



## Acknowledgments

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The content of this inventory is solely the responsibility of the authors and does not necessarily represent the official views of CDC or ASPPH.

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## Introduction

The Preparedness and Emergency Response Research Centers (PERRCs) conducted research to evaluate the structure, capabilities, and performance of public health systems for preparedness and emergency response.

The establishment of these centers was mandated by the Pandemic and All-Hazards Preparedness Act of 2006, which called for research to improve federal, state, local, and tribal public health preparedness and response systems.

All PERRC research has been focused on identifying the most critical elements needed to enhance preparedness for all hazards and to close gaps in public health preparedness and response services.

An integral part of the work of these centers has been to help translate study results to public health practice. Some of the research produced by the PERRCs has been translated into toolkits designed to facilitate the work of state and local public health agencies in preparedness efforts.

This inventory presents toolkits derived from the PERRC research that are freely available for use and that can be implemented with limited support from the toolkits developers.

This inventory was developed by the Emergency Preparedness, Research, Evaluation & Practice (EPREP) Program at the Harvard T.H. Chan School of Public Health with the scope of disseminating PERRC research findings and promising practices to knowledge users (researchers, decision-makers, practitioners, public health departments' workforce, and public health system partners), enhance preparedness processes and strengthen the competence of the public health workforce.

For more information on the inventory, contact:

Dr. Elena Savoia  
Senior Scientist  
Deputy Director  
Emergency Preparedness, Research, Evaluation & Practice Program  
Division of Policy Translation and Leadership Development  
Harvard T.H. Chan School of Public Health  
e-mail: [esavoia@hsph.harvard.edu](mailto:esavoia@hsph.harvard.edu)  
phone: 617-384-9055

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## HOW TO PROVIDE PSYCHOLOGICAL FIRST AID

### Psychological First Aid Intervention Toolkit

For more information, please visit:  
<https://www.coursera.org/learn/psychological-first-aid>

#### About the Psychological First Aid Intervention Toolkit

##### What is its purpose?

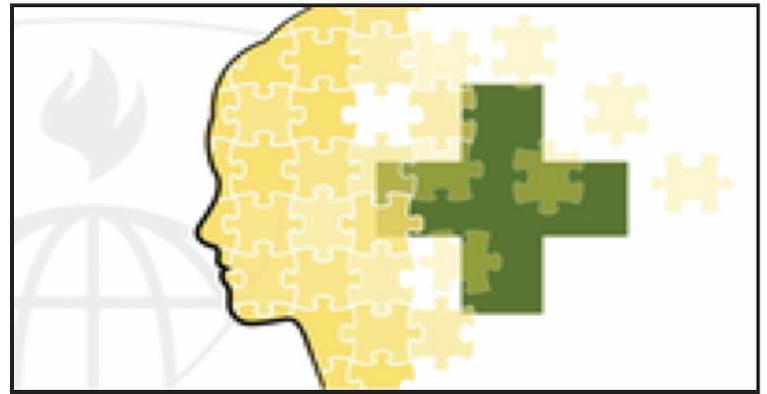
The Psychological First Aid Intervention Tool aims to enhance knowledge, skills, and attitudes to support the provision of psychological first aid (PFA) to disaster survivors, particularly for those segments of the population at-risk for mental and behavioral health problems.

##### What is it?

The Psychological First Aid Intervention tool is an educational workshop created by the Johns Hopkins Bloomberg School of Public Health. It provides intervention training for faith based organizations via a face-to-face format.

##### Who should use it?

The Psychological First Aid Intervention Tool is designed to be used by faith-based organizations (FBOs). However, the success of the LHD partners in terms of recruiting church leaders and community members to participate in PFA training is seen as a vital step to ensure a successful implementation of the overall model. Additional collaboration with academic health centers to evaluate this relationship is also seen as vital.



#### What are the expected benefits?



##### Who has already used it?

The PFA intervention tool has been successfully implemented in multiple areas of the US (Illinois, Iowa, and Maryland) as well as in varied residential locales (urban, suburban, and rural) with several ethno-racial groups (African, Caucasian, and Hispanic) of different faiths (Christian, Jewish, and Muslim), and in different-sized participant groups (range: 10-60). Additionally, conducting the PFA workshop poses no special problems for out-of-state application.

##### Contact information

Please email:

**Dan Barnett** [dbarnet4@jhu.edu](mailto:dbarnet4@jhu.edu)

**Natalie Semon** [nsemon@jhu.edu](mailto:nsemon@jhu.edu)

## HOW TO BE LEGALLY PREPARED FOR MENTAL HEALTH

### Legal and Ethical Preparedness Relative to Mental and Behavioral Health Toolkit & Memoranda

For more information, please visit:

[http://www.jhsph.edu/research/centers-and-institutes/center-for-law-and-the-publics-health/research/MntBeh\\_preparedness.html](http://www.jhsph.edu/research/centers-and-institutes/center-for-law-and-the-publics-health/research/MntBeh_preparedness.html)

#### About the Legal and Ethical Preparedness Relative to Mental and Behavioral Health Toolkit & Memoranda

##### What is its purpose?

The goal of both tool and memoranda for the Legal and Ethical Preparedness Relative to Mental and Behavioral Health is to allow participants to assess legal and ethical issues and solutions concerning prevention, detection and treatment of persons with mental and behavioral disabilities before, during and after emergencies. In doing so, this toolkit and memoranda intend to promote legal and ethical preparedness relative to mental and behavioral health and should be useful during all phases of preparedness and response.

##### What is it?

The Toolkit for Legal and Ethical Preparedness Relative to Mental and Behavioral Health provides information about common legal and ethical issues that arise relative to mental and behavioral health during emergencies.

