

Emergency Preparedness Planner

A Newsletter for the Health System

Emergency Management Branch, Ministry of Health and Long-Term Care

Summer 2012

The 'Hot Topic' Edition!.....	1
The Heat Goes on.....	2
Supporting Adaptation to Climate Change: National Perspectives..	4
Forest Fire Planning at the North West LHIN	6
What's New at EMB?	8
What's New at Public Health Ontario?	10
Training and Exercises	11
Upcoming Events	16



The 'Hot Topic' Edition!

Welcome to the 'Hot Topic' edition of the Planner where we'll be bringing you updates on some issues that have been turning up the heat in health emergency preparedness this summer.

We're sharing news about work that's being done on climate change, heat and health at both the national and local levels. With concern across the province about the forest fire outlook in the north this year, we're also updating you on some of the work being undertaken at the Northwest LHIN and at the Emergency Management Branch (EMB) to make sure we are prepared, if, like last year, Ontario faces major evacuations from First Nations communities in the north due to fire.

And, of course, we're bringing you plenty of updates on one of our favourite hot topics: the wealth of emergency exercises being carried out by our friends and colleagues across the province. Our Perth County and Hamilton colleagues in both the public health and acute care sectors offer us lessons from their recent exercise activities.

Have a great summer and remember that emergency preparedness begins with you as an individual – so stay cool!

~ Gerilynne Carroll, Director

Emergency Management Branch (EMB)

The Heat Goes on

On June 14, Toronto Public Health (TPH) conducted a workshop, “*Enhancing Response to Prolonged and Extreme Heat Events: Preventing and Adapting to Climate Change-Induced Heat Impacts on Health.*”

The day presented the findings of heat-related research carried out at TPH, and prompted excellent discussion on some of the planning challenges faced by all health units as the impacts of climate change unfold.

Toronto has a Hot Weather Response Plan in place. This plan deals with activities like heat alert notifications, as well as familiar response activities like street and park outreach, cooling centres and extended hours at city pools, and shelters or drop-ins with air conditioning. Extreme heat alerts also involve check-ins on boarding homes and rooming houses. However, extreme and prolonged heat events – such as those that have claimed thousands of lives in parts of Europe – are beyond the scope of Toronto’s Hot Weather Response Plan. There are currently no specific protocols for declaring a heat ‘emergency’, as opposed to a watch or alert.

Following the 2011 Toronto Board of Health report [“Protecting Vulnerable People from Health Impacts of Extreme Heat”](#) which raised the issue of integrating heat-specific emergency plans into city emergency plans, TPH began to look at ways of filling the knowledge gap. They received funding from Natural Resources Canada for climate change adaptation research to develop an integrated model of extreme heat risk. This funding allowed the undertaking of a number of research projects centred around the challenges that the City of Toronto and other Canadian jurisdictions are likely to experience with extreme and prolonged heat events.

The overall goal of this work is to enhance the capacity of municipal, provincial and federal decision-makers, community partners and the general public to understand, prepare and adapt to climate change - induced heat emergencies. With better understanding, the heat-related health impacts of extended heat waves - including premature mortality - can be minimized.

The information provided at the workshop included:

- Heat predictions for the City of Toronto: The Toronto Environment Office conducted a future weather modeling exercise. Unlike most weather modeling, it did not focus on projected means-of-climate, but focused on possible future extremes of temperature, like heat waves. This research predicts that over the next 50 years it will get much hotter more often!
- Evidence-based health guidelines for cooling: A study looked at the evidence on what interventions work best -- from the impact of air conditioning to the effectiveness of things like shade, cool baths, and hydration -- to prevent heat stroke and coolcore body temperature once it has risen.

- Exploration of a trigger to identify when a Heat Emergency should be declared: A study looked at the policy frameworks in other jurisdictions for the declaration of a heat emergency and recommendations for a framework for the City of Toronto.
- Looking at ways of carrying out syndromic surveillance to track heat related illness in real time, looking both at 911 information and at the system based on hospital emergency department data developed by the Kingston, Frontenac and Lennox and Addington Health Unit, currently in place in a number of areas of Ontario.
- Looking at some interactive heat maps developed as a potential tool, which would serve to map areas of heat vulnerability to support planning and provide information to the public, like the location of cooling centres.

