Tuesday, 31 October 2017

08:45 - 09:00

Conference Opening and Welcome

09:00 - 10:00

Plenary 1 Role of the Insurance Industry Post Disaster Aaron Sutherland,

Vice-President, Pacific Region Insurance Bureau of Canada, Vancouver, British Columbia

2017 saw the most destructive wildfire season in BC history, with over 1.2 million hectares burned, more than 200 homes destroyed and insured losses topping \$127 million. These wildfires, and the damage they caused, are more alarming evidence that extreme weather events have increased in both frequency and severity in Canada. Individuals, businesses, and governments are all experiencing a rapid rise in the costs of natural catastrophes. Focusing on the BC and Fort McMurray wildfires, IBC will highlight the critical role the insurance industry plays following a natural disaster, as second responders, arriving on the scene within days of the outbreak of fires, and supporting recovery as a strategic partner to local and provincial governments throughout the rebuild. IBC will share the lessons learned and best practices that can be shared across the country.

10:00 - 11:00 Coffee Break – with the Exhibitors

11:00 - 12:00 Sessions A

A1: Psychological First Aid

Carolyn Sinclair, *Team Lead* Provincial Mobile Response Team (MRT), Health Emergency Management, British Columbia

Psychological First Aid (PFA) involves humane, supportive and practical help to people impacted by or exposed to critical incidents and disasters. PFA provides a framework for supporting people in ways that respect their dignity, culture and abilities. In this breakout, attendees will be introduced to PFA strategies designed by the World Health Organization (WHO) as well as given some practical tips and tools on how to help themselves as well helping others responsibly by protecting people from further harm.

A2: Project Management Methodology for Post Disaster Reconstruction

Ivan Rincon *Program Manager* Ocean Networks Canada Victoria, British Columbia **Teron Moore** *Business Analyst* Ocean Networks Canada Victoria, British Columbia

Disasters and crises are, by nature, accompanied by uncertainty. The list of reconstruction priorities is longer than one person can tackle alone without support. Leadership and the ability to envision solutions are essential to managing projects of all types. But what is also essential is the means to practice the established principles of project management in order to achieve a

successful outcome. To address this, the Project Management Institute (PMI), the leading professional organization for project managers around the world, has developed the Project Management Methodology for Post Disaster Reconstruction, aimed at those in the disaster recovery field who are providing the kind of leadership and clarity of thought needed to help in the reconstruction effort. This methodology is available through the PMI Educational Foundation as a contribution from the organization to the community.

Project management and its related processes are the keys to staying organized and focused, and to accomplishing the solutions a community needs after being hit by a disaster. Reconstruction project management is about solving problems and delivering intended results through an organized, structured methodology. Project Management Methodology was developed for global application by relief agencies, non-governmental organizations (NGOs) and/or governments following a major disaster. It is based on A Guide to the Project Management Body of Knowledge (PMBOK Guide), and is meant to enhance collaboration and consistency, as well as quality and accountability, of projects undertaken in a crisis/disaster rebuild environment.

A3: North Shore Fire Services Major Operations Plan

Brian Hutchinson *Assistant Fire Chief*, District of North Vancouver Fire & Rescue Services North Vancouver, British Columbia

In 2016 the North Shore municipal fire services (District of North Vancouver Fire & Rescue Services, North Vancouver City Fire Department, West Vancouver Fire Rescue) came together to enhance post-disaster response and organizational resiliency. Reflecting the approach taken during routine operations known as Shared Services; a collaborative effort was implemented to align their operational stance in the event of significant hazards befalling this geographic area. This was a bottom-up initiative, participatory in nature, and inclusive throughout. Initially a nine person committee, the Fire Services Emergency Management Advisory Committee (FEMAC) was formed with equal representation from all three fire services, with advisory participation from fire services management and North Shore Emergency Management. The FEMAC worked over a ten month period to assess current capabilities. identify gaps, and build out a plan that was exercised across the North Shore, involving all fire services personnel on four separate dates. This plan, known as the Major Emergency Operations Plan (MEOP), has established a standard for future projects and programs. Integral to the process, was outreach to academic institutions and emergency management organizations to form a group of volunteers to conduct arms-length research within the culture of the fire service: to identify perspectives of North Shore response personnel in regards current capacities, capabilities, gaps, and concerns. This Volunteer Research Team (VRT) of eight individuals conducted quantitative and qualitative research through focus groups and surveys. A final report on the findings and the primary themes was presented to the FEMAC, which aided in ensuring the MEOP evolved into a realistic, practical and operationally relevant document. This model of collaborative planning for major events and disasters is as applicable for use in metropolitan areas like Vancouver, as it is for smaller communities that will need to align their actions and resources during times of crises.

A4: City of Calgary ESS Structure and why it works

Bonnie Lewin BCRP *ESS Planner* Calgary Emergency Management Agency Calgary, Alberta

The City of Calgary Emergency Management Agency (CEMA) ESS program has developed a fluid and hybrid Incident Command Structure (ICS) to manage ESS centres that open in the City of Calgary. The structure represents an ICS structure that meets the needs of workers and evacuees. It identifies the Incident Commander (ESS Lead) who is located at the Emergency

Operations Centre (EOC) and is a CEMA employee who understands the EOC structure and role.

