Treatment "Improve the quality of clinical care and evidence-based clinical interventions, especially for individuals who present to hospital following a suicide attempt."	-Psychological evaluation of the military personnel participating in missions abroad. -Periodic psychological and medical evaluation of civilian and military personnel of the armed forces. -Employing a psychologist in most of the military units.
Crisis Intervention "Ensure that communities have the capacity to respond to crises with appropriate interventions."	-No information provided.
Postvention "Improve response to and caring for those affected by suicide and suicide attempts."	-No information provided.
Awareness "Establish public information campaigns to support the understanding that suicide is preventable."	-No information provided.
Stigma Reduction "Promote the use of mental health services, and services for the prevention of substance abuse and suicide. Reduce discrimination against people using these services."	-Religious support. -When possible, a psychologist is embedded into the military unit during missions abroad.

STRATEGY	MILITARY PRACTICES
Stigma Reduction (cont'd)	-If someone has any medical or psychological problem, he/she is directed to the medical or psychological assistance for a certain period of time, according to his/her problem and the legal procedures. After recovery, that person comes back to work. In very specific situations, if the medical or psychological problem is very serious, that person could be retired from active duty service, according with national and military procedures.
Oversight and Coordination "Establish institutions or agencies to promote and coordinate research, training and service delivery in respect of suicidal behaviours."	-No information provided.

Table 7-14: Military/Veteran-Specific Suicide Prevention Practices Across 17 Surveyed Countries, Organized by the WHO Strategies for Suicide Prevention – SLOVENIA.

STRATEGY	MILITARY PRACTICES
Surveillance "Increase the quality and timeliness of national data on suicide and suicide attempts."	⊗ No
Means Restriction "Reduce the availability, accessibility and attractiveness of the means to suicide."	-No information provided.
Media "Promote implementation of media guidelines."	-No information provided.
Access to Services "Promote increased access to comprehensive services…"; "Remove barriers to care."	-No information provided.
Training and Education "Maintain comprehensive training programs for identified gatekeepers"; "Improve the competencies of mental health and primary care providers."	-No information provided.
Treatment "Improve the quality of clinical care and evidence-based clinical interventions, especially for individuals who present to hospital following a suicide attempt."	-No information provided.
Crisis Intervention "Ensure that communities have the capacity to respond to crises with appropriate interventions."	-No information provided.
Postvention "Improve response to and caring for those affected by suicide and suicide attempts."	-No information provided.
Awareness "Establish public information campaigns to support the understanding that suicide is preventable."	-No information provided.
Stigma Reduction "Promote the use of mental health services, and services for the prevention of substance abuse and suicide. Reduce discrimination against people using these services."	-No information provided.
Oversight and Coordination "Establish institutions or agencies to promote and coordinate research, training and service delivery in respect of suicidal behaviours."	-No information provided.

Table 7-15: Military/Veteran-Specific Suicide Prevention Practices Across 17 Surveyed Countries, Organized by the WHO Strategies for Suicide Prevention – TURKEY.

STRATEGY	MILITARY PRACTICES
Surveillance "Increase the quality and timeliness of national data on suicide and suicide attempts."	✓ Yes
Means Restriction "Reduce the availability, accessibility and attractiveness of the means to suicide."	-Restriction of weapon.
Media "Promote implementation of media guidelines."	-No information provided.
Access to Services "Promote increased access to comprehensive services…"; "Remove barriers to care."	-No information provided.
Training and Education "Maintain comprehensive training programs for identified gatekeepers"; "Improve the competencies of mental health and primary care providers."	-Buddy system. -Education of staff.
Treatment "Improve the quality of clinical care and evidence-based clinical interventions, especially for individuals who present to hospital following a suicide attempt."	-Psychological counselling.
Crisis Intervention "Ensure that communities have the capacity to respond to crises with appropriate interventions."	-Hotline.
Postvention "Improve response to and caring for those affected by suicide and suicide attempts."	-No information provided.
Awareness "Establish public information campaigns to support the understanding that suicide is preventable."	-Leader counselling. -Education of staff.
Stigma Reduction "Promote the use of mental health services, and services for the prevention of substance abuse and suicide. Reduce discrimination against people using these services."	-No information provided.
Oversight and Coordination "Establish institutions or agencies to promote and coordinate research, training and service delivery in respect of suicidal behaviours."	-No information provided.

Table 7-16: Military/Veteran-Specific Suicide Prevention Practices Across 17 Surveyed Countries, Organized by the WHO Strategies for Suicide Prevention − UNITED KINGDOM.

STRATEGY	MILITARY PRACTICES
Surveillance "Increase the quality and timeliness of national data on suicide and suicide attempts."	✓ Yes -Defence Analytical Services and Advice (DASA).
Means Restriction "Reduce the availability, accessibility and attractiveness of the means to suicide."	-No information provided.
Media "Promote implementation of media guidelines."	-No information provided.
Access to Services "Promote increased access to comprehensive services…"; "Remove barriers to care."	-Routine occupational health assessments.
Training and Education "Maintain comprehensive training programs for identified gatekeepers"; "Improve the competencies of mental health and primary care providers."	-No information provided.
Treatment "Improve the quality of clinical care and evidence-based clinical interventions, especially for individuals who present to hospital following a suicide attempt."	-New Horizons: Towards a Shared Vision for Mental Health Consultation – The government's new programme of action for mental health, New Horizons, has committed to updating England's suicide prevention strategy, taking into account 'changing demography, the current economic climate and special at-risk groups, for example young men leaving the forces. -Zero tolerance for drug misuse.
Crisis Intervention "Ensure that communities have the capacity to respond to crises with appropriate interventions."	-Suicide Vulnerability Risk Management policy (Army).
Postvention "Improve response to and caring for those affected by suicide and suicide attempts."	-No information provided.
Awareness "Establish public information campaigns to support the understanding that suicide is preventable."	-Education on good leadership, morale, cohesion.
Stigma Reduction "Promote the use of mental health services, and services for the prevention of substance abuse and suicide. Reduce discrimination against people using these services."	-No information provided.
Oversight and Coordination "Establish institutions or agencies to promote and coordinate research, training and service delivery in respect of suicidal behaviours."	-No information provided.

Table 7-17: Military/Veteran-Specific Suicide Prevention Practices Across 17 Surveyed Countries, Organized by the WHO Strategies for Suicide Prevention − UNITED STATES.

STRATEGY	MILITARY PRACTICES
Surveillance "Increase the quality and timeliness of national data on suicide and suicide attempts."	✓ Yes -Department of Defense (DoD) Suicide Event Report (DoDSER): http://www.dspo.mil/SuicideData/DoDSERAnnualReports.aspx.
Means Restriction "Reduce the availability, accessibility and attractiveness of the means to suicide."	-Component of DoD Strategy for Suicide Prevention. -Section 1057 of the National Defense Authorization Act of Fiscal Year 2013: Amends the Skelton Act to allow a service member's health professional or commanding officer to inquire if the member owns or plans to acquire any firearms or other weapons, if such professional or officer reasonably believes that the member is at high risk for suicide or causing harm to others.
Media "Promote implementation of media guidelines."	-Component of DoD Strategy for Suicide Prevention.
Access to Services "Promote increased access to comprehensive services…"; "Remove barriers to care."	-Component of DoD Strategy for Suicide Prevention.
Training and Education "Maintain comprehensive training programs for identified gatekeepers"; "Improve the competencies of mental health and primary care providers."	-Component of DoD Strategy for Suicide Prevention. -See below, under Treatment.
Treatment "Improve the quality of clinical care and evidence-based clinical interventions, especially for individuals who present to hospital following a suicide attempt."	-VA/DoD Clinical Practice Guidelines – Suicide Prevention: http://www.healthquality.va.gov/guidelines/MH/srb/. -Air Force Guide for Suicide Risk Assessment, Management, and Treatment (Appendices): https://www.usuhs.edu/sites/default/files/media/mps/pdf/mholloway-afguidesuiciderisk.pdf; https://www.usuhs.edu/sites/default/files/media/mps/pdf/mhollowayappendicesafguidesuiciderisk.pdf. -Problematic Substance Use by DoD Personnel: http://www.dtic.mil/whs/directives/corres/pdf/101004p.pdf.
Crisis Intervention "Ensure that communities have the capacity to respond to crises with appropriate interventions."	-Supporting Military Families in Crisis: http://www.dspo.mil/Portals/113/Documents/Family-Guide-DSPO-2014.pdf. -Military/Veterans Crisis Line (24/7 Support): https://www.veteranscrisisline.net/ActiveDuty.aspx; https://www.veteranscrisisline.net/.
Postvention "Improve response to and caring for those affected by suicide and suicide attempts."	-Suicide Postvention in the Department of Defense: http://www.rand.org/content/dam/rand/pubs/research_reports/RR500/RR586/RAND_RR586.pdf. -Postvention Guide: http://www.dspo.mil/Portals/113/Documents/Postvention-Plan-Reserve-Components.pdf.

STRATEGY	MILITARY PRACTICES
Awareness "Establish public information campaigns to support the understanding that suicide is preventable."	-Component of DoD Strategy for Suicide Prevention.
Stigma Reduction "Promote the use of mental health services, and services for the prevention of substance abuse and suicide. Reduce discrimination against people using these services."	-Improve strategic messaging and reduce stigma. -In response to an Executive Order, DSPO, with the Department of Veterans Affairs, is leading a 12-month, help-seeking campaign to reach service members and veterans. -DoD Directive (DoDD) 6490.08: Command Notification Requirements to Dispel Stigma in Providing Mental Health Care to Service Members: http://www.dtic.mil/whs/directives/corres/pdf/649008p.pdf.
Oversight and Coordination "Establish institutions or agencies to promote and coordinate research, training and service delivery in respect of suicidal behaviours."	-Department of Defense Task Force on the Prevention of Suicide by Members of the Armed Forces (2010) – 76 Recommendations: http://www.sprc.org/sites/sprc.org/files/library/2010-08_Prevention-of-Suicide-Armed-Forces.pdf. -Defense Suicide Prevention Office (DSPO), established in 2011, oversees all strategic development, implementation, centralization, standardization, communication and evaluation of DoD suicide and risk reduction programs, policies and surveillance activities: http://www.dspo.mil/. -DoD Strategy for Suicide Prevention: http://www.dspo.mil/Portals/113/Documents/TAB%20B%20-%20DSSP_FINAL%20USD%20PR%20SIGNED.PDF. -DoD Directive (DoDD) 6490.14: Defense Suicide Prevention Program: http://www.dspo.mil/Portals/113/Documents/DoDD-6490-14-Signed-June-18-2013.pdf.

Table 7-18: Country Specific Suicide Prevention Framework, Resources, and/or National Strategy.

COUNTRY	WEBSITE
Australia	National Suicide Prevention Strategy: http://www.health.gov.au/internet/main/publishing.nsf/content/mental-nsps. https://www.mindbank.info/collection/country/australia-national/suicide_prevention_.
Austria	SUPRA – National **Su**icide **Pr**evention Plan (**A**ustria): https://www.mindbank.info/item/4036.
Belgium	http://www.preventionsuicide.info/priorites/belgique.php. https://www.mindbank.info/item/4318.
Canada	The Canadian Association for Suicide Prevention (CASP), National Suicide Strategy: http://suicideprevention.ca/about-us/the-casp-national-suicide-strategy/. Report of the Canadian Forces Expert Panel on Suicide Prevention: http://www.forces.gc.ca/assets/FORCES_Internet/docs/en/about-reports-pubs-health/expert-panel-suicide-prevention.pdf.
Denmark	Guidelines for the municipalities: Prevention of suicidal behaviour in children and adolescents: https://www.mindbank.info/item/1245.
Estonia	Suicide Prevention: Multisite Intervention Study on Suicidal Behaviours, implemented in Estonia by the Estonian-Swedish Mental Health and Suicidology Institute (ERSI): http://www.suicidology.ee/index.php?page=59.
Finland	Ministry of Social Welfare and Health 2010 – Suicide Prevention: http://stm.fi/etusivu. Providing a safe environment for our children and young people: Finland's national action plan for injury prevention among children and youth: https://www.mindbank.info/item/1779.
France	National Program Against Suicide: http://www.sante.gouv.fr. French National Program Against Suicide, 2011 – 2014: https://www.mindbank.info/item/857.
Germany	National Suicide Prevention Program – Germany: www.suizidpraevention-deutschland.de/Home.html.
Latvia	Public Health Data: http://www.spkc.gov.lv/sabiedribas-veselibas-datu-analize/.
Lithuania	Lithuania Mental Health Centre: http://www.vpsc.lt/.

COUNTRY	WEBSITE
Netherlands	Suicide Prevention: www.113online.nl. Reducing Suicidality: https://www.mindbank.info/item/4288.
Romania	Romanian Alliance for Suicide Prevention: http://www.euregenas.eu/romanian-alliance-for-suicide-prevention/.
Slovenia	Slovene Centre for Suicide Research: http://www.iam.upr.si/en/units/suicide-research/. Development and Implementation of Suicide Prevention Activities – Report from Slovenia: http://cdn.intechopen.com/pdfs-wm/36303.pdf.
Turkey	No information available
United Kingdom	Preventing suicide in England: A cross-government outcomes strategy to save lives: https://www.mindbank.info/item/4911. Suicide Prevention Strategy for England: https://www.gov.uk/government/publications/suicide-prevention-strategy-for-england.
United States	2012 National Strategy for Suicide Prevention: http://www.surgeongeneral.gov/library/reports/national-strategy-suicide-prevention/full-report.pdf. United States (National): Suicide Prevention: https://www.mindbank.info/collection/country/us-national/suicide_prevention_.

ADDITIONAL RESOURCES	World Health Organization Preventing Suicide: A Resource Series: http://www.who.int/mental_health/resources/preventingsuicide/en/.

7.5 RECOMMENDATIONS

We acknowledge the continuing efforts on military suicide prevention across a number of countries. These efforts must be sustained to maintain progress and to reduce the problem of military suicide. We encourage each country to consider placing suicide prevention as a top priority for the military organization, given its devastating impact on the individual, the leadership, families, and of course, the military as well as the NATO communities. The WHO (2014) report states the following hopeful message: "With timely and effective evidence-based interventions, treatment and support, both suicides and suicide attempts can be prevented" (p. 2) [5]. We provide the following 20 recommendations:

1) **Comprehensive Surveillance of Military Suicide Deaths and Attempts**

   Create and/or continuously enhance a comprehensive surveillance system for tracking of suicide deaths and attempts among military personnel. If possible, consider extending the surveillance to veterans.

2) **Standard Suicide Death Investigations and Classifications**

   Develop and implement standard operating procedures for investigations and classifications of military suicide. A common definition should be used to classify deaths as suicides.

3) **Mental Health Policies**

   Review the WHO Comprehensive Mental Health Action Plan 2013 – 2020 (http://www.who.int/mental_health/action_plan_2013/en/) and be aware of mental health policies for your country and its military [6]. In cases where mental health policies for the military do not exist, it may be helpful to formulate these to meet the needs of each country's military.

4) **Reduction of Harmful Use of Alcohol**

   Review the WHO Global Strategy to Reduce Harmful Use of Alcohol (http://www.who.int/substance_abuse/activities/gsrhua/en/) and be aware of the prevalence of alcohol use and dependence for your country and its military [7]. Awareness campaigns to educate service members on the harmful use of alcohol may minimize suicide risk. Implementation and access to effective treatment options for alcohol-related conditions are additionally important.

5) **Multicomponent Intervention**

   Pay close attention to multicomponent interventions that combine different strategies to target suicide risk [8]. Nation-specific military and/or NATO community approaches to suicide prevention may be developed that encompass multiple levels of universal, selective, and indicated interventions.

6) **Program Evaluations**

   Incorporate a program evaluation component into each suicide prevention endeavour that is offered within the military system. Program evaluations that examine the efficacy or effectiveness of suicide-related interventions will provide valuable information to leaders and policy makers.

7) **Mental Fitness**

   Promote a strong emphasis on mental fitness such that it is viewed as an integral component of military service. Mental fitness, similar to physical fitness, requires a disciplined approach, continued practice of learned skills, and a commitment to building strength. Mental fitness, in certain countries, is evaluated at the time of entry into military service. However, regardless of the existence of screening processes, service members' mental fitness can be strengthened during the course of his or her military career.

8) **Awareness Campaigns about Mental Health and Stigma Reduction**

Raise awareness about mental health issues commonly experienced by military service members (e.g., adjustment related conditions, posttraumatic stress disorder, depression), substance use disorders and suicide. These awareness campaigns and targeted messages can be disseminated in various formats (e.g., via television, social media, print media) and to various individuals (e.g., spouses or romantic partners) and/or organizations involved in the service member's life. The overall objective can be to decrease shame, isolation, embarrassment, secrecy and overall stigmatization associated with a service member's condition while at the same time increasing prompt help-seeking behaviours.

9) **Access to Care**

Improve access to timely and effective treatments for mental health and substance use disorders among military personnel. Reducing barriers to care, discussing concerns about military career-related impact of help-seeking, and addressing perceived stigma can encourage distressed service members to connect with health care services sooner rather than later.

10) **Gatekeeper Training Programs**

Implement gate-keeper training programs for military and NATO frontline supervisors and those community members who may be ideally situated to recognize distressed service members and possible warning signs of suicide. For example, non-commissioned officers, military police, members of the chaplaincy, primary care providers, first responders, medics, military lawyers, and/or basic training instructors can serve as trained gate-keepers. Legal problems are an important risk factor for suicidal behaviours. Military legal representatives must be well-trained in recognizing distress and connecting service members with appropriate mental health services.

11) **Crisis Helplines for Military Personnel**

Provide a telephone and/or chat crisis helpline for suicidal service members. This may be a useful and cost-effective strategy for helping all military personnel – particularly those who either do not directly seek mental health services or do not have other social support and/or professional care networks. Trained civilian personnel, with no histories of military service, who work at these crisis helplines may benefit from training on military culture and military-focused community resources.

12) **Delivery of Evidence-Based and/or Evidence-Informed Suicide Prevention Practices**

Encourage vulnerable groups of service members – for example, those with histories of attempted suicide, family history of suicide, exposure to traumatic life events that may or may not include combat trauma, brain injury, legal difficulties, loss, and/or significant and stressful transitions – to seek health care services promptly. Invest in systems of military healthcare that deliver best-practices in suicide assessment, management, and prevention as well as programmatic research efforts in military suicide prevention to develop effective treatments and disseminate them widely.

13) **Continuity of Care and Engagement in Aftercare**

Consider follow-up and community aftercare support services for service members who are psychiatrically hospitalized due to mental health issues, substance use disorders, and/or suicidal reasons. Psychiatric hospitalizations and attempted suicide are robust risk factors for eventual death by suicide. Provide treatment to service members who have attempted suicide and/or psychiatrically hospitalized following a suicide-related event. Follow-up services can include case management, postcards or caring letters/text messages [9], telephone sessions, and/or brief in-person visits.

