

Monday, 28 October 2019

Pre-Conference Workshops

WORKSHOP I

08:30 -16:00

Introduction to BCP - BCA 100

Lisa Benini, MBCP, AFBCI, CRM

ISO 22301 Lead Implementer

Benini Consulting

Victoria, British Columbia

This is a DRI (Disaster Recovery Institute, Canada) course which consists of a fast paced lecture style, full day session that provides a high level overview of contemporary methodology and best practices used to implement a comprehensive business continuity program. This session is beneficial for employees who have an indirect or ancillary role in the development and maintenance of business continuity plans. The instructor will share her expertise in the field of business continuity as well as walk through some sample templates.

Lunch & Refreshments included

Registration is limited to a minimum of 7 and maximum of 25 persons and will be on a first come first served basis

WORKSHOP II

08:30 -12:00

ESS Collaborative Discussions

Deb Borsos

Community Disaster Recovery Manager

Regional District Central Kootenay,

Nelson, British Columbia

Part A - Working with the Vulnerable Sector

Barbara Morgan

Emergency Management Coordinator

City of Pitt Meadows

Pitt Meadows, British Columbia

Ginger Sherlock

Emergency Program Coordinator,

City & Township of Langley

Langley, British Columbia

Recent escalation of disastrous events in BC has seen an ever increasing demand on the volunteers, and the face of clients as well. More and more vulnerable populations come to Reception Centres that have addiction and mental health issues. Cultural differences and senior/elder concerns also present challenges for moving into recovery.

This session will be an opportunity to share challenges (urban/rural) and more importantly discuss successes and solutions. The intent of the session is to understand what Emergency Support Services face when dealing with the vulnerable sectors and solutions. Through networking, participants will be fully engaged and leave with a multitude of resources to use in future occurrences.

Part B - Responding with Empathy

Deborah Jones-Middleton

Director of Protective Services
Regional District of Bulkley-Nechako
Burns Lake, BC

A presentation followed by participant discussion regarding the response involved when supporting and working with those who have been evacuated or otherwise affected by disaster; what to consider; and how to respond empathetically.

Part C – Looking Forward

Participants input will be sought for future action and for conferences

Snacks & Refreshments included

Registration is limited to a maximum of 50 persons and will be on a first come first served basis

WORKSHOP III

09:00 -12:00

Impact of Climate Change on Emergency Management

Kari Tyler

User Engagement and Training Specialist
Pacific Climate Impacts Consortium
University of Victoria
Victoria, British Columbia

Tina Neale

Director, Climate Risk Management
Climate Action Secretariat
BC Ministry of Environment and Climate Change Strategy
Victoria, British Columbia

Kathryn Forge

Executive Director
Planning and Risk Reduction
Emergency Management BC
Victoria, British Columbia

Come and join other Emergency Managers in a briefing and discussion on the impact of our changing climate on emergency planning and response.

The first part of the workshop will comprise briefings. Kari Tyler will cover how climate change will impact BC along with projections of temperature and precipitation for the 2050s. Tina Neale will introduce the Preliminary Strategic Risk Assessment of BC and the 2020 Provincial Climate Preparedness Strategy. Kathryn Forge will cover the planning and Disaster Risk Reduction being done by EMBC.

The second part will involve a facilitated discussion about the impacts and future actions. The facilitator is;

David W. Edgington

Professor Emeritus
Department of Geography
University of British Columbia

Snacks & Refreshments included

Registration is limited to a maximum of 50 persons and will be on a first come first served basis

WORKSHOP IV

13:00 -16:00

Emergency Management Professionals – Think Tank

Sybille Sanderson

Emergency Program Coordinator
Cowichan Valley Regional District
Duncan, British Columbia

Jon Wilson

Chair
BC Association of Emergency Managers

Most of us work in relative isolation from our emergency management peers which often results in having to "re-invent the wheel". This workshop offers a unique opportunity to engage with your colleagues from across the province to exchange ideas and discuss topics ranging from planned or completed projects, policy issues, program support and identifying gaps and solutions. Collaboration and dialogue are key to our collective successes. If you have an issue or idea to share at this workshop, please send it to: executive.director@bcaem.ca

Snacks & Refreshments included

Registration is limited to a maximum of 50 persons and will be on a first come first served basis

Tuesday, 29 October 2019

08:30 - 09:00

Opening of the Conference

09:00 - 10:00

Plenary 1

Provincial Recovery Framework

Dave Peterson

Assistant Deputy Minister

Recovery Planning and Risk Reduction, Emergency Management BC
Victoria, British Columbia

Recent emergency events have highlighted the magnitude of recovery and the need for a provincial coordinated approach to support communities. The current Emergency Program Act, coupled with federal legislation, highlights preparedness and response, but does not provide a robust framework for recovery responsibilities. In the absence of a permanent recovery framework at both the federal and provincial levels, the province has developed an interim disaster recovery framework to address growing recovery needs and coordinate and integrate recovery actions until the renewed legislation is in place.

This strategic interim framework aligns with disaster risk reduction principles to provide accountability and integrate resources and expertise of all levels of government including First Nations, non-governmental organizations, private industry and other partners. The framework serves as the central coordination, accountability, and oversight mechanism for integrated disaster recovery and establishes scalable, flexible, and adaptable coordinating platforms that align key roles and responsibilities.

