



# COMPREHENSIVE STUDY TO DEVELOP A PTSD FRAMEWORK FOR UNIFORMED PERSONNEL

Final Study Report

24 December 2021

**Uniformed Capabilities Support Division**



# CONTENTS

SUMMARY		3
1	BACKGROUND	4
2	METHODOLOGY	4
	Research Questions and Framework Scope	4
	Organization of the Study	5
	Study Design	5
	Survey Construction	6
	Literature Review Procedures	6
	Interview Procedures	7
	Coordination and Review Procedures	7
3	FINDINGS	7
	Survey Results	7
	Literature Review Results : Prevalence	11
	Literature Review Results : Risk and Protective Factors	13
	Literature Review Results : Prevention and Mitigation	16
	Literature Review Results : Current State of PTSD Science	16
	Interview Results	17
4	CONCLUSIONS	18
5	RECOMMENDATIONS	22
APPENDICES		
A	References	
B	PTSD Study Legislative Language	
C	PTSD Study Survey	



## SUMMARY

The Department of Operational Support conducted a study of PTSD in uniformed personnel participating in United Nations peace operations, as requested by the General Assembly. The goals of the Study were to provide a holistic analysis of the policy, legal, administrative, and financial aspects of the matter of compensating claims for disability due to PTSD, and to develop a comprehensive United Nations PTSD Framework that could become the skeleton of a sustainable and appropriate approach to the management of PTSD in uniformed military and police personnel deployed to United Nations peace operations.

The Uniformed Capabilities Support Division under the Office of Supply Chain Management of the Department of Operational Support assembled a Study Working Group, overseen by both a Steering Committee and Advisory Board. Three research methodologies were combined to answer Study questions : a 28-item survey of troop- and police-contributing countries (T/PCCs), multiple reviews of published scientific and governmental literature, and interviews of PTSD subject matter experts in a subset of TCCs and PCCs, United Nations peacekeeping missions and global entities. Of 111 Member States eligible to participate in the survey, 65 responded in whole or part, yielding a response rate of 58.6 %.

Responses to the survey suggest that a large majority of T/PCCs screen personnel for mental health problems such as PTSD both before and after deployment, although a number of these T/PCCs only screen for PTSD post-deployment if an individual reports mental health symptoms. A little more than half (56 %) of all responding Member States reported having a national practice for the assessment of claims for disability due to PTSD in uniformed personnel who had deployed to a United Nations peace operation. 12 responding Member States (19 %) reported planning to submit one or more claims for disability due to PTSD to the Secretariat in the future ; as many as 1,510 claims for PTSD disability may already be in process. A majority (84 %) of responding T/PCCs reported providing training in the recognition, prevention, and mitigation of PTSD to uniformed personnel, and 97 % of responding T/PCCs reported providing treatment for PTSD in military and police personnel and veterans.

Review of the small but growing scientific literature on PTSD in military personnel resulting specifically from deployment to UN peace operations found a broad range of prevalence rates, from 0 to 11%. No studies of PTSD in police personnel following a UN deployment were found. An examination of the much larger literature of PTSD in military and police personnel in other contexts found two useful prevalence rates : one was the base rate of PTSD in typical military or police populations (2 - 4 %), the other the higher rate of PTSD identified in populations who have deployed to a peace or combat operation (4 – 8 %). Women in uniform have a slightly higher prevalence of PTSD due to their greater exposure to sexual harassment and assault.

National approaches to PTSD management all employ some combination of the following eight elements : (1) Promoting comprehensive physical and mental health in uniformed personnel, (2) Screening of personnel for fitness prior to deployment, (3) Training in operational stress management prior to deployment, (4) Procedures for managing and mitigating acute stress during deployment, (5) Training in managing mental health during repatriation, (6) Screening of personnel for mental disorders after deployment, (7) Referring personnel who screen positive for treatment, and (8) Compensating personnel for work-related injuries and illnesses.

Significant differences exist between Member States in their capacities to perform PTSD management functions due to differences in national laws and policies regarding mental health, insurance systems, and the availability of mental health professionals.

The Study team recommends that the Secretariat compensate disability in uniformed personnel due to PTSD acquired in an active peace operation from current mission operating budgets. **For closed missions, it is recommended that the UN establish a reserve fund to pay compensation for PTSD claims, and that the fund derive its revenue from a charge of 0.5% of total troop and police personnel reimbursement cost to be charged against each peacekeeping and special political mission budget.** The proposed rate of 0.5% mirrors the rate established to fund compensation for death or permanent disability in civilian employees of the UN.

Finally, it is proposed that a sustainable and appropriate approach to the compensation of claims for disability due to PTSD in uniformed personnel deployed to peace operations include measures to prevent and mitigate PTSD, in order to reduce both the incidence of future disability due to PTSD and its severity. It is recommended that, upon approval by the General Assembly, the Secretariat develop a **detailed plan to implement a comprehensive PTSD Framework, including the establishment of consensus minimum standards for screening, training, and intervening to mitigate risk** during and following deployment to peace operations.



## BACKGROUND

In its resolution (51/218 E) of 17 June 1997, the General Assembly established a system of self-insurance based on uniform and standardized rates for the payment of awards in cases of death or permanent disability sustained by uniformed troops or police personnel for incidents occurring after 30 June 1997. Prior to 1997, each Troop- or Police-Contributing Country (T/PCC) compensated deceased or disabled uniformed personnel according to their own national standards, which vary widely, resulting in unequal treatment and perceptions of unfairness.<sup>1</sup> By 17 November 2008, when the Secretary-General reported on a comprehensive review of this new system of death and disability benefits, the Secretariat had paid compensation for death in 630 cases, and permanent disability in 190 cases, for military contingent and formed police unit members.

Since 2017, the Secretariat has received over 400 claims for permanent disability specifically due to post-traumatic stress disorder (PTSD), a chronic mental disorder that may follow exposure to an extremely threatening or horrific event or series of events, such as may occur during peace operations. Most of these PTSD claims involved now-closed missions conducted decades ago, for which no further funds for disability compensation were available. Hence, alternative sources of funding disability awards for closed missions needed to be found.

Emphasizing the need for early settlement of death and disability claims, but with a view to promoting a sustainable and appropriate approach to PTSD claims, the Advisory Committee on Administrative and Budgetary Questions (ACABQ) recommended on 1 May 2020 that the General Assembly request that the Secretary-General conduct a study for the consideration of the Assembly, providing a holistic analysis of the policy, legal, administrative, and financial aspects of the matter.<sup>2</sup> The PTSD study was to include procedures for processing claims, medical standards, budgetary methodology for liability estimation, and sources of funding (see Appendix B).

This document reports the methodology, findings, conclusions, and recommendations of the Comprehensive Study to Develop a PTSD Framework for Uniformed Personnel conducted by the Uniformed Capabilities Support Division (UCSD), as recommended by the ACABQ and requested by the General Assembly.

## METHODOLOGY

### RESEARCH QUESTIONS AND SCOPE OF THE DESIRED PTSD FRAMEWORK

The historical context in which the Advisory Committee requested a study to provide « a holistic analysis of policy, legal, administrative, and financial aspects of the PTSD matter » was the receipt by the Secretariat of a large number of claims for disability due to PTSD, the first ever received by the Secretariat specifically for disability due to this mental disorder. PTSD is an emerging clinical construct, first established as a mental disorder by the American Psychiatric Association in the Third Edition of its Diagnostic and Statistical Manual of Mental Disorders (DSM-III) in 1980, and incorporated into the Clinical Management version of the World Health Organization's Ninth International Classification of Diseases (ICD-9-CM), published January 1979. As global PTSD science has advanced knowledge about this newly recognized but serious and common disease, diagnostic criteria for PTSD have been refined through multiple editions of the DSM, as well as the Tenth and Eleventh Editions of the World Health Organization's International Classification of Diseases (ICD-10 and ICD-11), published in 1992 and 2019, respectively.

Given this historical context, the PTSD Study team concluded at the outset that the answers to the following questions would best empower the ACABQ, Secretary-General, and General Assembly to make decisions about the United Nations' approach to the PTSD problem that are evidence-informed, just, and in keeping with global best practices. The answers to these seven research questions will lay the foundation for a comprehensive United Nations PTSD Framework.

1. Is PTSD a globally recognized medical condition capable of causing permanent disability ?

---

<sup>1</sup> A/63/550

<sup>2</sup> A/74/809, para. 21



2. If so, what are current global standards for establishing a medical diagnosis of PTSD ?
3. What are current global standards for establishing the degree of permanent disability due to PTSD ?
4. Can the Secretariat expect to receive more claims in the future for disability due to PTSD acquired by uniformed personnel while deployed to UN peace operations ?
  - a. How many additional claims for disability due to PTSD in uniformed personnel are currently being processed by T/PCC Member States, which may soon be received by the Secretariat ?
  - b. At what rate should the Secretariat expect to receive future claims for disability due to PTSD acquired by uniformed personnel deploying to peace operations ?
5. What are current global best practices for budgeting funds for disability compensation due to PTSD ?
6. What are current global best practices for limiting the future health and financial burden due to PTSD in uniformed personnel through measures for prevention and mitigation ?
7. What role, if any, does gender play in risk for PTSD in peace operations ?

## ORGANIZATION OF THE PTSD STUDY

The Uniformed Capabilities Support Division (UCSD) of the Department of Operational Support (DOS) launched the Comprehensive Study to Develop a PTSD Framework for Uniformed Personnel in 2020 with the following structure.

- Working Group : 14 members
  - Chair : Director, UCSD
  - Consultant Psychiatrist
  - Research team
  - Subject matter experts and stakeholders from the UN Secretariat (UCSD, DHMOSH, OMA and Police Division)
- Steering Committee
  - Chair : Assistant Secretary-General for Supply Chain Management
  - Representatives of the PTSD Study sponsor
- Advisory Board : 26 T/PCCs (see Appendix B)<sup>3</sup>
  - Military and Police Advisors to the Permanent Missions of 26 T/PCC Member States representing all five UN regions

## STUDY DESIGN

An holistic analysis of the policy, legal, administrative, and financial aspects of PTSD as an occupational hazard for UN peace operations requires the integration of information of many different kinds. Included must be hard data such as the findings of research on the epidemiology, diagnosis, and prevention of PTSD in uniformed personnel, at a minimum, but also softer forms of knowledge such as descriptions of current policies and practices for the prevention, screening, or compensation of PTSD by Member States and international organizations, as potential best practices.

The Study Working Group (WG) therefore elected to design and execute a mixed-methods study employing three parallel research methodologies :

- A survey of T/PCC Member States
- Multiple focused reviews of current scientific and governmental publications
- Interviews of a representative subset of T/PCC Member States, UN Missions, and global entities

<sup>3</sup> A/75/849, para. 60



The following table lists the seven component research efforts that comprised the overall PTSD Study, along with which of the seven research questions, posed above, were targeted by each component.

PTSD Study Components		Research Questions
1.	Survey of T/PCC Member States	1, 4, 6, 7
2.	Literature review : Prevalence and time course for recognition of PTSD	4
3.	Literature review : Risk and protective factors for PTSD	6, 7
4.	Literature review : Prevention and mitigation of PTSD	6, 7
5.	Literature review : Gender and PTSD	1, 4, 6, 7
6.	Literature review : Current state of global PTSD science and best practices	1, 2, 3, 4, 5, 6, 7
7.	Interviews of select T/PCC Member States, Missions, and global entities	1, 2, 3, 4, 5, 6, 7

## SURVEY CONSTRUCTION

The Study team developed a 28-item survey, comprising a mixture of multiple choice and text input questions, as our primary means of learning about current experiences and practices by T/PCCs regarding PTSD acquired by uniformed military or police personnel as a result of deployment to United Nations peace operations (Appendix C). The survey was addressed to the Military and Police Advisors of T/PCCs, with the instruction to respond to the survey twice — once for military experiences and practices and once for police experiences and practices — if a Member State has contributed both types of uniformed personnel to UN peace operations. Survey instructions also encouraged respondents to coordinate their answers to survey questions with appropriate subject matter experts in their organizations.