14) **Reducing the Mental Health Treatment Gap**

Review the WHO mhGAP Intervention Guide (http://www.who.int/mental_health/mhgap/en/) and promote continuing education, consultation, and/or supervision for providers who treat mental health and/or substance use disorders among military personnel [10].

15) **Targeted Suicide Prevention Training for Primary and Specialty Care Providers**

Provide targeted suicide-specific continuing education, consultation, and/or supervision to primary care and specialty mental health providers who serve the needs of military personnel and/or veterans. The training must emphasize evidence-based assessment, management, and treatment approaches for suicide prevention.

16) **Limiting Access to Lethal Means**

Consider options for limiting access to lethal means for suicidal service members and develop standard operating procedures for removing such access (during periods of elevated risk), without promoting stigmatization of the member. Restriction of access to means, particularly for impulsive service members, may prevent suicide [11]. However, countries may not have military specific policies and standardized procedures for removing a service member's weapon and/or firing pin. It is also imperative to pay close attention to the decision-making processes, not only for the removal of access but also for the subsequent permission for re-access.

17) **Postvention: Management of Suicide-Related Events**

Review policies and procedures related to the management of suicide-related events during the time of deployment and while in-garrison. For instance, in terms of deployed settings, consider standardizing decision-making processes for medically evacuating a suicidal service member, implementing procedures and training for the use of practices such as unit or buddy- watch to manage suicide risk, and/or devising guidance for how to best carry out a memorial service for a service member who dies by suicide during deployment.

18) **Responsible Media Reporting on Military Suicide**

Review recommendations for reporting on suicide (http://reportingonsuicide.org) [12]. Education about using responsible language and responsible media reporting practices is essential. Military leaders can play an active role in disseminating this information to members of their country's media whenever approached for interviews and/or commentary about a service member's suicide.

19) **Research on Military Suicide Prevention**

Support and incorporate ongoing research programs on military suicide prevention. Disseminate and share the knowledge gained nationally and internationally.

20) **Military Culture of Caring for the Fallen Service Member**

Advocate for a military culture that values caring for fallen service members who are experiencing mental health, substance use disorders, and/or suicidal thoughts / behaviours. Every life matters and suicide prevention is the responsibility of every service member and every command.

7.6 SUMMARY

Suicide prevention requires the proactive involvement of all military members as well as leadership. To inform military suicide prevention efforts, in this chapter (see Table 7-1 to Table 7-17), we have presented a summary

of best practices for military/veteran suicide prevention, as reported by individual representatives from 17 countries who completed a survey designed by the NATO Research Task Group HFM-218. To preserve the integrity of information, we have presented the language used by each country to describe the military/veteran suicide prevention efforts, without editorial changes. It is also important to note that each country was asked:

1) To list types of military/veteran suicide prevention efforts;
2) To list the military's "best practices" for the prevention of suicide; and
3) To provide a 1-paragraph written summary of military/veteran suicide prevention efforts including strengths and challenges.

Information provided in these sections of the survey was then organized within the WHO national strategies framework.

Each surveyed country was asked to indicate ways in which our NATO international collaboration could be responsive to the country's military suicide prevention efforts. The general themes conveyed by all countries were as follows:

1) We need to learn about "best practices" from our international NATO partners;
2) We need to collectively share expertise and knowledge gained about suicide prevention, intervention, and postvention; and
3) We need to promote awareness, in particular, among military and NATO leadership about the necessity of military suicide surveillance, education and dissemination of evidence-based practices, military-specific suicide risk and protective factors, and programmatic research.

7.7 REFERENCES

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Annex A – RTG HFM-218 SURVEY TABLES

Table A-1: Civilian Population Demographics by Gender as Reported by Each Nation.

Nation	Year	Population Size	Average Age	Male			Female		
				Count	Percent	Average Age	Count	Percent	Average Age
Australia	2013	23,255,218	–	–	–	–	–	–	–
Austria	2012	8,426,311	–	–	–	–	–	–	–
Belgium	2009	10,839,905	40.0	5,312,221	49.0	39.0	5,527,684	51.0	41.0
Canada	2011	34,482,779	39.8	17,104,098	49.6	38.9	17,378,681	50.4	40.7
Denmark	2013	5,602,628	40.7	2,778,852	49.6	39.7	2,823,776	50.4	41.6
Estonia	2012	1,339,662	40.3	617,862	46.1	37.2	721,800	53.9	42.9
Finland	2011	5,401,267	41.6	2,652,534	49.1	40.2	2,748,733	50.9	43.0
France	2012	65,241,000	40.5	31,588,000	48.4	39.0	33,653,000	51.6	41.9
Germany	2010	81,751,600	44.3	40,112,400	49.1	42.3	41,639,200	50.9	45.0
Latvia	2012	2,041,763	40.9	933,114	45.7	37.9	1,108,649	54.3	43.9
Lithuania	2012	3,007,700	40.9	1,385,600	46.1	38.0	1,622,100	53.9	43.5
Netherlands	2011	16,655,799	40.3	8,243,482	49.5	39.4	8,412,317	50.5	41.3
Romania	2011	21,400,000	39.8	10,400,000	48.7	38.3	11,000,000	51.3	41.2
Slovenia	2011	2,055,496	41.6	1,004,592	49.0	39.7	1,045,596	51.0	43.0
Turkey	2013	76,667,864	–	–	–	–	–	–	–
United Kingdom	2011	63,182,000	40.0	31,028,000	49.2	39.0	32,154,000	51.0	41.0
United States[1]	2010	308,745,538	37.2	151,781,326	49.2	35.8	156,964,212	50.8	38.5

– Dashes signify unavailable data.

[1] Average age is reported as median age.

Table A-2: Military Population Demographics by Gender as Reported by Each Nation.

Nation	Year	Population Size	Average Age	Male			Female		
				Count	Percent	Average Age	Count	Percent	Average Age
Australia	2010	50,049	–	–	–	–	–	–	–
Austria	2012	30,000	–	–	–	–	–	–	–
Belgium[2]	2012	35,934	42.5	33,015	91.9	42.5	2,919	8.1	41.7
Canada[2]	2012	67,449	35.0	58,116	86.2	35.0	9,332	13.8	35.0
Denmark	2013	15,800	–	14,770	93.5	–	1,030	6.5	–
Estonia	2012	5,800	–	5,104	88.0	33.0	696	12.0	40.0
Finland[2]	2011	8,844	41.4	8,526	96.4	–	318	3.6	–
France[2,3]	2012	325,583	32.7	275,297	85.0	32.9	50,286	15.0	31.9
Germany	2011	205,149	–	187,191	91.0	–	17,958	9.0	–
Latvia[2]	2012	5,008	–	3,956	79.0	–	1,052	21.0	–
Lithuania[2]	2012	7,382	33.0	6,696	90.7	32.0	686	9.3	36.0
Netherlands	2011	53,130	33.0	48,630	91.0	–	4,500	9.0	–
Romania[2]	2011	80,000	36.0	73,600	92.0	–	6,400	8.0	–
Slovenia[2]	2011	7,500	35.0	6,300	85.0	–	1,200	15.0	–
Turkey	2013	593,708	–	–	–	–	–	–	–
United Kingdom[2]	2014	159,620	27.0	143,780	90.0	27.0	15,840	10.0	32.0
United States[1]	2012	2,270,127	29.9	1,907,693	84.0	30.0	362,434	16.0	29.4

– Dashes signify unavailable data.

[1] Average age is reported as median age.

[2] Belgium, Canada, Finland, France, Latvia, Lithuania, Romania, Slovenia, United Kingdom: Data provided for active duty personnel only.

[3] For France, data reflect the total armed forces. Without the Gendarmerie and Reserves, there are 222,215 military personnel in total.

Table A-3: Top 5 Leading Causes of Death for Civilians as Reported by Each Nation.

Nation	Year	1	2	3	4	5	Suicide Ranking
Australia	2011	Ischaemic Heart Diseases	Cerebrovascular Diseases	Dementia and Alzheimer's Disease	–	–	15
Austria	2013	Cardiovascular Diseases	Malignant Neoplasms	–	–	–	13
Belgium	2009	Cardiovascular Disease	Cancer	Respiratory System Diseases	Digestive System Diseases	Mental Disorders	10
Canada	2012	Malignant Neoplasms	Diseases of the Heart	Cerebrovascular Disease	Accidents – Unintentional Injuries	Chronic Lower Respiratory Disease	7
Denmark	2010	Cancer	Diseases of the Heart	Diseases of the Respiratory System	Diseases of the Circulatory System	Mental Disorders	10
Estonia	2011	Disease of the Circulatory System	Malignant Neoplasms	Injury and Poisoning	Diseases of the Digestive System	Diseases of the Respiratory System	9
Finland	2010	Disease of the Circulatory System	Neoplasms	Dementia and Alzheimer's Disease	Accidents	Diseases of the Respiratory System	7
France	2008	Tumours	Cardiovascular Diseases	Accidents	Alzheimer's Disease	Undetermined Causes	8
Germany	2010	Disease of the Circulatory System	Cancer	Diseases of the Respiratory System	Diseases of the Digestive System	Injury, Poisoning and External Causes of Death	12
Latvia	2010	Ischaemic Heart Diseases	Cerebrovascular Disease	Malignant Neoplasms of the Trachea, Bronchus and Lung	Malignant Neoplasms (Female Breast)	Suicide and Self Inflicted Injury	5
Lithuania	2011	Disease of the Circulatory System	Malignant Neoplasms	External Causes of Death	Diseases of the Digestive System	Diseases of the Respiratory System	6
Netherlands	2011	Cancer	Diseases of the Circulatory System	Diseases of the Respiratory System	External Causes of Morbidity and Mortality	–	4
Romania	2010	Cardiovascular Disease	Tobacco-Related Lung Diseases	Ischemic Heart Diseases	Cancer	Alcohol-Related Diseases	11
Slovenia	2001	Circulatory Diseases	Neoplasms	Accidents and Poisoning	Respiratory Diseases	Gastrointestinal Diseases	–
Turkey	2013	Cardiovascular Disease	Benign and Malignant Tumors	Respiratory System Disorders	–	–	12

Nation	Year	1	2	3	4	5	Suicide Ranking
United Kingdom	2011	Ischaemic Heart Diseases	Malignant Neoplasms of the Trachea, Bronchus and Lung	Cerebrovascular Diseases	Chronic Lower Respiratory Diseases	Dementia and Alzheimer's Disease	22
United States[1]	2013	Heart Disease	Malignant Neoplasms	Chronic Lower Respiratory Disease	Accidents (Unintentional Injury)	Stroke (Cerebrovascular Diseases)	10

– Dashes signify unavailable data.

[1] Data for the United States was updated for 2013 using the Centers for Disease Control and Prevention's Web-based Injury Statistics Query and Reporting System.

Table A-4: Top 5 Leading Causes of Death for Military as Reported by Each Nation.

Nation	Year	1	2	3	4	5	Suicide Ranking
Australia	2010	Land Transport Crashes	Cancer	Suicide	–	–	3
Austria	2013	Traffic Accidents	Accidents (e.g., Training, Weapons)	Suicide	–	–	3
Belgium	–	–	–	–	–	–	–
Canada	2006	Hostile/Combat Related	Unintentional Injury	Cancer	Circulatory Disorders	Suicide	5
Denmark	–	–	–	–	–	–	–
Estonia	–	–	–	–	–	–	–
Finland[1]	1997 – 2007	Road Accidents	Suicide	Other Violent Causes of Death	–	–	2
France	2002 – 2011	Diseases (Tumors)	Traffic Accidents	Suicide	Other Accidents	Combat Related	3
Germany	–	–	–	–	–	–	–
Latvia	–	–	–	–	–	–	–
Lithuania	2012	Traffic Accidents and Trauma	Suicide	Cardiovascular Diseases	External Factors (Drowning)	Other Diseases (e.g., Digestive, Neoplasms)	2
Netherlands	–	–	–	–	–	–	–
Romania	–	–	–	–	–	–	–
Slovenia	–	–	–	–	–	–	–
Turkey	2013	Suicide	Accidents (Weapons)	Accidents (Vehicular)	–	–	-1
United Kingdom	2013	Cancer	Accidents (Other Than Land Transport)	Land Transport Accidents	Hostile Action	Other Diseases (e.g., Digestive, Neoplasms)	7
United States	2012	Accident	Combat	Suicide	Non-Combat Homicide	Undetermined Causes	3

– Dashes signify unavailable data.

[1] Data for Finland pertains to conscripts only.

Table A-5: Civilian and Military Manner of Death Determinations as Reported by Each Nation.

Nation	Who Determines Manner of Death		Organisation Handling Mortality Data	
	Civilian	Military	Civilian	Military
Australia	Coroner	Coroner	Australian Institute of Health and Welfare National Mortality Database; National Death Index	Personnel Agencies of the Single Services, Information Recorded in the Personnel Management Key Solutions Database
Austria	Physician	Military Physician	Statistics Austria / Statistik Austria	Personnel Data: Directorate General I, Personnel and Recruitment Directorate, Personnel Division B Critical Incident Case Data: Defence Staff, Directorate General IV (Operations), Operations Command and Control Division
Belgium	Physician	Military Physician	Statistics Belgium Local Community Governments	Human Resources Department
Canada	Coroner, Medical Examiner, or Physician	Coroner or Physician	Statistics Canada	Canadian Forces Surgeon General
Denmark	Physician	Military Physician	Cause of Death Registry	Danish Defence Personnel Organisation
Estonia	Physician or Forensic Physician	Medical (Civil) Expert	National Institute for Health Development, Causes of Death Registry	National Institute for Health Development, No Official Military Database
Finland	Physician	Physician	Statistics Finland	Defence Command and Centre for Military Medicine
France	Physician	Medical Officer or Civilian Physician	National Institute for Health and Medical Research; Epidemiological Center on Medical Causes of Death	Military Epidemiology and Public Health Center; Veterans' Health Observatory; Veterans and War Victims Administration; Military Social Security Office
Germany	Physician	Civilian Justice System (i.e., Police and Medical Examiner) During Deployment: Military Police, Military Legal Advisor, Medical Officer	Public Health Office and the Federal Statistics Office (Statistisches Bundesamt)	Institut für Wehrmedizinalstatistik und Berichtswesen der Bundeswehr

Nation	Who Determines Manner of Death		Organisation Handling Mortality Data	
	Civilian	Military	Civilian	Military
Latvia	Physician, Physician Assistant, or Forensic Expert Physicians	Military Physicians, Medics	Central Statistics Bureau and Centre for Disease Prevention and Control	Ministry of Defence, Personnel Department
Lithuania	Physician or Police	Civilian Specialists	Ministry of Health; Institute of Hygiene	Joint Staff J1 Branch
Netherlands	Local Authority	Medical Expert	Central Bureau for Statistics	Military Health Department
Romania	Forensic Medicine Institute	Military Prosecuting Attorney	National Institute of Statistics	Medical Directorate, Ministry of National Defence
Slovenia	Coroner, Doctor	Coroner, Doctor	Municipal Administrative Unit, Ministry of Interior	Operational Center, Ministry of Defence
Turkey	Physician	Physician	Turkey Statistical Institute	Turkish General Staff Chief of Personnel (J–1)
United Kingdom	Coroner	Coroner	Office for National Statistics	Defence Analytical Services Agency
United States	Licensed Physician, Coroner, or Medical Examiner	Armed Forces Medical Examiner System	Each State, City, and Territory Tracks Information; Information Collated Through Centers for Disease Control and Prevention, Department of Health and Human Services, and National Center for Health Statistics; Disseminated by National Vital Statistics System	National Center for Telehealth and Technology

Table A-6: Civilian and Military Definition of Suicide and Suicide Attempt as Reported by Each Nation.

Nation	Suicide		Suicide Attempt	
	Civilian	Military	Civilian	Military
Australia	(1) Deliberate Taking of One's Life; (2)Death Due to Other Than Natural Causes; (3) The Act of Deliberately Killing Oneself	Self-Inflicted Death With Evidence (Explicit / Implicit) That the Person Intended to Die	Self-Inflicted Harm Where Death Does Not Occur, But the Intention of the Person Was to Cause a Fatal Outcome	Non-Fatal Suicidal Behaviour With the Desire to End One's Life That Does Not Result in Death
Austria	Act of Taking One's Own Life	Act of Taking One's Own Life	Act with the Intention of Taking One's Own Life with Non-Lethal Outcome	Act with the Intention of Taking One's Own Life with Non-Lethal Outcome
Belgium	A Voluntary and Conscious Act that Results in One's Own Death and Aims at Achieving the Person's Desired Change Through Death	Not Defined	A Voluntary and Conscious Self- Destructive Act that does not Result in Death but has the Aim to Achieve a Desired Change	Not Defined
Canada	Intentional Self-Inflicted Death (ICD-10: X60-X84, Y87.0)	ICD-10: X60-X84, Y87.0 Open Verdict Cases (ICD-9: E980- E989; ICD-10: Y30-Y43) Excluded	Presence of ICD-9 Codes E950-E959 in the First Accident Code for a Patient Discharged Alive	Not Defined
Denmark	ICD-10	ICD-10	ICD-10	ICD-10
Estonia	ICD-10	Not Defined	ICD-10	Not Defined
Finland	ICD-10 and WHO	ICD-10 and WHO	ICD-10 and WHO	ICD-10 and WHO
France	ICD-10	All Self-Aggressive Behaviours Bringing About Death	ICD-10	Non-Fatal Act, the Intent to Commit Suicide Without Taking the Real Medical Risks into Consideration
Germany	WHO	WHO	WHO	WHO Definition with Further Differentiation Between: Failed Suicide (Suicide Attempt); Demonstration of Suicidal Intent (No Intent to Die, Not a Suicide Attempt); and Simulation of a Suicidal act (Punishable by Military Law, not a Suicide Attempt)
Latvia	WHO	WHO	A Non-Fatal Self-Directed Potentially Injurious Behaviour with any Intent to Die as a Result of the Behaviour. A Suicide Attempt May or May Not Result in Injury	A Non-Fatal Self-Directed Potentially Injurious Behaviour with any Intent to Die as a Result of the Behaviour. A Suicide Attempt may or may not Result in Injury

Nation	Suicide		Suicide Attempt	
	Civilian	Military	Civilian	Military
Lithuania	Carried Out, Voluntary, Willed, Intentional Termination of One's Life	Carried Out, Voluntary, Willed, Intentional Termination of One's Life	Act of Self-Destruction	Act of Self-Destruction
Netherlands	Action with a Lethal End, Initiated by the Deceased, in Expectation of a Lethal or Potential Lethal Ending, with the Intention to Make Desirable Changes	Action with a Lethal End, Initiated by the Deceased, in Expectation of a Lethal or Potential Lethal Ending, with the Intention to Make Desirable Changes	A Non-Habitual Action without Lethal Ending by which the Individual, by Expecting Injury of His or Her Own Body, or to Accomplish Death, or Not to Avoid the Risk of Death, Tries to Make Desirable Changes	A Non-Habitual Action without Lethal Ending by which the Individual, by Expecting Injury of His or Her Own Body, or to Accomplish Death, or Not to Avoid the Risk of Death, Tries to Make Desirable Changes
Romania	Sudden and Deliberate Suppression of One's Own Life	Sudden and Deliberate Suppression of One's Own Life	Unsuccessful Attempt to Sudden Suppression of One's Own Life	Unsuccessful Attempt to Sudden Suppression of One's Own Life
Slovenia	The Act of Intentionally Killing Oneself	The Act of Intentionally Killing Oneself	A Serious Effort to Commit Suicide Involving Definite Risk	A Serious Effort to Commit Suicide Involving Definite Risk
Turkey	The Act of Intentionally Causing One's Own Death	The Act of Intentionally Causing One's Own Death	A Serious Effort to Commit Suicide Involving Definite Risk	A Serious Effort to Commit Suicide Involving Definite Risk
United Kingdom	ICD-10	ICD-10	ICD-10	ICD-10
United States	Death Caused by Self-Directed Injurious Behaviour with any Intent to Die as a Result of the Behaviour	Suicide Results from an Injury or Poisoning as a Result of an Intentional, Self-Inflicted Act Committed to Do Self Harm or Cause the Death of One's Self	A Non-Fatal Self-Directed Potentially Injurious Behaviour with any Intent to Die as a Result of the Behaviour – A Suicide Attempt May or May Not Result in Injury	Cases of Self-Harm that Do Not Result in Death but in which the Individual Does Intend to Die

Table A-7: Civilian Suicide Data by Gender as Reported by Each Nation.