This toolkit is complemented by the Memoranda Regarding Legal and Ethical Issues that Arise During Emergencies Relative to Mental and Behavioral Health. The memoranda consist of 20 brief summaries of topics that fall at the juncture of mental and behavioral health, law, and emergencies and draws upon underlying legal and ethical concepts that are relevant to emergency preparedness.

##### Who should use it?

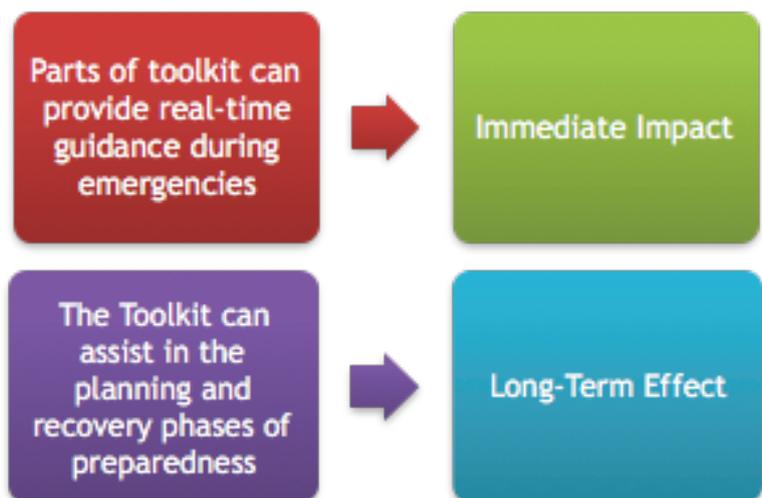
The toolkit is intended to benefit those who seek to understand specific legal and ethical issues that arise during emergencies relative to mental and behavioral health. Examples include but aren't limited to:

- Health Care Providers
- Health Care Administrators
- Public Health Officials
- Emergency Planners



##### What are the expected benefits?

By using these tools, it is hoped that the users will develop a greater understanding of specific topics at the intersection of mental and behavioral health, law, and emergency preparedness. As a result, the Toolkit for Legal and Ethical Preparedness Relative to Mental and Behavioral Health as well as the Memoranda Regarding Legal and Ethical Issues that Arise During Emergencies Relative to Mental and Behavioral Health have the potential for both immediate and long term impact shown by the model below.



##### Contact information

Please email:

**Dan Barnett** [dbarnet4@jhu.edu](mailto:dbarnet4@jhu.edu)

**Natalie Semon** [nsemon@jhu.edu](mailto:nsemon@jhu.edu)



## HOW TO UNDERSTAND LEGAL FRAMEWORKS FOR PUBLIC HEALTH SYSTEM COLLABORATIONS

### Legal and Ethical Indicators for Adaptive Response (LENA & ELDB) Toolkit

*For more information about LENA, please visit:*

<http://www.phdl.pitt.edu/LENA>

*For more information on the Emergency Database, please visit:*

<http://phasys.pitt.edu/eldb>

*For more information on the instructions, please visit:*

[http://www.phasys.pitt.edu/pdf/PHASYS\\_User\\_Guides\\_LENA-Database\\_v4.pdf](http://www.phasys.pitt.edu/pdf/PHASYS_User_Guides_LENA-Database_v4.pdf)

### About the Legal and Ethical Indicators for Adaptive Response Toolkit

#### What is its purpose?

The purpose of this toolkit is to help individuals understand the legal framework that directs public health systems (PHS) agents to work in collaboration with each other. It does this by mapping which body of law dictates a relationship, as well as by comparing variations between different jurisdictions in preparedness and response capacity for emergency incidents.

#### What is it?

The Legal and Ethical Indicators for Adaptive Response toolkit consists of two tools, the Legal Network Analyzer (LENA) and the Emergency Law Database (ELDB). LENA exists as both a standalone program and as a web-based applet. In LENA, public health system relationships can be identified within a state, as well as compared between states, or between a state and the federal government. It does this by allowing policymakers to visualize legal relationships between public health system (PHS) agents as mandated by federal or state statutes and regulations.

LENA creates said visual representations by referring to the Emergency Law Database, a comprehensive catalogue of over 5,900 laws and regulations regarding emergency preparedness and response activities in several states (see below). They can be searched by using keywords for a given action, and filtering them by emergency type, and/or by organization. The laws are coded to denote the actions, purposes, goals, and conditions each agent is directed to undertake by their respective legislature. It is important to note that not all of the laws and regulations are included in these jurisdictions.

#### Who should use it?

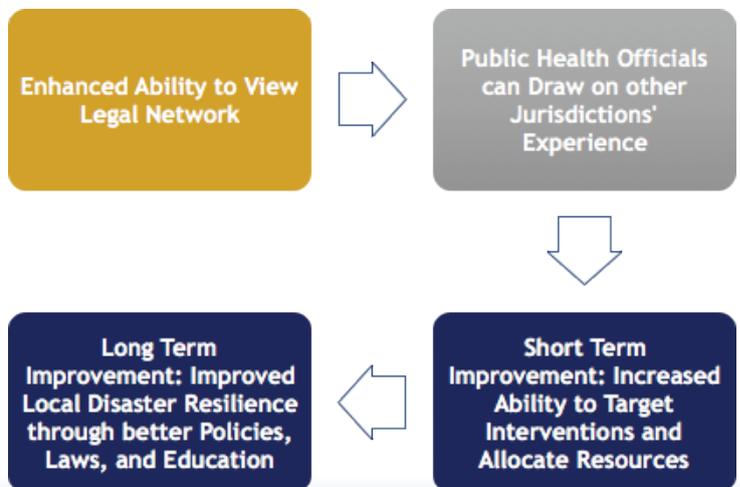
This toolkit is designed for public health officials and practitioners. Network maps can be created for the following jurisdictions (due to limitations in the scope of the ELDB): Alaska, California, Florida, Kansas, Maryland, New York North Dakota, Ohio, Pennsylvania, Rhode Island, Texas, Wisconsin, and the federal government.



