



Military Medical Corps Worldwide Almanac – Guidance for Authors of Country Profiles

Dear Country Profile Author,

Thank you for taking the time to read this Guidance. The purpose of the Military Medical Corps Worldwide Almanac (ALMANAC) is to provide a comprehensive summary of military medical services throughout the world. This provides a forum for each country to showcase themselves and publish facts and sources for further information to promote better understanding of their roles and capabilities. The ALMANAC provides a publicly accessible resource for military medical personnel, researchers, and businesses to enable better understanding of the contribution of military medical services to national armed forces and national health systems.

We have undertaken an analysis of the information contained in the ALMANAC. This shows that it could be an excellent source of information but there is variation in the breadth and depth of information provided by each country¹. We have developed a template to suggest the type of information that might be included for your country. It is structured into sections that represent the key components of the military medical service according to our previous research². We hope that much of this information is already available from within your Ministry of Defence, and might already be published on other public-facing sources (e.g. Ministry of Defence websites). We recognise that some information might be classified and therefore it may not be possible to provide everything suggested.

Please could you send your profile to Ms Erjona Elshani at: erjona.elshani@beta-publishing.com

Thank you for your support to the ALMANAC,

Professor Martin Bricknell CB OSTJ PhD DM

Lt Gen (ret.)

Editor-in-Chief

ALMANAC Military Medical Corps Worldwide

<https://military-medicine.com/almanac/index.html>

¹ Ryan M Leone, BA, BS, Zenobia Homan, PhD, Antonin Lelong, BA, Lutz Bandekow, Martin Bricknell, An Analysis of International Military Health Systems Using the Military Medical Corps Worldwide Almanac, Military Medicine, , usaa376, <https://doi.org/10.1093/milmed/usaa376>

² Leone R, Whitaker J, Homan Z, Bandelkow L, Bricknell M. Framework for the evaluation of military health systems. BMJ Mil Health Published Online First: 22 February 2021.

<https://militaryhealth.bmj.com/content/early/2021/08/03/bmjmilitary-2020-001699.long>

Military Medical Corps Worldwide Almanac Template

Good examples include:

Australia - <https://military-medicine.com/almanac/16-australia-commonwealth-of.html> ,

Canada - <https://military-medicine.com/almanac/30-canada.html> ,

Germany - <https://military-medicine.com/almanac/260-germany-federal-republic.html> ,

United States of America - <https://military-medicine.com/almanac/258-united-states-of-america.html>

THE MILITARY HEALTH SERVICES OF [INSERT COUNTRY]

Please provide:

The contact details for the staff officer responsible for writing this profile (this will not be published)

The name and rank of your Surgeon General/Head of Military Health Services

The official address for the headquarters of your military health services

The contact details for the Public Affairs department for your military health services

A link to any relevant websites (particularly the official website of your military health services)

Links to any other social media sites (Twitter, LinkedIn, YouTube channel etc)

Section 1: National Context and Summary

This section provides an overview to the unique characteristics that apply to healthcare for a country's armed forces. Insert a brief description of your country, its military system and its military health system (MHS). This should include any unique characteristics of the wider national health system that impact on the military medical system. **Please include answers to the following questions.**

- How are the armed forces organised?
- Where are the main organisations located?
- Does the military and its medical services operate as Joint or Single Services?
- How are health and social care financed? Does the military replicate this for armed forces personnel, families and retirees?
- How is healthcare information managed across the civilian and military health system?

Suggested Structure

Paragraph 1 – overview to the country and geostrategic situation.

Paragraph 2 – organisation of ministry of defence and armed forces.

Paragraph 3 – organisation of national health system.

Paragraph 4 – unique characteristics of the national military health system.

Section 2: Organisational Structure

This section covers leadership and governance of the MHS. Please insert an organisational diagram plus a supporting narrative to illustrate the relationship between the Surgeon General function (technical health advice to the Ministry of Defence, and health policy direction to the army, navy, and air force) and the Director General function (chief executive role over components of the military health system). **Please include answers to the following questions.**

- What is command and organisation structure of the MHS?
- Who does the head or heads of the military health system report to?
- What are the main medical formations and units at the strategic, operational and tactical levels and where are they located?
- Do the military use contractors to provide support for garrison healthcare and on operations?
- How are financial resources allocated?