Nation	Overall			Male		Female	
	Year	Count	Rate	Count	Rate	Count	Rate
Australia	2010	–	10.2	–	16.4	–	4.8
Austria	2013	–	15.1	–	24.0	–	6.7
Belgium	2008	1,986	17.6	1,450	26.5	536	9.3
Canada	2009	3,890	11.5	2,989	17.9	901	5.3
Denmark	2010	562	11.3	406	16.6	152	6.2
Estonia	2011	218	14.2	178	26.6	40	4.5
Finland	2010	951	17.7	716	27.2	235	8.6
France	2009	10,464	16.5	7,739	25.3	2,725	8.3
Germany	2006	9,765	11.6	7,225	17.9	2,540	6.0
Latvia	2009	516	22.9	416	40.0	100	8.2
Lithuania	2009	1,138	34.1	952	61.3	186	10.4
Netherlands	2011	1,647	9.9	1,136	13.7	511	6.1
Romania	2009	2,286	12.0	2,197	21.0	389	3.5
Slovenia	2009	447	21.9	350	34.6	97	9.4
Turkey	2013	–	4.2	–	6.1	–	2.3
United Kingdom	2012	5,981	11.6	4,590	18.2	1,391	5.2
United States[1]	2013	41,149	13.0	32,055	20.6	9,094	5.7

Rates presented as per 100,000.

– Dashes signify unavailable data.

[1] Data for the United States was updated for 2013 using the Centers for Disease Control and Prevention's Web-based Injury Statistics Query and Reporting System.

Table A-8: Civilian Suicide Data by Age as Reported by Each Nation.

Nation		15 – 24 years		25 – 34 years		35 – 44 years		45 – 54 years		55 – 64 years		65+ years	
	Year	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate
Australia	–	–	–	–	–	–	–	–	–	–	–	–	–
Austria	–	–	–	–	–	–	–	–	–	–	–	–	–
Belgium	2005	124	9.8	243	17.7	421	26.5	457	30.8	307	26.3	475	26.4
Canada	2009	479	10.5	556	12.1	763	16.0	967	18.0	612	14.9	488	10.4
Denmark	2010	27	4.0	49	7.4	74	9.2	132	17.3	117	16.2	163	18.1
Estonia	2011	21	11.7	23	11.7	42	23.3	31	16.8	35	21.3	64	28.3
Finland	2009	117	17.8	160	23.6	162	24.0	231	30.5	190	24.4	171	19.0
France	2009	522	6.6	1,036	13.4	1,905	21.4	2,246	26.2	1,790	23.1	2,948	27.7
Germany	2006	566	5.9	783	8.0	1,598	11.6	1,880	15.5	1,475	15.6	3,434	22.0
Latvia	2009	41	13.3	75	22.9	85	27.2	115	35.1	95	37.4	105	27.8
Lithuania	2009	125	24.2	131	28.6	221	45.8	272	55.2	175	49.7	209	39.4
Netherlands	2011	115	–	214	–	322	–	393	–	299	–	267	–
Romania	2009	202	6.6	307	9.0	496	15.1	575	20.6	452	18.2	530	16.5
Slovenia	2009	21	8.7	45	14.6	65	21.4	102	32.7	93	36.4	121	36.2
Turkey	–	–	–	–	–	–	–	–	–	–	–	–	–
United Kingdom[1]	2009	416	5.1	697	8.7	1,025	11.4	903	10.8	605	8.3	592	5.9
United States[2]	2013	4,878	11.1	6,348	14.8	6,551	16.2	8,621	19.0	7,135	18.2	7,215	16.1

Rates presented as per 100,000.

– Dashes signify unavailable data.

[1] Age ranges provided by the United Kingdom differ from those presented in the tables. The United Kingdom provided the following information: 15 – 29 years, count = 862, rate = 13.6 per 100,000; 30 – 44 years, count = 1,464, rate = 23 per 100,000; 45 – 59 years, count = 1,432, rate = 23 per 100,000; 60 – 74, count = 562, rate = 12.3 per 100,000; 75 and over, count = 270, rate = 13.2 per 100,000.

[2] Data for the United States was updated for 2013 using the Centers for Disease Control and Prevention's Web-based Injury Statistics Query and Reporting System.

Table A-9: Military Suicide Data by Gender as Reported by Each Nation

Nation	Overall			Male Service Members		Female Service Members		Formal Military Suicide Surveillance
	Year	Count	Rate	Count	Rate	Count	Rate	
Australia	2013	92	–	85	–	7	–	Yes
Austria	2012	–	27.0	–	27.0	–	0.0	Yes
Belgium	2012	13	36.0	12	33.0	1	34.0	No
Canada	2010	12	17.6	12	20.4	0	0.0	Yes
Denmark	1990 – 2009	41	10.0	41	10.0	0	0.0	Yes
Estonia	–	–	–	–	–	–	–	No
Finland[1]	2011	3	17.2	3	17.2	0	0.0	Yes
France[2]	2009	69	20.3	62	21.4	7	13.9	Yes
Germany	2011	18	8.5	18	9.3	0	0.0	Yes
Latvia	2003 – 2011	9	20.0	9	20.0	0	0.0	No
Lithuania	2012	3	23.0	3	25.8	0	0.0	Yes
Netherlands	–	–	–	–	–	–	–	No
Romania	–	–	–	–	–	–	–	No
Slovenia	–	–	–	–	–	–	–	No
Turkey	2013	64	10.8	64	10.8	–	–	Yes
United Kingdom	1994 – 2013	408	13.5	391	14.3	17	10.7	Yes
United States[3]	2013	259	18.7	244	20.7	15	–	Yes

Rates presented as per 100,000.

– Dashes signify unavailable data.

[1] Data for Finland pertains to conscripts only.

[2] France has additionally provided military suicide data by gender averaged across ten years (2002 – 2012): overall suicide count = 768, rate = 20.6 per 100,000; male suicide count = 724, rate = 22.6 per 100,000; female suicide count = 44, rate = 8.4 per 100,000.

[3] Data for the United States was updated for 2013 using the Centers for Disease Control and Prevention's Web-based Injury Statistics Query and Reporting System.

Table A-10: Military Suicide Data by Age as Reported by Each Nation.

Nation		15 – 24 years		25 – 34 years		35 – 44 years		45 – 54 years		55 – 64 years		65+ years	
	Year	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate
Australia	–	–	–	–	–	–	–	–	–	–	–	–	–
Austria	–	–	–	–	–	–	–	–	–	–	–	–	–
Belgium	2012	0	0.0	1	17.0	3	38.0	5	35.0	0	0.0	0	0.0
Canada	2010	3	23.6	5	21.2	3	15.5	1	8.4	0	0.0	–	–
Denmark	1990 – 2009	6	–	14	–	21	–	0	0.0	0	0.0	0	0.0
Estonia	–	–	–	–	–	–	–	–	–	–	–	–	–
Finland[1]	2011	–	17.2	–	–	–	–	–	–	–	–	–	–
France[2]	2002 – 2012	–	–	247	17.2	243	25.7	–	–	–	–	–	–
Germany	2011	10	–	3	–	2	–	3	–	0	0.0	0	0.0
Latvia	–	–	–	–	–	–	–	–	–	–	–	–	–
Lithuania	2003 – 2012	12	–	11	–	6	–	2	–	–	–	–	–
Netherlands	–	–	–	–	–	–	–	–	–	–	–	–	–
Romania	–	–	–	–	–	–	–	–	–	–	–	–	–
Slovenia	–	–	–	–	–	–	–	–	–	–	–	–	–
Turkey	–	–	–	–	–	–	–	–	–	–	–	–	–
United Kingdom	1994 – 2013	155	4.4	145	4.1	82	2.3	9	0.2	0	0.0	0	0.0
United States[3]	2013	109	–	106	–	36	–	–	–	–	–	–	–

Rates presented as per 100,000.

– Dashes signify unavailable data.

[1] Data for Finland pertains to conscripts only.

[2] Military suicide data for France is tracked by age groups that differ from those presented in this table: 18 – 19 years, rate = 18.5 per 100,000; 20 – 24 years, rate = 16.1 per 100,000; 25 – 29 years, rate = 17.5 per 100,000; 30 – 34 years, rate = 16.7 per 100,000; 35 – 39 years, rate = 23.2 per 100,000; 40 – 44 years, rate = 28.9 per 100,000; 45 – 49 years, rate = 25.0 per 100,000; > 50 years, rate = 27.0 per 100,000 (2002 – 2012).

[3] Military suicide data for the United States is tracked by age group that differ from those presented in this table: 17 – 19 years, count = 14; 20 – 24 years, count = 95, rate = 21.9; 25 – 29 years, count = 74, rate = 22.1; 30 – 34 years, count = 32, rate = 14.5; 35 – 39 years, count = 26, rate =16.8; 40 – 44 years, count = 10; 45 – 74 years, count = 8.

Table A-11: Civilian and Military Suicide Attempt Rates as Reported by Each Nation.

Nation	Civilian		Military	
	Year	Rate	Year	Rate
Australia	2007	0.40%	2010	0.40%
Austria	1996	346.0	2012	30.0
Belgium	–	–	–	–
Canada	1998–1999	87.0	–	–
Denmark	2011	122.2	–	–
Estonia	2010	95.9	–	–
Finland	1996–2003	44.0	–	–
France[1]	–	–	2002–2012	35.8
Germany	2010	123.0	2011	16.8
Latvia	2011	87.0	–	–
Lithuania	–	–	–	–
Netherlands	2012	94.0	–	–
Romania	–	–	–	–
Slovenia	–	–	–	–
Turkey	2013	130.1	2013	28.5
United Kingdom	–	–	–	–
United States[2]	2013	156.3	–	–

Rates presented as per 100,000.

Reporting practices differ across nations. As such, rates are alternately reported as percentages.

– Dashes signify unavailable data.

[1] Data for France is estimated; there are around 190,000 consultations in emergency departments per year.

[2] Military suicide attempt rates are not available for the United States. The United States tracks self-harm, confirmed or suspected. This category includes suicide, suicide attempt, and other intentional self-harm. In 2013, the count of military suicide attempts is available, count = 1,080.

Table A-12: Civilian Top 3 Suicide Methods as Reported by Each Nation.

Nation	Year	Leading Methods Reported
Australia	2011	Hanging (56.2); Poisoning by Drugs (12.2); Poisoning by Agents Other than Drugs (9.8)
Austria	2013	–
Belgium	–	Hanging (32.0); Poisoning (22.0); Jumping From a Height (19.0)
Canada	2000 – 2009	Hanging (44.0); Poisoning (25.0); Firearms (16.0)
Denmark	2010	Hanging (37.4); Poisoning (31.1); Other Means[1] (10.9)
Estonia	1997 – 2005	Hanging (77.9); Firearms (7.6); Other Means[2] (5.4)
Finland	2010	Hanging (30.2); Poisoning (24.9); Firearms (21.2)
France	2010	Hanging (52.5); Poisoning by Drugs (15.3); Firearms (13.3)
Germany	2006	Hanging, Strangulation, and Suffocation (47.9); Poisoning (17.0); Jumping from a Height (10.1)
Latvia	1996 – 2004	Hanging (82.6); Firearms (5.4); Other Means[2] (3.8)
Lithuania	1998 – 2004	Hanging (90.2); Firearms and Other Means[2] (2.3) – Tied; Poisoning by Agents Other than Pesticides (2.0)
Netherlands	2011	Hanging (45.0); Poisoning by Drugs (18.6); Jumping Before a Train (12.5)
Romania	2011	Hanging (79.0); Poisoning (7.0); Jumping from a Height (5.0)
Slovenia	1997 – 2004	Hanging (62.1); Other Means[2] (13.0); Firearms (9.4)
Turkey	2013	Hanging (50.9); Firearms (25.5); Jumping from a Height (9.4)
United Kingdom	2012	Hanging, Strangulation and Suffocation (–); Poisoning (–)
United States[3]	2013	Firearms (51.5); Suffocation (24.5); Poisoning (16.1)

Methods presented as % of all suicide deaths.

– Dashes signify unavailable data.

[1] "Other Means", in this instance, was provided by the nation representative.

[2] "Other Means", in these instances, may refer to: jumping or lying before a moving object, crashing of a motor vehicle, other specified means, or unspecified means.

[3] Data for the United States was updated for 2013 using the Centers for Disease Control and Prevention's Web-based Injury Statistics Query and Reporting System.

Table A-13: Civilian Top 3 Suicide Methods by Gender as Reported by Each Nation.

Nation	Male		Female	
	Year	Leading Methods Reported	Year	Leading Methods Reported
Australia	2011	Hanging (56.0); Poisoning by Agents Other Than Drugs (10.0); Poisoning by Drugs (9.0)	2011	Hanging (48.0); Poisoning by Drugs (26.0)
Austria	2013	Hanging (50.0); Firearms (20.0); Poisoning (13.0)	2013	Hanging (35.0); Poisoning (25.0); Jumping (15.0)
Belgium	2012	Hanging (37.0); Firearms (16.0)	2012	Poisoning (33.0); Jumping from a Height (27.0)
Canada	2000 – 2009	Hanging (46.0); Firearms (20.1); Poisoning (19.8)	2000 – 2009	Poisoning (42.3); Hanging (36.7); Other Means[1] (18.1)
Denmark	2010	Hanging (41.4); Poisoning (22.9); Firearms (18.2)	2010	Poisoning (52.6); Hanging (26.9); Other Means[1] (10.9)
Estonia	1997 – 2005	Hanging (79.7); Firearms (9.1); Other Means[2] (5.7)	1997 – 2005	Hanging (70.4); Jumping from a Height (10.7); Poisoning by Agents Other than Pesticides (9.1)
Finland	1996– 2004	Hanging (33.1); Firearms (26.7); Poisoning by Agents Other Than Pesticides (17.6)	1996 – 2004	Poisoning by Agents Other than Pesticides (49.5); Hanging (20.3); Drowning (10.6)
France	2010	Hanging (57.6); Firearms (17.3); Poisoning by Drugs (10.1)	2010	Hanging (38.2); Poisoning by Drugs (29.9); Jumping from a Height (9.7)
Germany	2006	Hanging, Strangulation, and Suffocation (52.6); Poisoning (12.5); Jumping from a Height (8.7)	2006	Hanging, Strangulation, and Suffocation (34.5); Poisoning (28.9); Jumping from a Height (14.3)
Latvia	1996 – 2004	Hanging (85.1); Firearms (6.5); Other Means[2] (3.6)	1996 – 2004	Hanging (72.6); Other Means[2] (7.8); Poisoning by Agents Other than Pesticides (6.2)
Lithuania	1998 – 2004	Hanging (91.7); Firearms (2.7); Other Means[2] (2.4)	1998 – 2004	Hanging (83.1); Poisoning by Agents Other than Pesticides (6.3); Jumping from a Height (4.4)
Netherlands	2011	Hanging (49.2); Jumping Before a Train (13.3); Poisoning by Drugs (13.0)	2011	Hanging (35.6); Poisoning by Drugs (30.3); Jumping Before a Train (10.6)
Romania	1999 – 2004	Hanging (87.3); Other Means[2] (3.8); Poisoning by Pesticides (3.1)	1999 – 2004	Hanging (74.1); Poisoning by Pesticides (9.1); Poisoning by Agents Other than Pesticides (7.9)
Slovenia	1997 – 2004	Hanging (64.7); Other Means[2] (13.1); Firearms (11.8)	1997 – 2004	Hanging (53.1); Other Means[2] (12.8); Drowning (12.2)
Turkey	–	–	–	–
United Kingdom	2012	Hanging, Strangulation and Suffocation (58.0); Poisoning (20.0)	2012	Poisoning (43.0); Hanging, Strangulation and Suffocation (36.0)
United States[3]	2013	Firearms (56.9); Suffocation (24.7); Poisoning (10.8)	2013	Poisoning (34.8); Firearms (32.3); Suffocation (23.7)

Methods presented as % of all suicide deaths.

– Dashes signify unavailable data.

[1] "Other Means", in this instance, was provided by the nation representative.

[2] "Other Means", in these instances, may refer to: jumping or lying before a moving object, crashing of a motor vehicle, other specified means, or unspecified means.

[3] Data for the United States was updated for 2013 using the Centers for Disease Control and Prevention's Web-based Injury Statistics Query and Reporting System.

Table A-14: Military Top 3 Suicide Methods as Reported by Each Nation.

