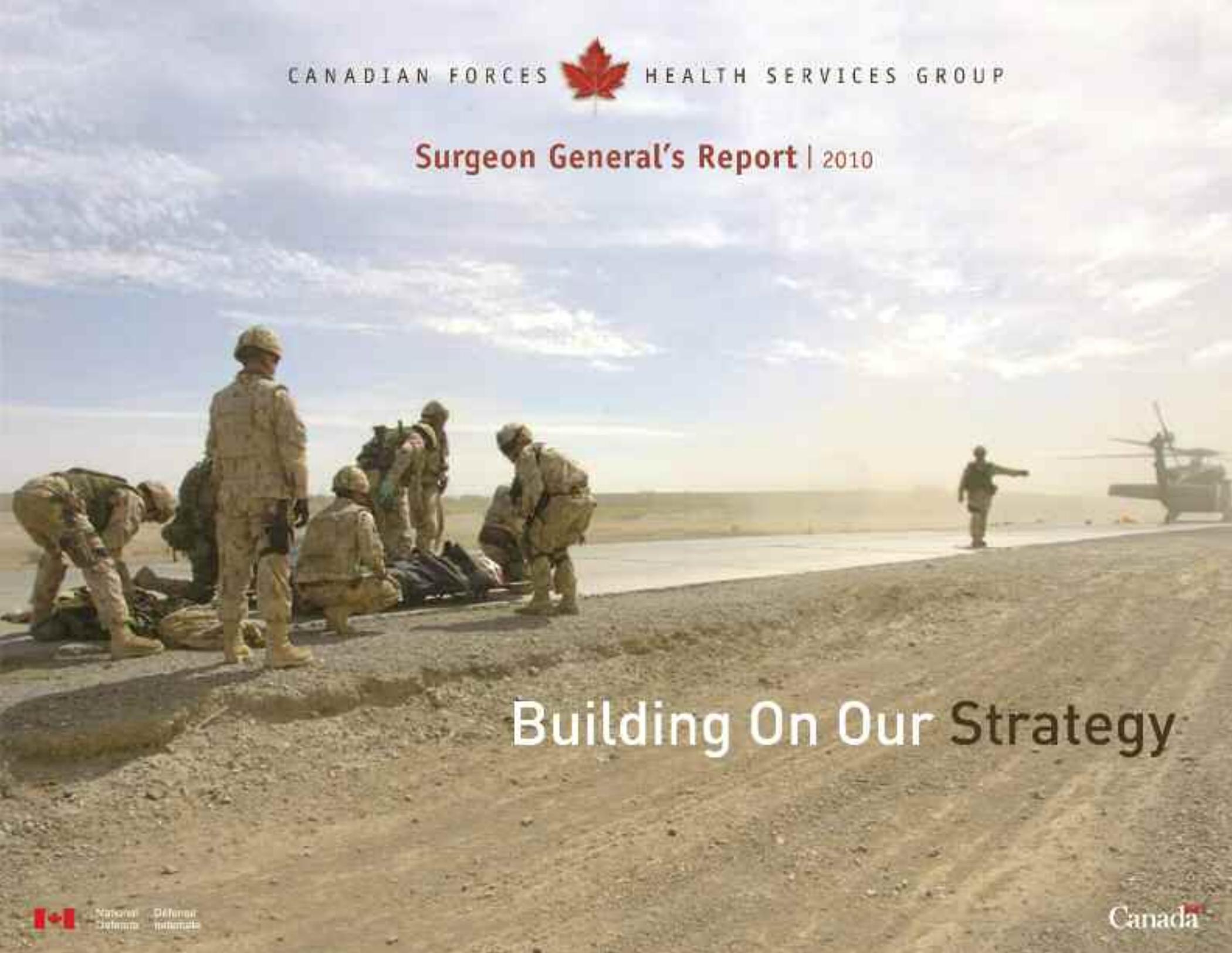


# Surgeon General's Report | 2010



## Building On Our Strategy



Developing this Report has been a collaborative effort. As Editor-in-Chief, I sincerely thank all who have contributed in making it a true reflection of Canadian Forces Health Services Group's impact in 2009–2010.

Col Richard Pucci — Editor-in-Chief  
LCol Murray Crawford and Louise Currier — Editor  
DGM-10-04-00001

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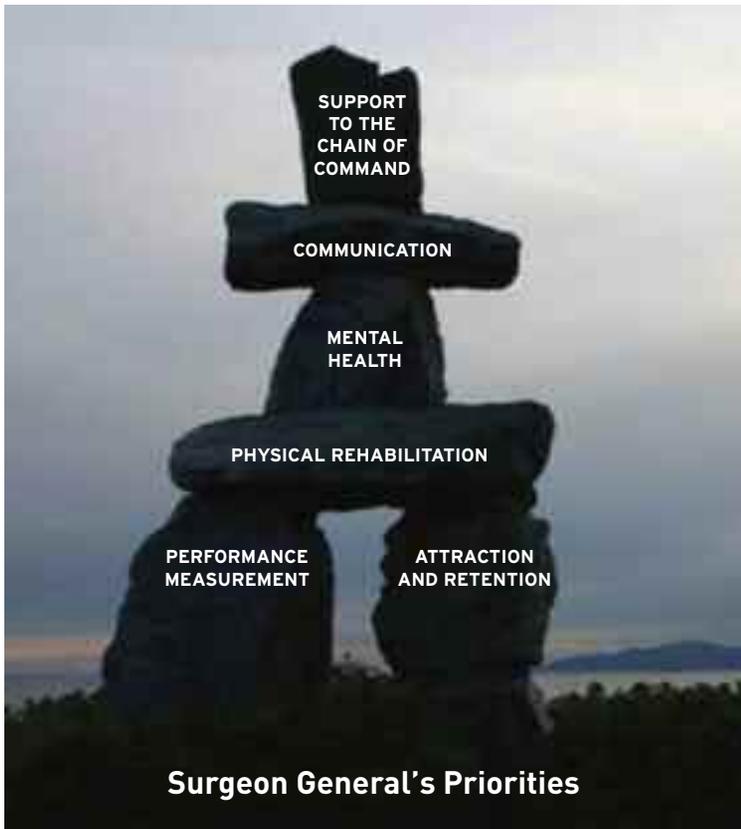
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# Surgeon General's Address

This has been a tremendously busy year for the men and women of the Canadian Forces Health Services Group (CF H Svcs Gp). We have experienced resurgence in health research, the development of our Directorate of Mental Health, and the implementation of a virtual reality rehabilitation system in a joint venture with our civilian partners. We have also moved a step closer to full implementation of our electronic health record as part of the Canadian Forces Health Information System. While these initiatives were taking place, our healthcare system continued to function normally, supporting operations in Afghanistan, at the Vancouver Olympics, in Haiti, and meeting the day to day operational readiness healthcare needs of the CF. The successful manner in which we have accomplished these activities has enhanced the reputation of our people and has equally increased our institutional credibility.

Over the next five years, CF H Svcs Gp will have many challenges and opportunities. All our goals, objectives and activities will directly support



the Department's six core missions as detailed in the Canada First Defence Strategy, the three priorities of the Chief of Military Personnel, and the needs of environmental commands.



In the immediate term, we must continue to plan and force generate for our current mission in Afghanistan, and to provide high-quality healthcare at home and abroad.

In the near term, we will actively plan and prepare to be capable of deploying health services personnel to another theatre of operations by January 2012 if so ordered by the Government of Canada. To accomplish this, we must continue to be agile and responsive to our patients, the chain of command, and any transformational requirements.

In the longer term, we will ensure that we continue to be leaders in the field of military healthcare with a renewed focus on health research. We will be fiscally responsible, and we will measure and evaluate our results using a rigorous performance measurement model.

We invite you into our world through this Report, which highlights a few of our key achievements and proud moments from 1 April 2009 to 30 June 2010.

*"I am extremely proud of the dedication and effort displayed by our people over the past year as we met the many challenges of supporting CF operations and providing excellent healthcare, both at home and abroad. Their numerous accomplishments are truly remarkable and reflect their ongoing commitment to quality."*

Hans W. Jung, OMM, CD, QHP, MD, MA  
Commodore  
Surgeon General  
Commander CF H Svcs Gp

# Who We Are

**C**F H Svcs Gp is Canada's 14th healthcare system. It is an integral part of the Canadian Forces (CF), providing "best care anywhere" to CF personnel, wherever we serve. This integrated team of military and civilian health professionals is a leader in healthcare reform. The team supports the Canada First Defence Strategy by offering a patient-focused comprehensive spectrum of care in evidence-based health services.

The health needs of CF personnel are a top priority for the CF and the Government of Canada. The universality of service or "soldier first" principle requires that CF personnel be physically fit, employable, and deployable at all times. The Surgeon General's obligation to CF personnel is to provide the services necessary for them to maintain their health and mental well-being; to prevent disease; to diagnose and treat any injury, illness, or disability; and, to facilitate their rapid return to operational fitness. Because strength and endurance could mean the difference between success and failure in a military operation, CF personnel must maintain a high standard of health and fitness.

CF H Svcs Gp supports the effectiveness of Canada's operational readiness by promoting a healthy lifestyle and physical fitness, delivering high-quality care in garrison, and providing operational healthcare services. Care provided to ill and injured CF personnel is on an individual basis and designed to meet their needs so they are able to have the best recovery and quality of life. By maintaining close relationships with the healthcare services of our allies and with civilian healthcare services, CF H Svcs Gp ensures that ill and injured CF personnel receive the best care possible from the whole community.

CF H Svcs Gp is a key component of the Defence Team and comprises approximately 6 400 regular force, reserve force and civilian personnel, as well as 500 civilian contractors. Our mandate is three-fold:



- 1 — DELIVER HEALTHCARE
- 2 — PROVIDE A DEPLOYABLE HEALTH SERVICES CAPABILITY TO OPERATIONAL COMMANDS
- 3 — PROVIDE HEALTHCARE ADVICE



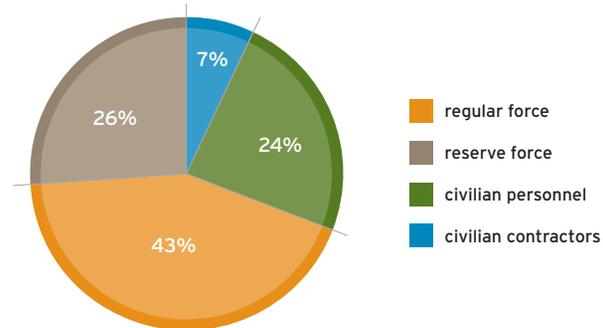
An evidence-based, best-practice, and performance-measurement culture is alive and well throughout CF H Svcs Gp—effectiveness and efficiency are at the heart of all we do. Our highly trained health professionals, recognized internationally for their excellence, are leaders in collaborative and interdisciplinary care. The structure of CF H Svcs Gp brings together a range of skills and expertise, as dictated by the needs of patients, commanders and operations.

CF personnel have access to at least the equivalent standard of healthcare and publicly funded benefits and services that Canadians receive under provincial healthcare plans. The "Canadian Forces Spectrum of Care" document describes these benefits and services, and it sets one standard for all CF personnel.

CF H Svcs Gp provides health services to CF personnel in two distinct environments: in garrison and on deployment. In Canada, every military base provides in-garrison care. Overseas, we provide health services whenever and wherever CF personnel deploy. These closely linked CF H Svcs Gp services ensure that personnel are healthy, thereby increasing deployment readiness and reducing the risk of health emergencies on deployment.

*Without healthy soldiers, sailors, airmen and airwomen, the CF would not be a combat-capable military force.*

**CF H SVCS GP—POPULATION DISTRIBUTION**  
(total population: 6 400)





CF H Svcs Gp is constantly adapting and improving to meet the challenges of delivering healthcare to a large and highly mobile population throughout Canada and the world. Health services must be flexible enough to meet the demands of the context in which we provide it. This includes at or under the sea, as well as on land in all geographical and climatic conditions. The basic principles of health services delivery are common to all environments, but each environment has unique challenges. In any military environment, the number of routine health problems far outnumbers operational casualties, even in warfare.

In combat operations, such as in Afghanistan, our wounded soldiers, sailors, airmen, and airwomen are provided with the most effective medical treatment that Canada can provide, from the point of injury all the way back to a hospital near home in Canada.



*CF H Svcs Gp is among the best of its kind in the world.*



## Aggregate Cost Analysis

The cost of the CF health system has often been compared with the cost of Canadian civilian health systems. In September 2009, the Consulting, Information and Shared Services Branch of Public Works and Government Services Canada conducted an external costing review of the delivery of healthcare to CF personnel.

The objectives of this review were (i) to compare the cost per capita for health services delivered to CF personnel with the cost per capita for health services provided to an equivalent Canadian population; and (ii) to determine the reasons for any differences. The results are presented in the report "Comparative Cost Analysis of Healthcare Services for the Canadian Forces."

Although the systems share commonalities, the package of services that each delivers is markedly different, particularly in the areas of force generation and support to operations. When compared with data from the Canadian Institute for Health Information database, the CF was shown to **deliver equivalent services for 2% less cost** than the Canadian health system average.

**"The CF actually spends \$78 per capita less on healthcare services for its personnel than the public system spends on healthcare for the average Canadian."**

For more information, please visit our website at <http://www.forces.gc.ca/health-sante/default-eng.asp>

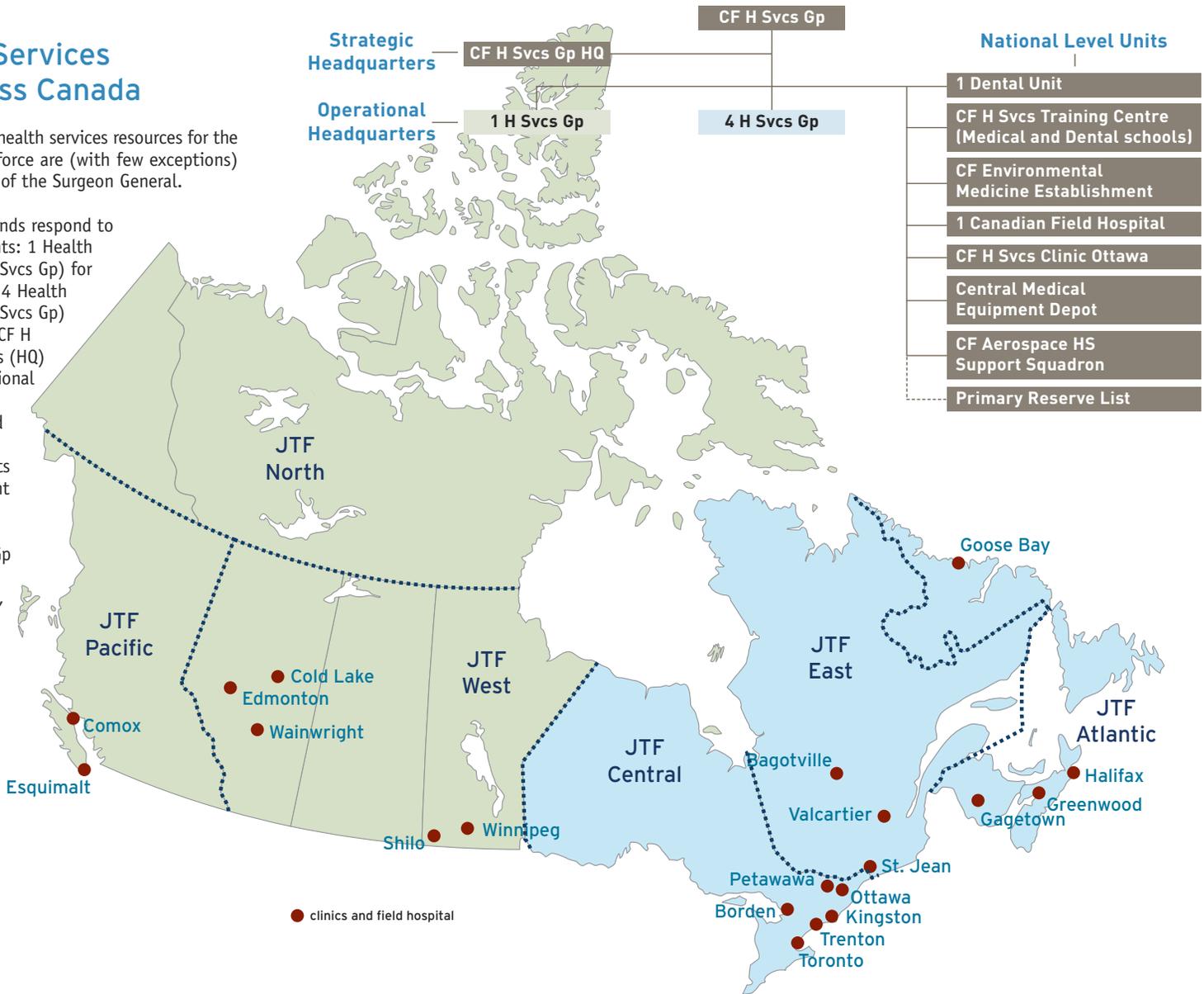
# Who We Are

## CF Health Services Group across Canada

Organizationally, all health services resources for the regular and reserve force are (with few exceptions) under the command of the Surgeon General.

Two regional commands respond to domestic requirements: 1 Health Services Group (1 H Svcs Gp) for western Canada and 4 Health Services Group (4 H Svcs Gp) for eastern Canada. CF H Svcs Gp Headquarters (HQ) is located in the National Capital Region. In addition, a dedicated health advisory and planning cell supports each CF regional Joint Task Force (JTF).

Currently, CF H Svcs Gp comprises 43 units and 82 detachments, including clinics, field ambulances (mobile medical units), one field hospital, two schools, one research establishment and one medical equipment depot.

