

MILITARY HEALTH SYSTEM

No matter where in the hemisphere, the conditions under which military duty is performed are often physically and psychologically demanding, and sometimes extremely dangerous. Injuries due to military operations or accidents, naturally occurring diseases, and even the normal wear and tear of military service are not uncommon. When these adversities occur, men and women in uniform need to feel confident that their country and their defence institutions will provide the services necessary to restore them to health and optimal functioning, that their families' needs will be met during a period of convalescence that can be long and difficult, and that they will receive the assistance necessary to make new lives for themselves should they be unable to resume military service.

Case Study #1: The Canadian Military Health System

Mission

In Canada, the care of ill and injured military personnel and their families is fulfilled through a whole-of-government approach. The duty and responsibility to care for our current and former members reside especially with the leadership of the Canadian Armed Forces, the Department of National Defence, and Veteran Affairs Canada, a separate federal department responsible for the care and support responsibilities of medically released Canadian Armed Forces veterans and their families. This paper will focus on the military health services provided to military personnel while they are in service.

In the Canadian Armed Forces, the Health Services Group is responsible for providing full-spectrum, high-quality health services to Canada's military forces wherever they serve. It is a distinct formation of the armed forces that has a three-fold mandate :

- 1 – Deliver High Quality Health Services
- 2 – Provide a Deployable Health Capability
- 3 – Provide Health Advice

Structure

Except for health service personnel serving onboard ships and with the Special Operations Forces Command, all health service resources for the Regular and Reserve Force are under the command of the Surgeon General. Dedicated health advisory and planning cells support the Royal Canadian Navy, the Canadian Army, the Royal Canadian Air Force, the operational commands, and the Regional Joint Task Forces. Two subordinate regional formations respond to domestic requirements.

Currently, the Canadian Armed Forces Health Services Group comprises 43 units and 82 detachments, including static clinics, field ambulances, a field hospital, two schools, one research establishment, a dental unit, one medical equipment depot, and other specialized elements.

Civilian-Military Cooperation

The Canadian Armed Forces do not possess any hospitals. The Health Services Group has permanent clinics providing primary care spread across Canada and in Europe. That said, owing to the broad geographic distribution of Canadian Armed Forces units, military personnel are not necessarily injured nor do they become ill near a Canadian Forces Health Services facility. The Health Services Group and its facilities therefore maintain close working relationships with provincial health care partners and allies to ensure that no matter where personnel are located, they will have access to the best available care. Regardless of where members first present themselves for care, they will eventually be cared for by a Canadian Armed Forces health care team.

As opposed to some countries, the Canadian Forces Health Services Group does not produce or manufacture its own pharmaceuticals and medical supplies. We use a system of prime vendors to obtain our medications and supplies. The Canadian Forces Health Services Group has adopted a “Just-in Time” procurement process which permits economy of scale not only for our inventory, but also in preventing overstocking of supplies which might expire on the shelves. Economies are also realized using the distribution networks of our providers. They have warehouses across Canada which shortens delivery time and reduces transport costs.

This system has been in place since 2001, when we reorganized the supply and distribution of pharmaceuticals and medical materiel, shifting the majority of this responsibility away from the Central Medical Equipment Depot (CMED) in Petawawa, Ontario. That said, the Central Medical Equipment Depot continues to provide pharmaceuticals and other medical supplies that cannot be provided by a prime vendor (kits and other unique military items) and also supplies Canadian Armed Forces’ missions across the globe.

Deployments

The Canadian Forces Health Services Group ensures that every Canadian Armed Forces member has access to essential health services outside of Canada. During large and established operations, the Health Services Group provides on-site primary and emergency health services, including initial surgery and post-operative care, short-term surgical and medical in-patient care, as well as diagnostic imaging, dental, pharmacy, and laboratory services. Robust health protection capabilities are applied and deployed to identify and maximally mitigate health threats arising from operational, occupational, industrial, and environmental health hazards.

The Canadian Forces Health Services Group currently supports 19 international missions. Canadian Armed Forces health planners supporting the Canadian Joint Operations Command and elements’ operational commands establish health services appropriate to diverse operational environments, such as the jungles of Central Africa, the deserts of the Middle East, and aboard ships off the Horn of Africa and in the Arabian and Caribbean Seas. For almost four years beginning in 2006, the Canadian Forces Health Services Group commanded and provided most of the staff for the NATO Role 3 Multi-national Medical Unit (R3MMU) in Kandahar. It provided tertiary care to coalition forces involved in combat

operations in southern Afghanistan and was widely considered one of the best trauma hospitals in the world with a 97% casualty survival rate.