The results from the temperature modeling indicated that, by the decade 2040-2049, the number of days a year the temperature is likely to go above 30°C will increase from an average of 20 to an average of 66, and that the number of days a year with a humidex of over 40°C will likely rise from 8 to 39. This future landscape provoked some heated problem-solving!

Participants noted that little evidence exists about environmental interventions other than conventional air-conditioning. Heavy reliance on air-conditioning has an impact on other areas of public – and public health – concern, such as air quality and demands on the power grid. Extreme and prolonged heat events can have serious critical infrastructure considerations for many sectors, from energy to transportation. And while discussion of heat emergencies often focuses on urban settings, some health units noted that rural areas face their own challenges in prolonged heat events, particularly for isolated individuals.

There was extensive discussion among participants of the fact that there is no single consistent definition of a heat wave or a common trigger for heat alerts, let alone heat emergencies. A number of health units are currently examining their extreme heat planning, and there was great interest in models from other jurisdictions and whether a consistent system in Ontario could be adopted.

Two models for heat emergency declarations from Europe feature a mix of automatic triggers – e.g. particular temperature or temperature/ humidity levels - for declaring heat alerts. These involve a consultative process with multiple agencies and areas of government to determine an actual ‘emergency’ declaration.

Based on this research, the recommended approach by workshop participants for an Ontario setting was for something similar: a framework to provide a consistent approach to declaring a heat alert (allowing for some regional flexibility, given the range of accustomed temperatures across the province), but where the decision to declare a heat emergency is taken consultatively.

TPH has already offered some webcast opportunities to learn more about their findings. Some of the interested health units will also be working with the Ontario Public Health Association to explore this issue further and look at next steps. Many

thanks to TPH for spearheading this important research and sharing their findings! For more information, see the [TPH website](#) or contact Carol Mee at CMee@toronto.ca.

Supporting Adaptation to Climate Change: National Perspectives

In the Spring 2011 edition of the *Emergency Preparedness Planner*, we featured some of the heat-related materials developed by Health Canada's Climate Change and Health Office (CCHO).

Our colleagues at Health Canada have since released additional heat-related resources, including the '*Heat Alert and Response Systems to Protect Health: Best Practices Guidebook*.' This product outlines best practices implemented in Canada and other countries, and provides steps for communities on how to develop, implement and evaluate a heat alert and response system, reduce urban heat islands and promote heat resiliency among Canadians.

There are also a number of materials specifically developed to help support health care workers minimize climate related health risks. These are currently available through Health Canada:

- [Extreme Heat Events Guidelines: Technical Guide for Health Care Workers](#) – an evidence-based technical guide on recognizing, treating and preventing extreme heat-related illnesses.
- [Extreme Heat Events Guidelines: User Guide for Health Care Workers and Health Administrators](#) – a summary document containing key content from the technical guide to provide policy guidance to health care organisations/institutions.
- [Fact Sheets for Health Care Workers](#) – targeted fact sheets for three distinct audiences: Acute Care, Community Care and Facilities (e.g. retirement homes) Preparation, providing information to enhance understanding of vulnerability to extreme heat, and the ability to identify effective prevention and mitigation measures.

Still to come this summer is an online accredited course for health care providers.

Efforts to help Canadians prepare for extreme heat have been ongoing since 2008. But heat isn't the only concern associated with climate change. Prior to the heat-focused work, Health Canada carried out a health assessment of climate change vulnerabilities and adaptive capacity in Canada. They prepared the report '*Human Health in a Changing Climate (CD): A Canadian Assessment of Vulnerabilities and Adaptive Capacity*'. This report provides information on Canada's vulnerabilities to natural hazards and extreme weather, UV radiation, air quality, water, food, vector, and rodent-borne diseases. It includes a review of existing adaptations, gaps and

needs. The report also highlights particular regional vulnerabilities, (e.g. Northern/Inuit communities) and provides information for emergency managers and partners to minimize health related impacts from climate change.

Climate change is projected to extend the geographic range and seasonal persistence of disease vectors like ticks and mosquitoes, so federal colleagues in the Public Health Agency of Canada have also been involved in pilot projects aimed at developing monitoring and surveillance systems to protect the health of Canadians from infectious diseases like Lyme Disease and West Nile Virus.