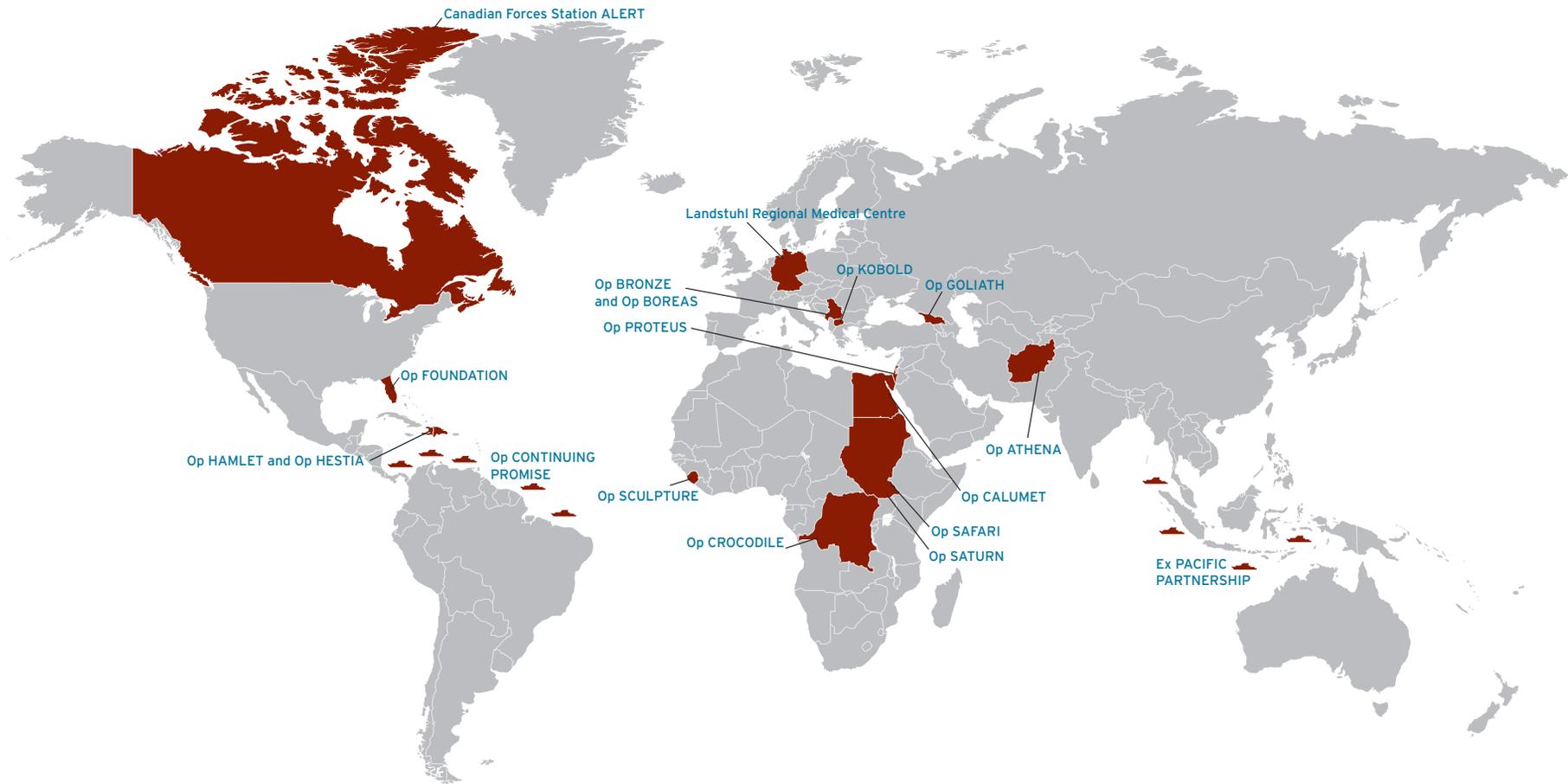


## CF Health Services Group spanning the globe

At the end of 2009, CF H Svcs Gp supported 15 international missions, ranging from Afghanistan, with more than 3 000 deployed CF personnel, to Cyprus, with only one person deployed.

CF H Svcs Gp planners who support the 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.

*Whether it is a single soldier, sailor, airman or airwoman, or an entire unit or task force on deployed operations, the provision of high-quality healthcare to our CF personnel is always top priority for CF H Svcs Gp.*





A photograph of two surgeons in an operating room, both wearing masks and glasses, focused on a surgical procedure. The image has a warm, golden-brown tint. The text "Deliver Healthcare" is overlaid in the center in a bold, black font.

**Deliver Healthcare**

# Primary Care

*We are extremely proud of the contribution all members of CF H Svcs Gp have made to the development of our clinic model. They have consistently acted with flexibility, openness, and the best interests of CF personnel at heart.*

CF H Svcs Gp is in the final stages of closing out a major 10-year project that has transformed the way we deliver healthcare. The leading-edge CF medical clinic model of healthcare delivery was based on sound principles and hard work. We are now seeing the benefits as the model matures and we learn from our experiences.

The Primary Care Renewal Initiative (PCRI) was a key component of the multi-faceted reform project called Rx2000. PCRI was the focal point for improving in-garrison continuity of care, and for developing the associated management structure and administrative framework to sustain improvements. The delivery of primary care services to CF personnel is critical to maintaining operational readiness, and to maintaining the essential trust between CF personnel and their healthcare system. The project ended on 31 March 2010. The clinic model issued from PCRI is the backdrop for what we can now claim to be a world-class, integrated, patient-centred system for the delivery of primary care services.

Healthcare in Canada is changing, and the development of the CF medical clinic model of care has allowed CF H Svcs Gp to be in the vanguard of that change. We celebrate the development of a system that is patient-focused, and which allows all members of the healthcare team to grow as professionals and to apply their skills to their maximum extent.



The heart of this new primary healthcare delivery system is the Care Delivery Unit (CDU). All CF personnel are rostered to a CDU where a multidisciplinary collaborative team provides focused, efficient and optimized care for both the individual patient and the relevant population. A CDU

core team consists of two uniformed medical officers, a civilian physician, a uniformed physician assistant, a civilian nurse practitioner, a primary care nurse (military or civilian), three military medical technicians and two civilian administrative support staff.

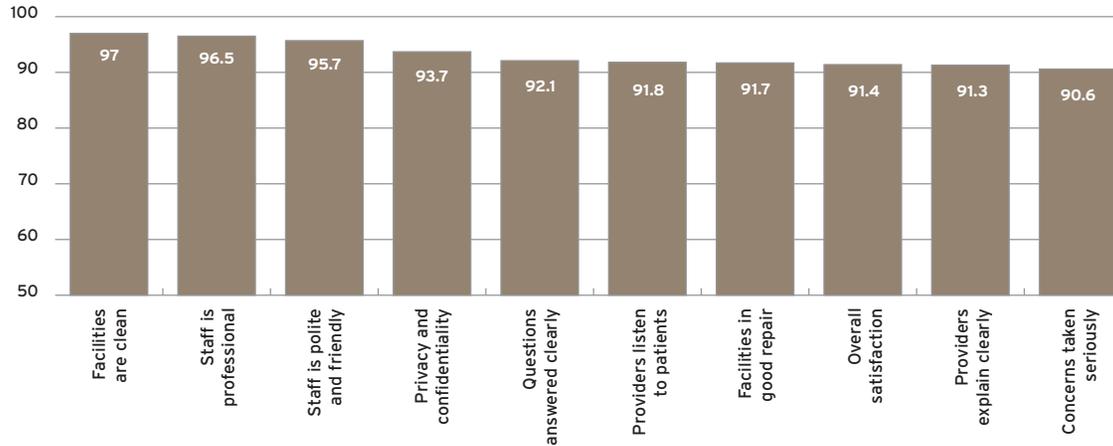
The team works collaboratively with patients to assess their needs, and to provide and coordinate the care in support of complete wellness. In-house physiotherapists, pharmacists and mental health professionals provide care either in collaboration with the team or through direct intervention.

Along with the adoption and optimization of the clinic model, the CF Health Information System (CFHIS) electronic health record is being rolled out to CF clinics. The electronic health record is more than a digital copy of traditional forms—it is critical to the success of the care delivery model. The CFHIS gives the team real-time access to documents and reports from any CF terminal so they can coordinate scheduling and tracking. It also allows the team members to discuss a patient's care electronically.

Patient satisfaction is clearly linked to responsiveness and effectiveness of healthcare services, and it may influence a patient's decision to seek medical advice, comply with treatment, and maintain effective relationships with primary care providers.



AREAS OF GREATEST SATISFACTION (90% AND ABOVE)—2009



## Patient Safety

In recent years, patient safety has emerged as a high priority for healthcare organizations in Canada and around the world. Patient safety is the result of high-quality care to prevent and mitigate adverse events within the healthcare system. Adverse events are unintended injuries or complications that arise from healthcare management and result in death, disability, or prolonged hospital stays.

This emphasis on patient safety stems from a number of studies, notably the Canadian Adverse Events Study, which reported a high incidence of preventable adverse events in Canadian hospitals.

CF H Svcs Gp is committed to the safest possible delivery of healthcare. To this end, we adopted patient safety as a priority in our strategic plan for the Quality Improvement and Risk Management Program. The Patient Safety Plan 2009–2012, “Creating a Patient Safety Culture in the CF,” was launched during Canadian Patient Safety Week in November 2009.

Patient safety will remain a major priority for the organization. We are conducting a patient safety study covering all our clinics in 2010, which will give us information on specific areas to be improved.



# Case Management

One of the greatest successes of the Rx2000 reform of CF health services was one of its first initiatives, the Case Management Program. The introduction of this program addressed a significant complaint voiced by CF personnel—the lack of continuity of care.

The Case Management Program is now a fully implemented and integral part of CF primary care. It provides a seamless, integrated mechanism for managing cases across the continuum of care. Because of its extensive and proven benefits, case management is our strategy for responding to the needs of CF personnel suffering from long-term and complex health issues. Improved processing of ill or injured CF personnel has enhanced overall operational capability.

**The Case Management Program received positive feedback and satisfaction ratings from patients in a 2009 survey:**

Case managers are involved in coordinating patient care as soon as deployed personnel who are ill or have been injured in theatre arrive back in Canada.

Case managers partner with CF personnel, the attending healthcare team and the applicable CF chains of command to help the patient return to duty and to achieve and sustain optimal health.



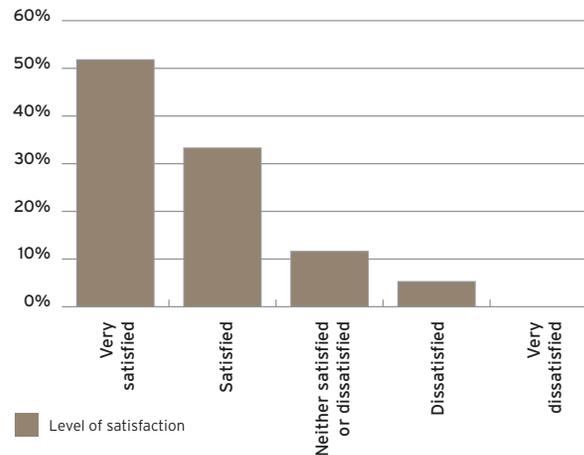
*"I would like to thank my case manager for her remarkable work. She advocated on my behalf at my Unit, clarifying my condition with positive outcome."*

*"This is a wonderful program; everyone is understanding and very friendly. They follow up with you at work to see how you are doing and the door is always open for questions or concerns. I would recommend this service to anyone going through the hardships of release due to medical conditions or other. The staff is very knowledgeable and leads you in appropriate directions to seek the help you need."*

*"I want to recognize the people responsible for having been there during the toughest period of my life and who largely contributed to putting me back on my feet. Without them, my career would be over. They ensured my recovery, maintained my dignity in the process and prevented me from losing my faith in the organization."*

The program currently includes 58 case managers at 23 locations and satellite sites and is overseen by two national coordinators and a national manager. It provides services to CF Regular Force personnel and Reservists with a temporary medical condition, those being medically released from service, and those requiring management of complex health issues. In 2009–2010, CF case managers maintained an active caseload of more than 3 000 personnel. Of these, approximately 1 200 were released from the CF on medical grounds.

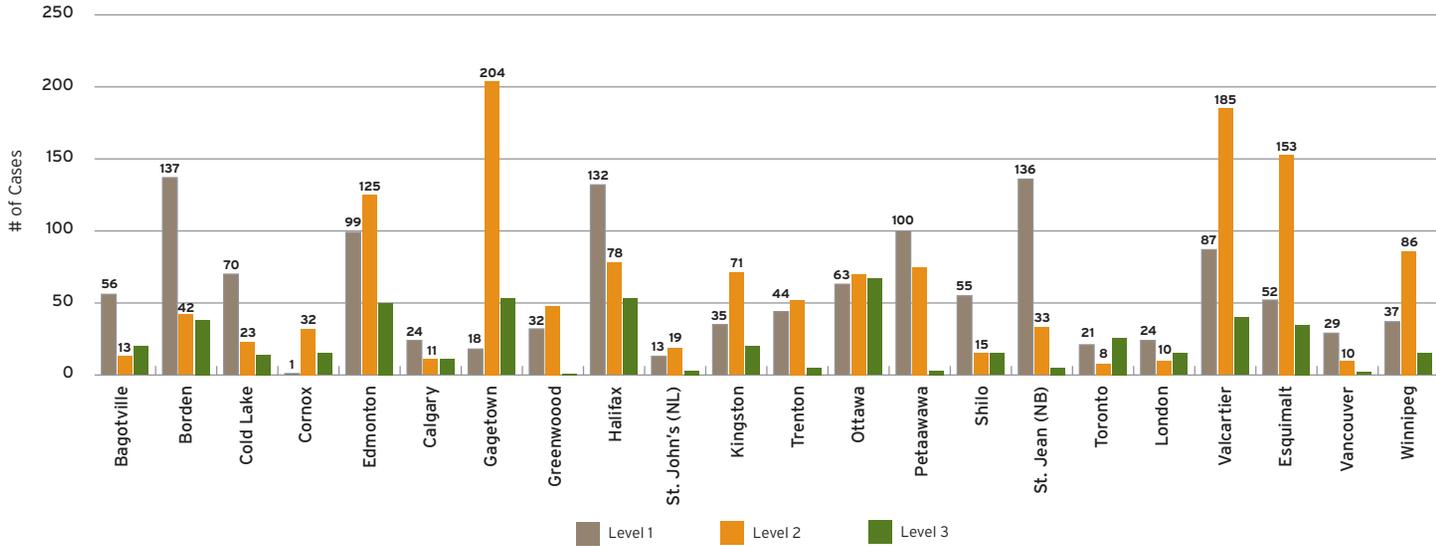
SATISFACTION SURVEY WITH THE CASE MANAGEMENT PROGRAM—2009



Over  
**3 000**  
active caseload  
in 2009–2010

Caseload intensity is defined as level 1, 2 or 3, with 1 requiring least amount of case manager intervention and 3 requiring the most.

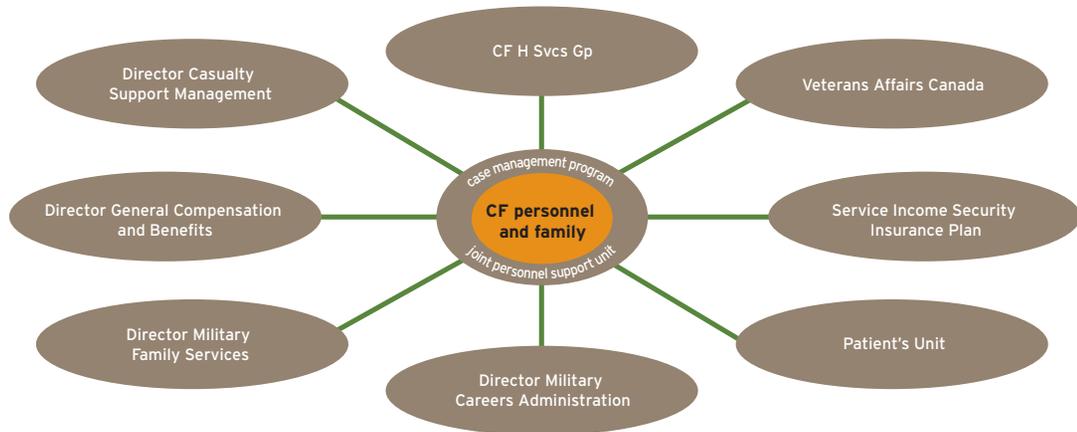
CASELOAD AND CASE MANAGEMENT LEVEL OF INTERVENTION—MARCH 2010



In 2009, the CF established a network of eight Integrated Personnel Support Centres (IPSCs) which are subordinate to the Joint Personnel Support Unit (JPSU) in Ottawa. The JPSU and its satellite IPSCs respond to requests for support and report patient concerns through the chain of command. They aim to improve the coordination of support services; to ensure that military personnel have access to consistent support across the country; and to reduce gaps, overlaps and confusion so no one falls through the cracks. CF H Svcs Gp case managers are key service partners with the IPSCs.

## Integrated Care and Support of Ill or Injured CF Personnel

CF case managers are at the hub of a support network for ill and injured CF personnel, ensuring all necessary linkages along the way. From the moment a CF casualty is brought to the Role 3 Multinational Medical Unit (R3 MMU) in Kandahar, for example, a case manager in Canada confers with the casualty support team in Germany to determine when the patient will be able return to Canada. The case manager sets the domestic care process in motion by communicating with all the health services support organizations that will play a role in the patient's recovery. Whether the patient returns to duty or is released from the CF, the case manager will communicate with everyone involved in the patient's care and management to ensure that all needs are met.



# Mental Health

*The Directorate of Mental Health provides a single focus for mental health activities and programs within the CF.*

The tempo of CF operations over the past six years has resulted in a steadily increasing demand for mental health services. In response to this increasing demand, the Directorate of Mental Health was set up in 2009. The directorate helps the CF sustain a high state of readiness and individual mental health, as well as providing dedicated and responsive care for ill and injured soldiers.



**STAFF**

The CF now has the highest ratio of mental healthcare workers per military personnel of any North Atlantic Treaty Organization (NATO) country. These workers include psychiatrists, psychologists, social workers, mental health nurses, addictions counsellors, and chaplains with advanced training in pastoral counselling.

**CLINICS**

Mental healthcare is provided in 20 clinics across Canada. The five largest mental health clinics are the regional clinics in Halifax, Valcartier, Ottawa, Edmonton and Esquimalt. These also act as referral centres for the smaller clinics.

**PROGRAMS**

Mental health support is provided throughout the entire career and deployment cycle. Resiliency training is provided prior to deployment; a mental health team is on each rotation in Afghanistan; and one-on-one follow-up with a mental health professional occurs upon return from deployment.

