INTRODUCTION
In the aftermath of the attacks on the World Trade Center in New York City on September 11, 2001, governments and first response agencies in Ontario became acutely aware of their vulnerability. While individual organizations had achieved various levels of readiness to respond to major or complex emergencies, there was a clear need for greater cooperation at all levels of government and among first-response agencies.

This article describes how the Office of the Fire Marshal (OFM) maximized the opportunity that resulted from this event to develop a collaborative and systematic approach to multiagency training and education. The systems of collaboration continue to contribute to increased multiagency readiness at the municipal, regional, and provincial levels throughout Ontario. This was evidenced in response to the SARS outbreak and the major power outage that were experienced in the province of Ontario in 2003.

EMERGENCY PREPAREDNESS PROJECT
In the immediate shadow of the attacks on the World Trade Center, the OFM initiated an emergency preparedness project. The comprehensive project goal was “to ensure that a competent, multidisciplinary team is available on a province-wide basis to respond to large-scale and/or complex natural or human-caused emergencies in a planned, coordinated, and timely manner.”

The achievement of this goal requires continuous evaluation, monitoring, and improvement of response readiness in relation to emerging threats, pressures, and practices. It was recognized immediately that training would become a major focus within the project.

PREPARING TO RESPOND: A TWO-PART APPROACH
The emergency preparedness project comprised a two-part approach. The first part of this approach was to develop a comprehensive provincial response strategy that partnered with existing agency networks within the province. The provincial response strategy was developed in response to a survey of existing response capabilities. The survey results, along with discussions with key stakeholders, assisted in the development of appropriate goals and strategies. The second part of the approach was to develop a framework of multiagency decision makers who would collaborate and provide assistance to training and education programs within the province.

The following sections outline the comprehensive provincial response strategy and the interagency training and educational system.

PART ONE: THE COMPREHENSIVE PROVINCIAL RESPONSE STRATEGY
Level one: Municipal and community response
In Ontario’s system of emergency management, the municipal government must act first to attend to the public’s emergency needs. Agencies such as fire, police, and emergency medical services are usually the first to arrive at the scene and respond to an incident in keeping with their agency-specific Standard Operating Guidelines (SOGs) and in accordance with their legislative frameworks.

When an incident involves a response to hazardous materials, the expectation is that all municipal and community response agencies throughout the province have the capacity to respond to a level one response. Level one response teams within Ontario are expected to respond according to the awareness
level defined by the National Fire Protection Association Standard 472 (NFPA 472): Standard for Professional Competence of Responders to Hazardous Materials Incidents (2002, Edition). This means that all responders should be able to recognize the presence of hazardous materials and take appropriate safety precautions, secure the scene of the incident, and call the appropriate authorities for assistance.

**Levels two and three response teams**

When advanced support is required to respond to emergencies, assistance may be available through agreements within mutual aid systems or from contracted service providers. When incidents involve hazardous materials and the community has declared a municipal emergency, level two and/or level three response teams who have partnered with OFM may be activated by the Provincial Operations Centre (POC), which is operated by Emergency Management Ontario (EMO). These teams support the local community in the response.

Level two response teams, who are trained to the operations level as defined by NFPA 472, come from fire departments that have partnered with OFM and are strategically located throughout the province. The responsibilities of Level two teams include incident analyses, identification of hazards, containment, and decontamination.

The level three teams, who are trained to the technician level in accordance with NFPA 472, are prepared to locate and rescue victims in the hot zone, establish procedures to control the hazardous release, ensure that appropriate levels of decontamination are implemented, and safely terminate the incident.

**Activating provincial and federal resources**

The POC receives requests for assistance from regional fire coordinators who coordinate mutual aid systems for local communities throughout the province. Fire coordinators identify the details of the incident and request resources to mitigate the emergency. Upon approval, the appropriate level of response team is activated. As warranted by the situation, the Ontario Provincial Police (OPP), Provincial Emergency Response Team (PERT) and the OFM Emergency Response Team (ERT) may provide response support. This can include the provision of mobile command posts, protective clothing, or radio and satellite communications systems, along with individuals who are prepared to offer advice and assistance. The provincial response teams work in cooperation with appropriate multiagency responders as required by the nature of the incident.