Medical Technician Providing Point of Injury Care-Afghanistan



R3 MMU Operating Room-Afghanistan



Mental Health

The Canadian Armed Forces were sensitized to the psychological impact of operations as members returned from missions such as those in the former Yugoslavia, Somalia, Rwanda and Afghanistan. A study, published in 2011, showed that 13 percent of personnel who deployed in support of the mission in Afghanistan up to 2008 were diagnosed with a deployment-related mental illness after more than four years of follow-up.

Recognizing that mental health is a critical component of overall health and well-being, the Canadian Armed Forces have developed mental health programs and services that deliver outstanding standard of comprehensive, high-quality care. These programs and services cover three components: health surveillance and mental health research; mental health education and training; and, clinical care. Examples of recent mental health initiatives include:

- Clinical research to better understand the underpinnings of post-traumatic stress disorder, to reduce self-termination of care and to explore novel therapies such as virtual reality.
- Each suicide case is reviewed by professionals to ensure that any indicated improvements are initiated rapidly to optimize prevention.
- The Road to Mental Readiness, a mental health training and education program based on the principles of sports psychology, is designed to demystify mental illness, provide individuals with tools for dealing with stressful situations and reduce the risk of developing mental illness.
- Seven Operational Trauma and Stress Support Centres across Canada provide specialized mental health services for patients with operational stress injuries.
- Members deployed to high-stress operations longer than 90 days participate in a Third Location Decompression program and all personnel returning from international operations of 60 days or more undergo the Enhanced Post-Deployment Screening process between 3 and 6 months after their return to Canada

Case Study #2: The Colombian Military Health System

Mission

The mission of the Health Subsystem of the Armed Forces of Colombia is to offer the support of health services to the Forces in Military Operations on land, sea, rivers or in the air, giving integral health services to military personnel and beneficiaries of the Health Subsystem of the Armed Forces, by means of activities aimed towards strengthening operational health, promoting health, preventing sickness, and promoting recuperation and rehabilitation, with the goal of improving the personnel's quality of life and lifestyle. Health services are provided under a model of health care and operations focused on risks and on integral quality care to its users.

Operational Health is an essential part of the Health Subsystem of the Armed Forces, giving continuous attention to all of the dimensions of well-being related to physical and mental

health, allowing personnel working on land, on the sea, on rivers or in the air to be medically suitable to face military operations. This is carried out based on an analysis of risks to operational health, applied to the three subprograms described in Agreement 018 of 2002 (Health on Campaign, Naval and Diving Medicine and Aerospace Medicine), and by intervening to prevent risks by means of the three principal components of Operational Health (Assessing and analyzing information, Medical Planning and Medical Logistics in SOPE [*translator's note: SOPE = Salud OPERacional, = Operational Health*]), contributing to investigation and the on-going education of health care personnel who participate in providing medical care, through continuous evaluation and monitoring of processes, with the goal of maintaining the psychophysical preparedness of military personnel.

Structure

The command, monitoring and assessment of health care activities is carried out by the General Directorate for Military Health, centering on tasks of drawing up guidelines for health that should be developed further by the Directorates of Health for the National Army, the National Navy and the Air Force, taking into account the specific and particular operational conditions of each Force, through health care centres or Military Health Facilities, organized on a national level.

The Directorate of Health for each Force put the directives that have been issued into action in order to satisfy the user through health services at quality standards, with human resources that are capacitated and trained to cover the needs that arise in the health care process.

Currently, the basic objective of Military Health in the theatre of operations is to preserve the Combat Force of the Armed Forces. This mission will be carried out by offering an efficient and functional health care system, perfectly connected and integrated from the first moment of injury, wound or sickness, through each of the successive stages of medical treatment, until arriving at a hospital facility capable of offering definitive care and rehabilitation for the specific wound/sickness in a timely, safe and efficient fashion, coordinated between the Armed Forces and the National Centre for Personal Recovery, demonstrating a workflow of functional resource integration.

As a complement to the structure of health care laid out here, there is the Central Military Hospital, which has a higher level of capacity for resolving health issues and is dedicated to offering a complete range of medical services, with vast experience in managing wartime trauma.

Successful Missions of Deploying Health Services in the Theatre of Operations (Trauma Treatment Group)

The deployment of the Military Health of the Armed Forces of Colombia has carried out successful missions on a national and international level. As a part of the cooperation between the countries of the Americas, humanitarian aid missions have been carried out such as what was done in response to the earthquake in Haiti in January of 2010 and to the humanitarian emergency of the earthquake in Peru in August of 2013.

Since the year 2002, the Group for Trauma Support (GATRA) has been deployed on a national level in response to the offensive of the Armed Forces against narco-terrorist organisations.