10:00 - 11:00

Coffee Break – Get to know the Exhibitors

11:00 - 12:00

Sessions A

A1: Wildfire Smoke Impacts and Effective Protection Strategies

Sarah Henderson

Senior Environmental Health Scientist,

BC Centre for Disease Control
Vancouver, British Columbia

Wildfire smoke causes episodes of the worst air quality that most people in British Columbia (BC) will ever experience. Research from BC and around the world has shown that wildfire smoke exposure is associated with large increases in respiratory health risk, and somewhat smaller increases in cardiovascular and mortality risk. With the record-breaking wildfire behind us, we must head into every new season expecting it that it could set new records. This presentation will cover the air quality impacts of wildfire smoke in BC, its health effects, and information on effective personal and public health protection.

A2: Improving Local Government Emergency Management

Gordon Ruth

Auditor General for Local Government
Surrey, British Columbia

Emergency management is one of the important areas of local government operations that the Auditor General for Local Government has worked on in recent months; this session will draw in more detail from the findings in recent audits on Emergency Management and the related best practices we have recommended.

A3: Right Size your ESS Team

Jackie Kloosterboer

Leader - ESS Program,

City of Vancouver

Vancouver, British Columbia

Eileen Grant

Manager - Emergency Program,

District of Oak Bay

Oak Bay, British Columbia

There is a lot of information available about volunteer management, including recruiting and retention. However, that information seldom answers the many questions we all struggle with every day. What kind of volunteers do we need? How do we keep them engaged? Trained? Are our teams ready to respond when they are called upon? Do we have the right volunteers? Is there a right size for our ESS Teams? How can we incorporate change management and modernization into our planning processes?

This presentation will look beyond the traditional approaches to volunteer management and explore new ideas on developing effective ESS Volunteer Teams with the capacity to work within their communities and the changing environments of emergency response and recovery.

We will explore the value of understanding community and emergency response and recovery needs, recognizing capacities and moving beyond the simple numbers game. We will work through integrating continuous improvement into our ESS volunteer management practices and incorporating change management into our everyday way of doing business to help us modernize our thinking and structures.

Our goal in this presentation is to provide participants with some new approaches to building an ESS team that will be effective in any emergency today and in the future.

A4: Community Futures Wildfire Business Transition Project

Karen Eden

General Manager,

Community Futures Cariboo Chilcotin

Williams Lake, British Columbia

Debra Arnott

General Manager,

Community Futures Sun Country

Ashcroft, British Columbia

The 2017 wildfire season was the worst in BC's history and had a particularly devastating impact on small businesses in rural communities across the affected region. In addition to the immediate impacts of property damage and loss of business due to evacuation orders, businesses had to grapple with the longer-term effects on business continuity, including loss of employees, customers and cash flow.

This presentation will examine how five Community Futures organizations came together to provide assistance to small businesses, Indigenous communities and not-for-profit organizations to help them recover and rebuild following the 2017 wildfires. Community Futures is a federally funded, not-for-profit, community economic development program that provides access to capital and support for small and medium-sized businesses in rural communities.

Recognizing that many of the communities in the region are remote and difficult to access, Community Futures developed a three-pronged approach that included outreach, financial support, and training. Local Business Ambassadors/Outreach Workers were hired and worked one-on-one with business owners to help them assess the impact of the wildfires on their operations, access the type of support they needed, and get an understanding of their longer-term needs. The outreach workers built

relationships with business owners that then allowed Community Futures to design training programs that would best meet their needs.

Community Futures was successful in leveraging \$3.16 million from several private and public sector partners and has provided assistance to more than 3,250 businesses to date.

A5: Real Time Seismic Monitoring and Data Products - What's possible when seconds count?

Teron Moore

Public Safety Program Manager,

Oceans Network

Victoria, British Columbia

When it comes to disasters, a 9.0 magnitude earthquake is as catastrophic as they come. The Indigenous communities of coastal BC experienced the last 'Big One' on the Cascadia Subduction Zone, and describe the story of an epic battle between the Thunderbird and the Whale that resulted in low-lying communities being completely wiped out.

Modern science and technology, including real-time data for seismic events, support community decision-making for disaster risk reduction priorities. By combining real-time seismic sensors, big data management, and advanced algorithms, Ocean Networks Canada (ONC) envisions providing tools that help at-risk communities plan for and respond to earthquake events. This presentation will explore ONC's earthquake early warning project and introduce a vision for implementing real-time seismic data into practical public safety solutions for the Emergency Operations Centre and beyond.

A6: BCSARA Data Management System

Neil Brewer

Search Manager,

BC Search and Rescue Association

Victoria, British Columbia

The British Columbia Search and Rescue Association (BCSARA) represents and supports the 80 EMBC-recognized Ground and Inland Water Search and Rescue groups and the approximately 2,500 volunteers in the Province.

In 2016 BCSARA applied to the National Search and Rescue's 'New Initiative Fund' and was successful in obtaining \$631,000 to fund a three-year project.

The Data Management System is an extensive on-line database that tracks virtually every aspect of emergency response and is intended to provide 'before and after' documentation. The same product is used by numerous emergency response agencies all over the world. The software is proving to be an indispensable tool in optimizing response preparedness

Tracking of personnel (qualifications, contacts, hours, availability, rosters etc.)