#### What are the expected benefits?

By analyzing the legal networks, using the Legal and Ethical Indicators for Adaptive Response toolkit allows for a comparison in the legal structure that forms the foundation for preparedness and response to emergencies in a public health context. The enhanced ability to visualize network strengths and weaknesses given by this toolkit enables public health officials to draw upon the disaster experience and legislative response of other jurisdictions, consequently improving emergency preparedness and response capacity in their respective jurisdiction.

In the short-term, the analysis of results will enhance the accessibility of legal information to non-lawyer practitioners, therefore increasing their ability to target interventions and to allocate resources. In the long-term, LENA and the Emergency Law Database can help to guide response interventions, improve policies and laws, and educate both public health agencies and the public to build disaster and resilience. This process is described in the model below:



#### Contact Information

Please email:

Leslie Fink [lfink@pitt.edu](mailto:lfink@pitt.edu)

Elizabeth Van Nostrand, JD [schmidte@pitt.edu](mailto:schmidte@pitt.edu)



Figure I: Example of LENA Map (Alaska, Epidemic Emergency)

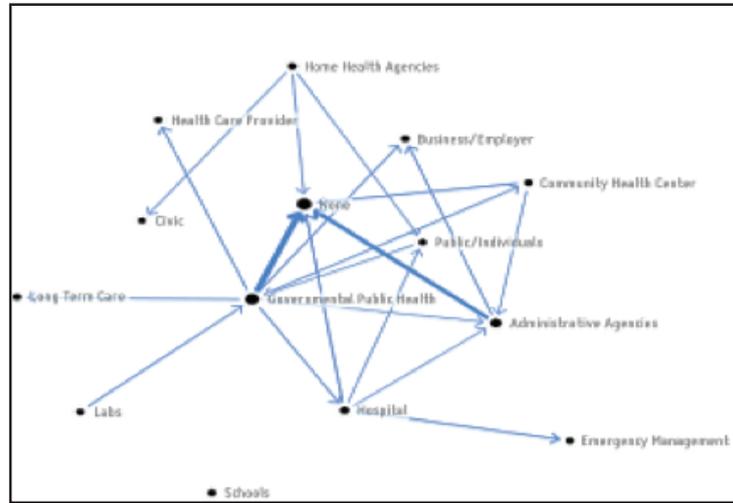


Figure I is a screenshot taken from the instruction manual (seen as “Figure 3”) showing the networks created through LENA. In this case, the network for Alaska in the advent of an epidemic emergency is shown. These networks are seen as circles which represent PHS agents and the lines are the laws which connect the PHS agents if applicable.

Figure II: Screenshot of Emergency Law Database in Default Setting

The screenshot shows the 'Emergency Law Database' search interface. At the top, there is a search box labeled 'Enter the Keyword(s):' with a dropdown for 'OR' and 'AND'. Below this are several filter sections, each with a dropdown menu and a 'Use Ctrl key to select multiple items' instruction:

- Jurisdictions:** Alaska, California, Florida
- Acting Agents:** None, Business/Employer, Civic
- Subjects:** None, Governor, State
- Footnotes:** Military and Veterans Affairs, Homeland Security, Energy
- Participating Agents:** None, Business/Employer, Civic
- Subsets:** Interstate, International, President, Non-Governmental or Private
- Footnotes:** Military and Veterans Affairs, Homeland Security, Energy
- Additional Search Parameters:**
  - Emergencies:** Non-Specified Disaster-Emergency, Flood Emergency, Nuclear/Radiologic Emergency
  - Timeframes:** By or After a Specific Date, Within or for a Specified Timeframe
  - Actions:** Prepare, Require, Maintain
  - Goals:** Plan, Emergency Operations Center, Communication System
  - Prescriptions:** Is/Isn't, May/Can, Must/Do
  - Purposes:** For Emergency Preparedness, For Emergency Response, For Emergency Management

Figure II is a screenshot taken from the Emergency Law Database tool. The database in Figure II is in default mode. Multiple laws can be searched simultaneously via terms entered in the “Enter the Keyword(s)” space, but they must be separated by a comma. Furthermore, the scope of the laws that are displayed can be filtered through the qualifiers shown above (Jurisdictions, Acting Agents, Participating Agents, and Additional Search Parameters).



## HOW TO ASSESS INCIDENT COMMANDERS' LEADERSHIP SKILLS

### Behavioral Markers Observation Toolkit

For more information, please visit:

<http://www.health.state.mn.us/oe/training/useee/index.html> (Under "Additional Course Materials")

### About the Behavioral Markers Observation Toolkit

#### What is its purpose?

By identifying and presenting professionals with specific behaviors that are best fitted for emergency response, the Behavior Markers Observation Tool aims to improve team performance as a result of better leadership.

#### What is it?

This tool is one-page observational survey series collaboratively developed by the Minnesota Department of Health and the University of Minnesota: Simulations, Exercises & Effective Education Preparedness and Emergency Response Research Center (U-SEE PERRC). It measures 33 observable behaviors that have been identified as key characteristics a public health incident commander should exhibit during response situations.

