

PACE Research Report

Institution

Justice Institute
of British Columbia

Principal Researcher

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Research Field

Emergency Management

Student Involvement

2 student researchers
2 employed students

Partners & Collaborators

Health Canada
Emergency Management BC
North Shore Emergency
Management Office

Funding Sources

Defence Research &
Development Canada
Centre for Security Sciences
Canadian Safety and
Security Program

Project Location

Will benefit community-
based Emergency
Operations Centre
personnel in any English-
speaking country

Enhancing EOC Psychosocial Capacity Simulation Training and Exercise Collaboratory

SIMTEC is a multi-year research project which will assist EOC personnel to develop a more considered approach of the psychosocial dimensions of CBRNE and other hazardous events.

This faculty led project has provided an opportunity for graduate students to become familiar with quantitative research in an exciting and dynamic project. SIMTEC is currently in the third year of a five year research project which will assist Emergency Operation Centre (EOC) personnel to develop a more considered approach of the psychosocial dimensions of chemical, biological, radiation, nuclear and explosive (CBRNE) threats and other hazardous events. Use of JIBC's Ex-Pod system will allow researchers to study senior officials during various exercise scenarios and the findings will demonstrate how to best enhance Canada's and the international community's capacity to respond more effectively to CBRNE and other threats. The key primary benefits will be to:

1. Enhance the existing knowledge base regarding how senior decision makers and Emergency Operations Centre (EOC) personnel incorporate psychosocial considerations into strategic and tactical decisions while responding to CBRNE and other threats;
2. Assist first responders in incorporating psychosocial considerations into existing decontamination, CBRNE and other multi-casualty incident protocols and procedures through the use of training sessions, materials and guidebooks; and to
3. Identify practical evidence-informed psychosocial interventions to reduce stress levels and enhance decision making of senior personnel working in EOCs when responding to CBRNE and other threats.

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In the first exercise, Winter Blues!, several common reactions were identified among exercise participants, based on observations from the pilot, test, and final simulation exercises, including:

- Reluctance to take breaks
- Tension between first responder (uniformed) and non-first responder (non-uniformed) participants
- The importance of clear leaders in the decision-making process
- Individuals being excluded from the decision-making process, not being heard by other team members, and missing an opportunity to articulate their views on a specific issue
- Non-verbal signs of stress, fatigue, frustration such as sweating; face in hands; rapid clicking of pens; getting distracted and/or separating oneself from the rest of the team by turning chair away from the group and no longer providing input in the decision-making process



In our second exercise, based on the contamination of community residents from chlorine gas from a swimming pool, a Decontamination Drill Exercise was held, the first of its kind anywhere in the world, specifically using live participants to complete self-decontamination. Having real people participate in the exercise provided an excellent learning environment for first responders while at the same time providing a unique opportunity to test our recommendations for psychosocial considerations for civilian populations during the decontamination process.



We are still completing our analyses of the various interviews and focus groups that were held but the findings are already providing us with some very valuable data. Our preliminary findings indicate that the use of the buddy system was very effective in keeping people engaged and providing the necessary supports to each other. We believe that we can further refine the “Decontamination Kits” to be more effective and less cumbersome or confusing. As unpleasant as the experience was for some participants, going

through the gross decontamination process, using the fire hoses, provided some very valuable data and reinforced the need for a different method to be used.

The exercise confirmed that the use of disaster psychosocial volunteers was invaluable – at the scene, on the bus and once the participants left the showers. Use of these volunteers will be recommended as part of standard practice. As we continue with our analysis we continue to discover valuable input to assist in refining the process.

This project has provided a unique, and exciting opportunity for students to become engaged in participatory action research, develop qualitative research skills (e.g., leading focus groups, completing thematic analyses), co-author papers and contribute to training and educational initiatives. As one of the students mentioned, “It’s a unique experience to be part of a project that focuses on real change and promotes innovative thinking and learning opportunities in emergency management.”