



Canadian Risk & Hazards
Network
(Knowledge and Practice)

www.crhnet.ca

HazNet

Réseau canadien d'étude des
des risqué et dangers
(connaissances et pratiques)

Volume 1 No.2 Winter 2010

WELCOME FROM THE CO- PRESIDENTS

Presidents's message

CRHNet was established in 2003 as a not-for-profit organization designed to promote or strengthen disaster risk reduction and emergency management in Canada. It serves to establish an environment in which related researchers, public officials and practitioners effectively share knowledge and strategies towards disaster risk reduction in Canada. During its formative years, CRHNet was dependent on the generosity of many including the University of Manitoba, and more recently York University that provided an element of operational and financial administration.

In 2009, the CHRNNet Board realized that at last CRHNet was 'ready' and made a conscious effort to establish the Network as a fully independent association. As a result, CRHNet overhauled its Bylaws, established its own (independent) financial system, hired its first Executive Director – Larry Pearce, and recruited a full Board of representatives from across Canada. Under Larry's coordination, CRHNet produced its first newsletter – a success, which prompted its continuation.

In November 2009, the Network again held its annual Symposium and once again advanced discussion, network and cross-fertilization of ideas among its members. Membership too has grown, and now boasts representation from almost all

provincial and territorial governments, as well as Public Safety Canada at the federal level.

Following the 2008 Symposium in Newfoundland, CRHNet developed its first Strategic Plan and throughout 2009 strived to fulfill its commitments under the Plan. As part of that, the CRHNet web-site was redesigned and moved to be administered by Publique Sécurité Québec under the stewardship of Michel Dore, CRHNet co-president.

In 2009, CRHNet began to develop an e-learning book on the many aspects of emergency management. It is an on-going project, being written by contributing experts in each related field and co-edited by Dr. Brenda Murphy and Professor David Etkin, both members of CHRNNet. It is to be lodged at the CRHNet web-site and evolve with new research findings and best practices.

Looking forward, CRHNet is continuing to explore its relationships within the risk and hazards communities to create synergies that advance awareness, knowledge and collaboration among all stakeholders. To that end, CRHNet is working to facilitate and promote the development of a "Canadian Disaster Risk Reduction Platform" that would serve as a major all-stakeholder forum for dialogue or collaboration.

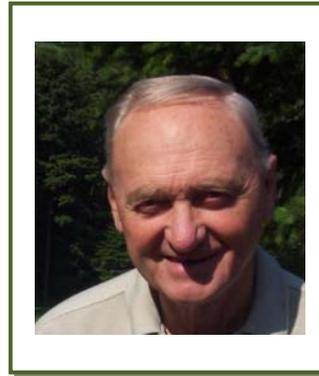
Our 2010 membership drive is currently underway and we invite all who are not yet signed up, to do so now. Join us and be part of this growing Network.

Ron Kuban, Ph.D and Michel C. Doré, Ph.D,
CEM
CRHNet Co-Presidents

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NOTE FROM EXECUTIVE DIRECTOR



I would like to extend a warm welcome to all of the members of the Canadian Risk and Hazards Network to the second edition of our CRHNet Newsletter “HazNet.”

There have been many changes over the past year not the least of which has been the recent down turn in the economy. Government and businesses have had to deal with radical changing markets as well as the political realities. The H1N1 pandemic; the ongoing threat of how the nations of the free world deal with the climate change issue; the failures of the Copenhagen conference; and the other environmental challenges which face Canada and the global community have been unprecedented. The 2010 Olympic Games have focused the attention and resources of all of us on potential security issues and the threats of disruption to this world class sports event.

Since the first issue of HazNet there have been dramatic changes in our appreciation of the impact of natural hazards and how devastating they can be upon cities and developing countries who are not able to reduce the impacts of these events. The Magnitude 7 earthquake in Haiti and the horrific devastation to the population, facilities and infrastructure was almost unbelievable. It is incomprehensible for all of us to talk in terms of 200,000 killed and over one million people left homeless. It was never contemplated that such an earthquake of these catastrophic proportions would have these unprecedented effects. The generosity of Canadians and the world-wide relief effort has been unparalleled.

SUMMARY OF 2009 6TH CRHNET SYMPOSIUM

These events underscore the need and the value of our Network. CRHNet creates an environment in which our communities through the efforts of hazard researchers and education and emergency management practitioners can effectively share knowledge and innovative approaches that work toward reducing disaster vulnerability. Clearly, the network could fill the information/research gap that exists in Canada - both for government and businesses at the federal/provincial/territorial levels and to identify best practices. “Reducing Risk through Partnerships” is the motto of CRHNet.

As we move forward in 2010 and look toward the next National Symposium this October in Fredericton, I challenge us all to help put the Network into the forefront and advance collaboration with our partners both in business and government and to work toward defining and developing the Canadian Disaster Risk Reduction Platform.

Finally I would like to extend a welcome to all of you who are not yet members and invite you to become members and to participate in future articles and symposia to enhance the mandate of CRHNet.

Larry Pearce

Executive Director

Email: larrypearce@shaw.ca



During November 23-26, 2009, CRHNet held its 6th Annual Symposium. The event was a success, despite the many obstacles it confronted including: travel restrictions for many organizations, H1N1-related concerns or restrictions, and the cancellation of the planned SOREM meeting that was to be held concurrently with the symposium.

Nevertheless, the symposium managed to attract numerous speakers from across Canada, as well as the US, and Belgium. It was opened by Dr. Tom Drabek – Professor at the Department of Sociology and Criminology at Denver University, who spoke on “Lessons learned and their meaning”. The closing speaker was Dr. Louis Francescutti – Professor at the University of Alberta, who spoke about “Reaching the public with the ‘Be prepared’ message”. In between, were a wide range of talented and interesting speakers.

As before, the symposium addressed a number of streams, and diverse topics from health, social services, and technology to governance and business continuity.

Above all, the symposium again lived up to the CRHNet goal of providing a relaxed and enjoyable forum for the exchange of ideas, research, and best practices among diverse stakeholders of disaster risk reduction. As an aside, a number of the symposium presentations will be available on the CRHNet website at www.CRHNet.ca

JOB OPPORTUNITIES

ABCP/ IT Security Recruitment Firm Senior Disaster Recovery Analyst

Role Summary

The purpose of this position is to provide leadership, support and organizational responsibility for worldwide Disaster Recovery program, which interfaces with the worldwide Business Continuity and Crisis Management programs. Accountabilities will include operational oversight, IT planning, innovative technology solutions and managing relationships with IT leaders, business partners and external vendors.

Certifications in Crisis Management, Business Continuity or Disaster Recovery would be an asset

Please note, this opportunity is in the Toronto area.

For further information, contact:

Harry Benz ... Consultant

Montgomery Benz

harry@mbsecure.ca

Phone : 905-864-8585

Toll Free: 1-866-424-8585

www.mbsecure.ca

RESEARCH INFO

Reducing risk from natural hazards in British Columbia: Mitigation Systems

Vancouver, BC, September 28, 2009

Lambertus C. Struik, John Clague, Laurie Pearce, Larry Pearce, Murray Day, Doug Allan, Wayne Hirlehey

Following the opening by Wes Shoemaker, Deputy Minister, Public Safety and Solicitor General, forty-seven local and national critical infrastructure owners, managers and stakeholders joined each other for a day long World Café to discuss effective remediation systems in British Columbia. The workshop focused on infrastructure resilience from natural events through prevention and mitigation, rather than response.

The World Café presentations and discussion were hosted by the Centre for Natural Hazards Research at Simon Fraser University, with support from various organizations and individuals. Opening presentations by Steve Litke (FBC), Sonia Talwar, (NRCan), Peter Anderson (SFU), and Jean Slick, (RRU), emphasized the significant role of mitigation initiatives at home and internationally. They demonstrated the roles of inter-agency governance, strategic land-use planning, socially encompassing communication, and avenues for incorporating local knowledge into building back better after a disaster.

Workshop proceeding will be hosted on the Centre for Natural Hazards Research website (<http://www.sfu.ca/cnhr>). These include graphic recordings made by Stina Brown (playcreative.com). The workshop was assisted by facilitators, and recorders from NRCan, SFU, the Justice Institute of BC, and Public Safety Canada.



Emergency Managers' Centre

BRITISH COLUMBIA ASSOCIATION OF EMERGENCY MANAGERS (BCAEM)

BCAEM is an association of dedicated professionals whose main purpose is to promote emergency management and represent the interests, aims and opinion of those who are involved in mitigation, preparedness, response and recovery in our communities.

Membership in the British Columbia Association of Emergency Managers provides an opportunity to network with other individuals who share the same interests and desire to promote Emergency Management as a recognized profession. BCAEM supports its membership by providing free downloadable resources on our website for exercises, training courses and regional workshops throughout British Columbia. While our membership is largely based in British Columbia, we have members in other provinces and overseas.

