*2015 Summary Report*

# Pacific Northwest Border Health Alliance Twelfth Annual Cross Border Workshop *"Back to Basics: Lessons Learned – Experiences Shared"*

April 28 -30, 2015
Victoria, BC

Pacific NorthWest
Border Health Alliance

*\Electronic copies of this report are available on the Pacific NorthWest Border Health Alliance webpage (http://www.pnwbha.org/). For further information, please contact info@pnwbha.org*

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# Acknowledgments

The Pacific NorthWest Border Health Alliance (PNWBHA) extends its most sincere appreciation to the British Columbia Ministry of Health for hosting the 12th Annual Cross Border Workshop. We would also like to thank the Washington State Department of Health for their financial support and assistance in program development and management. Last but not least, we must thank the bi-national planning committee, facilitators, speakers, note takers and report collators and our cross border public health partners for their support and commitment to the success of this workshop. Working together, we are establishing a seamless cross-jurisdictional public health system to quickly and efficiently track and respond to natural and intentional public health threats across both domestic and international borders.

**Mike Harryman**
Co-Chair (United States)
Pacific NorthWest Border Health Alliance

**Garnet Matchett**
Co-Chair (Canada)
Pacific NorthWest Border Health Alliance

Pacific NorthWest
Border Health Alliance

**Member Jurisdictions**

# Acknowledgments (continued)

## Workgroup Leads

### *Epidemiology and Surveillance*

**Eleni Galanis**
British Columbia CDC

**Mike Boysun**
Washington State Department of Health

### *Public Health Laboratories*

**Muhammad Morshed**
BC Centre for Disease Control

**Romesh Gautom**
Washington State Department of Health

### *Health Emergency Medical Services*

**Rod Salem**
BC Emergency Health Services

**Larry Torris**
State of Oregon

### *Health Emergency Management*

**Shawn Carby**
BC Ministry of Health

**Nathan Weed**
Washington State Department of Health

### *Clinical Medical Surge*

**Dr. Vicki Sakata**
Northwest Healthcare Response Network

### *Public Health Law*

**Fiona Gow**
BC Ministry of Justice

**Joyce Roper**
WA State Office of the Attorney General

### *Indigenous Health*

**Evan Adams, MD**
BC Ministry of Health

**Elizabeth Buckingham**
Makah Nation

### *Communications*

**Hannah Lawrie**

**Laura Blaske**
Washington State Department of Health

### *Environmental Health Initiative (new)*

**Herbert Antill**
Health Canada

**Leo Wainhouse**
Washington State Department of Health

**Kim Zabel**
Washington State Department of Health

# Acknowledgments (continued)


## Workshop Recorders

**Greg Nordlund**
Washington State Department of Health

**Jessica Baggett**
Washington State Department of Health

**Tim Schlender**
Washington State Department of Health

**Kristen Baird**
Washington State Department of Health

**Dianna Lahmann**
Washington State Department of Health

## Workshop Organizers

**Wayne Dauphinee**
PNWBHA Secretariat

**Amy Sheridan**
PNWBHA Secretariat

**Gail Andersen**
Washington State Department of Health

**Melia Kelly**
British Columbia Ministry of Health

**Carrie McGee**
Washington State Department of Health

**Jocelyn Hawse**
British Columbia Ministry of Heath


***Workshop Materials***

*Electronic copies of workshop presentations and photographs are available on the Pacific NorthWest Border Health Alliance webpage (http://www.pnwbha.org/).*

# Pacific NorthWest Border Health Alliance
# 12th Annual Cross Border Workshop
# "*Back to Basics: Lessons Learned – Experiences Shared*"

## INTRODUCTION

The Pacific NorthWest Border Health Alliance (PNWBHA) held its twelfth annual bi-national cross border workshop in Victoria, British Columbia, April 28-30, 2015. The workshop's theme, "Back to Basics: Lessons Learned – Experiences Shared," focused on the PNWBHA's continued collaborative approach to prepare for and respond to any natural, accidental and intentional events impacting the Pacific Northwest in a coordinated and effective manner. Nearly 200 professionals attended from Canada (including Alberta, British Columbia, Saskatchewan, Yukon Territory, Canadian First Nations and federal government agencies) and the United States (including Alaska, Idaho, Montana, Oregon, Washington, Native American tribes and federal government agencies), representing the fields of healthcare, public health, epidemiology, public health laboratories, emergency management, emergency medical services, indigenous health, risk communications, environmental public health, and public health law. In addition, this year's workshop included partners representing the Western Regional Emergency Management Advisory Committee.

## NEW ATTENDEES/REFRESHER ORIENTATION

**Wayne Dauphinee,** Executive Director
*Pacific NorthWest Border Health Alliance (PNWBHA)*

## WORKGROUP MEETINGS

Nine cross border workgroups convened on April 28, 2015, to discuss the status of projects, new issues and next steps. Following are reports on each session:

### Epidemiology and Surveillance Workgroup

The overall focus of this workgroup session was to discuss tools, best practices and lessons learned developed by the represented public health agencies in the United States and Canada

from the recent Ebola outbreak in West Africa. The discussion was specific to the roles and responsibilities that epidemiologists have in public health emergencies requiring surveillance, contact tracing, clinical guidance and more. Each jurisdiction represented at the session was able to discuss:

- The role of epidemiology and surveillance in planning.
- The role in response and province/state and local level.
- Tools and protocols developed.
- Challenges and successes.

Following the topics above, the discussion shifted to ways that some of the practices and lessons learned from Ebola could be applied and sustained to the next infectious disease outbreak or public health emergency. Some of the high-level discussion information that arose included:

- Application of Epidemiology Task Force to other diseases, including avian influenza and measles.
- Use of forms.
- Monitoring tools.
- Relationships formed with new partners.

There was a follow-up on the discussion of last year's workgroup topic of wildfires, and what next steps needed to be taken to sustain those efforts.

A 12-month work plan was reviewed and updated, which provided specific working group members with action items to complete. Some of these action items included:

- Circulating the previously developed MOU.
- Developing/updating a contact list for workday and emergency 24/7 phone numbers.

## Public Health Laboratories Workgroup

*Co-chairs:*
*Muhammad Morshed (CA)*
*Romesh Gautom (US)*

Primary staff: Dr. Romesh Gautom (WA) and Dr. Judy Isaac-Renton (BC)

After an introduction by the leads, several presentations were made including reports on:

- A visit of European Union delegation to Washington's Public Health Laboratories (PHL) to observe shellfish testing.
- Sharing patient-based results across borders and after-hours testing.
- Genome sequencing conducted under federal auspices.
- Testing during the Ebola outbreak.
- Lyme disease testing in mice and ticks.

Goals for the next year include:

- The Memorandum of Understanding (MOU) needs to be revisited and several issues need to be addressed.
- Coordination of genome sequencing.
- General rejuvenation of group.

## Health Emergency Management Workgroup

*Co-chairs:*
*Shawn Carby (CA)*
*Nathan Weed (US)*

**Purpose:**

The Health Emergency Management Working Group (HEMWG) enhances ongoing cooperation and collaboration in setting strategic/operational priorities and direction for cross jurisdictional health emergency management activities. The activities of the HEMWG are integral to ensuring that the requirements and activities of the other working groups are effectively integrated into enhancing PNWBHA broader emergency and consequence management operational plans and procedures.

The HEMWG is a forum where members can collaborate on existing Health Emergency Management programs, best practices and lessons learned.

**2014/2015 Achievements:**

- Ebola planning and ongoing engagement has been a top priority for all group members.

**2015/2016 Action Plan:**

Using the June 2016 Cascadia Rising and Coastal Response exercises as a driving force to:

- Validate cross border arrangements/agreements.
- Explore movement of health resources across the borders.
- Validate communication processes.
- Reinforce linkages with the EMS working group.

**PNWBHA 2015/2016 Strategic Objectives:**

To facilitate alignment and operationalize provincial, state and federal plans, agreements and arrangements.

## Health Emergency Medical Services Workgroup

*Co-chairs:*
*Rod Salem (CA)*
*Larry Torris (US)*

**Background and History: Larry Torris**

- History of the workgroup and productivity.
- Accolades to Mike Smith and his role with the group.
- Vision for next year = operationalizing discussions.
- Possible change /combination of workgroups.
- Introductions (10 people were present).

**The Future of EMS: Dr. Alexander Garza**

- Metamorphosis of EMS is the current state.
- EMS has not come far enough and needs to continue to be incorporated into the larger medical world.
- Overall, the medical community has little knowledge of EMS.
- Overall, EMS is still not widely accepted by the medical community.
- EMS lacks performance data:
    - Affordable Care Act will have an impact on EMS.
    - Focus shifting to Quality of Care (value-based purchasing).
    - Patient satisfaction.
    - Outcomes.
    - No new money, poor performers will not be rewarded.
- Principles of Quality Care and examples
    - STEMI (ST Segment Elevation Myocardial Infarction) care and review of general Key Performance Indicators (KPIs).
    - Mobile Integrated Healthcare models.
- EMS is a highly skilled, highly educated workforce that is used sporadically. EMS should be used for other healthcare roles. Example: to reduce readmission rates.
- Vision – EMS as a community asset with a culture of Quality Care = integration into the medical world.
- Recognition as medical professionals based on quality care.
- Specific issues related to emergency preparedness:
    - Ebola/MERS (Middle East Respiratory Syndrome) – Surveillance data from EMS is helpful but terminology gap still exists. Example: *fever* vs. *hot*.
    - Hospital and prehospital environments are very different and the tools used should address both environments.
    - Fidelity vs. early warning.
    - Mass Migration
        - Example: Haiti earthquake, Kentucky Derby
        - Healthcare workers migrating to Haiti and Haiti citizens migrating to other countries.
        - Challenges:

- Supply logistics for healthcare, initial supply and re-supply, controlled substances.
- Cross licensure.
- Immunization consideration for citizens and immigrants.
- Visas and immigration status of patients.
- Cross agency communication (FEMA vs. state).
- Medical surge issues on existing resources.

- This workgroup is an effective group to address these issues, and Dr. Garza advocates for the work to continue.
- Exercises would be a good way to work out issues.
  Review of best practices that exist to address these issues. Example: the Canadian Dispatch system, one system for all that integrated with surveillance system is a best practice.

**US Update on Ebola: Mike Smith**

- Provided update on how Washington established Ebola response:
  - Establishing EMS patient care protocols, county operating procedures, dispatch instructions and special equipment considerations.
  - Discussion on Isopod vs. other equipment and comparison.
  - Discussion on air vs. ground transport of EVD:
    - Vulnerability due to lack of resources.
    - Long ground transport times.
    - Air capability summary .
    - Review of current resource document for PNW states and EVD transports.

**Closing and Adjourn: Larry Torris**

- Summary of resource documents and concepts of sharing.
- Discussion on importance of the continuum of care.

## Communications Workgroup

*Co-chairs:*
*Hannah Lawrie (CA)*
*Laura Blaske (US)*

The Communications Leads from British Columbia and Washington State held a planning meeting to discuss partner engagement. The issue? Not many communications representatives are able to attend the annual meeting, and other outreach strategies are necessary to continue to move forward on collaborative plans and resource development/sharing.

The leads went over BC and Washington State emergency communications plans to assure appropriate contact points were included. They also agreed to follow up with communications colleagues in member provinces and states to develop an overall Emergency Communications Contact List and a system for keeping it up to date (to be completed in 2015).

BC and Washington State will convene a conference call with designated emergency communications contacts in early 2016 to discuss:

- Steps necessary to assure all member state and province emergency communications plans include protocols and contact information for engaging partners
- Developing a consistent process for sharing messages in an emergency.
- Establishing a regular series of conference calls to continue collaborations.
- Ways to better share resources, tools and materials in both emergency and non-emergency situations.
- Expectations/input from each jurisdiction on the overall goals of the group.

## Public Health Law Workgroup

*Co-chairs:*
*Fiona Gow (CA)*
*Joyce Roper (US)*

Attendees:
Denise Worker, Saskatchewan
Donna Lawson, First Nations
Dee Hoyano, Medical Health Officer, Vancouver
Kristen Mitchell, Washington State

Topics and Discussion:

**Ebola and Measles: The Role of Public Health Law**

The participants discussed their respective jurisdictions' experiences with Ebola and the Disneyland measles outbreak. The evolving guidance issued on Ebola, particularly for healthcare workers, was a point of interest, as was the decision by some states to be more restrictive for returning healthcare providers than the CDC guidance.