Nation	Year	Leading Methods Reported
Australia	2009	–
Austria	2012	Firearms (46.0); Hanging (26.0); Jumping Before a Train (10.0)
Belgium	2012	Hanging (100.0)
Canada	2011 – 2012	Hanging (63.2); Firearms (23.7); Poisoning (13.2)
Denmark	1990 – 2009	Firearms (41.0); Hanging (22.0); Poisoning (24.0)
Estonia	–	–
Finland[1]	1991 – 2007	Firearms (60.4); Hanging (16.7); Jumping (8.3)
France	2002 – 2012	Firearms (44.7); Hanging (40.5); Poisoning by Drugs (5.7)
Germany	2011	Hanging (44.4); Jumping Before a Train (22.2)
Latvia	2003 – 2011	Hanging (77.8); Firearms (22.2)
Lithuania	2012	Hanging (60.0); Firearms (29.0); Poisoning (11.0)
Netherlands	–	–
Romania	–	–
Slovenia	–	–
Turkey	2013	Firearms (80.8); Poisoning (13.7); Jumping from a Height (2.7)
United Kingdom	2014	Hanging, Strangulation, and Suffocation (43.0); Firearms and Explosives (22.0); Poisoning by Gas (13.0)
United States	2011	Firearms – Non–Military Issue (53.9); Hanging (29.4); Firearms – Military Issue (6.5)

Methods presented as % of all suicide deaths.

– Dashes signify unavailable data.

[1] Data for Finland pertains to conscripts only.

Table A-15: Military Top 3 Suicide Methods by Gender as Reported by Each Nation.

Nation	Male		Female	
	Year	Leading Methods Reported	Year	Leading Methods Reported
Australia	–	–	–	–
Austria	–	–	–	–
Belgium	2012	Hanging (100.0)	–	–
Canada	2011 – 2012	Hanging (61.8); Firearms (26.5); Poisoning (11.8)	2011 – 2012	Hanging (75.0); Poisoning (25.0)
Denmark	1990 – 2009	Firearms (41.0); Hanging (22.0); Poisoning (24.0)	–	–
Estonia	–	–	–	–
Finland[1]	1991 – 2007	Firearms (60.4); Hanging (16.7); Jumping (8.3)	–	–
France	2002 – 2012	Firearms (45.4); Hanging (41.8); Poisoning (4.3)	2002 – 2012	Firearms (35.0); Poisoning (27.5); Hanging (20.0)
Germany	2011	Hanging (44.4); Jumping Before a Train (22.2)	–	–
Latvia	2003 – 2011	Hanging (78.0); Firearms (22.0)	–	–
Lithuania	2012	Hanging (18.0); Firearms (9.0); Poisoning (4.0)	2012	Hanging (2.0); Firearms (1.0)
Netherlands	–	–	–	–
Romania	–	–	–	–
United Kingdom	1984 – 2012	Hanging and Strangulation (41.0); Firearms and Explosives (21.0); Poisoning by Gas (15.0)	–	–
United States[2]	–	–	–	–

– Dashes signify unavailable data.

[1] Data for Finland pertains to conscripts only.

[2] Data for the United States pertains to active duty and activated National Guard/Reserve service members.

Table A-16: Military Definition of Deployment as Reported by Each Nation.

Nation	Definition of Deployment
Australia	The Relocation of Forces to Desired Areas of Operations
Austria	–
Belgium	Military Assets Operating Outside the National Border, Authorised by the Government
Canada	The Relocation of Forces to the Desired Areas of Operations
Denmark	Military Assets Operating Outside the National border, Authorised by the Government
Estonia	Military Operation of Collective Self–Defence; Military Operation to Maintain / Restore Peace and Security; Other Military Operations in Accordance with International Law and Principles
Finland	Participating in Peace and Security Building or Humanitarian Operations, and Operations Tasked to Protect Civilian Populations
France	Detachments Located Outside the European Territory of France
Germany	An Assignment Broad or Outside of German Territory on Ships or Aircraft, Based on a Resolution of the German Federal Government on Grounds of an Understanding, a Treaty or an Agreement With a Supranational or International Body or With Another Nation (e.g. UN Missions) is a Deployment in Accordance with German Law (§ 6a Wehrpflichtgesetz, or § 62 Abs. 1 Soldatengesetz)
Latvia	Participation of the National Military Personnel in Multinational Military Units
Lithuania	Military Actions Carrying Out Strategic, Tactic, Administration Tasks, and Conducting Training Tasks
Netherlands	Peacekeeping or Humanitarian Operation in which Military Forces are Deployed Abroad, Decided by the Government
	– Includes Military Personnel Being Sent on Peacekeeping Operations Outside the Netherlands in an International or Allied Context; Actual Military Deployment Outside the Netherlands for Assisting Tasks Identified as Humanitarian Operations; and Any Other Form of Actual Military Deployment Outside the Netherlands Identified by the Minister of Defence
Romania	Getting an Assignment in a Mission Abroad Under Authority of a Security International Body
Slovenia	Installation of Armed Forces for Purpose of International Military Operations (MOM) on Military Critical Sites
Turkey	The Movement of Military Forces to Outside of the Country
United Kingdom	Any Unit-Based (i.e. Not an Individual) Military Activity (Including Whole Units Exercises) Conducted Away from the Home Garrison; Therefore, Includes Home Support Operations and Major Exercises, as well as Operations Abroad
United States	Service Member: (1) Physically Located within OEF / OIF / OND / OUR Combat Zone or Areas of Operations, or (2) Specifically Identified by His / Her Service as Directly Supporting the OEF / OIF / OND / OUR Mission

– Dashes signify unavailable data.

Table A-17: Deployment Data as Reported by Each Nation.

Nation	Year	# Deployed Troops Per Year: All Missions		Average # Deployments Per Service Member	Length of Deployment (Months)			Average Dwell Time Between Deployments
		Count	% of Total Military		Average	Minimum	Maximum	
Australia	2011	–	–	–	6	3	12	6 months
Austria	2013	–	–	–	6	1	47	12 months
Belgium	2011	4,627	–	0.1	4	1	12	1 month to 36 months
Canada	2012	1,289	2.0	–	6	3	12	18 months
Denmark	2013	906	3.7	–	6	1	12	36 months
Estonia	2013	216	9.0	–	6	1	12	12 months
Finland	2011	302	3.4	–	–	–	–	–
France[1]	2010	30,000	12.5	–	5	2	12	–
Germany[2]	2012	23,683	11.5	–	4	2	12	20 months
Latvia	2011	349	7.0	–	6	1	12	12 months
Lithuania	2012	550	4.7	1.5	6	4	12	36 months
Netherlands	2013	2,358	5.3	1.5	6	4.5	12	18 months
Romania	2012	2,000	3.3	–	6	2	12	12 months
Slovenia	2011	400	5.0	–	6	–	–	–
Turkey	2013	–	–	–	–	6	12	–
United Kingdom	2012	25,600	16.0	–	6	1	12	18 months
United States	2012	485,410	21.4	1.7	7	0	9	–

– Dashes signify unavailable data.

[1] Average dwell time between deployments varies based on branch of service. In 2010 in the French army, average dwell time between deployments was 7 – 8 months and 1-year for 2 missions in Afghanistan.

[2] Average number of deployments per service member for Germany was unavailable. Germany provided: 13% of service members have 4 or more deployments, 11% of service members have 3 deployments, 27% of service members have 2 deployments, and 49% of service members have 1 deployment.

Table A-18: Deployment Location and Combat Exposure as Reported by Each Nation.

Nation	Over Past 5–Years						
	Year	Site 1	Combat	Site 2	Combat	Site 3	Combat
Australia	2011	Middle East Area of Operations	Yes	East Timor	No	Solomon Islands	No
Austria[1]	2013	Kosovo	No	Bosnia	No	Middle East	Yes
Belgium	2012	Afghanistan – Kabul	No	Afghanistan – Kandahar	Yes	Lebanon	No
Canada	2011	Afghanistan	Yes	Middle East	Yes	Libya	Yes
Denmark	2013	Afghanistan	Yes	Aden (Operation Open Shield)	No	Kosovo	No
Estonia	2013	Afghanistan	Yes	Pacific	No	Kosovo	No
Finland[2]	2011	Afghanistan	–	Somalia	–	Kosovo	–
France	2011	Afghanistan	Yes	Ivory Coast	Yes	Libya	Yes
Germany	2013	Afghanistan	Yes	Kosovo	Yes	Horn of Africa	No
Latvia	2011	Afghanistan	Yes	Libya	No	Kosovo	No
Lithuania	2012	Afghanistan	Yes	Iraq	Yes	Syria	Yes
Netherlands	2012	Afghanistan	Yes	Iraq	Yes	Horn of Africa	No
Romania	2012	Afghanistan	Yes	Iraq	Yes	Balkans	No
Slovenia	2012	Kosovo	No	Afghanistan	Yes	Lebanon	No
Turkey	2013	Afghanistan	No	Kosovo	No	Lebanon	No
United Kingdom	2010	Afghanistan	Yes	Iraq	Yes	–	–
United States	–	–	–	–	–	–	–

– Dashes signify unavailable data.

[1] Forces deployed to the Middle East saw low intensity combat.

[2] Deployed service members participated in peace and security building or humanitarian operations, and operations tasked to protect civilian populations.

Table A-19: Civilian and Military Suicide Risk Indicators as Reported by Each Nation.

Nation	Civilian		Military	
	Year	Risk Indicators	Year	Risk Indicators
Australia	2011	Mental Disorders; Male Gender; Age (20 – 54 years and over 75 years); Family Discord; Social and Geographical Isolation; Loss of Employment; Bereavement by Suicide; Prior Suicide Attempt; Genetic Factors; Negative Life Events; Aboriginal and Torres Strait Islander (Especially Men Aged 15 – 19); Rural and Remote Location; Substance Use or Abuse; Contact with the Justice System; Same Sex Attracted and Gender Diverse Status; Exposure to Frequent Traumatic Events by Occupation (e.g. Emergency Services, Police)	–	Ideation More Likely for Females; Mental Disorders; Affective Disorders; Deployment History and Location; Low Unit Cohesion; No Perceived Military Support for Spouse/Partner; No Perceived Post–Deployment Support; Insufficient Family Support During Deployment; Feeling Let Down; Perceived Lack of Community Support and Understanding; History and Number of Interpersonal Traumas; Perceived Stigma Against Help–Seeking
Austria	2013	Male Gender, and Older Age (70+); Low Educational Level; Poorly Paid Jobs; Broken Homes; Mental Disorders; Physical Illness; Alcohol / Drug Addiction	2013	Access to Weapons; Drug/Alcohol Abuse; Mental/Physical Illness; Male Gender
Belgium	2012	Prior Suicide Attempt; Mental Disorders; Substance Abuse; Low Self–Esteem; Impulsive Aggressive; Trauma or Abuse; Physical Illness; Loss of Employment; Financial Problems; Loss of Social or Emotional Relationships; Access to Lethal Means; Family History of Suicide; Lack of Social Support; Isolation; Barriers to Health Care Access; Exposure to Suicide	–	–
Canada	–	–	2012	Mental Disorders; Relationship Failure; Financial Problems; Health Problems; Legal and Disciplinary Problems
Denmark	2010	Prior Suicide Attempt; Mental Disorders	1990 – 2010	Prior Suicide Attempt; Mental Disorders
Estonia	1994 – 2012	Male Gender; Middle Age, Older Age; Substance Abuse; Unemployment, Social Isolation; Access to Lethal Means; Pathological Internet Use	–	–
Finland	1996 – 2003	Prior Suicide Attempt; Male Gender; Mental Disorders; Alcohol Abuse	1997	Male Gender; Access to Lethal Means; Mental Disorders
France	2011	Prior Suicide Attempt; Suicide Ideation; Substance Abuse; Mental Disorders; Male Gender; Older Age; Passive Violence; Loneliness; Employment–Related or Financial Difficulties; Low Education Level	2010	Access to Lethal Means; Emotional, Social and Family Difficulties; Military Environment Adjustment Difficulties; Mental Disorders; Prior Suicide Attempt
Germany	–	Depression; Substance Abuse; Psychosis; Older Age; Prior Suicide Attempt; Psychosocial Crises; Chronic Diseases (Cancer)	–	–

Nation	Civilian		Military	
	Year	Risk Indicators	Year	Risk Indicators
Latvia	2009	Male Gender; Alcohol Abuse; Age (45 – 55); Socioeconomic Status	–	–
Lithuania	2008	Despair; Acceptability of Suicide; Belief in Suicide as a Solution to Problems; Helplessness After Suicide Deaths	2008	Despair; Acceptability of Suicide; Belief in Suicide as a Solution to Problems; Job Loss; Completing Military Service
Netherlands	2013	Biological Factors; Psychological Factors (e.g., Low Self–Esteem, Impulsivity); Psychiatric Factors (e.g., Depression, Addiction); Social Factors (e.g., Loneliness, Life– Events)	–	–
Romania	2009 – 2013	Mental Disorders; Substance Abuse; Lack of Social Support	2010 – 2013	Major Family Disturbances; Major Financial Difficulties; Psychoaffective Problems; Substance Abuse
Slovenia	2013	Alcohol Abuse	–	–
Turkey	2013	Age (Over 75, 15 – 19); Low Educational Level; Female Gender, Young Age	2013	Family Conflicts; Interpersonal Relationship Difficulties; Psychiatric Problems
United Kingdom	2012	Male Gender; Age (Under 35); Mental Disorders; Living Alone; Unemployment; Substance Abuse	–	Recruitment from Socioeconomically Deprived Areas; Selection of People with Higher Risk–Taking Profiles; Stigma Against Treatment in the Armed Forces; Higher Alcohol Consumption Rates; Higher "Strain" Rates
United States	–	Prior Suicide Attempts; Psychiatric Disorder Diagnosis; Depression Diagnosis; Posttraumatic Stress Disorder Diagnosis; Head Trauma / Traumatic Brain Injury Diagnosis; Hopelessness; Insomnia or Sleep Disorder Diagnosis; Negative Life Events; Recent Death of a Spouse or Parent; Access to or Ownership of Firearms; Proximity to Recent Suicides; Increased or Glamorized Media Coverage of Suicide	2013	Male Gender; Caucasian Race; Non–Hispanic Ethnicity; Age (17 – 24); Junior Enlisted Rank; Accession of Medical/ Support Services Within Last 90 Days; Behavioral Health Diagnoses (One or More); Failed Relationship Within Last 90 Days; Deployment History

– Dashes signify unavailable data.

Risk indicators are listed precisely as described by each nation.

Table A-20: Civilian and Military Suicide Protective Factors as Reported by Each Nation.

Nation	Civilian		Military	
	Year	Protective Indicators	Year	Protective Indicators
Australia	–	Social Connectedness; Optimism; Community and Individual Resilience; Well–Being; Life Skills; Environment that Supports Help–Seeking; Accessible Professional Help; Leadership Skills; Community Awareness of Suicide Prevention; Availability of Housing; Financial Wellbeing; Employment; Education; Mental and Physical Health; High Self–Esteem; Coping Skills; Sense of Belonging; Social and Emotional Competence	2013	Younger Age (18–24 years); Unit Cohesiveness; Mental Health and Resilience Training; Increasing Focus on Mental Health to Decrease Stigma and Barriers to Care; Employment Screening
Austria	2013	Good Psychosocial Health Care; Restrictive Gun Laws; Psychoeducation	2013	Social Network: Family, Comrades, Partners; Acceptance of Psychological Support Systems; Personal Ability to Handle and Cope with Frustrations, Conflicts, and Psychological Injury in a Non–Violent Way; Knowledge About Psychological Vulnerability and Recovery
Belgium	2012	Efficient Clinical Care for Mental, Physical, and Substance–Related Problems; Easy Access to a Range of Clinical Interventions; Easy Access to Help; Limited Access to Lethal Means; Good Relations with Family; Community Support; Continuity of Health Care; Problem Solving and Conflict Management Skills; Cultural and Religious Convictions	–	–
Canada	–	–	–	–
Denmark	2010	Good Relations and Communication	1990–2010	Good Relations and Communication
Estonia	2010–2012	Good Family Relations and Communication; Responsible Media Coverage on Suicide	–	–
Finland	2012	Easy Access to Health Care Services; Limited Access to Lethal Means; Female Gender	2009	Regular Health Examinations; Easy Access to Health Care Services
France	2000	Social and Family Support; Good Occupational Integration; Religious/ Cultural Faiths; Good Self–Respect; Sense of Responsibility for Somebody (e.g., Children); Access to Medical Support	2011	Social Integration; Embedded Medical Support; Limited Access to Lethal Means; Good Cohesion/Leadership; Selection of Healthy Personnel and Periodic Medical Assessment
Germany	–	Social Support; Self–Efficacy; Extraversion	–	–
Latvia	2009	Social Support; Availability of Treatment (Including Medications); Limited Access to Lethal Means; Increasing Quality of Mental Health Care	–	–

Nation	Civilian		Military	
	Year	Protective Indicators	Year	Protective Indicators
Lithuania	2003	Education; Training on Specific Skills; Strengthening of Social Links and Support	2008	Buddy Help and Family Support; Education; Easy Access to Specialist Care
Netherlands	2013	Individual Factors (e.g., Intelligence, Self–Esteem); Relational Factors; Resources (e.g., Religion)	–	–
Romania	2009–2013	Religious Habits Discouraging Suicide; Stable Family Background; Education	2010–2013	Positive Coping Skills; Psychological and Medical Periodic Assessment and Counseling; Esprit de Corps and Cohesiveness; Stable Family and Social Background
Slovenia	–	–	–	–
Turkey	2013	Religion; Family Relationships	2013	Religion; Family Relationships
United Kingdom	2012	Reduce Risk in Key High Risk Groups; Promote Mental Well–Being in the Wider Population; Reduce the Availability and Lethality of Suicide Methods; Improve Reporting of Suicidal Behaviour in the Media; Promote Research on Suicide and Suicide Prevention	–	Selection of Healthy Recruits; Exclusion of Recruits with Mental Disorder History; Discharge of Trainees Proving Unsuitable during Training; Discharge of Personnel with Chronic Health Problems; Discharge of Personnel with Patterns of Ill–Disciplined Behaviour; Good Leadership/ Morale/Cohesion; Zero Tolerance for Drug Misuse; Routine Occupational Health Assessments
United States	–	Higher Degrees of Religiosity; Problem–Solving Ability; Higher Levels of Familial Involvement; Restricted Access to Firearms; Medical and Environmental Safety Enhancements	2007–2011	Increased Military Unit Support; Increased Pride to Mitigate Feelings of Shame and Hopelessness; Post– Deployment Social Support to Enhance Accessibility to Family and Friends; Use of Psychological Hardiness Training for Service Members Separating from Service

– Dashes signify unavailable data.

Table A-21: Civilian and Military Psychiatric Conditions as Reported by Each Nation.