#### Who should use it?

The Behavioral Markers Observation Tool is designed to be used by those who will be leading public health responses to disasters. This includes those that work for:

- Environmental Health Units
- Epidemiologists
- Federal Government
- Foodborne Disease Surveillance Programs
- Government Officials
- Hotlines / Call Centers
- Immunization Programs
- Local Health Departments (LHDs)
- Policy Makers
- Public Health Agencies/Leaders/ Professionals
- Regulatory Compliance Officers and Inspectors
- State Health Departments (SHDs)

Behavioral Markers Observation Tool Date: \_\_\_\_\_ Team Observed: \_\_\_\_\_

One Time Markers	Measure
<b>Orients the Team</b>	
1) Introduces self as Incident Commander/Manager	N Y
2) Initiates introduction of ICS team members	N Y
3) Requires team members to don vests or name tags	N Y
4) Gives overview of incident for situational awareness	N Y
5) Verbally directs team members to job action sheets	N Y
<b>Knowledge of Objectives</b>	
6) Ensures the operational period is stated.	N Y
7) Ensures the incident objectives are verbalized.	N Y
8) Ensures the operational objectives are verbalized.	N Y
<b>ICS Knowledge</b>	
9) Identifies and addresses initial gaps in staff in ICS organizational chart	N Y
10) Provides direction to staff on ICS forms	N Y
<b>Briefings, Distractions, Environment</b>	
11) Provides verbal reminders to keep briefings constrained to key information	N Y
12) Verbalizes to forward phones and stop checking emails during briefing	N Y
13) Verbalizes that it's okay to ask questions or ask for help	N Y
<b>Calm</b>	
14) Intervenes to diminish escalating conflicts between staff members	N Y
15) Redirects team members who are off task	N Y
<b>Delegation, Moving Forward</b>	
16) Delegates Incident Manager/Commander responsibilities when leaving the EOC / DOC	N Y
17) Ensures ICS team members delegate responsibilities when leaving the EOC / DOC	N Y
18) References the Planning P for next steps	N Y

The image above is a screenshot of the first 18 behaviors in this tool. These behaviors are observed during the "Public Health Incident Leadership Training", which complements this tool.

#### What are the expected benefits?

By teaching participants the behaviors identified as key characteristics in effective leaders during an emergency response, it is hoped team performance improves due to better leadership. In turn, it is expected that this would lead to more efficient and effective public health responses during disasters. The model below outlines this process.

#### Contact information

Please email: [health.epr@state.mn.us](mailto:health.epr@state.mn.us)

Mickey Scullard [mickey.scullard@state.mn.us](mailto:mickey.scullard@state.mn.us)

Deb Radi [deb.radi@state.mn.us](mailto:deb.radi@state.mn.us)





## HOW TO SUPPORT TEAM DYNAMICS

### Improving Team Performance in a Public Health Response Toolkit

For more information, please visit:

<http://mn.train.org> (Course ID: 1053632)

### About the Improving Team Performance in a Public Health Response Toolkit

#### What is its purpose?

The Improving Team Performance in a Public Health Response tool is intended to provide individuals with the tools and techniques needed to actively contribute to team formation to improve response effectiveness.

#### What is it?

The Improving Team Performance in a Public Health Response is a 4-part training series collaboratively developed by the Minnesota Department of Health and the University of Minnesota: Simulations, Exercises & Effective Education Preparedness and Emergency Response Research Center (U-SEE PERRC). The course has been delivered several times with positive evaluations and consists of the following modules:

- *Module 1: Introduction to Team Dynamics*
- *Module 2: High Reliability Teams*
- *Module 3: Team Dynamics Tools and Techniques*
- *Module 4: Team Communication*

The course is available in 2 formats; in-person and an e-learning online course. The uptake seen with the online course suggests the adoption of the course is simple and straightforward.

#### Who should use it?

This training is intended for public health professionals, but is appropriate for any group that has to form teams from a pool of people. This is because it was created at a generic level and is adaptable. That being said, examples can be changed to incorporate specific audiences. (Some additional work might be needed to reach out to special populations or cultural communities).



The image above is a screenshot from slide 12 of Module 3: Team Dynamics Tools and Techniques. Presented in this image are common phrases which indicate that the team isn't working efficiently. It is up to the user to pick up on these cues as later in the module techniques to improve these communications (i.e. information exchange) are introduced. Participants

#### What are the expected benefits?

By partaking in the Improving Team Performance in Public Health Response training, participants will learn to contribute to team formation and response. Doing so will hopefully lead to a more efficient public health response roughly based on the following model:



#### Contact information

Please email: [health.epr@state.mn.us](mailto:health.epr@state.mn.us)  
**Barbara Lundgren** [barbara.lundgren@state.mn.us](mailto:barbara.lundgren@state.mn.us)  
**Mickey Scullard** [mickey.scullard@state.mn.us](mailto:mickey.scullard@state.mn.us)  
**Deb Radi** [deb.radi@state.mn.us](mailto:deb.radi@state.mn.us)



## HOW TO LEAD Public Health Incident Leadership Training Toolkit

For more information, please visit:

<http://www.health.state.mn.us/oep/training/useeee/index.html>

### About the Public Health Incident Leadership Training Toolkit

#### What is its purpose?

The purpose of the Public Health Incident Leadership Training course is to enhance the ability of Public Health Incident Commanders and other public health leaders to lead and manage a public health emergency response.