The measles discussion included comparison of the different jurisdictions' immunization laws and the authority to exclude children who had not been immunized from schools and daycares.

**Management of Avian Influenza Outbreak**

Kristen Mitchell led the discussion about the culling of domestic flocks due to transmission of highly pathogenic avian influenza (HPAI) H5 from wild birds. The disease is essentially following the migratory flyways. British Columbia is experiencing outbreaks in the Fraser Valley. Apparently some have affected backyard flocks, which are becoming increasingly common in urban environments in British Columbia and Washington.

**Regulating the Use of Marijuana and Tobacco**

The group discussed the legislation proposal in Washington to raise the smoking age to 21 and the fact that legislators dropped the age to 19. Regulation of e-cigarettes and vapor products was also discussed. Considerable time was spent talking about Washington's medical marijuana, recreational marijuana, and the legislation reconciling the two markets. Joyce Roper

described the evolution of the laws over the years in Washington. There was considerable interest in the differences between the Canadian and US federal systems and a discussion about how recent changes in the delivery of marijuana to medical marijuana patients (i.e., by mail) have triggered the opening of dispensaries in British Columbia. Local governments in British Columbia are sorting through what steps they may take to protect the public health, particularly to prevent the distribution of marijuana to minors who do not have medical authorizations.

**FPT Mutual Aid Agreement**

The workgroup reached this topic near the ending time for the workgroup meeting and no one other than Fiona Gow had reviewed the Mutual Aid Agreement. The group decided to postpone this discussion to a later date.

## Indigenous Health Workgroup

*Co-chairs:*
*Evan Adams (CA)*
*Elizabeth Buckingham (US)*

The Indigenous Workgroup began with a summary of public health events from the past year, emphasizing the strong need for continued collaboration and capacity building.

John Scott, representing the Pan American Health Organization, led a presentation on Disaster Risk Reduction—an update to the 2014 Indigenous Hemispheric Consultation. Scott spoke about the unique opportunities tribes face in building preparedness capacity. He challenged the group to consider how factors such as climate change will affect indigenous issues, including public health emergency preparedness in the future, and to be proactive in preparedness activities and building awareness within the tribes themselves.

An update was given on the Bella Bella Canoe Journey held July 13-19, 2014, with paddlers from Canada, Alaska and Washington. The event was one of the largest Canoe Journeys to date with approximately 5,000 in attendance, with no emergency incidents during the event.

The workgroup shared a robust conversation on the successes of last year's Canoe Journey and medical support equipment that could be easily shared across the border for planned tribal events or emergency incidents. Great consideration was given to the logistical aspects of this idea and possibly practicing the movement of public health assets from tribe to tribe across the border.

Specifically, the Canadian Mobile Medical Unit (MMU) was used to provide medical surge support to the hospital serving Bella Bella. The MMU is 1000 $ft^2$ of clinical space that can be used for outreach-level care to emergency surgical. The MMU can come staffed, and all staff have been through cultural competency training.

Workgroup leadership changes were announced during the meeting. The workgroup's British Columbia representative Dr. Evan Adams and US representative Elizabeth Buckingham will

formally secede their roles as co-chairs. Cheryl Sanders from the Lummi Tribe has agreed to step in as the US co-chair and Dr. Adams agreed to help locate his Canadian replacement.

Additionally, staff support to the Indigenous Workgroup will change. Washington State Department of Health Tribal Liaison & Multicultural Coordinator Maria Gardipee will transfer her role as staff support to the Indigenous Workgroup to the Office of Emergency Preparedness and Response program within the Department of Health. Staff members Kristen Baird Romero and Dianna Lahmann will take over as support staff to the workgroup moving forward.

Suggestions made during the meeting:

- Could be helpful to have virtual meetings in between the annual conference.
- Opportunity to make use of the Native student organization at the University of Washington for future conferences.
- Opportunity to connect with Mobile Health Clinics Association (Washington).
- Look into developing a “disaster” component for Culturally and Linguistically Appropriate Standards (CLAS).

## Clinical Medical Surge Workgroup

*Chair:*
*Vicki Sakata, MD (US)*

### Cross Border Patient Movement Discussion

- Current daily surge problems
    - Peace Health: Chronic state of need to surge, transferring patients out of system, collaboration with Good Samaritan.
    - Providence OR: Same issues. Difficult on a daily basis to find staff and space.
    - Hospitals are using locum staff, traveling nurses, etc.
    - Lack of one inpatient hospitalist can mean loss of care to 18 patients.
    - May need to have a lower threshold for regional surge.
- Specialty patient populations
    - Pediatrics
        - First “Train the Trainer” Pediatric Disaster Workshop to take place on May 15 in Portland.
        - Fifteen Portland hospitals to attend.
        - Goal is to spread pediatric training to nonpediatric hospitals throughout Oregon in the same fashion that Washington has done.
        - Funded by Oregon EMSC.
    - Other specialty populations to consider
        - High-risk OB
        - Perinatal
        - Critical care
        - Transplant patients
        - Burn

### Mission Ready Packages (MRP)

- Need to be developed.

- Need to be flexible.
- Need to be tested.
- Consider basic MRP either “Medical” or “Surgical” and then build out capabilities depending on situation.
    - Event-driven team depending on the situation
    - A roster of specialties
        - Consider using MRC (Medical Reserve Corp)
    - Two options: Bring patient to specialty care vs. specialty care to patient.
    - Need to be able to move a team short of a governor’s proclamation and declaration.
    - HHS: More and more of their responses are not declared disasters yet use a lot of resources.
    - Issue: Volunteer management/credentialing/liability protection.

- Needs to be “priced” so that requesting agency knows exactly what they are getting and what it will cost.

**Just-in-time supplies**

- Need to determine who has what supplies around the state.
- Important to exercise the movement of caches.
- Evacuating hospital to another location – then shouldn’t they still be responsible for supplies vs. establishing a facility for patients, then it is not owned by one particular hospital.
- Request for HHS to provide list of supplies sent with their small teams; will also provide a general location of caches for use by our region (Sacramento?).
- Does HHS have templates for forming teams? Ron will look into what EMD uses for DMAT.
- Rotate caches through the hospital system to avoid waste due to expiration. Build in extra supplies to cover in case need to access the supplies in emergency.
    - Michael: Possibly a one-time donation to cover costs with federal grant dollars?
- Triggers and indicators for crisis standards of care.

**EMAC vs PNEMA**

- Favor PNEMA over EMAC because of flexibility and ease of implementation (theoretically).

**Cross Border Medical Surge Exercise**

Additional attendee: John Ufford, Washington State Emergency Management Division

**Discussion:**
Michael – need to work on an exercise to test legitimacy of PNEMA in a medical disaster. Want to develop a real capability and be ready to activate it the next day; a mission-ready team (suggested Peds Team).

John U – suggest to ramp up to the exercise. Is willing to engage to help with implementation.

Discussion on cross-border patient transport:

- Each state and provincial emergency management agency have made commitment to coordinate transfer of staff and equipment
- Can turn around mutual aid requests within four hours (assuming infrastructure and communications are still in place).
- Annex B of the PNEMA operational plan has been in effect since 2005

Provider licensure:

- If physician or nurse is state worker, then automatically covered. If a private entity, they need to register with local emergency mgmt. agency as an emergency worker before deployment.
- Liability is born by the requesting agency
- The salary/cost is covered by the requesting agency.

Final thoughts:

- Rick/HHS: Bundled mission assignments - California holding exercise to test HHS ability to push resources and medical supplies without having to request it. Concern is no communication after a major disaster so the Feds need to be able to lean forward.
- Consensus that Medical Surge should combine efforts with EMS Workgroup as they deal with many of the same issues. EMS agreements across borders have been established.

**ACTION ITEMS**

GOAL:

- Create a pediatric response team; price the team; define the scope; legal component; credentialing for Oregon, Washington, and BC.
- Exercise from request to deployment, arrival and acceptance to work at receiving hospital.
    - Ron/Rick: provide templates for team composition and supply lists for a Medical Mission Ready Package
    - Vicki: review MRP make-up and obtain clinical input.
    - Michael: identify and contact corresponding team members in OR and BC and bring them up to speed.
    - Ron and Peter: Identify appropriate licensure credentialing contacts in respective jurisdictions

## Environmental Health Initiative Workgroup

*Co-chairs:*
*Herbert Antill (CA)*
*Kim Zabel and Leo Wainhouse (US)*

Herbert Antill from Health Canada opened the meeting with a brief introduction. He talked about the importance for the group to focus on goals and objectives and deliverables. He shared the

"umbrella" purpose of the Pacific Northwest Border Health Alliance (PNWBHA) and the Border Air Quality System (BAQS).

Objectives and next steps for the group include:

- Identifying common cross-border issues related to environmental public health.
- Identifying our response capabilities.
- Clarifying roles and responsibilities between cross-border representatives and stakeholders.
- Developing an integrated contingency plan.

The group talked about its scope of work, which is pending approval and should be approved soon, according to Herb. He said the over-arching strategic plan from the alliance gives our group basic directions, but it's up the group to decide what to concentrate on and how to prioritize. The group can decide how to get the work done and what the work should be.

- **Action item:** Decide who leads are for specific roles and tasks.
  We talked about creating a critical contacts list that would contain key contacts from each region, including a few people who would be a lead for their specific entity or jurisdiction. We agreed it would help to think through possible emergency scenarios to determine who should be critical contacts for each type of event.

Kim Zabel talked about the idea of creating an Environmental Public Health "Strike Team" that would be available to train individual local health jurisdictions (LHJs) for emergencies. The team might also be available to help do the LHJ's routine work during emergencies while they need to be in the field, or vice-versa.

**Presentation to the group by Heather Hill, Benton/Franklin counties, Washington.**
***Coccidiodes (Valley Fever) Discovery in Washington***

Presentation detailing the first-ever verified case of Coccidiodes in Washington state.
Heather shared events that led to the discovery between June 2010 and May 2011. There were three case histories:

1. Case 1: a 12-year-old boy.
2. Case 2: a 15-year-old boy.
3. Case 3: a 58-year-old man.

After interviewing the two persons from cases 1 and 2, Heather was able to determine the exact location to gather samples. In case 2, the boy had been injured while riding an ATV and Heather located the spot where he had fallen from the vehicle. She was also able to match DNA from the Case 2 victim with samples from the scene that were found as positive for Coccidiodes. Positive samples were also found in an outdoor "play area" for the 12-year-old victim in Case 1.

**Presentation to the group by Hanna Oltean, WA Dept. of Health**
***Coccidioides in Washington State: 2015 Surveillance Update***

Hanna Oltean shared background information about three Coccidioides cases discovered in Washington June 2010 – May 2011 with suspected local exposure. She shared that the Washington counties that reported the cases began requiring Coccidioidomycosis be locally notifiable later that same year. In April 2014, Coccidioidomycosis was made reportable

statewide in Washington as a rare condition. As of March 2015, eight cases with suspected or confirmed local exposure have been reported in four south-central Washington counties: Yakima, Benton, Franklin and Walla Walla.

Future surveillance will include increasing healthcare provider awareness, which should decrease time from onset to diagnosis. Improved awareness the local health jurisdiction level should aid accurate case reporting.

Continued efforts are necessary to increase our understanding. Outreach to other surveillance partners is ongoing, including:

- Indian Health Service
- Border states and provinces
- Academic partners

**Presentation by Clara Hard, WA Dept. of Health**
***Norovirus Outbreak***

Clara Hard shared information about a 2014 norovirus outbreak in Washington State that resulted in a recall of 12,000 dozen oysters and 8,000 lbs. of clams that originated from a harvester in Washington's Hammersley Inlet. Norovirus is a highly contagious virus that can cause nausea, vomiting, abdominal cramping, diarrhea, fever and headache. It's the most common cause of acute gastroenteritis and foodborne outbreaks in the U.S. The outbreak reinforced the need for:

- Thorough reporting.
- Report tracking at Dept. of Health to look for outbreak trends.
- Tagging shellfish shipments so we can track the food chain from harvest to consumer.