We welcome new members (membership fee is \$25.00 per year) to join our extensive network of contacts and contribute and benefit from information exchange and promote the advancement of emergency management efforts in Canada.

For more information on BCAEM, please visit our website: www.bcaem.ca

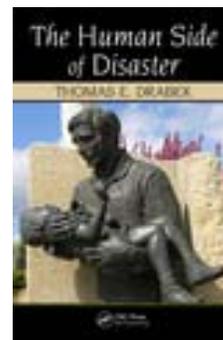
Lynn Orstad
Vice-President
BCAEM

ONTARIO ASSOCIATION OF EMERGENCY MANAGERS (OAEM)

For more info, visit www.oeam.ca

Virginia Jones
Chair, Communications & Secretary
Ontario Association of Emergency Managers
(OAEM)

EMERGENCY MANAGEMENT BOOKS



The Human Side of Disaster

Thomas E. Drabek,

Price: \$59.95

ISBN: 9781439808641

Publication: August 26, 2009

When disaster strikes, people react, and usually, fear levels rise. Temporarily, however, one motivation supersedes all others: survival of self and those nearby, especially loved ones. Based on the author's years of research and teaching experience, **The Human Side of Disaster** scientifically evaluates human responses in the face of disasters. This examination informs emergency managers and response teams and teaches them how to anticipate human behaviors in-crisis.

The author explores how people's responses can be predicted, the long term effects of disaster on the psyche, and the key issues involved in recovery.

<http://www.crcpress.com/product/isbn/9781439808641>

DRI CANADA'S In-House and On-Line BCM Courses: A Great Way to Save Money!

Organizations today face wide-ranging threats. Preparing for them takes hard work and forethought. Yet how do you take the necessary Business Continuity Management courses – when training and travel dollars are so limited?

The answer is DRI CANADA's **in-house and on-line courses**. This fall, we're offering two ways for your organization to reduce its training and travel costs while still ensuring your team has the skills necessary to handle the unexpected.

In-house courses: For as few as 7 people we can deliver course that suits your needs – at a significant discount – and we'll send the instructor to you. There's no travel involved.

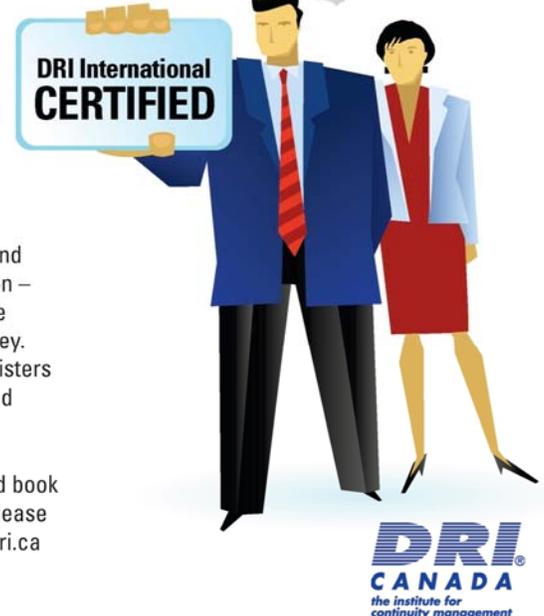
On-line courses: These course are self-paced and can be completed over a two-week period. This is ideal for busy professionals, who can now work right at

their own desks completing the courses in convenient periods of time.

Now is the ideal time to take advantage of this valuable opportunity to learn Business Continuity Management practices – and receive DRI International certification that's recognized worldwide.

DRI CANADA is a tested, proven and accepted source of BCM education – programs that help graduates save organizations effort, time and money. DRI CANADA manages and administers the DRI International education and certification programs in Canada.

To take advantage of this offer, and book your in-house or on-line course, please email Beverley Kelemen at bev@dri.ca or call 1-613-258-2271, or toll Free: 1-888-728-DRIC (3742).



DRI International
CERTIFIED

DRI
CANADA
the institute for
continuity management

The Canadian Centre for Emergency Preparedness (CCEP) is now accepting nominations for the 2010 Business Continuity Award

Do you know someone in Canada that:

- exemplifies leadership in the Business Continuity profession
- has made a contribution to the Business Continuity profession above and beyond the performance of their job (e.g., Magazine articles, publications, conference presentations, etc.)
- may have received other awards or citations in relation to the Business Continuity profession
- is involved in Business Continuity community service or volunteer activities (e.g., Associations, public awareness etc.)

If you do, please consider nominating them for the Canadian Centre for Emergency Preparedness 2010 Business Continuity Award. It really is a simple process that may take a few minutes yet ensures deserving colleagues in our profession get the recognition they deserve.

Go to <http://www.ccep.ca/awards.html> to see more information on the Business Continuity Award for 2010 and previous recipients. **Nominations close April 30th, 2010.**

If you have any questions, please contact Adrian Gordon agordon@ccep.ca

Just Around the Corner...

UPCOMING
EVENTS/CONFERENCES

EPICC Workshop & Forum

May 26th 2010

2010 – Lessons from the Real World

In collaboration with the Justice Institute of British Columbia, EPICC is very pleased to host the 15th Annual EPICC Forum. **Wes Shoemaker**, Deputy Minister, Public Safety and Solicitor General will be opening the Forum and is followed by a keynote address, **“Making Big Events Happen.”**

Following the keynote there will be a panel **“Business Impacts of 2010”** which includes **Fiona Famulak**, Whistler Chamber of Commerce; **Gary Mathiesen**, Quay Property Management Corp. and **Bernie Mangan**, Vancouver Board of Trade.

Eric Young, Deputy Provincial Health Officer, Ministry of Health; **Christine Trefanenko**, Terasen Gas, Manager of Emergency Planning and Business Continuity, **Peter Borgmann**, Coast Mountain Bus Company, AScT, Director, Safety and Emergency Management and **Dr. Holmes**, Global Consulting will speak at the afternoon panel session, **“People Management During a Pandemic.”**

Jim Stanton, Stanton & Associates will end the Forum with **“The Lessons of 2010.”** A **Networking Reception will follow!**

See www.epicc.org for Forum info.

Only **\$155.00** for EPICC members

The 23rd Annual Emergency Preparedness Conference

November 23rd, 24th, 25th,
2010



DECADE FOR
CHANGE: PLAYERS,
POLITICS AND
PLANNING

The 23rd Annual Conference will be covering topics relating to Players, Politics and Planning. Some of the topics will cover:

- Earthquakes – Haiti: a Major Catastrophe
- H1N1 Lessons learned for the next Pandemic
- Non-government partners in Emergency Management:
- Challenges facing governments, communities and citizens in the next decade
- Training Challenges for the Next Decade
- Balance priorities – Public Safety and Community needs
- Cross Ministry response – who takes the lead?
- Linking Emergency Preparedness with Financial Security
- Making Governments Accountable – the buck stops here
- Olympic Legacies as it relates to normal operations
- Self Rescue – Care facilities, high-rises, public safety system, and elementary schools

This Conference provides a great opportunity to network and learn from peers. Delegates are given the opportunity to browse the Exhibitor Area the Poster Presentations.

Check out the Web Site at www.EPCConference.ca – the new completed 2110 Conference Program will be up and running shortly.

Plan Now!

7th Annual October 27-29, 2010
Canadian Risk & Hazards Network Symposium



Delta Hotel, Fredericton, NB

Presented by



In collaboration with

University of New Brunswick

“Connecting With Canadians”



Risk Assessment Tools

Decision Support Tools

Risk Communications

Human Dimensions

Social Media

Visualization

Simulation

**XVII ISA WORLD CONGRESS
OF SOCIOLOGY**

SOCIOLOGY ON THE MOVE
LA SOCIOLOGIE EN MOUVEMENT
LA SOCIOLOGÍA EN MARCHA
11-17 JULY, 2010
GOTHENBURG, SWEDEN



<http://www.isa-sociology.org/congress2010/rc/rc39.htm>

Programme Coordinators

Joe Scanlon, Carleton University, Canada, jscanlon@ccs.carleton.ca

Lori Peek, Colorado State University, USA, lori.peek@colostate.edu

World Conference on Disaster Management (WCDM)

June 6 – 9, 2010, Toronto, Canada

<http://www.wcdm.org>

The 20th WCDM has a unique line-up of over 100 industry experts from multiple countries participating in keynotes, workshops and concurrent sessions ready to discuss the progress of past, present and future trends in building a global community.

