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CONFÉRENCE NATIONALE

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The role of the Canadian Forces Health Services and the importance of collaborating with our Canadian healthcare systems

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CANADIAN COLLEGE OF
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LEADERS EN SANTÉ

TITLE
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The Canadian Forces Health Services

Deliver comprehensive healthcare to Canadian Armed Forces (CAF) members both domestically and internationally.



We will explore **CFHS's operations**, its collaborative role within our broader **healthcare ecosystem**, and highlight the importance of **strategic partnerships** in preparing for potential crises such as high casualty flows resulting from conflict or war, to help ensure both **military and civilian healthcare systems remain robust**.

[Canadian Armed Forces - Medical Technician](#) [CFHS footage](#)



OVERVIEW

1. What is the role of the Canadian Forces Health Services (CFHS)?
2. Delivering Health care to Canadian Armed Forces (CAF) members
3. How CFHS supports CAF Operations
4. Crisis Planning
 - Wargaming
 - Patient Flow and tracking
 - Canadian readiness for large scale casualty reception
5. Health care collaboration – opportunities and next steps



Canadian Forces Health Services

14th Health Jurisdiction

Why does it exist?

- **The Constitution Act, 1867**, assigns sole responsibility for all military matters to the federal authority
- **The Canada Health Act, 1984**, specifically excludes CAF members from provincial/territorial health care coverage responsibility
- **The Minister of National Defence, in the Queen's Regulations and Orders**, directs that the CAF defines eligibility for and provide medical and dental care at public expense to CAF members



** Designed and Resourced to support CAF requirements*

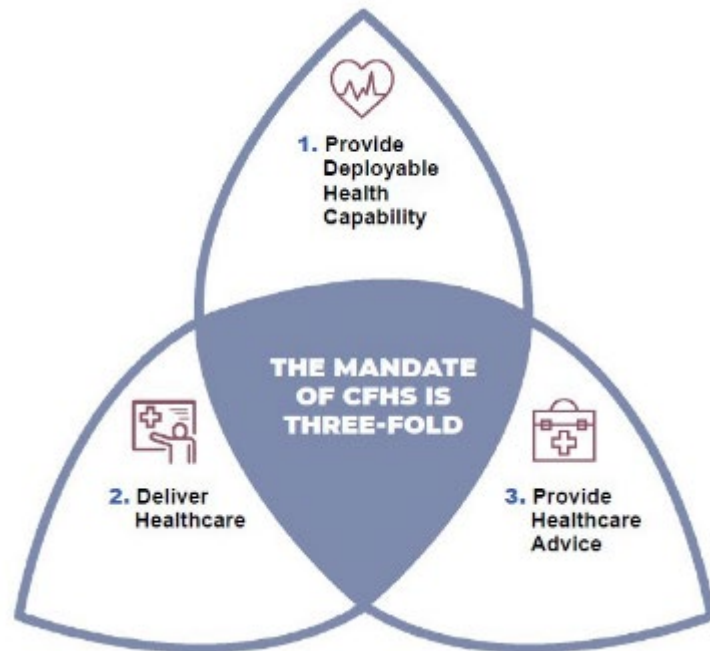


Main Role of CFHS

Deployable Health Capabilities

Task-tailored HS capabilities to support the CAF at home or abroad, including domestic, international, and humanitarian operations.

- Operation REASSURANCE
- Operation CADENCE
- High Readiness Missions



Provide Healthcare

Comprehensive, specialized, and adaptable medical & dental services to support the health, well-being, and operational readiness of CAF members and entitled personnel.

- Program Management
- Delivery of Health Effects



Health Advice

Guidance to ensure the safety, well-being, and health of members at home & abroad. Focused on preventing injuries, managing health risks, promoting health to support readiness.

- Surg Gen + Prof Tech
- Force Health Protection
- Triad of Leadership





CFHS



Mission: deliver high-quality HS to Canada's fighting forces wherever they serve



Vision: professional military service recognized for providing excellent care as an integral part of a world-class fighting force



Values: Caring, Our People, Teamwork, Professional Excellence, *Communication*, & Accountability

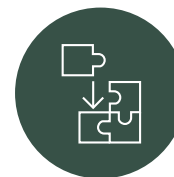




Key Capabilities



Comprehensive military health system that provides a wide range of services to support the health and operational readiness of CAF personnel.



These capabilities enable the CF H Svcs Gp to deliver high-quality, comprehensive health services, to foster a CAF where personnel remain healthy, resilient, and ready for operational duties.

Functional area

Description



Comprehensive Health Services

Primary and Specialty Care
Mental Health Services
Dental Services



Deployable Health Capabilities

Field Hospitals and Medical Units

Operational Medicine



Specialized Training, Research & Innovation

Health Services Training Centre
Research & Development
UAS
UofT Aerospace Medicine fellowship



Public Health & Preventive Medicine

Force Health Protection
Communicable Disease Control



Integrated Health Information Systems

Electronic Health Records – CFHIS
Patient Complaints Process
Appointment Reminders



Canadian Forces Health Services

Who we serve





Healthcare Delivery to CAF Members

Comprehensive Healthcare Services

CFHS offers a wide range of healthcare services, ensuring members receive both routine and specialized care.

Support for Readiness

The healthcare services provided are crucial for maintaining the readiness and fitness of armed forces personnel.

Routine and Specialized Treatments

CFHS ensures that personnel have access to both routine medical care and specialized treatments when needed.