The survey was divided into three sections, as follows :

1. Screening for PTSD and prevalence in uniformed personnel
2. Repatriation practices, recognition of PTSD, and disability claim submissions
3. Prevention and mitigation of PTSD

## LITERATURE REVIEW PROCEDURES

The Study team performed two types of literature reviews : (1) broad searches of indexed scientific publications using keyword search terms, seeking to capture the breadth of current knowledge about specific aspects of PTSD due to peace operations ; and (2) more in-depth searches of scientific, governmental, and other institutional publications, seeking to explore knowledge and practices about more narrow topics of interest.

Keyword searches were performed as follows. For each keyword search (e.g., using the terms « PTSD Peacekeeping » or « PTSD Gender »), researchers queried both the medical index, PUBMED (sponsored by the US National Institutes of Health), and the psychological sciences index, PsycINFO (sponsored by the American Psychological Association). After removing duplicates and publications of no relevance to the current project from the lists of citations returned from these queries, researchers acquired full-text copies in English of the remaining citations, which were then read and integrated into a set of findings and conclusions about each topic.

Our second type of literature review did not examine all citations tagged with a particular set of keywords, and therefore, did not provide as broad a perspective on each topic of interest. Rather, these focused searches sought to find the most reliable and useful publications of all types (scientific, governmental, institutional), often found as references in other widely read publications.



## INTERVIEW PROCEDURES

The Study team sought to conduct informal interviews of consenting MILADs, POLADs, and mental health subject matter experts from a representative subset of TCCs and PCCs and experts from relevant global entities, in order to develop a fuller understanding of the current range of experiences and practices for the screening, prevention, and mitigation of PTSD in military and police personnel. Our objective was to interview representatives of both TCCs and PCCs from across the spectrum, including from both advanced and developing countries, and across multiple UN geographic regions, especially those with recent deployments to high- or low-risk UN peace operations.

Each interview was structured around the same set of initial questions, the answers to which usually prompted follow-up questions.

1. Have you identified PTSD in your uniformed personnel ?
2. Do you have a national system of compensation for disability due to PTSD ?
3. Do you plan to submit claims for disability due to PTSD acquired in a peace operation to the Secretariat ?
4. Do you screen uniformed personnel for PTSD after returning from a deployment to a UN peace operation ?
5. Do you have procedures for the prevention or mitigation of PTSD in uniformed personnel ?

Interviews were conducted virtually by a small team from the Working Group led by the Consultant Psychiatrist. Interviews were not recorded but notes were taken. In many cases, supporting documents such as policy statements, procedural manuals, and training materials were also obtained from interviewed T/PCCs.

In order to gather information from the field, a series of additional online interviews were conducted with chiefs of military and police components as well as with medical officers in high-risk peacekeeping missions.

## COORDINATION AND REVIEW PROCEDURES

The Study team coordinated its emerging findings, conclusions, and recommendations with UN stakeholders at multiple points in the Study process. The following are the dates and names of stakeholder groups briefed and asked to comment on Study progress.

DATE	STAKEHOLDER
23 October 2020	PTSD Study Advisory Board - Initial briefing / consultation
17-18 December 2020	PTSD Study Advisory Board, all T/PCCs – Briefing / consultation on PTSD survey
24 March 2021	Military and Police Advisors Community (MPAC)
11 June 2021	PTSD Study Steering Committee
02 July 2021	PTSD Study Advisory Board
14 September 2021	PTSD Study Workshop for MILADs and POLADs

The Study's broadest coordination effort, the Workshop conducted virtually on 14 September 2021, was attended by 101 representatives of 63 Member States. In addition, researchers obtained confidential peer review of key scientific elements of the Study's evolving PTSD Framework from a select group of world experts in PTSD in uniformed personnel, including researchers from several countries who have published studies of PTSD in military or police personnel who had deployed to UN peace operations.

## FINDINGS



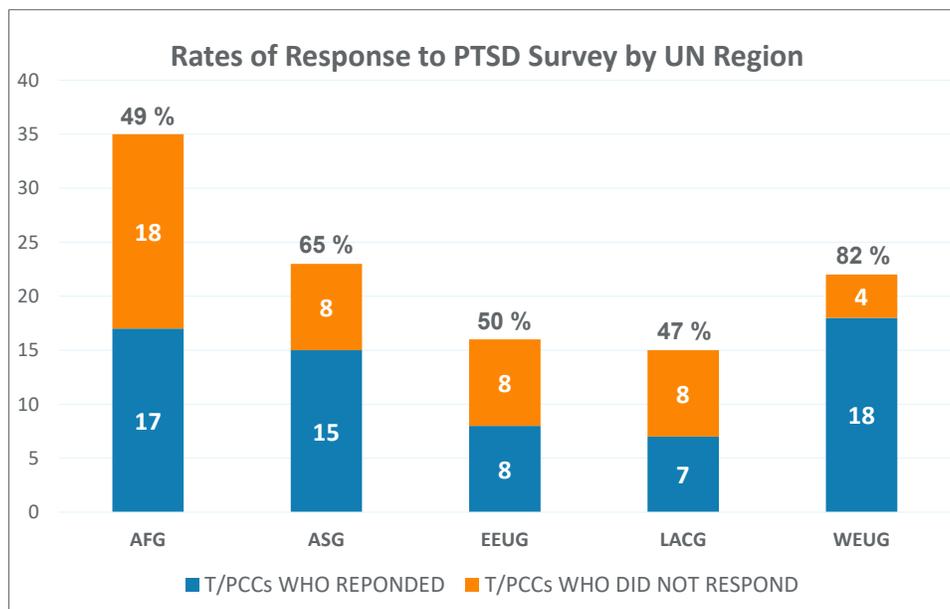
## SURVEY OF TROOP AND POLICE CONTRIBUTING COUNTRIES

The survey was distributed electronically to the military and police representatives of 111 UN Troop- and Police-Contributing Countries on 21 December 2020. These recipients of the Survey represented 124 Troop- or Police-Contributing Member States minus 13 who were exempted from participation because they had not deployed personnel to a UN Mission since 2002.

Each T/PCC received two submission links ; one for military and one for police personnel. In addition, 4 T/PCCs requested additional military service-branch links so that army, navy and air force could respond separately to the survey. Survey submissions were closed two and a half months later, in March 2021.

Of the 111 Member States who received the survey, 59 T/PCCs submitted at least one full survey response, and another 6 T/PCCs answered the survey in part. This yielded surveys from 65 countries for analysis, for a total **response rate of 65 / 111 = 58.6 %**.

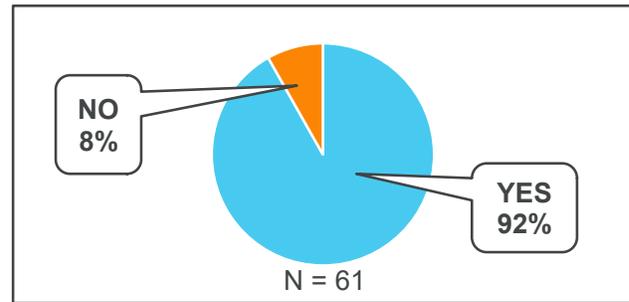
Responses to the survey were not equally distributed across the five UN regions, which limited our ability to draw generalizable conclusions from survey results. As depicted in the chart below, rates of response by region varied from 47 to 82 %, with highest response rates in Western European and Asia-Pacific groups. On the other hand, responses were received from nearly half of all Member States in every region, which strengthens the generalizability of Study conclusions.



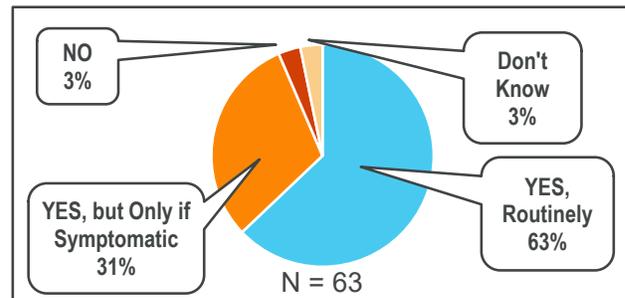


## SECTION 1 RESULTS: SCREENING FOR PTSD AND PREVALENCE IN UNIFORMED PERSONNEL

Q1. Does your country currently screen uniformed personnel for mental health problems before they deploy to a UN peace operation?

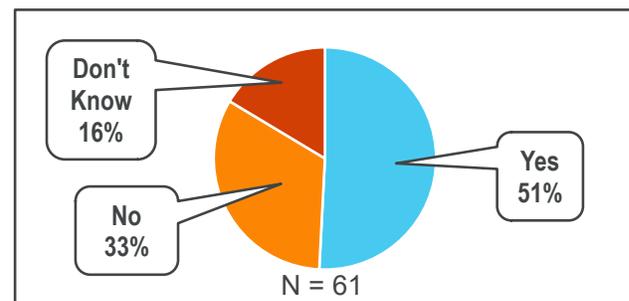


Q4. Does your country currently screen uniformed personnel for mental health problems such as PTSD after repatriation from UN peace operations?

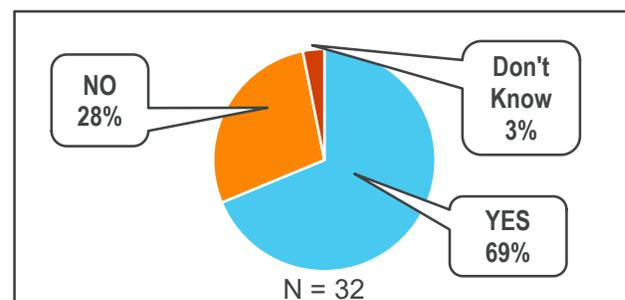


Hence, nearly all Member States who responded to the Survey reported screening uniformed personnel for mental health problems such as PTSD prior to each deployment (92 %) and after repatriation from each UN deployment (94 %). Of the 59 Member States who reported screening for mental health problems such as PTSD post-deployment, most (63 %) screen everyone routinely, whether or not reporting current problems, whereas 37 % reported screening only when an individual reported having mental health problems.

Q7. Has your country identified uniformed personnel who have acquired PTSD following deployment to a UN peace operation?



Q8. Does your country have data on the prevalence of PTSD among your uniformed personnel following their deployment(s) to UN peace operations?



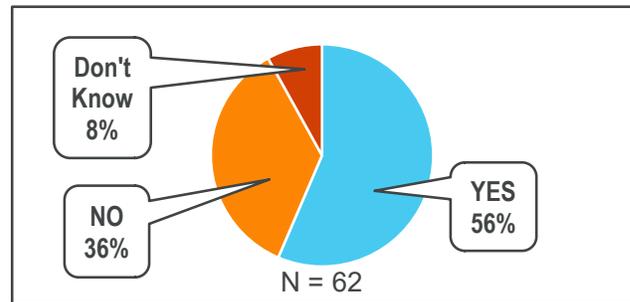


Of the 22 Member States who responded YES to Question 8:

- 17 (77 %) reported an observed prevalence rate of 0 - 5 %
- 3 (14 %) reported an observed prevalence rate of 6 - 10 %
- 1 (4.5 %) reported an observed prevalence rate of 11 - 20%
- 1 (4.5 %) reported no knowledge of national prevalence data

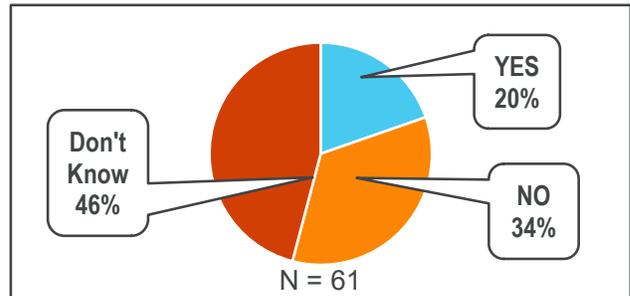
## SECTION 2 RESULTS: REPATRIATION PRACTICES, RECOGNITION OF PTSD, AND DISABILITY CLAIM SUBMISSIONS

Q12. Does your country have a formal practice for the assessment of claims for deployment-related PTSD among uniformed personnel for a UN peace operation?