ESS activations in Calgary have shown the importance to have all functions in the ESS Centre report to the ESS Centre Manager and this maintains an appropriate span of control. By making this change the Centre Manager maintains a better understanding of the centre and services being offered to evacuees and can efficiently delegate work. Communication to and from the EOC is a challenge for the Centre Manager and by having the ability to delegate responsibilities allows the manager to focus on the activities at the ESS Centre.

This structure allows the City of Calgary to leverage their current trained ESS membership (City of Calgary employees) with untrained employees who want to help during activations. ESS Friends was a program used during the 2016 Fort McMurray Wildfire response when the EOC put a callout to ESS members and asked them to "Bring A Friend"; (non ESS member employee) to work at the ESS Centre. The ESS ICS chart identifies the functions ESS Members and Friends can occupy and when required functions City of Calgary public volunteers can perform at an ESS Centre.

A5: Business case for Resilience and Continuity Project

Barry Huybens *Managing Director* iStrategic Advisors Inc. Edmonton, Alberta

So the world, your region, or your organization has just experienced another major crisis or disaster incident. Your corporate executive are asking how well prepared the enterprise is to handle a similar or next event. Your response is clear; we have a lot of work to do. As you anticipated, your executive ask for a compelling business case and project plan for addressing such a project. You recognize that tackling an effective resilience and continuity project takes a lot of time, effort and commitment. So before you start the project how will you position the business case for this important and yet challenging project before those executive? How will you tell the story of the project approach, the requirement for internal staff and external expertise, and the value of this to the enterprise? You seek out templates and advice from social media, fellow experts and then attempt your own research seeking good examples of such business cases and plans. You come up empty handed in your search for lessons in the development of these business cases and project plans. Now what do you do? This session will provide the participants with pragmatic methods for developing a business case and a plan for organizational resilience and business continuity projects. More importantly this session will put forward the importance of not just a one-time project but rather, the basis for a sustainable program. We will look at actual examples of these business cases and plans while considering case studies and other useful resources and research supporting this topic. The audience for this session is wide-ranging from Risk Managers, Emergency Managers, Crisis Managers, Resilience Executive, and Business Continuity Management Leads.

A6: Exploring Perceptions of Disaster Risk on Southern Vancouver Island

Brittany Schina

Senior Project Manager, Emergency Management British Columbia Saanichton, British Columbia

Southern Vancouver Island represents a unique geographic area exposed to natural and anthropogenic threats. The most significant threat the region faces is perhaps low frequency, high consequence earthquake events due to the Cascadia Subduction Zone, a region exposed to crustal, sub-crustal and subduction interface earthquakes.

Objectives. The goal of this research is to provide information to emergency management practitioners regarding the public perception of disaster risk and the public level of preparedness in the study sites surveyed. These objectives are addressed by: exploring what threats the

general public perceive themselves to be at risk from, exploring measures of preparedness and exploring preferred avenues for hazard communication.

Methods. Members of the general public from the Capital Region and the Cowichan Valley Region were surveyed regarding their perceptions of disaster risk, and corresponding preparedness levels. Participants were also asked questions to identify what methods of outreach and communication would reach them best with disaster information to increase awareness and preparedness. Research uncertainties are identified and addressed. Results. Descriptive analyses suggest that factors such as gender and geography had some influence on disaster risk perceptions among the general public. In addition, household income, levels of education and time spent living on Vancouver Island were all found to have a significant influence on individuals preparedness levels. Finally, significant differences were found by gender and region for how individuals preferred to receive hazard information. Conclusions. Perceptions of seismic risk have increased on southern Vancouver Island, but gaps remain in individual knowledge of disaster risk and in levels of individual preparedness. In recognition of these gaps, this study provides important information on disaster risk perceptions that open up areas for further discussion about how to improve preparedness and disaster communications.

12:00 - 13:30 Lunch 12:30 - 13:15 Lessons from London!

Randy Hull (retired City of Winnipeg Emergency Coordinator) and Brian Kayes (City of Brandon Emergency Coordinator and instructor at Brandon University) will be presenting a stage play, *Lessons from London!* The play is set in London, England in 1666 and uses the plague of 1665 and the great London fire of 1666 as a means to examine emergency management. Through humour and song you will find that very little has changed in the last 350 years! There will be opportunity for delegates to participate by singing and reading in unison from a booklet provided.

13:30 - 14:30 Sessions B

B1: Ethical Considerations for Emergency Management in BC

Dr. Bashir Jiwani *Ethicist and Director* Fraser Health Ethics and Diversity Services Surrey, British Columbia

This session will explore the ethics dimension of emergency planning and response. It will look at key dimensions of system-level decision-making and the three elements of resource allocation questions:

- 1) the criteria (who gets what at a meso and micro level?),
- 2) who would use these criteria? (who is applying the criteria?), and
- 3) by what process will this occur?.

The approach proposed will focus on the integrity of the people, teams, institutions and the systems involved in emergency response situations.