The last 20 years have seen the slow integration of EM/CM, ITDR, BCP & risk into a more mature business resilience approach to planning for and responding to major impacts. David Tickner, Consulting Principal of Computrix Services Pty Ltd in Australia, will answer “Where to next?” from 40 years experience. As well as challenge participants to address where they are in terms of maturity, what they should do to reach mature business resilience and whether they will lead or follow in the quantum leap.

Join us and immerse yourself in a concentrated four-day educational experience.

Contact: Chuck Wright, Group Event Director
888-443-6786 ext. 241
cwright@divcomevents.com



TORONTO, CANADA
JUNE 6 - 9, 2010

PRESENTED BY :  Canadian Centre for
Emergency Preparedness

BUILDING SOLUTIONS FOR A GLOBAL COMMUNITY
EMERGENCY MANAGEMENT AND BUSINESS CONTINUITY WORKING TOGETHER

 NETWORKING	 EDUCATION	 PRODUCTS & SERVICES
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WHO ATTENDS

- Emergency Management/Planning
- Business Continuity Management
- Risk Management
- Emergency Response
- Public Health
- Human Resources Management
- Health and Safety Management
- Emergency Communications
- IT Disaster Recovery
- Security
- Military
- Other Related Disaster Management

WHY DELEGATES ATTEND

- This four day conference offers new ideas and approaches that will help build solutions for a global community
- Receive professional training through classified workshops, concurrent and keynote sessions
- Meet new suppliers and discuss products and services that will help you better prepare for a crisis
- Become part of the WCDM network - exchange ideas and best practices with industry colleagues from around the world

Register Today With Invitation Code WORLD2 For \$200 Savings wcdm.org

ROYAL ROADS UNIVERSITY

Masters of Arts in Disaster and Emergency Management

Clear, consistent, constant information is key to public readiness

If you want to successfully educate the public about emergency

preparedness, learn a lesson from advertisers and be clear, consistent and constant. So says Dr. Dennis Mileti, professor *emeritus* at the Institute of Behavioral

Science/Natural Hazards Center, Colorado University at Boulder.



Viewed as one of the foremost scholars in disaster and emergency management in North America, Mileti was at Royal Roads University to deliver a timely and dynamic presentation to learners in the MA in Disaster and Emergency Preparedness program.

The focus was on results from a mega study completed in 2008 dubbed *The Manhattan Project for Public Readiness*.

Undertaken in the wake of the 9-11 terrorism attacks to support household and public preparedness for terrorist events in the U.S., the richly-funded research encompassed the entire geographic United States as well as a comprehensive range of racial and ethnic groups.

Results were compelling in that they were the same across all groups, all areas and for all hazards.

“The findings are impeccable in that they are clear, consistent and replicable. It’s as good as it gets in social science,” said Mileti.

What the results showed is that the relationship between information and public readiness is linear – that is, the more information, the more action. However, information must come from multiple sources and multiple channels and it must be explicit in what actions people should take and describe how those actions will help cut their losses in the wake of an emergency. It must also be consistent across messages from different sources.

Perhaps surprisingly, the results also show that there is no relationship between readiness and perceived risk. In fact, Mileti said, people can tune out if the message focuses on risk.

“Don’t try to motivate with risk and probabilities,” he said. “Information is the key factor. It works everywhere for everyone. Provide information from as many sources as possible. Use multiple channels to provide the same information in different ways and provide it constantly. People do more after receiving the same message many times.”

Mileti said the key, above all, is to provide specific information.

“If we use the analogy of teaching a child how to tie her shoelaces, we don’t say ‘do it or you’ll get frostbite going outside in the winter without shoes.’ We say ‘cross this lace over the other’ and so on. It’s the same for adults. Tell them exactly what you want them to do and tell them where to find out more about how to do it.”

This *information imperative*, as Mileti calls it – makes it particularly important for different agencies to work together to provide consistent messaging.

“Stop providing unique messages. Branded readiness messages work best,” said Mileti.

**Diploma in Emergency & Security Management
- An Online Degree-Path Program**

The high-growth fields of safety, emergency management and security are merging – and more and more employers are looking to hire candidates with strong backgrounds in both emergency management and security, along with a solid business foundation. The JIBC is proud to launch Canada’s first comprehensive, broadly based diploma program to prepare students for leadership positions within this exciting and growing field. Best of all, the diploma is offered completely online. This means you can complete this innovative program no matter where you live.

For more information, please visit our diploma website at www.esmdiploma.com or contact the coordinator at esmdiploma@jibc.ca or 604.528.5794.

Exercise Design Certificate – Available in BC & Ontario

Designing and delivering small and large scale exercises are critical components of every emergency management and business continuity program. This is because exercising is one of the best ways to apply learning and pinpoint important training and resource gaps.

The demand for personnel with specific exercise design expertise is growing. So whether you’re looking to add new skills to your repertoire, or enhance your qualifications to enter this exciting and growing field, now is the right time to complete an Emergency Management Exercise Design Certificate from the JIBC.

For more information, please visit our website at www.jibc.ca/emergency or contact the coordinator at emergency@jibc.ca or 604.528.5564.

He also dismisses the notion that public emergency preparedness campaigns may engender panic. “Panic is a myth – it’s hogwash,” he said. “The public doesn’t even panic when disaster is happening. They panic in very limited circumstances. For example, it’s chilling to think that, given how much education has gone on, there is no difference in earthquake preparedness in California than in other areas of the United States.”

As a result, Mileti said it’s time to get public readiness out of the closet and into the streets. He cited as examples erecting a huge banner on a building undergoing renovation saying “retro-fitting for earthquake preparedness” and encouraging public discussion as California did with its *Let’s talk about our faults* earthquake preparedness campaign.

“We have to sell readiness the way they sell Coca Cola! Coke has spent millions of dollars over decades selling its product. Why? Because that’s what it takes to change people’s behaviour.”

Presentation slides can be viewed at <http://iec.lacity.org/PDF/presentations/Mileti.pdf>

The first students in RRU's inaugural MA program in Disaster and Emergency Management graduated at spring convocation in June. They specialized in assessing, mitigating, responding to and recovering from natural disasters such as earthquakes, tsunamis, fires, floods and droughts; pandemics and other health risks; as well as new, emergent threats such as bio-chemical, nuclear and cyber-terrorism.

Those interested in learning more about the program can obtain information from the RRU website www.royalroads.ca

NAIT Emergency Management Program Marks Several Milestones

2009 saw a number of exciting evolutions in NAIT's Emergency Management program. The core diploma curriculum has been re-launched in a new, more compact format, two certificate credentials have been created and – most excitingly – NAIT Emergency Management has welcomed its first graduate.

This unique program is currently the only diploma-level education in Emergency Management offered in Canada. Classes are taught entirely online, with students and instructors participating from across the country. The newly formatted diploma curriculum will allow a student studying full-time to complete classes in approximately two years, with part-time students wrapping up studies in three to four years. As always, course materials focus on four key areas: mitigation, planning, response and recovery. The fundamental practices, procedures and strategies taught can be applied to any type of emergency or disaster.

May 2009 saw the first Emergency Management diploma graduate walk across the stage at the Edmonton's Jubilee Auditorium. Bryan Sali's story is unusual in that he had no prior experience in his chosen field. Most students in the diploma program come from police, fire, EMS, security or military backgrounds. Bryan had been a self-described "jack of all trades", working in a variety of fields, including sales and heavy duty machine operation. But, he says he truly found his niche in emergency management – knowing that he will make a difference and help people.

In late August, NAIT launched two new Emergency Management certificate credentials: an Industrial Emergency Management Certificate and a Public Sector Emergency Management Certificate. Each

of these new certificates requires the completion of five courses, which are completely transferable towards the diploma. They provide credentials for those students who need professional EM education, but perhaps not necessarily up to a diploma level. They also reward students in the diploma program with early credentials.

Think that you'd like to learn more about this dynamic program? Class intakes take place in September, January and May. For more information, email emtraining@nait.ca or check out NAIT's website at www.nait.ca/em.

YORK UNIVERSITY

For more information please go to <http://www.yorku.ca/akevents/academic/SAS/EM/index.html> or send an email to eminfo@yorku.ca.

BRANDON UNIVERSITY

Applied Disaster and Emergency Studies

More information about the ADES program, Brandon University, admission, residency and degree requirements can be found at www.brandonu.ca

UNIVERSITY OF BRITISH COLUMBIA

**Graduate Studies in Disaster
and Risk Management
Planning - School of
Community and Regional
Planning University of British Columbia**



For more information:

School of Community & Regional Planning
#433-6333 Memorial Road
Vancouver, BC V6T 1Z2, Canada
Phone: (604) 822-3276; Fax: (604) 822-3787

Website: www.scarp.ubc.ca

EMERGENCY MANAGEMENT IN CANADA: UNDERSTANDING AND GETTING OVER HUMAN NATURE (OURSELVES)

Dave Hutton, Ph.D.