The philosophy of the Group for Advanced Trauma Support (GATRA) is summed up in the organization of an interdisciplinary health group that accompanies military operations, and that has the capacity to react and mobilize human resources, material and teams, whose complexity allows prompt treatment of life-threatening emergencies, damage control surgery and preparation for transportation and evacuation of wounded personnel in a timely fashion to a health care facility of greater complexity, or to the External Network, in accordance with their medical needs.

The successes achieved in saving lives, it has been determined that the Group for Advanced Trauma Support (GATRA), as an integral part of an integrated System of Medical Treatment, Evacuation and Transportation, should be connected with the National Centre for Personal Recovery (CNRP) and second-level Military Health Facilities, the available external network and/or the Central Military Hospital, in order to optimize the use of available resources and the capacity of installations, reducing in this way the mortality rate and/or long-term sequelae of personnel wounded in combat.

As an integral part of an integrated System of Medial Treatment, Evacuation and Transportation, the Group for Advanced Trauma Support (GATRA) is connected with the National Centre for Personal Recovery (CNRP) and second-level Military Health Facilities, the available external network and/or the Central Military Hospital, in order to optimize the use of available resources and the capacity of installations, reducing in this way the mortality rate and/or long-term sequelae of personnel wounded in combat.

The procedure of casualty evacuation (CASEVAC) and medical evacuation (MEDEVAC) is carried out before evaluating the patient's state of health. The development of this kind of mission often requires coordination among the three Forces, in order to make available the most appropriate form of land, water or air transportation, taking into account the medical condition of the wounded soldier and the operational situation of the area where the patient is located. Search and Rescue missions are carried out under ordinary circumstances (SAR) and under enemy fire (CSAR); these missions are carried out by highly effective teams of the National Army, the National Navy or the Air Force.

During recent years, the Armed Forces have been supplied with pressurized and unpressurized medically prepared airplanes conditioned to be used exclusively for transporting patients throughout the entire National Territory, with greater autonomy and speed for their movements, which are destined for exclusive use as airborne ambulances, which have human resources on board specialized in medical air transportation and high technology equipment, fulfilling the requirements established by the Law. Similarly, for this exclusive use, there are UH60L helicopters available, and C-90, C-130, C-295 and CN-235b airplanes are being configured.

In the last decade 12,241 military patients and 2,664 civilian patients have been transported, for a total of 14,905 people transported, who have been victims of armed conflict, natural

disasters and medical emergencies.

Case Study #3: The Trinidad and Tobago Military Health System

Mission

In Trinidad and Tobago, care of the injured military personnel and their families is fulfilled by the Government. The responsibility to provide care for these members, reside with the Trinidad and Tobago Defence Force (TTDF), through the Ministry of National Security (MNS) and the Ministry of Health (MOH).

In the TTDF health services are focused on:

- Primary Health Care
- Monitoring (Rehabilitation)
- Outsourcing
- Advice

Structure

The health care of all serving personnel in the TTDF falls under the TTDF Medical Officer (DFMO). Each military installation within the TTDF – which comprises of the Trinidad and Tobago Regiment (TTR), Trinidad and Tobago Coast Guard (TTCG), Trinidad and Tobago Air Guard (TTAG) and the Trinidad and Tobago Defence Force Reserves – has a primary health care facility Medical Inspection Room (MI Room)/Medical Infirmary.

The aim of each MI Room is to provide services to meet the health care needs as mentioned above. Where health care requirements exceed the capacity of these primary facilities, referrals are made to have medical care accessed through the public health system. If the services are not readily available within the public health care setting, then the outsourcing of these services are sought through the local private health sector in the first instance and then the international private sector if need be.

Civilian Military Cooperation

The TTDF does not possess any Military Hospitals facilities. Each formation provides pre-hospital and primary care for military personnel. The medical inspections rooms within the TTDF provide clinics and primary care to all military personnel across formations. In the event that the treatment needs exceed the capacity of these facilities, then the injured or sick are transferred to the nearest public health care institution. The TTDF usually access health services from public health care facilities located closest to the military base. A close working relationship is maintained with these facilities to facilitate access to health care. During the period of rehabilitation, TTDF health care providers conduct monitoring to ensure that the health care needs are being met.

In addition TTDF through partnerships, access services from various stakeholders in health to ensure that care is made available. External agencies are invited to participate in health fairs, immunization drives, cancer screening, sex education and awareness, substance abuse, etc.