It is noteworthy that only a little more than half (56 %) of all responding Member States reported having a national practice for the assessment of uniformed personnel for deployment-related disability due to PTSD acquired during a UN peace operation.

Q14. Does your country currently plan to submit one or more claims to the UN for deployment-related PTSD among uniformed personnel following deployment to a UN peace operation?



Of the 12 Member States who responded YES to Question 14:

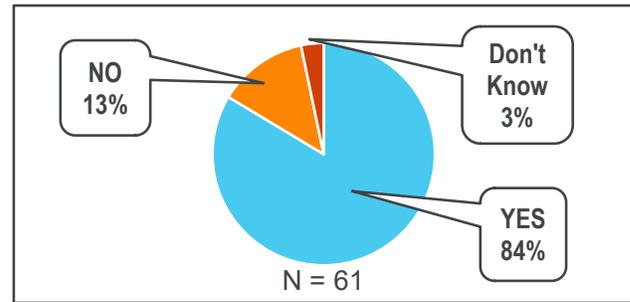
- 1 T/PCC reported planning to submit > 400 claims for PTSD to the UN
- 1 T/PCC reported planning to submit 201 - 400 claims for PTSD to the UN
- 1 T/PCC reported planning to submit 101 - 200 claims for PTSD to the UN
- 1 T/PCC reported planning to submit 51 - 100 claims for PTSD to the UN
- 5 T/PCCs reported planning to submit 0 - 50 claims for PTSD to the UN
- 3 T/PCCs reported not knowing how many claims would be submitted

Thus, the Secretariat could expect to receive between 754 and 1510 claims for disability due to PTSD in the near future.



### SECTION 3 RESULTS: PREVENTION AND MITIGATION OF PTSD IN UNIFORMED PERSONNEL

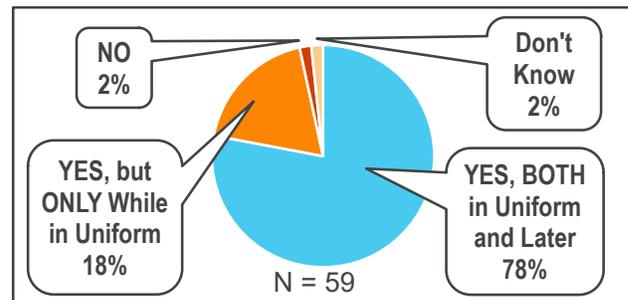
Q17. Do your country's military or police organizations currently provide training or other programs for uniformed personnel to enhance the recognition, prevention, or mitigation of PTSD following deployment to a UN peace operation?



Of the 51 Member States who responded YES to Question 17:

- 44 T/PCCs (86 %) reported providing PTSD-related training prior to each deployment
- 21 T/PCCs (41 %) reported providing PTSD-related training during each deployment
- 24 T/PCCs (47 %) reported providing PTSD-related training after each deployment
- 19 T/PCCs (37 %) reported providing PTSD-related training at other times even if not deploying

Q18. Does your country provide mental health care, including treatment for PTSD, for uniformed personnel who have deployed to UN peace operations?



Nearly all responding Member States (97 %) reporting providing mental health care, including treatment for PTSD, at least for individuals still in uniform. It was not possible to tell from Survey responses, alone, whether the 11 Member States who reporting providing mental health care only while in uniform truly did not provide mental health care to military and police veterans as well.

## LITERATURE REVIEW RESULTS

### PREVALENCE AND TIME COURSE FOR RECOGNITION OF PTSD IN UNIFORMED PERSONNEL

In this review of the literature, the Study team sought to find data from published studies to enable an evidence-informed estimate of the magnitude of the UN's liability for future claims for disability due to PTSD acquired in UN peace operations. This review addresses Research Question 4b., « With what incidence should the Secretariat expect to receive future claims for disability due to PTSD acquired by uniformed personnel deploying to peace operations ? »

Study researchers first searched for reports of studies of the prevalence of PTSD in military personnel as a direct result of deployment to a UN peace operation. Nine such studies were found, mostly of military personnel deployed to UN peace missions in the 1990s. **The rates of PTSD they reported for military personnel after deploying to a UN peace operation varied widely from 0 to 11 %.** No studies were found of rates of PTSD in police personnel who had deployed to a UN peace operation.

To provide a fuller answer to this fundamental question of prevalence, the Study team performed a series of keyword searches of medical and psychological literature, looking for studies of PTSD prevalence in personnel who had deployed to a NATO or other non-UN peace operation. The largest search employed the search terms, « PTSD Peacekeeping », which returned 92 citations from PUBMED and 98 from PsycINFO. After removing duplicates and articles of no bearing on the current project, researchers were left with 80 unique citations, all of



which were downloaded as full text articles. These 80 articles reported studies of PTSD in UN or NATO peacekeepers **conducted by researchers in the following 16 Member States : Australia, Brazil, Canada, Denmark, Finland, Georgia, India, Ireland, Italy, Japan, Netherlands, Norway, New Zealand, Sweden, United Kingdom, and United States**. The only UN Region not represented in these studies of PTSD in peacekeeping was the African Group.

Twenty-four of these 80 research papers reported prevalence data, and one paper (Souza et al., 2011) reported a meta-analysis of 20 studies of PTSD prevalence in peacekeepers published between 1997 and 2008. The 20 studies included in this meta-analysis compared PTSD rates in military personnel deployed to a number of peacekeeping locations, including Haiti, Lebanon, Somalia, South Africa, and Yugoslavia. PTSD prevalence rates in these 20 studies varied from 0.5 to 25.8 %, with a **pooled post-deployment prevalence rate of 5.3 %**.

This search of the scientific literature using the keywords, « PTSD Peacekeeping », yielded no information about rates of PTSD in police personnel deployed to peace operations, and it yielded very little about rates of PTSD in women who had deployed in uniform to peace operations. Therefore, two additional sets of searches of PUBMED and PsycINFO were conducted using the keywords, « PTSD Police » and « PTSD Women ».

The research team's literature search on PTSD in police personnel produced no articles reporting PTSD rates in police personnel who had deployed to a peace operation, but they did find reviews of studies of PTSD prevalence rates in police employed in other settings, for comparison. The Study's search for papers on rates of PTSD in women in uniform yielded 4 studies comparing rates of PTSD in men and women exposed to similar operational stressors.

The Study found two sets of prevalence rates from reviewing and comparing a number of high-quality studies with large study populations : one rate representing the base prevalence of PTSD in a uniformed population, irrespective of deployment status, and the other rate representing the higher prevalence of PTSD in uniformed personnel following their deployments to peace or combat operations. The first table below compares PTSD base prevalence rates in uniformed military and police personnel, both women and men, as reported in the four highest quality studies that were found (those which included the largest study populations of both women and men). The second table lists post-deployment PTSD prevalence rates in military personnel and veterans, both women and men.

BASE RATES OF PTSD IN UNIFORMED MILITARY AND POLICE POPULATIONS				
PTSD Rate	Study N	Population	Country	Reference
3.9%	40,299	Active police (men & women)	UK	Stevellink et al., 2020
3.7%	72,225	Active military (men & women)	USA	Smith et al., 2009
3.3%	2592	Active military women	Canada	Sareen et al., 2008
2.2%	5849	Active military men	Canada	Sareen et al., 2008
RATES OF PTSD FOLLOWING DEPLOYMENT TO PEACE OR COMBAT OPERATIONS				
PTSD Rate	Study N	Population	Country	Reference
8.0%	3461	Military deployed to Somalia	USA	Litz et al., 1997
6.7%	2342	Military women deployed to combat	USA	Jacobson et al., 2015
6.2%	10,605	Veterans deployed to Lebanon	Norway	Gjerstad et al., 2020
6.1%	2342	Military men deployed to combat	USA	Jacobson et al., 2015
5.4%	1198	Military deployed to peacekeeping	UK	Greenberg et al., 2008



It is noteworthy that observed base rates of PTSD in uniformed populations were remarkably similar, in the range of 2 to 4 %, regardless of personnel type or gender. The post-deployment PTSD prevalence rates the Study found, in the range of 4 to 8 %, were also remarkably similar for both men and women who had deployed to either peace or combat operations. This observed post-deployment PTSD rate of 4 to 8% is slightly higher than Souza et al.'s (2011) pooled rate of 5.4 %, but the present review included three large studies published subsequent to Souza and colleague's meta-analysis.

The study reported by Jacobson et al. (2015) was noteworthy in that it followed, over 7 years, two matched groups of 2,342 active duty military men and women whose demographics and military experiences, including deployments to Iraq or Afghanistan, were alike in every way except gender. The marginally higher rate of PTSD in military women (6.7 %) compared to men (6.1 %) was likely due to the higher incidence of sexual assault for military women than men. Jacobson and colleagues found no differences in PTSD rates due to combat experiences between women and men. The higher incidence of sexual assault for women than men also likely explains the higher base rate found by Sareen et al. (2008) for military women (3.3 %) than men (2.2 %).

No comparable study has yet been conducted to examine longitudinal PTSD rates in women and men who had deployed to peace operations.

Study researchers found no studies reporting data on the typical or extreme limits of delays in recognition of PTSD before receiving treatment or being compensated due to disability, in police or military personnel or veterans. A number of studies reported delays of years or decades before care or compensation were received. Even if symptoms began soon after the traumatic event, **it may take months or years for psychologically injured persons to acknowledge their own PTSD symptoms**, depending on their cultural backgrounds related to mental health matters, their surrounding community's understanding of PTSD, and the availability of relevant medical/social support systems. The Study team found ample evidence for the existence of a delayed subtype of PTSD, defined as any instance of PTSD that is only first recognized 6 months or more after the event that caused the injury. Delayed-onset PTSD is more common in occupations, such as military and police, that tend to meet the challenge of frequent exposure to extreme stressors with a culture of toughness and the expectation of being able to endure hardships. Delayed PTSD is more common in other professionals responsible for protecting others' welfare, such as healthcare workers, teachers, and firefighters. Delayed PTSD is also more likely to be more severe, disabling, and progressive.

## RISK FACTORS FOR PTSD IN UNIFORMED PERSONNEL DEPLOYING TO PEACE OPERATIONS

Risk factors for PTSD are relevant to the development of a sustainable and appropriate approach to PTSD claims, as requested by the General Assembly, primarily because of their importance to efforts to prevent or mitigate PTSD, as a way to reduce the future human and financial costs of deployment to peace operations. Risk and protective factors (the latter being risk factors with negative correlations to the health outcome of interest) are central to any public health-promotion effort because they are the best available levers into any health problem one hopes to address. One prominent example is the global effort to reduce the prevalence and severity of heart disease by reducing risk factors such as high blood pressure and smoking, and by enhancing protective factors such as diet and exercise. Another is the campaign to reduce the incidence of Covid-19 infections worldwide by reducing factors associated with risk, such as breathing the exhalations of nearby unmasked persons, and enhancing protective factors through vaccination.

Risk factors serve as the principal targets of prevention efforts aimed at entire populations, such as through information-dissemination campaigns. In his operational classification of disease prevention, Gordon (1983) called this level of prevention *Universal Prevention* because it included guidance of potential benefit to everyone, which can usually be applied without any professional assistance. Gordon's other two levels of disease prevention, *Selective* (those which target only high-risk groups of persons within a population), and *Indicated* (those which target only individuals already affected), also depend on reducing risk factors and enhancing protective factors, but in addition, they include other activities, such as screening or mitigation interventions.

The importance of risk factors for addressing the problem of PTSD in peace operations is reflected by the fact that 56 of the 80 articles the Study team reviewed from its search of medical and psychological literature databases using the keywords, « PTSD Peacekeeping », included data on observed risk factors. For comparison, the Study



team also looked at three broader meta-analyses of risk factors for PTSD from all civilian and military causes, including peacekeeping. No meta-analysis has yet been conducted of risk factor studies for PTSD caused exclusively by deployment to peace operations.