On September 2, 2008, the Standing Senate Committee on National Security and Defence Report released its review of emergency preparedness in Canada, *Emergency Preparedness in Canada: How the fine arts of bafflegab and procrastination hobble the people who will be trying to save you when things get really bad...* This is a rather damning and satiric report of Canada's emergency management preparations which takes aim at almost all aspects of emergency management at the federal government level especially. The report covers, among other things, the continuity of essential government services during emergencies; the usefulness of emergency caches located about the country; the funding of municipalities for emergency equipment and training; collaboration among federal, provincial, territorial and municipal governments; emergency communications; and the archiving of lessons learned and best practices. The essence of the report, should one not gather it from the title itself, can be probably be summarized by one sentence that comes in the introduction - "Sadly, for the most part, this is not a heroic story" (2).

As with other arguably contentious 'stories', the truth probably lies somewhere in the middle. Indeed, notable changes have been achieved in the decade since September 11th. An Emergency Management Framework for Canada (Public Safety

Canada, 2005)¹ and the National Framework for Health Emergency Management (Federal/Provincial/Territorial Network on Emergency Preparedness and Response, 2004)² have been developed by federal/provincial/territorial governments to serve as a basis for policy-making and planning across jurisdictions. Most jurisdictions are moving towards incident management systems, with consideration also being given to building surge capacity and mutual aid between jurisdictions. There has also been a rise of interest in the so-called *softer* aspects of emergency management, with considerable attention being given to vulnerable populations and psychosocial preparedness.

Still, one would be hard pressed to reasonably argue that Canada is as prepared as it might be. Almost a decade after the World Trade Center Attack, Canada still lacks a unified national incident management system; surge capacity and interoperability - while much discussed - continue to have many question marks; funding for municipalities to buy and maintain equipment remains inadequate, adding to the problem of interoperability; lessons to be learned are seemingly as often lost or forgotten because of a continuing lack of a centralized compilation mechanism; and standards and training remain very much with

¹ An Emergency Management Framework for Canada was completed and approved by the Federal/Provincial/Territorial Ministers Responsible for Emergency Management in 2005. The Framework defines fundamental concepts and principles underlying emergency management in Canada.

² The National Framework for Health Emergency Management was completed in 2004 by the Federal/Provincial/Territorial Network on Emergency Preparedness and Response. The National Framework lays out principles and guidelines to be used by jurisdictions in implementing emergency health and social services programs.

individual jurisdiction's purview, meaning we also lack a body of nationally agreed upon better practices for dealing with future disasters.

But why are we still talking about the same issues and problems in emergency management despite the millions of tax dollars that have been allocated? In 2006, for example, \$460 million (\$1 billion over five years) was allocated by the federal government to improve Canada's pandemic preparedness – an additional \$19 million went to Public Safety and Emergency Preparedness Canada to respond to other types of emergencies and disasters (Department of Finance Canada, 2006). In the 2008-09, the government allocated \$58.5 million for emergency management alone, although only two-thirds of this was spent (Office of the Auditor General of Canada, 2009). This is a lot of money (spent and unspent) for apparently half fulfilled deliverables. But perhaps the question we should be asking is whether what has been achieved is about as much as can be *realistically* expected? Or worded in another way - is Canada just about where it *should* be, all things considered?

This is not a cop out. Rather, it forces us to look a little deeper than claims of bureaucratic ineptness and procrastination when seeking answers to our shortcomings. After all, most senior bureaucrats and civil servants are bright, committed people who have the best intentions for Canada. But let us remember that September 11th and Hurricane Katrina did not happen in or to Canada. We have had SARS and the ever-threat of pandemic influenza, but these are essentially public health risks that do not demand the same form of emergency management as do more sudden emergencies such as terrorist attacks and devastating hurricanes. Further, while these public health threats have become key drivers in building a more prepared Canada, to what extent has the response been led by public health administrators and physicians whose expertise lies in medicine rather than emergency management?

This perhaps brings us to a more important question – is there really a culture of preparedness in Canada? Maybe not, at least not in the same sense as it exists in the United States. As Guy Corriveau (2009: 3) has pointed out in his comments of the Senate Committee on National Security and Defence Report, “Emergency Management is not, nor should be, the province of the “hacker.” How many in the employ of government at all levels are acting as Emergency Management professionals without the necessary competencies?” Indeed, one can rise to the most senior emergency preparedness positions in the federal government without great knowledge or experience in emergency management. If you doubt this, consider the following. According to the Auditor General in 2009, only 56 percent of senior managers at Public Safety Canada in April of that year had been in their jobs for more than 18 months. The rate of employee turn-over during 2008-09 was no less than 71 percent (Office of the Auditor General of Canada, 2009).

A Question of Leadership

One would be amiss, however, to suggest that Canada is not without a good number of very bright and talented individuals involved in emergency management as practitioners, decision-makers, academics and researchers. What then is missing?

In the spring of 2004, I participated in a meeting focusing on the environment and emergency preparedness - attended by a number of very influential people, including one future federal minister and a soon to be appointed provincial deputy minister. Late in the meeting, after many solutions were laid out for the many problems discussed, the room reached a consensus that nothing more could be done until Canada's 'leadership' assumed responsibility for such changes. As the meeting ended and the room emptied, I questioned how and why some of the most informed people in Canada could or would not

see *themselves* as the very leaders they were seeking.

So long as we look for others to assume the mantle of leadership and change, the longer emergency preparedness in Canada will remain focused on its shortcomings rather than taking bold steps to address these. It also strikes me that there is no reason that WE as individuals can not assume the mantle of leadership. Systems, to which we so often attribute responsibility for the status quo as well as the change we desire, are in fact made up of and are driven by individuals. Systems do not create change; it is people that create change - one small step at a time. And it is through the bringing of people together that one creates the critical mass of opinion and influence that can begin to shift the dominoes of policy and decision-making.

Leadership is about choosing to act for the greater good when others do not; it is not command and control or having the authority to make legislation or otherwise 'being in charge'. Collective leadership, to which I am referring, must ultimately be based on a *common* vision and effort to achieve change, which is quite different than what any one government might think is important, be it federal, provincial/territorial, or municipal. Rather, a national lobby of change must include representation from all levels of government, as well as non-government and professional organizations, academics and researchers alike.

There is no question that the pieces for change exist in Canada. Currently there is the Senior Official Responsible for Emergency Management, the Council of Emergency Management Organizations, the Expert Group on Emergency Preparedness and Response, Council of Health Emergency Management Managers, Council of Emergency Social Services Directors, Council of Emergency Voluntary Sector Directors, as well as the Domestic Group on Emergency Management and the National Municipal Emergency Social Services Network. There is also the Health Care Professional Network

on Emergency Preparedness and Response and the National Advisory Group on Emergency Preparedness of the Canadian Council of Churches, not to mention a National Inter-Agency Psychosocial Working Group. Together, these cover off federal, provincial, territorial and municipal emergency management officials, national voluntary and first responder associations like the Canadian Association of Fire Chiefs and Canadian Association of Chiefs of Police, professional health organizations like the Canadian Medical Association, not to mention Canada's major non-government organizations including the Canadian Red Cross, Salvation Army and St. John's Ambulance.

What remains to be accomplished, however, is for these bodies to come together as *partners* to promote good emergency management in Canada. Indeed, one can reasonably surmise that we are generally aware of the shortcomings of emergency preparedness in Canada. Unfortunately, we also seem to spend far more time explaining and defending away the status quo as the responsibility of other jurisdictions than working together to find solutions to cross-jurisdictional challenges that demand open dialogue and collaborative planning.

To this point, it seems that we have not put behind us the jurisdictional *sand box* issues that leave most Canadians shaking their heads. Rather than finding ways to be helpful, it seems that it is easier to find reasons for not having open discussions about issues that can not be realistically resolved by any one government. I expect this sometimes has something to do with that great human urge to have *things one's own way*, although I also expect that many simply *do not get it*, the *it* being the necessity for emergency managers to base their preparations as much on collaborative planning and mutual assistance as their own needs and capacities. Consider the following excerpt from the Senate Committee on National Security and Defence Report (2008: 64-65) between John Ash,

Emergency Manager for Ottawa (remember this name for later) and Senators Ruth and Tkachuk:

Mr. Ash: What would happen if there were a dirty bomb-type of incident that involved the Hill? Is there an expectation that members of Parliament - the Senate and what have you - will receive preferential treatment with regard to decontamination?

Senator Nancy Ruth: Are you asking us?

Senator Tkachuk: I have no idea.

Mr. Ash: I have no idea myself, but I have asked some people within the federal government and there is an assumption that there would be ... We want to have that dialogue. We want to be frank and candid, throw the cards on the table and say this is where we are at, so we can close the gaps if necessary.