The **Psycho-Social Program** is provided by social workers, mental health nurses and addictions counsellors. CF personnel can enter this program on their own, or a physician or supervisor can refer them. Services include individual counselling, family counselling, crisis intervention, addictions consultation, and pre- and post-deployment screenings.

The **General Mental Health** program provides care from a specialist and requires a physician's referral. This program provides assessment and treatment for a broad range of mental health concerns, such as depression, adjustment reaction, and anxiety.

The **Operational Trauma Stress Support Clinics (OTSSCs)** focus on mental health injuries related to operational stress, such as post-traumatic stress disorder (PTSD). These clinics take a very thorough approach to both assessment and treatment. There are OTSSCs in Halifax, Valcartier, Ottawa, Edmonton and Esquimalt, and new ones are being set up in Petawawa and Gaagetown in 2010.

The **Addictions Treatment Program** provides addictions counsellors and a 30-day ambulatory care program in Halifax for substance abuse disorders. In other centres, in-patient treatment programs for addictions are accessible through specialized civilian facilities.

The **CF Personnel Assistance Program** is a confidential telephone counselling service and is available to CF personnel and their families 24 hours a day, 365 days per year.

**AFFILIATED PROGRAMS**

The **Directorate of Force Health Protection** provides programs that strongly support mental health. The programs include anger management, stress management, basic relationship training, applied suicide intervention training, family-violence awareness training, and addictions awareness and prevention training.

The **Operational Stress Injury Social Support (OSISS)** is a Canada-wide network that provides confidential peer and social support to CF personnel, veterans and families affected by an operational stress injury.

The **Joint Speakers Bureau** provides CF personnel and their families with mental health education, training and awareness throughout the career cycle.

The **Military Family Resource Centre** is a community-based, non-profit organization that provides information, support and programs to meet the needs of military families.

**RECENT INITIATIVES**

**CF Expert Panel on Suicide Prevention:** In September 2009, an international expert panel examined scientific literature on suicide prevention and best practices in the CF and in the militaries of allied nations. It was determined that the CF has a strong, comprehensive, multifaceted suicide prevention program. The three cornerstones of this program are excellent care, effective leadership, and aware and engaged CF personnel. We continue to implement initiatives to enhance our ongoing suicide prevention program.

**CF Expert Panel on Mild Traumatic Brain Injury:** The CF is using the most current evidence-based practices in the treatment of mild traumatic brain injury (mTBI) as recommended by the expert panel on mTBI that was convened by the CF in 2008. These best practices include a strategy for surveillance. A follow-up NATO study panel will occur this year and will be led by a CF H Svcs Gp physician.

**Computer-Assisted Rehabilitation Environment:** The interactive computer-assisted rehabilitation environment (CAREN) is a treatment system that uses virtual reality. This leading edge technology will also be useful in research with mental health patients, as well as with patients in rehabilitation for physical reasons, such as amputation. We are undertaking this initiative in partnership with the Ottawa Hospital and the Glenrose Rehabilitation Hospital in Edmonton.

**Enhanced Addictions Treatment Program:** A centre of excellence for addictions treatment was established at the Halifax clinic. It offers a 30-day intensive residential treatment program. Work is continuing to enhance treatment training for medical officers, including the establishment of a national steering committee for addictions.

**Tele-health:** Video tele-health capability has been set up between Petawawa and Ottawa as a pilot project. A rollout of this capability across the CF will bring mental health services to isolated and semi-isolated bases and will allow patients and mental health providers to interact without requiring the patient to travel to a larger centre.

**Psychological Resilience Training:** The Road to Mental Readiness (R2MR) is a pre-deployment training program. The key learning objectives are (i) understanding stress reactions; (ii) identifying challenges of deployment and their impact; (iii) learning and applying strategies to mitigate the impact of stress; and (iv) recognizing when and where to seek support. The R2MR training will be initiated in the summer of 2010. The Phase 3 family portion pilot will occur this summer as well.

**Stigma:** CF personnel for the most part now hold largely forward-thinking attitudes about mental health problems. The CF has been recognized for the significant strides it has made in overcoming the stigma of mental health illness. In the CF, mental health awareness education, along with strong support from senior leaders, is building a culture of understanding.

**KEYS TO MENTAL HEALTH**

- ▶ **STRONG SENIOR LEADERSHIP SUPPORT**  
*to create a positive climate that destigmatizes mental health*
- ▶ **EXCELLENCE IN CARE**  
*founded on evidence-based best practice*
- ▶ **AWARE AND ENGAGED PERSONNEL**  
*education = understanding = acceptance*

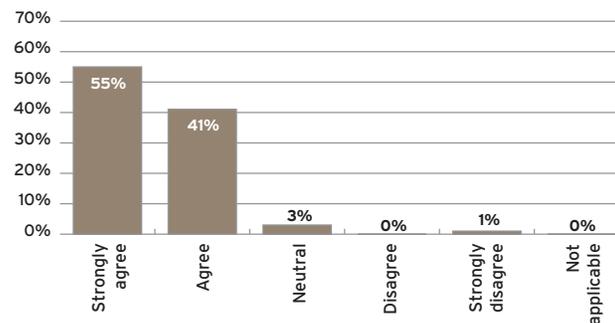


*Mental health support is available in all phases of operations: pre-deployment, in theatre and post-deployment.*



**The vast majority of CF patients report being satisfied with support they receive at OTSSCs (Patient Satisfaction Survey)**

*Overall, I am satisfied with the support and care I receive*



# Physical Rehabilitation

**M**usculoskeletal (MSK) injuries are one of the most prevalent sources of disability in the modern militaries of the world. In recent years, the impact of such injuries on the operational readiness of the CF has become more and more evident. It is estimated that between 35% and 45% of sick parade visits pertain to MSK conditions, and 53% of medical releases in the CF are due to MSK conditions.

About 25% of CF personnel access physiotherapy services every year. A strong team of more than 80 highly trained military and civilian physiotherapists working at more than 20 bases across Canada delivers physiotherapy services. In Kandahar, the role of CF physiotherapists has expanded to include in-patient care in the intensive care unit and the trauma ward, where they provide all MSK, cardio-respiratory and neurological rehabilitation services.

Dedicated CF physiotherapists use a militarized sports medicine approach aimed at returning our CF personnel to full active duty as quickly as possible.

The operational tempo in Afghanistan, combined with the aging of our personnel and the changed nature of the CF mission, has resulted in more MSK injuries. Complex injuries, such as traumatic limb amputation, life-altering limb injury, traumatic brain injury and poly-trauma, have become more prevalent. The caseload for rehabilitation services is along two lines: a very large cohort with minor but still incapacitating MSK injuries and a small neuro-musculoskeletal (NMSK) cohort comprised of seriously injured (SI) and very seriously injured (VSI) casualties.

In 2009, CF leadership endorsed the establishment of a full-spectrum CF Physical Rehabilitation Program. The program gives CF personnel access to a robust, seamless, sustainable, full-spectrum rehabilitation system that combines prevention, treatment, and after-care. The desired outcome is MSK and complex NMSK casualties reaching optimal functioning as soon as medically possible and returning to duty or productive civilian life (after a post-rehabilitation functional capacity assessment).



*When asked to describe their experiences on deployment to Afghanistan, physiotherapists responded that it was the best experience of their careers—playing a significant role in keeping soldiers fit for duty.*



The CF Physical Rehabilitation Program has identified centres of expertise at locations across Canada for SI and VSI rehabilitation. These civilian facilities provide CF personnel with high-quality physical rehabilitation through civilian/military collaboration. The program follows each patient throughout the continuum of rehabilitation. Operations in Afghanistan have resulted in an increased number of personnel who have lost a limb. CF rehabilitation staff work collaboratively with civilian rehabilitation and US military colleagues to develop advanced care skills and support for CF personnel with amputations. Other areas of involvement include the following:

### Amputee Care Clinical Exchange

In 2009–2010, the amputee care clinical exchange permitted numerous CF personnel and physio-therapists to work with their peers in the US Army to share lessons learned and to forge a collaborative professional technical network for amputee care.



### Promotion of Rehabilitation through Sport Opportunities

The Soldier On Program encourages amputees and the rehabilitation and fitness staff that support them to participate in events such as running and triathlon clinics. Twenty-two Canadians participated in the third annual Centre for the Intrepid triathlon clinic in May 2010 in San Antonio, Texas.



### Prosthetic Policies and Directives

Modernized policies, civilian rehabilitation personnel, and Veterans Affairs Canada (VAC), ensure that CF personnel receive the most appropriate prosthetic devices to support their individual and military goals throughout their lives.

In 2009 alone

**25 771**

CF personnel requiring physiotherapy

**162 771**

number of treatment sessions received



The CF has been working with private sector partners for years in the care of wounded CF personnel. Collaborative efforts have culminated in announcements that CF personnel requiring physical and mental rehabilitation will have access to two state-of-the-art virtual-reality rehabilitation systems procured by CF H Svcs Gp. One will be located at the Ottawa Hospital Rehabilitation Centre and will serve the eastern half of the country. The other will be located at the Glenrose Rehabilitation Hospital in Edmonton and will serve western Canada. The CAREN system can benefit a wide range of patients, including those in wheelchairs, those with spinal cord injuries or amputations, and those suffering from PTSD. Designed to reintroduce the patient to the complexities of the real world in a safe and controlled manner, it greatly speeds up recovery times. CAREN is considered a truly transformative technology.

**EXCERPTS FROM EMAILS SENT TO HEAD OF REHABILITATION, CF H SVCS GP**

*I just wanted to send you a quick update wrt my recovery from the IED blast Oct 08. I have been doing very well lately, I have been in the reactivation program for the past 3 months and will be discharged from the program this week (Jan 10).*

*The program has really helped me get back up to speed as far as PT goes. Two weeks ago I finished my BFT in an hour and fifty five minutes with a fully loaded rucksack. I have been back to work full time for several months and have my TCAT review coming up in the next couple of weeks. Also dental has been looking after me very well and has made great headway in replacing my teeth.*

*Thank you again for all of your guidance and assistance along the way, it is very much appreciated. I couldn't have done any of this without it.*

**Cpl Gregory Linton**

*In case you have not heard, I have received the decision from DMCA. They have cancelled my release in its entirety. I wanted to thank you again.*

*I know I may have been the one that accomplished the pass on the express test, but I could have never done it without all the support and assistance I received from you [LCol Markus Besemann] and Capt Lisa Francis. What you two do for the injured is amazing.*

**MCpl Rick Rickard**



# Infrastructure Renewal

It was the end of an era and a successful conclusion to a complex and long-awaited infrastructure project. In June 2009, after months of planning and preparation involving many people, the Ottawa medical and dental clinics moved from the Healthcare Centre—formerly known as the National Defence Medical Centre—to a new CF clinic at the Montfort Hospital site. During this transition, CF and other entitled personnel continued to receive operationally focused high-quality medical and dental care, but in a new state-of-the-art facility.



Situated on four floors of the new purpose-built east wing of the Hospital, the new clinic offers medical and dental services in a modern facility designed and built to meet best-practice healthcare delivery models. Services provided to CF patients include sick parade, medical appointments, prescriptions, medicals, preventive medicine, immunizations, physiotherapy, and mental health services. The clinic also provides a full range of dental services including emergency care, specialist care, and general dentistry.

Additional programs introduced by CF H Svcs Gp in the past few years, such as mental health services, case management, physiotherapy and physical rehabilitation, and occupational trauma and stress support, have had an impact on infrastructure requirements.



The net functional space requirements are driven by the CDU concept, which requires primary care services to provide a quick response to CF personnel on sick parade. The number of healthcare workers needed to provide those services at each clinic is identified in the position charter, which is the lead document that justifies the working space.

As the Rx2000 project is now completed, including the implementation of the PCRI initiative, we have been actively working to implement the infrastructure recapitalization program to ensure the new model is available to provide the level of service required for CF personnel.

Although no clinics were built in 2009, we are encouraged by the pace at which many projects are moving forward. Ground was broken for the new Kingston clinic recently (drawing of planned facility below), the first such construction project since a new clinic was built at Trenton in 2005. We expect the same milestone in Comox and Greenwood soon.

### Infrastructure Recapitalization Project Funding

	(\$ M)
Valcartier	28.9
Petawawa	42.1
Edmonton	75.2
Borden	31.9
St-Jean	30.4
Gagetown	19.2
Kingston	35.0
Greenwood	22.5
Comox	31.2
Esquimalt	61.7
Winnipeg	28.1
Halifax	29.8
Shearwater	21.9
Cold Lake	38.3
Bagotville	21.3



# Health Information System

**T**he Canadian Forces Health Information System (CFHIS) and its electronic health records support the delivery of optimal, seamless care. The system will ensure that patients feel secure and confident that their healthcare providers are working collaboratively and have all the information they need.

We made much progress in implementing CFHIS in 2009–2010. Currently, it is operational at 36 of 37 health services sites across Canada, as well as two bases in Europe and three locations supporting Afghanistan. It will soon be available onboard ships. It has approximately 120 000 registered CF personnel and care providers, and it schedules more than 750 000 appointments per year. Its integrated laboratory and x-ray applications handle more than 300 000 results per year. To date we have scanned at least 1.2 million documents into the medical charts, providing clinicians with easy access to patient information instantly and anywhere in the world.

Medical and dental care providers depend on this system and look forward to all future advancements. Ultimately, the CFHIS project will enable all medical and dental professionals located in clinics across Canada to securely share



*The recent deployment to Haiti saw hundreds of CF personnel medically screened within 12 hours, ready to deploy, after a review of their electronic health records. The old paper-based systems would have necessitated manual review of each individual file, requiring more time and materially delaying Canada's response to the humanitarian crisis.*



information and coordinate care for regular and reserve force personnel—anytime, anywhere. We attribute the success of CFHIS to the involvement of the entire CF H Svcs Gp team and the technical expertise of

Assistant Deputy Minister (Information Management). Health professionals have worked closely with technical experts to translate the complete information technology architecture into a safe, user-friendly system.

Reports generated from CFHIS will allow CF H Svcs Gp to improve the effectiveness of healthcare delivered and will provide senior leadership with real-time information. As a population health tool, it will allow the health services to link healthcare concerns with occupational, environmental and operational exposures.

The final functionality of the system will primarily allow care providers to sign off, compile, and access clinical notes specific to patients; as well, it will capture orders electronically. The electronic records will become the official medical record and will result in a virtually paperless healthcare system.

CFHIS is a great success for the CF and the Government of Canada. We have a bilingual electronic health record system functioning across Canada and in deployed operations. No other jurisdiction in Canada can boast of such an accomplishment. It is unlikely that any other healthcare system in the world currently integrates medical, dental, and mental health into one system.

At a recent demonstration of the system at a functional CF H Svcs Gp clinic, the Treasury Board Secretariat's chief information officer and the members of the Federal Health Care Partnership recognized the CFHIS electronic health record as a model for leveraging the creation of federal electronic health records—a whole-of-government approach.

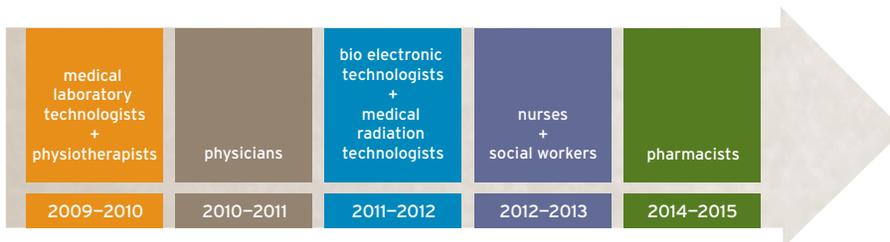
*The electronic health record allows authorized providers within and across the CDUs to centrally schedule and coordinate services. It also allows them to securely access and share information in real time to support appropriate treatment decisions and to avoid duplication.*

# Attraction and Retention

The CF's numbers of physicians, social workers, nursing officers, physiotherapists, and pharmacists have been consistently below preferred manning level (PML) since the early 1990s. In each case, the shortages have manifested as an inability to meet the operational requirements. Retaining the professional staff has also been a challenge. However, the attraction and retention cell within CF H Svcs Gp achieved great success in restoring several of our occupations to health in 2009–2010.

The CF Recruiting Group recently created and staffed medical officer recruiter and pharmacy officer recruiter positions, which greatly helped the recruiting team attract health professionals. In particular, they made remarkable progress in recruiting medical officers, despite the shortage of physicians nationally. The summer of 2010 will see the numbers of medical officers reach the staffing targets for the first time in recent memory, which means that the CF medical officer pool will be full for the next decade or so. The number of physiotherapists recently reached PML, and forecasts indicate that social workers and nurses will achieve PML in 2012–2013; pharmacists, by 2014–2015.

Target recruiting has also proven to be successful for technologists. The number of medical laboratory technologists reached PML in 2009–2010, and bio electronic technologists and medical radiation technologists will likely reach PML by the fall of 2011. The subsidized education program and the associated recruitment allowances for skilled candidates have proven to be very effective strategies.



CF H Svcs Gp intends to become an employer of choice for health professionals. We are keen on identifying common reasons for voluntary release, addressing any issues, minimizing preventable releases, and developing appropriate retention strategies. By tackling these issues we can achieve our five-year plan to maintain health service occupations and sub-occupations at PML. Retention strategies include the following:

- improving continuing medical education and continuing professional education programs;
- promoting CF H Svcs Gp through professional presentations and guest speaker opportunities at the national healthcare level;
- creating clinical major-level positions for our general duty medical officers;
- developing post-Afghanistan operational deployment strategies; and
- participating in future CF transformation activities.

*From the summer of 2009 to the summer of 2014 inclusive, we will have sponsored more than 150 medical students in university, giving us an average of 25 new doctors to be posted across Canada annually—this bodes well for our ongoing recruitment efforts.*

# Training and Development

The majority of healthcare training and education for the 19 health service occupations takes place at the CF H Svcs Training Centre (TC) located at Canadian Forces Base (CFB) Borden, Ontario. The TC provides training for the following personnel:

- medical technicians
- dental technicians
- preventive medicine technicians
- physician assistants
- nurses
- dentists
- physicians
- healthcare administrators
- health services operations officers

The TC conducts basic officer training courses for health services reserve force officers primarily and for selected regular force officers when necessary. It also provides an array of field training courses for all health services officers of the regular and reserve forces.