B2 Enhancing Land Based Hazardous Spills Management in BC

Cameron Lewis

Executive Director Environmental Emergencies and Land Remediation Branch, Ministry of Environment & Climate Change Strategy Victoria, British Columbia

The BC Ministry of Environment's Environmental Emergency Program (EEP) is responsible for responding to spills of hazardous materials and harmful substances. EEP works with first

responders, all levels of government, First Nations and stakeholders to prepare for and respond to oil spills, chemical spills, and spills of any substance that could harm human health and/or the natural environment. Ministry Environmental Emergency Response Officers, Provincial Incident Management Team members and technical specialists are strategically deployed to assess the incident, and provide guidance and technical expertise in the event of an emergency.

B3: Accessibility of Metro Vancouver Fire Personnel

Stephen Traviss *Director of Human Resources,* City of Port Coquitlam Port Coquitlam, British Columbia

Emergency plans require that first responders travel to their workplace; however, their ability to access their workplace from their home has not previously been evaluated. This report outlines the accessibility of Metro Vancouver's fire personnel relative to their regular workplace and home location immediately following, and in the hours and days after a damaging earthquake.

In the event of a damaging earthquake, transportation infrastructure will be disrupted limiting accessibility in the region. By examining the travel routes required by fire personnel, emergency planning can address any anomalies or identified gaps in service needs. An inventory of Metro Vancouver fire personnel was compiled. This data was analyzed and assessed to determine the accessibility of fire personnel resources throughout the region. Based on this analysis, it was determined that there will be a shortage of fire personnel resources in many Metro Vancouver municipalities following a damaging earthquake. To lessen these shortages, resource sharing and alternative travel methods and routes will need to be considered. Some municipalities, however, may have an oversupply of fire personnel resources if region-wide policies direct fire personnel to report to their home municipality in the event they are unable to return to their regular place of work.

This report is intended to provide information to guide the development of regional policies to ensure that available fire personnel resources are deployed in the most beneficial and effective way. To be most effective, other first responder and receiver agencies should consider a similar evaluation so the data can be assessed collectively. Given that a damaging earthquake in Metro Vancouver will impact the Fraser Valley Regional District, Fraser Valley communities should also be included. It would be beneficial for the provincial government to share in the responsibility to compile and analyze the data to encourage participation.

B4: Building Strong Communities Through Partnership

Dan Derby	Matthew Colling
Deputy Director	Senior Manager, BC & Yukon Disaster Mgt.
Canadian Red Cross	Canadian Red Cross

Whether families lose their home by fire or flood, or an emergency disrupts the lives of an entire community, disasters are bigger than all of us. Disasters are occurring more often, while the demands on local authorities and Emergency Program Coordinators are increasing. Partnerships are one of the most effective means of leveraging personnel and resources to be ready for the time when communities are stretched during response.

In this session, participants will learn how a partnership between the Regional District of Kootenay Boundary and the Canadian Red Cross is building the RD's capacity to respond to disasters by leveraging and enhancing local resources through a client and community centred approach. Presenters will share how the partnership has grown from idea to action with examples from small-scale house fires and floods to the wildfires of 2015 within the region. It will also demonstrate how volunteers rely on their formal and local training while drawing upon outside experience responding to the Syrian Refugee Arrival and the Fort McMurray Fire to lift beneficiaries from relief through recovery in the RDKB.

B5: BCP and Natural Disasters – Mitigation Response & Recovery Randy Smith

Manager, Business Continuity & Emergency Response Brookfield Global Integrated Solutons

Canadian organizations and companies are increasingly being impacted by natural disasters and events such as floods, wildfires, tornadoes and ice storms. For some events, there is little time to prepare and mitigate but for most events there is enough time to execute a well-defined mitigation strategy in advance of a disaster leading to more effective response plans and recovery strategies to reduce the overall impact.

This break-out session will review various mitigation strategies to reduce the overall impact of natural disaster while reviewing various natural disaster response and recovery protocols and techniques to enhance over all resiliency. The presentation will look at mitigation, response activities and impacts from natural disasters on the corporate real estate industry with a multi-property management perspective including office, retail, industrial, critical environments, institutions and other specialty facilities

B6: Research 101: A Practical Research Primer for EM

Dr. Ron Bowles *Associate Dean,* Justice Institute of British Columbia New Westminster, British Columbia

Emergency management and justice and public safety generally is a rapidly evolving field with a growing academic foundation. As practice becomes increasingly evidence-informed, practitioners are called upon to examine and incorporate research activities and research findings into their work. But the term Research covers a wide range of perspectives, approaches, and procedures. This session, is a primer for emergency management practitioners that explores key research concepts and procedures within an applied research framework developed by JIBC's Centre for Applied Research. This will be an applied session, using case studies and real world examples to relate key research concepts to the research processes of describing emergency management practice, exploring its depth and breadth, then developing and extending theories of practice. Participants will encounter a practical framework for critically appraising and incorporating existing research into their own work and models for developing and participating in new applied research projects.