**Presentation by Amber J. Itle, MsDVM, WSDA**

***Avian Influenza in Washington***

Amber J. Itle reported on a recent HPA1 avian influenza outbreak in the U.S. In an outbreak, WSDA's response is organized to:

1. Determine the nature of the outbreak
2. Initiate the appropriate response
3. Initiate disease control and eradication
4. Ensure recovery and resumption of business

She noted that the U.S. has the best avian flu testing program in the world. Agency partners at the US Dept. of Agriculture, Washington Dept. of Health and Dept. of Fish and Wildlife were notified early about the outbreak. Cases were found in multiple U.S. states, including Washington and Oregon. Numerous poultry cases occurred in Minnesota (22 out of 33 in total). Over 7 million birds have been depopulated in the U.S. as of April 15, 2015. The trade impacts from this type of outbreak are very real; the U.S. poultry export market is valued at $6.5 billion. As a result of this outbreak, 11 countries have suspended imports of all U.S. poultry products, and 35 countries have regionalized bans in the U.S.

**Presentation by Hanna Oltean, MPH, WA State Dept. of Health, and Vivian Hawkins, PhD MS, WA State Dept. of Health**

***Avian Influenza in Washington State: Implications for Human Health***

Hanna and Vivian reported that the risk to humans from avian influenza is very low and these viruses generally do not cause illness in humans. Infections that do occur almost always involve direct contact with infected birds or their environment. They said the goal is to maintain constant vigilance to identify and contain any human infection that may occur. The Washington Dept. of Health works closely with the CDC regarding any humans exposed to the virus. In the event of an infection, workers implement immediate control measures to minimize the potential spread of the virus.

Because avian influenza has been identified in birds and both Canada and the U.S., all public health partners should have plans for how to:

- Organize with partner organizations to share information.
- Manage any exposed humans.
- Respond to any suspected human cases within their jurisdictions.

**Presentation by Janice Bridgland, Canada Food Inspection Agency**

Janice detailed the agency's incident command setup and staffing. She shared photos of workers on site at a farm where avian influenza had infected the poultry. Janice answered questions about the similarities and differences between Canadian and U.S. incident command. She said even though the focus of the presentations to our group were different, the processes used by the two countries are very similar.

# PLENARY SESSIONS

**Opening Ceremonies**
**Shawn Carby**, Executive Director, Emergency Management Unit
British Columbia Ministry of Health, CA

**Post the Colors**
**First Nations Welcome**
**British Columbia Welcome**

**Pacific Northwest Welcome**

**Garnet Matchett,** PNWBHA Co-Chair
*Director of Operations, Health Emergency Management Unit*
*Saskatchewan Ministry of Health*

**Michael Harryman, MA,** PNWBHA Co-Chair
*Director of Emergency Operations, Oregon Health Authority (US)*

**Robert Ezelle,** Chair, Western Regional Emergency Management Advisory Council (WREMAC)
*Directory, Emergency Management Division*
*Washington State Military Department (US)*

## International Mutual Aid Agreements: Foundations of Health Security in North America

**Carole Cameron,** Director of International Affairs
*Federal Emergency Management Agency*
*US Department of Homeland Security*

Cameron spoke of how unmanageable disasters can be due to the volume of donated "stuff" and volunteers. FEMA has an office which oversees the **International Assistance System.** This office and system works with the US Department of State to determine whether offers of aid will really help, and whether to accept or decline them.

They are planning to develop an annex plan for importing medical products during disasters. These would have to be approved by the US Food and Drug Administration.

There are legal and tactical challenges to receiving international assistance, including the fact that state governors can waive certain requirements (like credentialing for teams or specialists) and accept help, where the federal government may have to decline.

One PowerPoint slide compared international assistance from Post-Katrina and Post-Sandy. During Katrina there were 151 countries and organizations offering cash and material assistance. The US International Assistance System was implemented resulting from that, so in the aftermath of Hurricane Sandy they were able to filter the number to seven. This is evidence that lessons learned and implemented since Hurricane Katrina are improving our international assistance system.

## Emergency Licensing of Healthcare Professionals

**Shawn Carby**, Executive Director
*Emergency Management Unit*
*British Columbia Ministry of Health*

In a disaster, there will always be a need for qualified medical personnel. The BC Ministry of Health has agreements such as OFMAR and PNEMA in place to assist when resources are exhausted. BC is currently in the planning stages of addressing the need of surge capacity when unaffiliated medical volunteers present to assist in an emergency. The major question presented was: how do they ensure their skills can be used? Some of the challenges presented

that are associated with medical volunteers include: convergence without coordination and loss of infrastructure impacting the ability to coordinate.

From the perspective of Washington State, the utilization of RCWs (legal codes) shape the foundation for the use of medical volunteers in an emergency. Ongoing discussions in Washington State include: what specific regulatory requirements during an emergency or disaster would we ask the governor to waive? The Health Systems and Quality Assurance (HSQA) Office of Customer Service (OCS) ensures that all critical services are resumed following a disaster. The Credentialing Team would use a team approach to maintain communication with service providers, issue temporary permits, grant license renewals, etc. In addition, all local jurisdictions in Washington have the ability to use WAserv,an online pre-registration system for medical personnel.

## Bio Hazard Waste Management

**Lisa Young**, Leader
*Infection Prevention and Control*
*British Columbia Emergency Health Services*
*Provincial Health Services Authority*

**David B. Jansen, PE, LEED AP,** Director
*Office of Radiation Protection*
*Washington State Department of Health (US)*

The group discussed the challenges of working with biomedical wastes generated during the Ebola outbreak of 2014. Healthcare facilities and laboratories around the country were faced with questions about handling such high-risk waste on what may have become a regular basis. Concern spread beyond the medical field into transportation, wastewater, and other environmental and legal areas. New practices were set up or refined during the outbreak that will provide better protections in future outbreaks. They are looking ahead to building on partnerships between disciplines and neighboring jurisdictions.

## Cascadia Impact

**Michael Loehr,** Chief
*Emergency Preparedness and Response*
*Washington State Department of Health (US)*

Mr. Loehr opened with the challenge to think differently about a catastrophic disaster event. Because there are so many unpredictable scenarios within any catastrophic event, the challenge is to prepare for the unknown. He admitted many planners struggle with this concept

because they want to be able to plan for everything. A big part of the planning is in figuring out how decisions will be made, not so much what the decisions will be. And how will we network together in the midst of the event?

Loehr emphasized how impacts from a disaster can be hard to predict and plan for. He said we need to plan with and for a range of options for different situations.

For Cascadia Subduction Zone planning, Loehr is a part of the Statewide Catastrophic Incident Planning Team (SCIPT). The team's purpose is to:

- Integrate planning efforts.
- Increase understanding.
- Build trust.

In the spring of 2016, planners from different regions and offices will conduct a four-day exercise called "Cascadia Rising." Participants include:

- Washington State tribes, state agencies and local jurisdictions.
- Oregon State tribes, state agencies and local jurisdictions.
- Federal agencies: FEMA Region 10, Department of Defense, and HHS.

The purpose of the exercise (for the Washington State Department of Health) will be to:

- Test the ability to gain and maintain situational awareness and assess environmental impacts.
- Test the agency's ability to support local health jurisdictions in medical surge activities.
- Test policy decision making.
- Test field response capabilities.

## Engaging Indigenous Peoples in Disaster Risk Reduction

**John Scott**
*Center for Public Service Communications*
*Member of the Tlingit and Haida Indian Tribes of Alaska*

Scott talked about the importance of approaching disaster planning in culturally appropriate ways when working with indigenous communities. Too often planning does not take into consideration the unique needs – socially and culturally – of indigenous peoples. A better flow of information and knowledge, back and forth, can minimize the gaps and leave indigenous peoples better prepared to survive and recover from disasters – natural and manmade.

## Lessons Learned but Forgotten: How to Implement Sustained Change in Public Health

*Facilitator:*
**Cdr. Erik Vincent, USPHS**
HHS/ASPR Liaison Officer to the Public Health Agency of Canada

*Speakers:*
**Barbara Raymond, MD**, Director General
*Centre for Emergency Preparedness and Response*
*Public Health Agency of Canada*

**Rick Buell,** Regional Administrator
*Health and Human Service (HHS), Office of the Assistant Secretary for Preparedness Response (ASPR)*

Rick Buell is one of 10 Regional Emergency Coordinators in the United States. The coordinators:

- Build lasting relationships with our partners to maintain strong capabilities.
- Respond to national and international requests for public health and medical assistance, and coordinate federal personnel, equipment and supplies.
- Are advocates for state, territorial, tribal and local health on prevention, protection, mitigation, response and recovery issues.
- Provide situational awareness on emerging threats, existing vulnerabilities, and inter-governmental/inter-agency activities and issues.

Mr. Buell's presentation, "Lessons Learned, Forgotten, and Remembered," focused on three principles: 1) train and exercise, 2) coordinate, and 3) continually improve. He detailed how the local community in the Washington town of Oso adapted and collaborated after the devastating mudslide there.

He shared plans for a training exercise in 2016 called, "Beyond the Border," a patient movement "table top." The goal is to improve the ability to track and move patients across the Canadian and United States border. Participants expect to identify the current procedures for movement and tracking of patients and also identify any gaps in the process.

Dr. Barbara Raymond presented on lessons learned from infectious disease outbreaks. She clarified that a "lesson learned" is only valuable once we've identified the lesson and adapted our process or mindset for the next event. She detailed areas where we've made great gains from lessons learned, including:

- **Regional Operations Centres** – Established to coordinate federal responses in partnership with provinces and territories.
- **Operational Framework for Mutual Aid Requests (OFMAR)** – Provides a framework for the movement of health care professionals and assets across jurisdictions during public health events.
- **Risk Threat Identification and Surveillance** – Robust surveillance tools monitor global media sources for information on global disease events.

Dr. Raymond talked about learning from some recent events we'd all heard about in the news, including the Ebola virus case in Dallas, TX. "God bless Texas," she said, in reference to all that we learned about emergency infections disease planning and operations by what Dallas went through. She also mentioned how the recent measles outbreak caused a valuable public discussion about vaccination.

"We all hesitate to 'trumpet' our mistakes or things we should have done differently when we review emergency situations. There is a need for a 'trusted forum' where we don't feel as vulnerable when we talk about lessons learned," she said.

## Speaking the Same Language: Fundamentals of Risk Communication

**Laura Blaske,** Manager
*Public Awareness and Emergency Communications*
*Washington State Department of Health (US)*

Laura Blaske presented an overview of risk communication strategies and the principles of managing an effective risk communication response in times of crisis. Laura covered the skills and tools needed to communicate effectively with staff, the media, outside agencies and community members, as well as how risk communication strategies can help communities respond to—and recover from—emergencies.

**Key areas included**:

1. The fundamentals of risk communication.
2. How to effectively communicate about sensitive issues.
3. What influences risk perception.
4. Targeting the message to the audience.
5. Risk communication management and spokesperson tools.

## EMS Management of Highly Contagious Patients

**Rod Salem,** Director
*Emergency Management Special Operations (EMSO)*
*Provincial Programs*
*British Columbia Emergency Health Services (CA)*

**Larry D. Torris, MBA**, OR-Paramedic, Planner
*Health Security, Preparedness and Response (HSPR) Program*
*Oregon Health Authority/Oregon State Public Health Division (US)*

The 2014 Ebola epidemic is the largest in history, affecting multiple countries in West Africa and beyond. EMS providers in the United States and Canada have invested efforts to be prepared to treat or transport suspected or known Ebola patients. Planning for Ebola response was highly influenced by those at the local level stemming from both public fear and anxiety driven by the media.

EMS planning for transport of Ebola patients centered on the following factors:

- Coordination of partners and agencies.
- Inclusion of Subject Matter Experts (SMEs).
- Providing a Continuum of Care.
- Managing the “What If” scenarios.

EMS best practices shared included a description of Oregon’s strategy to ask for staff to volunteer for highly contagious patient transport teams instead of assigning direct responsibility. It is believed Oregon’s strategy increased the number of willing staff to volunteer and encouraged dedicated personnel for advanced transport team training.

