# Heart and Stroke Initiatives and Community Paramedics







#### **Disclosures**



- Faculty: Lorie Langenfurth
- Role: CEO, Heart and Stroke Foundation, Saskatchewan

- Relationships with commercial interests:
  - Grants/Research Support: None
  - Speakers Bureau/Honoraria: None
  - Consulting Fees: None
  - Other: None

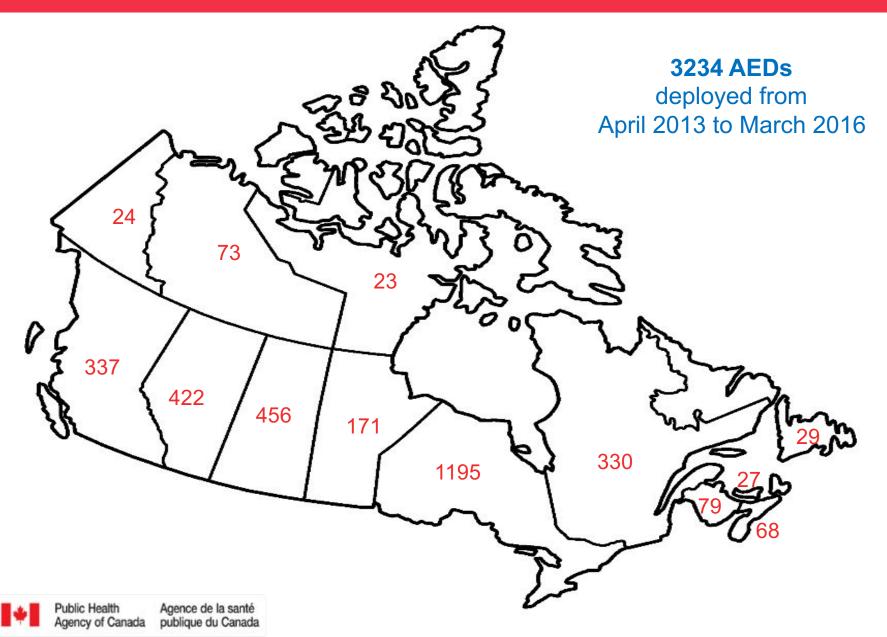
## 1. Providing Canadians with skills & confidence



- Paramedic services across the country work together with local and provincial Heart and Stroke offices to deliver CPR, AED and First Aid training and associated services
  - BC EHS
  - Winnipeg Fire and Paramedic Services and Paramedics Association of Manitoba

#### 2. Equip public places with AEDs





#### 3. Best practices for emergency response



- Guidelines Update for ECC and CPR
  - rigorous 5-year review process
  - International Liaison Committee on Resuscitation, or ILCOR
  - Look at science from the perspective of 'what changes in practice or systems have the most potential to save lives? ... Where can we have the most impact on improving patient outcomes?"