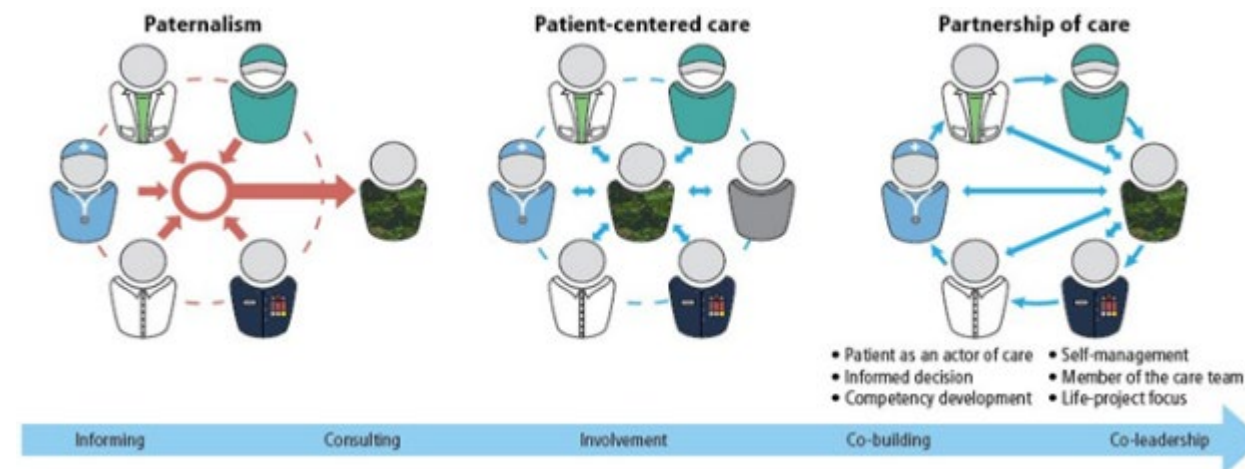
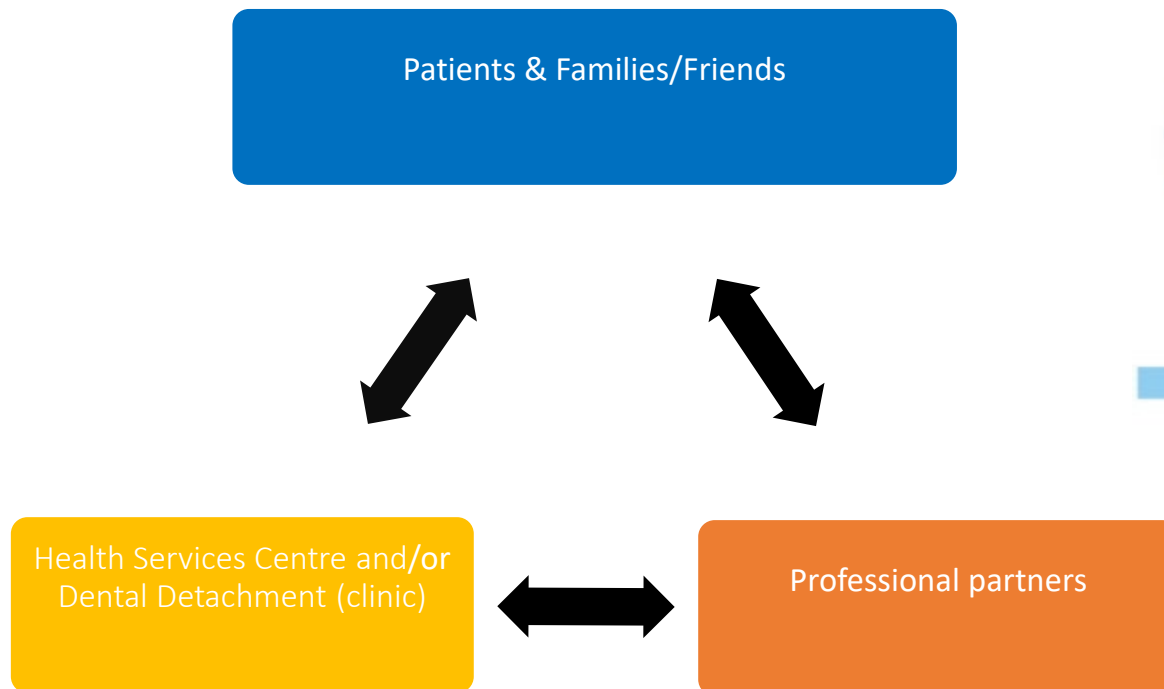
CAF Health Care Team

- More than 6,500 personnel
 - Military members: $\approx 4,500$
 - Regular Force
 - Reserve Force
 - Public Servants : $\approx 1,500$
 - Contracted health care providers: ≈ 500
- Some critical vacancies:
 - Physicians
 - Physician Assistants
 - Social Workers
 - OR Technicians
- Serving CAF population $\approx 62,000$





Person Partnered Care





Delivery of Healthcare Effects

- **Operational Units**

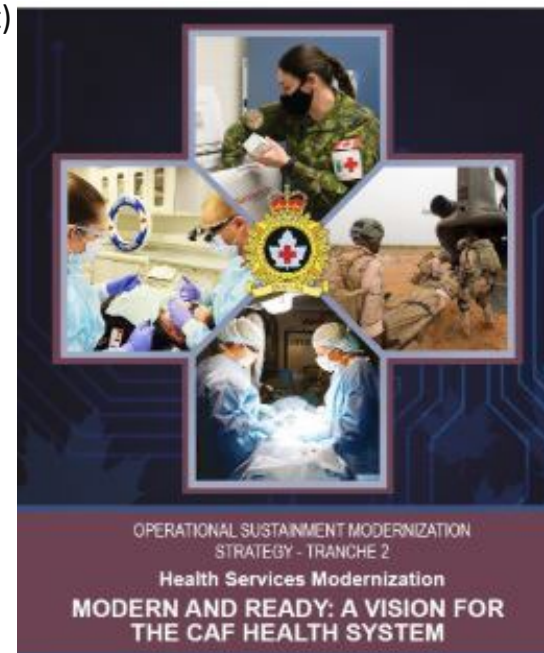
- 3 x Field Ambulances and 1 det (Reg Force)
- 9 x Field Ambulances and 3 dets (Res Force) + Dets
- 1 x Canadian Field Hospital + Dets
- 1 x AE Flight
- 1 x Central Medical Equipment Depot + Det

- **Training & Education**

- Canadian Forces Health Services Training Centre
- Canadian Forces Environmental Medicine Establishment
- CF Trauma Training Centres East & West

- **Provision of care *on Bases/Wings***

- **26 Dental Clinics (31 full-time; 10 part-time)**
 - **Dental specialty care** (oral surgery, periodontics, prosthodontics)
- **34 CF Health Services Centres & detachments (to include):**
 - **Primary Care** (Care Delivery Unit, Immunization Clinic, Case Management)
 - **Mental Health** (General Mental Health Services, Operational Trauma and Stress Support Centre, Psychosocial Services)
 - **Diagnostics and Therapeutics** (Physical Rehabilitation, Pharmacy, Preventive Medicine, Laboratory services, Radiology, Specialty Clinic)





CFHS Support to CAF Operations



Domestic

- Op Palaci – avalanche control
- OP Nanook – sovereignty and capacity building in the North
- OP Limpid – anti-sub on our coasts
- SAR 24/7/365

Humanitarian

- OP Helios – Haiti
- OP Render Safe – Pacific Island
- demining

Capacity building

- OP Unifier – Ukraine

Peace Support

- OP Proteus – Palestinian Authority
- OP Calumet – Egypt/Sinai
- OP Impact – Iraq/ME

International Law Enforcement

- OP Caribe – anti-narcotic
- OP Driftnet – fisheries
- OP Presence – anti-pirate

Support to Democracy and RBIO

- OP Reassurance
- OP Neon – UN sanction enforcement

Support During International Missions



Trauma Care

CFHS provides essential trauma care to personnel during international missions, ensuring timely and effective medical treatment in critical situations.