Despite differences in the EMS transport system between countries, both Oregon and British Columbia pointed success to the early engagement of agencies such as the Attorney General, Ministry of Health, public safety answering points,
emergency management, private-sector associates, field staff, and subject matter experts while continuously being open to work with less traditional partners. The interdisciplinary collaboration helped to determine what aspects of the system are obligatory EMS transport services while considering critical points such as liability, safety of responders, and hospital protocol.

Moving towards the future, Ebola planning efforts will shift to less-specific highly contagious disease planning. The key will be how to continue the momentum of efforts and engagement of partners for deliverables now that global focus and Ebola efforts in West Africa wind down.

## Quarantine Revisited

**Dr. Michelle Murti**
*Fraser Health*

**Dr. Reka Gustafson**
*Vancouver Coastal Health*

**Dale (Alex) Alexander,** Supervisor, Operational Readiness
*Emergency Preparedness and Response*
*Washington State Department of Health (US)*

The presence of travelers from West Africa during the Ebola outbreak posed logistical challenges for public agencies in both the US and Canada. Monitoring patients who had traveled to areas in West Africa where Ebola had been an issue became a huge problem. Creating and putting systems in place to track these patients, establishing protocols for care should they become symptomatic, and looking ahead to issues like disposal of remains - all of these needed to be put in place quickly. Quarantine facilities became a possibility for the first time in many years and planning for them became a priority. Marti described British Columbia’s efforts developing surveillance, monitoring and quarantine plans while Washington explained their establishment of a functioning quarantine center.

## Ebola Preparations in the Pacific NorthWest Border Health Alliance

**Denise Werker, MD,** Deputy Chief Medical Health Officer
*Population Health Branch*
*Saskatchewan Ministry of Health (CA)*

**Larry Torris**
*Preparedness and Response (HSPR) Program*
*Oregon Health Authority/Oregon State Public Health Division (US)*

Dr. Werker shared a timeline of milestones beginning with the March 23, 2014, World Health Organization (WHO) news announcement on the Ebola virus disease (EVD) outbreak in Guinea (49 cases, including 29 deaths). Other select milestones included:

- August 6, 2014: First meeting of Council of Chief Medical Health Officers to discuss EVD preparedness planning.
- September 30, 2014: First EVD case diagnosed in Texas, USA.
- October 22, 2014: First joint meeting of Public Health Network Council and Council of Chief Medical Health Officers to discuss EVD planning and preparedness.

Saskatchewan's population is 1.15 million. It has 13 regional health authorities and 70 First Nations communities. There are 61 hospitals, but only nine have intensive care unit (ICU) beds. Dr. Werker stressed the challenges of an outbreak like Ebola. "We are not well placed to deal with pop-up cases of an infectious disease," she said. "In the midst of the outbreak, there was enormous duplication of effort, and inadequate structures and processes to efficiently collaborate on acute health care issues across jurisdictions."

Werker shared lessons learned (or observed) from the World Health Organization. They include the realization that:

- New diseases and old diseases in new contexts must be treated with humility and an ability to respond to surprises.
- Fragile health systems are quickly overwhelmed and collapse in the face of an outbreak.
- Shared vulnerability means shared responsibility; sharing resources and information.

Mr. Torris presented information about the State of Oregon's planning and response during the Ebola outbreak. He reported that the risk was low in the state, but agencies have been working together to plan for dealing with infected patients. Various staff have been trained in the processes, which included self-monitoring, transport and regional hospitalization. He shared the color-coded map that was created to show locations for hospitals suited for assessment and treatment of Ebola patients.

## Ebola Transport and Healthcare Information and Actual Experience

**Alex Garza, MD, MPH**
*Saint Louis University College for Public Health and Social Justice and School of Medicine*

The overall focus of this presentation highlighted the potential value in using EMS data to identify a traveler with an infectious disease. The presentation began with a review of pandemic influenzas including 1918 and 2009, and was then followed by more current events such as Ebola and MERS-CoV. The question presented to the group is how do you turn big data into actionable information? Dr. Garza highlighted the importance of the "4 V's of Big Data" which include:

- Volume
- Velocity
- Variety
- Veracity

EMS data are timely. People call 911 for a reason, the information is time-stamped, latitude and longitude are often provided based on the call location, all of which is stored in a database. In contrast, hospital data likely contains the home address which might not reflect the entire picture of a potentially infectious traveler. EMS data also contain information such as:

- Patient assessment
- Medical history
- Treatment provided

Lessons learned during Ebola about the connection between public health and EMS:

- Notification to EMS is critical. If EMS doesn't know about a potential threat or various protection strategies, they will continue to run calls and might put themselves and others in harm's way
- Ebola webinar series for the EMS community in BC were a success
- The development and distribution of Ebola FAQ documents for the EMS community
- EMS is a vital component to public health surveillance
- EMS data continues to improve
- Surveillance requires flexibility
- EMS needs to engage with public health
- 911 can assist public health in identifying trends
- Infectious diseases don't respect borders. It's not IF, but WHEN!

## Meeting Public Health Threats at Ground Zero: Responding to Ebola in West Africa

**LCDR Michael Kinzaer, MD**
**LCDR Jesus Reyna, RN**
*Monrovia Medical Station, Monrovia, Liberia*
*US Public Health Service*

**Captain Angela Bremner, RN**
*British Medical Treatment Station, Kerry Town, Sierra Leone*
*Canadian Field Hospital Detachment, Vancouver, CA*

**Theodore (Ted) Kuschak, PhD**
*Canadian Mobile Laboratory, Sierra Leone*
*National Microbiological Laboratory (CA)*

**LCDR Michael Kinzer, MD**
*Ebola Response in Guinea, July – December 2014*

Dr. Kinzer spoke about the CDC's presence in Guinea during the Ebola outbreak in 2014. There were five teams in Guinea, comprised of 25-50 staff working four-week rotations. Their roles included:

- Epi/surveillance.
- Traveler screening.
- Infection control.
- Health communications.
- Emergency Operations Center (EOC) staffing.

Guinea has a population of 12 million people. According to Kinzer, US Ambassador Alex Laskaris said it is "the size of Oregon, the population of Ohio, and the budget of the Montgomery County Public School System." The CDC coordinated strategic planning, helped support the national coordination infrastructure, and also coordinated planning with local and international partners, including the UN, WHO, UNICEF and others. They also assisted in media relations, including funding for an Ebola Hotline that provided health education and alert response. During the crisis the hotline received up to 10,000 national calls a day.
With the help of volunteer staff, CDC also coordinated traveler screening for over 20,000 passengers a month.

**LCDR Jesus Reyna, RN**
*Monrovia Medical Unit Team 1*

Mr. Reyna was part of a 65-member team of healthcare professionals, administrators and clinical staff to manage and operate a 25-bed Ebola Treatment Unit in Monrovia, Liberia. He shared photos and schematics detailing the layout of the facility and how patients were treated. He talked about the staffing and scheduling, and he highlighted the laborious process of donning and doffing personal protective clothing. He said the doffing procedure is the most dangerous part of the process because workers are fatigued and might rush to be "done."

**Captain Angela Bremner, RN**
*"Operation SIRONA"*

Captain Bremner presented on "Operation SIRONA," a Canadian field hospital detachment to Kerry Town, Sierra Leone. Her team of 37 medical and support staff were deployed in December 2014. Divided into four teams, they worked a 24/7 rotation, three shifts a day for 60 days. They provided critical care to local Ebola patients, including supportive care, oral and intravenous fluids, management of electrolyte abnormalities, and pain management. The patient population in Sierra Leone was 60% male, with a total mortality rate of 42.9%, she said. Bremner also noted the transmission rate of the virus to healt care workers was very high, so her team trained extensively in the "donning and doffing" of their medical personal protective equipment (PPEs). During training, they used "tracer dye" to simulate patient body fluid and track whether fluids remained after the doffing procedure.

**Dr. Theodore (Ted) Kuschak, PhD**
*Canadian Mobile Laboratory, Sierra Leone*

Dr. Kuschak presented about life on the ground in Sierra Leone as part of the Canadian Mobile Laboratory team. He talked about the challenges of day-to-day infection control, as well as communications difficulties with spotty coverage for phones, email and WiFi. He said as part of the National Mobile Laboratory (NML), workers were deployed for four weeks, then they had a 21-day self-monitoring procedure when they returned home. “Everyone involved has a regular day job, too,” he said, so the time commitment alone can be difficult. He said the NML needs to be ready to deploy within Canada as well, and planning is ongoing for that.

### Ebola Roundtable Discussion

*Facilitators:*
**Perry Kendall**

**John Wiesman**
*Secretary of Health, Washington State*

This was a discussion of the public health response to the 2014 Ebola outbreak. The outbreak caused the public health systems of all industrialized nations to realize how vulnerable they were to the kind of threat posed by Ebola. The positive effect was that it forced everyone to innovate and collaborate at a pace and level unseen before. There was also multi-jurisdictional and multi-disciplinary collaboration happening outside the normal boundaries of public health into areas like utilities, education, transportation, business, organized labor, etc. Both speakers pointed out the resiliency and creativity that public health showed in rising to the occasion and facing the issues head on.

## WORLD CAFÉ

The **World Café** is designed as an informal opportunity for agencies and organizations to highlight their public health/resiliency programs, as well as being a great networking opportunity for Cross Border participants. Exhibits are intended as an educational/awareness opportunity, rather than a vendor-based forum.

This year’s World Café poster presentation was intended to provide individual attendees an opportunity to showcase a particular project or program. Final selections were based on innovation, workshop theme, topic relevance, diversity and their visually appealing and educational nature.

The 2015 PNWBHA People’s Choice Award for the “Most Informative” World Café display or poster was presented to Rod Salem, BC Emergency Health Services, for “FEARBOLA.”

Presenters included:

**Rod Salem**
*British Columbia Emergency Health Services*

Poster title: “FEARBOLA”

**Andy Stergachis, PhD**
*Northwest Center for Public Health Practice*

Poster title: “PAHO/WHO Collaborating Center for Mass Gatherings Public Health”

**Dara Davies**
*British Columbia Mobile Medical Unit*

Poster title: “Region Specific Mass Casualty Incident Simulation: A Look at Interdisciplinary Clinical Simulations Education in Two Rural BC Communities”

**Christina Hurst**
*Clallam County Health and Human Services*

Poster title: “Seeing Spots: Measles Outbreak in Clallam County”

**Amy Sheridan**
*PNWBHA Secretariat*

Poster title: “PNWBHA: Who We Are and What We Do”

**Jessica Baggett**
*Washington State Department of Health*

Poster title: “Washington Statewide Pharmacy Agreement”

**Laura Blaske**
*Washington State Department of Health*

Poster title: “Pacific NorthWest Emergency Management Arrangement”

## Appendices

Appendix A - Workshop Agenda

Appendix B - Speaker Biographies

Appendix C - Workshop Evaluation

Appendix D - List of Registered Participants

# Appendix A

## Workshop Agenda

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## Pacific NorthWest Border Health Alliance
## 12th Annual Pacific NorthWest Cross Border Workshop

### "Back to Basics:
### Lessons Learned – Experiences Shared"

### Victoria, British Columbia
### April 28-30, 2015

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***Tuesday, April 28, 2015, Day 1***
***Orientation Session/ Workgroup Breakout Sessions/***
***Joint Coordination Committee Meeting***

**7:00-5:00 Registration**

**9:00-11:00** *PNWBHA Joint Coordination Committee (JCC) Annual Meeting*
(By invitation only)

**11:15-12:00** **Orientation Session**

***Wayne Dauphinee****, Executive Director*
***P****acific NorthWest Border Health Alliance (PNWBHA)*

*12:00-1:00* *Lunch on Your Own*

**1:00-4:00** **Workgroup Breakout Sessions**

**Track 1** **Epidemiology and Surveillance**
*Eleni Galanis, Co-Chair (CA)*
*Mike Boysun, Co-Chair (US)*

**Track 2** **Public Health Laboratories**
*Muhammad Morshed, Co-Chair (CA)*
*Romesh Gautom, Co-Chair (US)*

**Track 3** **Health Emergency Management**
*Shawn Carby, Co-Chair (CA)*

*Nathan Weed, Co-Chair (US)*

**Track 4** **Health Emergency Medical Services**
*Rod Salem, Co-Chair, (CA)*
*Larry Torris, Co-Chair (US*

***Tuesday, April 28, 2015***
***Day 1***
***Workgroup Breakout Sessions, continued***

**Track 5** **Communications**
*Canadian Co-Chair to be announced (CA)*
*Laura Blaske, Co-Chair (US)*

**Track 6** **Public Health Law**
*Fiona Gow, Co-Chair (CA)*
*Joyce Roper, Co-Chair (US)*

**Track 7** **Indigenous Health**
*Evan Adams, MD, Co-Chair (CA)*
*Elizabeth, Buckingham, Co-Chair (US)*

**Track 8** **Clinical Medical Surge Workgroup**
*Co-Chair (CA) TBC*
*Vicki Sakata Co-Chair (US)*

**Track 9** **Environmental Health Initiative**
*Leo Wainhouse, Co-Chair (US)*
*Kim Zabel Co-Chair Designate (US)*
*Herbert Antill Co-Chair (CA)*