14:30 - 15:00 Coffee Break

15:00 - 16:00

Plenary 2 Joint Municipal Regional Disaster Debris Management Plan

Dipak Dittani Deputy Director - Engineering City of Burnaby, British Columbia Clarence Lai Senior Project Manager Integrated Partnership for Regional Emergency Management Surrey, British Columbia

On December 2016, the Metro Vancouver Regional Engineers Advisory Solid Waste Sub Committee (REAC SWSC) Working Group on Disaster Debris completed the development of the Joint Municipal Regional Disaster Debris Management Operational Plan. This Plan utilized a regional approach to provide a framework for local authorities within the Metro Vancouver region to create their own debris plans. The Plan has an operational focus with tools (e.g. site identification matrix, equipment classification, debris estimation), which is scalable to be used for most debris generating events (e.g. windstorms, floods, earthquakes) and flexible for local authorities to address their individual needs, as well as continuity with the Metro Vancouver region. The Plan was validated in June 2017 as part of a regional tabletop discussion based exercise that included solid waste engineers and emergency managers from local authorities, the Integrated Partnership for Regional Emergency Management (IPREM) and Emergency Management BC.

Following the regional tabletop exercise, the Plan was forwarded to the Metro Vancouver Regional Administrators Advisory Committee, Regional Engineers Advisory Committee and the IPREM Steering Committee with a recommendation that local authorities within the Metro Vancouver region prioritize the integration of the Plan within their emergency plans within a two year time frame. Institutionalizing the Plan will rest with the respective decision makers within individual local authorities.

The audience will have an opportunity to see the development process of the Plan, receive highlights from the relevant stakeholder meetings, outcomes from the regional tabletop exercise and the status on the adoption strategy with local authorities.

16:30 - 19:00 Social Night

Wednesday, 01 November 2017

08:30 - 10:00

Plenary 3 - BC Opioid Overdose Emergency

Dr. Jane Buxton	Carolyn Sinclair	Brian Twaites
Professor	Executive Director	Advanced Life Support Paramedic
School of Population &	Police Victim Services &	BC Emergency Health Services
Public Health, UBC	Team Lead for the	
	Provincial MRT	
Vancouver, B.C.	Vancouver, B.C.	Vancouver, B.C.

In April 2016, British Columbia's provincial health officer declared the province's first Public Health Emergency in response to an unprecedented increase in illegal drug overdose deaths. Despite rapid implementation and scale up of numerous evidence-based strategies and the diligent efforts among those on the front line, overdose deaths remain at record levels. A year and a half into the emergency, BC has shifted its response focus to strengthen successful interventions and implement novel approaches to prevent harms associated with an ever-evolving contaminated illegal drug supply that impacts all corners of the province. A panel of health, emergency response, and public safety representatives will lead the plenary session and present the latest data and response efforts underway.

10:00 - 10:30 Coffee Break

10:30 - 12:30 Sessions C

<u>C1: Orlando – Review of surge response and issues from the nightclub attack</u> Michael Loehr

Chief

Office of Emergency Preparedness and Response Washington State Department of Health Washington State, United States of America

On June 12, 2016, Omar Mateen, a 29-year-old security guard, killed 49 people and wounded 58 others in a terrorist attack/hate crime inside Pulse, a gay nightclub in Orlando, Florida. He was shot and killed by Orlando Police Department (OPD) officers after a three-hour standoff. It was both the deadliest mass shooting by a single shooter and the deadliest incident of violence

against LGBTQ people in United States history. It was also the deadliest terrorist attack in the United States since the September 11 attacks in 2001.

This presentation will focus on the actions taken and lessons learned in managing the mass casualties from the health perspective.

<u>C2 Selecting the Right Tool for the Right Job : An Introduction to Transportable Satellite Communication Systems</u>

Peter Anderson

Associate Professor, School of Communication, Simon Fraser University, Burnaby, British Columbia

In the past decade a host of portable and mobile satellite systems have emerged and gained interest within the emergency management community. These systems have been proposed for use in regions where there is an absence of other public telecommunications services and in urban areas when local services are disrupted. They support a variety of applications ranging from basic voice telephone to GPS tracking, text and email messaging to full Internet access, with end-user terminals varying from large fixed installations to small mobile devices. Many of these systems use different technology platforms, support different capabilities and range in cost and ease-of-use.

All terminals require clear line-of-sight paths to orbiting satellites. For many areas of B.C., highrise buildings, mountainous terrain and other physical obstructions can pose serious challenges for ensuring reliable connection. Consequently, if satellite communications are to be considered for emergency purposes, proper site assessment and extensive application testing should first be conducted to ensure that terminals are situated in appropriate locations and align with operational needs.

This presentation will provide an overview of current and emerging satellite systems, their characteristics and potential suitability for various emergency communication applications, along with best practice usage recommendations.

C3: Rapid Damage Assessment – Provincial Model and Delta BC's Functional Exercise

Dr. Ron Bowles	Mr. Chad
Associate Dean	Civil Engi
Justice Institute of British Columbia	Corporatio

Mr. Chad Taylor *Civil Engineer* Corporation of Delta British Columbia **Ms. Paula Kolisnek** Senior Policy Analyst Corporation of Delta British Columbia