Another exciting federal project was the Climate Change and Health Adaptation Program for Northern First Nations and Inuit Communities. Working with First Nations and Inuit Health Branch, a three year program was implemented to fund northern community-based research on climate change and human health. Designed to be carried out by northern communities in cooperation with aboriginal associations, academic, government and other partners, this research was intended to develop scientific and communication materials to help with decision-making at all levels regarding human health and a changing environment.

At the end of the program, a pan-Arctic workshop was held to bring together funded communities to share the findings. For more information on the First Nations and Inuit Health work, contact [Erin Myers](#), Environmental Research Officer.

Health Canada resources can be ordered from publications@hc-sc.gc.ca or their [publications website](#) , or call 1-866-225-0709. For more information on the various programs please contact Climatinfo@hc-sc.gc.ca

Climate Change and Health Office and Peel Region in Partnership

Health Canada and the Public Health Agency of Canada are also working with local and regional public health units to maximize climate change preparedness. For example, Health Canada is currently working with Peel Public Health on a climate change and health vulnerability assessment, and with Windsor, whose extreme heat exercise we featured in 2011.

The Region of Peel collaborated with the Cities of Brampton and Mississauga, the Town of Caledon, the Toronto and Region Conservation Authority and Credit Valley Conservation on a comprehensive climate change strategy. A key action under this strategy is completion of a vulnerability risk assessment, including human health impacts.

With the help of Health Canada, Peel Public Health is among the first Canadian municipalities to pilot new guidelines entitled “[Protecting health from climate change: Vulnerability and adaptation assessment](#)” developed by the World Health Organization and Pan American Health Organization.

The resulting report, “*Report on Health Vulnerability to Climate Change: Assessing Exposure, Sensitivity and Adaptive Capacity in the Region of Peel*” will serve as a

background discussion paper for consultation with community partners on next steps.

The assessment identified that the changing climate has the potential to affect human health by:

- Increasing temperature-related morbidity and mortality
- Exacerbating air quality
- Increasing the risk of injuries and mortality from extreme weather
- Increasing the potential for food and water-borne contamination and,
- Increasing the incidence of vector-borne disease.

It also identified that particular sub-populations may be more vulnerable to climate change-related morbidity and mortality, either due to inherent sensitivities or varying levels of exposure. These groups include the elderly, children, those experiencing social isolation, individuals with chronic conditions, disabilities or both, and socially and economically marginalized individuals.

“Peel Public Health is grateful for the assistance from Health Canada. This assessment will serve to guide our ongoing work on climate change,” said Louise Aubin, a Peel Health Environmental Health Manager. “It helps focus our work on areas with the greatest need.”

For more information on the climate change planning work being done in Peel, visit the [Peel Region website](#).

Forest Fire Planning at the North West LHIN

Last year was the worst forest fire year in some time in Ontario. More than 3,000 people were evacuated over the course of the summer from remote First Nations communities in Ontario’s north.

This year has also been flagged as a year in which we could face serious forest fires, due to the warm winter, lack of precipitation, and the amount of brush and debris from last year that still remains unburnt. We already faced two significant fires in May, as well as some limited evacuation activity.

Given the very real possibility of larger evacuations, the EMB has been trying to consolidate “lessons learned” from last year’s forest fire season. As part of this, EMB tapped into the emergency management expertise at the North East and North West LHINS.

We touched base with Susan Pilatzke, Senior Director of Health System Transformation at the North West LHIN, to see how her organization is preparing.

“The LHINS are young entities and our relationship to emergency management is evolving,” Pilatzke said. “Last year definitely demonstrated what an important role the LHIN can play in a situation where your region is suddenly facing an extraordinary increase in demand. We’re participating in the larger provincial group

looking at the role of LHINs in emergency management now, and we've brought that experience to that group's discussions."

For example, part of the North West LHIN experience was dealing with the impact of more than 1,000 evacuees in the Greenstone area – almost one third of the usual population for that area. Through the North West Community Care Access Centre (CCAC), nurses were found who were able to provide care at the evacuation centre. But after a few days, it became apparent that this had implications for the availability of care in the region for existing CCAC clients.

"It became clear that one of the things we need is good information," Pilatzke said. "We need good information systems for ourselves about our constituents and relationships so we can quickly understand the way a decision in one part of the system impacts the other parts. We need to have contact information easily available so we can communicate efficiently. Information about the needs of the communities during the emergency was also important."