***Wednesday, April 29, 2015***
***Day 2***
***General Session***

7:00-5:00 *Registration*

8:00-9:00 ***Opening Ceremonies***
*Shawn Carby*
Executive Director, Emergency Management Unit
British Columbia Ministry of Health, CA

***British Columbia Welcome***
*Honourable Terry Lake, MLA*
British Colombia Minister of Health

***Post the Colors***
***First Nation Welcome***

***Pacific Northwest Welcome***
*Garnet Matchett,*
PNWBHA Co-Chair
Director of Operations, Health Emergency Management Unit
Saskatchewan Ministry of Health, CA

*Michael Harryman, MA,*
PNWBHA Co-Chair
Director of Emergency Operations,
Oregon Health Authority, US

*Robert Ezelle*
Chair, Western Regional Emergency Management Advisory Council (WREMAC)
Director, Emergency Management Division
Washington State Military Department, US

9:00-10:00 ***International Mutual Aid Agreements: Foundations of Health Security in North America***
*Speaker: Carole Cameron,* Director of International Affairs
Federal Emergency Management Agency
US Department of Homeland Security

10:00-11:00 ***Maximizing Emergency Support across the Border in the Pacific Northwest: An Open Forum for a Stronger Future***
*Facilitators:*

*Dolph Diemont,* Federal Coordinating Officer
Federal Emergency Management Agency
US Department of Homeland Security

*John Lavery,* Executive Director
Health Emergency Management British Columbia

*Speakers: To be announced*

11:00-11:15 *Networking Break and Transition*

11:15-12:15 ***Concurrent Breakout Sessions***

Breakout Session #1
***Emergency Licensing of Health Care Professionals***
*Speaker: Shawn Carby,* Executive Director
Emergency Management Unit
British Columbia Ministry of Health

Breakout Session #2
***Bio Hazard Waste Management***
*Speakers:*

*Lisa Young,* Leader
Infection Prevention and Control
British Columbia Emergency Health Services
Provincial Health Services Authority

*David B. Jansen,* P.E., LEED AP, Director
Office of Radiation Protection
Washington State Department of Health, US

Breakout Session #3
***Cascadia Impact***
*Speaker: Michael Loehr,* Chief
Emergency Preparedness and Response
Washington State Department of Health, US

12:15-1:30 ***Lunch provided***

12:40-1:15 Luncheon Speaker
***Migration Emergencies: Are We Ready?***
*Speaker: Ann Touneh Dandridge*
Office of International Migration
Bureau of Population, Refugees, and Migration
United States Department of State

1:30-1:45 *Transition Break*

1:45-3:00 ***Lessons Learned but Forgotten: How to Implement Sustained Change in Public Health Preparedness and Response***

*Facilitator: Cdr Erik Vincent, USPHS*
HHS/ASPR Liaison Officer to the Public Health Agency of Canada

*Speakers:*

*Dr. Barbara Raymond, MD,* Director General
Centre for Emergency Preparedness and Response
Public Health Agency of Canada

*US speakers to be announced*

3:00-3:15 *Transition Break*

3:15-4:15 ***Concurrent Breakout Sessions***

Breakout Session #4
***Speaking the Same Language: Fundamentals of Risk Communication***
*Speaker: Laura Blaske,* Manager
Public Awareness and Emergency Communications
Washington State Department of Health, US

Breakout #5
***EMS Management of Highly Contagious Patients***
*Speakers:*

*Rod Salem,* Director
Emergency Management Special Operations (EMSO)
Provincial Programs
British Columbia Emergency Health Services, CA

*Larry D. Torris,* MBA, OR-Paramedic, Planner
Health Security, Preparedness and Response (HSPR) Program
Oregon Health Authority/Oregon State Public Health Division, US

Breakout #6
***Quarantine Revisited***
*Speakers:*

*Dr Michelle Murti,* Medical Health Officer
Fraser Health Authority, CA

*Dale (Alex) Alexander,* Supervisor, Operational Readiness,
Emergency Preparedness and Response,
Washington State Department of Health, US

| | |
|---|---|
| 4:15-4:30 | *Transition Break* |
| 4:30-6:00 | **Poster Presentations and World Café Networking**<br>Posters present a unique opportunity to inform conference delegates about special projects or initiatives that contribute to the field of emergency managers and promote community resiliency. Poster presentations feature innovative approaches, unique programs, community involvement or educational initiatives. |
| 6:00 | *Dinner on your own* |

**Thursday, April 30, 2015**
**Day 3**
**General Session**

7:00-10:00 am *Registration*

8:00-8:15 am ***Opening Remarks***
*Garnet Matchett,* PNWBHA Co-Chair
Director of Operations, Health Emergency Management Unit
Saskatchewan Ministry of Health, CA

*Michael Harryman,* MA, PNWBHA Co-Chair
Director of Emergency Operations, Oregon Health Authority, US

8:15-9:15 ***Ebola Preparations in the Pacific NorthWest Border Health Alliance***

*Speakers:*

*Dr. Denise Werker, M.D.* Deputy Chief Medical Health Officer
Population Health Branch
Saskatchewan Ministry of Health, CA

*Michael Harryman, MA,* Director of Emergency Operations,
Oregon Health Authority, US

9:15-10:15 ***Ebola Transport and Health Care Information and Actual Experience***
*Speaker: Dr. Alex Garza*, MD, MPH

10:15-10:30 *Networking Break*

10:30--11:45 ***Meeting Public Health Threats at Ground Zero: Responding to Ebola in West Africa***

*Speakers:*

*LCDR Michael Kinzaer*, M.D.
*LCDR Jesus Reyna,* R.N.
*Monrovia Medical Station, Monrovia, Liberia*
United States Public Health Service

*Theodore (Ted) Kuschak, Ph.D*
*Canadian Mobile Laboratory Sierra Leone*
National Microbiological Laboratory, CA

*Captain Angela Bremner, RN*
*British Medical Treatment Station Kerry Town, Sierra Leone*
1 Canadian Field Hospital Detachment Vancouver, CA

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|---|---|
| 11:45-12:30 | ***Ebola Roundtable Discussion***<br>*Facilitators:*<br><br>*Dr Perry Kendall,* Provincial Health Officer<br>British Columbia Minister of Health, CA<br><br>*Dr John Wiesman,* Secretary<br>Washington State Department of Health, US |
| 12:30-1:00 | ***Closing Remarks and Awards Presentation***<br>*Mike Harryman and Garnet Matchett,* PNWBHA Co-Chairs<br>*Amy Sheridan,* PNWBHA Administrator |
| 1:00 | Workshop Ends |

# Appendix B

## Speaker Biographies

(in alphabetical order)

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**Rick Buell, Regional Administrator**
**US Department of Health & Human Services**
**Office of the Assistant Secretary for Preparedness and Response**
**Seattle, Washington, USA**

Rick Buell is a US Department of Health and Human Services Regional Administrator with the Office of the Assistant Secretary for Preparedness and Response (ASPR). He works primarily with Alaska, Oregon, Idaho and Washington health departments, tribal governments and healthcare systems to prevent, prepare for, respond to and recover from public health emergencies and disasters.

Previously, he was a public health preparedness deputy director with the Washington State Department of Health's Public Health Emergency Preparedness and Response Program, a local health department EMS Specialist, former firefighter, EMT, and Intensive Care Paramedic. As a responder, he has helped coordinate federal health and medical support to numerous disasters and public health emergencies such as the recent SR 530 Landslide, the Unaccompanied Children mission, Super Storm Sandy, and numerous National Special Security Events.

**Carole Cameron, Director**
**International Affairs Division**
**Office of Policy and Program Analysis**
**Federal Emergency Management Agency**
**Department of Homeland Security, USA**

Ms. Cameron is the Director of the International Affairs Division. She has held key management positions in FEMA's NIMS Integration Center, the Office of National Preparedness, the US Fire Administration, the Chemical Stockpile Emergency Preparedness and Prevention Program and the Radiological Emergency Preparedness Program. Ms. Cameron also directed a team of experts that developed the National Response Framework. In addition, she coordinated federal, state, local, and community and family preparedness programs in the post 9-11 era.

In the International Affairs Division, Ms. Cameron is responsible for exchanging information and technical expertise with foreign emergency management offices; managing FEMA's involvement in the civil side of the North Atlantic Treaty Organization (NATO); coordinating the exchange of international assistance during disasters, and coordinating participation of foreign governments during exercises.

Ms. Cameron was also a Brookings Institute Legislative Fellow and worked closely with the Senate Environment and Public Works Committee. She was responsible for legislative issues

involving homeland security, emergency preparedness and response, fire safety, chemical site security, chemical safety and chemical accident prevention.

Prior to coming to FEMA, Ms. Cameron was the Communications Coordinator for EPA's Chemical Emergency Preparedness and Prevention Program. Her duties included directing communication and outreach efforts in the Risk Management Program, Emergency Planning and Community Right-to-Know Act, International Affairs, and EPA's anti-terrorism efforts.

**Shawn Carby, CD, MAL, BHSc, EMT-P Executive Director**
**Emergency Management Unit**
**Population Public Health Division**
**Ministry of Health, British Columbia, Canada**

Shawn has been involved in hospital and emergency healthcare, public health, and disaster health and preparedness service delivery for 30 years. Through his past experience as an emergency services and healthcare executive, administrator, consultant, instructor and provider, he has acquired a wealth of experience in municipal, regional health authority, military, and provincially operated emergency medical services, disaster and healthcare systems.

Areas of responsibility have included urban, rural and remote demographics including international disaster relief and peacekeeping deployments.

Currently, he is the Executive Director of the Emergency Management Unit, Population and Public Health, within the British Columbia Ministry of Health, which oversees the coordination of health emergency response and planning for the province of British Columbia.

**Wayne Dauphinee, MHA, Executive Director**
**Pacific NorthWest Border Health Alliance**
**British Columbia, Canada**

Mr. Dauphinee is the former Executive Director for the Emergency Management Branch, Ministry of Health Services, Victoria, British Columbia. He is a qualified health services administrator with over 40 years of experience in the field.

While with the Ministry of Health Services, Mr. Dauphinee was responsible for providing leadership in the implementation of a strategic planning process for emergency management, including maintaining the momentum which British Columbia has displayed in leading numerous pan-provincial and pan-Canadian public health preparedness initiatives. In this regard he was a driving force in the creation and operationalization of the Pacific NorthWest Border Health Alliance, fostering improved dialogue and collaboration on the management of bi-national cross-border public health preparedness. He is a former Co-chair of the Federal/Provincial/Territorial (F/P/T) Emergency Preparedness and Response Expert Group and Chair of the F/P/T Council of Health Emergency Management Directors.

Prior to joining the British Columbia Public Service, Wayne spent 35 years with the Canadian Forces (CF) as a Health Services Officer and currently serves as the Chair, Royal Canadian Medical Service Association.

**Bradley Dick**
**First Nation**

Bradley is Lekwungen, Mamalilikulla, Ditidaht First Nation, and a wee bit Scottish.

Bradley is married to Jennifer Chuckry, has three beautiful children, Shayla and granddaughter Kaydence (aka Granny), Dakota and Cienna, all of whom are originally from Saskatchewan and are of Cree ancestry, and his elder dog Raffie and his puppy and newest member of the household, an Australian shepherd named Cy.