Tracking of assets (maintenance, value, status)

Reporting (incident distribution/history)

12:00 - 13:30

Lunch

13:30 - 14:30

Sessions B

B1: A Physician's Lived Experience of Climate Change

Dr. Joshua Weil

Assistant Physician in Chief

Hospital Operations

Kaiser Permanete Santa Rosa Medical Center,
California, United States of America

We often talk of the need for health care to act on climate change, but are now faced with this question: What does it mean to be a health care professional when a climate change emergency is on your doorstep? Dr. Joshua Weil will discuss his experiences being a physician leader caught deep in the middle of the California wildfires, operational decisions, hospital evacuation, and his thoughts on health care's future in the face of climate change. He was impacted professionally and personally during the 2017 Tubbs Fire which was one of the most destructive wildfires in California history.

B2: British Columbia Emergency Management Common Operating Picture (COP) Portal

Gurdeep Singh
Portfolio Manager,
GeoBC
Surrey, British Columbia

Mike Knauff
Regional Manager,
Emergency Management BC
Kamloops, British Columbia

The Province (GeoBC and EMBC) developed a GIS based BC Emergency Management Common Operating Picture (COP) Portal to provide situational awareness within provincial Emergency Operation Centres. The Portal was used to support planning, evacuation, logistics, and response activities during the 2017 and 2018 Freshet and Wildfires. The goal is to have a single COP for internal stakeholders and external stakeholders by providing access to same information at the same time, where possible in real time to provide situational awareness at local, regional and provincial level.

Several communities (Local Governments and First Nations) across the Province were provided access to the COP for their use and to complement their tools for situational awareness. This approach allows each jurisdiction to use their own data and tools but also explore the value of sharing data, information and tools amongst various levels of governments during an event. This collaboration helps with establishing standards, guidelines and best practices for sharing data, information and tools to support a common situational awareness during emergency events.

In 2019 EMBC and GeoBC are developing an Emergency Management Mapping Hub to provide the public with reliable, responsive, adaptive, real-time and customer-focused mapping information. This would address one of the key recommendations identified as part of the After - Action Review conducted by George Abbot and Maureen Chapman.

B3: Where does Business Continuity fit within the EOC?

Lisa Benini
ISO 22301 Lead Implementer,
Benini Consulting
Victoria, British Columbia

Ginger Sherlock
Emergency Program Coordinator,
City & Township of Langley
Langley, British Columbia

When the same people are responsible for emergency management (EM) and business continuity (BC), ensuring both disciplines are addressed during major events is critical. For small businesses, regional districts and local authorities, building a common system to activate in a seamless and integrated model within an activated Emergency Operations Centre (EOC) is a logical place to start.

Ginger and Lisa have been working with public and private sector organizations over the last several years around integrating the two disciplines within the BCEMS structure. They will share their recommended model and discuss the pros and cons of this with a diverse audience of EM and BCP professionals. This will be an interactive workshop where participants will have the opportunity to explore the benefits and challenges with this comprehensive model.

They would encourage those already successful with integrating these two disciplines to share their own experience as well as recommend other models.

B4: Unmanned Aerial Vehicle use in Disaster Management

Mukesh Chand

Graduate,

Master of Arts in Disaster and Emergency Management

Royal Roads University

Colwood, British Columbia

The use of Unmanned Aerial Vehicle (UAV) technology is increasing globally and if applied in the field of Public Safety (PS), could prove useful in providing solutions to challenges in emergency operations. The purpose of this research is to identify and analyze the underpinning regulatory framework that impacts effective usage of UAV technology in the PS domain. The research includes a study of governance arrangements including current Canadian Aviation Regulations, Emergency Management (EM) Act, Canadian Criminal Code and their underpinning legislation and policies in order to assess and interpret their impacts on the use of UAVs in PS or EM agencies. It is informed by experiences and lessons learnt by these agencies.

The knowledge gained can be extended to PS or EM agencies who are contemplating the use of UAV technology in their services in order to reduce risk. UAV is of great interest as one of the disruptive technologies that is revolutionizing the way EM operations are carried out and with this hope that useful solutions or recommendations can be made.

B5: What makes a Disaster?

Christine Grist

Manager, Disaster Risk Reduction and Resilience

BC Emergency Health and Services

Victoria, British Columbia

Brooks Hogya

Manager, Disaster Risk Reduction and Resilience

BC Emergency Health and Services

Victoria, British Columbia

At BC Ambulance Service we have redefined our emergency management program to take future risks and vulnerabilities into account and have gone from the Emergency Management Office to the Disaster Risk Reduction and Resilience program.

Following the 2017 Wildfire season, a full emergency management (EM) program review was undertaken. Analysis from this review, after action reports, surveys, national and international best practice and other research has highlighted that there were no comprehensive disaster plans and procedures, and the focus of work was historically tied to ordering and shipping EM supplies and other tasks that did not increase the organizations resilience. This required us to rethink EM. In 2019 the government of Canada stated, "traditionally, EM has been primarily concerned with preparedness and response activities, but the current risk environment requires a shift in focus toward proactive prevention/mitigation efforts"

There is no option to close BCEHS in disasters; instead, as the provincial agency for pre-hospital care, there is a requirement to develop disaster risk reduction strategies that contribute to increasing the organizations resilience, specifically focusing on the following variables.

What makes it a disaster for BCEHS?

- a) an overwhelming number of patients;
- b) compromised BCEHS infrastructure;
- c) lack of paramedics; and
- d) the inability of hospitals to accept our patients.