With resources becoming exhausted in the North West LHIN, the organization began discussions with EMB about a possible role for the province's Emergency Medical Assistance Team (EMAT).

Initially deployed to provide support at the Thunder Bay Regional Airport (then being used as an evacuation transit hub), EMAT cycled through several roles at the transit hub, the Geraldton and Longlac evacuation centres and the Geraldton hospital. One of EMAT's chief roles at the evacuation centres was psychosocial support.

"In the early stages of the evacuation, we didn't anticipate how much need there would be for psychosocial care, as well as supports for mental health and addictions," Pilatzke said. "Coming out of that experience, one of our key learning themes is the need for the 'right people with the right skill sets at the right times' to be able to reduce the suffering of evacuees."

Some other themes also emerged for the North West LHIN.

There is a need for role clarity – a clear understanding of responsibility and coordination, Pilatzke said. There is also a need to be flexible, nimble. Expect the unexpected, she added.

And of course, there is always the need to be as prepared in advance as possible.

"This year we've had more time to prepare and gather information," Pilatzke said.

"We've put together a revised and updated database of all 64 First Nations located in our area. . We're working on an 'early warning system' with our partners to continue to get more, better and earlier information about communities that might be at risk."

"And we've stepped back a bit from all our incident-specific plans to develop an emergency preparedness plan that's a bit more 'all-hazards' in its approach – framing information, approaches and capacity in a way that could be useful in

unknown situations as well as the emergencies we know we face regularly. Resilience is really the theme of our approach.”

We asked Pilatzke about some of the challenges of working in the north.

“I’m not sure people are aware of the scale and magnitude of distance in the north, and how far flung and distant some of the communities are. That adds its own special challenge. Our LHIN covers 47% of the land mass in Ontario, with very different communities,” she said.

“But I will say, there was a good news story in how things went last year. The generosity of strangers to people in trouble was amazing. There were many instances and examples of many types of collaboration and assistance. I think that’s typical of working in the north. People really go the extra mile.”

We look forward to hearing more about how the North West and North East LHINs fared during this summer of flood and fire threats.

What’s New at EMB?

Provincial Forest Fire Planning

Based on the many lessons learned from last year, the EMB has developed a response plan for the threat of forest fires in 2012. The goals of this planning are to:

- Protect the integrity of the health sector and health human resources during the event.
- Maintain health services for residents.
- Coordinate health services for evacuees.

This response plan focuses on six pillars:

1. **Awareness of the Event:** Strategies to ensure a high level of awareness throughout the health sector of the evolving event, as well as awareness among health system partners and other sectors. As part of this, the EMB hosted a series of awareness sessions on forest fire planning, looking at a range of topics including general awareness, potential roles for EMAT and strategies to address the implications of the opiate dependency challenges some First Nations are currently experiencing.
2. **Threat Assessments:** Processes to ensure that evolving threats to human health and the health system are understood and assessed. This has involved a great deal of interaction with other ministries and government partners, like Emergency Management Ontario (EMO) and the Ministry of Natural Resources. This way we learn about the work going on in their spheres and promote the consideration of health system concerns. Notification protocols for EMB to communicate with the field have also been developed that describe both top down and bottom-up processes to support situational awareness and, where possible, allow time for enhanced planning activities.

3. **Planning and Readiness:** Processes and tools to ensure that health system partners achieve and maintain a state of readiness. This includes a tool to articulate the potential roles the province's Emergency Medical Assistance Team could play in the evolving event for consideration by local planners. EMAT fact sheets are also being developed. These resources should be available soon.
4. **The Integrity of the Health System:** Tools to ensure that the health system continues to function and perform throughout the event. This includes working with EMO to help make recommendations about what communities could serve as appropriate host communities, based on their health care capacity.
5. **Continuity of Care for Evacuated Residents:** Tools and processes to minimize disruptions to the delivery of health services and to evacuees throughout the event.

This is one of the major current focuses of planning. Work is ongoing on a number of fronts, from planning a "medical rounds" process between care providers in the evacuation communities and those in host communities to developing fact sheets for both municipal and health sector audiences on health and health service considerations for evacuation centres.