As the CF lead in the use of the Alternate Service Delivery (ASD) method of training, CF H Svcs Gp partners with civilian healthcare facilities throughout Canada to provide a clinical education for students studying to become physician assistants, and it also provides specialty courses in critical care, operating room procedures, and mental health services for nursing students. The TC collaborates with civilian colleges and institutions throughout Canada to provide occupational training for the following occupations:

- medical technician
- operating room technician
- dental technician and hygienist
- medical laboratory technologist
- medical radiation technologist
- biomedical technologist

Advanced education in aerospace medicine and hyperbaric diving medicine occurs at the School of Operational Medicine (SOM) and the CF Environmental Medicine Establishment (CFEME) in Toronto. The submarine medicine course is given off-site at CFB Halifax. Dentists and physicians also receive lengthy and highly specialized education and training in the US and the United Kingdom (UK).

Bioscience, pharmacy, physiotherapy and social work officers all receive their training through a unique combination of military and civilian programs. Similarly, aeromedical technicians pursue training at the CF School of Survival and Aeromedical Training in Winnipeg.

*Currently, the CF Physician Assistant (PA) Program is the only accredited PA Program in Canada. In 2009, CF H Svcs Gp and the University of Nebraska entered into a memorandum of understanding to grant a Bachelor of Science degree to those who successfully completed the two-year PA program in recognition of the quality of the program and the training provided at the CF H Svcs TC.*

2009-2010	CF H SVCS TC	<ul style="list-style-type: none"> <li>• 48 courses</li> <li>• 814 graduates</li> </ul>
	CFEME/SOM	<ul style="list-style-type: none"> <li>• 6 specialty courses</li> <li>• 81 graduates</li> </ul>
	ASD Training	<ul style="list-style-type: none"> <li>• 13 courses</li> <li>• 131 graduates</li> </ul>

As a force generator, the Surgeon General conducts annual competitions for postgraduate education in selected dental and medical specialties. Successful candidates receive an advanced postgraduate education so that CF will have enough qualified dental and medical specialists for domestic and operational health services support. Specialist education ranges from two to six years, and the fields include advanced general dentistry, general surgery, radiology, oral and maxillofacial surgery, orthopaedic surgery, internal medicine, anaesthesiology, psychiatry, periodontics, prosthodontics, dental public health, sports medicine, industrial hygiene, and occupational public health.



# Collaboration and Partnerships

To fulfill its mandate of providing comprehensive healthcare to CF personnel, CF H Svcs Gp relies heavily on a wide variety of civilian healthcare agencies. Through strategic alliances, memoranda of understanding (MOU), local arrangements, and a general spirit of cooperation and goodwill, CF H Svcs Gp has integrated itself into the mainstream of the Canadian health system.

As a pan-Canadian health system with significant national and international responsibilities, CF H Svcs Gp maintains strategic links with a host of provincial and federal agencies to execute its assigned mission and tasks at home and abroad. Militarily, CF H Svcs Gp also enjoys a close professional relationship with allied military medical organizations in NATO and around the world.

As a major employer of health services professionals, CF H Svcs Gp enjoys excellent relations with such professional governing bodies as the Canadian Medical Association, the Canadian Dental Association (CDA), the Canadian Nurses Association, the Canadian Pharmacists Association and the Canadian Association of Physician Assistants, to name just a few. Through its efforts to "professionalize" the management aspects of its business and the quality of its service, CF H Svcs Gp has established a close bond with the Canadian College of Health Service Executives.

Health Services Civilian/Military Cooperation (H Svcs CIMIC) is the cornerstone of our efforts to develop and maintain a coordinated and coherent network of strategic and long-term alliances between CF H Svcs Gp and the civilian healthcare community at the national, provincial, and local levels. H Svcs CIMIC supports CF units by providing a standardized framework that will lead to the development of a sustainable civilian/military alliance network.

**30** MOUs signed in 2009–2010, including:

**Healthcare Institutions**

- Ottawa Hospital
- Hospital for Sick Children
- Mount Sinai Hospital
- North Bay General Hospital
- Seven Oaks General Hospital
- Hôpital de la Sagamie
- Hôpital de L'Enfant-Jésus
- Centre Hospitalier Hôtel-Dieu

**Learning Institutions**

- University of Western Ontario
- McMaster University
- McGill University
- University of Calgary
- University of Manitoba
- Ryerson University
- Laurentian University
- University of California, San Diego



**The CF Medallion for Distinguished Service was awarded to the Ottawa Hospital in April 2010.**

The hospital was recognized for providing superlative care to injured military personnel, and training and clinical opportunities for the members of CF H Svcs Gp, through a long-standing partnership. While CF H Svcs Gp and the Ottawa Hospital have been partners in care for generations, it is in delivering high-quality trauma care and surgical services to military personnel returning wounded from Afghanistan that the hospital has most recently exceeded expectations.

A key contributor to improved interoperability between Canada and our allied partners is the standardization of policies and procedures. Recent experiences at the Role 3 Multinational Medical Unit (R3 MMU) located at Kandahar airfield in Afghanistan have reinforced the benefits of shared health facilities. Standardized agreements allow the seamless integration of health services support personnel from several different allied nations, resulting in the provision of high-quality health services in a collaborative and professionally rewarding environment.

No less than 18 health services personnel are engaged in NATO, the American, British, Canadian, Australian and New Zealand (ABCA) Armies' Program, and Multinational Interoperability Council working groups, expert panels and teams. They develop standardized agreements and publications that define the minimum common standard expected of nations engaged in coalition activities. In the past year, several NATO standardized agreements and publications and ABCA standards were developed and issued. Several more studies are underway, and many will result in new standardized agreements that improve interoperability.

*"The Government of Canada is pleased to provide Canada's military personnel with access to this new technology," said Minister of National Defence, the Honourable Peter MacKay, as he announced the partnership with Glenrose Rehabilitation Hospital in Alberta to provide advanced rehabilitation services to injured CF personnel. "Our collaboration with the Glenrose Hospital means CF personnel and other patients can benefit from state-of-the-art care."*





# Recognition

## CF H SVCS GP HAS RECEIVED RECOGNITION FOR ITS DELIVERY OF EXCELLENT HEALTHCARE.

The Standing Committee on National Defence acknowledged in its report of June 2009, that CF H Svcs Gp “is among the best of its kind in the world.” We have undertaken a system-wide accreditation process through an external agency, Accreditation Canada (AC). AC is an independent not-for-profit organization that provides healthcare organizations with an external peer review process to assess and improve services. AC is internationally recognized for setting standards of excellence in healthcare. In the past three years, AC assessed two-thirds of the CF healthcare clinics; it also assessed CF H Svcs Gp as a healthcare system. In October 2009, AC briefed the Surgeon General with its interim report, which highlighted our ongoing strengths. According to this report, “the quality of care and services delivered to the CF is excellent,” and CF H Svcs Gp leadership is “fully committed to ongoing, continuous quality improvement in its approach to improve the overall healthcare to CF personnel.”

Accreditation is one of the most effective ways for healthcare organizations to regularly and consistently examine and improve the quality of their services. AC recognized three clinics for leading practices in healthcare this year:

- 21 CF H Svcs Centre (Comox) designed a “19 Wing Health Promotion” prescription pad which allows the health practitioner to recommend certain areas for improving the health of the patient, including nutritional wellness, social wellness, addictions-free living, injury prevention, and active living.
- 23 CF H Svcs Centre (Winnipeg) produced a video, “Casualties You May Treat,” which focuses on how to deal with post-deployment challenges that CF personnel may face. It is available to families and staff, as well as civilian providers who interact with CF personnel returning from deployment.
- 33 CF H Svcs Centre (Kingston) initiated a practice of weekly “safety walkabouts.” All supervisors fill in a form indicating completion of the area review and give a five-minute safety presentation on a topic chosen by the unit safety officer.

In 2009, Canadian Forces Dental Services (CFDS) achieved a significant “first” in collaboration with Health Canada, Statistics Canada and the CDA—the annual Canadian Health Measures Survey now includes oral health indicators. Thirteen CF dentists conducted examinations, and CFDS contributed more than 1 000 person-days to this initiative. This survey will provide enough data to keep the dental research community in Canada busy for decades, with the eventual outcome being the improved oral health of Canadians. The CDA represents Canada’s 18 000 dentists, and has recognized CFDS for its significant contribution to this initiative by awarding it the Oral Health Promotion Award in November 2009. The nomination reads as follows “*During these examinations, the CFDS demonstrated the best values of Canadian dentistry by being knowledgeable, eager to learn, and by expressing a sense of privilege in being able to serve the public and their profession in this way.*”

The use of the award-winning Dental Information System (DentIS)—arguably the best performance measurement system and capability in the entire CF—has ensured the reliability and integrity of the CF dental fitness and oral health data. Currently, this system is the only management tool that can accurately track fitness levels and oral health, drive an effective recall system and produce dental deployability status reports for commanders at all levels down to sub-unit, in real time.

DentIS is a recognized CF end-state information management/information technology entity in the Military Personnel Management Capability Transformation Program. It is the cornerstone of the performance measurement framework for the outputs and outcomes as defined in the CF Dental Care Program, and it assists dental detachments in the management of dental care delivery.

At each patient visit to a dental clinic, health services personnel record key information, including the nature of the visit, the dental services provided, and the patient’s dental fitness classification and periodontal status. This key information uploads automatically each night so that it is available to the individual and the chain of command. As the rollout of CFHIS functionality is completed, DentIS will expand to capture the outstanding dental needs of every individual, including the required resources to achieve dental fitness and oral health.

### The Deputy Minister / Chief of the Defence Staff (DM/CDS) Innovation Award

*This award aims to recognize not only excellence in renewal but also in leadership in the field of innovation.* LCol Stéphane Grenier and Maj Suzanne Bailey co-managed the team responsible for the launch of the Mental Health and Operational Stress Injury Joint Speakers Bureau (MH & OSI JSB). The team’s mandate was to launch and maintain a long-term major mental health education and awareness campaign under the banner, Be the Difference. Officially launched by the CDS on June 25, 2009, the initiative set an excellent example of collaboration between CF military and DND civilian personnel. Each member of the MH & OSI JSB Team contributed to the success of this initiative from the conception, planning, organization, oversight, and implementation.

### Innovation Award Recipients

Trish Alish	Sgt Doug Brown
Dawn Casagrande	WO Jaime Lefebvre
Kim Guest	Capt Brian MacPherson
Charles MacDonald	Maj Suzanne Bailey
MCpl Chris Edgecombe	LCol Stéphane Grenier

## Honours awarded to CF H Svcs Gp personnel— 1 April 2009 to 30 June 2010

The **Order of Military Merit** recognizes distinctive merit and exceptional service displayed by the men and women of the CF, both regular and reserve forces. Many have demonstrated dedication and devotion beyond the call of duty, and the Order honours them for their commitment to Canada.




Col Scott Becker, OMM (right)  
Cdr Ian Torrie, MMM  
Maj Roger Tremblay, MMM  
CWO Donald Noel, MMM  
MWO David Steiger, MMM

(left to right)  
Sgt Martin Côté  
MCpl Michael Burse  
MCpl Brent Gallant  
were awarded the  
Military Medal of Valour




**Military Valour Decorations** are national honours awarded to recognize acts of valour, self-sacrifice or devotion to duty in the presence of the enemy.

The **Meritorious Service Medal** recognizes a military deed or activity performed in a highly professional manner or of a very high standard, which brings benefit or honour to the CF.




Col Scott Mcleod  
Col Jacques Ricard  
CWO Christopher Kaye (seen here)  
MCpl Cameron Smithers  
were awarded the  
Meritorious Service Medal

The **Sacrifice Medal** is awarded to those who have given their lives as a result of military service or are wounded by hostile action.

- Sacrifice Medal Recipients**
- |                          |                             |
|--------------------------|-----------------------------|
| MCpl Christian Duchesne  | Cpl Caroline Bouchard       |
| MCpl Paul Franklin       | Cpl Nicholas Cappelli Horth |
| MCpl Kristal Giesebrecht | Cpl Dominique Girard        |
| MCpl Byron Rodriguez     | Cpl Jaime Hernandez         |
| MCpl Jean-Paul Somerset  | Cpl Tanya Morin             |
| MCpl Micheal Trowbridge  | Cpl Michael Starker         |
| Cpl Nicolas Beauchamp    | Pte Andrew Miller           |




**Order of St John**  
Capt Michael Wionzek



**Mention in Dispatches**  
MCpl Erkin Cicekci  
MCpl David Giles  
MCpl Denis Leduc



**CDS Commendation**  
Col David Sanschagrin  
LCol Murray Crawford  
LCol Andrew Downes  
LCol Linda Garand  
Maj Marc Dauphin  
Maj Donald Schell  
Capt Carolyn Blanchard  
Capt Ephraim Manimtim  
Capt Michael McCormack  
MWO William Doupe  
Sgt Mario Charette  
MCpl Sylvain Braun  
MCpl Michael Rich  
Cpl Christopher Bonvie  
Cpl Kirk Keeping  
Cpl Annie Thibeault  
Cpl Scott Yaeck



**Command Commendation**  
LCdr Julie Bedard  
Maj Sandra West  
Capt Michael McBride  
CWO Richard Hassan  
CPO2 Daniel Bouchard  
WO Guy (ret'd)  
Sgt Sheldon DeWolfe  
Sgt Anthony McKenzie  
Sgt Georges Ricard  
Sgt Bonny Saucier  
Sgt John Thomson  
Cpl Thomas Clapham  
Cpl Shawn Flood  
Cpl Jaime Hernandez  
Cpl Maria Wiseman

**Major General Barr Award of Excellence**  
Sgt Walter Walsh

**JTF Afghanistan Commander's Commendation**  
Col Joel Redman  
Maj Scott Malcolm  
Sgt Shelley Lamothe  
Cpl Eric Dionne  
Pte Michael Gadway

**Surgeon General's Award of Excellence**  
LCol James Anderson  
LCol Homer Tien  
Lt(N) Sarah Orr  
Capt Lisa Francis  
Capt David Giroux  
Capt Valerie Lafortune  
Sgt Andrew Howlett  
PO1 Dianne DuPaul  
Catherine Goodjohn  
Bruce MacLeod  
Audrey Framand (seen here)



**CF H Svcs Gp Commander's Commendation**  
Maj June Tiefenbach  
MWO Robert Kleinsteuber  
MWO John McBeath  
WO Eric Bouchard  
Sgt Jacques Constantineau  
Cpl Tammy Prebushewski  
Dr. Richard Southby  
Mike Barnes

**CF Unit Commendation**  
1 Canadian Field Hospital is recognized for outstanding support to CF operations in the Persian Gulf, the Balkans, Afghanistan and Haiti. Responsible for training, preparing, and equipping the CF deployed surgical and in-patient care, the unit has demonstrated tremendous flexibility, determination, mission focus and creativity. 1 Canadian Field Hospital has also been instrumental in creating a remarkable level of confidence in the CF's deployed healthcare.





A sepia-toned photograph of a medical team in a field hospital. Several healthcare workers are focused on a patient lying on a stretcher. One worker in the foreground is adjusting a bandage on the patient's leg. Other team members are visible in the background, some looking at the patient and others at medical equipment. The setting is a compact, functional medical space with various supplies and equipment visible.

# Provide a Deployable Health Capability

# Preparing for Deployment

**M**edical technicians (med techs) fulfill many roles, from going on foot patrols with the infantry and serving on ships to performing aeromedical evacuations (AEs) abroad. Lessons learned from Afghanistan and other conflicts suggested that med techs could benefit from further training in managing life-threatening airway and circulatory emergencies, in addition to other select skills. The Advanced Emergent Care (AEC) package was recently created for experienced med techs. In partnership with Medavie Emergency Medical Service based in Dartmouth, Nova Scotia, the CF delivered its first AEC training in 2009. This course was also conducted in both official languages at the Atlantic Paramedic Academy in Moncton, New Brunswick, in partnership with local healthcare agencies.

*AEC training will better equip our medical technicians for the challenges on today's complex operations.*

A casualty simulation exercise to provide our med techs with the most realistic training was developed at the CF H Svcs Gp Training Centre. The exercise, called **Ex WOUNDED SERPENT**, combined elements of elaborate simulated casualties with a balanced mix of METIman (patient simulator), and was conducted for the first time in 2009.



196 810

*pounds of medical supplies and equipment were shipped to Op ATHENA in 2009-2010*



The CF Medical Simulation Centre (MSC) regularly holds exercises involving all aspects of emergency care needed in garrison, in the operational setting, and in the combat zone. The MSC organized a wounded evacuation simulation workshop as part of the 2010 trauma challenges conference at CFB Valcartier. The primary purpose of the workshop was to prepare participants—multidisciplinary teams of first responders, doctors and nurses from throughout Quebec—for worst-case scenarios. The realistic, interactive and highly dynamic exercises have a single goal: to get participants out of their comfort zone.

While civilian medical professionals are very familiar with emergency rooms and hospitals where they are used to working, the simulation exercise exposed participants to a much different scenario—helping injured people in a remote area. Choosing and transporting equipment, managing an emergency, and securing the danger zone are a few examples of what they learned to look at before going in to save the injured.

All CF medical personnel who have experienced Afghanistan know that being prepared for wounded evacuations is just part of the daily routine. However, for many of the civilians involved in the trauma challenges conference, this type of training was a first.

The Tactical Medicine (TACMED) course teaches med techs how to perform advanced pre-hospital procedures in an austere environment. In 2009, 210 students attended six of these courses. TACMED is similar in content to the Tactical Combat Casualty Care (TCCC) course taught to combat arms soldiers, but it provides advanced training in life-saving medical skills, including surgical airway management. The feedback about the TACMED training was unanimous—the course better prepares participants to perform tasks to a very high standard while deployed on operations in Afghanistan.

The training plan is flexible and is continually evolving with input from current operations and the development of better tools. The course has two phases. The first is a weeklong didactic phase, which includes classroom and laboratory portions, as well as basic tactics. The second week is practical, in a field environment. During the field portion, the combat soldiers participate as members of a section with two designated med techs as well as two TCCC-qualified soldiers. They are in realistic battle situations, complete with simulations and casualties. The training gives the med techs the opportunity to practice their skills on a model, which increases their confidence in the procedures before they deploy.