Bradley has spent much of the last 20 years working within the urban Aboriginal community working with Aboriginal Education SD 61, Surrounded by Cedar, Ministry of Children and Family Development. Bradley and family have also fostered for the last seven years. Bradley currently does independent contracts periodically and works within the BC Public Service Agency as the Aboriginal Youth Internship Program Coordinator—in other words “his dream job.”

He is incredibly excited to be provided the opportunity to continue to strengthen his relationship with community and organizations and is eager to learn. Bradley has a strong belief that our future generations are growing up with a renewed vigour and understanding. It is our role to ensure they are equipped to move our Aboriginal communities forward with strengthened relations within and with our extended families. So that our children and children’s children grow up culturally connected and with unified relations with our community partners.

Gilakasla (thank you), Hay’sxw’qa si’em (thank you Honorable ones), Klecko klecko (thank you).

**Dolph A. Diemont,**
**Federal Coordinating Officer Cadre**
**Federal Emergency Management Agency**
**Region X, USA**

Dolph Diemont is a member of the Federal Coordinating Officer (FCO) cadre and is assigned to Federal Emergency Management Agency Region X. In that capacity, he represents the President and coordinates all federal response and recovery activities with state and local emergency management agencies in the aftermath of major disasters.

Dolph became a member of the FCO cadre May 2007 and brought considerable emergency management leadership experience to the job from his previous 10 years as Regional Emergency Transportation Representative (RETREP) for the US Department of Transportation. During that time he was activated as Emergency Support Function One (ESF-1) on 15 major disasters including 1998 Hurricane Georges, the 1999 Hurricane Floyd response in South Carolina, and the 2001 Nisqually Earthquake response in Washington. He led the ESF-1 team in 2003 during the Columbia Space Shuttle Recovery. He deployed with the team to the 2002 Winter Olympics for federal consequence management operations, and led transportation-related response and recovery efforts for the four hurricanes that struck Florida in 2004. Additionally, Dolph played a key role in the 2005 Hurricane Katrina evacuations in Louisiana.

As FCO, Dolph led response and recovery efforts in Michigan in 2014, Alaska in 2013, West Virginia in 2012; recovery operations in Oregon, Idaho and Alaska in 2011; recovery operations in North Dakota and Alaska in 2010; Oregon and Illinois in 2009; Wisconsin in 2008, and served in senior leadership positions in three declared disasters—Ohio, California and Oregon—during

2007. He has also worked on a variety of special assignments, including two months on the Gulf Coast Mass Evacuation Project.

Dolph has over 35 years combined federal and military public service and has held key operational assignments in crisis management positions overseas and within the United States. His focus has always been on building and maintaining strong intergovernmental and interagency partnerships.

**Robert Ezelle, Chair**
**Western Regional Emergency Advisory Council (WREMAC)**
**Director, Emergency Management Division**
**Washington State Military Department, USA**

Robert Ezelle was appointed Director of the Washington Military Department's Emergency Management Division (EMD) on April 1, 2013, by the Department's Adjutant General, Major General Bret Daugherty.

Ezelle joined the Division in October 2010 as the Homeland Security Section Manager and in May 2011, management of the State's E-911 section was added to his portfolio. As the E-911 and Homeland Security Unit Manager, he oversaw the planning and operation of the statewide Enhanced 911 emergency phone system as well as management of the state's homeland security and emergency preparedness grant programs.

Prior to joining Emergency Management, Ezelle spent nearly 17 years in the Washington Air National Guard, in various senior leadership roles. Most recently he served as Vice Commander of the Western Air Defense Sector. The sector is responsible for air sovereignty and air defense of the western United States. He started his career in the Air Guard as air liaison officer and detachment commander for the Air Support Operations Group and Close Air Support Detachment.

Prior to joining the Washington Air National Guard, Ezelle spent 13 years as a fighter pilot, pilot trainer and operations officer in the US Air Force. He flew F-4 and F-15 fighters and AT-38B fighter trainer aircraft.

**Alexander Garza, MD, MPH**
**Associate Dean for Public Health Practice and Chair (Acting)**
**Department of and Occupational Health**
**Associate Professor in Epidemiology, Environmental and**
**Occupational Health and Emergency Medicine**
**Saint Louis University College for Public Health and Social Justice and School of Medicine, USA**

Alexander Garza MD, MPH is an Associate Professor in Epidemiology, Environmental and Occupational Health at the Saint Louis University College of Public Health and Social Justice where he serves as the Associate Dean for Public Health Practice as well as the Chair (acting) of the Department of Environmental and Occupational Health. He also holds and academic appointment as an Associate Professor in Emergency Medicine at the Saint Louis University School of Medicine.

Prior to joining St. Louis University, Dr. Garza was appointed by President Obama and confirmed by the US Senate as Assistant Secretary and Chief Medical Officer at the Department of Homeland Security where he served 2009–2013. He oversaw all aspects of health and security at DHS, was a principal advisor to the Secretary of Homeland Security, and briefed the White House on health and security issues.

Dr. Garza's career has centered on the delivery of emergency care, public health and security. This includes working as an EMT, paramedic, flight medic, emergency physician, army officer and an EMS administrator. Dr. Garza is board-certified in Emergency Medicine and holds a Master's Degree in Public Health. He has written numerous papers on emergency care and lectures nationally and internationally on issues involving health and security. He is a member of the US Army Reserves where he has deployed to combat theaters. He has received numerous awards including Combat Action Badge and the Bronze Star for Meritorious Service for his service in Iraq.

**Michael Harryman, MS, Co-Chair**
**Joint Coordination Committee, Pacific NorthWest Border Health Alliance**
**Director of Emergency Operations**
**Oregon Health Authority, USA**

Mike Harryman has served as the Director of Emergency Operations of the Oregon Health Authority's Public Health Division: Health Security, Preparedness and Response program since February 2006. The ASPR-HPP and CDC-PHEP cooperative agreement grants are managed at the state level within Mike's program.

Mike also served as the Director of the EMS and Trauma Systems program from February 2012 until October 2013. Prior to his current assignment, he was the program support manager for the Office of Public Health Systems where he managed administrative operations for the Drinking Water, Emergency Medical Services & Trauma, Radiation Protection Services, Environmental Toxicology, Health Care Certification and the Food Safety programs.

Mike is a veteran of the '91 Gulf War and retired after a 22-year career at the rank of a Master Sergeant from the US Army/Oregon Army National Guard in 1999. During his deployment to Saudi Arabia in support of Operation Desert Shield/Storm, he served as the Platoon Sergeant of the 97-member Ground Support Platoon in the 2186 Maintenance Company. Mike received his Master's degree with honors in Emergency and Disaster Management from the American Military University. He holds a BS in Business Management from the University of Phoenix.

**David B. Jansen, PE, LEED AP**
**Director**
**Washington State Department of Health**
**Division of Environmental Public Health**
**Office of Radiation Protection**

Mr. Jansen is currently Director of the Office of Radiation Protection for the Washington State Department of Health. David has over 30 years of public and private engineering and managerial experience. His work includes prison expansions, construction and operation of water and wastewater facilities, and cleanup of state and federal superfund sites. David has received state, national and international recognition for completion of challenging

environmental engineering projects including the Hanford cleanup and the nation's first LEED gold prison campus.

David received his Bachelor's degree from the University of Florida and Master's degree from the University of Central Florida. He is a registered civil and environmental engineer in Oregon and Washington, and is an adjunct faculty member in the Saint Martin's University, School of Engineering.

**Karen Jensen, Director**
**Partnerships, Planning and Performance**
**Washington State Department of Health, USA**

Karen Jensen earned both a bachelor's degree and master's degree in Bacteriology and Public Health Washington State University. After spending some time in teaching and research, she went back to school and earned a law degree from Seattle University in 1998. She started working with the Department of Health in 2000, when she was at the Attorney General's office and the Department of Health was her client.

She joined DOH as "in-house" counsel in 2004. This month marks her 10th anniversary with DOH. She has enjoyed several different leadership positions connected to healthcare law and policy. Karen was appointed as Director of the Office of Partnerships, Planning and Performance on October 13, 2013. In her new role, she is embracing the chance to be more directly connected to local health jurisdictions, and looks forward to exploring how we can work together to improve the health of everyone in Washington every day.

**Dr. Perry Kendall**
**Provincial Health Officer**
**Ministry of Health**
**British Columbia, Canada**

Dr. Perry Kendall was born in the United Kingdom in 1943. On May 3, 1999, Dr. Kendall assumed the position of Provincial Health Officer for the Province of British Columbia. In June 2005, Dr. Kendall was awarded the Order of British Columbia for his contributions to public health practice and to harm reduction policy and practice in BC.

The Health Act outlines the role of the Provincial Health Officer (PHO). As senior medical health officer for British Columbia (BC), the PHO's responsibilities include:

Advising the Minister and senior members of the ministry on health issues in BC and on the need for legislation, policies and practices concerning those issues.
Monitoring the health of the people of BC.
Providing information and analyses on health issues.
Reporting to the public on health issues, the need for legislation, a change of policy, or practice respecting health in BC.

**LCDR Michael Kinzer, MD, Medical Officer**
**Region 10, Environmental Protection Agency**
**Center for Disease Control and Prevention**
**Seattle, Washington, USA**

Dr. Kinzer started in public health as a Peace Corps volunteer in West Africa working on Guinea Worm eradication. He worked for several years with the Carter Center, then was a medical officer with the US Navy in Indonesia and Guam before transferring to the US Public Health Service and the CDC as an Epidemic Intelligence Service officer in Seattle, Washington, where his projects included a multi-state outbreak of contaminated tattoo ink, lead poisoning at an indoor firing range, skin infections in Native Alaskans, and polio in the Democratic Republic of the Congo.

Currently he is a medical officer at the Region 10 EPA office in Seattle, where he has worked on pesticide exposure in Oregon, birth defects in Washington, and environmental health training for tribal healthcare providers in Alaska. Most recently he served two tours as Country Team Lead for the CDC's response to the West African Ebola Epidemic in the Republic of Guinea.

**Theodore I. Kuschak**, **PhD**
**Director of Networks and Resilience Development**
**National Microbiology Laboratory**
**Infectious Disease Prevention and Control Branch**
**Public Health Agency of Canada**

Dr. Kuschak completed his training at the University of Manitoba (BSc [Hons.] Biochemistry, MSc in Medicinal Chemistry, PhD in Microbiology) and post-doctoral training at the National Cancer Institute at the National Institutes of Health, Bethesda, MD. After working as the manager of an imaging platform at the Manitoba Institute of Cell Biology, Dr. Kuschak joined the National Microbiology Laboratory as manager of the Canadian Public Health Laboratory Network in March 2003.

Theodore is currently the Director of Networks and Resilience Development at the National Microbiology Laboratory and is the Secretariat Lead of the Global Health Security Action Group Laboratory Network, and continues to provide oversight to the Canadian Public Health Laboratory Network.

He is responsible for establishing international linkages among the National Microbiology Laboratory, laboratories in the international community, and among laboratory networks. He has spent a considerable amount of time in the NML's Operations Centre in the Capacity of Director, especially during SARS, H1N1, V2010 and more recently Ebola.

**Honourable Terry Lake**
**British Columbia Ministry of Health**
**British Columbia, Canada**

The Minister was re-elected in June 2013 as MLA for the riding of Kamloops-North Thompson. He was appointed the Minister of Health June 10, 2013.

Minister Lake has served as Minister of Environment. Prior to that, he served as the Parliamentary Secretary for Health Promotion to the Minister of Health Services and Parliamentary Secretary for the Ranching Task Force to the Minister of Agriculture and Lands. He also sat as a member of the Select Standing Committee on Health and on Legislative Initiatives.

A veterinarian by profession, Lake served as the mayor of the City of Kamloops 2005-2008 and as a city councillor 2002-2005.

**John Lavery, Executive Director (HEMBC)**
**Health Emergency Management**
**British Columbia, Canada**

John Lavery is the Executive Director of Health Emergency Management BC, a program that provides emergency management leadership and support to the BC Health Authorities. He has been an emergency manager for most of the past 20 years with the past 14 years working in the health system.

He began his career with the Manitoba Emergency Measures Organization, leading the search and rescue volunteer program, and supporting the response and recovery from the 1997 floods.

He later worked for Manitoba Health as the Director of the Office of Disaster Management, and at the Ministry of Health in BC as the Executive Director of the Emergency Management Unit.