6. **'Return to Home' Readiness:** Processes and tools to ensure that the health system recovers after the event and continues to be able to provide a high level of care. This includes developing some guidance on returning to service for any health facilities which may have had to evacuate.

Thanks are owed to the many health sector partners who have contributed to this work thus far. Last year the health sector worked hard and creatively to address the challenges posed by the evacuations. We hope that this plan will help capture some of the lessons of that work, and make this year as smooth as possible if evacuations are once again necessary.

Did you know...

Like any discipline, forest fire fighting - or 'fire suppression' - has its own terminology. Below are some key terms used to discuss the 'Stages of Control' in containing a forest fire.

- **Not Under Control (NUC):** a wildfire not responding or only responding on a limited basis to suppression action, such that perimeter spread is not being contained
- **Being Held (BHE):** Indicates that with currently committed resources, sufficient suppression action has been taken and the fire is not likely to spread beyond existent or predetermined control boundaries under prevailing or forecasted conditions

- **Under Control (UCO):** a wildfire that has received sufficient suppression action to ensure no further spread of the fire
- **Out (OUT):** Describes a fire that has been extinguished

What's New at Public Health Ontario?

Staff at Public Health Ontario's Emergency Preparedness program (formerly known as Emergency Management Support) have been working to update Incident Management System (IMS) education for public health units. Originally it was delivered as a stand-alone IMS 200 course certified by Emergency Management Ontario. However, feedback supported a module targeted to the issues and needs of public health professionals.

In response, Public Health Ontario (PHO) devised a modular format: a one-day non-certified IMS component for public health leaders and staff, and a second day of material compliant with the EMO-certified IMS 200 course for those who want or require it. The first component was delivered as a pilot to Niagara Region and Sudbury and District Health Units in June, with positive results. PHO has made final changes to their approach and plan to deliver the new product to several health units in the summer and fall. Please let us know at ems@oahpp.ca if your public health unit is interested!

PHO has also developed a survey to assess the status of emergency preparedness and response activities of local public health units as well as their need for additional education and support. PHO is in the process of obtaining research ethics approval to ensure the confidentiality of responses as well as explore opportunities to contribute to the growing body of knowledge in public health emergency preparedness. When ready, the survey will be sent to the individual most responsible for emergency management in each public health unit and responses will help to guide how PHO provides support to public health units in the future.

PHO's Emergency Preparedness and Service Integration section now includes an Incident Response function, under the leadership of Lisa Fortuna. The Incident Response Unit uses a coordinated approach to monitor and provide an organizational response to issues of public health concern, including infectious disease outbreaks and environmental health issues. The monitoring also includes any emerging issues in other jurisdictions that may have an impact in Ontario. The unit, in cooperation with Emergency Preparedness at Public Health Ontario, is responsible for the daily monitoring of such events to enable communication and coordinated action.

The Incident Response Unit also monitors information from the different public health and scientific programs within Public Health Ontario and the Public Health Ontario Laboratory, as well as information from a variety of partners - the 36 local Boards of Health, the Ministry of Health and Long-Term Care, the Ministry of Agriculture, Food and Rural Affairs, and the Ministry of Natural Resources. Federal

partners such as the Canadian Food Inspection Agency, Public Health Agency of Canada and Health Canada act as links to issues within their mandates, such as food recalls and health advisories. The main foci of monitoring include laboratory, epidemiology, surveillance, infection control and health communications.

The Incident Response Unit serves as the primary point of contact at Public Health Ontario for public health incidents. Lisa's team triages and coordinates PHO's support work for the MOHLTC Public Health Division and local public health units during outbreaks and other incidents.

Over the last several months, incidents that the Unit has responded to included outbreaks of Salmonella Typhimurium, Heidelberg and Thompson, the Easter weekend botulism outbreak, ongoing pertussis cases and a formaldehyde spill in North Bay. The Unit also coordinates response to requests for knowledge products. While these may come from the varied areas of technical expertise in PHO – like Environmental and Occupational Health, Communicable Disease Prevention and Control, or the Ontario Public Health Lab - we strive to ensure PHO's response to incidents and requests are consistent and integrated.