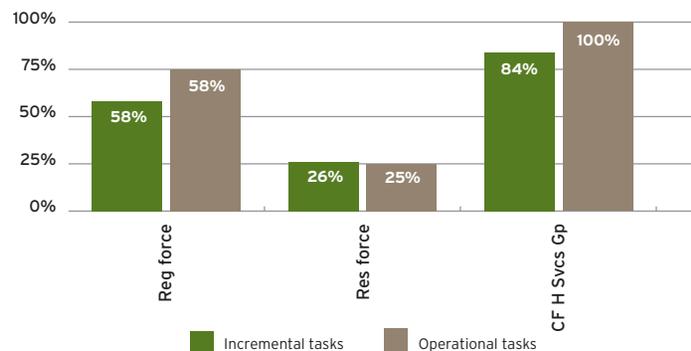
Advances in military medicine (medical capabilities required to support CF operations) continued in 2009–2010 through the efforts of the Combat Casualty Care Working Group. The working group enhanced the Combat First Aid course and the TCCC training for soldiers attending the TACMED course for medics.

Procuring state-of-the-art medications and devices is ongoing, as is highlighting CF advances in combat casualty care at international forums.



Another crowning achievement this year was the development of the Special Operations Medical Technician Course (SOMT-C). Canadian Special Operations Forces Command (CANSOFCOM) operates in unique environments. Recognizing this, the medical leadership within the command developed the SOMT-C to (i) better prepare its med tech personnel to support special operations forces and (ii) broaden their scope of practice. After years of careful preparation, this eight-week course took place for the first time in 2010. It focused on the medical and tactical challenges facing the med tech. This training will ensure that CANSOFCOM personnel and those they support receive excellent care “anywhere, anytime.” **Viam Inveniemus** (“We will find a way”)

**% OF INCREMENTAL AND OPERATIONAL TASKS FILLED BY CF H SVCS GP—MARCH 2010**



# Op ATHENA / Role 1

**C**F med techs (other military systems use the term “medic”) are integral members of the military combat team. Med techs routinely go forward with infantry and combat engineers into the most perilous areas. As they are usually the first healthcare provider to assist a fellow soldier, sailor, airman, or airwoman injured in combat, they need to be fit to both help win the fight and save a life. They work with physicians, physician assistants, and nurses to treat the ill and injured in all kinds of CF operations and units.

How better to catch a glimpse of the med techs’ world than by sharing a few recent in-theatre stories about them?



*The med tech is at the “pointy end” of health services.*



Master Cpl Mike Cuevas caught sight of his company’s new medic and he had doubts. He’d fought in Afghanistan’s heat, climbed over head-high mud walls, leaped water-filled ditches, scrambled to firing positions under incoming rounds, all carrying upwards of 40 kilograms of gear. The woman standing in front of him stood five feet, one-half-inch. She weighed about the same as his battle kit. ... Cuevas knew that as a medic on patrol in Afghanistan, she’d be bearing nearly her own weight through extreme terrain and temperatures. ... Charlie Company’s commander had similar qualms. “When I met her I thought her equipment would weigh more than she would and I was somewhat concerned,” says Maj. Wade Rutland.

Then he watched her research every aspect of her new job. By the time the company was to deploy to Afghanistan, [Musson] earned the position of lead company medic, which carried a tour-specific promotion to Master Corporal. ... Charlie Company arrived [fall of 2009] at the fortified Canadian outpost of Sperwan Ghar, and any lingering doubts about Musson’s capabilities vanished in the surrounding villages, fields and desert of the infamously violent Panjwaii district.

Wearing a flak vest with heavy armour plates front and back, carrying her assault rifle and five spare magazines, plus a rucksack and tactical vest filled with medical supplies, Musson must keep pace for up to 15 hours at a time. On overnight operations, she adds a sleeping bag, pad, ration packs, and as much as seven kilograms of water. Combat-effectiveness

standards dictate that a soldier should carry a maximum of 33 per cent of body weight. ... “[MCpl Musson] was carrying about 80 [per cent], and she was still effective.”

Two months after arriving, Musson’s patrol ran into an ambush near a graveyard a few hundred metres from the base. Insurgents opened up with AK-47s. Musson stood behind a grapevine berm and joined her comrades in returning fire. The war was becoming ever more real. Already, she had treated grievous injuries inflicted by the Taliban’s most prevalent weapon, the improvised-explosive device. ... Two months later, the troops at Sperwan Ghar heard an explosion on a base-access road. When she reached the scene, she saw the victim was a soldier she’d known for a year. His skull was fractured, and the field medic had put a tourniquet on his arm, which was blown open above the elbow, with shrapnel wounds in the forearm. Musson says she doesn’t feel traumatized by those incidents.

On patrols, she draws attention from village kids who have never seen a woman carrying a gun. The girls flock to her, Rutland says. “Here’s someone that’s a great example for these young ladies, a strong female figure that’s out doing a great job.” And Cuevas, who once had doubts about Musson, has nothing but admiration for the woman who has become one of his closest friends.

**Ethan Baron, “Petite Army Medic Shoulders Big Role,” Calgary Herald, 19 April 2010**



### I AM THE MEDIC

by MCpl Leah Boyd

*I am the medic  
I am a soldier's medic  
I have dedicated my life  
to learning and skill  
This is my sword  
I have given my time in  
the pursuit of excellence  
This is my shield  
With these weapons  
I will fight for you my brother  
At the mouth of the Valley  
I will fight Death  
When you can no longer  
fight for yourself  
I am a medic  
I am a soldier's medic  
I am your medic*

Med techs deployed  
to OP ATHENA

Jan-Apr 2010 **284**

since Jul 2003 **1 015**

They say Master Corporal Richard Dixon can bring people back from the dead. He has leaped over mud walls and raced through gunfire to reach injured soldiers. He once lay prone for more than half an hour beside a gravely wounded man who had stepped on a homemade bomb. He tended to the soldier's injuries while exchanging gunfire with the insurgents.

Like paramedics, combat medics are responsible for providing first aid and trauma care on the battlefield. Their job is to stabilize the seriously injured until they reach hospital, where surgeons and nurses take over. When truckloads of injured Afghan police or soldiers pull up at the gate at this forward operating base in southern Afghanistan, it is MCpl Dixon, a medic with the 3rd Battalion, Royal Canadian Regiment Battle Group, who is calm amid the carnage. ...

MCpl Dixon's legendary ability to stay above the fray hasn't made him less human. [When he first] arrived in southern Afghanistan last fall... he was overwhelmed by the severity of the injuries he witnessed. ... He copes, in part, by purposely shutting out the day's events at the end of a shift. ... MCpl Dixon says humour helps all seven medics on the base deal with stress.

**Jane Armstrong, "Heroism and Humour Are all in a Day's Work,"  
Globe and Mail, 9 February 2009**

The way in which an army treats the population of the foreign country in which it operates, is in many ways a reflection of that army's professionalism. In my 13 years as a soldier, I have come to believe that my fellow Canadian soldiers are, with few exceptions, of the highest moral caliber, not only willing to sacrifice their lives for their comrades as part of the duty they freely choose to take on, but capable of difficult decisions on a daily basis under stressful conditions in unclear situations. I am telling this story, not because it is rare, for incidents like this have happened many times in the eight years we have been in this country and our many missions before Afghanistan, nor because I think we've done anything particularly special. I tell this only because this is my personal example of how our soldiers live up to the expectations and standards set for us by the people of Canada.

On January 7, [2010] ... Our forces engaged an insurgent who had been watching our advance and reporting via radio. ... En route to the scene, another insurgent moved into the area on a motorbike, recovered the radio he had been using and fled after being shot in the side. When we arrived, we found the first insurgent who was shot in both legs --- one leg almost completely severed and the other femur shattered. He was unconscious, near cardiac arrest, and within minutes of bleeding out. ... WO Jeff Schnurr, oversaw the clearing, treatment and preparation of the casualty for evacuation. The work done by the platoon's two integral medics, Corporals Dan Lemieux and Richard Ready, was outstanding. With the assistance of the section, particularly the diligent note-taking and delegation of tasks by Cpl Rob Davis and the small hands of Cpl Brad Cady, which allowed him to reach far enough into the wound cavity to find the main artery, Dan and Richard applied tourniquets and rescue flow, providing life-saving medical assistance.



I have always had the highest faith in my medics. Their skills, their initiative and their knowledge are first-rate, coupled with a strong patrolling spirit and an outstanding level of physical fitness. This being said, actually watching the proficiency and effectiveness with which they worked that day reminded me of just how blessed the platoon is to have them attached. I know that this thought was shared by all of the other patrolmen that witnessed their calm and deliberate manner as they brought back an enemy from certain death.

Our assets identified a threat and neutralized it. This is a necessity in the work we do. ... We saw a wounded human being and my soldiers used their skills to save him. Simply, it was our duty and the right thing to do.

No one in the platoon thinks that what we did was special; it wasn't. As I explained, this is not a story about a rare event, it is simply a single example of the professionalism and morality of Canadian soldiers, an example in a long line of like ones that have happened here over the past eight years and will, without a doubt, continue.

**Capt Mike MacKillop, "CF Soldiers Risk Their Lives Saving Enemy,"  
Afghanistan Journal, 24 March 2010**

# Op ATHENA / Role 3

**C**F H Svcs Gp continued to support various missions and operations around the globe, including a significant contribution in Afghanistan as the lead nation of the R3 MMU until mid-October 2009. Under Canadian command, the R3 MMU was considered one of the best trauma hospitals in the world. To date, 815 CF H Svcs Gp personnel have worked closely with healthcare personnel from coalition countries to provide exemplary healthcare, saving the lives of Canadian soldiers, coalition members, and Afghan civilians.

97%

*If a CF soldier, sailor, airman or airwoman makes it to R3 with vital signs, they have a 97% chance of making it all the way back to Canada alive.*



When CF personnel are injured in Afghanistan, they receive initial treatment at the R3 MMU facility at Kandahar airfield. After assessment, an AE back to Canada may be required for further treatment of complex medical conditions. As Afghanistan is 12 000 kilometres from Canada, the AE is normally completed in phases. The initial phase is a flight onboard a US aircraft from Afghanistan to Germany, where injured CF personnel are admitted to Landstuhl Regional Medical Centre (LRMC), an American military hospital. While there, they receive further advanced medical and surgical treatment to stabilize them and prepare them for the onward flight home to a medical facility in Canada.

### Roles of Medical Care

R1	provides primary healthcare, specialized first aid, triage, resuscitation and stabilisation
R2	a structure capable of the reception and triage of casualties, including ability to perform resuscitation and treatment of shock to a higher level than R1
R3	deployed hospitalization, including surgical at primary surgery level, ICU, nursed beds and diagnostic support
R4	provides the full spectrum of medical care that cannot be deployed to theatre or is too time consuming to be conducted there

At LRMC, a casualty support team (CST) consists of clinicians, administrators and a padre. The team provides medical liaison between the American clinical team and the receiving medical facility in Canada. In 2009, the CST assisted 77 patients, 60% of whom were further evacuated to Canada. The remainder returned to Afghanistan following their recovery. The CST team also supported 27 family members of seriously injured CF personnel.

The next phase of AE is the flight home to various locations in Canada. Members of the CF AE Flight from the base in Trenton use a variety of aircraft. In 2009, the CF AE Flight repatriated 46 patients, almost half of them critical care cases, in more than 30 missions.



*The medical staff on a Forward AE mission are specifically trained to provide an advanced level of care to the injured soldier. Both the Chief of the Air Staff and the Surgeon General are committed to increasing the chance for survival of our injured personnel in theatre.*

CFDS plays an active role in Afghanistan and still deploys a general dentistry team to provide in theatre dental care to all entitled personnel. The team is very busy with both urgent dental problems and minor dental issues that patients are happy to have addressed. Two dental teams were located in the R3 MMU facility in Kandahar. We also deployed an oral surgery team, consisting of an oral maxillofacial surgeon (OMFS) and a dental technician. Their surgical skill set was often required to preserve life and stabilize casualties for air evacuation to a R4 facility. More than 10% of all surgeries at the R3 MMU facility were performed by the OMFS team and included procedures such as managing complex head and neck lacerations, repairing fractured jaws, and performing tracheotomies to secure an airway.



SINCE 2006 →

42 000	patients received	n/a
3 100	patients admitted	950
4 500	surgeries performed	1 050

← ROTO 7  
Apr-Oct 2009

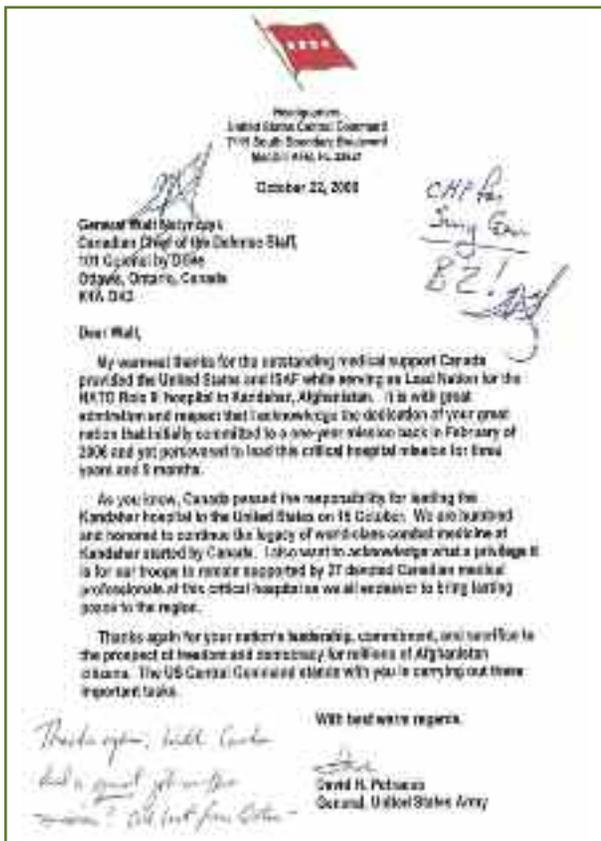


The R3 MMU, affectionately called “the wooden palace” by its occupants since Canada’s first rotation because it was mainly an agglomeration of wooden structures and tents, stood at the edge of Kandahar airfield.

Hospital services moved into a new concrete facility in May 2010. Seen here: Canadian, American and British medical personnel walk the last patient to leave the old R3 medical facility into the new and larger NATO facility right next door.



A momentous event for the R3 MMU this past year was the transfer of operational command authority from Canada to the US. As of 15 October 2009, the US assumed lead-nation status. Despite this transfer, Canada still maintains a highly robust and professional medical capability within Canada’s area of operations, continuing the tradition of providing excellent care to the fighting troops and civilians injured in the course of military operations. Approximately 30 CF healthcare personnel are still deployed at the unit.



The R3 MMU provides healthcare support to NATO and coalition troops. It also provides care to Afghan civilians, saving lives, limbs and eyesight. If it were not for the R3 MMU, many of those civilians would not have had access to medical care.



Building On Our Strategy

# Op ATHENA / Mentoring

**I**n November 2009, 38 Afghan National Army (ANA) soldiers graduated from a Combat Medic Course at Camp Hero in Kandahar. The soldiers, all medics from 1 Brigade 205 Corp ANA, spent eight weeks being mentored by three CF soldiers, while learning basic medical life-saving techniques.

*"I would like to express my sincere thanks to the Canadians and United States soldiers for the training they have provided for our soldiers and the patience they have exhibited throughout the course. The training that these medics received is critical allowing them to support their brothers-at-arms and save lives. Our challenge is that we do not have enough doctors in the ANA, so having qualified medics is an essential asset."*

**Major Abdullah Majid Kherkaw**  
1 Brigade 205 Corp ANA surgeon



The Combat Medic Course at Camp Hero provided instruction in trauma care. Students learned how to apply tourniquets and bandages, treat shock, and administer medication intravenously. This course has run in the past, but this is the first time it was officially certified through the National Kabul Military Training Centre, the establishment responsible for standardizing all training for the ANA.

*"This course will give the ANA medics the opportunity to provide immediate on-site medical care to their soldiers. I am extremely proud to see them graduate today after watching them develop their skills over the past two months. As a mentor, I found this experience very rewarding and events like this graduation are a mark of progress in the development and training of the ANA."*

**Captain J.G. Barnes**

Maj Kherkaw, seen here speaking with Capt J.G. Barnes, Medical Mentor with the Operational mentor and Liaison team (OMLT).



The ANAs recently acquired fleet of fully equipped high mobility multipurpose-wheeled vehicle (Humvee) ambulances will significantly improve front-line treatment and stabilization of casualties. Even the brightest "silver lining" has a cloud, and in this case, it is training. Realizing they did not possess the skills and experience to use the ambulance equipment correctly, the ANA medics were anxious to learn from someone who did.

The CF R1 med techs developed a high-quality course and delivered it to 24 Afghan medics from 1st Brigade Kandak. The training was hands on, focusing on practical skills such as the correct techniques for loading a patient onto a stretcher, transferring a patient from the stretcher to a bed or gurney, and administering oxygen by mask.

This Canadian-made initiative has set the conditions for further development of the ANA field medical capability. The newly minted ambulance medics can apply their knowledge immediately and share it with their fellow medics. In addition, the training plans were so well prepared that after translation and approval from the ANA Surgeon General, they will constitute baseline instruction material for future courses.

The ambulance familiarization course is indicative of the positive partnership between CF and ANA medical personnel during Roto 8.



The R3 dental team in Kandahar started a mentoring program for the ANA and Afghan National Army Air Corps (ANAAC) dentists at the Kandahar Regional Military Hospital. The team established strong relationships with the ANA and ANAAC dentists and enhanced the CF's reputation for collaborative mentoring that would become the hallmark of this success story. The team began by stressing the importance of infection control techniques and patient management. They even waded through the various dental materials in the regional medical supply warehouse to learn how to use certain tools, equipment and materials. The mentoring program has grown to a formalized program with well-developed learning objectives and basic assessment tools to help the mentor teams focus on the areas where training would be most beneficial.