Meta-analyses are useful tools to learn about the causes and contributors to any disease because they typically compare results from all available studies at a given point in time, and because they typically only include risk and protective factors in their analyses for which *effect sizes* have been calculated. Effect sizes are numerical representations of the relative impact of each factor so they can be compared ; factors with a higher effect size account for more of the outcome, and hence, make better targets for prevention efforts than factors with lower, less significant effect sizes.

The table below summarizes the major findings of each of **three meta-analyses of risk factor studies for PTSD in adults : Brewin, Andrews, & Valentine (2000) from the UK, Ozer et al. (2003) from the US, and Xue et al. (2015) from China**. Only the last of these three meta-analyses exclusively examined risk factors for PTSD in military personnel, whereas the previous two studies included studies of PTSD in both military and civilian populations. These three studies are presented here in chronological order because each study intentionally built on the previous meta-analysis(es) ; the sequence tells a story. The table below lists the risk factors with the highest positive or negative effect sizes in each of three categories : pre-event (those which existed prior to the traumatic stressor experience), peri-event (those operating at the time of the traumatic stressor experience), and post-event (those which operated after the traumatic stressor experience). For each factor, we list that factor's observed effect size represented as either the square of the weighted average correlation co-efficient,  $r^2$ , for that factor, or the calculated Odds Ratio (OR) for that factor relative to some comparator condition. Both  $r^2$  and OR statistics permit comparisons between risk factors, though with slightly different significance. The  $r^2$  statistic approximates the percentage of the total outcome (in this case, PTSD symptom severity) accounted for by that particular risk factor ; e.g., a risk factor with a calculated  $r^2$  of 0.10 accounted for only 10 % of the observed outcome, but it accounted for twice as much risk for PTSD as a factor with an  $r^2$  of only 0.05. The OR statistic states by how much risk for PTSD is increased by that specific factor, such that a risk factor with an Odds Ratio (OR) of 3.0 accounted for twice as much risk for PTSD as a factor with an OR of 1.5. Factors with an OR of less than 1.0 can be considered protective factors, analogous to factors with an  $r^2$  of less than zero. Note that certain risk factors, such as concurrent life stress, can operate in more than one time period relative to the index traumatic event.

<b>COMPARISON OF THREE META-ANALYSES OF RISK FACTORS FOR PTSD</b>					
<b>META-ANALYSIS 1 : Brewin, Andrews, &amp; Valentine (2000) : 77 Studies</b>					
PRE-EVENT FACTORS	$r^2$	PERI-EVENT FACTORS	$r^2$	POST-EVENT FACTORS	$r^2$
Adverse childhood experiences	.04	Concurrent life stress	.10	Lack of social support	.16
Low intelligence	.03	Trauma severity	.05	Concurrent life stress	.10
Low socio-economic status	.02				
Female gender	.02				
Childhood abuse	.02				
Minority race	.00				
<b>META-ANALYSIS 2 : Ozer, Best, Lipsey, &amp; Weiss (2003) : 68 Studies</b>					
PRE-EVENT FACTORS	$r^2$	PERI-EVENT FACTORS	$r^2$	POST-EVENT FACTORS	$r^2$
Prior trauma	.03	Peritraumatic dissociation	.12	Perceived social support	-.08
Prior adjustment	.03	Peritraumatic emotions	.07		
Family psychiatric history	.03	Perceived life threat	.07		



META-ANALYSIS 3 : Xue, Ge, Liu, Kang, Wang, & Zhang (2015) : 32 Studies, All Military					
PRE-EVENT FACTORS	OR	PERI-EVENT FACTORS	OR	POST-EVENT FACTORS	OR
Branch of service (Army)	2.30	Discharged a weapon (yes)	4.32	Other psychological problems	2.83
Rank (non-officer)	2.18	Saw someone wounded / killed	3.12	Other stressful events	1.26
Prior adverse life events	1.99	Trauma severity	2.91	Post-deployment support	0.37
Smoking (yes)	1.87	Combat exposed	2.10		
Early life trauma	1.13				

The following conclusions are drawn from this comparison of these three meta-analyses of risk factors for PTSD in adults. First, **the strongest risk factors operate at the time of the traumatic event, including both characteristics and severity of the traumatic event, itself, and peritraumatic experiences of distress or dissociation** (abrupt loss of function during and immediately after the traumatic event). **The second strongest risk factors, and perhaps the strongest protective factors, are those which operate after the traumatic event, such as perceived social support.** The weakest risk factors are those operating before the event, such as gender, race, or a history of childhood adversity or previous exposure to traumatic events, whose contributions to risk for PTSD were each found to be less than 5 %, and therefore, within margins of error.

None of the 80 articles found through the Study's « PTSD Peacekeeping » keyword searches of PUBMED and PsycINFO reported a systematic review of risk factors for PTSD encountered exclusively in peacekeeping, comparable to the three meta-analyses just compared. The subset of 56 articles which reported risk factor findings associated with peace operations identified many of the same risk factors included in the above meta-analytic reviews, while also providing greater detail about specific risk factors, especially those related to the **meaning ascribed to traumatic events**. Over the past two decades, meaning has become an increasingly important consideration in understanding trauma and the impact of traumatic events, especially since the emergence of the concept of **moral injury as a prominent mechanism of psychological harm in military settings**.<sup>4</sup>

One of the 56 articles the Study found (Maguen, Litz, Wang, & Cook, 2004) deserves to be highlighted as a case study in how risk for PTSD due to peace operations is mediated by the meaning ascribed to the events experienced. Maguen and colleagues followed 204 soldiers longitudinally, from 2 to 3 weeks before deployment to Kosovo to 7 months after their repatriation. Based on interviews conducted post-deployment, Maguen and colleagues constructed a 17-item Negative Aspects of Peacekeeping Scale (NAPS), which they then asked participants to rate according to how detrimental each aspect was for their mental health and well-being. The table below lists the ten most negative aspects of peacekeeping in Kosovo along with the percentage of soldiers who rated each stressor experience as Moderately or Extremely Negative seven months after their return.

NEGATIVE ASPECTS OF PEACEKEEPING SCALE (NAPS)	
STRESSOR EXPERIENCE	PERCENT OF SOLDIERS MODERATELY OR EXTREMELY AFFECTED
Knowing that many of the war criminals were not arrested	73
Seeing children harmed by violence	67
Seeing civilians in despair	58

<sup>4</sup> The term *moral injury* was first coined by Jonathan Shay in his 1994 book, *Achilles in Vietnam: Combat Trauma and the Undoing of Character*, then further described in Litz et al. (2009), and measured empirically as a major risk factor for PTSD in military settings using the Moral Injury Events Scale (Nash et al., 2013). Moral injury is an enduring harm caused by one or more experiences characterized by betrayals of moral trust in high-stakes situations.



Being unable to identify who is an enemy	47
Witnessing the hatred between population subgroups	47
Civilians rejecting help	42
Experience with terrorist activity	31
Failing to make a lasting impact	30
Having to remain neutral in the face of conflict	29
Witnessing violence without being able to stop it	25

## PREVENTION AND MITIGATION OF PTSD IN UNIFORMED PERSONNEL

Only 5 of the 80 articles found in the « PTSD Peacekeeping » keyword search described an intervention intended to aid in prevention or mitigation of PTSD in peace operations, tabulated below. Only one of these papers, Adler et al., 2008, reported outcome data for a prevention activity, namely critical incident stress debriefing (CISD). In their trial, CISD failed to reduce PTSD symptoms in 312 soldiers relative to two control interventions : attendance at stress management classes (359 soldiers) or only taking the survey (281 soldiers).

REPORTS OF PREVENTION OR MITIGATION ACTIVITIES IN PEACE OPERATIONS		
REFERENCE	MISSION	PREVENTION OR MITIGATION INTERVENTIONS
Adler et al., 2008	Kosovo	Randomized controlled trial (RCT) of psychological debriefing
Bolton et al., 2003	Somalia	Self-disclosure to supportive significant others
Deahl et al., 2000	Yugoslavia	Operational stress training, psychological debriefing
Rosebush, 1998	Rwanda	Psychological debriefing
Sawamura et al., 2008	Golan Heights	Training about mental health issues, family support

Study researchers could find no integrative reviews of prevention or mitigation activities exclusively in uniformed peace operations. The broadest and most complete review they found of interventions to prevent or mitigate PTSD in uniformed personnel was published in 2014 by the US Institute of Medicine (IOM, now National Academy of Medicine), entitled *Preventing Psychological Disorders in Service Members and Their Families: An Assessment of Programs*. The IOM report could find no evidence to conclude that any prevention or mitigation intervention in use by the US Department of Defense (DoD) effectively improved psychological health or reduced risk for PTSD in service members or their families. The IOM recommended that **future efforts to prevent psychological disorders such as PTSD include the collection and analysis of measures of effectiveness, and that they be built on logic models which clearly define the outcome to be prevented or enhanced, and provide evidence that the intervention to be employed is capable of significantly affecting that outcome.**

## CURRENT STATE OF PTSD SCIENCE

The 2014 Institute of Medicine report on US DoD prevention activities draws sharp attention to an important fact about PTSD science worldwide : **PTSD is a very young disorder that we have only known about for 40 years, and which we do not yet understand well enough to reliably prevent.** Recent reviews of first line treatments for PTSD in uniformed personnel have been equally disappointing.<sup>5</sup> Efforts to develop and implement evidence-informed interventions to prevent or mitigate PTSD in peace operations must embrace this uncertainty, with a long-term goal to advance our understanding of the nature, causes, and cures of PTSD.

<sup>5</sup> See Steenkamp, Litz, Hoge, & Marmar (2015); and Steenkamp, Litz, & Marmar (2020), both in the Journal of the American Medical Association.



A second fact about the current state of PTSD science also deserves to be kept in clear focus : PTSD science is currently in a state of transition, possibly even approaching a state of crisis. In the two decades after the diagnosis of PTSD was first established in the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders, Third Edition (DSM-III), in 1980, five influential theorists offered models to understand the nature and causes of PTSD. Two theorists endorsed theories of PTSD as maladaptive coping with fear<sup>6</sup> ; their models of PTSD underpin the most widely used psychological treatments for PTSD, Prolonged Exposure and Cognitive Processing Therapy, as well as widely used approaches for prevention, such as psychological debriefing and stress inoculation training. The other three theorists offered models of PTSD as an enduring wound to a person's social identity.<sup>7</sup> These three identity-wounding models were never as popular as the maladaptive coping models because they did not lend themselves to brief interventions for treatment or prevention, and they did not promise complete recovery.

Three occurrences have prompted PTSD scientists and practitioners to revisit identity-wounding models of PTSD. The first is the already mentioned weakness of widely deployed treatments and prevention activities for PTSD based on conceptions of PTSD as maladaptive coping with fear. The second is the emergence and growing strength of the concept of moral injury as perhaps the predominant mechanism of psychological harm at any age, in both uniformed and civilian populations. The third is the growing global endorsement of the diagnosis of Complex Post-traumatic Stress Disorder (CPTSD) as perhaps the most common form of PTSD in uniformed personnel. A recent European study (Letic-Crepulja et al., 2020) found that 81 % of veterans being treated for PTSD had the more severe complex form of PTSD.

First defined by Judith Herman in her 1992 book, *Trauma and Recovery*, and now included in the World Health Organization's International Classification of Diseases, Eleventh Edition (ICD-11, 2019), CPTSD adds to the nightmares, flashbacks, and avoidance behaviors of simple PTSD three additional symptoms of (1) loss of control over painful emotions such as anger, guilt, and shame ; (2) diminished self-esteem ; and (3) difficulties trusting others and sustaining interpersonal relationships.

Uncertainties about the nature and causes of PTSD must be kept in clear focus as options for prevention and mitigation are considered for inclusion in the UN's PTSD Framework.

## INTERVIEW RESULTS

The Study team conducted informal interviews of military (M) and police (P) personnel and their PTSD subject matter experts in the following T/PCCs :

- AFG : Burkina Faso (M), Rwanda (M), Senegal (M)
- LACG : Brazil (M)
- WEUG : Australia (M), Australia (P), Canada (M), Denmark (M), Germany (M), Norway (M)

Researchers were unable to interview representatives of T/PCCs from ASG or EEUG.