**Michael Loehr, Chief**
**Emergency Preparedness and Response**
**Washington State Department of Health, USA**

Mr. Loehr is the Chief of Emergency Preparedness and Response at the Washington State Department of Health. He is an Affiliate Professor at the University of Washington's School of Public Health, and the Northwest Center for Public Health Practice. He is also a certified Emergency Manager (CEM), and a graduate of the Executive Leaders Program, Naval Post Graduate School, Center for Homeland Defense and Security.

Prior to coming to the Department of Health, Mr. Loehr was the Public Health Preparedness Director at Public Health – Seattle & King County, Washington. Prior to that, he spent two years as the Operations Program Coordinator for the Office of Emergency Management in King County. From 1995 to 2001 Mr. Loehr worked for the Florida Division of Emergency Management where he led disaster response, planning and operations.

**Garnet Matchett, Co-chair, Joint Coordination Committee**
**Pacific NorthWest Border Health Alliance, Pacific NorthWest Border Health Alliance**
**Director of Operations, Chief Health and Safety Officer**
**Health Emergency Management, Saskatchewan Health, Canada**

Mr. Matchett is the Director of Operations and Chief Health and Safety Officer of Health Emergency Management in Saskatchewan Health, and the Canadian Chair for the Pacific Northwest Border Health Alliance.

He is a member of Expert Group on Emergency Preparedness and Response, Public Health Agency of Canada, Provincial Emergency Management Committee, Provincial Emergency Operations Advisory Council and Emergency Response Assistance Program (Transport Canada/National Microbiology Laboratory-Public Health Agency of Canada) SCDL (Human Risk Level 4 Pathogens).

Mr. Garnett was appointed Emergency Planning Officer for Saskatchewan Health, and has held many other positions as the chair for National Emergency Stockpile Systems Strategic Review and Council of Health Emergency Management Directors. He is also a guest lecturer for multiple universities throughout Canada.

**Dr. Michelle Murti**
**Medical Health Officer**
**Fraser Health**
**British Columbia, Canada**

Dr. Murti is a Medical Health Officer with Fraser Health and is the regional lead for Communicable Diseases. She is the co-chair of the provincial EVD public health working group, and the deputy Incident Commander for the Fraser Health EVD EOC. Dr. Murti trained in Family Medicine and Public Health and Preventive Medicine at the University of Toronto, and prior to joining Fraser Health in 2013, she was at the CDC in Atlanta.

**Hanna Oltean, MPH**
**Zoonotic/Cross-cutting Epidemiologist**
**Office of Communicable Disease Epidemiology**
**Washington State Department of Health, USA**

Ms. Oltean is a zoonotic disease epidemiologist at the Washington State Department of Health, Office of Communicable Disease Epidemiology. She received her MPH in International Health Epidemiology from the University of Michigan.

She previously worked as a research technician at Seattle Biomedical Research Institute, studying drug resistance in fungal pathogens.

**David Owens, Emergency Preparedness Specialist**
**Washington State Department of Health**
**Olympia, Washington, USA**

Mr. Owens is the Emergency Preparedness Specialist at the Washington State Department of Health. After he retired in 1997 from a 24-year career with the US Air Force, he went to work at the Washington State Department of Labor and Industries, where he served as the Agency Emergency Manager. He moved to the Department of Health in 2001 as the National Pharmaceutical Stockpile planner.

He currently leads the capability for medical materiel management and distribution. During emergencies affecting local or tribal jurisdictions, he serves as a member of the Incident

Management Team. He also manages the state Reception, Storage and Staging Task Force. He served as the Operations Section Chief during the Ebola Virus Disease response.

**Dr. Barbara Raymond, Director**
**Centre for Emergency Preparedness and Response**
**Public Health Agency of Canada,**

Dr. Barbara Raymond is the Executive Director of the Centre for Emergency Preparedness and Response (CEPR), within the Health Security Infrastructure Branch of the Public Health Agency of Canada. The Centre supports the Government of Canada, provincial and territorial governments and other nongovernmental partners in coordination of the response to health related emergencies. The Centre facilitates situational awareness and early risk assessment through its Global Public Health Intelligence Network (GPHIN), provides training and exercises for health-related risks, and maintains the Health Portfolio Operations Centre to facilitate coordinated preparedness and response activities. The Centre also maintains the National Emergency Strategic Stockpile (NESS), is Canada's National Focal Point for the International Health Regulations (2005) and is responsible for health security measures at Canada's international ports of entry. Since July 2014 she has been the Event Manager for the agency's response to the Ebola outbreak in West Africa.

Dr. Raymond, in her former role as the Director of the Agency's Influenza and other Respiratory Infectious Disease Division was responsible for coordination and oversight of seasonal and pandemic influenza (and other emerging respiratory pathogens) preparedness and response planning activities related to antivirals, vaccines, public health measures, and the review and revision of the Canadian Pandemic Influenza Preparedness: Planning Guidance for the Health Sector (CPIP).

Dr. Raymond has worked in the area of pandemic preparedness since 2006, establishing and exercising pandemic preparedness response plans, and developing and implementing expedited adverse reaction reporting for antiviral drugs prior to and during the 2009 pandemic. She joined the Public Health Agency of Canada in 2009, at the time of the second wave of the H1N1 influenza pandemic, and has since contributed to a broad range of pandemic and emergency management related activities, from provision of technical, policy and logistical advice, to clinical or public health guidance development, to vaccine and antiviral procurement.

Dr. Raymond received a BSc in Health Studies from the University of Waterloo, and her medical degree from the University of Western Ontario.

**Jesús Reyna, RN, BSN**
**LT, US.Public Health Service**
**US Dept. of Health & Human Services**
**Region X Regional Minority Health Consultant**
**Seattle, Washington, USA**

LCDR Reyna is a Commissioned Officer with the US Public Health Service and is the Regional Minority Health Consultant for Region X (AK, ID, OR and WA). His work focuses on HHS Secretarial and OASH prevention initiatives and priorities, including Healthy People 2020; the HHS Action Plan to Reduce Racial and Ethnic Health Disparities; and the National Stakeholder Strategy for Achieving Health Equity.

LCDR Reyna has been at the HHS Region X office for 11 years and held two other positions prior to this assignment. He coordinated the Medical Reserve Corps program and was the HIV/AIDS Regional Resource Coordinator. LCDR Reyna was deployed with Monrovia Medical Unit Team 1 to assist with the Ebola crisis in Liberia.

**Rod Salem**
**Director, Emergency Management Special Operations**
**British Columbia, Canada**

For 12 years Mr. Salem has been with EMTI, and responded to the Evergreen Trailer Court during the Edmonton Tornado July 1987. As the EMBC Regional Manager, he led the development and implementation of the British Columbia Emergency Response Management System (BCERMS) and the use of the Incident Command System in British Columbia.

He also has responded to numerous major emergencies and disaster events involving evacuations and disaster financial assistance, including Bennett Dam Sink Hole in August 1993. He served as the director of the Central Region Provincial Region Operations Centre Spring Freshet Flood 1999 and Central Region Provincial Region Operations Centre Wild Land Urban Interface Fire Season. During the fire season, 52,000 people were evacuated from the Central and South Interior of Province.

Mr. Salem assisted in the development of the BCAS' Mass Casualty Incident management system and training.

**John C. Scott, MS, President**
**Center for Public Service Communications**

John Carver Scott founded (1990) and directs the Center for Public Service Communications, whose mission is to provide guidance and expertise to individuals, communities and public sector organizations in the specialized field of applying telecommunications and information technologies to reduce health disparities, to improve health services to underserved and disenfranchised individuals and communities, and to improve the collection and sharing of scientific, technical and community knowledge to reduce human vulnerability to natural hazards.

Mr. Scott's International working experience includes the Americas, Africa, Southeast Asia, the Caribbean, China, Western Europe, the Pacific and the former Soviet Union.

Currently, Mr. Scott is coordinating initiatives to engage indigenous peoples in disaster risk reduction on behalf of the United Nations Office of Disaster Risk Reduction, the Pan American Health Organization, and the United Nations Permanent Forum on Indigenous Issues. He was a principal co-author of the disaster risk reduction handbook for mayors on behalf of the UN International Strategy for Disaster Reduction (ISDR) and its "Making Cities Resilient" campaign. He is executive director of the Refugee Health Information Network (RHIN) and is a member of the National Advisory Committee on Cultural Competency for Disaster Preparedness and Crisis Response (of the US Department of Health and Human Services Office of Minority Health).

He has been a senior advisor on early warning and disaster health information to institutions including the Pan American Health Organization/WHO, ISDR, the National Aeronautics and

Space Administration (NASA), the US Office of Foreign Disaster Assistance (OFDA) and the National Library of Medicine (NLM). From 2001 to 2005 Mr. Scott established and was executive director of the National Congress of American Indians (NCAI) President's Task Force on Health Information and Technology. He was also co-founder, in 1993, of the US Congressional Steering Committee on Telehealth and Health Information Technology and coordinated that group for 10 years.

Mr. Scott is an enrolled member of the Tlingit and Haida Indian Tribes of Alaska.

**Larry Torris, All Hazards Planner**
**State of Oregon**
**Health Security**

Larry Torris works as an All Hazard Planner for the State of Oregon in the Health Security, Preparedness and Response Program. His focus has been on pre-hospital planning and now encompasses Cascadia, mass fatalities, patient movement, EMS assessment for preparedness, logistics, and many other areas. Larry graduated from Oregon State University in 1994 with a degree in Anthropology and spent some time working for the OSU Forestry Department before starting a small business. He then went on to become an Emergency Medical Technician and then Paramedic in 2000 and transitioned from field work to training officer, supervisor, teacher, and operations management. During that time he completed his Master in Business degree and was then hired by Mike Harryman to work as a planner. Experiences include different chief roles in incident management including ESF 8 logistic chief, and planning chief as needed. Larry is the father to six children ranging in age from 3 to 23 and in his spare time also works as a partner in his wife's photography business while still working in the field as a paramedic.

**Denise H. Werker, MD, MHSc, FRCPC**
**Deputy Chief Medical Health Officer**
**Saskatchewan Ministry of Health**
**Regina, Saskatchewan, Canada**

Ms. Werker is a Public Health and Preventive Medicine Specialist and is the Deputy Chief Medical Health Officer for the Saskatchewan Ministry of Health. In this role she has been directly involved in Saskatchewan's preparedness planning for Ebola virus disease as a result of the unprecedented outbreak in West Africa. Her public health practice spans all levels of government in Canada and international governmental organizations. She has practiced as a family doctor in rural and urban communities in British Columbia, and served on various committees and boards of professional and non-profit organizations.

In the federal government, Dr. Werker held positions in the Public Health Agency of Canada, Department of National Defence and Health Canada. She supervised the public health training of health professionals, coordinated many national outbreak investigations and enabled field epidemiologists to participate in international efforts to eradicate polio and to control outbreaks, including the outbreak of Ebola virus disease in Uganda in 2000.

From 2001 to 2006, Dr. Werker was a medical officer in the World Health Organization, Geneva, where she had an essential role in the design and implementation of global surveillance for the multi-country outbreaks of severe acute respiratory syndrome (SARS) in 2003 and of avian influenza in 2004. In addition, she participated in international responses to outbreaks of

international concern, including the outbreak of Marburg virus disease in Angola in 2005, and provided technical input to the revision of the International Health Regulations.

Dr. Werker completed her undergraduate degree at the University of Toronto, her medical degree at the University of Ottawa, and her post-graduate degree and public health specialty training at the University of BC. She is passionate about making a difference in the health of populations and individuals, seeing beauty in the world around her and staying connected to family and friends.

**John Wiesman, DrPH, MPH, Secretary**
**Washington State Department of Health**
**Olympia, Washington, USA**

Secretary Wiesman was appointed secretary of health by Governor Jay Inslee and joined the Department of Health in April 2013. He's an accomplished transformational leader with more than 22 years of local public health experience.

He has worked in four local public health departments in Washington and Connecticut. He started his public health career in Connecticut in 1986 and was in its first group trained to provide HIV counseling and testing.

Currently, John serves as an adjunct assistant professor at the University of North Carolina-Chapel Hill, Gillings School of Global Public Health, Health Policy and Management. He also serves as a clinical professor at the University of Washington, School of Public Health, Department of Health Services.