#### 3. Best practices for emergency response

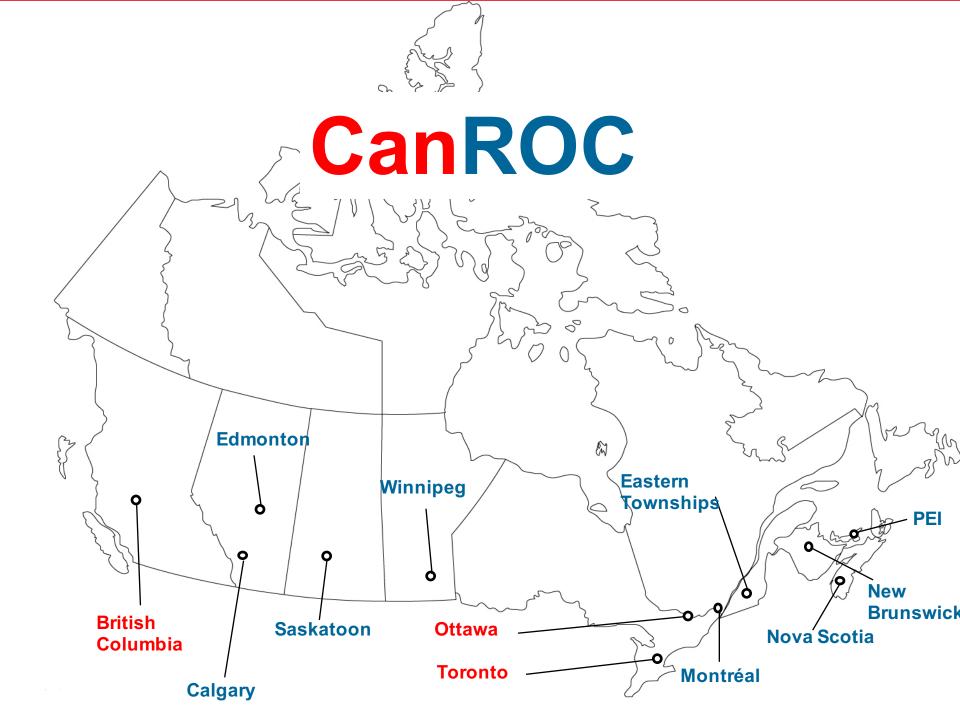


- Adult Chain of Survival split into two chains: one for in-hospital and one for out-of-hospital systems of care
- New Basic Life Support training incorporates a dual stream design supporting education to both pre-hospital and in-facility providers

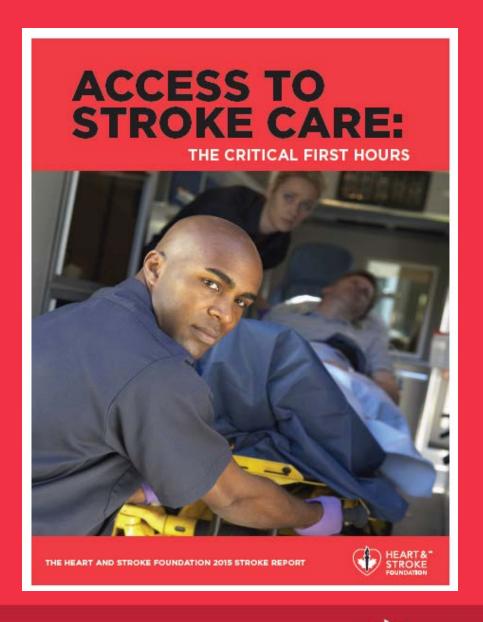
#### **Involving Paramedics in Research**



- Direct involvement of paramedics in research
  - Continuous Chest Compression vs. 30:2
  - Amiodarone vs. Lidocaine vs. Placebo in VF
  - Effectiveness of Airway Interventions in Out-of-Hospital Cardiac Arrest



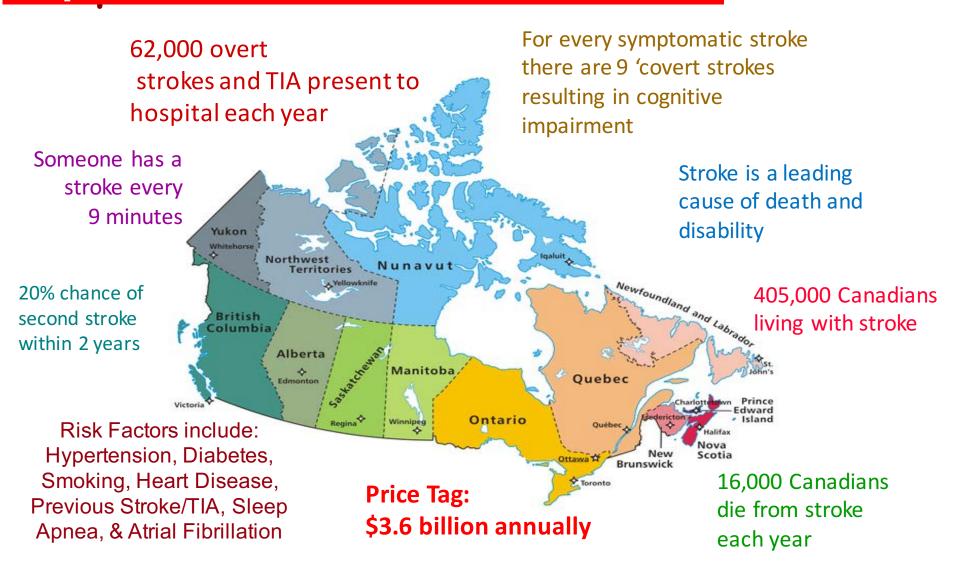
# Stroke and Paramedicine





# Impact of Stroke Care in Canada Population 35.2 million





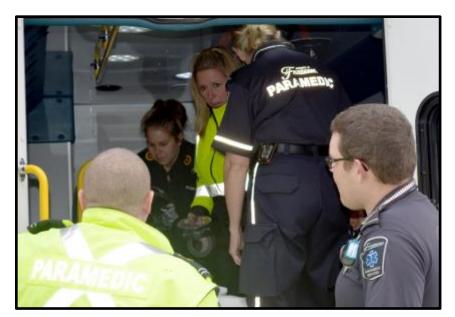
10 10

#### Key Message



- The public needs to know that when a stroke is witnessed or suspected, the first thing they should do is call PARAMEDICS
- Help to educate Canadians by incorporating this message in your community outreach





#### B. Shift from "Five" to FAST





Weakness – Sudden loss of strength or sudden numbness in the face, arm or leg, even if temporary.