Military and police leaders and their PTSD subject matter experts currently deployed to MINUSMA, MONUSCO and UNMISS were also interviewed.

Finally, the Study team also interviewed the President of the World Veterans Federation.

Interviews provided crucial contextual details about approaches to PTSD management across the spectrum from developing to developed countries, especially with respect to military troop deployments. Interviews also facilitated the exchange of training materials and other documents providing details of national approaches to PTSD, at least for a subset of TCCs. The Study did not interview sufficient police personnel to draw firm conclusions about current practices for PTSD management in PCCs.

Study interviews drew attention to both important commonalities and differences between individual T/PCCs. All Member States that were interviewed recognize PTSD as an occupational health problem for uniformed personnel,

<sup>6</sup> See Resick & Schnicke (1993), *Cognitive Processing Therapy for Rape Victims*, and Foa & Rothbaum (1997), *Treating the Trauma of Rape*.

<sup>7</sup> See Herman (1992), *Trauma and Recovery*; Janoff-Bulman (1992), *Shattered Assumptions*; and Shay (1994), *Achilles in Vietnam*.



and all devote resources to manage this problem. Many interviewed Member States have conducted high-quality research on PTSD arising from peace operations. A number recognize mental health stigma as a potential obstacle to recognition and treatment of PTSD. Most acknowledge that deployment-related mental health promotion is about more than preventing and mitigating PTSD ; depression, anxiety, substance abuse, and suicide can also occur as direct results of deployment to peace operations.<sup>8</sup>

At the same time, large differences were found between wealthier, more developed countries, and less wealthy developing countries in the quantities and types of resources available to manage the PTSD problem. The World Health Organization's (2018) *Mental Health Atlas 2017* reported a ten-fold difference in numbers of mental health facilities, and a 40-fold difference in numbers of per capita outpatient mental health visits between low- and high-income nations.

At one end of the spectrum, a few of the interviewed TCCs reported deploying entire teams of mental health professionals to provide support during deployment or to screen prior to repatriation. At the other end of the spectrum, a few of the TCCs reported relying entirely on primary care providers such as advanced practice nurses for the recognition and treatment of deployment-related PTSD. All interviewed Member States reporting relying on their primary healthcare personnel to deliver components of their PTSD prevention or mitigation activities.

Two other differences between Member States highlighted by interviews were differences in public policy and insurance systems related to PTSD. The WHO (2018) reported that one in four nations does not have a published national mental health policy, and two in four do not have national laws addressing mental health.

**Every interviewed T/PCC reported employing some combination of the following eight elements of comprehensive PTSD management in uniform :**

- Promoting comprehensive physical and mental health in uniformed personnel
- Screening of personnel for fitness prior to deployment
- Training in operational stress management prior to deployment
- Procedures for managing and mitigating acute stress during deployment
- Training in managing mental health during repatriation
- Screening of personnel for mental disorders after deployment
- Referring personnel who screen positive for treatment
- Compensating personnel for work-related injuries and illnesses

Interviews of T/PCC PTSD subject matter experts also drew attention to two challenges common to all Member States who provide compensation or assess for possible compensation for disability due to occupational PTSD : (1) the absence of a central database of personnel, by name, who deployed in contingent units to past UN peace operations, and (2) the absence of objective evidence to confirm that a particular potentially traumatic event actually occurred during a past UN contingent deployment.

## CONCLUSIONS

### 1. EMERGING GLOBAL RECOGNITION OF PTSD AS A DISABILITY

The global awareness that exposure to certain types of horrific events could inflict a lasting psychological wound has emerged gradually over the course the 20th and 21st Centuries, largely because of the many wars of this period. The first sets of criteria for the diagnosis of post-traumatic stress disorder (PTSD) were published by the American Medical Association's DSM-III in 1980, and the Clinical Modification version of the WHO's International Classification of Diseases, Ninth Edition (ICD-9-CM), in 1979. Since then, research on PTSD in uniformed personnel has accelerated and continues to accelerate.

<sup>8</sup> See Namie Di Razza, "Mental Health in UN Peace Operations: Addressing Stress, Trauma, and PTSD among Field Personnel," International Peace Institute, December 2020.



Although the nations of the world differ in the degree to which they recognize and actively manage PTSD as an occupational health hazard, the trend is clearly toward greater global recognition. No nation has reported evidence to refute the existence of PTSD in uniformed personnel as a direct result of their participation in military activities.

In every nation that has studied PTSD, this disorder has proven to be typically chronic and unremitting, and often associated with serious impairments in physical health and social and occupational functioning.

## 2. GLOBAL STANDARDS FOR DIAGNOSING PTSD

Since PTSD was first established as a mental disorder diagnosis in 1979 - 1980, two sets of diagnostic criteria have developed and evolved in parallel : one currently contained in the American Psychiatric Association's DSM-5 (2013), and the other contained in the WHO's ICD-11 (adopted in 2019 and the global health insurance standard as of 01 January 2022). The small but important differences between these two diagnostic systems with respect to PTSD, and the many changes in those two criteria sets over more than four decades, has led to global confusion over the precise boundaries between PTSD and other mental disorders, or between normal and pathological consequences of exposure to stressful experiences.

Importantly, ICD-11 criteria for the diagnosis of PTSD are much broader and inclusive than the DSM-5 criteria for the same diagnosis, particularly with respect to how traumatic stressor events are defined. The DSM-5 criteria are based to a certain extent on cognitive-behavioral conceptions of PTSD as maladaptive coping with fear, whereas the ICD-11 criteria allow for mechanisms of psychological harm other than exposure to physical danger or maladaptive coping, such as moral injury. Critically, DSM-5 does not recognize the more severe form of PTSD called Complex PTSD (CPTSD), first described in 1992 and now included in ICD-11 as an independent diagnostic category that research is now recognizing at high rates in veterans.

Since no objective tests for the existence of PTSD have yet been devised, this disorder is diagnosed based on subjective reports from the individual of their symptoms and life difficulties, confirmed when possible by third parties such as family members, friends, coworkers, and available records, and supplemented by objective observations of the mental status of the individual during interview sessions.

PTSD is diagnosed by a trained health care professional based on one or more clinical interviews, which can be either unstructured or semi-structured, such as by using the Clinician Administered PTSD Scale (CAPS).<sup>9</sup> In both unstructured and semi-structured interviews, every positive response is followed up with additional questions about the context and details of each endorsed symptom, such as nightmares, flashbacks, and tendencies to avoid situations that are reminders of the traumatic event. The greater the depth and breadth of detail offered by the individual about their symptoms of distress and difficulties in life, and the more closely their emotional expression matches their described internal states, the more solidly a symptom can be concluded to be present.

Of first importance in diagnosing PTSD, especially for disability compensation, is linking current symptoms to a particular past causal event. This is accomplished by comparing the content of current nightmares, flashbacks, and avoidance behaviors to the index traumatic event. Although the nature of disturbing nightmares and intrusive daytime recollections evolve over the years after a traumatic event, the connection to that event should still be clearly evident in the content of those PTSD symptoms, and in the situations that triggered them (e.g., a person with PTSD caused by an event involving drowning may have nightmares about drowning and may avoid going in the water for fear of having a panic attack).

A number of self-report questionnaires have been created to assess for PTSD symptoms. All correlate well with diagnoses of PTSD made by clinical interviews, so they are widely used for screening for PTSD, but they are not sufficient for establishing a diagnosis of PTSD. The vast majority of these questionnaires assess for criteria of simple PTSD, as defined by DSM-5, but not complex PTSD as defined in ICD-11. So far, self-report screening tools for PTSD have been validated only in a limited number of world languages.

Since no objective tests for PTSD exist, the symptoms of PTSD can be exaggerated or malingered, which could be motivated by a desire to receive disability compensation for occupationally acquired PTSD. The objective

<sup>9</sup> See <https://www.ptsd.va.gov/professional/assessment/adult-int/caps.asp>



negative life consequences of chronic PTSD, such as PTSD-related failures in occupational and social functioning, cannot be as easily exaggerated. Furthermore, the few studies that have been done to evaluate the accuracy of PTSD diagnoses made for the purposes of disability compensation have found that the great majority of such diagnoses are accurate.

### 3. GLOBAL STANDARDS FOR ASSESSING DEGREE OF DISABILITY

**One global standard exists for rating the degree of disability due to any physical or mental disorder, the American Medical Association's (2008) *Guides to the Evaluation of Permanent Impairment***, currently in its Sixth Edition. Chapter 14 of the AMA Guides provides detailed procedures for evaluating mental and behavioral disorders, including PTSD, for degree of permanent impairment. The AMA Guides recommend that all mental and behavioral disorders be diagnosed using American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision (DSM-IV-TR), published in 1994 (superseded by DSM-5 in 2013).

**Permanent impairment due to a mental or behavioral disorder is assessed using three scales for rating current level of functioning: the Brief Psychiatric Rating Scale (BPRS), the Global Assessment of Functioning (GAF) scale, and the Psychiatric Impairment Rating Scale (PIRS).** The final rating of percentage permanent impairment due to a mental or behavioral disorder is determined by the median (middle) value of the individual's calculated BPRS, GAF, and PIRS scores.

### 4. LIABILITY ESTIMATE FOR FUTURE CLAIMS FOR DISABILITY DUE TO PTSD

Survey results suggest that in the near future, **the Secretariat could receive between 754 and 1510 additional claims for disability compensation for PTSD** due to past peace operations, since this is the range of numbers of claims currently being processed by nine Member States who offered numbers.

Prevalence studies suggest that at any given time, **between 2 % and 4 %** of all uniformed military and police personnel in a population will currently be experiencing significant PTSD symptoms. This is **the base rate of PTSD in uniformed personnel**. Not all PTSD in uniformed populations is caused by occupational stressor exposures, of course ; some is due to traumatic experiences occurring prior to or after operational deployments.

The power of deployment to peace or combat operations to cause new-onset PTSD is well established, and evident in the higher rates of PTSD observed in persons who had deployed to one or more peace or combat operations. Post-deployment rates of PTSD vary significantly, depending on a number of factors, the most important of which is the frequency and severity of stressor events experienced by personnel during that deployment. Deployments that expose persons to more horrific events will yield more cases of PTSD, and of greater severity than less-stressful deployments.

**PTSD can be expected to occur in between 4 % and 8 % of military and police personnel who have deployed to a high-risk peace operation.** Low-risk peace operations may result in few cases.

### 5. GLOBAL BEST PRACTICES FOR BUDGETING FUNDS FOR PTSD CLAIMS

Two facts about deployment-related PTSD make it very difficult to forecast future expenditures for awards for occupational disability. The first is the great variability in observed prevalence rates, based mostly on the enormous differences in stress levels encountered in missions of various types. The second is the fact that PTSD is often only first recognized by the person afflicted years or decades after the triggering stressor event, a subtype of PTSD termed delayed PTSD.

Delays in recognizing the symptoms of PTSD are due to many factors. One is the fact that the process of understanding the social and spiritual meaning of any extreme event often only unfolds gradually over time as more is learned about why the event happened and what its consequences turned out to be. Another is the culture of imperviousness to stress that characterizes a number of military and police organizations, which may discourage individuals from even paying attention to their own stress symptoms. Finally, the negative social and health impacts of PTSD often take years to fully develop.



The Study team could find no Member State that budgeted funds for PTSD claims as a percentage of the annual operating budget of a peace or combat deployment. **Member States that were interviewed which have a national system for compensation for disability due to PTSD budget funds for such claims annually based on a running average of claims for PTSD disability received over the recent past, such as the past 3 years.**

## 6. GLOBAL BEST PRACTICES FOR PREVENTION AND MITIGATION

**Because global studies of risk factors for PTSD have consistently produced reliable results, repeatedly confirmed in a variety of populations, approaches to PTSD prevention based on reducing risk factors or enhancing protective factors in a population are the most promising and widely employed.** This level of prevention, targeting risk in an entire population, is termed *universal prevention*, and it typically involves a campaign to educate a population about the risk factors that are under their control, along with information about how to moderate those risk factors in various situations, once identified. Such **training is typically delivered to front-line uniformed personnel at some point prior to deployment, and often, again, around the time of repatriation**, to address post-deployment risk factors. Universal prevention training is also separately delivered, in some cases, to **uniformed leaders and/or family members**, to draw their attention to risk and protective factors under their control, and to offer tools for stress management.