Depending on the nature of the emergency, provincial ministers may be delegated to take the lead in handling certain emergencies. (For example, a toxic spill would fall under the Ministry of the Environment, while major nuclear or radioactive emergency response would be the responsibility of the OFM and coordinated through EMO.)

Access to federal assistance is also coordinated through EMO. This includes notification or intervention in incidents that involve federal jurisdictions, such as war, or where federal lands are concerned. The federal government, through the Royal Canadian Mounted Police (RCMP), has primary responsibility in the event of suspected terrorist incidents.

**PART TWO: MULTIAGENCY COLLABORATION ON TRAINING AND EDUCATION**

When this project was first established, the OFM wanted to ensure that all training and educational initiatives targeted the appropriate groups of responders and agencies, that the course content was appropriate for each target group, and that the courses developed were coordinated with those being offered by other agencies. For these reasons, it was determined that a systematic and comprehensive approach would be developed through the appointment of a multiagency committee so that the appropriate input, feedback, and recommendations would be received to support the development of an emergency preparedness academic unit.

**Emergency preparedness/response core planning committee**

To initiate a systematic and comprehensive approach to training and education, the multiagency emergency preparedness/response core planning committee was established. The committee’s mandate was to provide advice and recommendations on the
development and coordination of all training projects that resulted from the OFM-led government initiative for multidisciplinary team response to large-scale or complex emergencies. This committee now has representatives from more than 15 agencies that include fire, police, emergency medical services (EMS), EMO, emergency health services (EHS), public health services, and hospitals. The committee meets regularly to share information and discuss issues that relate to multiagency training and education and to ensure that there is a coordinated approach to multiagency training initiatives in Ontario.

Multiagency course planning work teams

In addition to providing advice and recommendations on training projects, a key responsibility of committee members is to assist the OFM by providing appropriate agency-specific work team members to assist in the development of course materials.

Multiagency work teams are established to collaborate on planning, development, and delivery of training programs to ensure that their separate and collective needs are met. By using multiagency work teams appointed by the core planning committee, the OFM is assured that all agencies address the appropriate course content, that the courses meet the educational needs of the targeted groups, and that the courses are coordinated throughout jurisdictions and agencies.

Emergency Management Centre of Excellence

The courses that have been developed to date are part of what will become the Emergency Management Centre of Excellence. Physically, the Centre will operate from the grounds of the Ontario Fire College (OFC) located in Gravenhurst, Ontario. The OFC is expanding its capabilities beyond the fire service to ensure that program delivery capability, registrations, certificates, and other student administration and record systems are established in keeping with the needs of this multiagency initiative. The multiagency education and training initiatives currently available are delivered through the OFC and will become a key part of the Emergency Management Centre of Excellence. The courses were designed by multiagency work teams who were appointed by the core planning committee.

The following sections provide an overview of courses that have been developed through this process to date. We believe that the collaborative way in which these courses have been developed contributes to the overall project goal.

Courses that support Level One teams throughout the province

The Terrorism/Hazardous Materials Awareness for First Responders in Ontario self-study course is available to all first responders on the OFM Internet site at www.ofm.gov.on.ca. This course, which is based on the NFPA 472, Standard for Professional Competence of Responders to Hazardous Materials Incidents (2002, Edition), has been distributed to first response agencies in Ontario and continues to be downloaded by many multiagency first responders in the province and other jurisdictions. Our goal is to reach as many first responders as possible. In keeping with the provincial response strategy, we encourage all first responders from fire, police, and ambulance/emergency health to develop their skills so that they meet the requirements of awareness level training. We continue to offer OFC certificates of completion to those who have completed the course.

Interagency first responder course

The interagency first responder course was developed for front-line responders including fire, police, emergency/public health, EMO, and hospitals. This interactive workshop provides participants with a common understanding of their shared and separate responsibilities when responding to significant emergencies.

A cross section of speakers that represent the varying agencies highlight the legislative frameworks and protocols which govern the work of first responders. This is followed by considerable sharing of experiences, success stories, and challenges, while participants work through a series of case studies to plan and practice a unified approach to incident management.