Some of the most rewarding experiences of my long military career have been related to teaching and mentoring young medical technicians to become proficient in their skills. Then I get to watch them apply those life-saving skills with success.

I have been mentoring and instructing Afghan National Army (ANA) medics on the Combat Medic Course at Camp Hero, just outside Kandahar Airfield, for the past several weeks. The instruction took place in both Pashtu and Dari; an interpreter translated the lessons for me so I could ensure an appropriate standard of instruction and content.

This Combat Medic Course was a pilot developed by the ANA from an eight-week U.S. Department of Defense course. The instructors were ANA medical staff, supported by two Canadian mentors: Lieutenant (Navy) Gord Barnes of the Operational Mentor and Liaison Team and me. While we prepared for the course, I sat down with my interpreter and evaluated how the material was to be delivered and to whom it would be directed. Understanding that the OMLT mission is “helping Afghans to help Afghans,” we adopted a “train the trainer” philosophy to help the instructors engage their students.

The ANA instructors are combat veterans chosen for the task because they demonstrated a sincere wish to teach and improve the ANA Medical Services. Their knowledge and experience was there and the students were keen to learn, but the means of delivery required some work to ensure the students received the maximum benefit of the instruction. So, with a little mentoring and guidance, coupled with practical demonstration lectures and the use of medical technicians from the HSU in full casualty-simulation moulage, the ANA instructors captivated their students with a vigorous delivery of the material.

The ANA medics had never experienced scenario play with realistic casualty actors before, and it tested their mettle. This technique will become a course standard, as ANA instructors incorporate as many realistic battlefield scenarios as possible to prepare the students for operations with their infantry kandaks. Candidates’ performance in scenarios will be graded to determine their final course placement.

This pilot Combat Medic Course was also the beginning of the history and heritage of the ANA Medical Services. The students were reminded that they are now medics, responsible for saving their comrades’ lives every day, so they should adopt the esprit de corps of their new profession. I briefed the class and instructors at the end of each day on the brotherhood of medical health-care providers that they were joining, emphasizing that we are few, while the infantry is many. The pride of these young medics grew daily. There was suddenly no Pashtu, Tajik or Hazar sitting before the instructors, but simply ANA medics.

The ANA’s appreciation for our instruction and for instilling professional pride in their medics was such that I was personally thanked by General Bashir, commander of 205 “Hero” Corps, Afghan National Army, at the final graduation parade. He requested that I return to mentor on the next eight-week Combat Medic Course in January 2010.

I will look back upon my introduction to teaching those ANA medics with great personal and professional pride, knowing that the trained product going out the door to operational units will be greatly improved over what was previously available. This very rewarding experience supports Canada’s strategic goal of preparing Afghans to look after Afghans. It was truly my honour to participate, and I look forward to helping with the next course.

**CWO Christopher Moffatt, “Mentoring New ANA Combat Medics,” Afghanistan Journal, 1 December 2009**



## All you have to do is ask...

I spent my formative years as a soldier of the Cold War CF, a military in which the “culture of apprenticeship” thrived. This “teacher–student” culture was led by Second World War and Korean War veterans, the tribal elders, who had the desire to share their hard fought knowledge with those who would eventually replace them.

Those traditional mentoring relationships emerged slowly and naturally through informal interactions between junior and senior members of organizations. They frequently crossed rank bands, were absent of any external intervention, were often spontaneous, were rooted in shared interests, and were mutually initiated. This, in my opinion, was the true pinnacle of mentoring within the Canadian military, and it played a major role in our recent successes overseas.

There exists a limited window of opportunity for current CF personnel to benefit from those who have considerable experience as veterans of the Cold War, served under UN auspices and succeeded as true war fighters in South West Asia. It’s critical that we return to our mentoring roots and re-establish the apprenticeship culture before the tribal elders retire and take their knowledge and wisdom with them.

**Capt Mike McBride, MMM, CD**

*Capt McBride has served in Egypt, Cyprus, CF Europe, Bosnia, the US, and most recently in Southwest Asia as a mentor to the ANA.*



# Op HESTIA

*Operation HESTIA was the CF's participation in humanitarian operations conducted in response to the catastrophic earthquake that struck Haiti on 12 January 2010. Op HESTIA was part of a whole-of-government effort that also involved the Department of Foreign Affairs and International Trade (DFAIT) and the Canadian International Development Agency.*



1 Canadian Field Hospital, located in Léogâne, Haiti, provided a R2 Enhanced medical facility to all members of the communities surrounding the city. R2 Enhanced is hospital-level care, complete with most services, such as a laboratory, x-ray imaging, a pharmacy and dental services. Medical care at the field hospital is similar to that received by Canadians at home.

CF H Svcs Gp personnel were intimately involved in the effort

to relieve human suffering in the immediate after-effects of the earthquake. During Op HESTIA, CF H Svcs Gp deployed 195 medical and dental personnel from 32 different trades, all contributing their expertise in this humanitarian mission.

Personnel of 1 Canadian Field Hospital, Disaster Area Relief Team (DART), HMCS *Athabaskan* and HMCS *Halifax* provided relief efforts and treated approximately 22 000 Canadian and Haitian earthquake victims, in addition to delivering high-quality healthcare in support of deployed CF personnel. The Canadian field hospital had 100 beds, two operating rooms, four intensive care units, and four resuscitation bays. The field hospital personnel performed 199 surgeries and cared for many in-patients. It also provided surgeons to assist medical non-government organizations in the area. Health services support (HSS) personnel integral to DART provided both in-patient care to wounded Haitians and medical outreach to remote areas.



The health services effort was one of the main lines of operation in the overall CF response to Haiti. As part of the DFAIT-directed effort to evacuate civilian Canadian entitled persons (CEPs) from Haiti, CF H Svcs medical personnel pre-screened and treated CEPs at the Canadian Embassy in Port-au-Prince prior to repatriation to Canada.

16 682	patients seen at hospital
5 558	patients seen by the village medical outreach teams
199	surgeries performed

Five AE crew members, including a flight surgeon, were among the first medical assets to deploy to Haiti, arriving two days after the earthquake. CF AE crews, along with all other medical colleagues and augmentees, did not stop until 3 March 2010. They completed 59 flights, evacuated 62 patients, and provided escort to 4 544 CEPs. In addition, CF medical personnel, as part of a combined military/civilian team, provided en route medical care to young Haitian orphans travelling to Canada to unite with their new families. Finally, because of the launch of DFAIT's disaster victim identification (DVI) mission, CF H Svcs provided two CF forensic odontologists. This participation increased inter-departmental collaboration and was a great opportunity for CF dentists to demonstrate their unique skills.



The dental officers at Dental Detachment St-Jean processed ante mortem dental records obtained by the Royal Canadian Mounted Police (RCMP). CF dental officers deployed to Haiti as part of each DVI team with all of the dental equipment necessary to conduct dental post mortem examinations. The dental officer and the forensic pathologist worked together to complete a medical autopsy and then to chart the dentition and take dental radiographs of the jaws.



Each of the three DVI teams remained in Haiti for two weeks. The Canadian six-member DVI teams, working under extremely difficult conditions, completed over half as many examinations as another DVI team that was eight times as large.

The result of all this hard work by our CFDS personnel is that CF H Svcs Gp is recognized as a federal agency that can provide forensic odontology support. We have the equipment and the trained personnel, and we can get great results in adverse circumstances. This new capability will greatly increase the chances that we will be deploying dental officers and technicians on future DVI Canada missions.





## Op HESTIA Nursing Update

LCdr Gord Peckham and Maj Amélie Proulx  
February 2010

Greetings Colleagues,

We thought we would send a note from Haiti to let you know how things have been going and provide insight into our daily operations. First off, most of us departed for Petawawa with less than 24 hours notice so it has been a very quick deployment. During our time in Petawawa, we gathered the required medical equipment and supplies, developed teams for each clinical area, and loaded the equipment for transport to Haiti.



Upon arrival in Haiti, we gained an appreciation of the devastation and poverty as a result of the earthquake. The team set-up camp in an open field, where we currently live without electricity or



running water, eat military rations, shower from a bag in a tree, and clean our own laundry by hand. Duties on camp are also conducted by all staff, including garbage detail, cleaning, moving equipment, and water and ration resupply.

The staff of the R2 completed the physical set-up of the facility in five days and we began receiving patients on 29 Jan 10. The R2 staff consists of 32 different MOSIDS from 21 units across Canada ranging from the rank of Private to Lieutenant-Colonel. The areas of the R2 that nurses work in are triage, resuscitation, recovery, ICU, OR, MIR, and the ward. We currently have approximately 100 beds with an in-patient staff of 50 (including Nurses, Med Techs, and Physicians). Triage is conducted by a team of 2 Nursing Officers and 2 Med Techs; they usually see 100-120 patients per day. To date, the R2 has treated 1700 patients and completed 100 surgeries with two Operating Rooms running concurrently. The cases we have seen are a



stark contrast from those in Afghanistan. There are some post acute injuries from the earthquake (orthopedic) as well as chronic issues from the lack of a pre-existing health care system. Some interesting examples include: three cases of tetanus, three cases of malaria, a twenty-pound abdominal cyst, eclampsia, a premature infant, three cases of severe Congestive Heart Failure, and much pediatrics presenting with malnutrition and dehydration. Most of our ward beds are camp cots in a weather haven; the staff has been very creative in providing care, including traction with concrete blocks and parachute cord.

Although we have 50 staff assigned to in-patient services and they work on three shifts each day, team cohesion is



excellent and morale remains very high. The collaboration amongst Nursing specialties, Physicians, and Med Techs continues to enable the highest standard of patient care.

# Op PODIUM



In preparation for the Vancouver 2010 Olympic and Paralympic Winter Games, security and public safety agencies from all levels of government worked together to ensure they were prepared to respond to any potential emergency on land, at sea, or in the air. The scope and scale of these Games made it the largest domestic security operation in Canadian history.

A task-tailored health services unit (HSU) was generated and trained to support the CF contingent in Op PODIUM. The mission of the Joint Task Force Games Health Services Unit (JTFG HSU) during Op PODIUM was to provide R1 health service support (HSS) to all entitled personnel at the Vancouver Games from 1 September 2009 to 15 April 2010. The HSU was commanded by a double-hatted commanding officer/task force surgeon and comprised 123 personnel. In addition to providing R1 support, the HSU coordinated R2 to R4 support for the approximately 4 500 CF personnel involved in the mission.



Cpl Stephanie Schneider, a reservist with 11 Field Ambulance in Victoria, volunteered for Op PODIUM. She provided medical support to CF personnel of Task Force Whistler at Camp MacGregor during the Vancouver 2010 Olympic and Paralympic Winter Games. Her support role expanded when she was selected to be a torchbearer during the Whistler, British Columbia, portion of the first ever Paralympic Torch Relay across Canada.

R2 to R4 HSS was delivered by civilian providers and was primarily coordinated through Vancouver Coastal Health Authority, the Fraser Health Authority and British Columbia Ambulance Services. The task force surgeon and H Svcs CIMIC built key linkages for temporary British Columbia licensure of medical officers and accreditation at civilian hospitals and for civilian ambulance pick-up points.



The unit provided support to all elements—air, maritime, land—scaled to need and based on an area-support concept. R1 support was enhanced by limited holding capability where required and by medical evacuation assets at each supported location. Special capabilities included preventive medicine support, patient tracking and liaison, diving and aerospace medical capabilities, integrated mass casualty response and dental services.

During the deployment and employment phases of Op PODIUM, the JTFG HSU detachments conducted 2 778 patient visits, of which 2 500 resulted in immediate “return to duty” disposition.

Lessons learned from health services planning and training at both the unit and the operational headquarters, will be applied to future domestic operations.

The CF looked to its med techs to perform the all too important casualty evacuation function at home during Op PODIUM.

The Forward Aeromedical Evacuation Specialist course was first taught in January 2009, born out of the need to address critical casualty evacuations in Afghanistan. A number of med techs took this new type of training during the early days of Op PODIUM to ensure they were skilled, capable, and responsive should they be called upon to help save the life of CF personnel or a member of the RCMP. They would be able to combine their medical knowledge and skill with the transportation capability of the CH-146 Griffon helicopter. Working safely along with air assets can help med techs expedite the transfer of a casualty to the appropriate medical authority and will help save lives.



# Op CONTINUING PROMISE

**D**uring 2009, CF H Svcs Gp participated in two humanitarian assistance missions sponsored by the US Navy. The overriding aim of these deployments was to provide humanitarian assistance to underserved populations in the Caribbean/Latin America basin and in the South Pacific.

Op CONTINUING PROMISE 09 was conducted during the period of 1 April to 31 July 2009. CF H Svcs Gp deployed 27 medical and dental professionals onboard the robust US Navy Ship *Comfort*. Op CONTINUING PROMISE 09 has provided humanitarian assistance to Haiti, Dominican Republic, Antigua, Panama, Columbia, El Salvador, and Nicaragua. CF personnel worked alongside US uniformed medical and dental personnel and non-governmental organizations.

Exercise PACIFIC PARTNERSHIP 09 was held during the period of June to September 2009. This humanitarian assistance exercise focused on the South Pacific region. The USS *Richard E. Byrd* was the selected platform. It conducted operations in Samoa, Tonga, the Solomon Islands, Kiribati, and the Marshall Islands.

Our participation continues to demonstrate Canada's ongoing commitment within the Caribbean, Latin American and South Pacific regions and contributes to our interoperability with partner nations.



# Health Services Reserve

In 2009–2010, the Health Services Reserve (HS Res) provided a level of direct support to CF H Svcs Gp that exceeded initial expectations and the established norms. Between the demands of the Afghanistan mission, the 2010 Olympics, and the unanticipated deployment for earthquake disaster relief in Haiti, the HS Res exceeded its individual augmentation targets for the year domestically. At the same time, it achieved its expeditionary targets for international operations, and maintained its ongoing level of support to individual training and affiliated brigades.

The HS Res is proactive and adaptable, and it is ready, willing and able to provide the requisite quality healthcare to the CF. The HS Res provides vital links to the broader Canadian civilian population and healthcare community.

Many reservists have full-time careers outside the CF in a wide range of civilian healthcare professions, including medicine, nursing, and social work. Others are full-time students or members of other trades or professions. Reservists are typically employed in one of the 14 reserve field ambulances (Res Fd Ambs) located, in whole or in part, in 18 cities across Canada, or they are on the national Health Services primary reserve list (HS PRL). The HS PRL is a relatively recent initiative to facilitate the employment of licensed or certified healthcare specialists in support of the R3 field hospital. HS PRL personnel typically commit to two weeks per year, during which time they conduct military skills training, whereas Res Fd Amb personnel routinely train up to 52 days per year.

We offer reservists a range of duties to suit their particular circumstances, including the following:

- undertaking full-time duties in support of CF H Svcs Gp clinics;
- deploying to a six-month operational tour abroad;
- relieving regular force clinicians who are deployed on operational missions; and
- acting as a specialist consultant to CF H Svcs Gp clinicians.

from left to right:

Maj David Puskas, an Orthopaedic Surgeon, first deployed to R3 MMU at Kandahar airfield as a civilian. Upon his arrival home, he enrolled in the HS Res, completed all required courses and deployed a second time in uniform, stating he felt more a part of the team performing his duty as a uniformed clinician.

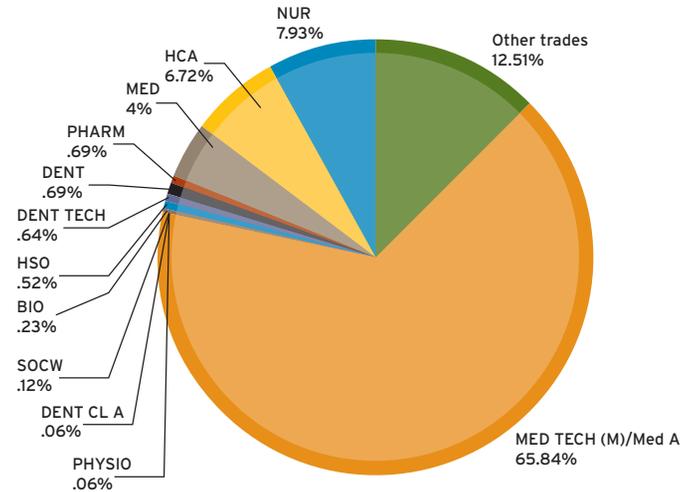
Maj Mark Thibert, a Plastic Reconstructive Surgeon, joined the HS Res directly.

With the creation of the HS PRL, former regular force Trauma Surgeon Cdr Ross Brown transferred to the HS PRL enabling CF H Svcs Gp to maintain both experience and clinical expertise.

Capt Damien MacDonald, an Emergency Physician, also joined the HS Res directly and then deployed to Kandahar after completing his officer training.



HS RES OCCUPATION DISTRIBUTION 2009-2010



On 22 June 2010, Cpl Thomas Clapham, a med tech with 28 Ottawa Res Fd Amb, received a Commander's Commendation from Canadian Expeditionary Force Command (CEFCOM) for providing exceptional medical care to an insurgent that had been engaged by a coalition helicopter in Afghanistan on 8 November 2008. Upon arrival at the scene, Cpl Clapham determined the casualty was suffering from life-threatening injuries and immediately began providing first aid. Despite the patient's lack of vital signs, Cpl Clapham worked relentlessly to resuscitate and stabilize him until his evacuation to a medical facility. The outstanding dedication, selflessness, and medical skill of Cpl Clapham and his commendable compassion for an adversary saved this patient's life.



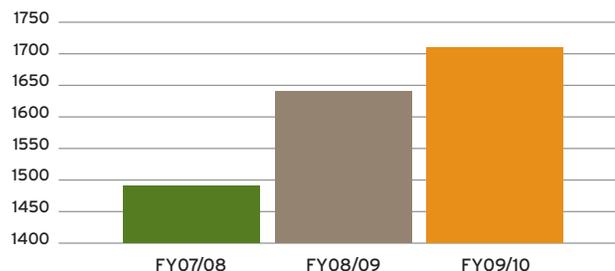
My four-month experience as a Nursing Officer with the CF was both rewarding and educational. I was very proud to serve my country and be a part of Canada's mission overseas. My many years working as a civilian operating nurse were invaluable during my tenure at the R3 MMU. The unit was primarily life and limb and we treated casualties that were victims of the war, which included soldiers, locals, and civilians, and unfortunately, many of them were children. We worked long days and were on call 24/7. In July and August, we broke the record for most cases in the history of the hospital. Sometimes the anticipation of the next call was more exhausting than the work itself. Carrying a side arm and the sound of the sirens and announcement for rocket attacks were constant reminders that we were living in a war zone. Although we were living in the more secure area, the threat of danger was very real. There were many times when I was lonely for my family and friends. However, through my experiences in Afghanistan, I gained many new friends that I will cherish forever.