Nation	Civilian						Military					
	Year	Diagnosis 1	Diagnosis 2	Diagnosis 3	Diagnosis 4	Diagnosis 5	Year	Diagnosis 1	Diagnosis 2	Diagnosis 3	Diagnosis 4	Diagnosis 5
Australia	2007	Anxiety Disorders (–)	Mental and Behavioural Disorders Due to Psychoactive Substance Use (–)	Mood [Affective] Disorders (–)	–	–	2010	Anxiety Disorders (–)	Mood [Affective] Disorders (–)	Mental and Behavioural Disorders Due to the Use of Alcohol (–)	–	–
Austria[1]	2013	Mood [Affective] Disorders (–)	Mental and Behavioural Disorders Due to the Use of Alcohol (–)	Schizophrenia (–)	–	–	2013	Adjustment Disorders (–)	Mood [Affective] Disorders (–)	Mental and Behavioural Disorders Due to the Use of Alcohol (–)	–	–
Belgium	2012	Major Depressive Disorder (5%)	Obsessive Compulsive Disorder (2%)	Borderline Personality Disorder (1%)	Bipolar and Related Disorders (1%)	Schizophrenia (1%)	–	–	–	–	–	–
Canada	2002	Depressive, or Bipolar and Related Disorders (17%)	Anxiety Disorders (12%)	Substance–Related Disorders (5%)	–	–	2002	Depressive, or Bipolar and Related Disorders (16%)	Anxiety Disorders (10%)	Substance–Related Disorders (5%)	–	–
Denmark	–	–	–	–	–	–	–	–	–	–	–	–
Estonia	2011	Neurotic, Stress–Related and Somatoform Disorders (654.2)	Mood [Affective] Disorders (479.7)	Mental and Behavioural Disorders due to Psychoactive Substance Abuse (252.5)	Organic, Including Symptomatic, Mental Disorders (203.6)	Disorders of Psychological Development (115.8)	–	–	–	–	–	–

[1] Data for Austria pertains to Professionals only.

Nation	Civilian						Military					
	Year	Diagnosis 1	Diagnosis 2	Diagnosis 3	Diagnosis 4	Diagnosis 5	Year	Diagnosis 1	Diagnosis 2	Diagnosis 3	Diagnosis 4	Diagnosis 5
Finland	2011	Major Depressive Disorder, Single Episode (27.9%)	Major Depressive Disorder, Recurrent (16.3%)	Other Anxiety Disorders (12.3%)	Bipolar Disorder (9.0%)	Schizophrenia (8.3%)	2011	Reaction to Severe Stress, and Adjustment Disorders (31.8%)	Major Depressive Disorder, Single Episode (18.6%)	Other Anxiety Disorders (17.9%)	Sleep Disorders (14.4%)	Mental and Behavioural Disorders Due to Use of Cannabinoids (2.8%)
France	1999 – 2007	Mood [Affective] Disorders (13.6%)	Other Anxiety Disorders (21.6%)	Mental and Behavioural Disorders Due to the Use of Alcohol (4.3%)	Schizophrenia, Schizotypal and Delusional Disorders (2.7%)	Mental and Behavioural Disorders Due to Psychoactive substance Use (2.5%)	2005 – 2010	Mood [Affective] Disorders (71.3%)	Anxiety Disorders (40.2%)	Other Mental Disorder (4.3%)	–	–
Germany	2012	Anxiety Disorders (17.2%)	Alcohol Use Disorder (10.0%)	Major Depressive Disorder (8.7%)	Obsessive Compulsive Disorder (3.9%)	Somatic Symptom Disorder (3.6%)	–	–	–	–	–	–
Latvia	2012	Organic, Including Symptomatic, Mental Disorders (897.0)	Mental Retardation (847.0)	Schizophrenia (758.0)	Neurotic, Stress–Related and Somatoform Disorders (400.0)	Major Depressive Disorder, Single Episode or Recurrent (240.0)	–	–	–	–	–	–
Lithuania	2010	Organic, Including Symptomatic, Mental Disorders (71.0%)	Mood [Affective] Disorders (65.9%)	Major Depressive Disorder (64.3%)	Schizophrenia, Schizotypal Disorders, and Delirium[2] (26.5%)	Disorders of Psychological Development (6.4%)	2011	Mood [Affective] Disorders (41.9%); and Neurotic, Stress–Related and Somatoform Disorders (41.9%) – Tied	Disorders of Adult Personality and Behaviour (6.9%)	Mental and Behavioural Disorders Due to Psychoactive Substance Use (4.7%)	Behavioural Syndromes Associated with Physiological Disturbances and Physical Factors (2.3%)	Schizophrenia, Schizotypal and Delusional Disorders (2.3%)

[2] Diagnoses do not match ICD-10 or DSM-5 codes, but nevertheless reflect the data provided by nation representatives.

Nation	Civilian						Military					
	Year	Diagnosis 1	Diagnosis 2	Diagnosis 3	Diagnosis 4	Diagnosis 5	Year	Diagnosis 1	Diagnosis 2	Diagnosis 3	Diagnosis 4	Diagnosis 5
Netherlands	2013	Major Depressive Disorder (–)	Substance–Related Disorders (–)	Personality Disorders (–)	Schizophrenia (–)	–	–	–	–	–	–	–
Romania	2009 – 2013	Major Depressive Disorder[3] (–)	Substance–Related Disorders[3] (–)	Anxiety Disorders[3] (–)		–	–	–	–	–	–	–
Slovenia	2010	Anxiety Disorders (4.8%)	Major Depressive Disorder (4.6%)	Mixed Anxiety and Depressive Disorder (4.4%)	Mental and Behavioural Disorders Due to the Use of Alcohol (5.0%)	Dementia (1.5%)	2011	Adjustment Disorders (33%)	Anxiety and Depression Related Disorders[3] (22%)	Behaviour Related Disorders[3] (15%)	Sleep Disorders (12%)	Mental and Behavioural Disorders Due to the Use of Alcohol (10%)
Turkey	2013	Depressive Disorders (–)	Anxiety Disorders (–)	Somatic Symptom Disorder (–)	–	–	2013	Adjustment Disorders (–)	Depressive Disorders (–)	Anxiety Disorders (–)	–	–
United Kingdom	2009	Mixed Anxiety and Depressive Disorder (9000.0)	Generalized Anxiety Disorder (4400.0)	Depressive Episode (2300.0)	Phobic Anxiety Disorders (1400.0)	Obsessive Compulsive Disorder (1099.0)	2013	Adjustment Disorders (9.5)	Depressive Episode (6.1)	Post–Traumatic Stress Disorder (1.8)	Mental and Behavioural Disorders Due to the Use of Alcohol (1.6)	Unspecified Mental Disorder (1.0)
United States	2005	Major Depressive Disorder (16.6%)	Alcohol Use Disorder (13.2%)	Specific Phobia (12.5%)	Social Anxiety Disorder (12.1%)	Conduct Disorder (9.5%)	2009	Posttraumatic Stress Disorder (9 – 20 %)	Major Depressive Disorder (8 – 15 %)	Neurocognitive Disorder Due to Traumatic Brain Injury (4 – 8 %)	–	–

– Dashes signify unavailable data.

Reporting practices differ across nations. As such, prevalence is reported alternately as percentages or rates.

[3] Diagnoses do not match ICD-10 or DSM-5 codes, but nevertheless reflect the data provided by nation representatives.

Annex B − SAMPLE SURVEY LETTER SENT TO NATIONS

SCIENCE AND TECHNOLOGY ORGANIZATION

HUMAN FACTORS & MEDICINE PANEL

Research Task Group on "Military Suicide"

DOC REF: 323-HFM-2013-045

4 October 2013,

Dear Surgeon General,

To address the problem of suicide among Armed Forces and Veterans, the North Atlantic Treaty Organization (NATO) Science & Technology Organization (STO) has approved a Human Factors and Medicine Panel (HFM), Research Task Group (RTG-218) on the topic of military suicide. We are contacting you on behalf of this organized group. Please note our sincere appreciation for the inclusion of a Technical Team Member from your nation as a nominated representative to NATO-HFM-RTG-218.

The members of the HFM-RTG 218 on "Military Suicide" have been meeting since 2011. As a result of deliberations during these meetings, the workgroup has identified a priority task as the identification of information from all NATO and non-NATO nations on the following: (1) suicide data on civilian, military, and/or Veteran suicides (if available); and (2) national and/or military specific suicide prevention programs to address the public health problem of suicide. The goal for gathering the specified information is to systematically organize and disseminate this information back to you for consideration in selecting best practices for military suicide prevention. Your office will be provided with a finalized NATO approved digital copy of the Technical Report from the HFM-RTG-218.

The HFM-RTG 218 members are writing to inform you that your countries' Technical Team Members, as part of his or hers assigned duties as the RTG member, has already provided some unclassified information on the questionnaire described in the above paragraph. We would like to ask for your valuable support, guidance, and resources to ensure that all aspects of this designed NATO survey can be completed for dissemination in the final technical report to be written by this body.

Dr. Marjan Holloway, Chair of the HFM-RTG 218 is available to discuss this request with you and to respond to any written questions you may have. Her phone number in the United States is +1-301-295-3271 and her email address is marjan.holloway@usuhs.edu.

The deadline for the submission of this information is **November 29, 2013**.

NATO UNCLASSIFIED
RELEASABLE TO PARTNERS

BP 25 - F-92201 Neuilly-sur-Seine Cedex - France
Tel: +33 (0)1 55 61 22 60 - Fax: +33 (0)1 55 61 96 45 - E-Mail : ron.verkerk@cso.nato.int

NATO UNCLASSIFIED
RELEASABLE TO PARTNERS

Please submit the completed questionnaire to the following individuals:

1) Dr. Marjan G. Holloway – Email: marjan.holloway@usuhs.edu
2) Lieutenant-Colonel Ron Verkerk – Email: ron.verkerk@cso.nato.int

In case the requested information has not been received by the specified date, the NATO Technical Report may only provide incomplete data for the Alliance and Partners (Nations).

Sincerely,

Marjan G. Holloway, Ph.D.

Marjan G. Holloway, Ph.D., NATO HFM-RTG-218 Chair
on behalf of HFM-RTG-218 Members
Telephone: +1- 301-295-3271

Lieutenant-Colonel (RNLA) Ron VERKERK
Panel Executive Human Factors and Medicine Panel
NATO Research and Technology Agency
Telephone: +33-1 55 61 22 60

Action Officer: LtCol Ron Verkerk

Original: English

Annexes: Survey

NATO UNCLASSIFIED
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-2-

Annex C – SAMPLE SURVEY SENT TO NATIONS

Purpose of Survey: This questionnaire has been designed by members of the North Atlantic Treaty Organization (NATO), Human Factors and Medicine (HFM), Research Task Group (RTG HFM-218) on *Military Suicide* in order to:

1) Collect information on NATO, Partner for Peace (PfP), and Non-NATO nations' suicide rates for civilians, military personnel, and Veterans; as well as
2) Capture best practices for suicide prevention among the Armed Forces and Veterans.

DEADLINE: NOVEMBER 26, 2013

Please submit the completed questionnaire to the following individuals:

1) Dr. Marjan Ghahramanlou-Holloway – Email: marjan.holloway@usuhs.edu
2) Lieutenant-Colonel Ron Verkerk – Email: ron.verkerk@cso.nato.int

I: INFORMATION PERTAINING TO NATIONAL AND MILITARY DEMOGRAPHICS AND SUICIDE DATA

Instructions: Please ensure that all information reflects the most recent data available for your nation. If information is not available, leave the section blank or indicate, "Unknown."

SECTION A: National Information

(Specify Year of Data Source: _____)

1. Name of Nation:	
2. Estimated Population Size:	
3. Where does suicide rank among your nation's *leading causes* of death? (Example: 10th leading cause of death)	
4. National Suicide Rate[1]:	
5. National Male Suicide Rate:	
6. National Female Suicide Rate:	

[1] We prefer that rates for all applicable sections be provided as per 100,000, in accordance with the World Health Organization format for collecting suicide rate information.

7. National Suicide Attempt Rate:

8. Who is authorized to determine the manner of death within your nation?

9. What organization handles the mortality data within your Nation?

10. What are the top 3 leading causes of death in your nation?

1.
2.
3.

11. Briefly describe the procedure by which suicide deaths are determined & documented within your nation.

12. Is there systematic surveillance for suicide within your nation? ☐ Yes ☐ No

If YES, specify:

13. List 3 Most Common National Suicide Methods *(specify % of all suicide deaths)*

1.
2.
3.

14. Please provide national suicide protective factors (demographic and/or modifiable).

15. Please provide national suicide risk indicators (demographic and/or modifiable).

16. What are the 3 most commonly diagnosed psychiatric conditions within your nation?	1. 2. 3.

SECTION B: Military Information

(Specify Year of Data Source: _____)

1. Estimated Active Duty* Military Size:

   ** Active Duty refers to uniformed, full-time, and employed military personnel.*

2. Where does suicide rank among your military's *leading causes* of death? (Example: 3rd leading cause of death)

3. Military Definition of Suicide:

   Does this definition differ from the civilian definition of suicide? ☐ Yes ☐ No

   If YES, please provide civilian definition of suicide:

4. Military Suicide Rate:

5. Military Male Suicide Rate:

6. Military Female Suicide Rate:

7. Veteran Suicide Rate:

8. Military Definition of Suicide Attempt:

   Does this definition differ from the civilian definition of suicide attempt? ☐ Yes ☐ No

   If YES, please provide civilian definition of suicide attempt:

9. Military Suicide Attempt Rate:

10. Who is authorized to determine the manner of death within your military system?

11. What organization handles the mortality data within your military system?

12. What are the top 3 leading causes of death for active duty military personnel?

1.
2.
3.

13. Briefly describe the procedure by which suicide deaths are determined & documented within your military.

14. Is there systematic surveillance for suicide within the military? ☐ Yes ☐ No

If YES, specify:

15. List 3 Most Common Military Suicide Methods *(specify % of all suicide deaths)*

1.
2.
3.

16. Please provide military-specific suicide protective factors (demographic and/or modifiable).

17. Please provide military-specific suicide risk indicators (demographic and/or modifiable).

18. What are the 3 most commonly diagnosed psychiatric conditions within your military?

1.
2.
3.

19. What constitutes the structure of your military? *(Check all that apply)*

☐ Volunteers
☐ Conscripts
☐ Peacekeeping Personnel
☐ Reserves
☐ National Guard
☐ Professional
☐ Other *(please specify)*:

20. Military Definition of Deployment:

21. Deployment Length:

Minimum Deployment Length:

Maximum Deployment Length:

Average Deployment Length:

22. Average Dwell Time Between Deployments:

23. List Top 3 Deployment Sites/Locations Over the Past 5 Years:

Site/Location	Exposure to Combat
1.	☐ Yes ☐ No
2.	☐ Yes ☐ No
3.	☐ Yes ☐ No

24. Number of Military Suicides in Deployed Settings: *(Total Number **AND** per 100,000 OR per xx,xxx)*	

II: INFORMATION PERTAINING TO NATIONAL AND MILITARY SUICIDE PREVENTION EFFORTS – BEST PRACTICES

Instructions: Please ensure that all information reflects the most recent data available. If information is not available, leave the section blank or indicate, "Unknown."

SECTION C: NATIONAL Suicide Prevention Efforts – Best Practices

(Specify Year of Data Source: _____)

1. List Types of **National** Suicide Prevention Efforts:

1.
2.
3.
4.
5.
6.
7.
8.
9.
10.
(if necessary specify additional items here) *Citations if applicable*:

2. List Your Nation's "Best Practices" for the Prevention of Suicide:

(Defined as a practice with scientific support for reducing suicide ideation, suicide attempt, and/or suicide death [with at least one publication supporting the prevention strategy; ***please provide the citation(s)****])*

1.
2.
3.
4.
5.
(if necessary specify additional items here) *Citations*:

SECTION D: MILITARY/VETERAN Suicide Prevention Efforts – Best Practices

(Specify Year of Data Source: _____)

1. List Types of **Military/Veteran** Suicide Prevention Efforts:

1.
2.
3.
4.
5.
6.
7.
8.
9.
10.
(if necessary specify additional items here) *Citations if applicable*:

2. Please list your Military's "Best Practices" for the prevention of suicide below:

*(Defined as a practice with scientific support for reducing suicide ideation, suicide attempt, and/or suicide death [with at least one publication supporting the prevention strategy; **please provide the citation(s)**])*

1.
2.
3.
4.
5.
(if necessary specify additional items here) *Citations*:

3. Please provide a 1-paragraph written summary of your **military/veteran** suicide prevention efforts including strengths and challenges below (provide citations):

Citations:

4. In what ways could our NATO international collaboration be responsive to the military suicide prevention efforts within your nation?

1.
2.
3.
4.
5.
(if necessary specify additional items here)

Name of Individual Completing Form Professional Title	
Correspondence Address Phone E-mail	
Form Completion Date	

Annex D − WHITE PAPER: MILITARY SUICIDE PREVENTION

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Department of Medical and Clinical Psychology
UNITED STATES

Acknowledgement: Members of the NATO RTG HFM-218

D.1 PURPOSE

The purpose of this White Paper is to provide a brief discussion of how suicides may be prevented among military service members.

D.2 DEFINITION OF MILITARY SUICIDE

According to the World Health Organization [1], suicide refers to the act of deliberately killing oneself. "Military suicide" refers to the act of a service member deliberately killing oneself. At times, the manner of death of a service member may be difficult to determine given the absence of information on suicidal intent.

D.3 THE CHALLENGE

When a military suicide occurs, leaders and other members of the military and civilian community are greatly impacted. They often question what could have been done to prevent the suicide. Leaders, unit members, family members, and/or friends may feel a sense of guilt and responsibility for the death.

D.4 MESSAGE TO LEADERS

According to the World Health Organization (Ref [1], p. 3), "suicides are preventable." The scientific community has a good understanding of risk and protective factors for suicide; most recently, additional research is emerging on unique military factors that increase or decrease suicide risk. A number of programmatic efforts have focused on reducing suicides among military service members. Yet to date, the effectiveness of various military suicide prevention programs has not been well-established. Continued research on the topic of military suicide prevention as well as support from military leaders for the implementation of such work is much needed.

Military leaders can take reasonable actions to minimize the occurrence of suicide. Actions that promote mental fitness, reduce stigma and barriers to seeking mental health care, as well as increase social connectedness and partnerships within the military structure are expected to decrease the risk for suicide. Therefore, active

promotion of self-care and psychological fitness by leaders in their troops can play an important role in suicide prevention.

Some military personnel are at a greater risk for suicide compared with others. For instance, those who have previously attempted suicide and those who have been diagnosed with a psychiatric condition (particularly depression and/or alcohol-related problems) appear to be at increased risk. To date, there is no precise method for predicting suicide and in fact, most scientists agree that many suicides are not predictable. However, awareness of recognized risk and protective factors may be important in saving lives. Leaders can actively encourage and support their service members in seeking evidence-based mental health services as needed in order to maximize mental fitness and operational readiness.

D.5 SUMMARY

Engaged leaders who strive to know their service members may recognize early warning signs for suicide and be well-positioned to intervene in a timely manner. Once these warning signs have been identified, appropriate referrals may be made to help the service member improve his or her psychological health. Of course, in some cases of suicide, no warning signs may have been detected by leadership since the service member may have not disclosed his or her suicidal thoughts and/or intent to a military peer and/or leadership.