The presentation will take you through our process of redefining, naming, focusing the scope of work and building our program using The Sendai Framework, Canadian Standards, Accreditation and internal Policies.

B6: Response on the “Highway Thru Hell”

Tom DeSorcy

Fire Chief

Fire Department

Hope, British Columbia

Mark Miller

President

Thunderbird Entertainment

North Vancouver, British Columbia

On February 25th 2018, over 100 first responders were called to a major crash just north of Hope on the Coquihalla Highway. Among those first on scene of this horrific incident that involved 2 passenger buses, 3 semi-trucks, 7 cars and close to 170 people, was the film crew for the television show "Highway Thru Hell". Our presentation gives a behind the scenes look at the story behind this successful, Canadian-made TV series on Discovery Channel. A show focused on a road that sees 400-500 crashes every winter with no dedicated fire service and limited road rescue along its 186 km route. We further examine the incident, how it was responded to and what steps have been taken since to prepare for a mass casualty event in a rural area a year later. The presentation features exclusive and revealing video captured by the crew at Great Pacific TV.

14:30 - 15:00

Coffee Break

15:00 - 16:00

Plenary 2

Burning Questions: Trends and New Directions in Wildfire

Carol Loski

Senior Manager/Director

BC Wildfire Service

Victoria, British Columbia

The conditions leading to wildfires are rapidly changing. Seasons are longer, wildfire behaviour is more intense and the threat to public safety is growing with tragic outcomes witnessed in other jurisdictions. Recent severe wildfires experienced across the province, North America and globally, all point to this trend continuing. As wildfires change so too must the approaches we use to prepare for, prevent and mitigate, respond to and recover from natural disasters.

Significant work is underway to transform how we address wildfire threat in the province and nationally. BC Wildfire Service will provide an overview of wildfires, how they are changing, the factors contributing to these changes and how the approach to wildfire is being transformed through integration, innovation and engagement. Collaboration with local authorities, First Nations and other stakeholders is a cornerstone of this transformation and opportunities to participate at the local, regional and site level will be discussed.

16:00 - 20:00

Social Night

Wednesday, 30 October 2019

8:30 - 10:00

Plenary 3

2018 Boundary Flooding: A Community-Led Recovery Process

Graham Watt

Recovery Manager

Regional District of Kootenay Boundary,
City of Grand Forks, British Columbia

Chris Marsh

Manager of Emergency Programs

Regional District of Kootenay Boundary
Trail, British Columbia

In the spring of 2018 the Kettle, West Kettle and Granby Rivers experienced record flooding. The RDKB Emergency Operations Centre opened for 5 weeks to support over 3000 residents who were forced from their homes. Over 1000 structures were damaged.

The RDKB and the City of Grand Forks embarked on a massive recovery effort. A 12-person recovery team was established. This community-led recovery process addressed 5 pillars:

- Housing:
 - o Temporary housing for affected residents,
 - o Managing Disaster Financial Assistance issues and insurance issues,
 - o Seeking options for long-term housing recovery, and;
 - o Finding solutions for repair and rebuilding.

- Human Wellness:
 - o Using a case manager approach, data was gathered and support given to assist flood affected residents dealing with all aspects of recovery.

- Critical Infrastructure:
 - o Repairing flood protection works,
 - o Repairing damaged municipal infrastructure; and
 - o Short-timeline DMAF and NDMP grant proposals.

- Economics and Agriculture:
 - o Over 100 flood-affected businesses to assist,
 - o DFA and insurance issue support;
 - o Dozens of farms affected, including crop loss, arable land loss, and infrastructure damage.

- Environmental Recovery:
 - o Contamination from flood water
 - o In-stream works support and river bank stabilization, and;
 - o Debris removal from river and hazard identification.

The Boundary Flood Recovery Team would be happy to share its experience in the recovery from this event.

10:00 - 10:30

Coffee break

C1: Ministry of Health, Mental Health and Wellness Recovery Guide & The Grand Forks Case Manager Model

Richele Shorter

Director

Ministry of Health
Victoria, British Columbia

Darren Pratt

Executive Director,

Boundary Family Services
Grand Forks, British Columbia

Rachel Warriner

Community Case Manager

Grand Forks, British Columbia

After the unprecedented wildfires and flooding in 2017/2018, the Ministry of Health undertook the development of a Mental Health and Wellness Disaster Recovery Guide (the Guide) in partnership with other organizations that deliver Mental Health services. Richele Shorter will walk us through the key components of the guide such as which entities are involved, and how government, the health system and partners will be organized and supported effectively to meet mental health and wellness needs of impacted communities during the recovery phase.

The human factors in global health and wellness post-disaster in rural and remote setting pose unique challenges to recovery teams. The Boundary Region was given a unique opportunity post Freshet Event of 2018 to attempt a “made local” solution to these challenges by using a multi-faceted case management approach.

Lessons learned as well as possible potential best practices will be covered. Some of the topics covered will be:

- Building a team by leveraging existing resources and relationships
- Maximizing case management across all pillars of recovery
- Data, data, and yes...more data
- Managing outreach services in a rural/remote setting
- How to tier supports with a local wellness working group
- Clinical support for team health
- The role of recovery during response: building capacity BEFORE a disaster
- The politics of recovery

This will be an interactive session, with opportunities for dialogue and discussion, so please think about your unique perspectives and experiences and what you can teach us.