**Lt Sandra Rowe**

As of 2009, all governments across Canada have passed legislation guaranteeing reservists that they can return to their jobs, with the same seniority, after a deployment. Because of the enactment of federal, provincial, and territorial job protection legislation, reservists can feel secure seeking time off from their civilian employment or educational programs to deploy on military operations or to undertake military training.

**HS RES-3 YEAR GROWTH TREND**



Canada is not the only country to have introduced such legislation. It now exists in the UK, the US, and Australia and is under consideration in many other countries where reservists play an important role in national defence. It is all part of officially recognizing the value of reservists' contributions.

...Maj Andrew Kirkpatrick is a former regular force member and served as the regimental medical officer for the Canadian Airborne Regiment from 1989 to 1991. He has kept his name on the Primary Reserve List, and served at the [R3] MMU in summer 2008. ... [Maj Kirkpatrick] was impressed with the facilities: "It's got every resource," he says, "even though it's, like, in this little tin can. It's probably better than 99.5 percent of the places you'll get cared for in Canada. ... [Maj Kirkpatrick] will be speaking at [the] Canadian Surgery Forum at a postgraduate course on catastrophe surgery, drawing on [his] experiences in Afghanistan to train other trauma surgeons in applying military techniques such as triage, evacuation and damage control surgery to civilian practice.

**Lesley Craig, "Kandahar Has Doctor Joining Reg Force," The Maple Leaf, 29 April 2009**

The valuable lesson I learned while deployed is that teamwork, communication, and limitless sacrifice, as exemplified by the values and work ethics within the CF, will enable any group of medical professionals to accomplish any task, no matter how daunting and under any set of conditions. My 20 years as a Plastic and Reconstructive Surgeon in Thunder Bay provided me with the experience and clinical competency to deploy as an Oral-Maxillofacial Surgeon to the R3 MMU, KAF, for two months. I did so to serve my country with duty and honour, as a part of the Canadian Forces Health Services Group's contribution to the Afghanistan mission. As a Medical Specialist in the Reserves I am also the Commanding Officer of 18 (Thunder Bay) Field Ambulance, Brigade Surgeon to 38 CBG, and Canadian Forces Reserve Medical Officer Practice Leader.



**Maj Mark Thibert**





**Provide Healthcare Advice**

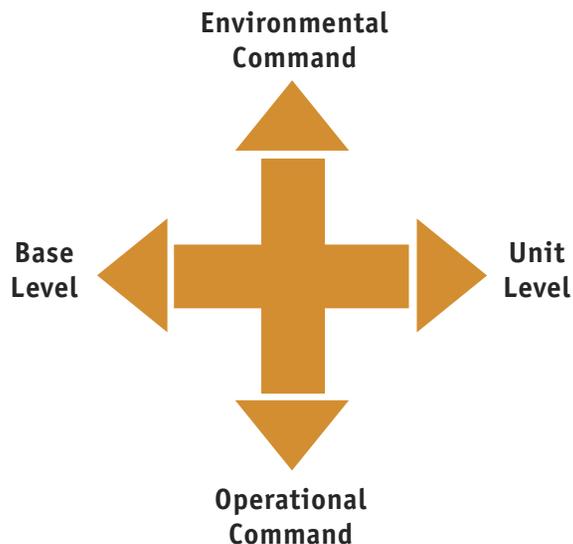
# Advice Throughout the Chain of Command

**A**t all levels, commanders require expert medical advice on a variety of health issues to ensure that they are adequately discharging their responsibilities. There is a requirement for uniformed healthcare professionals to exercise control, on behalf of commanders, over professional and technical aspects of healthcare.

The Surgeon General has an established network of professional technical advisors to exercise responsibilities. This "prof tech net" includes a central staff of subject matter experts who make policy and exert national level authority; and senior medical officers at all levels of command who have responsibility and accountability for the quality of medical services provided within their area of responsibility. At local, regional, and national levels, practice leaders are employed for each of the healthcare disciplines serving the CF. These practice leaders are responsible for discipline-specific professional technical issues.

We develop policies with extensive input and consultation from civilian subject matter experts to ensure congruity with Canadian health policy, and we update them to reflect best practice, and evidence-based medicine.

At all levels, a focus on the needs of CF personnel is what guides decision-making. Policies, important decisions, direction on specific issues, and lessons learned are quickly communicated through the "prof tech net."



- advises senior departmental authorities (Minister, Chief of Defence Staff, Armed Forces Council) on significant health issues
- liaises with other military and civilian health organizations, including Surgeons General of NATO and non-NATO countries, Health Canada, VAC, civilian healthcare bodies, and provincial medical licensing authorities
- formulates an overarching strategy for a professional technical organization, policies, and procedures within CF H Svcs Gp
- maintains a constant watch of the world's literature on health issues

## STRATEGIC FOCUS

# SURGEON GENERAL

## OPERATIONAL FOCUS

- provides guidance and direction on all aspects of healthcare in the CF
- develops healthcare policy, sets standards, establishes procedures and responds to issues from the field as they arise
- is the final authority on all healthcare issues and resolves disputes over professional issues between various groups of healthcare workers in the CF

Meeting the diverse health needs of CF personnel is daunting. In addition to the expertise required to run the day-to-day primary healthcare clinics across CF bases, CF H Svcs Gp must also function effectively in the challenging and distinctly different maritime, aerospace and field environments. Meeting these challenges requires a multidisciplinary team approach and extensive specialty operational training.

*To ensure the most efficient, consistent, cost-effective, cross-CF national healthcare program, each level has its own medical advisor.*





Building On Our Strategy

# Force Health Protection

*The identification of potential environmental, occupational and infectious disease threats and the development and delivery of appropriate and timely mitigating strategies are imperative if the CF is to meet its obligations and tasks.*

Operational medicine is responsible for the provision of strategic-level expertise in the areas of medical intelligence; casualty prevention and management; medical aspects of conventional, nuclear, chemical, biological, and directed energy weapons; aerospace medicine; and diving medicine. To protect CF personnel from chemical, biological, radiological, and nuclear (CBRN) threats, we recently improved the CBRN medical kits; added novel medical countermeasures; revised the CBRN Medical Defence Doctrine; and advanced CBRN research and development. CBRN operational medicine has been at the forefront of allied efforts at NATO and in the Australia, Canada, UK, and US communities.

*Force Health Protection (FHP) is a large prevention and health promotion initiative within CF H Svcs Gp. FHP is designed to protect CF personnel from preventable illnesses and unnecessary casualties—in garrison and on deployment—while helping them achieve and maintain a healthy lifestyle.*

The CF has established public health and disease control programs that are on par with civilian federal and provincial counterparts. CF H Svcs Gp's public health program is an integral part of the military healthcare system. The program goes to the heart of health maintenance, which is the prevention of disease and illness through appropriate interventions and through guidance to CF personnel and healthcare professionals within CF H Svcs Gp. We have extensive working relationships with other federal and provincial departments, who view the CF H Svcs Gp public health program favourably for its expertise

Through its Biological Warfare Threat Medical Countermeasures (BWTMCM) project, Canada has been participating and collaborating with the UK and the US for more than 10 years on developing and acquiring medical countermeasures against biological warfare (BW) agents. Recently, Australia began to participate in these development efforts as well. The BWTMCM project has led to improvements in operational effectiveness. The project also complements other measures, such as enhanced protective equipment; increased emphasis on surveillance; and early diagnosis, detection, and identification of the full range of BW agents. To date we have initiated three international medical countermeasures programs: an advanced smallpox vaccine system (vaccines and immunoglobins), an improved plague vaccine, and a botulinum medical countermeasures system. Additional initiatives will address other BW threats, such as filoviruses, anthrax, ricin, viral encephalitis, viral haemorrhagic fevers, tularaemia and brucella.

and performance. We are strong contributors in the setting of standards and policies at the national and international levels, and we are frequently asked to provide expert advice and guidance to other Canadian federal and provincial public health programs—a clear recognition of the high calibre of our professional cadre.



The rapid and deployable capability of the health-hazard assessment teams is just one example of the relevance and responsiveness of the program to the demanding and changing environment

in which the CF must function. Preventive medicine technicians have special expertise in the identification, quantification, and control of health hazards in CF work and living environments, as well as threats resulting from toxic and infectious agents (chemical, biological and physical) in food, water, vectors, or human populations. These technicians are on the scene at the start of a mission, during a mission, and at closeouts (forward operating bases) or handovers.



# Strengthening the Force

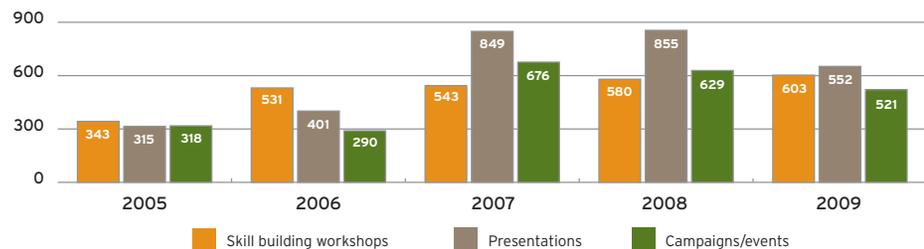
*The health of Canada's military is fundamental to its mission success. We define "health" as a state of complete physical, mental and social well-being, not merely the absence of disease or infirmity. Preventive health programs strive to enable populations to gain control over their health and to improve it.*

A key component of Canada's ability to meet its defence mandate is the health and physical fitness of its personnel, which is fundamental to effective employment and deployment. A robust and responsive preventive health component is needed to ensure mission capability, sustainability, and success.

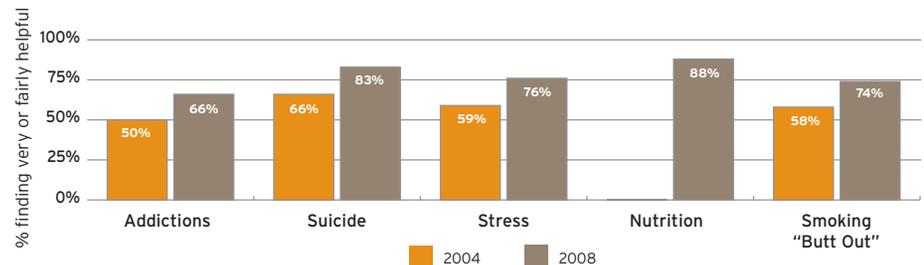
Strengthening the Forces (STF) is the national health promotion program managed by CF H Svcs Gp. STF is designed to enhance wellness, foster healthy lifestyle behaviours, and support leadership in strengthening the culture of health in the CF. The STF program provides information, subject matter expertise, training and skill-building activities that reflect best practice in population health. Of particular interest are addictions awareness and prevention; injury prevention; active living; nutritional wellness; social wellness, including stress and anger management; and healthy relationships.

The motto of CF's Health and Physical Fitness Strategy is "Healthy and Fit for Life." The long-term goal is to establish a culture of health and physical fitness where people take their health seriously and choose a lifestyle dedicated to eating well, engaging in regular activities that support physical fitness, maintaining a healthy weight, and living an addiction-free lifestyle. Health promotion services ultimately target the entire 100 000 CF regular force and reservists.

HEALTH PROMOTION—NUMBER OF BASE/WING ACTIVITIES STAGED



HEALTH PROMOTION—PARTICIPANT SATISFACTION WITH STF WORKSHOPS



## H1N1 Planning

In 2009 the H1N1 influenza pandemic created some interesting challenges for CF H Svcs Gp. Under Op LASER, we supported CF personnel on bases across Canada, as well as approximately 2 200 CF personnel and entitled dependants deployed on operations, training, or posted in locations all around the world. The outstanding efforts of the entire CF H Svcs Gp operational team resulted in CF personnel and entitled family members being offered the H1N1 vaccine regardless of where they were located. This was particularly important because of the logistical challenges of distributing vaccines and antiviral medications that were in short supply and required specialized shipment and handling, both domestically and abroad.



## A sampling of 2009–2010 programs



# Health Research



The aim of the Surgeon General's Health Research Program is to continually assess and improve health programs and capabilities for optimal CF health and operational success.

In early 2010, the Surgeon General released a Health Research Strategy to better formalize, coordinate, and revitalize the multiple science and technology (S&T) efforts of his directorates and clinician-scientists; to better coordinate with external partners to maximize benefits derived from limited S&T resources; and, to better articulate the Health Research Program's place within the Defence S&T enterprise. The strategy will help medical personnel better direct and participate in research, technology, analysis, development, engineering and evaluation activities, and ultimately enhance health services. The health research team contributes to the general base of scientific knowledge by promoting collaborative projects and by forging and maintaining strong research links and collaboration with relevant government entities, allies, universities, hospitals, and private agencies.

Accomplishments include the formalization of eight health research "blocks", a new Surgeon General's Health Research Board, an online health research application and tracking system, and updated CF health research priorities. Under the Surgeon General's leadership, the first-ever Military and Veteran Health Research Forum was conceptualized and will be convened by Queen's University and the Royal Military College in November 2010. A few of the operational benefits of the many research efforts undertaken since 2009 include better forward casualty triage; advances in trauma management and analysis; better knowledge of mental health status and the effectiveness of current screening and preventive measures; the development and implementation of resiliency, mTBI management; and suicide intervention programs.

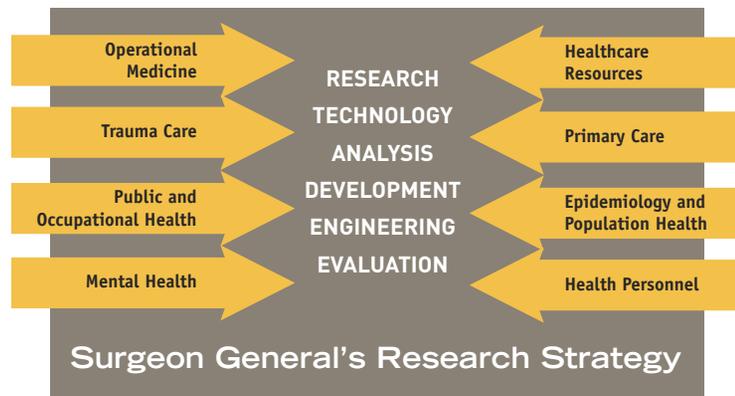


*"To better shield and sustain Canada's fighting forces through health innovation"*

CF health professionals have led or significantly contributed to numerous scientific publications, health research projects and media articles. They have also been invited to give presentations at prominent national and international scientific conferences. In addition to a much larger number of internal CF scientific studies and reports, they:

- published 43 scientific articles in the peer-reviewed scientific literature;
- gave or published 66 media interviews or articles;
- gave 52 presentations at scientific conferences;
- initiated 8 major research projects; and,
- completed 4 major research projects.

New or ongoing CF H Svcs Gp endeavours include: participation in a multi-centre prospective randomized optimal plasma ratio clinical trial; several mental health-related studies; the co-hosting with Defence Research and Development Canada of a NATO symposium on blast injury in October 2011; the development of research protocols for two new CAREN systems; and, the HMCS *Chicoutimi* crew medical monitoring project.



### CF H Svcs Gp

- Clinician scientists
- Epidemiologists
- Standing Committee on Operational Medicine Review Working Groups
- Directorate of Medical Policy
- CF Environmental Medicine Establishment
- Directorate Mental Health/Deployment Health
- CF Trauma Training Centres
- Directorate of Force Health Protection/Communicable Disease Control Section/Occupational and Environmental Health Section/Health Promotion Section
- Biological Warfare Threat Medical Countermeasures Project Management Office, Deployable Health Hazards Assessment Teams
- Directorate of Health Services Operations/Operational Medicine Section/G2 Medical Intelligence Section/Regulatory Affairs Section

### Surgeon General's Health Research Partners

#### ALLIES

- The Technical Cooperation Program
- Chemical, Biological and Radiological Defence Memorandum of Understanding
- Quadripartite Medical Counter-Measures Coordinating Team
- Quadripartite Occupational and Environmental Health Surveillance Team
- US National Center for Medical Intelligence
- US Department of Defence Joint Environmental Surveillance Working Group
- NATO Research and Technology Organization
- NATO Committee of the Chiefs of Military Medical Services
- NATO Standardization Agency Panels
- Quadripartite Air and Space Interoperability Council
- Quadripartite Medical Intelligence Committee
- Quadripartite Medical Intelligence Analysts Working Group
- Quality Assurance Working Group

#### DND

- ADM S&T Partner Groups/Defence Research and Development Canada/Director General Military Personnel Research and Analysis
- Director Chemical Biological Radiological and Nuclear Defence
- Assistant Deputy Minister (Materiel)
- Chief of Defence Intelligence

#### EXTERNAL

- Veterans Affairs Canada
- Royal Canadian Mounted Police
- Canadian Institutes of Health Research
- Statistics Canada
- Health Canada
- Public Health Agency of Canada
- Canadian Agency for Drugs and Technologies in Health
- University Hospital Partners
- Industry

*In 2009, CF H Svcs Gp epidemiologists launched the CF Cancer and Mortality Study in collaboration with VAC and Statistics Canada. The study will link a database of CF personnel since 1972—over 300 000 files—to the national cancer and mortality registries. This complex undertaking will permit analysis of the long-term health of CF personnel in relation to their military career. It will also allow a thorough and detailed analysis of the causes of death and cancer.*



#### CF Surgeon appointed Director of Trauma at Sunnybrook

*LCol Homer Tien is a skilled surgeon, a dedicated researcher, and a trusted advisor within the medical community. He has recently been appointed as Medical Director of Trauma Services at Sunnybrook Health Sciences Centre in Toronto.*

*"On behalf of the entire Defence community, I would like to extend my sincere congratulations to LCol Tien" said the Honourable Peter MacKay, Minister of National Defence. "It demonstrates the type of top quality healthcare providers within our ranks and is an example of the excellent partnerships we've been able to forge with the civilian medical community."*

*"LCol Tien is a model for us all. We are very fortunate to have him as a part of our team and are proud he has been selected for such a prestigious position within the medical community," said Surgeon General Commodore Hans Jung.*

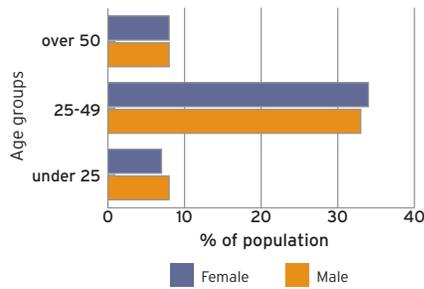
*Sunnybrook Health Sciences Centre press release, 5 July 2010*

LCol Tien had his important research paper "Preventing Deaths in the Canadian Military" published in the Journal of Preventative Medicine this year. He will soon be editing a CF supplement to an upcoming edition of the world-renowned "Journal of Trauma."