D.6 REFERENCE

[1] World Health Organization. Preventing Suicide: A Global Imperative. Geneva, Switzerland: World Health Organization; 2014.

Annex E − WHITE PAPER: THE ROLE OF LEADERSHIP IN MILITARY SUICIDE PREVENTION

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UNITED STATES

Acknowledgement: Members of the NATO RTG HFM-218

E.1 PURPOSE

This White Paper summarizes the current consensus view by the NATO RTG HFM-218 on the role of leadership in the prevention of military suicide.

E.2 RECOMMENDATIONS FOR LEADERS

Leaders at all levels play a key role in the mental health and readiness of the service personnel under their command and they significantly shape the morale and well-being of their personnel. The following suicide prevention recommendations are provided for all levels of military leadership.

E.2.1 Importance of Command Climate

First, leadership must establish a command climate that acknowledges that personnel may become overwhelmed by a number of stressors associated with their occupational service as well as their personal life. Second, leadership has the responsibility to create conditions where personnel can openly talk about such stressors and seek mental healthcare or other helping services to effectively cope. Service members are more likely to openly admit to having problems, and accept the idea of receiving help, if the command environment in which they work and operate endorses that having problems is normal and getting help is an important strategy for coping with life challenges.

E.2.2 Promotion of Help Seeking Behaviours

Leadership at the highest levels must unequivocally support and promote help seeking behaviours among service members who report stressful life problems. Leadership should further convey the message that seeking help when in distress is not a sign of weakness or deficiency, but rather a sign of courage, strength and responsibility – in other words, a sign of being a good service member who cares both about physical and mental well-being.

E.2.3 Evidence-Based Mental Health Care

Leadership at the highest levels:

1) Must ensure adequate resources to maximize timely access to evidence-based mental health care; and
2) Create an environment that reduces barriers to seeking and receiving such healthcare services in a timely manner.

E.2.4 Stigma Reduction

Leadership at all levels, from the section leader on up, must foster a climate where members learn about resiliency and the signs of mental strain and illness, where having problems is not stigmatized, and seeking help is the soldierly thing to do.

E.2.5 Knowing Your Service Member

Leaders at all levels are encouraged to know the service members under their command. Leaders' knowledge about their members, both in terms of their jobs and the stressors associated with their home life, is essential. Further, leaders must observe for changes in the behaviour and/or the performance of their members. These changes are often sudden, but can also be more gradual. Mental health personnel within command can be consulted with, when needed for guidance. Finally, leaders should ensure that those identified in need of intervention by behavioural health professionals are referred to, assessed, and treated in a timely manner.

E.3 SUMMARY

The prevention of military suicide involves ongoing interactions among three important domains:

1) Actively engaged service members with awareness and education about the importance of maintaining mental fitness;
2) A military health care system delivering high quality evidence-based care; and
3) A committed, supportive and engaged leadership that maximizes opportunities for such interaction.

Annex F − WHITE PAPER: MYTHS AND FACTS ABOUT SUICIDE RELEVANT TO THE MILITARY

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Acknowledgement: Members of the NATO RTG HFM-218

Being well-informed about the most prevalent myths and facts about suicide will help military leaders and decision makers to avoid some common traps, especially during times when immediate decisions have to be taken. Below, a list of myths and facts about suicide applicable to the military environment is presented.

Table F-1: Myths and Facts About Military Suicide.

MYTH	FACT
Individuals who talk about suicide do not kill themselves.	Scientific studies show that 60 – 80% of those who died by suicide communicated their suicidal thoughts prior to their death.
Most suicides happen impulsively and without any warning.	Suicide death investigation studies indicate that most suicidal individuals showed many warning signs prior to their death.
All individuals who attempt suicide are fully committed to dying and have absolutely no desire to live.	While some suicidal individuals have a strong desire to die, most experience ambivalence – meaning that the desire to die and the desire to live may both be present at the same time. The ambivalence, at times, may be related to a strong desire to end the emotional pain.
Improvement after a suicide crisis means that the suicide risk has passed.	This is a very hazardous assumption because for some, suicides can happen after "the improvement" has set in.
Asking about suicidal thinking may (1) implant the idea of suicide in one's head; and/or (2) increase the likelihood of acting on suicidal thoughts.	Asking an individual directly about his or her suicidal thinking would show that you care and provide an opportunity to refer the person for immediate help. There is no scientific evidence to suggest that asking about suicide may increase suicide risk. In fact, asking about suicidal thinking can provide useful information that can then be acted upon promptly.
A suicidal service member, once suicidal, is never fit for duty.	An actively suicidal service member may require some time to manage his or her distress, with the assistance of a professional and the support of leadership. However, an actively suicidal service member, once no longer suicidal and stabilized, can be expected to help the military unit with its mission, depending on the timely care he or she receives and the subsequent engagement with care.
Real men do not become suicidal.	Every person – regardless of strength, courage, and/or character – could be susceptible to suicidal thinking and behaviors given certain life stressors and psychological conditions such as depression.

MYTH	FACT
Only mentally ill individuals kill themselves.	Approximately 40-50% of the individuals who die by suicide do not have a documented psychiatric condition at the time of their death. Individuals may become suicidal and yet not suffer from a mental health disorder.
Only mental health professionals can help a suicidal individual.	A suicidal individual may benefit from any person within their social network (e.g., peers, leaders, chaplains, family member, and/or friend). These individuals can help by showing empathy and ensuring that professional help is received.

Annex G − WHITE PAPER: TECHNOLOGY-BASED SUICIDE PREVENTION

COL (Ret.) Gregory Gahm, Ph.D. and David Luxton, Ph.D.
National Center for Telehealth and Technology
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Acknowledgement: Members of the NATO RTG HFM-218

G.1 PURPOSE

An overview of current and emerging technologies for suicide prevention is provided.

G.2 BACKGROUND

The popularity and capabilities of technologies, such as mobile device applications (apps) and social media, provide new opportunities for military suicide prevention and outreach programs. Technology-based suicide prevention applications are being used to increase awareness, provide education, connect individuals with supportive services, and provide platforms for military suicide risk screening and surveillance.

G.3 CURRENT STATUS

- Internet web sites provide suicide prevention education and information on supportive services to the military community.
- Social Media, such as Facebook, provide opportunities to form support groups and share information. Built-in links can direct those thinking about suicide to supportive services.
- Web-based video and podcasting can be used for suicide prevention Public Service Announcements (PSAs) and provide support for family members and survivors of suicide.
- Mobile devices, such as smartphones, provide new platforms for suicide risk screening applications. Mobile device apps can also provide plans for keeping service members safe. New apps continue to be developed to augment suicide prevention treatments.
- Suicide prevention outreach via email and texting is an emerging area. Caring emails and texts, similar to caring letters may be sent to suicidal service members as a means of showing support.
- Virtual Worlds (e.g., Second Life) can be used for providing education and support in virtual communities.
- Text analysis is a technology that can be used for suicide prevention. Google's Internet search engine, for example, has this technology built into so that key military suicide prevention resources automatically appear when a user types in suicide associated key words.
- Suicide surveillance databases, in some countries, systematically collect information on suicide events, risk factors, and demographics data.
- Interventions may also be delivered via the phone and/or online in areas where such technology is available.

G.4 CONCLUSION

Technology provides new opportunities for military suicide prevention programs. More research on the effectiveness of these programs is needed, although the evidence base is growing. The continued growth in demand for technology-based applications, as well as advances in technological capabilities, is expected.

Annex H − WHITE PAPER: STIGMA AND BARRIERS TO CARE

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Acknowledgement: Members of the NATO RTG HFM-218

H.1 DEFINITION

Stigma is a sociological concept of discrimination that disqualifies individuals from membership in a particular group; it has also been at times defined as a negative stereotype.

H.2 BACKGROUND

The military unit is structured on values of sacrifice, strength, and courage to face adversity. Suicidal service members may experience feelings of shame and guilt due to a perceived failure to meet and/or live up to collective ideals. Such individuals can also be rejected by their military peers because they seem different, unpredictable, or even dangerous to the mission. Sometimes, members of the command may view service members who seek help as malingerers, using medical support as a strategy to get out of their assigned military duties and to avoid disciplinary action. Regardless of malingering behaviour, commanders are encouraged to err on the side of caution and proactively promote help seeking.

Many service members who struggle with life stressors and mental health issues experience shame, guilt, and embarrassment due to perceived stigma. For instance, in the case of Posttraumatic Stress Disorder (PTSD), mood disorders, and addiction, service members may feel different, isolated, and too ashamed to ask for help. Some may also view asking for help as a sign of weakness and they may fear being treated differently by their command and/or military peers.

H.3 STIGMA AS A RISK FACTOR FOR SUICIDE IN ARMED FORCES

The belief and the fear of being stigmatized is a barrier to accessing mental health care. Therefore, some service members may suffer in silence due to fears of being labelled, belittled, perceived as mentally unfit for duty, or worse that seeking help will adversely affect their careers. This situation creates distrust and military personnel may voluntarily hide their medical problems. When suffering is inexpressible and not shared with others, suicide can appear as a viable and only solution.

H.4 CHANGING ATTITUDES TOWARD SUICIDE IN ARMED FORCES

While research on changing negative attitudes toward suicide in the military is sparse, the following suggestions are provided by the NATO RTG HFM-218:

- Disseminate information to the military community about psychological health, strategies in building emotional fitness and thriving during one's military career/service.
- Also disseminate information to the military community about warning signs of suicide, associated risk and protective factors.
- Openly discuss the potential impact on one's military career/service and professional fitness, if one chooses to seek mental health services.
- Share anonymous case stories, personal experiences and lessons learned – particularly when this is done by individuals in the position of leadership (when and if applicable or feasible), which can be very impactful.
- Acknowledge the role and responsibility of military leadership in reducing stigma and practice openness and empathy when listening to the problems reported by service members.
- Establish effective communication strategies and responsible dissemination plan of suicide prevention information, as described by the World Health Organization (http://www.who.int) when working with the media.

H.5 IMPROVING UTILIZATION OF MENTAL HEALTH CARE AND/OR SUICIDE PREVENTION PROGRAMS

- Prevent a possible delay in asking for help by creating an atmosphere of trust; emphasize the benefits of seeking early medical advice [please note that a patient-centered medical environment that respects confidentiality between the service member and the medical provider would be helpful].
- Embed helping professionals in the military unit, if feasible, to closely support service members: Integrate medical, psychological, and spiritual support into operational units to support troops before, during and after an operational mission.
- Foster a positive approach by focusing on the individual service member's strengths and previous efforts to maintain mental health: "what has been done and can be done to enhance mental equilibrium".
- Screen for mental health, suicidal ideation, and psychological fitness in military primary care settings.
- Provide information on suicide hotline available 24/7 for help-seekers.
- Provide opportunities for pre- and post-deployment briefings to normalize combat stress reaction and detect symptoms of PTSD.
- Acknowledge personal accountability as well as the responsibilities of leadership and military buddies in recognizing and responding effectively to suicidal thoughts and behaviours.
- Utilize the expertise of the psychosocial team who can best serve in an advisory role to command.

Annex I − WHITE PAPER: TACTICAL LEVEL LEADERSHIP AND MILITARY SUICIDE PREVENTION

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Acknowledgement: Members of the NATO RTG HFM-218

I.1 PURPOSE

Military leadership is most commonly categorized into three different levels:

1) Strategic;
2) Operational; and
3) Tactical – with those in tactical leadership positions having the most direct contact with service members.

Tactical leaders provide service as squad leaders (e.g., command of up to 8 to 12 service members) and given their proximity to and relationship with the service members, they are uniquely situated to recognize signs of distress and intervene early. Therefore, the military suicide prevention recommendations that are provided in this paper will primarily focus on tactical level leadership.

I.2 RECOMMENDATIONS FOR TACTICAL LEVEL LEADERSHIP

Leadership recommendations provided in this paper cover the following three topics:

1) Mental fitness enhancement;
2) Stigma reduction; and
3) Linkage with psychological support.

I.2.1 Mental Fitness Enhancement

Military leadership has solid awareness and knowledge about the importance of physical fitness in mission success. Another key contributor to mission success is mental fitness. Mental fitness refers to the emotional strength and endurance of a service member, in his or her environment, to cope with stressors. Mental fitness can be promoted among service members in a variety of ways. There are several strategies for improving mental fitness, for example learning and practicing healthy coping strategies and effective problem solving. Another

strategy for improving mental fitness could involve recognizing one's negative emotions and learning to communicate effectively to resolve interpersonal conflict.

I.2.2 Stigma Reduction

Positive leaders who value unit cohesion and the contributions of each service member show compassion and support when observing the early signs of distress among the men and women they lead. In particular, squad leaders have a critical role in stigma reduction when a distressed service member is in need of help and support. Squad leaders are encouraged to demonstrate much needed flexibility in having distressed service members respond to demands on and off the battlefield. For example, time off for mental health concerns (e.g., anxiety disorder) could be allowed, similar to the time off typically allowed for physical health concerns (e.g., a broken arm).

Sometimes, service members who need the help the most do not seek it due to feared consequences associated with their military career. In many of these instances, the feared consequences can seem much greater than the actual consequences. Therefore, optimal adaptation and performance are helped by dissemination of accurate information about how seeking mental health services could or could not impact one's military career. Squad leaders can educate their service members about the potential career-related consequences for seeking help due to psychological distress (if any exist). In order to increase help seeking behaviors, squad leaders can also provide opportunities for their service men and women to discuss any concerns related to seeking help and potential career-related impact. If confidential services are provided within the military health system framework (e.g., chaplain support, 24/7 hotline, free counseling), information about such services may also be provided.

I.2.3 Linkage with Psychological Support

Operational tempo, work schedules, and location of services relative to a service member's quarters and work environment can all become organizational barriers to seeking timely mental health services. Leadership can reduce these barriers through several actions:

1) Allow time for service members to seek needed assistance.
2) Ask "where", not "why". Simply ask *where* the service member will be in order to account for his or her whereabouts without encroaching on the person's privacy. Asking *why* a service member needs to seek mental health services requires him or her to disclose and explain a possible mental health concern. Similar to any other setting where employees may feel uncomfortable disclosing personal mental health related information to superiors, service members may be reluctant to share information about their psychological state of mind possibly due to concerns about how leadership and their unit peers would perceive and subsequently treat them.
3) Embed mental health whenever possible. Inviting mental health providers to attend training and recreational events will provide ease of access for service members as well as de-stigmatize interactions with mental health providers.

Individual barriers to seeking mental health services could include a lack of awareness of available resources. Leadership should actively work to increase awareness of resources through invited talks, placement of advertisements in high-traffic area for personnel (e.g., recreation centres, dining facilities), and guided discussions during standard training events. Squad leaders are therefore encouraged to alleviate, as much as possible, the potential personal cost to service members for seeking assistance. The general stance of leadership should be to increase help-seeking behaviours (the earlier, the better) among service members by encouraging them to effectively manage and overcome perceived and/or actual barriers to seeking help.

I.3 SUMMARY

The recommendations provided in this paper offer multiple ways for tactical leaders who serve as squad leaders to assist in the reduction of suicidal events among service men and women. The overall objective is to establish and maintain an optimal culture of physical *and* mental health fitness. Squad leaders who support service members and encourage them to seek timely assistance for their mental health concerns are serving as effective coaches who are interested in optimal performance. In addition, such proactive and positive leadership attitudes and actions towards mental health fitness are likely to promote:

1) A culture of accountability for self-care on the behalf of the distressed service member; and
2) A culture of acceptance for the necessity of mental health care on the behalf of the distressed service member's unit members.

Annex J − WHITE PAPER: RISK TAKING BEHAVIOURS AND SUICIDE

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Acknowledgement: Members of the NATO RTG HFM-218

J.1 DEFINITIONS

Risk-taking behaviours may include engaging in extreme sports, participating in dangerous activities, consuming large amounts of alcohol, driving while intoxicated, drug abuse, and/or high-risk sexual relations. Such behaviours are not necessarily suicide-related, although they increase the likelihood of injury or death.

Self-harm behaviours are acts of injuring oneself intentionally by methods such as self-laceration, self-battering, taking overdoses or exhibiting deliberate recklessness, but with no intent to die.

Impulsive behaviours occur quickly without control, planning, or consideration of the consequences of that behaviour. Impulsive behaviours tend to be connected with immediate positive consequences (for example, relief from emotional pain). There is evidence that aggressive and impulsive personality traits and psychological distress are important proximal factors for suicide.

J.2 THE CHALLENGE

Although no research has been conducted on this topic, the military occupation is speculated to attract a higher percentage of individuals prone to risk taking behaviours. The military may provide an environment where risk taking behaviours are encouraged and reinforced. For some individuals, risk taking behaviours and sensation seeking are a normal component of their personality structure and do not present as problematic. However, when such behaviours either cause personal distress (in the form of psychiatric symptoms) and/or a deterioration of functioning in social and/or occupational settings, they are considered problematic.

Military service members with risk taking behaviours are not necessarily at risk for suicidal behaviours. However, when risk taking behaviours are combined with impulsivity and/or other problems such as substance abuse or gambling, there may an indication of an underlying psychiatric problem which can subsequently increase the risk for suicidal thoughts and behaviours.

J.3 RECOMMENDATIONS

Leaders should be attentive to **sudden changes** in the following:

- Sleeping and eating patterns.
- Isolation and social withdrawal.
- Lack of discipline, diminished performance.
- Repeated accidents and/or physical manifestations.
- Substance misuse and possible legal related problems.
- Excessive bragging about high risk behaviours.
- Notable changes in emotional stability.
- Aggressive and/or violent behaviours toward self or others (e.g., domestic violence).
- Transgression of security rules (for example gun misuse).
- Self-medication or not taking prescribed medication.
- Associated impulsive behaviours such as gambling, sexual promiscuity, excessive spending.

A case-by-case approach must be taken when faced with sudden changes in a service member's behaviour(s). Leaders can encourage the open dialogue between peers, evaluate the need of protective measures (e.g., confiscate firearms as needed), and consult with medical or psychological care providers.

Annex K − WHITE PAPER: MILITARY LIFE CYCLE, PSYCHOLOGICAL FITNESS, AND SUICIDE RISK

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K.1 DEFINITION

The "Military Life Cycle" is the sum of all stages that service members go through during their military life. Some of these stages are repeated throughout their career and others are unique to specific time points.

K.2 BACKGROUND

Suicide has a lot to do with stress. The transitions that service members face during their military life involve numerous stressors; as a result, service members often find themselves in a process of continual adjustment and learning. These stressors are made up of an interplay between organizational and personal factors. This paper describes the stages of the military life cycle in relation to stress and suicide risk. Specific strategies are proposed to mitigate the stress related to the transitions between the stages of the military life cycle.