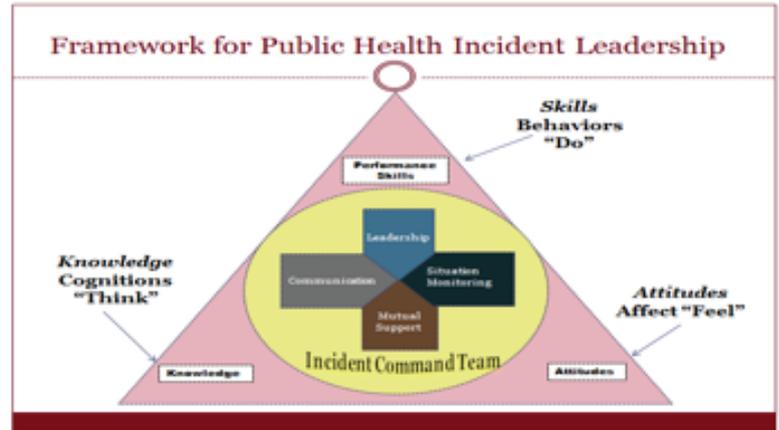
#### What is it?

This course was developed by the Minnesota Department of Health in partnership with the University of Minnesota. It consists of five, one-hour modules that cover the training topics most commonly identified by incident commanders as responsibilities during responses to disasters and events with public health implications. The modules are listed below:

- Leadership
- Communication
- ICS Roles/ Expectations
- Team Formation
- Team Management

#### Who should use it?

The Public Health Incident Leadership curriculum is intended for public health professionals who fill the Incident Command role. Other public health professionals with command and general leadership roles will benefit from the training, too. This tool was designed generically to be used across the nation. To meet culturally-specific audience needs, additional work would be needed.



The image above is a screenshot taken from slide 27 of the PowerPoint presentation for "Module 1: Leadership", it depicts the framework of leadership for public health incidents. This module is one of the five components that make up the Public Health Incident Leadership Training.

#### What are the potential benefits?

Using the Public Health Incident Leadership Training could result in the following benefits:

- Recognizing how to apply everyday leadership skills to emergency response.
- Improving critical communication skills used during a response.
- Knowledge of tools and strategies that will help Incident Commanders form and manage effective Incident Management Teams.
- Increasing awareness and understanding of both the Public Health Incident Commander/ Incident Management Team's roles and expectations.

#### Contact information

Please email: [health.epr@state.mn.us](mailto:health.epr@state.mn.us)

Mickey Scullard [mickey.scullard@state.mn.us](mailto:mickey.scullard@state.mn.us)

## HOW TO CREATE SURVEYS TO ASSESS PUBLIC COMMUNICATION Emergency Risk Communications Item Bank Toolkit

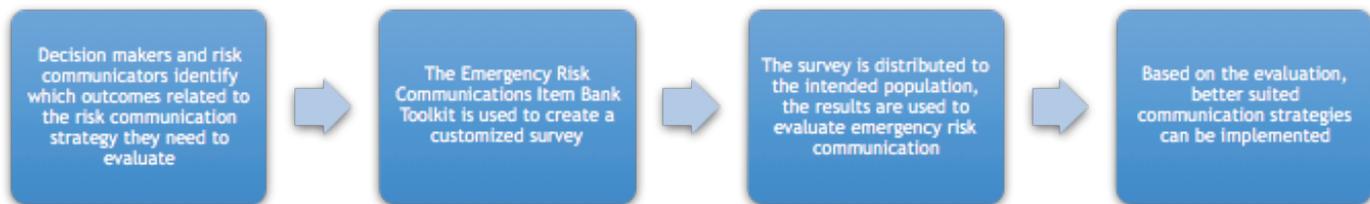
For more information, please visit:

<https://www.hsph.harvard.edu/preparedness/toolkits/risk-communications-item-bank>



### What are the expected benefits?

The ability for public health organizations to evaluate public opinion and communication strategies during an emergency is crucial for making an appropriate response. By helping organizations make these evaluations more efficient via the use of the Emergency Risk Communications Item Bank Toolkit, their ability to communicate risk to their respective community during an emergency should be improved.



## About the Emergency Risk Communications Item Bank Toolkit

### What is its purpose?

The Emergency Risk Communications Item Bank was created to aid risk communicators and policy makers in quickly evaluating public opinion and public communication strategies during emergencies.

### What is it?

The Emergency Risk Communications Item Bank Toolkit is a database of survey questions related to emergency risk communications. Based on focus group data gathered from diverse ethnic/racial and socioeconomic backgrounds and pre-existing surveys, the survey questions are selected by the toolkit which generate a customized survey to assess how the public receives, process and act upon risk communication messages.

### Who should use it?

This toolkit is intended to be used by risk communicators, policy and decision makers, practitioners, and public information officers from public health agencies, hospitals or other health-related organizations.

The surveys generated by the toolkit can then be used by public health related organizations and planners to gain information with regards to the following domains:

- *Communication Behaviors*
- *Social and Demographics*
- *Attitudes and Belief (General)*
- *Attitudes and Belief (Specific Threat)*
- *Health Status*
- *Past Experience Social Network/ Social Capital Socio-demographics*

### Contact information

Please email:

Leesa Lin [lilin@hsph.harvard.edu](mailto:lilin@hsph.harvard.edu)

Figure I: Screenshot of Options Available for Creating a Custom Emergency Risk Communications Survey

The screenshot shows a web interface titled "Emergency Risk Communications Item Bank". Under the heading "Domains", there are three categories of options, each with a checkbox:
 

- Communication Behaviors**:  Communication Behaviors
- Social and Demographics**:
  - Attitudes and Belief (General)
  - Attitudes and Belief (Specific Threat)
  - Health Status
  - Past Experience
  - Social Network/ Social Capital
  - Socio-demographics

 Below this, under the heading "Survey Implemented in Real Emergencies", there are four checkboxes:
 

- MA water crisis
- West Virginia water crisis
- H1N1
- MERS

 A red "Submit" button is located in the bottom right corner of the form area.