Training and Exercises

Operation SWEEP: A Severe Weather Emergency Exercise in Perth

- A guest article from Christel Ivanyshyn, Perth County CEMC

Gone are the days when we ignore Chicken Little's cry that 'the sky is falling'. Now, we sit up and pay attention. Lessons have been learned. Emergency plans have been written, tweaked and practiced. Unfortunately, it takes real-life experience to learn those lessons; and it was these experiences that were the focus of a one-day training and exercise session in Perth County: Operation SWEEP.

Perth County partnered with the City of Stratford and the Town of St. Marys to host over 160 people, including municipal, provincial, industry, volunteer, healthcare, and emergency service stakeholders.

Participants had the pleasure of an entertaining presentation from Environment Canada's Geoff Coulson on severe weather, particularly tornados – how they are formed, what protective actions to take – the main focus being on the F3 tornado that cut such a devastating swath through Goderich on August 21, 2011.

As well, a panel of responders provided their first-hand experience of what it was like to respond to this devastation and the lessons they learned. We heard from Lynda Rotteau, Goderich's Emergency Manager, who gave a truthful presentation of what it was like to go into work when her beloved town had been reduced to a state resembling a warzone. Chip Wilson, Director of Operations, discussed the trials and tribulations of frantically trying to clear over 500 downed trees, while restoring power to the town. Steve Beatty from Emergency Management Ontario described the

health and safety issues, and how the devastation of the old buildings had released asbestos into the mix. Donna Parsons from the Huron County Health Unit provided heartwarming stories of how hospital staff either stayed at work long past their shift, or walked through the debris to get to the hospital as the roads were not clear to drive. Erin Schooley, the Disaster Services Coordinator from the Red Cross, reminded us all that first responders were also victims.

The afternoon session allowed participants to work within groups of similarly mandated agencies to determine what their top priorities would be if the events and conditions of Goderich were to happen in our community. Those priorities from throughout the room were: 1. the protection of life and property, 2. restoration of utilities, 3. communication.

Perth County will continue to learn from the lessons of our neighbours and build a comprehensive emergency plan as a result. Let us not fail those who lost so much.

For more information on Operation SWEEP please contact [Christel Ivanyshyn](#) CEMC, Perth County.

‘What you don’t know, you will learn’: Hamilton Public Health Services Exercise Tracer

~ A guest article from Hamilton Public Health Services

“You have been selected to attend the Hamilton Public Health Services Emergency Exercise on Friday June 22nd 2012 9:00 am to 12:00 pm. This is a mandatory tabletop exercise. Please block off this date and time. This exercise will be a low stress, engaging learning opportunity. What you don’t know, you will learn.”

This was the exercise invite sent to participants of the Public Health Emergency Control Group (PHECG). Many of the selected participants had never been involved in an emergency exercise or response. The focus of the exercise was to engage participants who lacked experience in emergency response. The results were amazing! Lots of lessons were learned, with participants eager for more training and exercises to improve their response during an emergency event or exercise.

The exercise was designed and controlled by an independent consultant who was familiar with roles and responsibilities of Hamilton Public Health Services. The organizational objectives were to test and evaluate the activation and operations of the PHECG, including but not limited to:

- o roles & responsibilities;
- o coordination and collaboration;
- o incident action planning; and
- o use of standard protocols.

The knowledge objective was to build awareness and familiarity with the conditions



and circumstances surrounding a potential nuclear emergency, particularly the conditions, protocols and support mechanisms for missing radiological materials and their potential impact on the City of Hamilton.

There were some seasoned responders within the group. However there was also a significant number of inexperienced responders. You never know the conditions under which a team may be challenged, and working with different levels of experience is good preparedness for a real emergency.

The exercise scenario began with a rumour from an unconfirmed source of a leak at McMaster University's nuclear reactor. The rumour triggered PHECG to consider the potential impact of a nuclear release at McMaster University.

The second business cycle focused on radioactive sample (I-125) and technical equipment (radiological cameras) stolen from McMaster's shipping facilities. The third business cycle dealt with radioactive material found in a public park.