Universal prevention activities such as pre- or post-deployment training serve to draw attention to risk factors for PTSD in a population. Once a high-risk subgroup within a population has been identified (e.g., because of common exposure to certain horrific stressor events), the next level of prevention, *selective prevention*, is employed to mitigate risk within that subgroup. Global approaches to selective prevention in uniformed populations vary depending on whether occupational PTSD is conceived to be the result of maladaptive coping with an experience of intense fear, or a literal wound to a person's social identity because of a loss or betrayal of a moral trust. Organizations that subscribe to a literal wound conception of PTSD are more likely to engage in aggressive **screening for recent stressor exposures and current PTSD symptoms in high risk groups such as recently repatriated deployers to a high-risk mission**. Organizations that subscribe to a conception of PTSD as maladaptive coping with fear may avoid drawing attention to either stressor events or current symptoms by screening for them in high-risk groups, such a recently repatriated military or police unit.

Other selective prevention activities that are employed to mitigate risk for PTSD in high-risk groups include **additional training in recognizing serious stress problems should they arise, methods for self-care to optimize functioning and promote recovery, and ways to access higher levels of care** if they are needed.

One widely used but increasingly controversial tool for selective prevention is psychological debriefing (PD), a structured group activity popularized and taught commercially as Critical Incident Stress Debriefing (CISD). Based on a model of PTSD as maladaptive coping with fear, PD has been found in meta-analyses of outcome studies to be helpful for some and possibly harmful for others, but overall not an effective way to reduce the incidence or severity of later PTSD.<sup>10</sup> Importantly, procedures for PD and CISD do not include any screening or routine follow-up of individuals after the intervention to identify which of the persons in the high-risk group develop disabling PTSD, as if the incidence of PTSD after a single two-hour debriefing session must be zero.

The third level of mental disorder prevention, termed *indicated prevention*, encompasses all activities intended to mitigate the severity and chronicity of PTSD symptoms in individuals already affected, either as an alternative or as an adjunct to clinical mental health treatment. Approaches to indicated prevention vary even more than those for selective prevention depending on which understanding of PTSD they are based on.

Current indicated prevention practices in military organizations based on a model of PTSD as maladaptive coping with fear have changed little since they were developed in Western militaries during WWI to check the epidemic of medical evacuations of front-line personnel on both sides of the war because of shellshock or *Nervenshock*. These principles for indicated prevention of post-traumatic stress can be summarized with the acronym, PIES, still taught to service members and psychiatrists today. The four PIES principles are : Proximity (keep the psychologically injured near the front lines and within the sound of the guns so they won't expect to go home) ; Immediacy (intervene quickly, as soon as severe stress problems emerge) ; Expectancy (assure individuals they

<sup>10</sup> See, for example, the Cochrane review: Rose, Bisson, Churchill, & Wessely (2002), Psychological debriefing for preventing post traumatic stress disorder.



will recover within 72 hours) ; and Simplicity (since a combat stress casualty is not a serious or enduring problem, offer little more in the way of assistance than hot meals and rest). Historically, individuals who experienced a mental breakdown in an operational theater, but who didn't recover completely within 72 hours, were told they must have possessed an unrecognized mental disorder before they deployed, despite the lack of evidence for a pre-existing mental health problem other than the current breakdown under stress.

One example of a military program for PTSD prevention that is based on a model of PTSD as a literal stress injury is the US Marine Corps (2010 / 2016) Combat and Operational Stress Control (COSC) program,<sup>11</sup> reviewed by the US Institute of Medicine in their 2014 report on US military prevention efforts. The US Marine Corps' doctrine for PTSD prevention integrates three tools for leaders of military units to manage the mental health of their unit members. All three were developed by operationally experienced Marine leaders with the assistance of operationally experienced mental health professionals and spiritual advisors. These tools comprise :

- **Stress Continuum Model** : a visual reference tool for assessing one's own or another's current stress level along a continuum of four discrete color-coded stress zones : Green (Ready), Yellow (Reacting), Orange (injured), and Red (Ill). Early recognition of Orange-zone stress injuries is key for mitigating risk for PTSD.
- **Five Core Leader Functions** for psychological health promotion, to be continuously repeated : Strengthen (enhance protective factors), Mitigate (reduce risk factors), Identify (recognize problems early), Treat (intervene to mitigate problems), and Reintegrate (return the stress-injured person to the fullest possible functioning).
- **Stress First Aid** : a set of five key actions for indicated prevention of a stress injury, whether caused by an exposure to intense fear, a betrayal of a moral trust, the loss of a cherished person or thing, or simply chronic stress accumulated over time. The five Stress First Aid actions, to be repeated as often as necessary, are intended to mitigate harm at the moment of a traumatic event (primary aid), as well as to promote recovery afterwards (secondary aid).
  - Cover : get the stress-injured person to safety
  - Calm : relax, slow down, refocus
  - Connect : obtain social support from important others
  - Competence : restore effectiveness in all spheres of life
  - Confidence : restore self-esteem and hope

Outcome studies have yet to document evidence of the effectiveness of any of these three components of the Marine Corps approach to PTSD prevention. The RAND Corporation conducted a study to evaluate the effectiveness of training for infantry Marines and their leaders in these COSC principles, in a program called Operational Stress Control and Readiness (OSCAR) ; their 2015 report found no evidence of a beneficial impact on mental health outcomes or mental health stigma, although inconsistencies in implementation limited fidelity to the model and generalizability of the findings.<sup>12</sup> Nevertheless, Stress First Aid has been adapted for use by other high-risk communities, including firefighters and healthcare providers during Covid-19.<sup>13</sup>

## 7. ROLE OF GENDER IN RISK FOR PTSD IN PEACE OPERATIONS

The Study team drew two important conclusions about the role of gender in risk for PTSD in peace or combat operations. First, **women in uniform tend to have a slightly higher prevalence of PTSD than men in uniform with similar demographics**. But second, high quality studies of risk for PTSD in matched samples of men and women in uniform have demonstrated that the slightly higher rate of PTSD in women is not due to a greater vulnerability for PTSD in women, but rather to the fact that **women in uniform are subjected to certain potentially traumatic events, particularly sexual harassment and assault**, two of the most toxic stressor experiences possible, at rates much greater than their male peers.

<sup>11</sup> Available for download from <https://www.doctrine.usmc.mil>

<sup>12</sup> Vaughan CA, Farmer CM, Breslau J, Burnette C. Evaluation of the Operational Stress Control and Readiness (OSCAR) program. Santa Monica : RAND Corporation.

<sup>13</sup> See, for example: Watson P, Westphal R. Stress First Aid for Health Care Workers. 2020 ; VA National Center for PTSD. Available at: [www.ptsd.va.gov](http://www.ptsd.va.gov).



In recent decades, women in uniform have been exposed to the same operational stressor experiences as men in uniform, including combat, regardless of occupational role during deployment. **There is no evidence that women are any less capable of enduring and functioning effectively under operational stress of any type or magnitude.**

Initiatives to promote gender equity and reduce rates of sexual harassment and abuse in uniform also serve to prevent PTSD in both women and men.

## RECOMMENDATIONS

### 1. BUDGETARY METHODOLOGY AND SOURCE OF FUNDING

Based on the findings and conclusions of the PTSD Study, it is recommended that the United Nations fund future awards for disability due to PTSD in uniformed personnel by two mechanisms, one for current, active missions, and the other for closed missions for which resources are not readily available to satisfy the claim .

For active missions, it is recommended that claims for disability due to PTSD be compensated from the relevant mission's budget.

**For closed missions, it is recommended that the UN establish a reserve fund to pay compensation for PTSD claims for uniformed personnel associated with those missions as a sustainable measure and an insurance for future closed missions. It is also proposed that the funds cover compensation for death and physical disability claims associated with closed missions.**

Based on the best available information, it is recommended that the reserve fund derive its revenue from **a charge of 0.5% of total troop and police personnel reimbursement cost to be charged against each peacekeeping and special political mission budget.** The proposed rate of 0.5% mirrors the rate established to fund compensation for death or permanent disability in civilian employees of the UN.

### 2. PROCEDURES FOR PROCESSING PTSD CLAIMS FOR UNIFORMED PERSONNEL

Claims for compensation for uniformed personnel disabled because of PTSD acquired in a UN peace operation should be processed using the same standards and procedures employed for adjudicating and awarding compensation for death or disability due to a physical injury or illness, as established by the General Assembly in its resolution 52/177, and as detailed in the report of the Secretary-General on death and disability benefits (A/52/369). The following are recommended guidelines specific to the processing of claims for PTSD disability in uniformed personnel.

Degree of permanent impairment due to PTSD should be evaluated according to the procedures detailed in Chapter 14 of the **AMA Guides to the Evaluation of Permanent Impairment**.

Claims for disability due to PTSD or any other mental disorder should be **based on the criteria published in the latest edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM)** because this is the diagnostic standard recommended in the AMA Guides.

In accordance with established practice for disability claims, **the required standard of proof should be "at least as likely as not" that the claimant's PTSD would not have occurred in the absence of its association with an event or events related to his or her deployment to a United Nations mission.** "At least as likely as not" means 50 per cent or greater, with the benefit of the doubt going to the claimant if the evidence is at equipoise (50/50 chance).

To be considered eligible for compensation by the United Nations, instances of PTSD must be characterised by the following elements of proof :

- Existence of PTSD as defined in the latest edition of the APA's Diagnostic and Statistical Manual of Mental Disorders (DSM), currently DSM-5.



- Disability or loss of function of a permanent nature (including determination of the degree or proportion of permanent disability)
- The fact that PTSD arose due to mission-related circumstances, with particular attention to an identified or specific traumatic incident (or series of incidents) that are medically assessed to reasonably have impacted the concerned individual
- PTSD is not mostly attributable to a pre-existing or subsequent condition(s) or event(s), whether in employment or personal circumstances.

Documentation for an appropriate assessment of a claim for compensation for PTSD-related disability, depending on the circumstances of the case at hand, should include the following :

- Medical report(s) and records : a detailed psychological medical assessment, demonstrating the aforementioned elements of proof required to demonstrate PTSD-related disability. The medical assessment should also aim to establish the degree or proportion of permanent disability
- Documents establishing the factual basis of events related to the claim : a detailed report establishing the injured individual's deployment to the mission (e.g. period, duration, location, and terms of appointment) and the incident or other circumstances surrounding the cause of the PTSD.

### 3. A SUSTAINABLE & APPROPRIATE PTSD FRAMEWORK

Upon approval by the General Assembly, it is recommended that the Secretariat develop action plans to implement a sustainable and appropriate framework for the management of PTSD in peace operations that includes the following key components :

- A consensus understanding of the nature of PTSD as an occupational health hazard.
- Clearly delineated responsibilities throughout deployment cycles for monitoring and maintaining psychological health and preventing PTSD in uniformed personnel and their families.
- Training for various personnel groups at various phases of deployment cycles, collaboratively developed by T/PCC Member States and the Secretariat but delivered in the culture and language of the deploying Member State.
- Training for leaders of military and police units at all levels regarding their responsibilities and available methods for monitoring and maintaining the health and well-being of their unit members.
- Collaboratively developed gender-sensitive methods for screening before and after deployments - screen for exposure to significant recent stressors and current mental health symptoms in recently repatriated military or police personnel and members of their families, also delivered in the language and culture of the Member State.
- A continuous education campaign to raise awareness about the deleterious effects of mental health stigma, and methods to reduce its impact on individuals' willingness to seek help when needed.
- Training for all personnel at all phases of deployment cycles in gender-specific risk and protective factors for PTSD in peace operations.
- A unified deployment record-keeping system that collects and stores data on the names of uniformed personnel deployed to each UN peace operation, as well as the major stressor events encountered by those persons during deployment.
- A clearly defined and well-maintained coordination network linking PTSD support offices in the Secretariat with mental health representatives in every deployed military or police unit and the mental health advisors of every current Mission and its Force Commander and Head of the Police Component.
- Methods for the Secretariat to coordinate surge mental health support for deployed or recently repatriated military or police units whose organic mental health professional capacity is insufficient to meet current



needs for screening, treatment, or evaluations for a possible deployment-related disability due to a mental disorder. These methods may include coordinating the clinical services of external mental health professionals to be delivered through virtual means, or the provision of additional training in concepts and procedures related to PTSD prevention and care to primary health care personnel already supporting the unit.

