Enhancing the relevance of IMS in public health emergency preparedness (PHEP)

Lessons Learned

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The **Incident Management System (IMS)** is a standardized approach to emergency management encompassing personnel, facilities, equipment, procedures, and communications operating within a common organizational structure.

IMS is mandated in public health

Requirement #3: The board of health shall develop its emergency response plan, in consultation with community partners and governmental bodies, to address the identified hazards for which the board of health and medical officer of health will have a lead role in responding to, consistent with an Incident Management System and in accordance with the Public Health Emergency Preparedness Protocol, 2008 (or as current).

Source:

IMS is voluntary in public safety

Implementation is voluntary and rooted in recommended practices.

Source:
What is IMS?

IMS is a system for creating some order out of the disorder that characterizes any emergency.

It was written by and for first responders for the purpose of coordinating the response to the California wildfires.

- Assumes there is an incident that needs to be managed
- Includes a suite of tools designed to manage incidents
- Has been extrapolated to many disparate agencies and applications
  - Police, EMS, public works, hospitals, and Public Health
Objectives of the project

Phase 1: IMS200 for Public Health Units

Phase 2: IMS PHEP workshops

Phase 3: Train the Trainer & custom courses

Phase 4: Delegated Workshops

Evaluation & Lessons Learned

Discussion
Presentation Learning Objectives

Outline
The challenges of using / promoting IMS in a public health environment

Describe
The responsive / iterative process for applying IMS to a public health-relevant workshop / exercise format

Reflect
On the successful strategies for enhancing relevance of IMS to public health

Identify
Implications of this process for public health emergency preparedness policy, practice and research

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Responsive/Iterative Curriculum Design

Francis (2009): role of the learner
Slavcev et al (2013): outcome-based design

Adult Learning

Knowles et al (2005): characteristics of adult learners
Brookfield (2006): teaching adults
Schön (1988): reflective practice

Communities of Practice

Lave & Wenger (1991): learning as a social process
Wenger (2007): learning communities
Challenges of using IMS in Public Health

- Traditional IMS concepts do not resonate in PH
- PH professionals are sophisticated IMS users
- PH professionals prefer practical learning activities
- Limited relevant learning resources are available
- IMS is often seen as compliance-based obligation
Project Objectives

Outline
Key messages, concepts, principles and tools for emergency preparedness in public health

Apply
These tools in public health investigations and interventions

Adapt
These tools to the needs of public health organizations

Appraise
The value added by these tools to day-to-day public health applications
Phase One – IMS200 for Public Health Units

Retain IMS200 certification and format

Swap out first responder examples

Replace above with health and public health examples

Seek and incorporate open feedback from learners
IMS200 for Public Health Units

- 2011 March - 2012 January

**Goal**
Apply IMS200 in the health and public health sectors

**Delivery**
5 x IMS200 for PHUs courses (approx. 100 learners)
- 3 PHU
- 1 internal PHO
- 1 general stakeholders

**Outcome**
Focus on IMS concepts proven in public health investigations
- Go to 1-day format (non-IMS200 format)
- Use scenario-based and other adult education principles
Phase Two – IMS PHEP Workshops

Focus on role of public health in emergencies

Public health preparedness plans

Key concepts in IMS in public health

Interactive case study approach

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Develop IMS-based, public health emergency preparedness (PHEP) workshop

- 2012 February – 2012 December

**Goal**
IMS workshop designed by public health professionals for public health professionals

**Delivery**
3 IMS workshops (approx. 60 learners)
- 3 PHUs: 1 east, 1 north, 1 GTA

**Outcome**
Learners requesting custom scenarios & Train-the-Trainer
Emergency Management Cycle

- Prevention
- Mitigation
- Preparedness
- Response
- Recovery
First Responders
First Responders

Incident Management System

Prevention
Mitigation
Recovery
Preparedness

First Responders
Emergency Plans Mapped to the Emergency Management Cycle
Emergency Plans Mapped to the Emergency Management Cycle

Hazard Identification & Risk Assessment (HIRA)
Informs all phases of emergency planning
Emergency Plans Mapped to the Emergency Management Cycle

Emergency Response Plan (ERP) Provides structure and tools for response.
Emergency Plans Mapped to the Emergency Management Cycle

Continuity of Operations Plan (COOP)
Protects business interests and sustains operations.
Emergency Plans Mapped to the Emergency Management Cycle

Communications
Has internally and externally facing pieces

Training & Exercises
Ensures relevant plans and staff confidence in their roles
Emergency Plans Mapped to the Emergency Management Cycle

Incident Management System (IMS)
Coordinates these activities in a standardized, flexible manner.