Dr. Bowles will outline a model for the use of credentialed and non-credentialed personnel to perform rapid damage and safety assessment in an emergency. BC Housing, the Architectural Institute of British Columbia (AIBC), the Association of Professional Engineers and Geoscientists of BC (APEGBC), and Justice Institute of British Columbia (JIBC) have partnered in a unique research program to design a province-wide, first-in-Canada, comprehensive building damage and safety assessment (DSA) system to enable communities to manage and recover more quickly from major emergencies. Damage assessment involves the assessment or estimation of the type, quantity, cause and/or cost of damage to a building. Safety Assessment is the assessment of the immediate usability of the building, and in some cases, the identification of short-term countermeasures to reduce risk in order to be occupied. Chad Taylor and Paula Kolisnek will follow up with information the Corporation of Delta developed to conduct a comprehensive Disaster Damage Assessment to assess the overall impact that an earthquake would have on the municipality. It provides a snapshot of the extent and boundaries of the damage to the community as well as to Delta's critical infrastructure and facilities. It helps determine the scope of response and location of the critical needs. In April 2017, Delta ran a functional exercise to test the Disaster Damage Assessment in Tsawwassen using first responders from Fire, Police, Engineering Operations and Bylaws. Delta's first responders assembled at Community Emergency Coordination Centre #2, as per Delta's Staff Earthquake Protocol, and undertook a community-wide "windshield" assessment of 35 critical

infrastructure sites in less than 3 hours. Once the assessment was complete, the status of Delta's infrastructure was conveyed to the Emergency Operations Centre using amateur radio communications. This presentation will discuss how Delta established its damage assessment process, how it was designed, implemented and exercised.

C4: Bridging the Challenges – ESS Volunteer Recruitment, Retention & Recognition

Jackie Kloosterboer

Emergency Social Services Director City of Vancouver Program Vancouver, British Columbia

Eileen Grant,

Manager, Oak Bay Emergency Program Oak Bay, British Columbia

Every ESS program relies on the commitment, engagement and passion its volunteers bring to the program to realize its goal of having volunteers trained and ready to help evacuees in an emergency or disaster. ESS volunteers come to the program with the objective to help their community respond to and recover from an emergency. Recruitment can be a challenge, but an equally difficult challenge can be retention, especially when the volunteer's expectation of helping to make a difference in their community cannot be realized in the immediate future. Do we, as program and volunteer managers, need to reframe our goals and expectations to meet both sets of needs? Do we need to work differently with our partners to build stronger, more robust volunteer teams? This presentation will look at both a small and a large community's attempts to bridge the challenges and build a team of volunteers working together to build a disaster resilient community.

C5: Cyber Attack and Ransomware

Gary Perkins *Executive Director* / Chief Information Security Officer Province of British Columbia Victoria, British Columbia

This session will provide information on the actual vs. perceived threats of cyber attack and ransomware such as IWannaCry and others. A full description of the presentation is not available at this time.

C6: Vulnerability, response and resilience to post disaster fuel supply challenges Stephanie Chang.

Professor, University of British Columbia Vancouver, British Columbia

Fuel availability is fundamental to recovery from disasters and resumption of normal activities. Coastal communities in BC are served by a hub and spoke fuel delivery system, with the hub in a highly vulnerable location and the spokes entirely reliant on marine transport. We conducted 19 interviews with 30 experts and surveyed a further 22 representatives of key stakeholders, from government officials to fuel distributors. These interviews point to key system vulnerabilities borne of a gap between perceptions and actual organizational preparedness. They also revealed institutional barriers to taking actions that would improve resilience through pre-planning and preparedness. An expert-informed transportation model was created using an analytic framework for community resilience that assesses the regional fuel delivery system's vulnerability in the event of disasters such as earthquakes, as well as opportunities for enhancing response and increasing resilience. Findings from this project indicate the need for an integrated approach to managing the risks prior to an event occurring. This includes creating agreements across agencies, acknowledging differing risks and vulnerabilities between maritime communities, and having plans in place with specific and clear responsibilities. These results will improve decision-making for disaster resilience and will benefit those involved with

emergency planning and management, the trucking and shipping industry, and those broadly associated with the maritime transportation system.

12:00 - 13:30 Lunch

12:30 - 13:00 Award Presentations

EPICC - Friends of EPICC Award – Don Bindon

Pacific Northwest Preparedness Society

- Award of Excellence Dave Cockle
- Marie Rogan Lifetime Achievement Award John McKearney •

13:30 - 14:30 Sessions D

D1: BC Mobile Medical Unit DTES Deployment

Peter Hennecke

Clinical Operations Director Mobile Medical Unit, PHSA Vancouver, British Columbia

From December 13, 2016 to May 19, 2017, in partnership with Vancouver Coastal Health (VCH) Providence Health Care (PHC) and BC Health Emergency Services (BC EHS), the Mobile Medical Unit (MMU) was deployed to Vancouver's Downtown Eastside (DTES) on 58 West Hastings Street as an emergency measure to help care for an unprecedented number of overdose patients in the downtown core

The unit served as a satellite emergency department for patients who overdosed and helped to take pressure off local hospital emergency departments. Having the MMU set up in the DTES meant BC Ambulance paramedics had a closer option to get patients immediate, necessary treatment which allowed them to transfer patients more quickly and get back on the road. The MMU was also able to provide a welcoming space where patients had access to resources and support in the community, facilitated by outreach workers and addictions physicians. During the 163 day deployment a total of 3,064 patients visited the MMU; an average of 25 patients presented per day.

In June, 2017 the team received a much deserved BC Health Care Award of Merit for Collaborative Solutions. Peter Hennecke, Clinical Operations Director of the BC MMU will provide attendees with more insight to the services and support that were provided during this extensive deployment. He will also discuss the other offerings of the MMU which includes health emergency response, business continuity, clinical education and health consultation services throughout BC.