Suggested Structure

Paragraph 1 – overview to the organisation of your military health system, including a description of the organisational diagram.

Paragraph 2 – overview to linkage between the Ministry of Defence, Joint forces, and the Army, Navy and Air Force.

Paragraph 3 – unique characteristics of internal relationships in the military health system, e.g. relationships between active duty and reserve forces, relationships between tri-Service and Army, Navy, Air Force elements.

Section 3: Firm Base (or Garrison) Health System

This section covers the Firm Base health system (see: Bricknell M, Cain P. 'Understanding the Whole of Military Health Systems - The Defence Healthcare Cycle,' *The RUSI Journal*. 2020.

<https://www.tandfonline.com/doi/full/10.1080/03071847.2020.1784039>). This comprises community health services (family practice, occupational health, dental care, mental health, sports medicine/rehabilitation, community hospitals) and hospital services (either military hospitals or facilitated access to public/private hospitals). **Please include answers to the following questions.**

- What is the size of Firm Base health system?
- Is there a map showing the distribution of medical facilities?
- Are there any special military medical treatment capabilities? E.g. rehabilitation centre, mental health centre, cancer centre etc
- What is the relationship between military Firm Base healthcare and the civilian public health system?
- How is military medical/clinical information exchanged and managed in the Firm Base?

Suggested Structure

Paragraph 1 – organisation of garrison community and hospital services (Firm Base), including a map of their location.

Paragraph 2 – further description of the Firm Base health system including unique characteristics such as specialist treatment services. Consider adding a photograph(s) of the main military hospitals or other key medical units.

Paragraph 3 – summary of beneficiaries to the Firm Base health system – see Table 3.1. Consider providing this information as a table or as a narrative description.

Paragraph 4 – description of military biomedical research capabilities – see Table 3.2. Consider adding a photograph of any major military medical research achievement and a link to any military medical journal or research publication.

Paragraph 5 – additional unique features of the Firm Base health system e.g. medical information systems and linkage to civilian health information system, additional capabilities of the Firm Base health system within the provision of government health services such as care for retirees and veterans.

Section 3.1 – Healthcare Beneficiaries

Table 3.1 provides a suggested categorisation to record the beneficiaries of the MHS. In addition to armed forces personnel, there may also be an obligation to provide general medical services to beneficiaries, such as family members, retirees, veterans and designated civilians.

Table 3.1 - Beneficiaries of the Firm Base Military Health System.

Beneficiary	Definition	Number	Remarks
Active Duty	Full-time members of the Army, Navy, Air Force		
Other Security Forces	Personnel who serve in counter-terrorism teams, the gendarmerie, or other law enforcement representatives.		
Reserve	Non-full-time members of the Army, Navy, Air Force		Might be different categories of reserves
Family Members	Relatives of Active Duty members of the Armed Forces		Might include spouses, children, parents or other relatives
Retirees	Personnel who have left Active Duty employment		

Beneficiary	Definition	Number	Remarks
Veterans	Personnel who have left Active Duty employment with a medical condition attributable to military service		
Government Civilians	Personnel who work for the military and/or government as civilians.		
VIP Populations	Personnel who have privileged royal, elected, or otherwise important status who receive care from the military without qualifying due to other factors.		
Public Civilians	Members of the general public not fitting any of the above categories		This might be provided free or require co-payment

Section 3.2: Military Medical Research and Innovation

Medical research for the military environment is an important component of a military health system and is often linked to military medical education institutions. Table 3.2 lists categories of potential military medical research domains. This sub-section should include a description and link to any national academic journals in military medicine. **Please include answers to the following questions.**

- Does the military have physical infrastructure in place to research each topic?
- Are there civilian institutions and researchers who are funded by the military to conduct this research?
- Are there joint research projects conducted across the civilian and military spheres?
- Does the your country publish any academic journals in military medicine?