Senator Tkachuk: Are you pushing for that dialogue now?

Mr. Ash: Yes.

Senator Tkachuk: Are they being helpful or are they stalling you? What is happening? Maybe we can help you.

Mr. Ash: It was challenging for me, because I spent probably two years trying to find the right person to talk to.

Senator Nancy Ruth: We have the same problem.

The notion that we can *build* and *sustain* collaborative working relationships in Canada strikes me as easier said than done. For all the devastation that disasters cause, they also serve as catalysts for significant policy and practice changes. Fortunately, Canada does not have regular *disasters of scope* that force us to work with one another in ways that bring transformational changes to our systems and practices. This is not to say that changes do not occur, after all the Public Health Agency of Canada owes its existence to the SARS crisis in 2003. However, to the point of the Senate

Committee on National Security and Defence Report (2008: 2), these changes have not necessarily culminated in a national emergency response system and capacity that one might have expected for the dollars invested:

“During the intervening years [between the 1987 Edmonton Tornado and 2009] various orders of government have inched toward improved national coordination for disaster relief, but even “inched” often seems like a generous word, used here only because “centimetered” hasn’t come into common usage.

We also seem to have been unreasonably hesitant to adopt the core competencies and standards of emergency management that are common in the United States. Across the border, there has been a steady evolution of emergency management since the Cold War, marked by a number of significant achievements such as the National Mitigation Strategy, the Federal Response Framework and National Incident Management System, as well training and equipping of emergency personnel to ensure adequate response capacity. Moreover, there has been a “professionalization” of emergency managers through the NFPA 1600 Standards on Disaster/Emergency Management and Business Continuity Programs and certification programs for emergency managers at both the national and states levels.

This has not been the story in Canada. In fact, the lag in adopting standards and competencies has not only meant that we have been less likely to implement better practices in the first place, it also means that lessons learned during an emergency are not as likely to be grasped and implemented within the narrow *windows of opportunity* that typically follow sudden and catastrophic events. Without a foundation of standards and practices by which we can evaluate and critique what has happened, we run the age old risk of accepting lessons without adequate analysis. Instead, “lessons learned are

often ‘what people want to learn’ or [what] administrators may wish to have remembered” (McAllister, 2008: 2). This apparently does not exactly bode well for training either - between 2003 and 2009, Public Safety Canada spent a combined annual federal budget of \$12 million to provide CBRNE training to some 1,850 first responders and awareness training to another 10,400. “While Public Safety Canada has administered participant questionnaires and consulted experts and other government departments, it has not conducted a formal needs analysis for its first responder training” (Office of the Auditor General of Canada, 2009: 18).

At the same time, we are rarely called upon to work with one another for the *greater good* of imperiled citizens - which is exactly what major disasters demand from us. Instead, there remains a grudging willingness among the different constituencies of emergency managers and responders to plan together, however infrequent this may be. The Senior Officials Responsible for Emergency Preparedness does not sit down with the Expert Group on Emergency Preparedness and Response or the Council of Health Emergency Management Directors, the Council of Emergency Social Services Directors does not want to plan with the National Municipal Emergency Social Services Network, and no one wants to talk with the Council of Emergency Voluntary Sector Directors.

While there logically seems to be no good reason that governments and organizations cannot work together more effectively, getting everyone into the proverbial sand box seems to be a significant and ongoing challenge facing the Canadian emergency management community. But perhaps this should also not come as a surprise. For the most part - and this is supported by sociological research - we like things and people that are familiar to us and prefer consistency to diversity, even when the latter might be to our best interest.

Towards A ‘Canadian’ Culture of Preparedness

Perhaps it is also time to recognize that emergency preparedness in Canada can not be shaped in the manner it has been formed in the United States. But while we have been fortunate not to have experienced the devastating events that have shaped emergency management across the border, and while we continue to struggle to establish a community rooted in standards and competencies, that does not mean emergency management in Canada can not mature and develop.

Indeed, over recent years there have been significant developments in the field in Canada that deserve noting. Emergency management programs have been established at the University of Brandon in Manitoba, York University in Ontario and Royal Roads University in British Columbia. These universities are producing a new generation of emergency managers who are entering the field with a grounding in the principles and practices of good emergency management. At the same time, the formation of the Canadian Risk and Hazards Network in 2003 provides both a network and an annual forum to bring together practitioners, academics, researchers and policy-makers to collectively address the challenges which we face.

The past decade has also shown that it is possible to address the question of collaborative leadership. The Centre for Emergency Preparedness and Response (Public Health Agency of Canada) under the leadership of Dr. Ron St. John is a case in point. Beginning in 2002, the Centre held its first annual National Forum on Emergency Preparedness and Response. The Forum, which began with some 50 federal, provincial and territorial Government officials, eventually reached over 250 participants from all areas of emergency management and government as well as representatives from non-government and professional health organizations. While the themes of the National Forum were focused on emerging priorities - for example, reaching consensus on the National Framework for

Health Emergency Management and elements of a National Health Incident Management System - the Forum was always about recognizing the breadth and diversity of emergency management stakeholders (which is different from emergency management itself). As such, its overarching objective remained one of bringing people to together around a community of practice based on mutual respect and understanding.

It may well be that the National Forum, at least in its original form, has seen its day. Leadership thrives and wanes within any organization, in no small part because of personalities. But there is no lack of individual leadership in Canada; what seems to be lacking is a willingness to put aside competing interests, political agendas, and bureaucratic inertia in order to address the 'greater good'. We also tend to fall into the trap of seeing those not immediately involved in our own circle of planners and decision-makers as 'outsiders' who bring ideas and perspectives that only cloud the 'real' issues and slow down decision-making.

We need to recognize – as a principle of good emergency management – that we only increase our risks by not involving the wider ring of stakeholders and constituents. In *Flirting with Disaster*, Marc Gerstein (2008) points out that accidents and disasters are rarely accidental. Citing disasters ranging from the Challenger and Columbia space shuttle explosions to Chernobyl and Katrina, the author points that organizations that rely on a relatively small number of experts too often become prone to *group think* which fosters its own form of human bias, distortion, and errors of judgment. In explaining the Challenger disaster specifically, Jeff Forrest (2005: 2) has written that “although the destruction of the Shuttle Challenger was caused by the hardware failure of a solid rocket booster (SRB) "O" ring, the human decision to launch was, in itself, flawed ... The decision to delay a Shuttle launch had developed into an "unwanted" decision by the members of the Shuttle team. In other words, suggestions made by any group member that

would ultimately support a scheduled launch were met with positive support by the group. Any suggestion that would lead to a delay was rejected by the group”. Taking a broader but no less relevant view in *The Wisdom of Crowds*, James Surowiecki (2004: 1) observes that “any time most of the people in a group are biased in the same direction, it's probably not going to make good decisions ... Experts, no matter how smart, only have limited amounts of information. They also, like all of us, have biases”.

This implies not only a need for greater dialogue between emergency management organizations themselves but a real appreciation of the role and contributions that non-government, professional and community organizations have in emergencies and disasters. Emergencies and disasters do not generally happen to us; they happen to and are ultimately managed by communities, with recovery often driven by non-government organizations, churches and other community groups. As such, we can not see these stakeholders as part of a problem to be fixed; indeed, they are very much part of the solution itself. To this end, we would be well served by emergency managers and public servants who are not only experts in the field but who are comfortable in sharing both the responsibility and credit for good emergency management with their partners at all levels.

As we move forward in emergency management in Canada, it is perhaps more important now than ever to recognize that human nature seems to have a far greater part in how make decisions and work with one another than we might appreciate or like to admit. Underneath this, of course, lies the most fundamental factor of emergency management - relationships between people, trust and reciprocity. Regardless of who is in charge, a response is only as successful as the degree to which those involved cultivate relationships of inter-dependence and openness in communication and information sharing. This is the most basic of all lessons, learned in so many emergencies and disasters but somehow

lost upon just enough of us to make it ever so difficult to sustain. No doubt this is also part of human nature, but so too is our willingness and capacity to be do things differently, like picking up the phone when John Ash calls.

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Dave Hutton used to work for the Public Health Agency of Canada and currently serves with the United Nations.

Dave Hutton PhD
Programme Support Office
UNRWA, West Bank Field Office, Israel
d.hutton@unrwa.org

From the Practitioner's Desk

POWER RESTORATION IS NOT AN ENGINEERING PROBLEM

By: Ray Williams

Have you ever been affected by a major power outage? Probably. It seems most of us have, at one time or another. Why is it then, that after the outage someone comes along and writes a report that concludes that the power provider adhered to industry standards, and generally did the best that could be done under the circumstances? Is it really true that major outages and delays in restoration are part of the price we pay for the services we receive? Probably not.