D2: Summary of multiple agency information sharing project funded by the **Building Canada Innovation Program**

Steve Newton	Dan Erikson
Regional Manager	Chief Operations Officer
Emergency Management BC	Lightship Works
Kamloops, British Columbia	Kamloops, British Columbia

In January 2017, the Canadian government, through the Building Canada Innovation Program, funded a project to test information sharing between a number of agencies in British Columbia. The objective of this project was to assemble and share a comprehensive set of information related to climate, weather, and emergency response. This project, supported by the federal and BC provincial government, demonstrates how a diverse set of organizational information practices can inform a common operating platform. Two major consortiums are involved in this project: - the Climate Related Monitoring Program (CRMP) consisting of BC Hydro, Ministry of

Transportation and Infrastructure, Ministry of Forest Lands and Natural Resource Operations (Wildfire), Ministry of Environment, and Environment Canada together with additional meteorological operators in BC working to collate and annotate meteorological data as a common resource for climate change monitoring, adaptation and preparedness and; - the Emergency Management consortium, consisting of Emergency Management BC, PEP Air/CASARA, Ground Search and Rescue, BC Oil & Gas Commission, Nav Canada, BC Environment Spill Response and other organizations testing the data sharing and situational awareness capabilities of the innovation in the context of emergency management and response. Information sharing and communication is identified as an area for improvement during the hot wash of nearly every emergency response exercise. Through this presentation, we'll present the project outcomes, and demonstrate that information sharing is easier and more cost-effective than it's ever been, with a number of practical benefits for emergency response. We'll summarize the lessons learned during this project. We'll review user stories from testing organizations, examine some of the technology and sources of data used, and share the best practices developed. This talk builds on a presentation at the 2016 EPBC conference (Can Technology Improve the Event Board), and demonstrates a larger commitment to systems interoperability by the federal and provincial governments.

D3: What Transport Canada can do for First Responders

Monique Lavoie

Remedial Measures Specialist, Transport Canada Ottawa, Ontario

Transport Canada (TC) will address what the First Responders should do in the case of a dangerous goods incident. Specifically, it will elaborate on how Transport Canada can assist First Responders at incident sites and define the roles and responsibilities of the Canadian Transport Emergency Centre (CANUTEC) and the Remedial Measures Specialists (RMS). TC will also discuss the content of the Emergency Response Assistance Plan (ERAP), the process to activate an ERAP, and how Protective Direction 36 can help emergency planners prepare their all-hazard plan. Additionally, it will provide an overview of the 2016 Emergency Response Guidebook (ERG), as well as present the new Awareness Program responsible for the development of the Transportation of Dangerous Goods; 4 Safety Awareness Kits that were developed to address four different audiences (General Public, Communities/Municipalities, First Responders and Industry).

D4: Animal Sheltering – Its about family (part 1)

Heather Ferguson

Regional Coordinator Southwest British Columbia Canadian Disaster Animal Response Team Surrey, British Columbia

Pet services is actually about people and families. It can be an intensely emotional situation with people completely focused on the safe recovery and reunification with their pets. Many times we have heard "things can be replaced, they are all that matters."

This session is to lead the students through challenges faced by pet services volunteers at the reception centre with an embedded animal shelter and the dealing with evacuees at the event site.

For ESS volunteers charged with the sheltering and care of companion animals, the task can seem simple, but the reality can be much different than a table top exercise can portray.

Challenges arise from the broad range of companion animals evacuees can have, a pet wallaby made the news earlier this year, raising the question of what animals are in the area and what is considered a "pet".

First-hand experience has taught the value of liaising with emergency services as to location and number of pets, securing transport for animals from the event site to either the shelter or to an emergency clinic, tracking pets evacuated out when the owners are not at home, as well as decontamination and wellness evaluations.

Post event, lack of pet-friendly temporary housing and recovery of lost pets that escaped during the event need to have brought evacuees to pet services for help.

Having a successful pet services shelter and reunification team, needs the same forethought as any reception centre and group lodging scenario.

D5: Understanding Risk

Bob Manson, *Emergency Management Coordinator* Health Emergency Management British Columbia Vancouver, British Columbia

"Risk" is a term that is ubiquitous in the world of emergency management. We perceive it, analyze it, interpret it, discuss it, and at times, make great efforts to deal with it. Individuals, homeowners, financial institutions, organizations, businesses, governments, emergency managers and all manner of other stakeholders deal with risk in some way every day. Its application spans the gamut from recreational activities to life-and-death situations with catastrophic potential. However, do we really understand risk? Can it really be measured in any meaningful way? Can it actually be managed? And most importantly, when we are discussing it, does everyone in the conversation have the same understanding of the concept? This presentation will examine the concept of risk to explore what it means to different people and its role in their decision-making. Some of the research on risk perception and risk management will be explored, as well as the role of risk management in some case studies. Without delving too deeply into academia, we will examine how efforts to address risk can actually make things worse, how risk assessments can often turn into nothing more than a naming exercise rather than precipitating change, and how the terms and language we choose to use can often be misleading.