Table 3.2: Categories of Research Conducted by a Military Health System

Research Category	Description of Research Capability
Aviation and Aerospace	
Diving, Underwater and Naval	
Tropical and Infectious Disease	
Public Health	
Chemical, Biological, Radioactive, and Nuclear	
Mental Health	
Technology and Telemedicine	
Rehabilitation and Prosthetics	
Combat Casualty Care	

Research Category	Description of Research Capability
Human Performance in Austere and Extreme Environments (heat, cold)	

Section 4: Operational Capabilities

This section covers the role of a MHS to treat and transfer casualties from military operations from point of injury through different levels of care back to the home nation. The narrative might be supported by a graphic that illustrates the national military casualty evacuation system. The NATO capability definitions (Table 4) may be a helpful framework, though nations may combine more than one role into a single medical unit (regiment or battalion). There may be security constraints that prevent recording the precise numbers and capacity of medical units. **Please include answers to the following questions.**

- Does the military have any standing domestic and international military tasks?
- What is the operational capability and capacity?
- Are there capabilities for damage control surgery and in-theater surgery?
- What are the types of forward, tactical and strategic MEDEVAC capabilities and their capacities?
- How are new medical equipment or capabilities procured?
- How is medical logistics organised and managed during operations?

Suggested Structure

Paragraph 1 – an overview to national concepts/doctrine for operational military medical support. This might include an image of the medical evacuation chain showing the movement of casualties from point of injury to arrival in hospital in your own nation. Consider providing a link to national medical doctrine.

Paragraph 2 – a more detailed description of individual medical capabilities/units. Consider the use of Table 4 to identify those capabilities. This might include photographs. For example, your nation may have field hospitals or MEDEVAC helicopters that are special military facilities.

Paragraph 3 – cover recent experiences from recent military operations. Consider the use of Table 4.1 to identify these activities. It might be worthwhile to include a world map or other graphic to show the locations of these deployments.

Paragraph 4 – describe collaborations and allies. Consider the points at 4.2.

Paragraph 5 – describe innovations or lessons from the experience of providing military medical support on operations. This might include links to publicly available books or other sources.

Paragraph 6 – describe other aspects of military medical operational capability such as medical supply, blood supply, use of reserves etc.

Table 4: Medical Operational Capabilities (see: Allied Joint Medical Support Doctrine AJP-4.10. North Atlantic Treaty Organization Standardization Office. 2019. At: https://coemed.org/files/stanags/01_AJP/AJP-4.10_EDC_V1_E_2228.pdf)

Capability	Definition	Numbers	Description
Role 1	Triage, pre-hospital emergency care, essential diagnostics, and limited holding capabilities.		
Role 2F	Mobile and deployable structures that may perform damage control resuscitation and damage control surgery in far-forward or unsecured environments.		
Role 2B	Mobile and deployable structures that may perform damage control resuscitation and damage control surgery.		
Role 2E	Mobile and deployable structures that may perform damage control resuscitation and damage control surgery, along with expanded capabilities that may include x-ray equipment, blood banks, pharmaceutical supplies,, and sterilization equipment.		
Role 3	Deployable hospital and specialist care that incorporates CT technology and oxygen production.		
Role 4	Full-spectrum capabilities outside of the deployed environment that include reconstructive surgery, rehabilitation, and other specialized techniques.		
Casualty Staging Units	Patient holding centers with nursing care that may hold and stabilize patients before transport between levels of care.		
Medical Emergency Response Team	Pre-hospital care teams that can provide care in non-combat operational environments.		
Forward Evacuation	Transportation from the point of injury to an initial medical treatment facility.		
Tactical Evacuation	Transportation from one medical treatment facility to another within the area of operations.		
Strategic Evacuation	Transportation from medical facilities within the area of operations to medical facilities outside of the area of operations.		
Maritime Evacuation Assets	Sea-based vehicles that may evacuate individuals from maritime or amphibious operations.		
Land Evacuation Assets	Ambulances that can transport casualties over difficult terrain.		

Capability	Definition	Numbers	Description
Air Evacuation Assets	Tilt rotor, rotary, or fixed wing assets such as helicopters and planes that may transport patients through the air.		