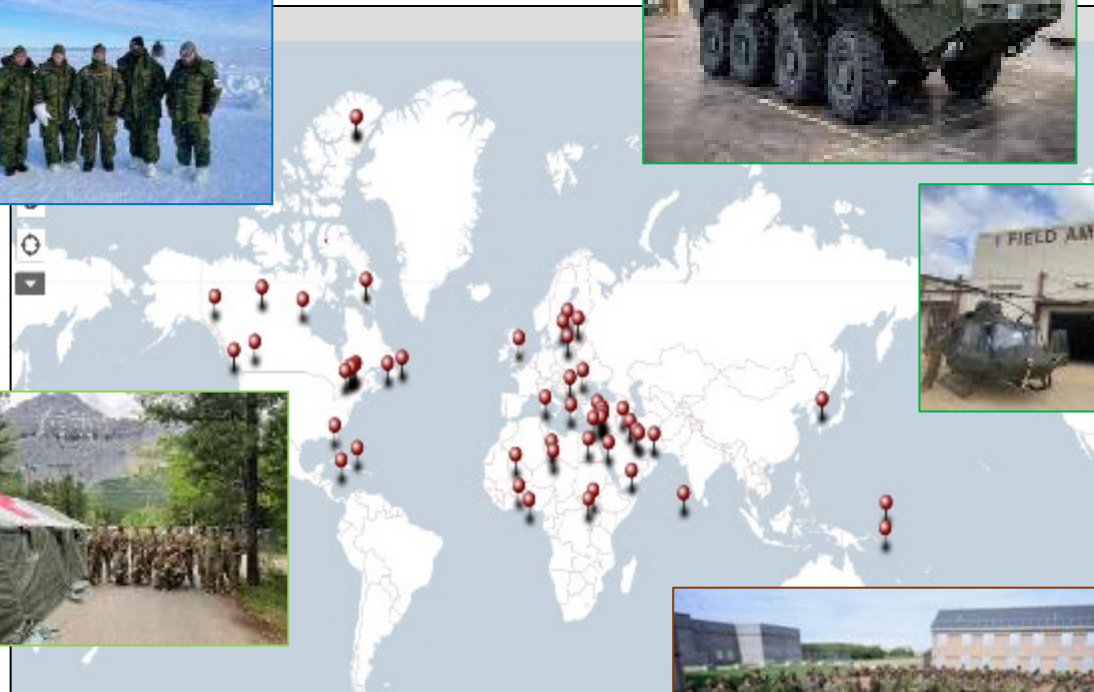
Medevac

Medevac services are a critical part of CFHS's support, facilitating the rapid evacuation of injured personnel to receive specialized medical care.



Public Health Initiatives

CFHS also focuses on public health initiatives to promote the well-being of deployed personnel and local communities during missions.