Those in the field of emergency management will benefit from this examination of this four-letter word and how it influences our world every day. This presentation should serve as a call to action for those in the emergency management field to gain a better understanding of risk, how it is perceived and how it should best be addressed, and what it means to different people. As professionals, we need to have a consistent understanding of risk so that we may have meaningful discussions and get better utility from its application.

D6: Catastrophic Earthquake Preparedness in BC - An Overview of Emergency Management BC's Technical Seismic Projects

Robert White

Seismic Specialist Emergency Management BC Saanichton, British Columbia

Emergency Management BC (EMBC) continues to work with its partners to enhance the Province's preparedness for a catastrophic earthquake event through a variety of technical seismic projects focused on seismic hazards and risks. The BC Integrated Earthquake Risk Assessment is a collaborative research project that EMBC is undertaking in partnership with the Earth Sciences Sector of Natural Resources Canada, the Global Earthquake Model Foundation, and other partners. This project aims to assess earthquake risk and risk reduction potential in settled areas of BC as well as develop a standardized framework of performance based earthquake risk indicators that will assist in the communication of risk to inform earthquake risk reduction. EMBC continues to work with Ocean Networks Canada to develop an earthquake early warning system for the Cascadia Subduction Zone which, when completed, will be capable of delivering alerts to a selection of organizations within the Province. EMBC is also working with the Institute of Catastrophic Loss Reduction and Western University to assess the earthquake related hazards of ground shaking, liquefaction, and slope instability in the Metro Vancouver area. Outcomes of the project consist of a series of maps and accompanying digital data outlining each of the hazards that can be used to inform, amongst other areas, emergency planning, land use decisions, and detailed earthquake risk assessments.

14:30 - 15:00 Coffee Break

15:00 - 16:00 Sessions E

E1: Interlakes Reserves Tribal Council – Emergency Operations Command Centre

Karl Zadnik

Chief Executive Officer Interlake Reserves Tribal Council (IRTC) Manitoba

Interlakes Reserves Tribal Council has recently been approved to build phase 3 of its Emergency Operations Command Centre (EOCC) in one of its communities. This EOCC will be the central hub for all surrounding communities that are in need of assistance for the successful response and management of any emergency that may occur. IRTC's response to an emergency disaster will cause the Emergency Management organization to activate and coordinate emergency operations. The Emergency Operations Centre Coordinator, in such situations, assists each communities flood coordinators. The EOCC receives staff support from each First Nations flood team.

IRTC has also purchased 20 Emergency Response trailers valued at \$5,000,000 for the purpose for flood fighting.

E2: Communication at the speed of Crisis – Joint Public Information

Kevin Skrepnek Chief Fire Information Officer BC Wildfire Service Kamloops British Columbia

Emergency management and response agencies are rapidly adapting to the realities of the 21st century communications environment; an arena where rumours and misinformation travel at the speed of light, expectations for real-time intelligence are ingrained, and the demand for information from the public, media, stakeholders, and your own organization is immediate and unrelenting.

Emergencies are rarely isolated to one agency - the ability for organizations to work together to communicate in a consistent and concerted fashion is crucial to an effective response. Providing public information in lockstep with partner agencies - either through the establishment of a Joint Information Centre (JIC) or other more informal means - is essential.

Understanding this new environment will be key for effective emergency management practitioners- both in terms of meeting the needs of public information, but also in promoting emergency preparedness, prevention and mitigation messaging.

This presentation will examine case studies and expected future ramifications in this field. Attendees will be encouraged to share their own experiences from past events and discuss how this may inform best practices going forward.

E3: An Introduction to Fatality Management

Karen Collins Manager, Health & Safety/Emergency Management Douglas College Coquitlam, British Columbia

"Show me the manner in which a nation cares for its dead and I will measure with mathematical exactness the tender mercies of its people, their respect for the laws of the land and their loyalty to high ideals." Sir William Ewart Gladstone (former British Prime Minister).

When a mass fatality incident occurs, how will Canadians manage their dead? What should the immediate response look like? How about the sustained response? What logistics are required? Fatality management is a unique subspecialty of emergency management. It is complex and in Canada, it is based upon the International Criminal Police Organization (INTERPOL), Disaster Victim Identification (DVI) Standard.

This session will provide an overview of the components of a comprehensive response to a mass fatality incident (MFI). Attendees will learn where fatality management fits within the greater sphere of emergency management and what makes this particular response unique. A fact sheet will be provided to participants.

E4: Animal Sheltering – Its about Family (part 2)

Heather Ferguson

Regional Coordinator SWBC, Canadian Disaster Animal Response Team Surrey British Columbia

This session will build on the lessons learned discussed in Part 1 (Session D4).

E5: "You Can't Stop Bad – Continuing Your Operations When 'Bad' Occurs!

John Yamniuk President, Disaster Recovery Institute, Canada Calagary, Alberta

Disasters have become more complex, severe, frequent, and widespread. Organizations must be prepared to deal with any type of natural, human caused, and or technological event. In an ever increasing interdependent/interconnected world, the importance of being prepared cannot be overstated. Preparation goes beyond having plans in place – it includes understanding new and emerging threats – specifically cyber, dependencies – internal and external, as well as having pre-established relationships with entities to make the organization more resilient and lessen the impacts of events when 'bad' does occur.