**Trouble speaking – Sudden** difficulty speaking or understanding or sudden confusion, even if temporary.



Vision problems - Sudden trouble with vision, even if temporary.



Headache - Sudden severe and unusual headache.



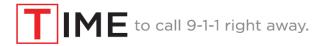
**Dizziness** – **Sudden** loss of balance, especially with any of the above signs.

#### LEARN THE SIGNS OF STROKE









ACT FAST BECAUSE THE QUICKER YOU ACT, THE MORE OF THE PERSON YOU SAVE.

© Heart And Stroke Foundation of Canada, 2014



Late 1990's

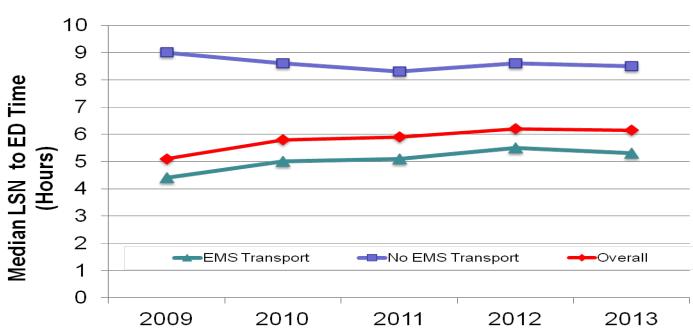
2014

#### **Emergency Department**





#### Time from stroke onset to hospital (ED) arrival

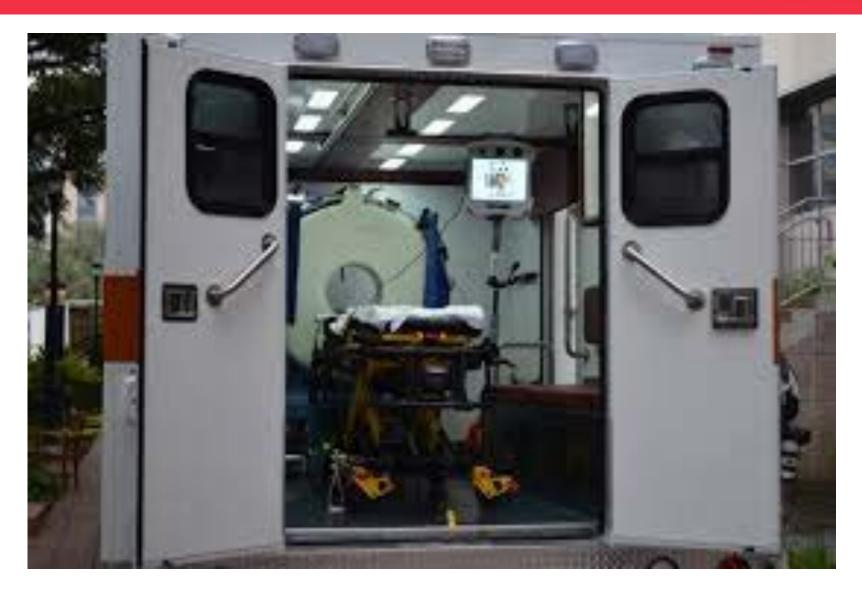


#### Percentage of stroke patients arriving to the ED by EMS

CAN	ВС	AB	SK	MB	ON	QC	NB	NS	PEI	NL
69%	67%	75%	64%	65%	69%	*	62%	73%	64%	68%

#### Mobile stroke unit





14 14

#### **FRONTIER Trial**



### New drug trial puts possible stroke treatment in the hands of paramedics UHN 2014

- ► A new Canadian-developed neuroprotectant drug, NA-1, shows promise in containing the damage done to the brain after an acute stroke.
- As part of a clinical trial called FRONTIER, the drug is being administered by paramedics to stroke patients who are within a three-hour window of symptom onset.
- Design: Double-blind, NA-1 vs placebo
- Primary Outcome: modified Rankin Score at 90 days
- Secondary outcomes: NIHSS score at 90 days, return to baseline function within 24 hours, Barthel Index at 90 days



#### Join Us!