Figure I is a screenshot taken from the Emergency Risk Communications Item Bank Toolkit found under “Generate your own emergency risk communication survey”. Here, the user can input the intended domains as well as example templates from previous surveys in order to generate their own custom survey (see Figure II).

Figure II: Sample Output from Custom Survey from User Input into Emergency Risk Communications Item Bank Toolkit

The screenshot shows a survey form with the following content:
 

**Domain: Attitudes and Belief (General)**  
**Subdomain: None**

1. If pandemic flu occurs, how likely would it be that older adults 60+ are at risk for catching pandemic flu, with 1 being “not at all likely” and 7 being “very likely”?  
1 (not at all likely) - 7 (very likely)
2. If pandemic flu occurs, how likely would it be that children are at risk for catching pandemic flu, with 1 being “not at all likely” and 7 being “very likely”?  
1 (not at all likely) - 7 (very likely)
3. If pandemic flu occurs, how likely would it be that healthy adults are at risk for catching pandemic flu, with 1 being “not at all likely” and 7 being “very likely”?  
1 (not at all likely) - 7 (very likely)
4. If pandemic flu occurs, how likely would it be that people who are active in their community are at risk for catching pandemic flu, with 1 being “not at all likely” and 7 being “very likely”?  
1 (not at all likely) - 7 (very likely)
5. If pandemic flu occurs, how likely would it be that business travelers are at risk for catching pandemic flu, with 1 being “not at all likely” and 7 being “very likely”?  
1 (not at all likely) - 7 (very likely)
6. If pandemic flu occurs, how likely would it be that healthcare workers are at risk for catching pandemic flu, with 1 being “not at all likely” and 7 being “very likely”?  
1 (not at all likely) - 7 (very likely)
7. If pandemic flu occurs, how likely is it that local travel (such as buses and subways) may be slowed or stopped, with 1 being not at all likely and 7 being extremely likely?  
1 (not at all likely) - 7 (extremely likely)

Figure II is a representative screenshot of the custom survey form that is created based on user input into the database. These surveys are given to the target population and the results allow for a rapid evaluation of public opinion and public communication strategies during emergencies.



## HOW TO USE TEXT MESSAGING SYSTEMS

### Texting for Public Health Toolkit

For more information, please visit:

<http://www.nwcphp.org/training/opportunities/toolkits-guides/texting-for-public-health-toolkit>

#### About the Texting for Public Health Toolkit

##### What is its purpose?

Oftentimes, vulnerable populations are harder to reach through the media, particularly as technology advances. The Texting for Public Health Toolkit aims to change this by teaching public health agencies how to adopt this technology to communicate important, personal messages to numerous people.

##### What is it?

The Texting for Public Health Toolkit is an online tool that provides a tutorial to teach users how to create, market, and implement text messaging programs to improve emergency communications and other public health communications efforts. It does so by teaching the following learning objectives:

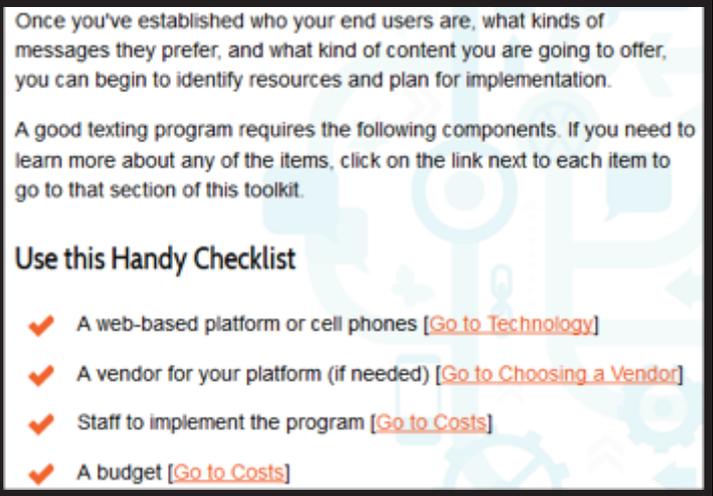
- Explaining how text messaging can be a valuable communications strategy in public health practice
- Planning a public health text message program
- Identifying types of text message users
- Marketing a public health texting program
- Crafting text messages for a public health audience
- Listing legal and security threats to a public health text message program
- Describing the methods for sending text messages and how the technology works

##### Who should use it?

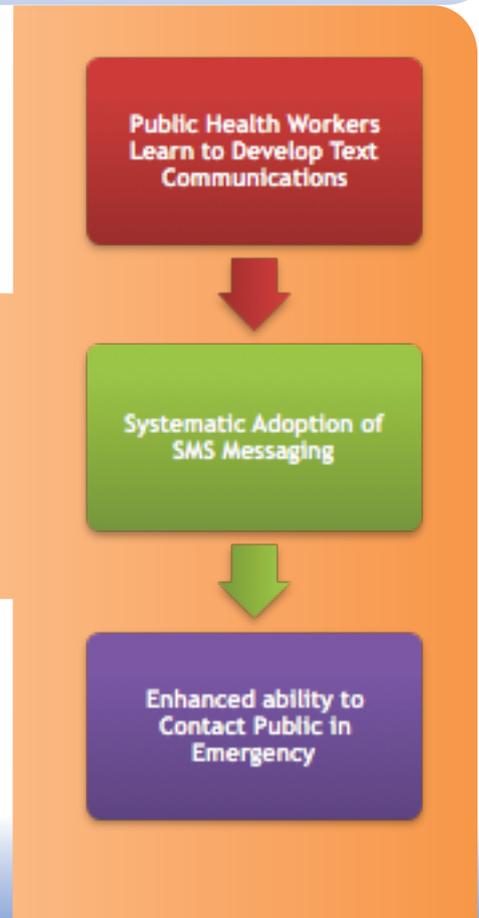
Users of the tool should include members of the public health workforce, including staff from finance, information technology, management, and program delivery staff.