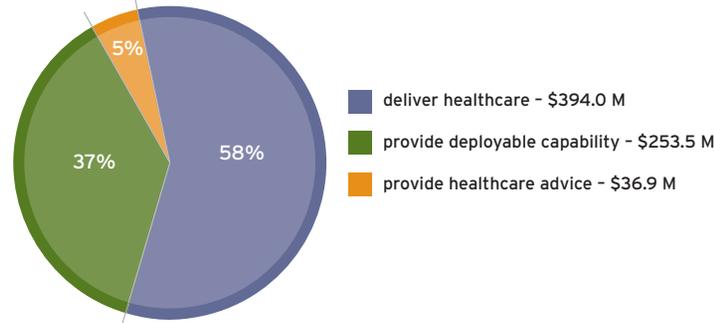
# Your Health—Our Mission... By the Numbers

Building On Our Strategy

CF H SVCS GP  
AGE/GENDER DISTRIBUTION



CF H SVCS GP 2009-2010  
HEALTHCARE BUDGET—\$684.4 M



During the span of his 35 year career (assuming 3 deployments), MWO I.M. Neversick will live up to his name yet still undergo/receive:

- |  |   |
|--|---|
| <b>1</b> enrolment and <b>1</b> release medical  | <b>2</b> six-month courses of antimalarial drugs  |
| <b>11</b> periodic health assessments (including vision and hearing screen and diagnostic tests) | <b>1</b> G6PD (test for an enzyme required in order to tolerate antimalarial treatment) |
| <b>35</b> dental examinations and <b>35</b> cleanings  | <b>3</b> TB tests   |
| <b>3</b> pre-deployment, <b>3</b> enhanced post-deployment screenings                            | A number of vaccinations including annual influenza                                     |
| <b>5</b> promotion screenings, <b>1</b> isolated posting screening                               | Blood type testing  |

ONLY **14** DAYS

opened field hospital in Haiti (Op HESTIA) in record time  
—within only 14 days  
of getting mandate to deploy

## CF Dental Services Treatment Statistics for 2009

total number of dental visits .....	206 499
total number of dental procedures.....	479 394
total number of active dental charts .....	71 744
total number of cleaning appointments .....	56 228
patient visits in theatre .....	4 366
total number of sick parade visits .....	15 026
total number of after-hours dental emergency exams .....	125

165 000

number of tongue depressors used in clinics each year

1885

year the military medical service was first established

1915

year the first military dental service came into being

24.9

million dollars of total drug expenditures in 2008–2009

24.9

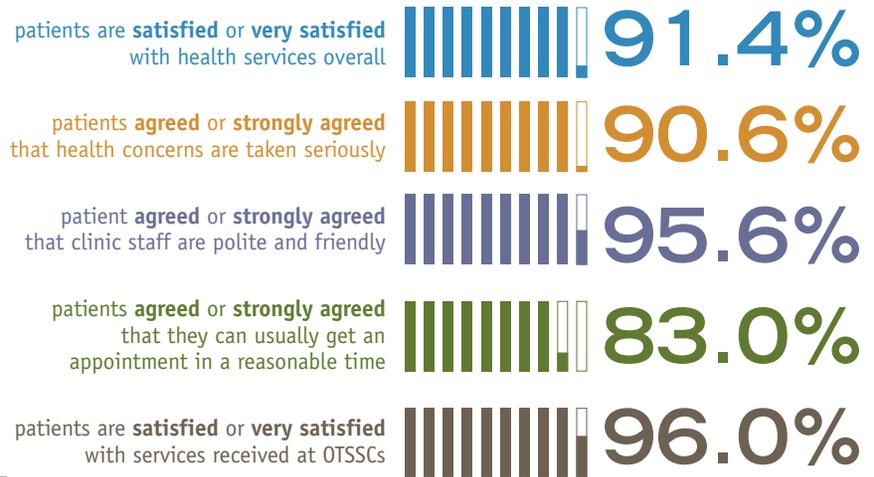
percentage of total drug costs for antimalarials

193 548

total number of days HS Reservists worked in 2009–2010

20 836
<i>number of patient files received in Records Management Office in 2009</i>
38
<i>average age for all CF H Svcs personnel (reg/res/civ)</i>
3 346
<i>number of hours of study to become a physician assistant</i>
30
<i>number of aeromedical evacuation missions in 2009-2010</i>
92
<i>percentage of CF members who have three dental visits per year (Cdn public: 64% visit dentist 1.3 times per year)</i>
11
<i>million doses/tablets of over-the-counter medications dispensed to CF personnel in 2008-2009</i>

**2009 SURVEY—**  
4 000 respondents



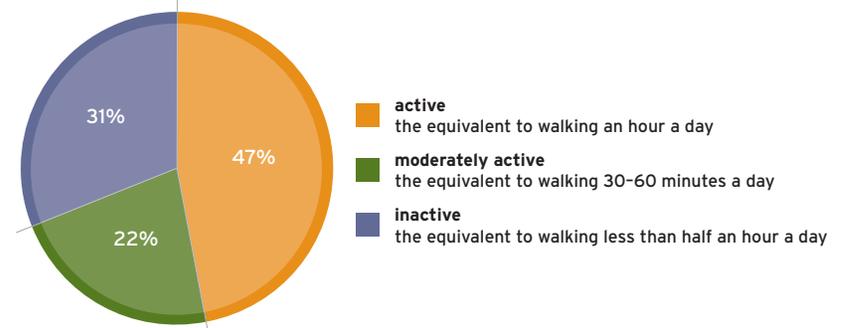
**AT ANY GIVEN TIME**

**15 %**  
of CF H Svcs Gp personnel are deployed

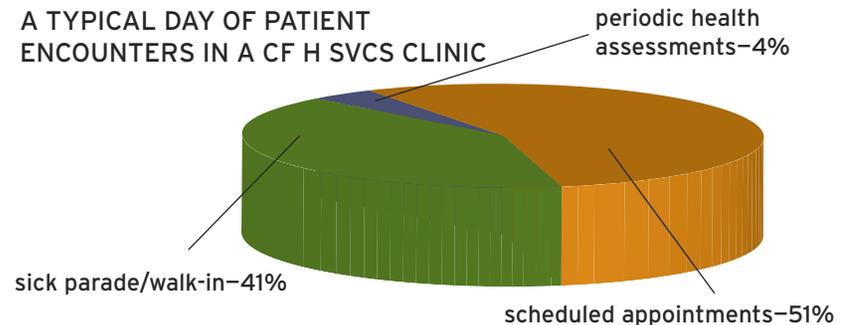
**15%**  
of CF H Svcs Gp personnel are on training to deploy

**15%**  
of CF H Svcs Gp personnel have just returned from deployment

**LEVEL OF CF PERSONNEL'S PHYSICAL ACTIVITY (SELF-REPORTED)—2008-2009**



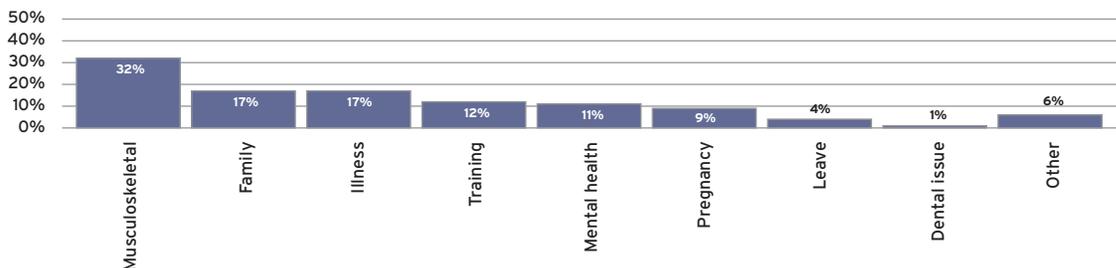
**A TYPICAL DAY OF PATIENT ENCOUNTERS IN A CF H SVCS CLINIC**



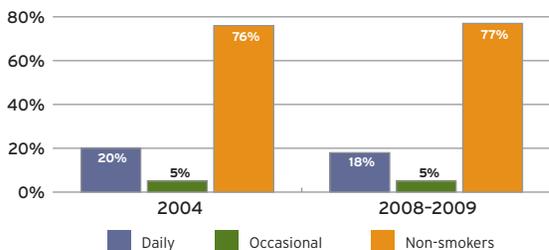
# Your Health—Our Mission... By the Numbers

To provide a much-needed baseline of the prevalence of health status and chronic disease risk factors, CF H Svcs Gp epidemiologists conduct the CF health and lifestyle information surveys (HLIS). The surveys provide data to inform a comprehensive review of health promotion priorities and track CF progress to healthy lifestyle, deployability, and employability. This is a sampling of results from the most recent survey, 2008–2009.

## REASONS RESPONDENT WAS UNABLE TO DEPLOY IN PREVIOUS 2 YEARS

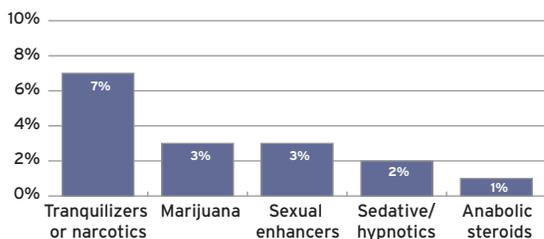


## SMOKING FREQUENCY

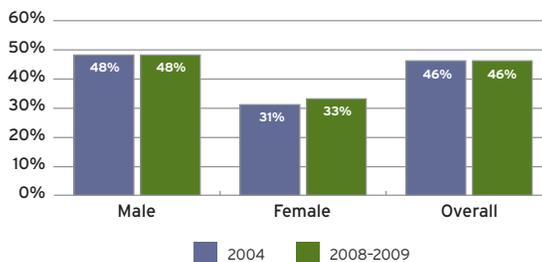


- 22% of CF personnel started smoking after joining the CF, the majority (45%) during basic training
- 80% of CF smokers have increased or restarted smoking since joining the CF, the majority (43%) while on deployment

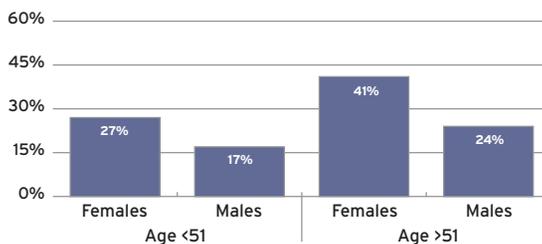
## USE OF NON-PRESCRIPTION DRUGS IN THE PAST 12 MONTHS



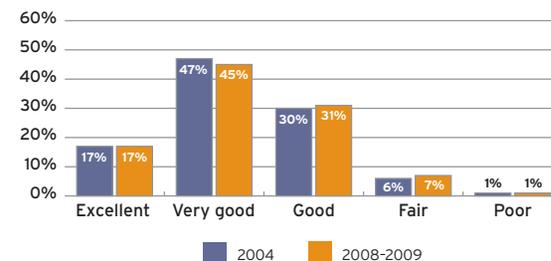
## ALCOHOL CONSUMPTION EXCEEDING LOW-RISK DRINKING



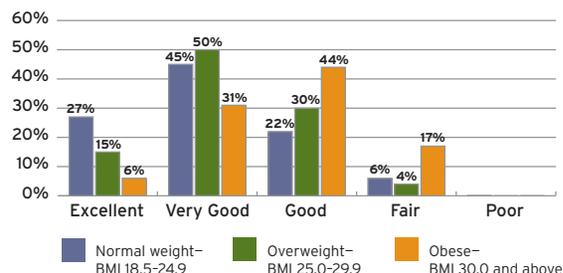
## MEETING CANADA'S FOOD GUIDE RECOMMENDATIONS (fruits and vegetables)



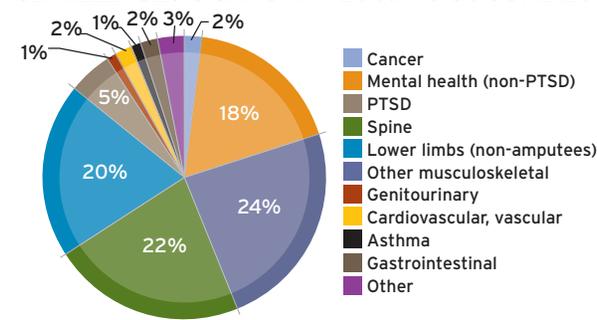
## SELF-RATED OVERALL HEALTH



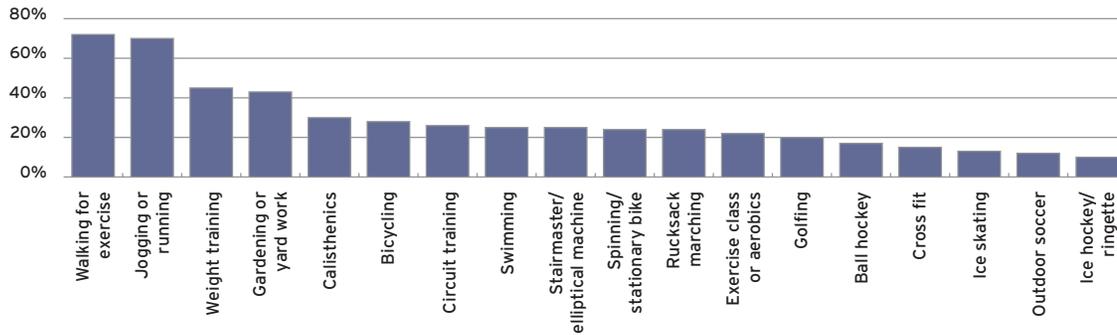
## SELF-RATED OVERALL HEALTH BY CATEGORIES OF BMI



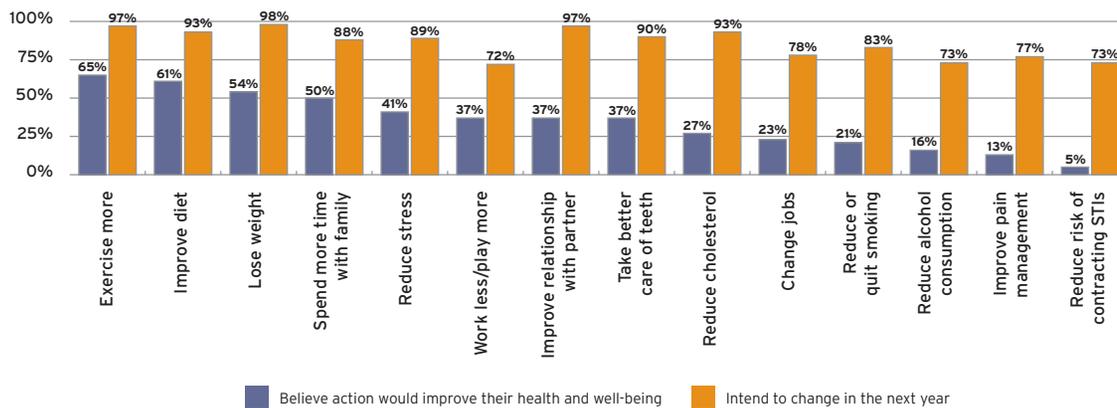
## 3B RELEASES 5 JANUARY 2009 TO 30 JUNE 2009



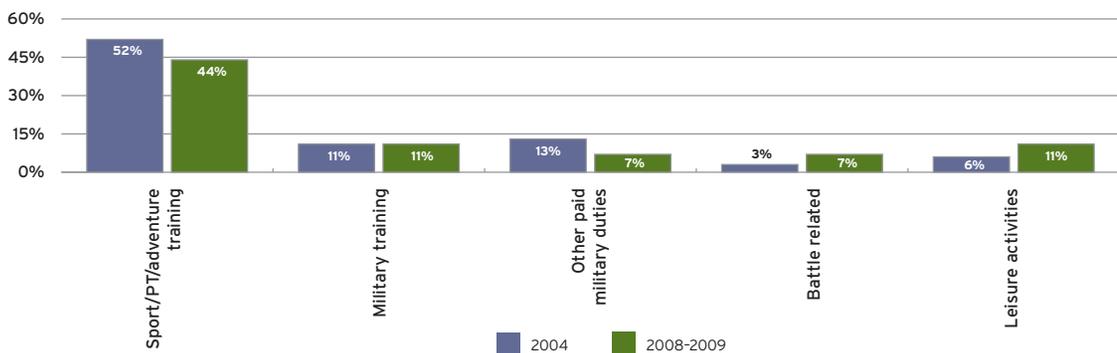
### PARTICIPATION IN SPORT AND PHYSICAL ACTIVITY



### TAKING ACTION TO IMPROVE HEALTH AND WELL-BEING



### ACTIVITIES ASSOCIATED WITH MOST SERIOUS ACUTE INJURIES IN THE PREVIOUS 12 MONTHS



**90%** have access to exercise facilities  
**64%** are given time to exercise at work  
**45%** exercised without a proper warm up  
**23%** trained so hard they felt sick  
**24%** exercised before injury was fully healed  
**21%** ran in combat boots  
**20%** ran while wearing a rucksack

**43%** have completely sedentary jobs  
**84%** reported working in jobs requiring little or no physical activity  
**28 hours/week** average amount of time spent watching TV, on the internet, playing video games or reading

### MOST COMMON BODY PARTS AFFECTED BY INJURY