The military life cycle can be considered a process of continual learning which involves adapting to new situations, learning to integrate into new groups, and learning to deal with new challenges. Each station or new assignment poses its own challenges, provides opportunities for improvements, but also may present additional stressors. In order to help adaptation and prevent negative consequences including suicide, we present a closer look at these individual stages.

K.3 MILITARY LIFE CYCLE STAGES

The stages that individuals go through during their military service are generally the same for everyone serving in any armed forces:

- **Stage 1: Entrance into the Military**
  Entrance into the military organization consisting of recruitment, selection, reception, and in-processing.
- **Stage 2: Basic Military Training**
  Basic military training which is designed to integrate the individual into the military culture.

- **Stage 3: Continued Military Training**

  Continued military training which is the initial training at the beginning of a military career to gain skill in an occupational specialty and to adapt to the operational phase, as well as further training later to gain higher qualifications or to change the occupational specialty.

- **Stage 4: Assignments**

  Assignments (abroad or at home) as an initial first duty assignment as well as further assignments during the military career.

- **Stage 5: Deployment(s)**

  Deployment into military theaters of operations which in themselves are a cycle composed of the pre-deployment, actual deployment, and reintegration sub-stages.

- **Stage 6: End of Military Service**

  End of military service due to the end of contract obligation or discharge for other reasons (e.g., medical, administrative).

- **Stage 7: Retirement**

  Retirement at the end of a military career with the task of redefining a new role and status in society.

K.4 RECOMMENDATIONS

Leadership needs to be educated and aware of the challenges that go along with the transitions and individual stages of the military life cycle. This awareness is required in order to structure and implement effective interventions to help service members deal with the specific challenges they are faced with. For example unit leaders can:

1) Introduce organizational and structural changes that would facilitate adaptation, for example flexible schedules (when feasible) to cope with work/life balance.
2) Create an environment of open communication by listening and being attentive to service members.
3) Propagate a solution-oriented attitude such that challenges can be seen as problems that can be solved independently or with the assistance of others, when needed.
4) Provide educational and counseling opportunities for unit members and leadership who encounter difficulties in adapting.
5) Allot unit members adequate time to cognitively and emotionally make the transitions required of them.
6) Recognize early signs of distress among service members who are unsuccessfully managing the military life transitional changes and associated challenges; provide appropriate and timely referrals to help with linkage to mental health care.
7) Create an environment which reduces stigma and encourages help seeking among service members who require mental healthcare, regardless of rank.
8) Educate military families about the stages of the military life cycle such that these individuals can understand the benefits as well as challenges associated with service and to give adequate support.

Service members who are aware of the common challenges to be experienced during each stage of the military life cycle can be well-prepared and equipped for an upcoming transition.

Annex L − WHITE PAPER: POLICY RECOMMENDATIONS ON MILITARY SUICIDE

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Acknowledgement: Members of the NATO RTG HFM-218

L.1 PURPOSE

To provide the political and military leadership with recommendations for dealing with the problem of military suicide.

L.2 TALKING ABOUT SUICIDE

- Be open and talk about suicide.
- Normalize such that you deal with mental health problems as you do with other medical problems. This would affect areas such as issuing or maintaining security clearance, eligibility for other health related services, and continuance of military career.

L.3 ROLE OF LEADERSHIP

- Implement measures that promote an open, inquisitive, empathic, trusting, proactive, interpersonal style in military leadership since these qualities are beneficial for a good operating unit, psychological fitness overall, and the prevention of suicide.

L.4 TRAINING

- Advocate for training programs that teach every service member:
  1) How to best recognize early signs of distress among his or her peers; and
  2) How to best identify specific warning signs of suicide in order to intervene as needed.
- Embed suicide prevention trainings into other programs.
- Provide training for optimal mental health and functioning during and after combat.
- Provide training on suicide prevention throughout military service, not just once in basic training.
- Provide suicide prevention training for nonmedical helping professionals, such as chaplains.

L.5 GATHERING DATA

- Implement standardized and systematic surveillance efforts within each nation to track military suicides and suicide attempts based on the World Health Organization (WHO) definitions.
- Based on data gathered, a suicide prevention policy for the nation and for the military can be established and reviewed every 5 years.

L.6 RESEARCH

- Support research studies, both quantitative and qualitative, on suicidal behaviors among military service members.
- Support research studies that explore evidence-based treatment for suicide and provide resources for the dissemination of these interventions by well-trained providers to service members.

L.7 PROGRAM EVALUATION

- Evaluate the effectiveness of the existing suicide prevention programs through different validated methods and continually incorporate feedback into improving the programs and efforts.
- Elicit feedback from service members on the effectiveness of training programs on a continual basis.

L.8 TREATMENT

- Provide access to evidence-based care for mental health conditions, including psychotherapy and medication.
- Treat service members early when suicidal thoughts and/or actions (e.g., attempts) occur to prevent eventual death by suicide.

L.9 ORGANIZATION

- If feasible for the military medical structure within the nation, create a division in mental health services between treatment (curative) and assessment. For example, a therapist who is assessing a service member for fitness for duty would not be the same person treating a service member for suicidal thoughts.
- Nations and their militaries implement and/or support programs for stigma reduction to increase help seeking behavior and decrease barriers to care.

L.10 NATIONAL STRATEGY

- All of the above need to be overarched by a national military policy on suicide prevention. Those nations that do not have a policy in place should first develop a strategic framework, subsequently implement the national strategy, and put efforts into systematically evaluating its potential impact.

Annex M − TECHNICAL ACTIVITY DESCRIPTION (TAD) HFM-218, RTG ON MILITARY SUICIDE

Activity Reference Number	HFM-218	**Activity Title** Military Suicide	**Approval** TBA
Type and Serial Number	RTG		**Start** March 2011 IS
Location(s) and Dates		1st Mtg 7-8 July 2011, RTA Paris (FRA) 2nd Mtg 10-11-12 Jan 2012, Oberammergau (DEU)	**End** March 2014
Coordination with Other Bodies		COMEDS	
NATO Classification of Activity		UU	**Non NATO Invited** Yes
Publication Data		TR	UU
Keywords		Suicide, Prevention, Military, Operational Readiness, Leadership, Psychological Health, Guidelines, Deployment	

I. BACKGROUND AND JUSTIFICATION (RELEVANCE TO NATO)

The protracted NATO operations are stressing our militaries. In particular, NATO combat operations have resulted in an increase of combat-related Post-Traumatic Stress Disorder (PTSD). Conditions such as PTSD, depression, alcohol misuse, aggressive behaviours, and/or sleep disorders (as possible manifestations of stress) are suspected to be linked to the observed rise in suicide rates in service members. For instance, a rise in suicide-related behaviours has been observed post Operation Iraqi-Freedom and Operation Enduring Freedom for American military personnel as well as anecdotally reported for other NATO countries.

Furthermore, there is emerging evidence that veterans of deployments are at increased risk for suicide post-service (Thoresen, 2006). In fact, for many NATO countries, there is a lack of information about suicide-related behaviours that may be linked to prior deployments. Within the past two decades, there has been a shift for many NATO countries, such as Norway, from the traditional UN peace keeping operations to enforcement operations under NATO command (Weisath, 2003). The noted change may have implications for the psychological health and suicide-related behaviours among service members and veterans.

With the increasing demands on troops, countries such as Slovenia expect a worsening of the prevalence of suicide-related behaviours among their military service members. Regional differences have been noted and our NATO collaboration is hoped to provide some understanding of such observed regional differences for the military.

Finally, numerous Partnership for Peace (PfP) countries are supporting operations in Afghanistan. Therefore, it is anticipated that these countries may face similar problems given their involvement. For example, Finland, Austria, and Sweden among others are currently deploying troops to Afghanistan. Experiences and observations noted by NATO member countries are hoped to assist these PfP countries in their suicide prevention efforts targeted at the military.

Suicide and suicide-related behaviours present a challenge for all NATO militaries. While some countries have established elaborate systems to monitor, evaluate, and report on these behaviours, other countries have presently very limited efforts in this area. There is generally a lack of even basic information regarding how military service impacts suicide and what activities may prevent or lessen suicide-related behaviours. To date, there has been no systematic effort across NATO member countries:

1) To track the prevalence of suicide and suicide-related behaviours among military service members; and
2) To identify best practices for military suicide prevention.

Identifying best practice guidelines applicable to current and future NATO military operations is a high priority. This RTG will address the basic information needs regarding suicide in the military, identify rates, risk, and protective factors across nations and provide information regarding effective intervention and prevention measures. The RTG is being formed to focus its efforts on understanding international military suicide and suicide-related behaviours both for those actively serving in the military as well as veterans of deployments.

II. OBJECTIVE(S)

The main objectives of the RTG would include the following:

1) To administer a designed survey to NATO and non-NATO countries in order to enhance our understanding of current military suicide prevention efforts, best practices, and potential gaps for each country.
2) To create a platform to organize and make available materials pertaining to international military suicide.
3) To prepare a series of white papers covering key topics relevant to NATO leadership and members.

III. TOPICS TO BE COVERED

- Review of Scientific Literature on Military Suicide and Suicide-Related Behaviors.
- Review of Military Suicide Epidemiology.
- Risk and Protective Factors for Military Suicide and Suicide-Related Behaviors.
- Recommendations for Leadership in the Management of Suicide-Related Behaviors.
- Deployment and Re-Adjustment Related Stressors Associated with Suicide and Suicide-Related Behaviors.
- Interpersonal Factors, Suicide, and Suicide-Related Behaviors.
- Current Military Intervention Efforts Targeted at Suicide and Suicide-Related Behaviors.

- Evidence-Based Prevention, Intervention, and Postvention Efforts.
- Suicide and Suicide-Related Behaviors among Veterans.

IV. DELIVERABLES AND/OR END PRODUCT

1) Product **1A**: NATO Technical Report of Best Practices.
2) Product **1B**: Manuscript Formatted for Submission to Peer-Reviewed Journal.
3) Product **2**: Interactive Platform to Disseminate Information on International Military Suicide.
4) Product **3**: Six (6) White Papers.
5) Product **4**: Symposium at Scientific and/or Military Professional Meeting.

V. TECHNICAL TEAM LEADER AND LEAD NATION

Chair: Dr. Marjan GHAHRAMANLOU-HOLLOWAY, United States.

Co-Chair: Dr. Tanja LAUKKALA, Finland.

Lead Nation: United States.

VI. NATIONS WILLING/INVITED TO PARTICIPATE

NATO Nations and Bodies: Canada, Croatia, Czech Republic, Germany, Latvia, Netherlands, Norway, Portugal, Slovenia, United States.

PfP Nations: All PfP invited.

MD Nations: All MD invited.

ICI Nations: None.

Global Partners: Australia, Japan, New Zealand, Republic of Korea.

Contact/Other Nations: None.

VII. NATIONS AND BODIES PARTICIPATING

Australia, Belgium, Canada, Czech Republic, Denmark, Estonia, Finland, France, Germany, Italy, Latvia, Netherlands, Slovenia, United States.

VIII. NATIONAL AND/OR NATO RESOURCES NEEDED (PHYSICAL AND NON-PHYSICAL ASSETS)

Individual nation resources will be required to support team members' travel and participation in RTG meetings. Each nation will be asked to host a meeting in which the nation would provide the hosting facilities.

IX. CSO RESOURCES NEEDED

NATO resources may be requested for non-NATO member countries.

Funding for 2 Consultants who as Subject Matter Experts can serve Guest Speakers/advisors to the RTG.

X. ADDITIONAL INFORMATION

Panel Mentor: Col Jean-Robert BERNIER, Canada.

Limited Participation Technical Team: No.

Comments:

- Activity is open to all PfP, MD and selected Contact Countries (Australia, Japan, New Zealand and the Republic of Korea).
- Follow on to the HFM-ET 103.

Deliverables:

- Product **1A**: NATO Technical Report of Best Practices.
- Product **1B**: Manuscript Formatted for Submission to Peer-Reviewed Journal.
- Product **2**: Interactive Platform to Disseminate Information on International Military Suicide.
- Product **3**: Six (6) White Papers.
- Product **4**: Symposium at Scientific and/or Military Professional Meeting.

HP/E2DT: 2(5).

Approved at the 26th HFM PBM, Fall 2010 Amsterdam.

Approved by the RTB in DEC 2010 in Silent Procedure/Fast Track.

Annex N − TERMS OF REFERENCE (TOR)
HFM-218, RTG ON MILITARY SUICIDE

I. ORIGIN

A. Background

To date, there has been no systematic effort across NATO member countries to track suicide and suicide-related behaviours among military service members and to identify best practices for suicide prevention. For some NATO countries, the suicide rates have been on the rise possibly due to operational activities by the Armed Forces in countries such as Afghanistan. The United States has experienced a rise in the military suicide rates since the start of operations in Iraq and Afghanistan and the concern is that the observed increase may be mirrored in other nations supporting NATO operations.

Military service exposes individuals to physical and emotional stressors. While some service members may have sufficient resources to cope with the challenges of deployment and military service, others due to biological, psychological, and/or social risk factors, may be more predisposed to demonstrate suicide or suicide-related behaviours. We continue to have a limited understanding of the interplay amongst military risk and protective factors that may contribute to suicide and suicide-related behaviours.

Suicide or suicide-related behaviours may occur at any time during one's military career. The experience of a deployment or multiple deployments may place personnel at increased risk for suicide or suicide-related behaviours. In addition, the necessary readjustment and reintegration following deployment may exacerbate existing suicide risk factors. These risk factors may carry over following release from active duty. Moreover, military risk factors may interact with inherent genetic and cultural factors in the population of origin to result in suicide or suicide related behaviours.

Identifying best practice guidelines applicable to current and future NATO military operations is a high priority. This RTG will focus its efforts on both those actively serving in the military as well as veterans of deployments.

B. Justification (Relevance for NATO)

The protracted NATO operations are stressing our militaries. In particular, NATO combat operations have resulted in an increase of combat-related Post-Traumatic Stress Disorder (PTSD). Disorders such as PTSD, depression, alcohol misuse, aggressive behaviours, and/or sleep disorders (as possible manifestations of stress) as well as relationship problems are suspected to be linked to the observed rise in suicide rates in service members. For instance, a rise in suicide and suicide-related behaviours have been observed post Operation Iraqi-Freedom and Operation Enduring Freedom for American military personnel as well as anecdotally reported for other NATO countries.

Furthermore, there is emerging evidence that veterans of deployments are at increased risk for suicide post-service [2]. In fact, for many NATO countries, there is a lack of information about suicide-related behaviours that may be linked to prior deployments. Within the past two decades, there has been a shift for many NATO countries, such as Norway, from the traditional UN peace keeping operations to enforcement operations under NATO command [1]. The noted change may have implications for psychological health, suicide, and suicide-related behaviours among service members and veterans.

With the increasing demands on troops, countries such as Slovenia expect a worsening of the prevalence of suicide-related behaviours among their military service members. Regional differences have been noted and our NATO collaboration is hoped to provide some understanding of such observed regional differences for the military.

Finally, numerous Partnership for Peace (PfP) countries are supporting operations in Afghanistan. Therefore, it is anticipated that these countries may face similar problems given their involvement. For example, Finland, Austria, and Sweden among others are currently deploying troops to Afghanistan. Experiences and observations noted by NATO member countries are hoped to assist these PfP countries in their suicide prevention efforts targeted at the military.

II. OBJECTIVES

A. Description of the Area of Research and the Scope of the Activity

Suicide and suicide-related behaviours present a challenge for all NATO militaries. While some countries have established elaborate systems to monitor, evaluate, and report on these behaviours, other countries have presently very limited efforts in this area. There is generally a lack of even basic information regarding how military service impacts suicide and what activities may prevent or lessen suicide and suicide-related behaviours. This RTG will address the basic information needs regarding suicide in the military, identify rates, risk, and protective factors across nations and provide information regarding effective intervention and prevention measures.

B. Specific Goals of the RTG Activity and the Topics to Be Covered

The main objectives of the RTG include the following:

1) To administer a designed survey to NATO and non-NATO countries in order to enhance our understanding of current military suicide prevention efforts, best practices, and potential gaps for each country;
2) To create a platform to organize and make available materials pertaining to international military suicide;
3) To prepare a series of white papers covering key topics relevant to NATO leadership and members; and
4) To disseminate the RTG findings at an international scientific and/or military non-NATO professional conference.

C. Expected Products or Deliverables of the Technical Team (e.g., technical reports, meeting proceedings, field trial databases, computer models, etc.)

NATO Technical Reports:

A) Annual Report (NATO requirement).

B) Technical Report (Final RTG report; NATO requirement).

C) Governance – Meeting Minutes for Each of the 6 RTG Meetings.

RTG Deliverables (Refer to Annex A):

1) Product **1A**: NATO Technical Report of Best Practices.

2) Product **1B**: Manuscript Formatted for Submission to Peer-Reviewed Journal.

3) Product **2**: International Web Site to Disseminate Information on Military Suicide.

4) Product **3**: Six (6) White Papers – Topics may include: Prevalence and Probability Estimates; Mental Health Conditions and Suicide-Related Behaviors; Suicide Risk and Protective Factors; Deployment Cycle and Suicide; Comparison of Military and Veteran Suicide Rates; Alcohol, Impulsivity, and Suicide; Role of Leadership in Promoting Psychological Health and Preventing Suicide; Can Suicide Be Preventable? Suicide Myths and Facts; Does Talking about Suicide Lead to Suicide? Contagion Effects Following a Suicide.

5) Product **4**: Symposium at Scientific and/or Military Professional Meeting.

D. Overall Duration of the Technical Team

The RTG is expected to last 3 years and culminate in a symposium given at a non-NATO scientific or military professional conference.

III. RESOURCES

A. Membership

Participants in this RTG are expected to have expertise in military mental health, suicide prevention, clinical assessment and interventions for suicide, and/or research related to military mental health and suicide. The expertise provided by this Group will inform efforts to sustain service members in a variety of combat and operational environments.

Chair: Dr. Marjan GHAHRAMANLOU-HOLLOWAY, United States.

Co-Chair: Dr. Tanja LAUKKALA, Finland.

Nations and Bodies Participating: Australia, Belgium, Canada, Czech Republic, Denmark, Estonia, Finland, France, Germany, Italy, Latvia, Netherlands, Slovenia, United States.

B. National and/or NATO Resources Needed

Individual nation resources will be required to support team members' travel and participation in RTG meetings. Each nation will be asked to host a meeting in which the nation would provide the hosting facilities.

C. CSO Resources Needed

NATO resources may be requested for non-NATO member countries.

Funding for 2 Consultants who as Subject Matter Experts can serve as Guest Speakers/advisors to the RTG will be requested.

IV. SECURITY CLASSIFICATION LEVEL

The security level will be Unclassified/Unlimited.