National
Defence

Défence
Nationale

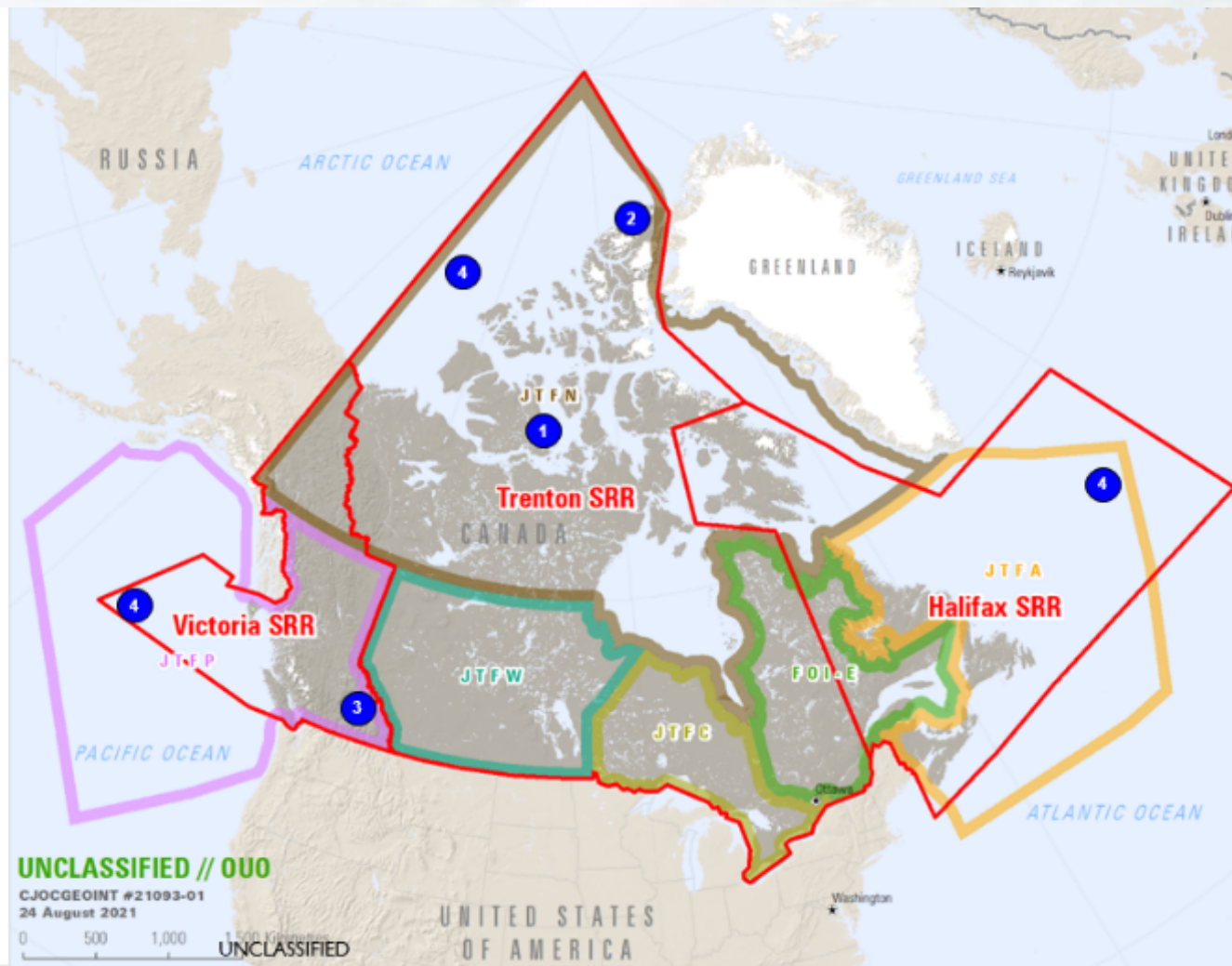
HSS to Domestic Operations

CANADIAN FORCES HEALTH SERVICES

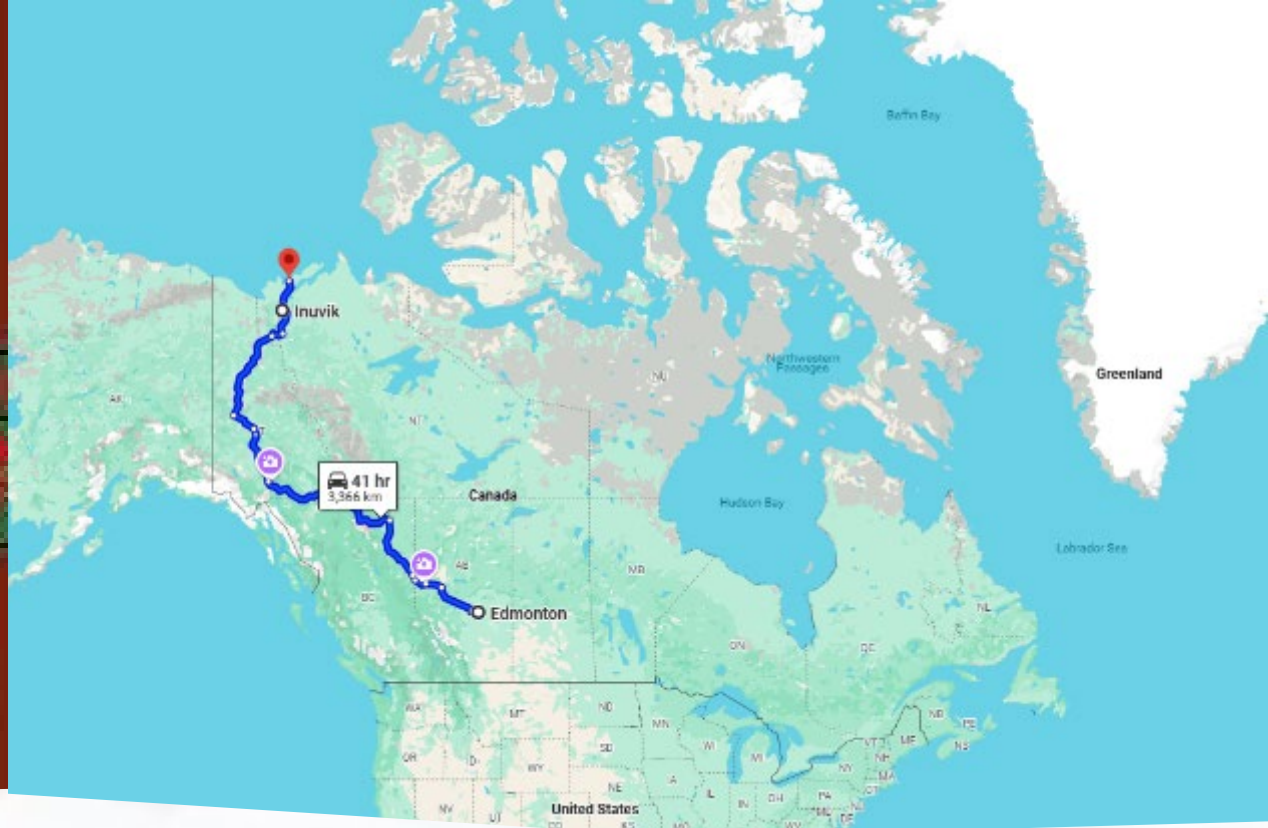
SERVICES DE SANTÉ DES FORCES CANADIENNES



Northern Sovereignty and Capacity Building Op NANOOK	1
Canadian Forces Station Alert Resupply Op BOXTOP	2
Search and Rescue Aeronautical and Maritime	Nation wide
Response to Domestic Air Threat Op NOBLE EAGLE and NORAD standing Op Plans	Nation wide
Assistance to Disaster Response in Canada Op LENTUS	Nation wide
Avalanche Control Op PALACI	3
National Surveillance and Presence Op LIMPID	4
Support to whole-of-government COVID response Op LASER	Nation wide
Support to national COVID-19 vaccine roll-out Op VECTOR	Nation wide
Support to Canadian Heritage upon Royal Family death Op BRIDGE	Nation wide
Support to Arms Control Verification in Compliance with Chemical Weapons Convention Op OPENVIEW	Nation wide
Support to Foreign Observation Flights (in Canada) Op PASSIVE SKIES	Nation wide
Support to Foreign Observation Flights (outside Canada) Op TRANSIT SKIES	Overseas
SJS Arms Control Verification Inspections Support Op MIL CONTACT	Overseas
Support to Military History Commemorations Op DISTINCTION	Nation wide



Canada



OP NANOOK 2025



Canada



Tuktoyaktuk Medical Support



CFHS Integration with Rangers Patrols



CAN-USA Artic Medical Collaboration



RCN Dive with Allies in Artic Ocean



Op REASSURANCE

CANADIAN FORCES HEALTH SERVICES

SERVICES DE SANTÉ DES FORCES CANADIENNES



Mission.

Canada is the Framework Nation (FN) for an enduring combat capable, multinational battle group with the principle purpose of deterring and if necessary, defend an incursion to Latvia and the greater Baltic area.

Population.