The following table outlines a proposed comprehensive framework to manage PTSD in uniformed personnel and their families participating in United Nations peace operations, organized as a set of responsibilities before, during, and after each deployment, for the Secretariat, Member States, individual uniformed military and police personnel, and members of their families. Preventing PTSD in peace operations requires the coordinated engagement of all four sets of stakeholders.

	RESPONSIBILITIES			
	SECRETARIAT	T/PCCs	INDIVIDUALS	FAMILIES
<b>Before Deployment</b>	<ul style="list-style-type: none"> <li>Assess risk factors for planned mission</li> <li>Collaborate with T/PCC to develop pre-deployment trainings</li> <li>Coordinate preparations</li> </ul>	<ul style="list-style-type: none"> <li>Deliver pre-deployment training to leaders, uniformed personnel, and family members</li> <li>Assess potential deployers for medical fitness</li> </ul>	<ul style="list-style-type: none"> <li>Attend pre-deployment training</li> <li>Notify leaders of any limiting health conditions</li> <li>Prepare to deploy</li> </ul>	<ul style="list-style-type: none"> <li>Attend offered pre-deployment training</li> <li>Prepare the family for separation and other stressors</li> <li>Get help when needed</li> </ul>
<b>During Deployment</b>	<ul style="list-style-type: none"> <li>Monitor and record major stressors of operation</li> <li>Coordinate assessment and mitigation measures with T/PCCs</li> </ul>	<ul style="list-style-type: none"> <li>Monitor and record major stressor events and who was exposed</li> <li>Reduce risk and enhance protective factors</li> <li>Monitor individual and unit health and wellbeing</li> <li>Apply mitigation measures</li> </ul>	<ul style="list-style-type: none"> <li>Monitor personal stress level</li> <li>Monitor peers and subordinates for stress</li> <li>Practice prescribed prevention activities</li> <li>Notify leaders of any change in physical or mental health</li> <li>Reduce risk and enhance protective factors</li> </ul>	<ul style="list-style-type: none"> <li>Monitor family members for stress</li> <li>Practice prescribed prevention activities</li> <li>Reduce risk and enhance protective factors</li> <li>Get help when needed</li> </ul>
<b>After Deployment</b>	<ul style="list-style-type: none"> <li>Coordinate assessments, mitigation measures, and PTSD claim submissions</li> <li>Collect, analyze, and report outcome metrics (e.g., numbers &amp; results of trainings delivered)</li> </ul>	<ul style="list-style-type: none"> <li>Assess repatriated personnel for stressor exposures and mental health symptoms</li> <li>Mitigate and treat identified problems</li> <li>Submit PTSD claims when indicated</li> </ul>	<ul style="list-style-type: none"> <li>Report persistent mental health problems</li> <li>Monitor subordinates for mental health problems</li> <li>Engage in mitigation measures and treatment</li> <li>Initiate a claim for PTSD disability when indicated</li> </ul>	<ul style="list-style-type: none"> <li>Attend offered post-deployment training</li> <li>Reduce risk and enhance protective factors</li> <li>Get help when needed</li> </ul>

The detailed plan to implement the UN's PTSD Framework for uniformed personnel should include **written procedures for organizing, implementing, and maintaining the PTSD Framework**, including clear statements of responsibility by various stakeholders, and procedural manuals and standard operating procedures for leaders and administrators at the Secretariat and field missions, uniformed leaders and mental health experts at Troop- and Police-Contributing Member States, and individual military and police personnel and their families. It should also include a clear plan to collect and analyze measures of effectiveness for key elements of the PTSD Framework. In establishing policies and procedures, the UN's goal should be to identify the **minimum set of activities which all T/PCCs should be expected to practice, as the ones most consistent with science and best practices**, and most likely to reduce the future human and financial costs of deployment to peace operations.



## APPENDIX A : REFERENCES

- Adler AB, Litz BT, Castro CA, Suvak M, Thomas JL, et al. A Group Randomized Trial of Critical Incident Stress Debriefing Provided to US Peacekeepers. *J Traum Stress*. 2008 ; 21(3) : 253-263.
- American Medical Association. *Guides to the Evaluation of Permanent Impairment, Sixth Edition*. 2008 ; Chicago : American Medical Association.
- American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders, 5th ed. (DSM-5)*. American Psychiatric Publishing, 2013.
- Bolton EE, Glenn DM, Orsillo S, Roemer L, & Litz BT. The Relationship Between Self-Disclosure and Symptoms of Posttraumatic Stress Disorder in Peacekeepers Deployed to Somalia. *J Traum Stress*. 2003 ;16(3) : 203-210.
- Brewin CR, Andrews B, & Valentine JD. Meta-Analysis of Risk Factors for Posttraumatic Stress Disorder in Trauma-Exposed Adults. *J Consult Clin Psychol*. 2000 ; 68(5) : 748-766.
- Deahl M, Srinivasan M, Jones N, Thomas J, Neblett C, & Jolly A. Preventing psychological trauma in soldiers : The role of operational stress training and psychological debriefing. *Br J Med Psychol*. 2000 ; 73 : 77-85.
- Debriefing Provided to U.S. Peacekeepers. *J Traum Stress*. 2008 ; 21(3) : 253-263.
- Di Razza N. Mental Health in UN Peace Operations : Addressing Stress, Trauma, and PTSD among Field Personnel. International Peace Institute, December 2020.
- Foa EB, Rothbaum BO. *Treating the Trauma of Rape : Cognitive-Behavioral Therapy for PTSD*. 1997 ; New York : Guilford.
- Gjerstad CL, Bøe HJ, Falkum E, Martinsen EW, Nordstrand AE, et al. Prevalence and Correlates of Mental Health Problems in Norwegian Peacekeepers 18–38 Years Postdeployment. *J Traum Stress*. 2020 ; 33 : 762-772.
- Gordon RS. An Operational Classification of Disease Prevention. *Public Health Reports*. 1983 ; 98(2) : 107-109.
- Greenberg N, Iversen A, Hull L, Bland D, & Wessely S. Getting a peace of the action: measures of post traumatic stress in UK military peacekeepers. *J R Soc Med*. 2008 ; 101 : 78–84.
- Herman JL. *Trauma And Recovery : The Aftermath of Violence- From Domestic Abuse to Political Terror*. 1992 ; New York : Basic Books.
- International Peace Institute. (2020). Mental Health in UN Peace Operations : Addressing Stress, Trauma, and PTSD among Field Personnel.
- IOM (Institute of Medicine). *Preventing psychological disorders in service members and their families : An assessment of programs*. Washington, DC: The National Academies Press.
- Jacobson IG, Donoho CJ, Crum-Cianflone NF, & Maguen S. Longitudinal assessment of gender differences in the development of PTSD among US military personnel deployed in support of the operations in Iraq and Afghanistan. *J Psychiatr Res*. 2015 ; 68 : 30-36.
- Janoff-Bulman R. *Shattered Assumptions : Towards a New Psychology of Trauma*. 1992 ; New York : The Free Press.
- Letica-Crepulja M, Stevanović A, Protuđer M, Juretić TG, Rebic J, Frančišković T. Complex PTSD among treatment-seeking veterans with PTSD. 2020 ; *Eur J Psychotraumatology*. 11, 1716593. doi.org/10.1080/20008198.2020.1716593.
- Litz BT, Orsillo SM, Friedman M, Ehlich P, & Batres A. Posttraumatic Stress Disorder Associated With Peacekeeping Duty in Somalia for U.S. Military Personnel. *Am J Psychiatry*. 1997; 154: 178–184.



- Litz BT, Stein N, Delaney E, Lebowitz L, Nash WP, et al. Moral injury and moral repair in war veterans : A preliminary model and intervention strategy. *Clin Psychol Rev.* 2009 ; 29 : 695-706.
- Maguen S, Litz BT, Wang JL, & Cook M. The Stressors and Demands of Peacekeeping in Kosovo : Predictors of Mental Health Response. *Mil Med.* 2004 ; 169 : 198-206.
- Nash WP, Carper TLM, Mills MA, Au T, Goldsmith A, & Litz BT. Psychometric Evaluation of the Moral Injury Events Scale. *Mil Med.* 2013 ; 178 : 646-652.
- Ozer EJ, Best SR, Lipsey TL, & Weiss DS. Predictors of Posttraumatic Stress Disorder and Symptoms in Adults : A Meta-Analysis. *Psychol Bull.* 2003 ; 129 : 52-73.
- Resick PA, Schnicke MK. *Cognitive Processing Therapy for Rape Victims.* 1993 ; New York : Sage.
- Rose S, Bisson J, Wessely S. A Systematic Review of Single-Session Psychological Interventions ('Debriefing') following Trauma. *Psychother Psychosom.* 2003 ; 72 : 176-184.
- Rosebush PA. Psychological Intervention with Military Personnel in Rwanda. *Mil Med.* 1998 ; 163 : 559-563.
- Sareen J, Belik S-L, Affi TO, Asmundson GJG, Cox BJ, & Stein MB. Canadian Military Personnel's Population Attributable Fractions of Mental Disorders and Mental Health Service Use Associated With Combat and Peacekeeping Operations. *Am J Public Health.* 2008; 98: 2191–2198. doi:10.2105/AJPH.2008.134205.
- Sawamura T, Shimizu K, Masaki Y, Kobayashi N, Sugawara M, et al. Mental Health in Japanese Members of the United Nations Peacekeeping Contingent in the Golan Heights: Effects of Deployment and the Middle East Situation. *Am J Orthopsychiatry.* 2008 ; 78 : 85-92.
- Shay J. *Achilles in Vietnam : Combat Trauma and the Undoing of Character.* 1994 ; New York : Atheneum.
- Smith TC, Wingard DL, Ryan MAK, Kritz-Silverstein D, Slymen DJ, & Sallis JF. PTSD Prevalence, Associated Exposures, and Functional Health Outcomes in a Large, Population-Based Military Cohort. *Public Health Reports.* 2009 ; 124(1) : 90-102.
- Souza WF, Figueira I, Mendlowicz MV, Volchan E, Portella CM, et al. Posttraumatic Stress Disorder in Peacekeepers : A Meta-Analysis. *J Nerv Ment Dis.* 2011;199: 309-312.
- Steenkamp MM, Litz BT, Hoge CW, Marmar CR. Psychotherapy for military-related PTSD: a review of randomized clinical trials. *JAMA.* 2015 ; 314(5) : 489-500.
- Steenkamp MM, Litz BT, Marmar CR. First-line Psychotherapies for Military-Related PTSD. *JAMA.* 2020 ; 323 : 656-657.
- Stevenson SAM, Opie E, Pernet D, Gao H, Elliott P, Wessely S, et al. Probable PTSD, depression and anxiety in 40,299 UK police officers and staff: Prevalence, risk factors and associations with blood pressure. *PLoS ONE* 15(11): e0240902 ; 2020. <https://doi.org/10.1371/journal.pone.0240902>
- United States Marine Corps. *Combat and Operational Stress Control (MCTP 3-30E, NTTP 1-15M).* 2016 ; Quantico, VA : Marine Corps Combat Development Command. Available for download from <https://www.doctrine.usmc.mil>.
- Vaughan CA, Farmer CM, Breslau J, Burnette C. Evaluation of the Operational Stress Control and Readiness (OSCAR) program. 2015 ; Santa Monica : RAND Corporation.
- Watson P, Westphal R. Stress First Aid for Health Care Workers. 2020 ; VA National Center for PTSD. Available at: [www.ptsd.va.gov](http://www.ptsd.va.gov).
- World Health Organization. *International Classification of Diseases for Mortality and Morbidity Statistics, 11th Revision, (ICD-11).* Geneva, Switzerland: World Health Organization; 2019.