##### What are the expected benefits?

While SMS Text messaging is familiar to most of the US adult population, systematic adoption by health departments to use in emergency communications, health promotion, disease management, surveillance, medicine adherence or community development is limited. The Texting for Public Health Toolkit helps combat this by aiding in the implementation of mass texting systems. Thus, members of the public across sectors and demographic groups would benefit by the following sequence:



The image above is a screenshot from the Texting for Public Health Toolkit. This particular image is from the program planning section and provides information on what an agency needs to get started.



##### Contact information

Please email:

**Hilary Karasz, Program Manager** [hilary.karasz@kingcounty.gov](mailto:hilary.karasz@kingcounty.gov)  
 Northwest Center for Public Health Practice [nwcphp@uw.edu](mailto:nwcphp@uw.edu)  
 Online form at <http://blue.kingcounty.gov/about/contact/>



## HOW TO USE TEXT MESSAGING SYSTEMS

### Video Series for Text Messaging System Toolkit

For more information, please visit:  
[www.kingcounty.gov/health/texting](http://www.kingcounty.gov/health/texting)



### What are the expected benefits?

Texting is a powerful mobile technology that can be especially useful in reaching challenged communities such as geographically isolated populations, and certain vulnerable populations. By using this tool to increase emergency and response programs' knowledge, attitudes and skills related to implementing SMS text messaging as a communication method, the following benefits can be achieved:

Increase community resilience

Broad Reach

Inform Development of Texting System

Implementation of Texting System with Logistical Considerations

Promotion of needs based understanding

### About the Video Series for Text Messaging Toolkit

#### What is its purpose?

The Video Series for Text Messaging System Implementation is designed to assist public health departments in implementing a texting system that can be used to reach audiences (including employees and the public) with public health emergency communications.

#### What is it?

This series of videos is designed to assist emergency preparedness and response programs in implementing a texting system that can be used to communicate with employees and the public. This tool comes in a video format and includes interviews with national experts reflecting the most current thinking in the field of mobile health. The content of the video series is broken-up into parts which focus on the following:

- Text messaging for reaching a broad range of the target population
- Research findings on what specific audiences want from a public health texting program
- Technical information about how texting works
- Legal implications of using text messaging services

*By emphasizing these objectives, this video series is an effective and engaging training tool that health departments can access at minimal or no cost*

#### Who should use it?

The videos are intended for emergency preparedness and response program managers/staff, as well as community-based organization leaders in order to increase preparedness among their communities, particularly those who belong to at-risk population subgroups. In addition, the lessons learned may also be applicable to a range of public health and community-based organizations' communications outside the realm of emergency preparedness and response. The video series can be accessed online and used at state and local health departments and/or community organizations.

#### Contact information

Please email:

**Hilary Karasz**, Program Manager [hilary.karasz@kingcounty.gov](mailto:hilary.karasz@kingcounty.gov)  
**Northwest Center for Public Health Practice** [nwcp@uw.edu](mailto:nwcp@uw.edu)

Online form at <http://blue.kingcounty.gov/about/contact/>



## HOW TO TEACH EXPECTANT MOTHERS ABOUT VACCINES

### MOMVAX Toolkit

For more information, please visit:

<http://momvax.org/>

### About the MOMVAX Toolkit

#### What is its purpose?

The MOMVAX toolkit was designed to improve knowledge and education about antenatal influenza and Tdap vaccination. It can also become a trusted resource for up to date information on such topics.

#### What is it?

The Emory MOMVAX toolkit is a multi-level intervention package designed to promote influenza and Tdap (tetanus diphtheria pertussis) vaccination to pregnant women. The toolkit is made up of the MOMVAX P3 Study Package as well as the MOMVAX webpage. The P3 package includes consists of the following (URL links can be found under “Additional MOMVAX Toolkit Materials”):

1. Identification of a practice-based “vaccine champion” staff member
2. Promotional posters
3. Educational brochures
4. Lapel buttons
5. Peer-to-peer vaccine education
6. Provider-to-patient talking points
7. Maps to retail outlets where patients could receive the vaccine(s)
8. Educational iBook app

The toolkit is underscored by the MOMVAX webpage <http://momvax.org/> which provides up-to-date information about antenatal vaccination. In addition, it also serves as an online repository for tools and resources produced by antenatal vaccination researchers at Emory University.

#### Who should use it?

This toolkit is designed to be used by expectant mothers/families, obstetric care providers, other public health researchers conducting similar research to increase antenatal vaccine coverage.



#### What are the expected benefits?

Through the expansion of educational resources to promote vaccination, it is anticipated that vaccination rates among all pregnant women will increase. In addition, by building an audience base prior to a public health emergency, the MOMVAX website can be a useful tool in terms of pushing relevant information out to pregnant women and their clinicians during an emergency.