CAF PAR ~750

eFP BG: ~600

Sigs: ~125

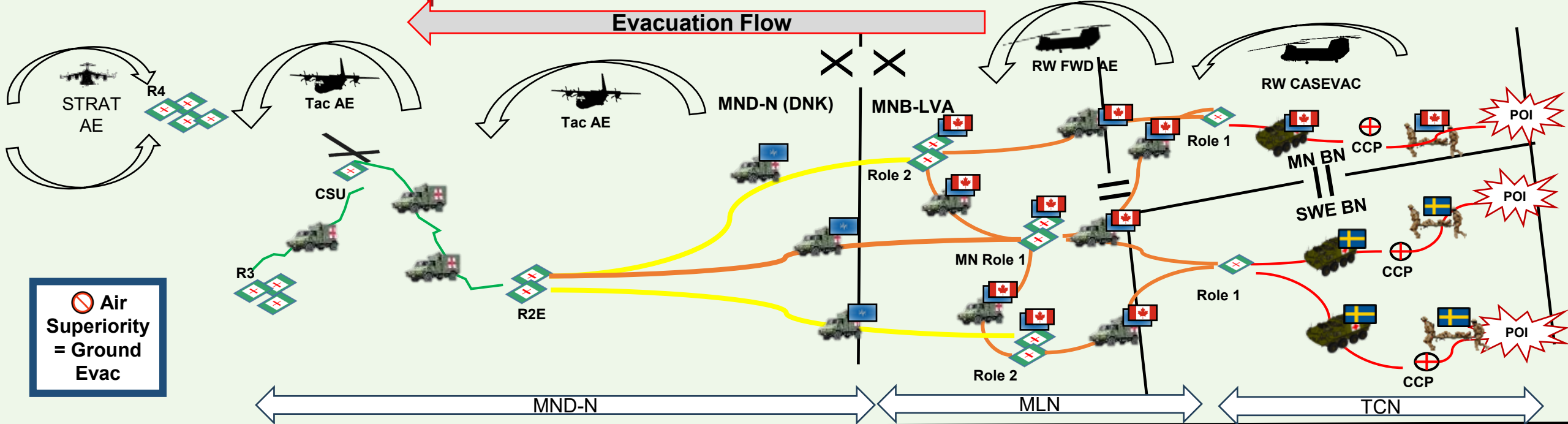
NSE: ~150

HSS Pers: 26

Key Points.

- eFP Bdes
- Incremental growth of CAF and Allies
 - Capabilities of Multi-National Clinic
 - Canada ability provide auxiliary services to SNs

National Responsibilities



⊘ Air Superiority = Ground Evac

Medical Lead Nation (MLN) Responsibility

Troop Contribution Nation (TCN) Responsibility



Role 3 capabilities



Ground MEDEVAC



Role 2 capabilities



Ground MEDEVAC



Unit Role 1 (includes DCR)




Ground MEDEVAC



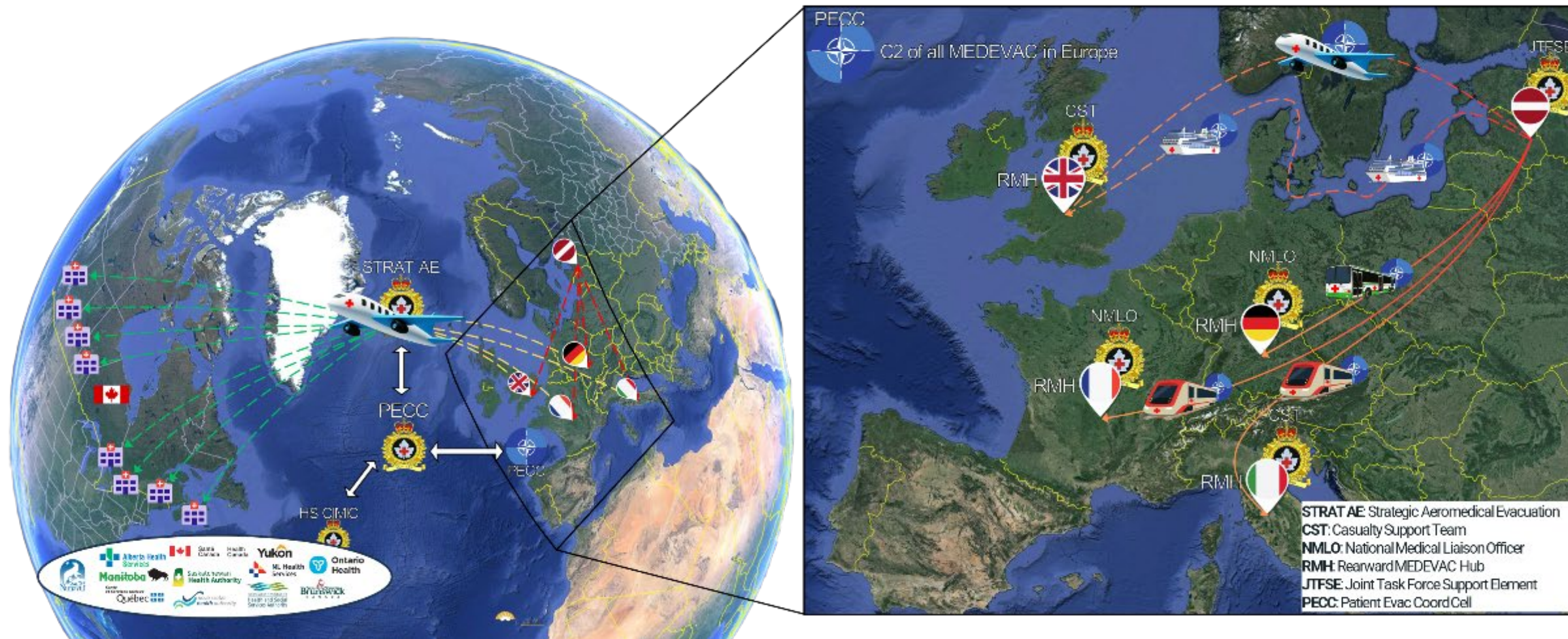
Life-saving Treatment (TCCC)

Ideal NATO timelines for patient care will likely not be met under the expected conditions.

			
Definitive Surgery	Surgery	PA/Medical Officer	Medic
+2 (hours) Definitive Surgery	2 (hours) Damage Control Surgery (DCS)	1 (hour) Damage Control Resuscitation (DCR)	10 (minutes) Combat First Aid / TCCC



NATO Patient Flow Management



Strategic Planning and Managing High Casualty Flows



What is our (Health Services Support Command) Role in war?

➤ Overall, the medical system's goal is to:

Treat and recover soldiers as quickly as possible

allowing them to rejoin combat operations and

***Maintain the fighting strength of the force.**



➤ In war:

The military medical system plays a **crucial role** in

Returning soldiers to the fight,

thus

***Enhancing overall combat capability.**



Casualties: The scope of the challenge

- North Korea – Incursion of the 38th parallel
 - **Anticipate** 10,000 casualties in the first 48-72 hours
- China – Battle for Taiwan
 - **Anticipate** 7000 casualties in the first 5-7 days
- Ukraine – Russia’s “special military operation” in Ukraine
 - **Estimated** 80,000 killed and 400,000 wounded
- NATO – Future large scale combat operations (LSCO)
 - Could expect to experience up to 3000 casualties per week, divided amongst 32 member states.
 - Daily warzone casualties can range from 1 to 16.
 - 25% of casualties will be KIA (higher than recent Canadian conflicts)
 - 15% of casualties are considered severely wounded.
 - 1.3% of casualties will have significant burns.
 - Average ICU requirement: 14 days
 - Increased complications from surgical delays
 - Increased rates of infection/sepsis
 - Decreased rate of limb salvage
 - Increased multiple organ failures
 - Limitations of pain control
 - Increased long-term mental health challenges

LSCO ≠ Counter-insurgency operations (COIN)



“...two previous studies evaluating analgesia administration under TCCC guidelines found that almost half of all casualties received no pain medications.”