C2: How to manage the new abnormal: lessons learned and future applications

Adam Davey

Manager Emergency Programs,

City of Prince George

Prince George, British Columbia

During the summers of 2017 and 2018, Prince George played host to nearly 14,000 wildfire evacuees for a combined three months. Nearly 500 staff and 2000 volunteers were involved around a 24/7 ESS-centric operational tempo. As a result of this, the City of Prince George (CPG) embarked upon an innovative new approach to emergency planning borrowing concepts from the unconventional military paradigm.

This presentation will address CPG's criteria and ongoing development on a new approach to managing the 'new abnormal:' large, multi-jurisdictional, long-lasting events. We've delineated event response into two categories: 'conventional' event and 'unconventional' event. A conventional event is uni-jurisdictional with a concise transition from 'response' to 'recovery,' adheres to the principles of ICS, and

can be internally managed mostly within City resources. Examples include large apartment fires, freshet events, or pipeline rupture - all of which has occurred in Prince George in the last seven years. Unconventional events are large, dynamic, multi-jurisdictional, long-lasting, and do not neatly conform to ICS principles: they organically occur via a net-centric or hub-and-spoke 'horizontality' similar to (military) insurgency campaigns. The 'Response' and 'Recovery' phases are grey and interwoven. There are numerous actors and no clear "lead" agency. The wildfires of 2017 and 2018 resulting in mass evacuations are examples of unconventional events.

CPG has a model to differentiate between event type and thus tailor response - this presentation will explain the evolution, based upon real-time practice, of CPG's new emergency planning methodology.

C3: Emergency Support Services Modernization Project

Melia Walker

Director ESS and Mass Care,
Emergency Management BC
Saanichton, British Columbia

Farrah Simpson

A/ESS Training Specialist,
Emergency Management BC
Saanichton, British Columbia

Emergency Management British Columbia (EMBC) is working to improve the Emergency Support Services (ESS) program through a project aimed at digitizing and modernizing ESS delivery. This project will streamline processes so evacuated individuals can access services more easily and efficiently. EMBC's goal is to create an adaptable and scalable program, which allows ESS teams to focus on providing in-person support to vulnerable citizens affected by disasters, while also reducing wait times by incorporating self-serve options outside of reception centers. The overarching project goal includes the review of policies, processes, branding and development of a digital system.

C4: Organizational Knowledge Transfer: Capturing Expertise

Ron Andrews

Principal,
Continuity Craft
Winnipeg, Manitoba

Effective knowledge transfer within organizations is always a pressing issue, but more so now with a multi-generational workforce and a highly dynamic and ever-changing service environment. Those working in the fields of business continuity, emergency management and enterprise risk are all affected. The question: How do organizations capture the knowledge that walks out the door?

This workshop offers:

- An overview of effective knowledge retention strategies
- A review of "what not to do" in retaining knowledge
- Highlighting a few organizational success stories
- Participant sharing of this issue for the benefit of one another

C5: Predictive Analytics and Data Commons for Local Government Disaster Management

Chris Webber

Strategic Advisor,
Macdonald, Dettwiler and Associates (MDA)
Richmond, British Columbia

To mitigate the impact of natural disasters and ensure the safety of their citizens, Cities urgently need the ability to collect, consolidate and analyze data to gain real time situational awareness and make informed operational decisions.

MDA is conducting a proof of concept with the City of Richmond. The proof of concept will explore the adoption of a new outcomes-based technology-agnostic approach to achieve the goal of integrating the City's award-winning disaster mitigation practices with those of other levels of government, mutually address the impacts of climate change and create replicable, transferable best practices models for other local governments.

The Solution provides:

- Early warnings of imminent disasters using Predictive Analytics, Machine Learning, IoT and Big Data technologies.
- A secure Data Commons cloud-based platform (Smart3D APSTM) where earth observation, geospatial, contextual and real-time IoT sensor data from multiple, disparate sources are easily accessed, processed and analyzed to provide near-real-time situational awareness, alerts and predictive forecasting to support informed proactive operational decisions for disaster mitigation and recovery.
- Capability to simulate disaster scenarios to inform planning and optimize infrastructure upgrades.

Local Governments benefit from having a framework from which to action their long-term plans to create situational awareness through technology to protect the city against the impacts of climate change, enhance mobility of people and goods, create more informed decisions for both everyday situations and emergency response, integrate communications and strengthen community resilience.

C6: A Tale of Two Cities- Bringing Rescue Taskforce to Vancouver and Calgary

Katherine Severson

Sergeant,

Emergency Management Unit Calgary Police
Calgary, Alberta

James Flewelling

Sergeant,

Vancouver Police Department
Vancouver, British Columbia

Acts of mass violence, active shooters/hostile events (ASHE) and vehicle attacks are incidents that are demanding the focus of emergency responders and emergency managers and motivating them to adopt new processes and integrated actions more closely than ever before. In particular, law enforcement agencies are adapting their rapid intervention/victim rescue tactics and combining with fire rescue and emergency medical services into rapid response units called Rescue Taskforces. Against the backdrop of an ever-shifting threat environment, two Canadian cities have developed and implemented unique Rescue Taskforce programs supported by police, fire and in Alberta, EMS personnel. The presenters will explain in detail how they initiated their respective Rescue Taskforce Programs in Vancouver and Calgary, and what they've learned from the significant challenges and enormous benefits from doing so. They will review the concepts of leadership, changing emergency response agency cultures, program implementation strategies, and logistics of multi-agency training design. They will also share how the recently released NFPA 3000 Standard (2018) can guide organizations in their own planning. James and Katherine look forward to sharing their different experiences and hope to support others who may be considering how to make changes to their own response programs.