Section 4.1: Overseas or Operational Deployments

This section should indicate the breadth and scale of overseas/operational commitments by the military medical services. This might be illustrated on a map and supported by data entered into Table 4.1. **Please include answers to the following questions.**

- How many combat operations, disaster relief missions, and UN Peacekeeping Operations has the nation completed this year?
- What current medical operations are being conducted by the nation’s military abroad?

Table 4.1: Operational Deployments

Resource Commitment	Combat Operations	Disaster Relief	UN Peacekeeping Operations
Individual Teams			
Role 1 Involvement			
Role 2 Involvement			
Role 3 Involvement			

Section 4.2: Collaborations and Alliances

This section summarises the participation of the MHS in international healthcare collaborations and alliances. Please list the alliances that the nation takes part in and fill out the table below. **Please include answers to the following questions.**

- Is the nation a member of any multi-national military medical organisations?
- Who are the nation’s closest collaborators during operational and training missions?

Section 5: Military Medical Personnel

This section covers key aspects of military medical personnel management, training and recruitment. It should provide numbers of military personnel with a narrative that highlights key aspects such as: military medical technicians, extended training for military roles (e.g. nurse anaesthetists), and the balance between the active duty, reserve, and civilian workforce. **Please include answers to the following questions.**

- What is the total number of personnel in each the medical services of the Army, Navy, Air Force, civilian?
- What is breakdown of professions/specialities?
- What is the role of reservists and civilians in the military medical system?

Suggested Structure

Paragraph 1 – covers the numbers and type of personnel in the whole military health system. This might be supported by data collated using Table 5 which provides a method for classifying different classes of military healthcare workers.

Paragraph 2 – covers the methods for recruitment of military healthcare workers. Table 5.1 provides a method of classifying different types of recruitment incentives.

Paragraph 3 – describes the military medical education and training institutions. Table 5.2 provides a method of classifying different types of educational programmes. This might include a description of military medical universities or medical education institutes and also medical field training centres. Consider adding a photograph of such facilities.

Paragraph 4 – this could include examples of innovations in military medical training including simulation, formal university qualifications and civil-military collaborations.

Table 5: Categories of Healthcare Personnel in a Military Medical System

Personnel Type	Definition ¹	Active Duty #		Reservist #		Civilian #	Total #
		Officer	Enlisted	Officer	Enlisted		
Physicians	Clinicians who have obtained medical degrees with the proper licensing and training to practice in general medicine or in specialized disciplines. ¹⁵						
Veterinarians	Certified clinicians who diagnose, treat, and prevent diseases in animals. ¹⁵						
Dentists	Clinicians who are licensed to treat diseases of the mouth, teeth, jaws, and related areas. ¹⁵						
Pharmacists	Professionals who are licensed to store and distribute medications. ¹⁵						
Nurses	Clinicians with nursing degrees and credentials to provide care to patients. ¹⁵						
Combat Medics	Clinical care providers who are trained by the military, but are not necessarily provided with the certification levels and education required for physician and non-physician clinician roles. ¹³						
Healthcare Administrator	Any non-clinical personnel, such as NCO practice managers and medical support officers, who help with the management of						

Personnel Type	Definition ¹	Active Duty #		Reservist #		Civilian #	Total #
		Officer	Enlisted	Officer	Enlisted		
Rank						N/A	
	domestic and international healthcare facilities. ²⁸						
Allied Health Professional	Personnel who support physicians and non-physician clinicians, including dental hygienists, physical therapists, medical technicians, radiographers, speech pathologists, respiratory therapists, among others. ²⁹						
Non-Physician Clinicians	Licensed clinical practitioners who are not certified physicians, including nurse practitioners, mid-wives, physician assistants, chiropractors, naturopaths, acupuncturists, optometrists, and podiatrists, among others. ³⁰						

¹ See: World Health Organization. Classifying health workers: Mapping occupations to the international standard classification. *World Health Organization*, 2010. At; https://www.who.int/hrh/statistics/Health_workers_classification.pdf?ua=1

Section 5.1: Military Medical Recruitment

This sub-section should provide information about the recruitment pathways for military medical providers. **Please include answers to the following questions.**

- How are physician and non-physician providers recruited to the military?
- Which groups receive their primary professional training in the military? (doctors, nurses, AHPs, non-physician clinicians)

Table 5.1: Recruiting Mechanisms for Military Health Professionals

Recruiting Mechanism	Definition
Monetary	Physicians are offered monetary bonuses or higher compensation than civilian alternatives would provide.
Scholarship or Repayment	Physicians are offered scholarships for schooling while in training or repayment programs after their training is completed.
Mandatory Service	Physicians in the country are required to serve in the military.