Source: Col (ret) Brian Eastridge, Spectre of the Next War: Implications for US Healthcare and Surgical Practice, 5 Sep 2024
[Opinion: The risks of prolonged casualty care for conventional forces in large-scale combat operations](#)



Preparation for Potential Crises

Crisis Management Drills

CFHS conducts regular drills to prepare for potential crises, ensuring that staff are well-trained for emergencies.

Development of Protocols

Developing clear protocols is essential to manage mass casualty situations effectively and ensure a coordinated response.

Effective Response Readiness

Preparedness is vital for rapid and effective responses to crises, minimizing impact on affected individuals.



Why Wargaming Matters for CFHS



Safely test complex scenarios without real-world consequences



Enhance civil-military collaboration through realistic decision making under pressure



Explore legal, logistical and operational friction points that need resolution before crisis hits



Turn recommendations into action plans for capability development, policy reform and training

Importance of Decision-Making in Crisis



Integration of Lessons from Combat



Collaboration Between Military and Civilian Health Systems

Exercise CASUALTY OVERLOAD 2025

Large-Scale Combat Operations (WAR)
Medical Command Decision-Making (Brigade and Division Level)
Military Medical Ethics and Lessons from Ukraine War



Game Cards Overview

CASUALTY Priority **1**



TO STABILIZE T3 P3

HOLDING SPACE

WAIT LIMIT Crit
Stab

Casualty Allocation: Roll a D6: 1-2=UMS 1, 3-4=UMS 2, 5-6=

INJECT



DRONE STRIKE
Your unit has been the target of an enemy Drone Attack.

to unit treat

Roll a D6: 1 = L, 2 = R, 3 = R, 4 = Role 1, 5 = Role 2, 6 = Role 3

Applies for

ENABLER




ARMoured ESCORT
A Mechanized Infantry Company is escorted by an armoured escort.

+2 to road m

ation: Limit

Limit: One t

INJECT



ETHICS SCENARIO

minute pause to openly
Military Medical Ethics
Scenario #1

10 minutes for discussion

CONSEQUENCE GROUND




VEHICLE BREAKDOWN
Your vehicle incurred a serious mechanical failure.

Effect: This vehicle has failed its action

Allocation: Applies to the vehicle that attempted the action

Vehicle Out of Battle: This turn only

CONSEQUENCE CAPACITY




SUPPLY SHORTAGE
The overload of casualties at this location has expended more resources than anticipated.

Effect: Lose 3 resources

Allocation: Applies to the unit that failed the capacity roll

Duration: One time only

CONSEQUENCE AIR



SEVERE WEATHER
Severe conditions prevent your aircraft from flying.

Effect: This aircraft has failed its action

Allocation: Applies to the vehicle that attempted the action

Vehicle Out of Battle: This turn only

Key Takeaways

Skills & Competencies:

- Return to Battle Rates
- Patient Tracking & Movement Coordination Methods
- Collaboration & Interoperability

Wargame Specific:

- The wargame as an education tool
- The success of the underlying game mechanics & framework
- Customization & Tailoring





Ex LATVIAN LIFELINE: A MEDEVAC Wargame

**CFHS HQ, DHSO
24-25 Mar 25**

Ex LATVIAN LIFELINE: Objectives

- Testing the MEDEVAC plan against a peer threat adversary within a contested AO (Latvia)
- Gain insights into transport, logistics, and scaling to meet the demands of large-scale combat operations
- Risk mitigation in a non-COIN environment to help develop and improve the medevac plan
- Generate unanticipated insights into TTP's in order to inform field training and operational research within a safe to fail environment capable of simulating new threats (FPV UAV's, omnipresent ISR, targeting of medical resources, non-permissive AO)
- Create a scalable wargame for future iterations run by any CFHS professional
- Simplify gameplay to 2 phases: Preparation and planning, and then testing the plan: link & node wargame





UK Defence Medical Services

Wargame: Reception Arrangements for MoD Patients(RAMP)

Southwick Park, UK

3-7 Feb 25

Components of a Scalable RAMP

Strategic Medical Evacuation

- Medically supervised evacuation of entitled MOD patients from overseas to UK Point of Arrival by air or other means of transportation

Defence supported

Patient Movement

- Transportation from UK Point of Arrival, admission, transfer into NHS Hospitals.

Health supported

Clinical Care

- Clinical management of MOD patients including provision of specialist/niche clinical pathways as required.

Health supported

Patient Coordination and Control

- Patient identification, tracking, welfare support, administration & discharge management.

Defence supported

Rehabilitation and Recovery

- Rehabilitation post discharge from NHS at Defence Medical Rehabilitation Centre (DMRC) and/or Regional rehabilitation Units (RRUs) or another rehabilitation facility

Defence supported

Future?



