

# Preface

The Chemical, Biological, Radiological-Nuclear, and Explosives (CBRNE) Research and Technology Initiative (CRTI) is part of Canada's response, helping to sharpen the focus of our scientific and emergency response communities on the areas that are the most relevant to today's realities. Many previous and ongoing CRTI projects have greatly strengthened Canada's preparedness for CBRNE events. However, there are additional needs, such as the need to increase the preparedness for dealing with vulnerable population groups, the need for identifying gaps in casualty management and the need for increasing capacity in emergency response. The *Workshop on Biological Dosimetry: Increasing Capacity for Emergency Response* was held on 19 May 2010, followed by the *Workshop on Medical Preparedness for CBRNE Events: National Scan* on 20 to 21 May 2010 and the *Workshop on Radiological Emergency Preparedness for Children* on 1 to 2 June 2010. All three workshops were hosted by CRTI in Ottawa, Canada. The purpose behind these workshops was to enhance communications and networks within the emergency response community, identify the needs and gaps in emergency preparedness and response in CBRNE events and eventually generate a plan for the development of emergency casualty management capabilities with specific emphasis on various population groups.

The *Workshop on Biological Dosimetry: Increasing Capacity for Emergency Response* included seven talks given by Canadian and US experts in biological dosimetry. The purpose of this workshop was to review current state of biological dosimetry capabilities, capacities and recent developments in new technologies. The workshop concluded with an open discussion on the way forward for developing a North American Biological Dosimetry Network.

The *Workshop on Medical Preparedness for CBRNE Events: National Scan* offered an opportunity for 23 presenters to provide an overview of the existing capabilities to an audience of 54 representatives from international and national federal governments, provincial and regional health-care providers, industry partners and academia. Forty-four of the attendees had a strong interest in radiological/nuclear emergency response. The workshop generated discussions on some outstanding gaps and

proposed a way-forward for developing best practices for casualty management. A united approach with emphasis on cross-collaborations was recognised as the only successful approach for developing a diversified cross-Canada mass casualty management response capability.

The *Workshop on Radiological Emergency Preparedness for Children* consisted of eight presentations and discussions on three pre-designed scenarios. Children have been identified as a population group at-risk in emergency situations such as radiological/nuclear events. However, children have been shown to be both vulnerable and resilient in many aspects. It was recognised that children are not small adult, and have their special needs. When dealing with children, special protocols, procedures and resources are needed. Emergency exercise involving children is identified as a good practice and valuable for emergency preparedness. Through early education and behavioral rehearsal, children can make valuable contribution to emergency prevention and preparedness. Around special issues of children, the workshop generated more questions than answers. Future effort is needed to provide the answers and to fill the gaps identified in the workshop.

It is hoped that some of the recommendations captured through these three workshops will provide guidance for new CRTI research priorities.

Although there was a presentation bias towards radiological/nuclear scenarios in all three workshops, the intent for the workshops was an all-hazards approach (CBRNE). The workshops were organised to enable extensive round-table discussions. The participants in the workshops were diverse in their expertise, and the diversity contributed to a very broad range of ideas, discussions and suggestions. As a relatively small assembly, there was ample opportunity for participation by all attendees. It was deemed that the presentations and the discussions of the workshops need to be published for broader distribution.

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