It's no surprise that technically-oriented organizations, like power suppliers, often bridle at outside interference, given that they have the expertise, obvious responsibilities, and the resources. They also have the investment. So when a major outage occurs, they implement their restoration activities in accordance with priorities established well in advance. Usually they get high marks for this from the reviewing bodies, even though significant components of the community do not see power restored in an acceptably short period. From the utility perspective they did well; from the community perspective, they were negligent and uncaring. Why?

A major part of the problem is that utilities see the task as restoring power, whereas the real task is to restore a functioning community. So, for example, the utility sends a crew to a site of downed wires and is thwarted by the downed or dangerous trees, while somewhere else a community's public works crew tries to address debris and gets stalled by wires thought to be live. Had the utility planned and trained and exercised with the community, and in

short approached the problem as one of jointly restoring the functioning of the community, horror stories like the above would be less frequent.

Similarly, as I mentioned, the utility restores power in accordance with priorities established in advance. Naturally police, fire and hospital services get priority, but at some point it pretty much gets down to the greatest good for the greatest number. Thus utilities are surprised when community leaders criticize them for the priorities they pursued. Much of that criticism could be avoided by meeting with community leaders and setting restoration priorities together. After all, disasters disturb external relationships, and make priorities established within an organization inadequate.

Corporate efforts alone, including the mutual aid arrangements utilities justifiably take pride in, are usually insufficient in most major disaster events. Nevertheless and unfortunately, utilities often fail to effectively coordinate their planning with the communities they provide power to. Focusing on their own daily responsibilities and taking pride in their record of service and safety, they tend to forget that public perception is dramatically influenced by a disaster, and all the good work they do daily counts for little if their response is (or is considered to be) inadequate to restore the community to a functioning organism.

But it's not just planning and setting priorities that benefit from this broader conception of restoration. Exercises provide training of participants, improvement of plans, testing of concepts and equipment, and, notably, personal connections among the various response and recovery elements. So, given that electrical utilities provide virtually every organization the element it needs to function properly, you'd expect utilities to welcome and

actively participate in major community, state and federal exercises. But that was not what we found when James Lee Witt Associates examined the response of major utilities to a multi-state outage on the US east coast. My experience in the US Northwest also leads me to believe consistent and effective utility participation in exercises remains a goal.

We can illustrate the relationship of the utility to the community in another way. Utilities normally can trim or remove trees as necessary to provide safe continuous electrical service. But unless they cherish conflict, they need to act in a way that recognizes the role of trees in shading and beautifying the local environment, in reducing rapid rain runoff, in fostering biodiversity, in cleansing the air and in global warming. Quality of life and goodwill considerations must be factored into a utility's tree-management program, as there are complex community interests involved. Just as disasters make a utility's narrow vision painful for the community, so also a focus on the community is important day-to-day, as this tree-management example illustrates.

Utilities would be well advised to remember that, in a major disaster, politicians and others often look around for someone to blame. Sad but true. Until utilities act day-to-day on the idea that a major outage is a community event, and plan and exercise accordingly, their response and restoration efforts may well be considered inadequate by those who represent the community. Seeing major power outages as a utility event, and restoration as a utility responsibility, is a failure of mitigation.

Ray Williams has worked in the field of emergency management since 1974. For twelve years he was Deputy Regional Director of FEMA in the Pacific Northwest and Alaska. He was Project Director for James Lee Witt Associates' 2003 review of power provider response to Hurricane Isabel.

williams.ray@comcast.net

By: John W. Porco, PE, and Kenneth A. Zaklukiewicz - Michael Baker Jr., Inc.

This paper is intended to provide guidance to local jurisdictions on “core elements” that are essential to be included in an effective local Evacuation Plan. Evacuation is a process by which people move or are moved from a place where there is immediate or anticipated danger to a place of relative safety, offered appropriate temporary shelter, and when the threat to safety is gone, enabled to return to their normal activities or to make suitable alternative arrangements. Local jurisdictions should adapt the elements to any format and content that best suits local conditions. In developing the core elements, the authors reviewed a wide variety of plans and guidance documents from jurisdictions around the United States to identify “best practices” from these documents. In addition, the authors drew on their experience in developing evacuation plans for four large urban areas. An evacuation plan should include:

- 1. AUTHORITIES:** Planning considerations associated with evacuation procedures are complex and must account for existing local, State/Provincial, and Federal legislation and plans.
- 2. THREAT ASSESSMENT:** The Plan should include a comprehensive discussion of the types of incidents that might prompt an evacuation and the potential level of evacuation that each might require, specific to the individual jurisdiction. Examples might be flooding, earthquakes, and terrorism.
- 3. PLANNING ASSUMPTIONS:** Every Plan is founded on a series of Planning Assumptions, which “bound” the evacuation scenario. For example, based on observations, with advance warning, approximately 50% of jurisdiction population will voluntarily evacuate the area even before being ordered to leave based on their

perception of danger. Once an order is issued, up to 90% of the affected population can be expected to evacuate.

4. PHASES OF EVACUATION: The actions necessary to conduct an evacuation could be presented by phases, stages, or timing of evacuation activities. This encourages a more organized approach to both planning and implementation. For example, an evacuation might be conducted in four stages, Pre-evacuation contacts, evacuation alert or warning, evacuation order (precautionary or mandatory), and return.

5. LEVELS OF EVACUATION: The Annex should define levels of evacuation, because these will characterize the scope of the event and the actions which must be taken. There are a variety of ways to define evacuation levels, such as minor/routine, major, and catastrophic, based on the impact of the event. "Shelter in Place," the act of sealing off a room or building in order to isolate the occupants from an external threat and staying inside until the threat has abated, is another option.

6. ORGANIZATION/ROLES AND RESPONSIBILITIES: The Plan must include the organization structure of the evacuation implementation team, clearly indicating what agency is in charge of the evacuation operations. In addition, the Plan should set forth the roles and responsibilities of each agency and organization, local, State/Provincial, and private, that will be involved in the evacuation.

7. TRANSPORTATION: The primary mode of transportation in an evacuation will be privately owned vehicles. Therefore, the Plan must identify and include information on evacuation routes, particularly capacities. Evacuation routes used will be determined based on the location and extent of the incident. However, many individuals within a jurisdiction may not own a car or, for whatever reason, cannot drive or in an emergency may not choose to drive. To this number must be added those who find themselves temporarily without a

vehicle, such as commuters, college and university students, many tourists and others. So, supplemental transportation resources must be provided for these "carless" populations. Many urban areas have a significant supply of public transportation assets, most often busses, supplemented by rail transit, commuter rail, private operators, and taxicabs, as appropriate. The Plan should include listings of vehicles available, capacities, points of contact, and dispatch protocols. Another critical element of supplemental transportation services is the designation of pickup points to which evacuees would walk, which must be listed in the Plan.

8. SPECIAL NEEDS: The disastrous evacuation problems experienced in Hurricane Katrina emphasize the need for identification of transportation resources that can help evacuate people with disabilities during an emergency. The National Council on Disabilities defines such persons as those "whose needs for basic necessities are compounded by chronic health conditions and functional impairments, such as people who are blind; people who are deaf; people who use wheelchairs, canes, walkers, and crutches; people with service animals; and people with mental health needs." The provision of vehicles equipped with lifts capable of accepting passenger wheelchairs and similar mobility aids requires careful coordination. The Plan should include some estimation of special needs populations who will require specialized transportation services.

9. SHELTERING: About 10-20 % of evacuees can be expected to seek public shelter. The remainder will leave the area, stay with relatives or friends, or seek commercial lodging. So, the Plan should include comprehensive strategies for sheltering. Note that shelter-in-place should be considered as the initial response to a hazardous event.

10. ANIMAL CONSIDERATIONS: Ensuring for the transportation, care, and sheltering of animals must be considered in evacuation plans. Many people will refuse to evacuate their homes if they

cannot take their pets with them. It is estimated that up to 25 percent of pet owners will not evacuate because of their animals.

11. PUBLIC NOTIFICATION: Effective and informative notification to the public will be vital to convincing them that they should evacuate. The public must understand why they need to evacuate or shelter-in-place, how long they will need to plan to do so, routes to use, the location of transportation pickup points, the time required for evacuations, the availability of shelters, what they should take with them, how their pets will be accommodated, how they should secure their homes, and the security that will be provided when they are away from their homes.

A jurisdiction that includes all of these elements will have a framework for an successful evacuation plan for protection of their citizens.