Role 3 MMU Operating Room Afghanistan



1 Canadian Field Hospital Haiti





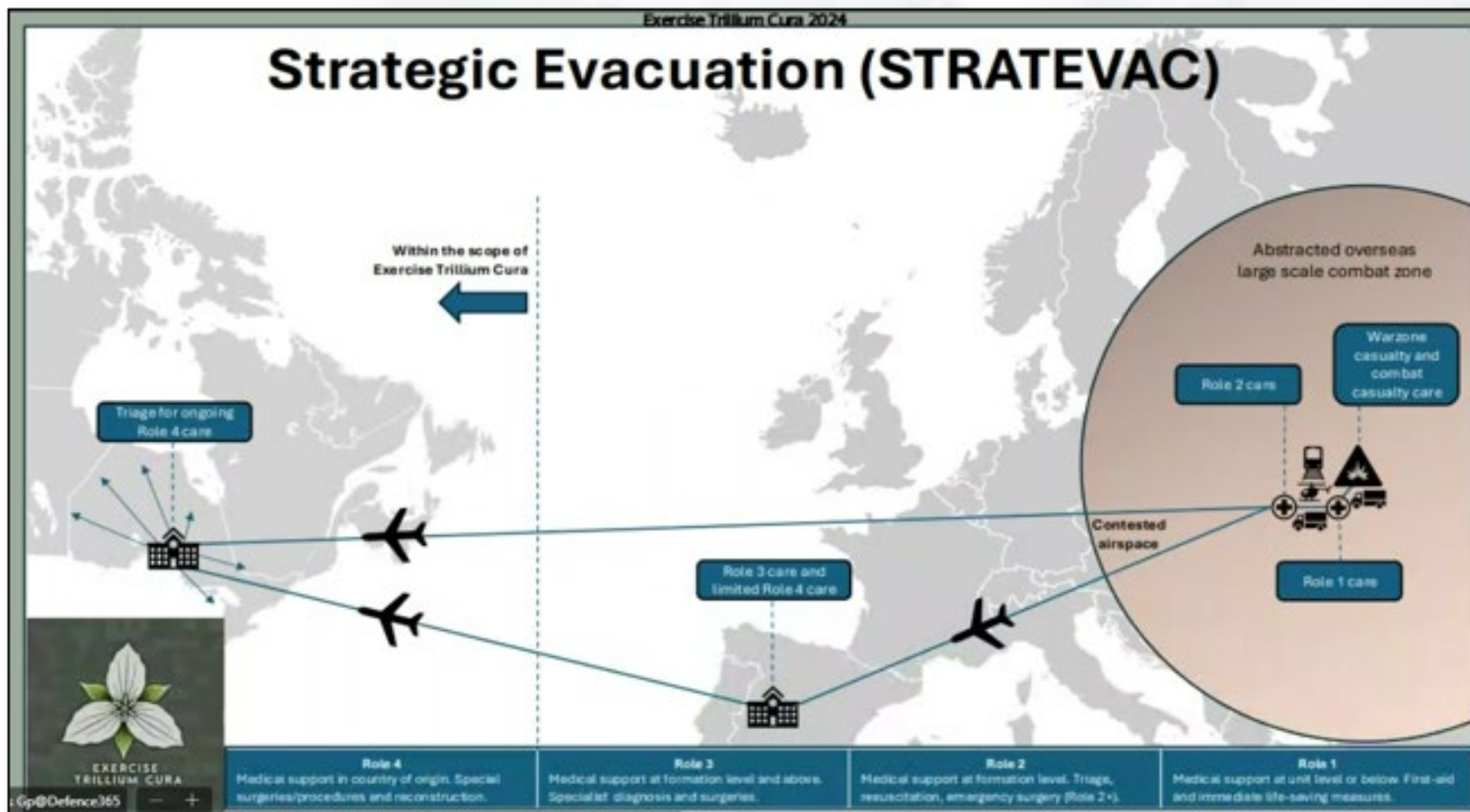
Ex TRILLIUM CURA

Ontario Health System Preparedness Wargame

Toronto, ON

6-8 Nov 25

Exercise Trillium Cura: Health System Preparedness as National Defence Strategy



CIMVHR
Canadian Institute for Military
and Veteran Health Research

ICRSMV
L'institut canadien de recherche sur
la santé des militaires et des vétérans



Dalla Lana
School of Public Health



UNIVERSITY OF TORONTO
DALLA LANA SCHOOL OF PUBLIC HEALTH



Ex Trillium Cura Objectives

Purpose:

To simulate a mass casualty scenario in a NATO Article 5 context and explore how Ontario's health system would respond, coordinate, and integrate with federal and CAF support.

Key Objectives:

- **Test civilian-military integration** in Ontario's health system under crisis conditions.
- **Evaluate provincial readiness** to receive and manage large-scale patient flows, including repatriated CAF members and allied nationals.
- **Identify system gaps** in trauma care, burn capacity, mental health support, and logistical coordination.
- Use war gaming to model health response policy under stress and to build shared situational awareness.
- **Advance a whole-of-government approach**, reflecting NATO's expectations for integrated national response systems.



Strategic Rationale



Strengthening Civilian-Military Health Integration through an "All Hazards" Lens

- Canadian Armed Forces depend on provincial systems for specialized and inpatient care.
- No dedicated military hospitals in Canada.
- Large-scale casualty repatriation would require coordinated national response.
- Opportunity to reinforce operational partnerships across health and defence sectors.
- Health system readiness deserves consideration as a strategic pillar of Canadian security strategy.



Lessons Learned: Leadership and Governance



Defining and Coordinating the Casualty Management Process

- Managing and tracking casualties repatriated back to Canada requires national-level oversight and command and control.
- Provincial Patient Evacuation Coordination Cell structure needs to be defined with clear roles and responsibilities.
- Strengthen alignment across federal, provincial, and clinical systems.
- Embed risk communication and public trust, and family engagement strategies.



Lessons Learned: Service Delivery & Operational Capacity



Planning and Operationalizing Triage and Pathways to Care

- Identifying organizational responsibility is essential for efficient transport across casualty pathway from repatriation to onward care.
- Consider a national repatriation hub to support strategic evacuation and re-triage.
- Consider incident management structures.
- Artificial intelligence (AI), guided by an ethical framework, to support swift and effective triage.
- Casualty pathway algorithms needed to ensure coordinated care.



Lessons Learned: Service Delivery & Operational Capacity



Ensuring Health System Readiness to Deliver High Quality Care for Complex Casualty Injuries.

- Contingency plans must be developed to expand health system capacity with actionable plans for surge-readiness that includes personnel, infrastructure, and supply strategies.
- Management and care of non-Canadian casualties, including captured persons, requires inter-agency administrative readiness.
- Ongoing rehabilitation and mental health care requirements must be considered.



Lessons Learned: Health Workforce



Building a Scalable and Supported Workforce

- Workforce resilience is foundational to sustained operations.
- It is essential to plan for expanding health workforce capacity, expediting specialized training and “burnout” prevention.
- Enable inter-provincial licensure of health professionals for rapid deployment.
- Embed robust mental health supports for the health workforce.



Lessons Learned: Medical Products and Technologies



Optimizing Strategic Supply Chain Readiness

- Ensure coordinated access to trauma- and burn-specific products.
- Clarify roles across federal, provincial, and institutional stockpiles.
- Plan for transportation, storage, and surge distribution logistics.
- Integrate supply planning into operational readiness frameworks.



Lessons Learned: Information Systems



Developing Robust Systems for Information Management and Sharing

- Privacy, legal, and technical protocols for interoperability is essential for sharing casualty information.
- Military, federal, and provincial health systems of record/management must address key interoperability gaps.
- A trauma registry or pan-Canadian patient registry is essential.
- Include efforts to strengthen cybersecurity as part of preparedness planning.

Implications for the Canadian Health System



Health Preparedness as National Defence Capability

- Reinforces Canada's sovereignty and response leadership.
- Civilian-military integration enhances resilience across sectors.
- Builds public trust through visible, coordinated action.
- Supports continuity of care during protracted emergencies.
- Positions Canada to lead internationally on health security policy.



Strategic Recommendations



Strengthening Canada's National Readiness Posture

1. Establish a Patient Evacuation Coordination Cell with clear mandate.
2. Expand surge planning for specialized services and workforce deployment.
3. Integrate supply chain and information systems into national planning.
4. Advance civil-military governance and communication protocols.
5. Embed public trust, mental health supports and family engagement in all readiness efforts.