World Health Organization. *Mental health atlas 2017*. 2018 ; Geneva : World Health Organization.

Xue C, Ge Y, Tang B, Liu Y, Kang P, et al. A Meta-Analysis of Risk Factors for Combat-Related PTSD among Military Personnel and Veterans. 2015 ; PLoS ONE 10(3): e0120270. doi:10.1371/journal.pone.0120270.

PTSD REPORT – LEGISLATIVE LANGUAGE

1. PTSD Claim table, Analysis, and Procedures (A/74/809, para. 21) – approved in GA Res 74/280

21. The Advisory Committee emphasizes the need for early settlement of death and disability claims, notes with concern the considerable number of pending PTSD claims and stresses the importance of addressing the backlog in a timely manner (see also A/73/755, para. 81). With a view to promoting a sustainable and appropriate approach to PTSD claims, the Committee recommends that the General Assembly request the Secretary-General to prepare, as soon as possible, a study for the consideration of the Assembly. The study should provide a holistic analysis of the policy, legal, administrative and financial aspects of the matter, including the procedures for processing claims, medical standards, budgetary methodology for liability estimation and source of funding. The proposal should also contain information on the number of submitted, rejected, closed and pending PTSD claims from active and closed peacekeeping missions in recent years, along with the corresponding compensation amounts and source of funding (see also A/52/410, para. 13). Pending the completion of the study, the Committee recommends against the proposed resources of \$3,545,400 for PTSD compensation under the support account. The Committee's observations and recommendations on other related PTSD resources are contained in paragraphs 36 and 38 below.

2. PTSD framework proposal (A/75/849, para. 60) – approved in GA Res 74/280

60. The Advisory Committee again emphasizes the need for early settlement of death and disability claims and stresses the importance of developing, as soon as possible, a PTSD framework for the consideration of the General Assembly as a basis to promote a sustainable and appropriate approach to the compensation of PTSD claims (see also A/74/809, para. 21). The Committee, acknowledging the importance of consultations with Member States, welcomes the creation of an advisory board and looks forward to the presentation of a proposal to the Assembly during its seventy-sixth session.

**Comprehensive study to develop a PTSD framework**

**Survey of**

**POST-TRAUMATIC STRESS DISORDER OF  
UNIFORMED PERSONNEL FOR A UN PEACE OPERATION**



The Uniformed Capabilities Support Division

2020-2021

Name of your UN member state: \_\_\_\_\_

**What types of uniformed personnel does your country contribute to UN peace operations?  
(Check all that apply)**

**NOTE: If your country contributes both military and police personnel to UN peace operations, please fill out this survey twice – once for military personnel and once for police personnel. Please use separate survey links – one link for military personnel and one link for police personnel**

Military	<input type="checkbox"/>
Police	<input type="checkbox"/>
Other (if "Other" only, go to Question 20)	<input type="checkbox"/>

**Which uniformed personnel group is the response to this questionnaire based on?**

Please use separate survey links for military and police personnel.

Military only	<input type="checkbox"/>
Police only	<input type="checkbox"/>

# 1. PTSD following deployment of uniformed personnel for a UN peace operation

This section covers aspects and questions related to mental health screening programs, as well as national knowledge about PTSD consequences following from systematic registrations and research on this topic.

Suggestions of subject matter experts for this section: Military/police professionals or civilians with military/police employments with knowledge and responsibilities within military/police mental health, recruitment and selection methods, and research personnel working within the field of PTSD.

	Yes	No (Go to Question 3)	Don't know (Go to Question 3)
<b>1.</b> Does your country <u>currently</u> screen uniformed personnel for mental health problems <u>before</u> they deploy on a UN peace operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**You have indicated that your country currently has a mental health screening program that includes uniformed personnel for a UN peace operation.**

**2.** When does your country conduct pre-deployment mental health screening of uniformed personnel who are about to deploy on a UN peace operation? (Check all that apply)

Prior to entry into uniformed service	<input type="checkbox"/>
Periodically (e.g., annually) after entry into uniformed service	<input type="checkbox"/>
Immediately (within 3 months) prior to each UN deployment	<input type="checkbox"/>
Another time	<input type="checkbox"/>
Don't know	<input type="checkbox"/>

**3.** Does your country currently screen uniformed personnel for mental health problems, such as PTSD during their deployments on UN peace operations?

Yes, but only if they report symptoms	<input type="checkbox"/>
Yes, routinely, even if not symptomatic	<input type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>

**4.** Does your country currently screen uniformed personnel for mental health problems, such as PTSD after repatriation from UN peace operations?

Yes, routinely, even if not symptomatic	Continue with Question 5	<input type="checkbox"/>
Yes, but only if they report symptoms	Go to Question 7	<input type="checkbox"/>
No	Go to Question 7	<input type="checkbox"/>
Don't know	Go to Question 7	<input type="checkbox"/>

**5.** When does your country routinely screen uniformed personnel who have deployed on UN peace operations for mental health problems, such as PTSD? (Check all that apply)

Within 30 days of repatriation	<input type="checkbox"/>
1-6 months after repatriation	<input type="checkbox"/>
More than 6 months after repatriation	<input type="checkbox"/>
Don't know	<input type="checkbox"/>

**6.** How does your country routinely screen uniformed personnel who have deployed on UN peace operations for mental health problems, such as PTSD? (Check all that apply)

Written standardized mental health screening questionnaires	<input type="checkbox"/>
Oral interviews by mental health professionals	<input type="checkbox"/>
Oral interviews by other health professionals	<input type="checkbox"/>
Other	<input type="checkbox"/>
Don't know	<input type="checkbox"/>

	Yes (Continue with Question 7.1)	No (Go to <u>Section 2</u> )	Don't know (Go to <u>Section 2</u> )
<b>7.</b> Has your country <u>identified</u> uniformed personnel who have <u>acquired PTSD</u> following deployment on a UN peace operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**7.1.** If yes, has all or parts of this knowledge regarding PTSD been published? (Check all that apply):

Yes, as a scientific article	<input type="checkbox"/>
Yes, as a public report	<input type="checkbox"/>
Yes, as an internal report	<input type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>

	Yes	No (Go to <u>Section 2</u> )	Don't know (Go to <u>Section 2</u> )
<b>8.</b> Does your country have <u>data</u> on the <u>prevalence</u> of PTSD among your uniformed personnel following their deployment(s) on UN peace operations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**8.1.** If yes to 8, what was the PTSD prevalence of uniformed personnel following their deployments to UN peace operations? If you found more than one prevalence, then please provide the highest calculated prevalence following deployment to a UN peace operation.

0-5 %	<input type="checkbox"/>
6-10 %	<input type="checkbox"/>
11-20 %	<input type="checkbox"/>
20+ %	<input type="checkbox"/>
Don't know	<input type="checkbox"/>

**8.2.** If possible, please specify the publication details of the highest PTSD prevalence of uniformed personnel following deployments on UN peace operations:

Author: \_\_\_\_\_

Publication title and details: \_\_\_\_\_

	Yes	No	Don't know
<b>8.3.</b> Do you have PTSD prevalence data of uniformed personnel following their deployments on UN peace operations <u>separated by gender</u> ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## 2. Repatriation from a UN peace operation, recognition/identification of PTSD and submission of claims

This section covers aspects and questions related to documentation for PTSD and the process of submission of claims.

Suggestions of subject matter experts for this section: National subject matter experts with relevant policy knowledge as well as knowledge of current practices of documentation and claims.

Does your country:	Yes	No	Don't know
<b>9.</b> Keep records that detail the time and place of the potentially traumatizing event(s) during the deployment of uniformed personnel for a UN peace operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>10.</b> Keep records of uniformed personnel that has been deployed to a UN peace operation detailing the time, place and method by which a recognition and identification of PTSD was established?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>11.</b> Have a formal practice for the assessment of PTSD among uniformed personnel following deployment to a UN peace operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>12.</b> Have a formal practice for the assessment of claims for deployment-related PTSD among uniformed personnel for a UN peace operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>13.</b> Have a formal practice for the processing of claims for deployment-related PTSD among uniformed personnel for a UN peace operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Yes (Continue with Question 15)	No (Go to Question 16)	Don't know (Go to <a href="#">Section 3</a> )
<b>14.</b> Does your country <u>currently plan</u> to submit one or more claims to the UN for deployment-related PTSD among uniformed personnel following deployment to a UN peace operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**15.** How many PTSD claims does your country plan to submit to the UN in the coming years? Indicate the possible amount of PTSD claims:

0-50	<input type="checkbox"/>
51-100	<input type="checkbox"/>
101-200	<input type="checkbox"/>
201-400	<input type="checkbox"/>
More than 400	<input type="checkbox"/>
Don't know	<input type="checkbox"/>

**When question 15 is answered please go to Section 3.**

**16. You indicated that your country currently does not plan to submit one or more PTSD claims to the UN for deployment-related PTSD among uniformed personnel following deployment to a UN peace operation.**

Please state in your own words:

- Why your country does not plan to submit PTSD claims to the UN for deployment-related PTSD among uniformed personnel for a UN peace operation.
- How the UN can offer support to your country in its assessment and submission of PTSD claims.

---



---



---



---



---



---



---

### 3. Current practices of prevention and mitigation of PTSD

This section collects data about military/police stress management training, post-deployment repatriation programs, and mental health treatment.

Suggestions of subject matter experts for this section: Military/police professional staff and/or subject matter experts with knowledge about training and military/police preparations for UN missions with respect to stress management and mental training. Experts with knowledge about repatriation programs to prevent post-deployment mental health problems as well as knowledge of mental health treatment programs.

**17.** Do your country’s military or police organizations currently provide training or other programs for uniformed personnel to enhance the recognition, prevention, or mitigation of PTSD following deployment to a UN peace operation?

Yes	Continue with Question 17.1	<input type="checkbox"/>
No	Go to Question 18	<input type="checkbox"/>
Don’t know	Go to Question 18	<input type="checkbox"/>

**17.1.** If yes, please briefly describe the training or program(s):

**Example:**

Program 1: Road to Mental Readiness (R2MR) is eligible for all service members and their families throughout the personnel’s career and in the deployment cycle. R2MR was developed in 2007 and has since then been implemented and is still in use.

Program 2: A survey is sent to all personnel 6 months after repatriation. The survey includes questions measuring PTSD symptoms. We contact those with severe PTSD symptoms and provide psychological treatment.

---

---

---

---

---

---

**17.2.** When do uniformed personnel in your country receive training in the recognition, prevention, or mitigation of PTSD following deployment to a UN peace operation? (Check all that apply)

Prior to each deployment	<input type="checkbox"/>
During each deployment	<input type="checkbox"/>
After each deployment	<input type="checkbox"/>
On a regular basis even when not deployed	<input type="checkbox"/>
Other	<input type="checkbox"/>
Don't know	<input type="checkbox"/>

**18.** Does your country provide mental health care, including treatment for PTSD, for uniformed personnel who have deployed on UN peace operations?

Yes, but only while in uniform	<input type="checkbox"/>
Yes, both while in uniform and after leaving uniformed service	<input type="checkbox"/>
No	<input type="checkbox"/>
Don't know	<input type="checkbox"/>

**19.** Please describe any other, unaddressed concerns you have regarding PTSD among uniformed personnel following from deployment on UN peace operations.

---

---

---

---

---

**You are now ready to complete the online survey. Thank you for taking the time to contribute to this survey.**

**20.** You indicated that your country only contributes other types of uniformed personnel, not military and/or police, to UN peace operations. Please describe which other types of uniformed personnel. Please also describe concerns you have regarding PTSD among other uniformed personnel following from deployment on UN peace operations.

---

---

---

---

---

**You are now ready to complete the online survey. Thank you for taking the time to contribute to this survey.**