12:00 - 13:30

Lunch

12:30 - 13:00

Award Presentations

EPICC – Friends of EPICC Award
Pacific Northwest Preparedness Society

- Awards of Excellence
- Marie Rogan Lifetime Achievement Award

D1: Planning for extreme heat in rural communities in British Columbia: a public health perspective**Sue Pollock**

Medical Health Officer,
Interior Health Authority
Kelowna, British Columbia

In 2018, Interior Health (IH) embarked on a multi-year project to support planning and response to extreme heat. Climate projections demonstrate that temperatures in the southern interior of B.C. will continue to increase over time, and a temperature-mortality relationship has been described in the literature. Climate change adaptation must include efforts by cross-sector partners to plan for and respond to events, including extreme heat. Because of human health impacts, the health sector plays an important role. This project is in direct alignment with the Ministry of Health mandate for health authorities in B.C. to form partnership agreements with local governments. The objective of this project was to support the development and implementation of Heat Alert and Response Systems in several rural communities in the region. Heat Alert and Response Systems (HARS) are developed by communities, for communities. Key components of HARS include: community mobilization and engagement; alert protocol; community response plan; communication plan; and evaluation plan. This session will describe the project, including: initial community engagement; stakeholder participation; synergies with organizational mandates; funding; use of data; equity considerations; and alignment with emergency planning. Findings from the planning and implementation of HARS in one rural community will be described, including generalizability to other rural settings. Seeking early consensus on roles and responsibilities of stakeholders is a key to success of HARS. Heat related morbidity and mortality data help demonstrate the urgency of planning for heat related emergencies amidst competing priorities.

D2: Sea to Sky Multi-modal Evacuation Plan**Megan Latimer**

Emergency Program Coordinator,
District of Squamish
Squamish, British Columbia

Erin Marriner

Emergency Program Coordinator,
Resort Municipality of Whistler
Whistler, British Columbia

The increasing frequency and severity of natural disasters means that mass evacuation is now an important planning consideration for every community. During the 2017 British Columbia floods and wildfires, more than 65,000 people were evacuated from their homes. The year before, we saw the evacuation of the entire populations of Fort McMurray and Slave Lake in Alberta due to wildfire.

In 2018, the Resort Municipality of Whistler and the District of Squamish collaborated on the development of the regional Sea to Sky Multi-modal Evacuation Plan. This plan details how a mass evacuation of one of our communities would be coordinated utilizing all infrastructure available in the Sea to Sky Corridor, including highway, air, rail, and marine assets. Extensive modeling has been conducted to provide an evidence-base for the number of hours it will take for each community to completely evacuate, which helps inform trigger points and timelines for proactive evacuation decision-making.

The plan includes a detailed transportation analysis, review of the hazards that could trigger a mass evacuation in each community, a population data analysis (including vulnerable populations), shelter analysis, trigger points for when to recommend an evacuation to the head of the local authority, pre-scripted public information, lists of resources (gas stations, fuel trucks, tow trucks, transit fleets), and procedures for deploying and coordinating between the different agencies and ministries with a role. A steering committee of 15 local and provincial agencies is overseeing the development of the plan.

D3: Emergency Program Act Modernization Consultation (Part 1 of 2)

Heather Brazier

Executive Director,
Policy and Legislation,
Emergency Management BC
Victoria, British Columbia

BC's Emergency Program Act (EPA) was created in 1993. Its focus on preparing emergency plans and declaring states of emergency reflects its roots in Canada's War Measures Act. While the EPA has served BC well over the years, it is not well-suited for today's reality where disasters are becoming more frequent and more severe.

Emergency Management BC (EMBC) is leading an initiative to modernize the EPA. This includes addressing all four pillars of emergency management: risk mitigation; preparedness; response; and recovery. The modernized Act will reflect the Sendai Framework for Disaster Risk Reduction, the recommendations of the Abbott-Chapman Report on the 2017 fire and flood seasons, and the United Nations Declaration on the Rights of Indigenous Peoples. It will recognize that emergency management is a shared responsibility between provincial, local and First Nation governments. Fundamentally, it will improve BC's ability to deal with disasters -- before, during and after events.

EMBC invites emergency management practitioners to help us design a modern legislative framework that meets BC's needs now and into the future. Your expertise and knowledge will provide valuable insights into what currently works well, what doesn't work well, and what gaps need to be filled. In this workshop, attendees will actively participate in a World Cafe style session designed to solicit input and ideas to strengthen BC's emergency management framework.

D4: Response Requires an Integrated Solution - Does Your Organization Have One?

John Yamniuk

President,
DRI Canada
Calgary, Alberta

Organizations are faced with ever increasing threats to their operations, whether natural, human caused, or technological in nature. These threats are not limited within the organization itself, they can and do affect supply chains, ultimately affecting the organization as well as its stakeholders. The response to these threats is critical in order to protect the assets (human, physical, financial, information, and reputation) of the organization, ensure continued operations, and ultimately add to the overall resilience of an organization. In this presentation, we will look at the response phase of our industry and the need to have an integrated solution to deal with events or threats we face.