Communications

Training & Exercises
# Scenario Ground Rules

<table>
<thead>
<tr>
<th>Rule</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>This is an open and safe learning environment</td>
<td></td>
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<tr>
<td>Be receptive to the scenario - it is fictional</td>
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<tr>
<td>Feel free to experiment with IMS</td>
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<tr>
<td>Try to keep your existing plans in mind</td>
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<tr>
<td>The scenario is not a test of our ability to conduct a public health investigation</td>
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Phase Three – Train the Trainer & Customized Scenarios

- Shared facilitation model
- Train the trainer pilots
- Customized-scenario workshops
- Basic template for the IMS Structure
- Continued workshop enhancement
Train-the-Trainer (TTT) and customized workshops

- 2012 December +

Goals

- Build and deliver Train-the-Trainer (TTT) workshop(s)
- Customize and improve the base workshop
- Design hybrid workshop to include IMS200 certification

Delivery: 12 courses (approx. 250 learners)

- 3 TTT workshops
- 4 base workshops
- 3 custom scenarios
- 3 hybrid courses with IMS200

Outcome

Flexible training tools to meet the needs of public health professionals

- 4 new scenarios to add to library for use in base workshop as appropriate
- Original goal of Phase One project has been met with hybrid course delivery

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Customized Scenarios

Nuclear satellite crash

Mass gathering: Billy-Stockapalooza

Flooding in Billy Bishopville
Customized Scenarios

Blackout

Hazmat train derailment

2015 Pan-Am Games

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Phase Four - Delegated Workshops

Community of Practice

Delegated facilitation in a hub-based model

PHO EPIR staff provide ongoing support to delegated facilitators

Use of health unit PHEP plans
Delegated Facilitator Workshops

- 2013 October to present +

Goal

Delegated, hub-based workshop delivery model

Delivery

To Date: 5 courses (approx. 130 learners). 6 more confirmed

- 3 northern PHUs with facilitators from 4 PHUs
- 1 GTA PHU with facilitators from 2 PHUs
- 1 west PHU with facilitators from 2 PHUs

Outcome

Positive feedback for PHO tools and concepts

- Customized scenarios – learners asking for more
- Learners appreciate facilitator viewpoints of multiple PHUs
- Interest in PHO tools from outside of public health sector
2013 October 28.
PHO IMS for Public Health workshop, Timiskaming PHU, New Liskeard ON.
Delegated Facilitators from Timiskaming PHU, Porcupine PHU, and North Bay Parry Sound District PHU.
2014 January 30.
PHO IMS for Public Health workshop, Chatham-Kent PHU, Chatham ON.
Delegated Facilitators from Chatham-Kent PHU and Lambton PHU.
2014 February 21.
Real-world operational planning workshop for Chatham-Kent PHU role in local forecast flooding event. Key staff of Chatham-Kent PHU, plus municipal public safety reps, with support from PHO.
PHO Collaboration site in support of a PHEP Community of Practice
PHO IMS module resource materials

Base Workbook

TTT Workbook

Base Slide Deck

Facilitator’s Guide
Project Evaluation

Next Step
Lessons Learned – Phase 1: IMS200 for PHUs

- PH incidents are highly complex events
- Some IMS principles are more relevant to PH than others
- PH professionals are sophisticated users of IMS
- PH professionals need IMS training tools targeted to their unique needs
- Non-structured evaluations provide rich feedback to drive development of relevant tools
Lessons Learned – Phase 2: IMS PHEP Workshops

IMS-based PHEP format resonates with PH professionals.

Training tools based in adult education principles are highly valued by the learners.

PH practitioners are a rich and enthusiastic source of expertise.

Cross-sectoral and cross-disciplinary discussion advances understanding of IMS
IMS is a dynamic organizing principle.

PH emergency planners see themselves partly as educators.

It is important for us to model the behaviours we want to foster.

PHUs have widely varying needs and priorities for planning and training.

The hub-based model is a valuable strategy for resource-sharing among PHUs.

IMS training can be a valuable networking and relationship-building tool among professionals across many fields and disciplines.
Implications

The project has highlighted the opportunities for cross-sectoral applications.

There may be further opportunities to leverage the expertise of public health professionals.

The base module is a foundational tool for further development of training materials – “booster packs”.

There is a need to establish a research base for the application of PHEP concepts.
Discussion

• Thank you!

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And all those we missed!

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