Based on the feedback from observations, the hotwash and the completed evaluation forms, the high priority and frequently recurring concerns of the exercise are captured in the following recommendations:

- o That Public Health Services design and implement a responder training program for new and alternate PHECG members. The elements of such a program include:
 - Incident Management System (IMS) content, including foundational material (concepts, functions, roles, information and reporting flows) with modules for business cycle operations, management by objectives, forms and documentation, and creative problem solving;
 - More frequent exercise participation, including a structured learning cell with instructional feedback enabling new and / or inexperienced responders to 'walk through', digest and discuss decision making and courses of action
 - Subplan development specifically dealing with radiological and nuclear emergencies, including: detailed health impacts and treatments; communications templates; external contacts and relationships; and checklists / flowcharts for expected tasks and protocols.
 - Accessible (perhaps automated) tools for Incident Action Plan development, event / task listing and business cycle note taking.

The exercise revealed great learning opportunities and was an excellent occasion to train and understand the intricacies of emergency response within Hamilton Public Health Services. For more information, contact [Connie Verhaeghe](#) at Hamilton Public Health Services.

Exercise General Fontbonne: Code Orange, Critical Care Surge, and EMAT in Hamilton

As part of their training cycle, Ontario's Emergency Medical Assistance Team is required to carry out a live deployment exercise approximately every 18 months, working with a hospital partner. Over the years, EMAT has carried out exercises with hospitals in Thunder Bay, Sudbury, Windsor, Kingston, Niagara and others.



For the March 2012 exercise, St. Joseph Healthcare Hamilton (SJHH)-Charlton Campus and Hamilton Health Sciences (HHS)- Hamilton General site generously agreed to be the hospital partners. The planning group took advantage of the work done on Exercise Trillium Navigate – covered in the [Winter 2011/2012 edition of the Planner](#) - and used parts of the same scenario: a suspicious explosion taking place on transit in Hamilton, with multiple

casualties and the suspicion of a CBRNE aspect. The result was General Fontbonne, a complex 3 day exercise involving an EMAT live deployment framed by hospital table-top exercises, and additional hands-on training for both EMAT and hospital staff.

The exercise involved a large number of people. Participants included SJHH and HHS Emergency Planners, EMAT members, staff from the MOHLTC Emergency Management Branch, 80 volunteers from the Canadian Red Cross and St. John's Ambulance, medical, nursing and paramedic students, and emergency department nurses and physicians from SJHH and HHS. Additionally, this exercise was supported by 'patient actors' from the University of Toronto's Standardized Patients Program.

The exercise was also supported in part through the federal government contract "Develop a National Chemical, Biological, Radiological, Nuclear and Explosive (CBRNE) Training Program for Health, Psychosocial and Communication Responders" from the CBRNE Research and Technology Initiative (CRTI), held by the Sunnybrook Research Academy. With this additional support, EMAT and the Hamilton hospitals were able to work with the development team to add a number of unique additional aspects to the exercise that provided greater depth to the exercise and learning opportunities for the participants. These additional aspects included:

- Building a web-based dashboard (based on the dashboard tool developed by the Toronto Central LHIN for the G20 summit) that was used as part of the EMAT play, simulating information about the incident, the number of casualties and the impact on hospital service capacity.
- Bringing in world experts to provide some additional training, including Dr. Frank Walters of the University of Arizona, who trained approximately 90 health providers in Advanced Hazmat Life Support, and Jim Schultz from the

University of Miami and Wayne Corneil from the University of Ottawa, who worked with the psychosocial team.

- Having international expert observers review the training and exercise.

The involvement of two major hospitals in a dense urban setting allowed EMAT to test some team functions that had not been extensively tested before. This included the complexities of set-up in a downtown hospital with minimal grounds or outdoor surface parking, and ways to split the team to support two hospitals. The scenario also allowed EMAT to test a range of different capabilities – from provision of CBRN decontamination advice by phone to supporting ventilated patients, as well as providing psychosocial support in a scenario with significant public distress and media attention.

What was the benefit to the partner hospitals?

“Our Senior Team was highly engaged and supportive of this exercise,” said Stephanie Trowbridge, Manager of Emergency Preparedness at SJHH. “It allowed SJHH the opportunity to do a whole range of activities around the EMAT deployment and the Trillium Navigate scenario which involved a mass casualty incident within walking distance of our front door! We expanded this exercise and did a joint Code Orange table top exercise with HHS-General Site, Key decision makers from both hospitals were in there hands on including our ED, ICU, and Surgical Chiefs”.