Future Directions



Toward a National Tabletop Preparedness Exercise

- Fall 2025: Expand scenario to full repatriation continuum.
- Include multiple provinces, civilian and military partners.
- Test governance, logistics, and long-term care coordination.
- Position Canada as a global leader in health emergency strategy.

Conclusion



Health System Readiness is National Defence

- Exercise Trillium Cura highlights Canada's strengths and strategic opportunities.
- Civil-military cooperation is essential for sustained national emergencies.
- Preparedness is a shared responsibility — across jurisdictions and sectors.
- Next steps are already underway.



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Ex Trillium Cura – Key Insights

Validated war games as a critical tool to stress-test health systems, policies, and decision-making in a safe environment.

Exposed gaps in trauma coordination, mental health surge capacity, burn care, and patient movement logistics.

Confirmed CAF's support role in evacuation, coordination, and forward surgical teams—not frontline care.

Highlighted need for a whole-of-government approach, mirroring NATO allies' integrated crisis response models.

Reinforced the importance of civil-military integration to manage complex, large-scale emergencies.



Leadership Strategies for Sustainable Partnerships

Fostering Collaboration

Effective leadership strategies focus on fostering collaboration among healthcare providers and stakeholders to improve patient outcomes.

Sustainable Partnerships

Building sustainable partnerships with provincial healthcare systems ensures long-term support and resource sharing for enhanced healthcare services.

Mutual Support

Leadership strategies emphasize mutual support between organizations, enhancing the overall capacity for healthcare delivery.





Conclusion

**Strengthening together a
Resilient Canadian Health System
Ready for the worst...**

Adapting to Modern Challenges

Modern battlefields demand innovative strategies in combat medical support and casualty care, redefining acceptable medical risks where achieving the "golden hour" is often compromised.

Reassurance for Troops and Population

Effective national medical preparedness is crucial for soldier confidence.

A well-resourced and coordinated health system supports troops, ensuring they receive timely care during and after combat, which ultimately improves survival rates.

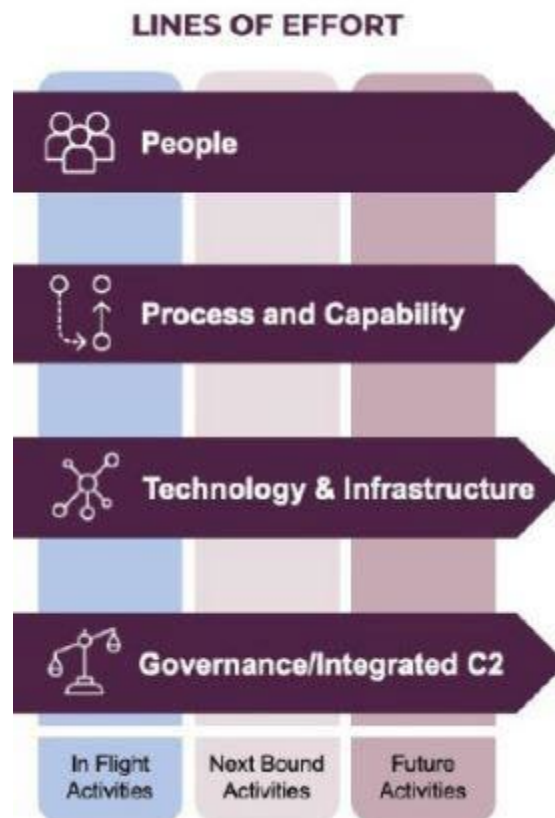
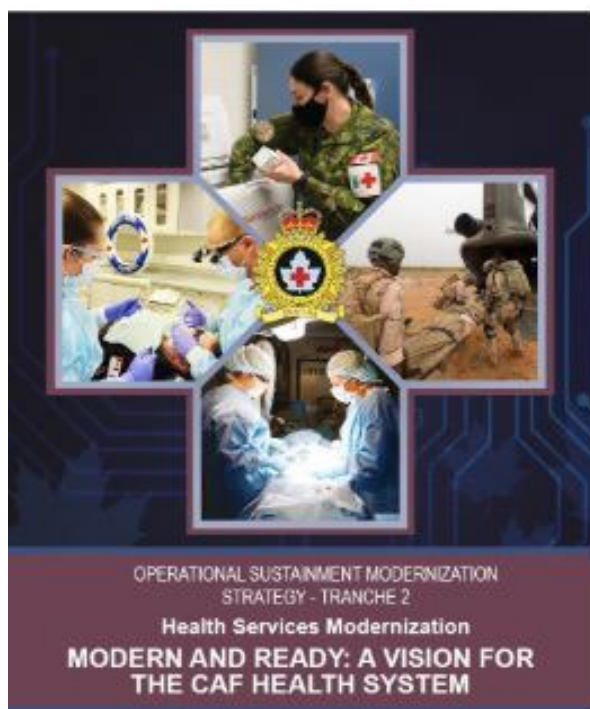
Fostering Resilience

By embracing advanced learning and collaborative exercises, the health services command is better equipped to manage uncertainties in war, paving the way for operational effectiveness and agility in response to evolving battlefield conditions.



NEXT STEPS

- Position the CFHS as a ready, agile, doctrinally grounded, and fully operationalized joint enabling capability.
- Positively impact all facets of operational readiness, structure, function, and overall interoperability with NATO Allies.



Vision

- Modern, integrated, effective and efficient health system that respects and understands the unique needs of those who serve.
- Digitalized CFHS that is integrated into PDC2.
- Clinical resources optimized to meet needs of all CAF members, including those transitioning.
- Agile and operational medical capacity that meets the requirements of the CAF and is interoperable with key allies.



DISCUSSION & QUESTIONS

- What are some things that you, as a Canadian Healthcare leader, need to think about?
- How can we work together to maximize concurrent demands of our Canadian healthcare personnel?









Pre-Op - 15 min
Post-Op - 15 min
Monitoring - 15 min
Total Time - 45 min

Medications

Induction Agents
Ketamine 1.5-2.5 mg/kg
Etomidate 0.2-0.3 mg/kg
Fentanyl 2-5 mcg/kg
Midazolam 0.1-0.3 mg/kg

Neuromuscular Blockers
Succinylcholine 1 mg/kg

Medication
Name: Ketamine
Strength: 100 mg/ml
Lot: 123456
Exp: 12/2024
Manufacturer: ABC Pharma
Barcode: 1234567890123
Date: 10/2023
Time: 14:30
Signature: [Signature]

Canadawide
SCIENTIFIC





























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- What are some things that you, as a Canadian Healthcare leader, need to think about?
- How can we work together to maximize concurrent demands of our Canadian healthcare personnel?