Pharmaceuticals

The TTDF does not produce or manufacture its own pharmaceuticals and medical supplies. Pharmaceuticals and medical supplies are requisitioned from the Government by the Defence Force Pharmacist. Pharmaceuticals which are not available are procured and issued by the Defence Force Pharmacist. Medical supplies and equipment which are unavailable at Government storage depot can be procured by the individual formations.

Mental Health and well-being

The TTDF recognizes the impact of mental health and welfare issues arising out of the day to day operations of military personnel. On the 31st December 1981, Cabinet accepted the proposal for the establishment of a Welfare Department for the Trinidad and Tobago Defence Force as part of the staff of the Chief of Defence Staff, with effect from 1st January 1982. The department offers a range of services including short-term counselling and referrals for both job related and personal issues, for all members of the Force. Over the years, the Department has developed trained personnel and increased its services offered. This expansion has made the department more accessible. The Medical Infirmary makes referrals to CAMP where assessments are done to determine what interventions are necessary. If necessary, referrals can be made to private psychologist or to the public health facility.

Welfare in the TTDF in its broadest sense is to enhance the morale and well-being of all Defence Force personnel and their families. It provides material aid, health, education and social services, at the same time maintaining a strict code of confidentiality. To this end the overall objective of the department is to improve the quality of life for every member of the Force thus crafting a healthier workplace for us all. The department consists of a Social Work/Counselling unit, Chaplaincy unit, Addiction Anonymity unit and the Group Health unit.

Cooperation in the Americas

Cooperation at the military health system level is currently limited to multinational exercises. As part of the Beyond the Horizon and New Horizons exercise programs, Canadian troops specializing in engineering, construction and health care provide needed services to communities while receiving valuable deployment training and building important relationships with partner nations.

New Horizons is a multifaceted, international exercise geared toward providing mutual training opportunities between host nation, U.S. service members and allied forces, of which Canada is a contributor, while assisting the host nation population in various capacities. It is an annual series of joint and combined humanitarian assistance exercises. New Horizons Belize 2014, for instance, comprised Belize Defense Forces and U.S. military civil engineers constructing five school facilities and one medical care facility, and it also encompasses Belizean, Canadian Armed Forces and U.S. medical professionals operating in numerous medical and dental readiness training exercises throughout the country. The Canadian

Armed Forces contributed doctors, pharmacists, medical and dental technicians to this exercise.

Beyond the Horizon is a U.S. Southern Command sponsored, U.S. Army South planned and led annual humanitarian and civic assistance exercise. The exercise lasts for several months and provides construction and medical assistance to partner nations throughout the Central and South America and Caribbean region. As an example of cooperation between partner nations, Canada, Chile, Colombia, the Dominican Republic and the U.S., recently participated in Beyond the Horizon-Dominican Republic 2014 and provided medical, dental and construction projects over a four month period. The Canadian Armed Forces provided doctors, nurses, pharmacists, medical and dental technicians.

Exercise Tradewinds is a multinational maritime interdiction, ground security and interagency exercise led by the U.S. Southern Command. It focuses on countering transnational organized crime and practicing humanitarian assistance and disaster relief (HA/DR) in order to promote regional security cooperation. Exercise Tradewinds 14 was the 30th iteration taking place in June in the Caribbean. The exercise involves ships, aircraft and personnel from 16 nations, including: Antigua & Barbuda, Belize, Canada, Dominica, Dominican Republic, Grenada, Guyana, Haiti, Jamaica, St. Kitts & Nevis, St. Vincent & Grenadines, Suriname, Trinidad and Tobago and the U.S. The Canadian Armed Forces Health Service's contribution to the exercises consists of medical support onboard our maritime coastal defence vessel, dive support to the diver training team from the Fleet Diving Unit (Atlantic) and medical ground support to the members of the Canadian Army.

Conclusion and Way Forward

Our hemisphere's military health systems vary in their structure, in their objectives, and in their arrangements with civilian institutions. That said, our military health institutions possess valuable expertise and have, from various national contexts, developed lessons learned that are worth sharing with partners. In the absence of a pan hemispheric space for sharing experiences, member countries of the Conference of Defence Ministers of the Americas may wish to consider building a list of points of contact responsible for military health in their own defence institutions. Canada would be pleased to lead in the initial development of such a list and share it with all other countries before the next Conference in 2016. While modest, such an initiative would serve as a first step in building bridges among our respective military health organizations, building a pan-American community of military health experts and facilitating the sharing of experience among our countries. We would also suggest that our commitment be endorsed by our Ministers and would propose that the following language we adopted in the Final Declaration of Arequipa:

DECLARE:

Their agreement to develop a list of points of contact responsible for military health in the hemisphere and their commitment to assist in the creation of such a tool with a view to building a community of military health experts and facilitating the exchange of lessons learned among our countries.