“While deployment of EMAT equipment was mostly at the St. Joseph site, Hamilton General Hospital would be a major player in a mass casualty incident because it’s the regional trauma and burn centre,” added Lili Brylowski, Emergency & Disaster Management Specialist for Hamilton Health Sciences. “As such, it was important for both hospitals to work through the activation of our critical care surge plans and determine when to request additional support from the EMAT team. Our critical care surge plans are key in a Code Orange event like this one, so understanding not only our response, but the potential role of other support agencies like EMAT and the EMB was an excellent learning opportunity. We were also pleased to assist with EMAT training on the use of the LHIN ventilators that we store and to explain the request and approval process for their use. It was a win-win in learning for everyone involved!”



Other lessons learned from the hospital perspective included:

- The need for hospitals to have more in-depth knowledge of the MOHLTC EMB and EMAT, and the range of services and resources that can be requested, like CBRN consultation, or the availability of the EMAT psychosocial team that can assist with psychological trauma and family reunification.

- The importance of calling EMB early in an emergency. Even if you don't need provincial support, early engagement can help identify what resources might be available to you. The exercise itself built relationships that will facilitate future notifications.
- Understanding the timelines associated with EMAT and what kind of support they can best provide. EMAT is not a first response team, and their mandate is to be available within 24 hours of notification, so they can't be on the ground for the initial response. But they can provide other kinds of assistance, including stepping in during the recovery stage if a hospital has exhausted their available staff in the immediate response.
- The flexibility of EMAT set-up. With the modular set-up of the team, they can provide surge relief by accepting more stable patients from the hospital in a predetermined internal location or by utilizing their own external tents. This would free up hospital capacity for the more critical cases.
- With the current modular set up of EMAT, the EMB can receive requests from more than one hospital for assistance. EMAT and the EMB would consult with each organization and review options like splitting their modular units or team.

Entailing a variety of partners and activities, General Fontbonne was one of the more complex exercises EMAT has been involved in. The results were definitely worth it!

For more information on the Hamilton experience, contact [Lili Brylowski](#) or [Stephanie Trowbridge](#). For more information on EMAT, contact the [EMB](#). For more information on the CRTI CBRNE training initiative, contact [Dr. Laurie Mazurik](#).

Upcoming Events

HEPCO Conference – a focus on evacuation

The Hospital Emergency Preparedness Committee of Ottawa (HEPCO) will be hosting a day-long conference in October around the theme of evacuation. “Evacuations: Lessons to be Learned” will be held at Ben Franklin Place, Ottawa on October 26, 2012.

For more information on HEPCO and their conference, please contact [Jill Courtemanche](#) at Ottawa Public Health.

Toronto Emergency Management Symposium

The 2012 Toronto Emergency Management Symposium has been confirmed for November 14-16. Program development is underway and should be confirmed soon. To watch for more information on the program, visit the [Toronto Emergency Management Symposium Website](#).

3rd Annual Public Health Ontario Outbreak Management Workshop

On September 20-21, 2012, PHO will be presenting their third annual workshop on outbreak management, looking at tools to successfully manage outbreaks in healthcare and community settings. Speakers will be presenting to public health unit staff:

- Providing health units with information about Extended Spectrum Beta Lactamase (ESBLs) and Carbapenamase producing Enterobacteriaceae (CPEs)
- Informing health units about recent developments with a) community outbreaks of iGAS, epidemiology and challenges, b) challenges in outbreak management in long-term care homes c) use of social media in public health and d) information about foodborne outbreaks, and more.

For more information, consult the [PHO website](#).

Oxford County Heat Response Exercise

Oxford County Public Health and Emergency Services is working with Health Canada and other community stakeholders on an upcoming exercise testing aspects of the county's heat response plan. The exercise is tentatively scheduled for the fall. It will include representatives from the area municipalities, county departments, health-care organizations, provincial ministries and other community agencies. The information gathered during the exercise will be used for developing and implementing response plans, including strategies for responding to extreme weather. Currently the exercise design is in the initial phases. For more information, please contact [Peter Heywood](#), Health Protection Program Supervisor. Otherwise stay tuned for more about this exercise in future issues of the planner!

Not on the Emergency Planner Distribution List?

If you would like to be added to the *Emergency Preparedness Planner's* distribution list or would like to update your current registration, please contact Emergencymanagement.moh@ontario.ca or call 416-212-0822.