D5: Enhancement of Multi Agency Capability for At-Risk Populations in an Evacuation

Laurie Pearce

Co-Principal Investigator/Researcher,
Wilfred Laurier University
Brantford, Ontario

Recent disasters such as the Fort McMurray (2016) and British Columbia wildfires (2017) have demonstrated major challenges in managing large numbers of evacuees. At-risk evacuees were assigned numbers, sometimes separated from support networks, sent to one or more reception centres in different host communities, and repeatedly required to line up to access accommodation, medical and other services. For many Indigenous evacuees, the process reminded them of painful residential school experiences and triggered post-traumatic-stress symptoms.

Currently, services needed by evacuees are provided by various agencies each separately managing the services they provide. Because of privacy concerns, transfer of information from one agency to another results in vulnerable populations having to repeat the same information and not necessarily receiving services in a prioritized and effective fashion.

Building on previous research, this presentation will focus on identifying the needs of evacuees with a focus on those who are most at-risk. Following a literature review, the research team will be travelling across Canada to meet with evacuees of recent events from mainstream and Indigenous communities to learn about their needs during an evacuation, how those needs were met, and how services could have been better integrated and delivered. The researchers will also meet with service providers to identify their strengths and challenges. This presentation will be based on these findings which will be conducted over the course of the spring and summer of 2019. The study is funded by Defence Research and Development Canada.

D6: Public Safety Broadband Network (PSBN) 2019 Update

Ivan Rincon

Executive Director ICT,
Ministry of Citizens' Services
Victoria, British Columbia

Lawrence Chow

Director National Coordination Office,
Project Management Institute
Philadelphia, United States of America

A Public Safety Broadband Network (PSBN) is a secure high-speed wireless data communications network. It can be used by emergency responders and public safety personnel to communicate with each other in emergency situations and during day-to-day operations, and holds the potential to improve the effectiveness and safety of first responders and the public safety community.

New technologies making use of a PSBN offer the potential to improve the safety and security of Canadians, including through improved communications infrastructure for first responders and governments.

In 2017-2018, the Government of Canada, through a Federal PSBN Task Team, consulted provincial, territorial, and municipal governments, first responders, the private sector, and various other stakeholders on implementation models for a PSBN in Canada.

In 2019, the Government of BC held a regional consultation process via a RFI and a survey to understand the specific interests and needs of diverse stakeholders within the Province.

Mr. Chow and Mr. Rincon will provide a progress report on the work of the Temporary National Coordination Office, to examine national PSBN principles, governance options, and business models, as well as an update on the provincial findings and discuss possible ways forward.

14:30 - 15:00

Coffee break

15:00 - 16:30

Sessions E

E1: Community Driven, Nation Based: Supporting First Nations Health & Emergency Preparedness

Casey Neathway

Interior Regional Manager,
First Nations Health Authority
West Vancouver, British Columbia

Emily Dicken

Director of Crisis Response Centre
First Nations Health Authority
Squamish, BC

First Nations Health Authority (FNHA) is Canada's first and only Indigenous-led provincial health authority of its kind, delivering and supporting health programs and services to First Nations

communities within the boundaries of BC. In recognition of the substantial and disproportionate impact of natural disasters on First Nations communities, FNHA has examined its internal and community-facing emergency program structures to reduce barriers, minimize impacts and advocate for equity.

This breakout session will address the disproportionate impacts from disaster experienced by First Nations and present the unique community-driven and Nation-based emergency response activities of FNHA with a focus on innovative and equitable service delivery; and, cultural safety during times of crisis. Participants will learn how FNHA supports First Nations across the four pillars of emergency management, and be given opportunities to consider areas of partnership and collaboration to improve service delivery, as well as reflect on their own client engagement practices. Environmental public health, primary care, and mental wellness program areas will be highlighted, as well as exploring interdisciplinary partnerships for efficient community supports.

E2: Haida Gwaii Tsunami Safe Zone Utility Pole Marking Project

Larry Duke

Fire Chief and Emergency Program Coordinator,
Village of Queen Charlotte
Queen Charlotte, British Columbia

Haida Gwaii is an island located off the West coast of BC and all communities have areas that are identified as potential tsunami inundation zones. The directional Tsunami street signs are regular targets for theft and they are expensive to replace. Both locals and tourists need to be aware of where the 'safe' zone is in the case of a Tsunami hazard.

The Tsunami Pole Project aims to reduce the risk of injury and/or fatality in the event of a tsunami by utilizing existing infrastructure to paint visual indicators of inundation zones and safe zones in communities across Haida Gwaii. These visual indicators have been painted on utility poles to instruct visitors and residents on where the hazard zones are and where it is safe to go in the event of a tsunami. The grand opening for the project is planned for April 6, 2019.

The project report provides details including a tsunami hazard analysis and impact analysis for Haida Gwaii, processes involved in the research and development phase of the project, and recommendations for implementation. GIS mapping was completed to map the hazard and safe zones in each community and outline which poles to paint, as well as budgets for communities to implement the project. A communications strategy and marketing tools were developed to raise awareness and an implementation manual was developed for communities to follow.