More information is available from **John W. Porco, PE, and Kenneth A. Zaklukiewicz**
jporco@mbakercorp.com

EXERCISES IN SMALL COMMUNITIES

By: *John Newton, P.Eng. Ph.D*

Old pro or newbie, you know the need and value of exercises. Yet generating the enthusiasm and support across the desired breadth of organizations and agencies can seem a daunting challenge, especially when added to your daily workload and the unplanned events and emergencies that occur. Some, especially where annual exercises are required by legislation, attempt to substitute these emergencies. A natural tendency when one's schedule is crowded I will admit, though not the same as a controlled exercise where mistakes are learning opportunities, not casualties. If we then consider a small community where emergency staff

has many (too many?) hats, organizing, planning and holding an exercise can seem out of reach.

It doesn't have to be that way.

I recently moved to Salt Spring Island just off the east coast of Vancouver Island in the newly named Salish Sea. Over the last few years emergency efforts have begun to focus on community preparedness through a Pod Program. Pods are distinct geographic areas of the island (there are currently 50) where volunteer residents organize and develop emergency preparedness and response capacity. As the normal 72 hour rule could well be much longer for a major event on Salt Spring, particularly for the more remote Pods and those that depend on single road and power access, emergency services are promoting that residents work towards being self-sufficient for up to seven days. Once the foundation planning is done Pods are encouraged to hold tabletop training and information sessions. On November 21, 2009 fifty community members and emergency response staff (Ambulance, Communications, Fire, RCMP, SAR) assembled at Fire Hall #1 for an overview of current emergency preparedness activities. Emergency leaders of the Long Harbour Pod – all volunteers – then went through a simulated snowstorm and power outage, including coping with a severely injured resident.



In addition to a large map of the Pod area, the exercise used a basic process of about five verbal or written inputs

outlining the evolving situation, which were developed by the Fire Services' training coordinator. With snow making steep roads treacherous and downing power lines the Long Harbour team reviewed their resources (local skills

and equipment) to address the situation they faced. Forty observers from other Pods and the community emergency services contributed ideas and thoughts as the tabletop was run in a very open manner. This approach helped the event be a learning experience for everyone attending, rather than just the players. Other Long Harbour residents, asked hard questions and provided personal detailed information about trails, roads and people with needed skills. Emergency responders saw the capacity to cope and caring in the residents, as well as their weaknesses and lack of knowledge. As is all too often the case, the process of communications to other residents and the emergency agencies was uncertain and irregular.



With darkness descending rapidly the formal exercise came to a close with the players breathing a sigh of relief, but also shuddering a little and knowing in their hearts the severity of the situation were it real. There followed a lively debrief and a long list of potential actions (see sidebar) that chart a good direction, though require much effort, so will likely take some time to achieve. Nonetheless, over three hours a great deal of valuable experience was gained, the overall Pod Program on Salt Spring strengthened, gaps identified, and a valuable feeling of progress and readiness realized among the volunteers. It was one important step in the many that are needed for our island residents to be ready for local or wider emergencies. It only takes the efforts of a few to make a real difference and the

people in Fire Hall #1 that day are now better prepared to cope. Your community can achieve the same.

John Newton lives on Salt Spring Island, consults in business continuity and emergency management and is a member of the Island’s Emergency Management Commission. Contact: 250.653.4594 or j.newton@utoronto.ca

Exercise Outcomes:

- More exercises would be desirable
- Pod leaders need to identify alternates as preparedness is a neighbourhood effort
- Important to encourage residents to work on personal emergency kits
- Pod newsletters (even one page) help promote preparedness and inform residents
- Promotion in the local newspaper with cut-out ad to increase public awareness
- The better prepared people are at home, the better they can help their neighbours
- Better communications between Pods and Community Coordination Centre (CCC) means better resource allocation
- More training and more exercise sessions including radio and first aid needed soon
- Ensure a back-up of Pod resource lists are at the CCC should a Pod not have access to their list
- Combine a Pod exercise with a social event
- Consider realigning the boundaries of some Pods
- Utilize Neighbourhood Watch Information
- Sub-divide Pods by Post Box zones

Student & Graduate Papers

SOCIAL DISASTER RECOVERY

By Bryan Sali

Disasters are social phenomenon. If society is not present in some form then there is no disaster. It follows, therefore, that recovery is by nature a social event. Recovery is an often misunderstood event in which the sole purpose is to restore a damaged community to its pre-disaster state, insisting that citizens need to return to normalcy as soon as possible. However, this often replicates the vulnerabilities and places people, a potentially socially fractured group, in a vulnerable community once again. In order for recovery to be effective and sustainable it needs to be used as an opportunity for improvement, which may mean some sacrifices need to be made in order to attain that.

Long-term social and sustainable recovery needs to consider many aspects of community. The following list is not a complete list, it does not include the physical (engineering) aspects of recovery that are already done very well, but it does cover most of the points that must be considered for truly effective social recovery. Recovery needs to include considerations and allowances for:

- Health (Physical, Emotional, Psychological)
- Community artefacts
- Social Support Networks
- Special Needs individuals and groups
- Community social and cultural organizations
- Non-governmental and Government Recovery Assistance
- Memorials and anniversaries
- Homelessness and transient populations
- Cultural and language differences and inclusivity

- Physical community planning (e.g., New Urbanism)
- Employment issues (retraining, access to jobs, new opportunities, suffering industries)
- Media
- Economy and banking

Naturally each one of these items represents a massive planning undertaking and each has many considerations buried within them. It is therefore, necessary that recovery planning committees and teams be a large, diverse group of people from multiple fields and organizations who are experts and who are motivated towards making their community a better place to live.



Bryan Sali is the first graduate from the NAIT Emergency Management Diploma program

PLANNING COLLABORATIVELY USING A FUNCTIONAL NEEDS APPROACH

By: Susan Gilbert

Planning for the diverse and complex requirements of at-risk groups is a significant challenge for emergency practitioners. There has been a tendency to group people with disparate needs and varying capacities into a broad “special needs” or “vulnerable populations” category (Kailes & Enders, 2007). Compounding the problem, groups considered to be at-risk have been diversely identified as the very old, the very young, the poor, people with disabilities, non-English speakers, the socially isolated, the seriously ill, single-parent families, people with limited psychosocial coping

capacity, tourists (Buckle, Mars & Smale, 2000), residents of group living facilities, renters, ethnic minorities, large households, and the homeless (Morrow, 1999), among others.

Because of the wide variation in, and lack of consensus on the composition of at-risk groups, these terms have become essentially meaningless, contributing to imprecise planning, inadequate resource allocation and, in the case of Hurricane Katrina, deaths (Parsons & Fulmer, 2007).

The functional needs framework ([FNF] (Kailes & Enders, 2007), which is emerging as a better practice in the United States, provides emergency managers with a practical planning tool with which to plan for the diverse and variable requirements of all members of the community. Kailes and Enders have recommended an approach based upon common functional requirements designed to guide all phases of emergency planning and to improve resource management. These five common functional categories are: communication, medical needs, maintaining functional independence, supervision, and transportation.

In the fall of 2008, the Public Health Agency of Canada supervised a research study entitled *Planning Collaboratively with People At Risk Using a Functional Needs Framework*. The study, conducted by Susan Gilbert, was designed to investigate how Canadian emergency practitioners plan for and with people at-risk in their communities and focused on the following questions: Are Canadian emergency managers aware of the FNF? Are they using the FNF? What are the barriers to using the FNF? How do emergency managers who are not using the FNF plan for and with at-risk populations?

Fifty-seven research participants from four existing Canadian emergency management networks were invited to participate in the study: two Ontario-based community emergency managers groups, the Council of Emergency Social Services Directors, and the National Emergency Social Services

Network. Participants from these networks were chosen because planning for at-risk populations falls within the general mandate of community emergency management and within the specific mandate of Emergency Social Services (ESS).

Study findings revealed that two-thirds of emergency social services (ESS) practitioners were aware of the FNF, whereas less than one quarter (21%) of community emergency management coordinators (CEMCs) were aware of it, suggesting that planning issues as they relate to at-risk populations is currently viewed as an ESS responsibility, rather than a broad-based emergency management consideration.

The study's second finding is that most (92%) emergency practitioners are not using the FNF in their planning work. The most common reason given was that practitioners do not believe that they know enough about the FNF to use it in their planning efforts. It is interesting to note that the overwhelming majority of participants reported that they would consider using the FNF in future as a basis for planning for and with at-risk populations. The barriers to using the FNF appear to relate primarily to the lack of resources to implement the FNF into practice, such as planning templates.

Thirdly, when at-risk populations are considered in planning efforts, these efforts are neither consistent nor formalized. Practitioners noted that they plan in a general way for at-risk people, or on an ad-hoc basis, or when an emergency reveals the need to consider specific groups of people.