Join this session where examples of where having pre-established relationships mitigated impacts will be shared and practical tips provided for delegates to implement in their organizations.

E6: Public Safety Canada Regional Resilience Assessment Program

Anya Daradics Program Officer Public Safety Canada Burnaby, British Columbia

The Regional Resilience Assessment Program (RRAP) uses on-site assessments to help organizations measure and improve their capacity to respond to all hazards in Canada. The RRAP team is housed within Public Safety Canada's (PS) National and Cyber Security Branch and works with critical infrastructure owners and operators across Canada. RRAP is delivered using three tools: the field-based Critical Infrastructure Resilience Tool (CIRT) evaluates security capabilities and operational resilience, the Canadian Cyber Resilience Review (CCRR) process evaluates operational resilience and cyber security capabilities, and the Critical Infrastructure Multimedia Tool (CIMT) helps bolster emergency response awareness. The assessment is non-regulatory, voluntary, non-technical, and is delivered at no cost by a team of PS facilitators.

The objectives of RRAP are to enable owners/operators to identify dependencies and vulnerabilities, to provide owners/operators with options to mitigate threats and improve their ability to respond and recover from disruptions, to strengthen partnerships and information sharing among government and owners/operators of critical infrastructure, and to enhance

Public Safety Canada's knowledge with respect to the resilience capabilities of Canada's ten CI sectors.

The Public Safety presentation will highlight the utility of the RRAP assessment tools and their ability to better equip critical infrastructure owners/operators through measuring the overall resiliency and protective posture of a facility while identifying all hazards vulnerabilities and site dependencies. Furthermore, the presentation will highlight the objectives of the program and the types of organizations best suited to receive an assessment, along with providing an in-depth look at the measurement tools used by Public Safety and their benefits to the owner/operators.

16:00 - 17:00 BC Association of Emergency Managers - Networking Reception

17:00 - 18:00 Annual General Meeting of the BC Association of Emergency Managers

Thursday, 02 November 2017

08:30 - 10:00

Plenary 4

Desolation to Hope - Best Practices for hosting First Nations Communities Panel Discussion

Moderator Duncan Stephen, Manager, Intergovernmental Affairs Indigenous and Northern Affairs Canada

Speakers

Laurie Pearce, *Researcher,* Pearces 2 Consulting Corporation North Vancouver, British Columbia

Marc Bissley

Despite having made great strides in improving the resilience of Indigenous communities, in recent years, many communities have, and will continue to be, impacted by disasters necessitating the evacuation of people from their homes and territories. These evacuations can be short-term (days or weeks) or they can be long-term (months or years). The impacts of evacuation are always stressful, but become intensified when the relocation is extended and when evacuees are dispersed across several receiving neighbourhoods or communities some distance from their home community.

Imagine what it is like for families who have lost everything, to spend seven months in a hotel room with six children; moving nine times from hotel to hotel with your family, and learning to ride a bus for the first time in -30°F with three children in tow. Indigenous people lose their sense of community and local support networks; and lose convenient access to their resources for hunting and fishing, trapping and gatherings.

This presentation will be focused on short- and long-term solutions to increase the resilience and coping capacity for Indigenous people who have been displaced as a result of disasterrelated evacuations. These solutions form the basis of A Guide for Evacuated Indigenous Communities: A Strength-Based Approach to Minimizing the Impacts of Evacuation which will be presented and will be of value to both evacuating and receiving communities; both Indigenous and non-Indigenous.

The research findings will include strategies to welcome, house, feed, and provide the psychosocial needs of evacuated residents and will be supported by videos of impacted residents, illustrating the issues and potential solutions that have faced evacuated populations

from Kingcome, BC (flooding); Lytton First Nation, BC (forest fires); Long Plain, MB (tornado) and the Eskasoni First Nation, NS (flooding). We are grateful to Indigenous and Northern Affairs Canada for funding this research.

10:00 - 10:30 **Coffee Break**



Plenary 5 2017 Floods and Fire Season in Review Peter Prendergast Travis Whiting

Senior Regional Manager Emergency Management BC Kamloops British Columbia *Fire Chief* Kelowna Fire Department Kelowna British Columbia

Kevin Skrepnek

Chief Fire Information Officer BC Wildfire Service Kamloops British Columbia

This plenary session will cover the operational level response to this past years emergency events in the BC Interior. Senior staff from Emergency Management BC and the Regional District of Central Okanagan, supported by the BC Wildfire Service, will cover the Spring Okanagan Flooding event and move into a discussion of the unprecedented wildfire situation BC experienced shortly thereafter.

12:00 - 12:45 Lunch

12:45 - 13:45 Plenary 6 Strategic recap of this year's historic fire and flood response and recovery efforts and way ahead for Emergency Management in BC

Robert Turner

Assistant Deputy Minister Emergency Management BC Saanichton, British Columbia

The Assistant Deputy Minister will reflect on some of the many challenges experienced during the recent major flooding and wildfire events that occurred across the province of BC. He will provide a high level overview on some of the outcomes from these events and how governments at all levels as well as stakeholders will need to refine their emergency management planning moving forward.

13:45 - 14:15

Conference wrap-up and draw for one free registration to next year's conference and exhibitor prizes