E3: Emergency Program Act Modernization Consultation (Part 2 of 2)

Heather Brazier

Executive Director,
Policy and Legislation,
Emergency Management BC
Victoria, British Columbia

BC's Emergency Program Act (EPA) was created in 1993. Its focus on preparing emergency plans and declaring states of emergency reflects its roots in Canada's War Measures Act. While the EPA has served BC well over the years, it is not well-suited for today's reality where disasters are becoming more frequent and more severe.

Emergency Management BC (EMBC) is leading an initiative to modernize the EPA. This includes addressing all four pillars of emergency management: risk mitigation; preparedness; response; and recovery. The modernized Act will reflect the Sendai Framework for Disaster Risk Reduction, the

recommendations of the Abbott-Chapman Report on the 2017 fire and flood seasons, and the United Nations Declaration on the Rights of Indigenous Peoples. It will recognize that emergency management is a shared responsibility between provincial, local and First Nation governments. Fundamentally, it will improve BC's ability to deal with disasters -- before, during and after events.

EMBC invites emergency management practitioners to help us design a modern legislative framework that meets BC's needs now and into the future. Your expertise and knowledge will provide valuable insights into what currently works well, what doesn't work well, and what gaps need to be filled. In this workshop, attendees will actively participate in a World Cafe style session designed to solicit input and ideas to strengthen BC's emergency management framework.

E4: BCAA's Resiliency Program

Edd Bennett

Business Continuity Manager,
BCAA
Burnaby, British Columbia

Scott Kramer

Director of Governance and Compliance,
BCAA
Burnaby, British Columbia

An overview of how BCAA revitalized their BCM Program through focusing on their risk profile and leveraging their teams' shared experience from the Military and Energy sectors. We discuss how we generated and used renewed investments in both support and finance from top management to guide BCAA towards resilience as a culture. We explore how we developed a self-sufficient highly deployable Business Continuity Solution that can be adaptable enough to deal with most interruptions we can face in British Columbia.

E5: Emergency Lodging Design Guidelines for Communities

Steve Bibby

Director - Security and Emergency Services,
BC Housing
Burnaby, British Columbia

In the event of a catastrophic emergency which displaces hundreds or thousands of residents from their homes, it will likely become necessary to construct temporary emergency shelters and emergency lodging which may be occupied for a period of a few weeks or months, up to 5 years and possibly longer.

This session will introduce and discuss BC Housing's Design Guidelines for Emergency Lodging, which are designed to act as a baseline reference of minimum requirements to support the impacted cities, municipalities, communities, towns and villages in British Columbia. The guidelines encourage and facilitate the transition from temporary to permanent housing, either through the relocation of the units to a permanent site and/or the ability to add incrementally to the base unit in response to the occupants needs.

Through an extensive review and consultation process, the guidelines capitalize on modular, panelized and manufactured lodging units that could be constructed in large numbers within a reasonably short time frame. The guidelines are one of the many components that support the mass care planning in British Columbia.

E6: CASARA / PEP Air Support

Fredrick Carey

Deputy Director,
Civil Air Search and Rescue Association (CASARA)/PEP Air
British Columbia

PEP Air / CASARA is a member for EMBC Air operations at the Provincial level, and also a national organization supporting the Canadian Armed Forces in their Search and Rescue roll at the Federal level.

This will concentrate mostly at the Provincial level in terms of land sea and air support synergies and what that means.

The initial presentation should be a plenary, to describe to all the provincial emergency resources on what we are capable of.

16:30 - 1800

BCAEM Reception and AGM

Thursday, 31 October 2019

08:30 - 10:00

Plenary 4

Tahltan First Nation Response & Recovery 2018 Wildfires

Chief Rick McLean

Tahltan Nation

Stikine Country, British Columbia

In the summer of 2018 a large wildfire partially destroyed the remote community of Telegraph Creek in northern BC, and several hotspots were still burning this spring. Chief McLean of the Tahltan Nation will present on managing the response from over 100 km away, the effects of the fire on the community, and the resulting recovery process that is still ongoing.

10:00 - 10:30

Coffee Break

10:30 - 12:00

Plenary 5

Extreme Weather Costs Are on the Rise: How Can Canada Reduce Disaster Risk and Adapt to Changing Climate?

Natalia Moudrak,

Director of Climate Resilience

Intact Centre on Climate Adaptation,

University of Waterloo, Waterloo, Ontario

Climate-related natural disasters and extreme weather events are on the rise in Canada and are becoming more costly. As a metaphor for growing cost, property and casualty insurance payouts from extreme weather averaged \$405 million annually from 1983 to 2008 and exceeded \$1.8 billion annually ever since. In addition to financial impacts, impacted individuals also suffer mental stress post the disaster events. This presentation will outline practical guidance and initiative that are being deployed in Canada to help limit the costs of extreme weather events, focusing on flood resilience at a level of homes, communities and commercial real estate. It will also outline the role of natural infrastructure in climate adaptation, as well as emerging private sector financing solutions to support climate resilience projects and adaptation.

12:00 - 12:45

Lunch

12:45 - 13:45

Plenary 6

EMBC Strategic Overview and Way Ahead

Madeline Maley,

Assistant Deputy Minister

Emergency Management BC

Saanichton, British Columbia

Madeline Maley, the Assistant Deputy Minister for EMBC Response Operations will discuss learning from the events of 2019 and prior years, and how these lessons are influencing BC's approach for a more resilient province.

13:45 - 14:00

Closing & Prizes