Collaborative planning strategies—that is, planning for emergencies with at-risk people and the advocacy groups that support them—are also not consistently employed. Collaborative efforts, such as inviting at-risk groups to participate in emergency training and exercises, invitations to participate on committees, take part in focus groups, and provide input on operational issues such as the purchase of emergency supplies for people with disabilities, are strategies used more often by ESS

planners (68%) than by community emergency managers (26%).

Finally, the study concluded that there is a significant lack of clarity with regard to whose responsibility it is to plan for and with at-risk people.

Based on these findings, the study recommends four key recommendations to improve planning for people at-risk in Canadian communities: (a) that the federal and provincial governments endorse the FNF; (b) that FNF-based training, tools and templates be developed; (c) that provincial FNF pilot projects be initiated; and (d) that collaboration with people at-risk be embedded in all community emergency management planning efforts.

A view of people from a “special needs” perspective is not a clear or comprehensive lens through which to plan for people at-risk in Canadian communities. All Canadians, at some point in their lives, may have a functional limitation caused by or coinciding with an emergency. Adapting community emergency planning to reflect a function-based approach will help emergency managers to ensure that all members of the community are included in preparedness, response and recovery efforts.

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Susan is a recent graduate of the Masters in Disasters and Emergency Management Program at Royal Roads University.

Susan Gilbert
Gilbert Consulting
psgilbert@rogers.com

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Topical Issues

HOUSEHOLD ECONOMIC DISASTER RECOVERY: CANADIAN APPROACHES

By: Brenda Murphy, PhD

This brief³ focuses on the household level, financial aspects of disaster recovery within a Canadian context. Disaster recovery is the fourth pillar of emergency management, after mitigation, preparedness, and response. Recovery is the most costly, least organized phase of the disaster management cycle as well as the phase involving the most diverse range of individuals, organizations and communities. Adequate funding during recovery is fundamental to helping a disaster-struck region rebuild. Household recovery takes many forms. It requires recuperation from the physical and psychosocial impacts of the event; recovery from income disruption and job loss; the re-building and repair of homes and other infrastructure; and activities to recoup the financial losses associated with all of these impacts. Further, as outlined by the *Emergency Management Framework for Canada*, published by Public Safety Canada, there is a strong relationship between long-term recovery and the prevention and mitigation of future disasters. Thus, disaster recovery is more than just returning to some pre-existing ‘normal’ level; it is an opportunity to increase long-term resiliency both for households and their communities.

In Canada, household financial disaster assistance in the recovery phase can be provided through many sources (see Table).

Types of Household Economic Assistance During Recovery

Type of Assistance	Description
Insurance	Household insurance policies wherein yearly premiums are paid and against which a claim can be made. This is the cornerstone of financial recovery in all developed countries.
Existing government programs	Government programs that incorporate disaster financial assistance into their mandate, e.g. AgriStability program
Disaster Financial Assistance Arrangements (DFAA) and provincial assistance programs	Formal government agreements that specify the type/level of financial assistance that will be provided after a disaster, the criteria and process to access the assistance and the government cost sharing formula
Ad hoc government disaster assistance and loans	Case-by-case government assistance and loan agreements put into place in the wake of particular disaster events
Non-government and business support	NGOs and businesses that provide disaster aid either as part of their mission (e.g. Red Cross) or that come forward with aid on an ad hoc basis (e.g. Wal-Mart)
Fundraising	On-going fundraising by organizations such as the Red Cross or targeted fundraising in the wake of a disaster by disaster oriented agencies, other organizations (e.g. church) or emergent groups
In-kind and goods oriented support	Donation of goods and services such as clothes, medical supplies, debris removal and home reconstruction
Self-funding and personal loans	Use of household’s savings and credit to finance recovery

Insurance is viewed as the householder’s responsibility and government disaster financial assistance is typically not available for insurable property. Households may be able to access various types of existing government funding during the

³ This brief is a summary of a longer paper to be published on the Canadian Risk and Hazards website as part of the on-line book entitled: *Disaster and Emergency Management in Canada*

**LIABILITY IN SEARCH AND
RESCUES: SHOULD
INDIVIDUALS WHO
NECESSITATE THEIR OWN
RESCUES HAVE TO PAY?**

Sheila M. Huss, *University of Colorado Denver*

Abstract

Over the course of the past several years, numerous disasters in the outdoors have received widespread attention by the media and the American public. Search and rescue (SAR) services in the U.S. generally have been provided free of charge to outdoor enthusiasts who need them. In light of the excessive costs associated with some rescues, the fact that many rescues are either the result of perceived stupidity or unwarranted, and other factors, there has been a shift toward charging individuals who necessitate their own rescues.

This paper examines the legal basis for free SAR services in the U.S., the rationale behind the shift toward charging for these services, and the implications of holding individuals liable for the cost of SAR activities. It reviews the formal shift toward individual liability for SAR services, looking specifically at state legislation and local policies, as well as some case law. Finally, the paper discusses the implications of charge-for-rescue policies.

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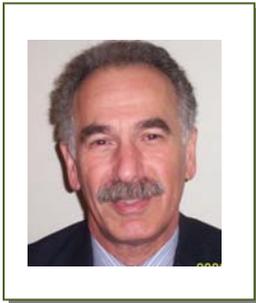
recovery period including unemployment insurance and agricultural support programs. Government aid programs are designed to recoup the economic losses of key resources (e.g. primary residence), not luxury goods. Although the DFAA provide substantial assistance for natural disasters, there is only case-by-case assistance available for biological and technological disasters. Ad hoc funding may also be provided for extraordinary natural disasters or to cover other special circumstances. Under recent changes to the DFAA, mitigation costs to reduce the threat from future disasters of no more than 15% of the 'estimated cost of repair to pre-disaster condition' may be eligible. Although each province/territory has its own set of policies regarding how to handle household financial recovery, there is significant harmonization with the guidelines laid out by the federal DFAA. Household recovery is also impacted by the capacity of communities, such as municipalities, to adequately deal with the economic aspects of disasters because local governments bear the brunt of responsibility for adequately managing disasters. Since not all local jurisdictions are equally resourced, some have more capacity to deal with disasters and assist the households within their area.

All of these avenues of economic assistance have specific criteria and limits attached to them; it is unlikely that any of these sources of aid will fully cover a household's recovery expenditures. Fund-raising and in-kind donations often offset some of the costs not covered by other sources. However, residual costs will almost always remain – these must be self-funded by the household, either through savings or loans.

Brenda Murphy is on the Board of Directors of CRHNet and an Associate Professor at Wilfred Laurier University bmurphy@wlu.ca

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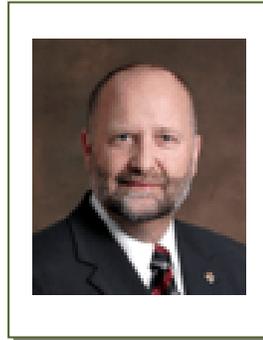
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Management Consortium Corp.

Email: rkuban@shaw.ca

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michel.dore@misp.gouv.qc.ca



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Email: lilyufa@yahoo.com



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Email: anderson@sfu.ca

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FCIP, CRM, CBCP**

Risk and Insurance
Management,
Business Continuity
Consultant

Email:
BCPRiskManagement@bell.net

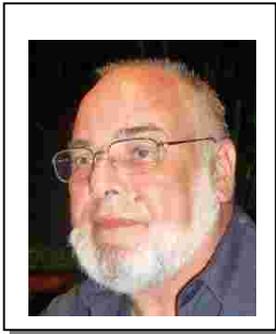


Marion Boon

Coordinator, Emergency
Management Program
School of Professional and
Continuing Education
Northern Alberta Institute of
Technology

Email: marionb@nait.ca





Jacques Descurieux

Meteorological Service of
Canada,
National Service Operation
Division

Email: jacques.descurieux@ec.gc.ca

Brenda L. Murphy, Ph.D.

Contemporary Studies and
Geography
Brantford Campus
Wilfrid Laurier University

Email: bmurphy@wlu.ca



C. Emdad Haque PhD

Professor
University of Manitoba

Email:
haquece@ms.umanitoba.ca



Ernest MacGillivray

Director / Directeur
Emergency Services/Services d'urgence
Public Safety/Sécurité Publique

Email: ernest.macgillivray@gnb.ca



Len Hancock

Director of Field Operations,
Alberta Emergency
Management Agency
Edmonton, Alberta

Email: lenhancock@shaw.ca



Lambertus C. Struik

Geologist/géologue
Geological Survey of
Canada/Commission
géologique du Canada

Adjunct: Earth Science
Department

Simon Fraser University
British Columbia, Canada

Email: bstruik@nrcan.gc.ca



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The Network creates an environment in which the hazards research, education and emergency management practitioner and business community can effectively **share knowledge and innovative approaches** that reduce disaster vulnerability. CRHNet can help to:

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