He earned his doctor of public health (DrPH) in public health executive leadership from the University of North Carolina-Chapel Hill and his master of public health in chronic disease epidemiology from Yale University. John and his husband have lived in Washington State since 1989.

**Lisa Young**
**Leader, Infection Prevention and Control**
**BC Emergency Health Services**

Lisa is the Infection Prevention and Control Leader with BC Emergency Health Services, with 17 years' experience working in infection prevention and control (IPAC).

As an RN, qualified in Nottingham, England, Lisa started her IPAC career as an Infection Control "link nurse" while working on a Neonatal Unit. This gave her a taste of what would become her passion, infection prevention and control, and applied it to the most vulnerable of all patients.

Lisa went on to become a practitioner in IPAC, later moving to manage a team of practitioners in Doncaster, England. Following a lunchtime discussion, she decided it was time for a complete change of scenery and moved across the water to Canada in 2007. Here she was excited to join Vancouver Island Health Authority (now Island Health) as an IPAC practitioner in a small town on Vancouver Island. Always one to take on growing responsibilities, Lisa moved in to project

management to lead the System-wide Initiative focusing on prevention of infections. She then became manager of the IPAC team at Island Health.

In May 2013 came another change of job and focus for her IPAC passion, accepting the 'first' Leader for IPAC within BCEHS. With this change she has moved her IPAC lens from acute and residential care to pre-hospital care and its unique challenges. With this move Lisa has taken on an active role with IPAC Canada, co-chairing the Pre-Hospital Interest Group and becoming the President of the BC Chapter.

**Mahlet Zeru, Ebola Workgroup Coordinator**
**Emergency Preparedness and Response Specialist**
**Washington State Department of Health**
**Olympia, Washington, USA**

Mahlet Zeru graduated with a Bachelor's degree from University of Washington and earned a Master's in Public Health from Florida State University. Previous work experience includes working at the Florida Department of Health in Leon County as a Chronic Disease Program Assistant.

Her accomplishments include the implantation of a healthy lifestyle initiative 95210: The Whole Picture of Health in primary schools and a tobacco free Florida State University campus.

After relocating back to her home state of Washington, she works for the Department of Health as an Emergency Preparedness and Response Specialist. Mahlet is currently the Ebola work group coordinator and works on straightening Ebola preparedness and response capabilities in Washington State. During the Ebola response, Mahlet worked as a division group supervisor for the Isolation and Quarantine group. She is also the point of contact for community resilience and recovery efforts.

# Appendix C

## 2015 Pacific Northwest Border Health Alliance Workshop Evaluation

**Question 1. Where is your work location?**
Total responses (N): 17 Did not respond: 0

| *Answer* | *Frequency* | *Percentage* |
|---|---|---|
| Alberta | 0 | 0.00% |
| British Columbia | 5 | 29.41% |
| Saskatchewan | 1 | 5.88% |
| Yukon Territory | 0 | 0.00% |
| Alaska | 0 | 0.00% |
| Idaho | 0 | 0.00% |
| Montana | 0 | 0.00% |
| North Dakota | 0 | 0.00% |
| Oregon | 4 | 23.53% |
| Washington | 6 | 35.29% |
| Canada First Nation | 0 | 0.00% |
| US Tribe | 0 | 0.00% |
| Other | 1 | 5.88% |

**Question 2. What type of organization/agency do you work for?**
Total responses (N): 17 Did not respond: 0

| *Answer* | *Frequency* | *Percentage* |
|---|---|---|
| Local/Regional Government | 1 | 5.88% |
| State/Provincial/Territorial Government | 11 | 64.71% |
| Federal Government | 2 | 11.76% |
| Hospital or Community Clinic | 1 | 5.88% |
| Military | 0 | 0.00% |
| First Nation/Tribal Affiliation | 0 | 0.00% |
| College or University | 1 | 5.88% |
| Business | 0 | 0.00% |
| Other | 1 | 5.88% |

**Question 3. What days/sessions of the workshop did you attend? (Please mark all that apply.)**
Total responses (N): 17 Did not respond: 0

| *Answer* | *Frequency* | *Percentage* |
|---|---|---|
| Tuesday, April 28, 2015 (Orientation Session) | 8 | 47.06% |
| Tuesday, April 28, 2015 (Workgroup Breakout Session) | 14 | 82.35% |
| Wednesday, April 29, 2015 (General Session Day 1) | 16 | 94.12% |
| Thursday, April 30, 2015 (General Session Day 2) | 16 | 94.12% |
| I did not attend the workshop | 1 | 5.88% |

**Question 4. What workgroup breakout session did you attend on Tuesday, April 28, 2015?**

Total responses (N): 17 Did not respond: 0

| *Answer* | *Frequency* | *Percentage* |
|---|---|---|
| Epidemiology and Surveillance | 0 | 0.00% |
| Public Health Laboratories | 0 | 0.00% |
| Health Emergency Management | 3 | 17.65% |
| Emergency Medical Services | 3 | 17.65% |
| Risk Communications | 0 | 0.00% |
| Public Health Law | 1 | 5.88% |
| Indigenous Health | 1 | 5.88% |
| Clinical Medical Surge | 1 | 5.88% |
| Environmental Public Health | 2 | 11.76% |
| Floated between different workgroup meetings | 3 | 17.65% |
| I did not attend a workgroup breakout session | 3 | 17.65% |

**Question 5. What new workgroups (if any) should be established? (e.g., Disaster Psychosocial Workgroup, Other?)**

Total response (N): 6 Did not respond: 11

**Question 6. The workshop workgroup breakout session that you attended on Tuesday, April 28, 2015 provided a valuable forum for exchange of ideas and information.**

Total responses (N): 16 Did not respond: 1

| *Answer* | *Frequency* | *Percentage* |
|---|---|---|
| Strongly Agree | 9 | 56.25% |
| Agree | 4 | 25.00% |
| Undecided | 1 | 6.25% |
| Disagree | 0 | 0.00% |
| Strongly Disagree | 0 | 0.00% |
| I did not attend a workgroup breakout session | 2 | 12.50% |

**Question 7. There was enough time during your workgroup breakout session to meet its objectives.**

Total responses (N): 17 Did not respond: 0

| *Answer* | *Frequency* | *Percentage* |
|---|---|---|
| Strongly Agree | 6 | 35.29% |
| Agree | 8 | 47.06% |
| Undecided | 0 | 0.00% |
| Disagree | 0 | 0.00% |
| Strongly Disagree | 1 | 5.88% |
| I did not attend a workgroup breakout session | 2 | 11.76% |

**Question 8. There was enough unstructured time during the workshop to informally network with colleagues.**

Total responses (N): 17 Did not respond: 0

| *Answer* | *Frequency* | *Percentage* |
|---|---|---|
| Strongly Agree | 8 | 47.06% |
| Agree | 9 | 52.94% |
| Undecided | 0 | 0.00% |
| Disagree | 0 | 0.00% |
| Strongly Disagree | 0 | 0.00% |

**Question 9. This workshop was useful in strengthening healthcare and public health preparedness and response partnerships across borders.**

Total responses (N): 17 Did not respond: 0

| *Answer* | *Frequency* | *Percentage* |
|---|---|---|
| Strongly Agree | 11 | 64.71% |
| Agree | 5 | 29.41% |
| Undecided | 1 | 5.88% |
| Disagree | 0 | 0.00% |
| Strongly Disagree | 0 | 0.00% |

**Question 10. The World Café Poster Session provided a valuable forum for learning and exchanging ideas with colleagues.**

Total responses (N): 17 Did not respond: 0

| *Answer* | *Frequency* | *Percentage* |
|---|---|---|
| Strongly Agree | 2 | 11.76% |
| Agree | 9 | 52.94% |
| Undecided | 1 | 5.88% |
| Disagree | 1 | 5.88% |
| Strongly Disagree | 0 | 0.00% |
| I did not attend the World Café Poster Session | 4 | 23.53% |

**Question 11. If a cross border workshop is held next year with a registration fee of approximately $100-$150, I would still be likely to attend.**

Total responses (N): 17 Did not respond: 0

| *Answer* | *Frequency* | *Percentage* |
|---|---|---|
| Yes | 15 | 88.24% |
| No | 1 | 5.88% |
| Don’t Know | 1 | 5.88% |

**Question 12. The elimination of hosted continental breakfasts and lunch (sit-down and take-away) is an acceptable solution in reducing workshop operating costs.**

Total responses (N): 17 Did not respond: 0

| *Answer* | *Frequency* | *Percentage* |
|---|---|---|
| Strongly Agree | 1 | 5.88% |
| Agree | 7 | 41.18% |
| Undecided | 2 | 11.76% |
| Disagree | 6 | 35.29% |
| Strongly Agree | 1 | 5.88% |

**Question 13. What cross border issues would you like to see addressed at the next cross border workshop?**

Total responses (N): 8 Did not respond: 9

1. Coordination between the Health and Emergency Management Sector.
2. Engaging border staff so we can bring them along with what will be needed to get personnel/goods across the border rapidly.
3. Public health impacts of climate change
4. The Lac Megantic oil train explosion case study would be good. The guy from Maine spoke at Partners in Emergency Preparedness 2015.
5. Movement of evacuees if necessary; mission ready teams (variable) that could be accessed; licensing and scope of practice for health care workers.
6. Mass evacuation cross borders e.g. air quality, fire etc.
7. Continue focus on potential hazards of relevance to attendees
8. Community and health sector resilience; disaster psychosocial services

**Question 14. Are there partners whose attendance is missing from the workshop?**

Total responses (N): 13 Did not respond: 4

| Answer | Frequency | Percentage |
|---|---|---|
| Yes | 5 | 38.46% |
| No | 2 | 15.38% |
| Don’t Know | 3 | 23.08% |
| If Yes, Who? | 8 | 61.54% |

1. ID and AK Public Health
2. Regulators
3. Could use more tribal representation
4. More indigenous representation
5. Clinical Care Physicians for surge and transfer of care.
6. Justice personnel, licensing and resource
7. Oregon Health Authority
8. More health services

**Question 15. What did you like most about this workshop?**
Total responses (N): 14 Did not respond: 3

1. Joining with WREMAC
2. Awareness of the activities/exercise that are taking place—we need to participate and work out process so we do not act as a barrier when actual event happens; opportunity to network with other stakeholders, and raise issues of concern, and know where we need to do work.
3. Facilities; presentation by Alex Garza
4. Networking, exposure to shared interests in emergency preparedness and response as well as environmental health.
5. The more I get to know about Cross Border issues and agreements, the more I learn each year. Even if it's some of the same things repeated – I hear something new, or understand things in a deeper way. It's good to see some of the same faces. It builds rapport and trust.
6. The opportunities to re-connect and re-focus on common issues.
7. Excellent information exchange.
8. Productive JCC meeting; engagement of EMO group for joint discussions; well organized and executed – no snags; great venue, sincere commitment from all; participants, organizers et al
9. The opportunity to network and create relationships with people who will be contacted during events. Additionally the sharing of practices.
10. Networking
11. Networking opportunities
12. Networking
13. Broad spectrum, educational. Enjoyed the Surge workshop and meeting with Federal partners.
14. The integration of public health/health services and emergency management (WREMAC) made this the best workshop to date

**Question 16. What suggestions do you have for improving the next cross border workshop?**
Total responses (N): 11 Did not respond: 6

1. Continued coordination with WREMAC group.
2. Have more regulators, we have already identified a number of issues with our processes that need to be addressed, but need to understand how other jurisdictions are managing, what our role is, and to be participants in exercises to ensure we have the mechanisms in place to register rapidly, while ensuring practitioners meet minimum competency requirements.
3. More engagement at "section" level prior to workshop
4. More time for strategic planning at the JCC, review of strat plan progress on benchmarks, etc.
5. None

6. Increase the webinar and tech input format so those who are not able to attend in person are able to listen, watch, or participate.
7. Edmonton, Alberta or cour de lene, Idaho
8. Once every 2-3 years would suffice
9. Somewhat less reporting or presenting from federal levels
10. Conduct a crossboarder table top exercise focusing on movement of healthcare provider resources in each direction
11. A joint table top exercise with WREMAC