Section 5.2: Military Medical Training and Education

Many nations have institutions for the training and education of military healthcare personnel including field training centres, nurse and AHP training centres, military medical schools and collaborations for post-graduate training of healthcare professionals. These should be recorded in this section, including civil-military collaboration. **Please include answers to the following questions.**

- How are basic soldiering skills and medical specialist training delivered?
- Is there mandatory individual training in military skills such as weapon handling, CBRN protection and first aid?
- Are there specific military medical training institutions? E.g. field training centre, military medical school, military nursing school etc?
- How is the military collectively trained and validated to meet readiness?

Table 5.2: Education and Training Systems for Military Health Professionals

Training Mechanism	Definition
Civilian Education	Students pursue their education at a civilian university with no military component.
Military Education	Students pursue their professional qualifications at a military university/training centre.
Military Track Education	Students pursue their medical degree at a civilian university that possesses a military faculty and pathway.
Foreign Military Education	Students pursue their education at a military medical school in a foreign, but allied, country.

Section 6: Civil-military relations

This section covers formal arrangements for civil-military collaboration in health services and research. **Please include answers to the following questions.**

- Are there formal arrangements for co-ordination/collaboration between civilian and military health systems?
- Are the military health services included within national disaster risk reduction and resilience planning?
- Are there examples of military medical services being used as part of national crisis response?

Suggested Structure

Paragraph 1 – cover formal arrangements for civil-military medical co-ordination in response to national emergencies.

Paragraph 2 – cover formal arrangements for civil-military medical co-ordination as part of the military contribution to humanitarian and disaster assistance.

Paragraph 3 – cover examples of civil-military medical operations, including the response to the COVID crisis.

Paragraph 4 – cover any other examples of civil-military medical collaboration, e.g. civil-military co-operation in training in trauma care or CBRN emergencies, military manufacture of pharmaceuticals for the national health market, collaboration in bio-medical research or others as listed at Table 6.

Table 6: Examples of categories of Civil-Military Relationships

Activity	Briefly describe
Civil-military cooperation in a domestic trauma system	
Military providers working in a civilian context when not deployed	
Joint civil-military disaster operations domestically	
Joint civil-military disaster operations abroad	
Integration of military and civilian garrison hospitals	

Section 7: History and Culture

This section should summarize the historical and cultural of the military health system, tracing from its early stages to the current status of the military health system (see: Bricknell M. The Cultural Challenge of Leading in Military Medicine. *Military-medicine.com*. 2020. Retrieved from <https://military-medicine.com/article/3839-the-cultural-challenge-of-leading-in-military-medicine.html>). **Please include answers to the following questions.**

- When did the nation’s military health system begin?
- What changes has the military health system undergone over time?
- What symbols and cultural structures have become shared across all military providers?

Suggested Structure

Paragraph 1 – brief summary of the history of your military health services, include a link to any sources of historical information and military medical museums (or significant medical displays in military museums).

Paragraph 2 – summary of military medical associations or other societies. Consider adding photographs/images of the badges of your military medical service.

Paragraph 3 – description of any other topics included within Table 7.

Table 7: Examples of cultural artefacts/symbols/features of a MHS

Category	Definition	Description
History	A narrative description of the initial founding and subsequent development of the military health system.	
Military badges or emblems	A badge/emblem that denotes an association with the MHS.	
Mission Statement or Motto	A statement of purpose or short phrase that defines the function of the military health system.	
Military Medical Associations	Organizations that facilitate community and socialization between military providers either during or after their service.	
Museums	Facilities that describe the history of a nation’s military healthcare and store relics of the system’s past.	

Category	Definition	Description
Historical Books	Literary descriptions of the historical development of a nation's military healthcare system.	
Websites	Links to any websites that provide information about a nation's past or present military health system.	