Although this course has been piloted, it is still in the developmental stages, and plans are currently underway to finalize the course content and to plan for its implementation for other multiagency first responders within Ontario.
Multiagency senior officer/manager course

This year, our multiagency senior officer/manager course is being rolled out for regional delivery in key communities within the province. Although the first communities to be targeted for this opportunity are those who have partnered with the OFM as level two (operational level) or level three (technician level) teams that contribute to Ontario's emergency response strategy, the long-term intent is to make this course available throughout the province. The target audience includes senior decision makers, officers, and managers who work together in local communities to plan for and respond to complex emergencies.

The purpose of this workshop is to provide an opportunity to senior officers and managers from regional emergency management and response agencies to work through case studies of significant or complex emergencies. Participants practice the implementation of a unified incident management system, in keeping with the emerging provincial and local protocols. The shared and separate roles of the multidisciplinary agencies are highlighted, while focusing on cooperation that contributes to a seamless transition from one agency's responsibilities to the next. Participants practice responses to simulated complex emergencies and are encouraged to take the acquired knowledge, skills, and resource materials back to their local departments.

From the Halliburton area, a senior manager in the long-term care access center wrote:

I was able to take the information that I gained and use it to revise our internal emergency response plan and make contact with our EMO community officers in our three counties. This enabled us to contribute to our municipal Chemical, Biological, Radiological/Nuclear (CBRN) emergency response plan.

A sergeant from the OPP who participated in the course stated:

The use of the multiagency senior officer/manager course was beneficial in seeing the vast perspectives in dealing with an emergency from all agencies. At times we become too entrapped in our own programs to see the impact emergencies have on other agencies. More specifically, police, fire, and ambulance forget about the support agencies that deal with and continue to care for those who are impacted long after the initial emergency is over.

A participant from the Health Sciences Centre in Hamilton indicated:

This course provided valuable insight and education about agencies my organization doesn't deal with on a daily basis. In the event of an emergency or disaster situation, the information and networking opportunities with experts in the field will be invaluable to my organization and myself.

Courses that support level two teams

Hazardous materials operations course

A hazardous materials operations course was developed to support the response of level two teams. This course, which has been accredited by the International Fire Service Accreditation Congress (IFSAC) to meet the operations level of the NFPA 472, was initially offered on location by the OFC to level two teams. Subsequent courses have been delivered by local instructors who are qualified as associate instructors with the OFC. Using in-depth classroom activities that focus on both skill and knowledge, this course targets responders who will support the local level one teams. Teams trained to this level will be prepared to analyze hazardous materials incidents, determine the nature of the hazards, plan a safe response, and practice decontamination procedures.

Courses that support level three teams

Hazardous materials technician course

One of the requirements of level three teams is that members are trained to the technician level in accordance with NFPA 472. Consequently, a hazardous materials technician course has been developed to support these teams. This two-week course provides
participants with an opportunity to analyze situational factors that involve hazardous materials. Learners go through several rigorous simulated hazardous scene responses where they assess and identify hazards, develop and implement action plans, and practice responding safely as team members. Learners also focus on rescue, recovery, and scene restoration, while using specialized protective equipment.

Provincial CBRN response teams training and exercise

Over the past three years, we have held at least one major exercise annually, where the provincial CBRN response teams from Windsor, Ottawa, and Toronto, supported by the OPP PERT team, meet to work on enhancing their individual technician teams’ capabilities by responding to a simulated complex CBRN emergency. The workshops associated with these training sessions have focused on identification of hazards, intervention, rescue and recovery, decontamination, mass decontamination, and radiation safety. A major one-day multiagency exercise tests the response and decision-making actions within a unified incident management system. Participants and observers from EMS/Ambulance, EMO, and the Ministry of Health and Long-Term Care (MOHLTC) support the team members in the exercise.

SUMMARY

In summary, the OFM has been able to contribute to multidisciplinary training and education to support preparedness and response within Ontario. However, we could not have done so without the considerable support and collaborative efforts of the multiagency network that joined us in the early stages of this project to plan and discuss issues, to make recommendations on training needs, and to provide us with many planning team members with content expertise. The planning team members put in long, hard hours to ensure that courses were meeting the identified needs. We believe that the collaborative approach that was initiated early in this project, and the cooperative work that followed, contributed to breaking down barriers among agencies and increasing multiagency preparedness at the municipal, regional, and provincial levels throughout Ontario.