V. PARTICIPATION BY PARTNER NATIONS

This activity is open for all PfP, MD and Selected Contact Countries (Australia, Japan, New-Zealand and the Republic of Korea).

See Membership.

VI. LIAISON

This RTG will link to HFM-179/RTG on *Moral Dilemmas and Mental Health Problems*, HFM-178/RTG on *Impact of Lifestyle and Health Status on Military Fitness*, HFM-203/RTG on *Mental Health Training* and HFM-164/RTG on *Psychological Aspects of Health Behaviours on Deployed Military Operations*. The Chair, HFM-218/RTG, will request their respective TORs, TAPs and POWs to minimize potential redundancy and enhance the accomplishment of HFM-218/RTG's objectives by exchanging relevant information. When appropriate, HFM-218/RTG members will engage more actively with HFM-179/RTG, HFM-178/RTG, HFM-203/RTG, and HFM-164/RTG by attending each other's RTG meetings. The Chair, HFM-218/RTG, will contact the Chairs of the other panels listed above. The TOR will be provided and minutes from the RTG will be provided to the Chairs.

In addition, contact will be made with the Chair of the COMEDS Military Mental Health Expert Panel (MMHEP). MMHEP produces NATO Standardization Agreements on topics similar to those addressed by RTGs and would serve to strengthen ties to other members and nations participating in NATO activities in addition to providing guidance on practical and user-friendly products to be delivered by this RTG.

Additional links will be established with the European Symposium on Suicide and Suicide Behaviour (ESSSB), American Association of Suicidology (AAS), International Association for Suicide Prevention (IASP), U.S. Department of Defense Suicide Prevention and Risk Reduction Committee (SPARRC) and the Technical Cooperation Program (TTCP) Technical Panel 13 Psychological Support during Military Operations.

VII. REFERENCES

[1] Mehlum, L. and Weisaeth, L. (2002). Predictors of posttraumatic stress reactions in Norwegian U.N. peacekeepers 7 years after service. Journal of Traumatic Stress, 15(1), 17-26.

[2] Thoreen, S., Mehlum, L., Roysamb, E. and Tonnessen, A. (2006). Risk factors for completed suicide in veterans of peacekeeping: Repatriation, negative life events, and marital status. Archives of Suicide Research, 10(4), 353-363.

Annex O − PROGRAMME OF WORK (POW)
HFM-218, RTG ON MILITARY SUICIDE

DESCRIPTION, SCHEDULE, AND MILESTONES

HFM-ET 103 Meeting – Date: June 1-3, 2010; Location: Heidelberg, GERMANY (Hosted by U.S.)

- Update TAP
- Establish draft ToR
- Establish draft PoW

Between ET and 1st RTG Meeting: Plan for 1st RTG Meeting

NATO Governance:

- Identify Participants
- Establish Meeting Objectives and Agenda
- Distribute Approved TAP, Draft PoW, and Draft ToR

1st RTG Meeting – Date: July 2011; Location: CSO, Neuilly-sur-Seine, FRANCE (Hosted by NATO)

NATO Governance:

- Review/Update TAD
- Finalize PoW
- Finalize ToR
- Draft Meeting #1 Minutes

Products:

A. Product 1: NATO Technical Report and Manuscript

- Discuss the content areas of the survey to be developed
- Establish subgroups to further review the content areas of the survey
- Make decisions on survey administration, participating nations, and general methodology

B. Product 2: International Web Site for Military Suicide

Not applicable

C. Product 3: Six (6) White Papers

- Distribute format for white papers
- Identify potential topics
- Identify 2 panel members to prepare the 1-page White Paper (#1)

D. Product 4: Presentation at a Scientific and/or Military Non-NATO Symposium

Not applicable

Between 1st and 2nd RTG Meetings: Plan for 2nd RTG Meeting

NATO Governance:

- Distribute Meeting #1 Minutes
- Submit Final TAP, PoW, and ToR to HFM

Products:

A. Product 1: NATO Technical Report and Manuscript

- Prepare nation-specific presentation (table + 1 paragraph) on current suicide data based on content areas identified (template provided)
- Post nation-specific presentation on NATO SharePoint by Dec 15, 2011
- Review presentations posted on SharePoint prior to arrival to 2nd meeting
- Submit the summary to Chair for distribution to panel members

B. Product 2: International Web Site for Military Suicide

Not applicable

C. Product 3: Six (6) White Papers

- Submit White Paper #1 to Chair and disseminate to panel members

D. Product 4: Presentation at a Scientific and/or Military Non-NATO Symposium

Not applicable

2nd RTG Meeting – Date: January 2012; Location: Oberammergau, GERMANY

NATO Governance:

- Finalize Meeting #1 Minutes
- Draft Meeting #2 Minutes

Products:

A. Product 1: NATO Technical Report and Manuscript

- Review existing data table provided by each RTG participating nation
- Prepare subgroup summaries for assigned content area
- Submit the summary to Chair for distribution to panel members
- Draft 1st version of the survey
- Pilot test the survey and make further revisions as needed
- Generate final draft of the survey questions
- Discuss dissemination methodologies for the survey

B. Product 2: International Web Site for Military Suicide

- Review existing suicide prevention platforms such as the one developed by the Suicide Prevention and Risk Reduction Committee (SPARRC)
- Identify content for web-site and discuss security clearance issues

C. Product 3: Six (6) White Papers
- Finalize White Paper #1
- Identify 2 panel members to prepare the 1-page White Paper (#2)

D. Product 4: Presentation at a Scientific and/or Military Non-NATO Symposium
Not applicable

Between 2nd and 3rd RTG Meetings: Plan for 3rd RTG Meeting

NATO Governance:
- Distribute Meeting #2 Minutes

Products:

A. Product 1: NATO Technical Report and Manuscript
- Prepare a list of participating countries

B. Product 2: International Web Site for Military Suicide
- Consider alternative site models
- Build partnerships with suicide prevention community

C. Product 3: Six (6) White Papers
- Submit White Paper #1 to HFM
- Submit White Paper #2 to Chair and disseminate to panel members

D. Product 4: Presentation at a Scientific and/or Military Non-NATO Symposium
Not applicable

3rd RTG Meeting – Date: June 2012; Location: Washington, DC, UNITED STATES

NATO Governance:
- Finalize Meeting #2 Minutes
- Draft Meeting #3 Minutes

Products:

A. Product 1: NATO Technical Report and Manuscript
- Generate final survey
- Determine start date and end date of survey

B. Product 2: International Web Site for Military Suicide
- If identified, present information on alternate site(s)
- Consider platform features and content domains for presentation

C. Product 3: Six (6) White Papers
- Finalize White Paper #2
- Identify 2 panel members to prepare the 1-page White Paper (#3)

D. Product 4: Presentation at a Scientific and/or Military Non-NATO Symposium
Not applicable

Between 3rd and 4th RTG Meetings: Plan for 4th RTG Meeting

NATO Governance:
- Distribute Meeting #3 Minutes

Products:

A. Product 1: NATO Technical Report and Manuscript
- Distribute survey to participating countries
- Distribute database of initial survey findings

B. Product 2: International Web Site for Military Suicide
- Create prototype site
- Obtain feedback from panel members on the prototype site

C. Product 3: Six (6) White Papers
- Submit White Paper #2 to HFM
- Submit White Paper #3 to Chair and disseminate to panel members

D. Product 4: Presentation at a Scientific and/or Military Non-NATO Symposium
Not applicable

4th RTG Meeting – Date: January 2013; Location: Amsterdam, NETHERLANDS

NATO Governance:
- Finalize Meeting #3 Minutes
- Draft Meeting #4 Minutes

Products:

A. Product 1: NATO Technical Report and Manuscript
- Discuss findings
- Outline survey findings in abstract format
- Summarize findings in written format
- Identify writing subgroups and associated leaders

B. Product 2: International Web Site for Military Suicide
- Demo the web-site
- Access “test” site and problem solve as needed
- Discuss web-site governance

C. Product 3: Six (6) White Papers
- Finalize White Paper #3
- Identify 2 panel members to prepare the 1-page White Paper (#4)

D. Product 4: Presentation at a Scientific and/or Military Non-NATO Symposium
Not applicable

Between 4th and 5th RTG Meetings: Plan for 5th RTG Meeting

NATO Governance:
- Distribute Meeting #4 Minutes

Products:

A. Product 1: NATO Technical Report and Manuscript
- Prepare subgroup technical group sections on findings
- Send technical report sections to Chair for preparation of initial findings report and dissemination to panel members

B. Product 2: International Web Site for Military Suicide
- Launch web-site

C. Product 3: Six (6) White Papers
- Submit White Paper #3 to HFM
- Submit White Paper #4 to Chair and disseminate to panel members

D. Product 4: Presentation at a Scientific and/or Military Non-NATO Symposium
Not applicable

5th RTG Meeting – Date: June 2013; Location: Tallinn, ESTONIA

NATO Governance:
- Finalize Meeting #4 Minutes
- Draft Meeting #5 Minutes

Products:

A. Product 1: NATO Technical Report and Manuscript
- Review and edit the technical report

B. Product 2: International Web Site for Military Suicide
- Further solidify content for web-site

C. Product 3: Six (6) White Papers
- Finalize White Paper #4
- Identify 2 panel members to prepare the 1-page White Paper (#5) and White Paper (#6)

D. Product 4: Presentation at a Scientific and/or Military Non-NATO Symposium

- ☐ Prepare Symposium[1] submission to scientific and/or military conference

Between 5th and 6th RTG Meetings: Plan for 6th RTG Meeting

NATO Governance:

- ☐ Distribute Meeting #5 Minutes

Products:

A. Product 1: NATO Technical Report and Manuscript

- ☐ Make final edits

B. Product 2: International Web Site for Military Suicide

- ☐ Gather usage information and feedback

C. Product 3: Six (6) White Papers

- ☐ Submit White Paper #4 to HFM
- ☐ Submit White Papers #5 and #6 to Chair and disseminate to panel members

D. Product 4: Presentation at a Scientific and/or Military Non-NATO Symposium

- ☐ Obtain appropriate approvals from NATO HFM for submission
- ☐ Symposium presentation to be submitted to preferably a European Suicide Prevention Meeting to disseminate HFM-RTG findings

6th RTG Meeting – Date: January 2014; Location: London, UNITED KINGDOM

NATO Governance:

- ☐ Finalize Meeting #5 Minutes
- ☐ Draft and Finalize Meeting #6 Minutes

Products:

A. Product 1: NATO Technical Report and Manuscript

- ☐ Finalize Report
- ☐ Draft 1st Version of Manuscript

B. Product 2: International Web Site for Military Suicide

- ☐ Review web site and make any necessary final modifications

C. Product 3: Six (6) White Papers

- ☐ Finalize White Papers #5 & #6
- ☐ Submit White Papers #5 & #6 to HFM

[1] Note: Non-NATO Symposium.

D. Product 4: Presentation at a Scientific and/or Military Non-NATO Symposium

- ☐ Symposium at Scientific and/or Military Meeting

Updated List of Nations Agreeing to Participate

12 NATO Nations: Belgium, Canada, Czech Republic, Denmark, Estonia, France, Germany, Italy, Latvia, Netherlands, Slovenia, United States.

2 Non-NATO Nations: Australia and Finland.

Nations Expressing Interest: Croatia.

Manpower

Confirmed national or agency contributions in terms of manpower:

- Participation includes regular meetings (e.g., 2 RTG meetings per year of 5 days each, including travel days), supplemental meetings (e.g., sub-group participation may require 2 – 3 additional 2 – 3 day meetings throughout the RTG), and email and/or telephone exchanges (e.g., on an as-needed basis). Nations that agree to host an RTG meeting will need to provide additional manpower and resources (at the minimum, a meeting room and equipment for audio-visual presentations).

Software

Agreement on hardware and software to be used for editing of reports from the team: All materials will be developed using Microsoft compatible software.

Limited Participation

A statement with sufficient justification if the Technical Team requests to close its activity as a Limited Participation Technical Team: Does not apply.

Participant Contact Information

Please refer to Annex B for a complete list.

Annex P − TIMELINE

Table P-1: Timeline for and Summary of NATO RTG HFM-218 Activities.

Meeting #	NATO Governance	Product 1: NATO Technical Report and Manuscript	Product 2: International Web Site for Military Suicide	Product 3: Six (6) White Papers	Product 4: Presentation at a Scientific and/or Military Non-NATO Symposium
1	(1) Review/Update TAD (2) Finalize PoW (3) Finalize ToR (4) Draft Meeting #1 Minutes	(1) Discuss the content areas of the survey to be developed (2) Establish subgroups to further review the content areas of the survey (3) Make decisions on survey administration, participating nations, and general methodology	Not Applicable.	(1) Distribute format for white papers (2) Identify potential topics (3) Identify 2 panel members to prepare the 1-page White Paper #1	Not Applicable
Between Meetings 1 and 2	(1) Distribute Meeting #1 Minutes (2) Submit Final TAP, PoW, and ToR to HFM	(1) Prepare nation-specific presentation (table + 1 paragraph) on current suicide data based on content areas identified (template provided) (2) Post nation-specific presentation on NATO SharePoint by Dec 15, 2011	Not Applicable.	(1) Submit White Paper #1 to Chair and disseminate to panel members	Not Applicable

Meeting #	NATO Governance	Product 1: NATO Technical Report and Manuscript	Product 2: International Web Site for Military Suicide	Product 3: Six (6) White Papers	Product 4: Presentation at a Scientific and/or Military Non-NATO Symposium
Between Meetings 1 and 2 (cont'd)		(3) Review presentations posted on SharePoint prior to arrival to 2nd meeting (4) Submit the summary to Chair for distribution to panel members			
2	(1) Finalize Meeting #1 Minutes (2) Draft Meeting #2 Minutes	(1) Review existing data table provided by each RTG participating nation (2) Prepare subgroup summaries for assigned content area (3) Submit the summary to Chair for distribution to panel members (4) Draft 1st version of the survey (5) Pilot test the survey and make further revisions as needed (6) Generate final draft of the survey questions (7) Discuss dissemination methodologies for the survey	(1) Review existing suicide prevention platforms such as the one developed by the Suicide Prevention and Risk Reduction Committee (SPARRC) (2) Identify content for web-site and discuss security clearance issues	(1) Finalize White Paper #1 (2) Identify 2 panel members to prepare the 1-page White Paper #2	Not Applicable
Between Meetings 2 and 3	(1) Distribute Meeting #2 Minutes	(1) Prepare a list of participating countries	(1) Consider alternative site models (2) Build partnerships with suicide prevention community	(1) Submit White Paper #1 to HFM (2) Submit White Paper #2 to Chair and disseminate to panel members	Not Applicable

Meeting #	NATO Governance	Product 1: NATO Technical Report and Manuscript	Product 2: International Web Site for Military Suicide	Product 3: Six (6) White Papers	Product 4: Presentation at a Scientific and/or Military Non-NATO Symposium
3	(1) Finalize Meeting #2 Minutes (2) Draft Meeting #3 Minutes	(1) Generate final survey (2) Determine start date and end date of survey	(1) If identified, present information on alternate site(s) (2) Consider platform features and content domains for presentation	(1) Finalize White Paper #2 (2) Identify 2 panel members to prepare the 1-page White Paper #3	Not Applicable
Between Meetings 3 and 4	(1) Distribute Meeting #3 Minutes	(1) Distribute survey to participating countries (2) Distribute database of initial survey findings	(1) Create prototype site (2) Obtain feedback from panel members on the prototype site	(1) Submit White Paper #2 to HFM (2) Submit White Paper #3 to Chair and disseminate to panel members	Not Applicable
4	(1) Finalize Meeting #3 Minutes (2) Draft Meeting #4 Minutes	(1) Discuss findings (2) Outline survey findings in abstract format (3) Summarize findings in written format (4) Identify writing subgroups and associated leaders	(1) Demo the web-site (2) Access "test" site and problem solve as needed (3) Discuss web-site governance	(1) Finalize White Paper #3 (2) Identify 2 panel members to prepare the 1-page White Paper #4	Not Applicable
Between Meetings 4 and 5	(1) Distribute Meeting #4 Minutes	(1) Prepare subgroup technical group sections on findings (2) Send technical report sections to Chair for preparation of initial findings report and dissemination to panel members	(1) Launch web-site	(1) Submit White Paper #3 to HFM (2) Submit White Paper #4 to Chair and disseminate to panel members	Not Applicable.

Meeting #	NATO Governance	Product 1: NATO Technical Report and Manuscript	Product 2: International Web Site for Military Suicide	Product 3: Six (6) White Papers	Product 4: Presentation at a Scientific and/or Military Non-NATO Symposium
5	(1) Finalize Meeting #4 Minutes (2) Draft Meeting #5 Minutes	(1) Review and edit the technical report	(1) Further solidify content for web- site	(1) Finalize White Paper #4 (2) Identify 2 panel members to prepare the 1-page White Paper #5 and White Paper #6	(1) Prepare Symposium[1] submission to scientific and/or military conference
Between Meetings 5 and 6	(1) Distribute Meeting #5 Minutes	(1) Make final edits	(1) Gather usage information and feedback	(1) Submit White Paper #4 to HFM (2) Submit White Papers #5 and #6 to Chair and disseminate to panel members	(1) Obtain appropriate approvals from NATO HFM for submission (2) Symposium presentation to be submitted to preferably a European Suicide Prevention Meeting to disseminate HFM-RTG findings
6	(1) Finalize Meeting #5 Minutes (2) Draft and Finalize Meeting #6 Minutes	(1) Finalize Report (2) Draft 1st Version of Manuscript	(1) Review web site and make any necessary final modifications	(1) Finalize White Papers #5 and #6 (2) Submit White Papers #5 and #6 to HFM	(1) Symposium at Scientific and/or Military Meeting
FINAL PRODUCTS	✓ Meeting Minutes to NATO	✓ NATO Technical Report of Best Practices ✓ Manuscript Formatted for Submission to Peer-Reviewed Journal	✓ Interactive Platform to Disseminate Information on International Military Suicide	✓ Six (6) White Papers	✓ Symposium Presentation by HFM Team

[1] Note: Non-NATO Symposium.

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14. Abstract

In accordance with the World Health Organization 2014 report, *Preventing Suicide: A Global Imperative*, the Human Factors and Medicine (HFM), Research Task Group (RTG) 218 Technical Report underscores that military suicide prevention must be recognized globally as a top-priority public health issue. This report's objectives are threefold: (1) to disseminate knowledge about current military suicide surveillance across countries; (2) to promote a global strategy for systematic, standardized, and continuing military suicide surveillance efforts; and (3) to contribute to the understanding, further examination, development, and dissemination of best practices in military suicide prevention. This multinational collaboration is an important first step towards promoting a global public health strategy for combating military suicide. A new task group, RTG HFM-277 (Leadership Tools for Suicide Prevention), has been formed to continue this international effort.

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