



# Building Capacity and Resilience: Emergency Response Training in a Remote First Nation Community

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## A Study in Progress

### Introduction

- Alarming rates of traumatic injury and mortality have been reported among First Nations (FN) peoples in Canada.<sup>1</sup>
- Remote locations impede access to timely emergency medical care for FN communities.
- Remote FN communities have dramatically elevated rates of chronic disease and trauma in comparison with Canadian population.<sup>2,3</sup>
- At least 39% of pre-hospital deaths from accidental injury are preventable.<sup>4</sup>
- First aid education has improved acute health outcomes in many resource-poor areas.<sup>5-8</sup>

### SLWEREI

- The purpose of the Sachigo Lake Wilderness Emergency Response Education Initiative (SLWEREI) is to build first response capacity while investigating the impact and potential of the program.<sup>9</sup>
- Knowledge translation collaboration between community members, medical professionals, and university researchers.
- Two 5-day courses since 2009 program inception: Nov. 2010, May 2012

### Aim

Determine how the development and delivery of SLWEREI: **(1) met locally specific needs; and (2) built emergency response capacity and resilience.**

### Capacity and Resilience

**Capacity:** “resources required by community groups to effectively address local issues and concerns.”<sup>10</sup>

**Resilience:** “the capacity of individuals to navigate their way to resources that sustain wellbeing.”<sup>11</sup>

- Components of resilience associated with culture, community, relationships, and the individual.<sup>12</sup>

### Sachigo Lake First Nation



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- Remote community 425 km north of Sioux Lookout accessible by air and temporary winter road.
- Community members (450) have access to local nursing station.
- No paramedical service – bystanders are often the first and only people to respond to emergencies.
- Minimum of four hours to reach hospital care.
- The lack of pre-nursing station care highlights the necessity of local paraprofessional emergency response systems.**

### Methods

- Formative evaluation process based in community-based participatory research (CBPR) approaches.
- Research and training components interwoven
  - Individual interviews with course participants
  - 6 small group interviews with participants
  - 2 large group interviews with participants
  - Concluding survey
  - Interviews with community members
  - Daily team reflections
  - Observational and document analysis
- Interviews addressed course content and delivery, past first aid experiences, local health needs and intervention strategies
- Follow-up phone interviews with participants and program delivery team.
- Impact of course will be compared to components of resilience.

### Outcomes

- Real-time course development through community input.
- 1. Tailored to Sachigo Lake:**
  - Curriculum included mental health first aid and CPR with AED support;
  - Scenarios mirrored local health emergencies;
  - Course delivery included themes of realism, locally available tools, common language, review periods, and small group learning;
  - 100% of respondents felt that this course was better suited to the community. “*The scenarios and the questions ensure the delivery of knowledge.*”-participant
- 2. Built community capacity and resilience:**
  - 19 people completed the first course, 10 people completed the second course, and 3 people completed both (26 total)
  - “*I like this course very much because it would provide me the emergency teachings if help is needed in community.*” “*If emergency happened we will be able to know what to do.*”-participants
  - Themes of improved confidence, and social support networks have emerged thus far.



**Figure 1.** Participants from the second SLWEREI course displaying their certificates along with research team members.

### Discussion

- Many communities in Ontario’s far north do not have the comprehensive medical services that are provided elsewhere.
- The epidemic of trauma mortality necessitates the development of efficient and sustainable models of education for community members to improve pre-hospital trauma care.
- Many first aid programs are not well-suited for remote environments - often developed for urban residents and adventure-seekers.
- Medical training programs developed with a formative, community-based evaluation component can be tailored to local needs.
- The SLWEREI provided 5.8% of community with emergency response skills applicable to the local environment.
- We are cautiously optimistic that medical education programs that are locally tailored can effectively build community capacity and resilience.**

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