#### Additional MOMVAX Toolkit Materials

2012 MOMVAX RCT Intervention Package Materials (URL links):

iBook: Vaccines and Pregnancy (pdf version)

[http://web1.sph.emory.edu/PHSR/Emory\\_PERRC/documents/Emory\\_Vaccines%20and%20Pregnancy\\_iBook\\_03122014.pdf](http://web1.sph.emory.edu/PHSR/Emory_PERRC/documents/Emory_Vaccines%20and%20Pregnancy_iBook_03122014.pdf)

Poster

[http://web1.sph.emory.edu/PHSR/Emory\\_PERRC/documents/emory\\_vaccine\\_poster\\_APedits\\_reduced.pdf](http://web1.sph.emory.edu/PHSR/Emory_PERRC/documents/emory_vaccine_poster_APedits_reduced.pdf)

Brochure

[http://web1.sph.emory.edu/PHSR/Emory\\_PERRC/documents/emory\\_vaccine\\_brochure\\_APedits\\_reduced.pdf](http://web1.sph.emory.edu/PHSR/Emory_PERRC/documents/emory_vaccine_brochure_APedits_reduced.pdf)

Doctor to Patient Talking Points: Influenza Vaccination During Pregnancy

[http://web1.sph.emory.edu/PHSR/Emory\\_PERRC/documents/-FLU\\_Provider%20to%20patient%20talking%20points\\_120312.pdf](http://web1.sph.emory.edu/PHSR/Emory_PERRC/documents/-FLU_Provider%20to%20patient%20talking%20points_120312.pdf)

Tdap Vaccination During Pregnancy:

[http://web1.sph.emory.edu/PHSR/Emory\\_PERRC/documents/T-DAP\\_Provider%20to%20patient%20talking%20points\\_120312.pdf](http://web1.sph.emory.edu/PHSR/Emory_PERRC/documents/T-DAP_Provider%20to%20patient%20talking%20points_120312.pdf)

EPIC Immunization Training

<http://www.gaepic.org/Immunization.html>

#### Contact information

Please email:

Saad Omer [somer@emory.edu](mailto:somer@emory.edu)

Online form at <http://momvax.org/contact-us/>

# HOW TO TEACH KIDS ABOUT NON-PHARMACEUTICALS INTERVENTIONS

## Flu Math Games Toolkit

For more information, please visit:

[http://blossoms.mit.edu/videos/lessons/flu\\_math\\_games](http://blossoms.mit.edu/videos/lessons/flu_math_games)

### About the Flu Math Games Toolkit

#### What is its purpose?

The intent of the Flu Math Games tool is for students who have completed the exercise to educate parents and siblings about Non-Pharmaceutical Interventions (NPI's) and reducing the spread of influenza.

#### What is it?

The Flu Math Games tool is an interactive educational video for high school math classes. The video lesson shows students that math can play a role in understanding how an infectious disease spreads and how it can be controlled. During this lesson, students will see and use both deterministic and probabilistic models and learn by doing via role-playing exercises. The primary exercises between video segments of this lesson are class-intensive simulation games, in which members of the class 'infect' each other under alternative math modeling assumptions about disease progression. There are also occasional class and local discussions with classmates.

In addition to the video, the following online simulations are also provided to supplement the tool.

- Simulation 1: Exponential Growth, Sampling without Replacement
- Simulation 2: Sampling with Replacement
- Simulation 3: Super Spreaders
- Simulation 4:  $R_0 = 1.5$
- Simulation 5: Initial Immunity
- Simulation 6: Statistical Flu Spread Simulation Too

#### Who should use it?

The tool is intended for use by high school and middle school students. There are no formal prerequisites, as students in any high school or even middle school math class could enjoy this learning video. In addition, more advanced classes can go into the optional applied probability modeling that accompanies the module in a downloadable pdf file.

Don't shake hands with people or otherwise touch them in a way that would encourage virus transmission from one to another.



The figure above is a screenshot of the Flu Math Games video, in this image, information about non-pharmaceutical interventions (i.e. not shaking hands) is being shown.

#### What are the expected benefits?

By teaching high and middle school students about the spread of infectious disease and providing an education about non-pharmaceutical intervention, this tool could potentially reduce the spread of influenza through the model below.

#### Contact Information:

Please email:

Richard Larson [rclarson@mit.edu](mailto:rclarson@mit.edu)

Elizabeth Murray [emurray@mit.edu](mailto:emurray@mit.edu)

Leesa Lin [llin@hsph.harvard.edu](mailto:llin@hsph.harvard.edu)





## HOW TO MONITOR SCHOOL ABSENCES TO DETECT AN OUTBREAK

### School Absentee Surveillance System (SASS) Toolkit

For more information, please visit:  
[www.absenteesurveillance.org](http://www.absenteesurveillance.org)

#### About SASS Toolkit

##### What is its purpose?

The purpose of the School Absentee Surveillance System (SASS) is to monitor school absences and analyze them to determine if they are abnormal and generate warning based on the results.

##### What is it?

The SASS tool was developed by the Preparedness, Emergency Response, and Recovery Consortium's (PERRC) UCLA branch as a way of tracking school absences at the district level. The system processes, analyzes, and displays data for each district on a daily basis. In addition, the SASS tool has the capacity to generate a wide range of absentee warnings based on a combination of complex rules and results.

##### Who should use SASS?

SASS is intended for use by local health departments and school districts. Logistically speaking, SASS is very efficient because it requires very few resources as only computer systems in both the school and the local health department are needed. That being said, for SASS to work at full capacity, only a member of the IT staff and an epidemiologist are necessary.



##### What are the expected benefits?

By the use of this system an infectious disease outbreak could be detected days before other surveillance systems (i.e. hospital flu admissions, hospital based syndromic surveillance systems, sentinel Ill sites). It can empower local health departments to respond sooner which helps reduce both the length and severity of an outbreak.

##### Contact information

Please email: [info@epgtech.net](mailto:info@epgtech.net)

Figure I: Example of SASS in use

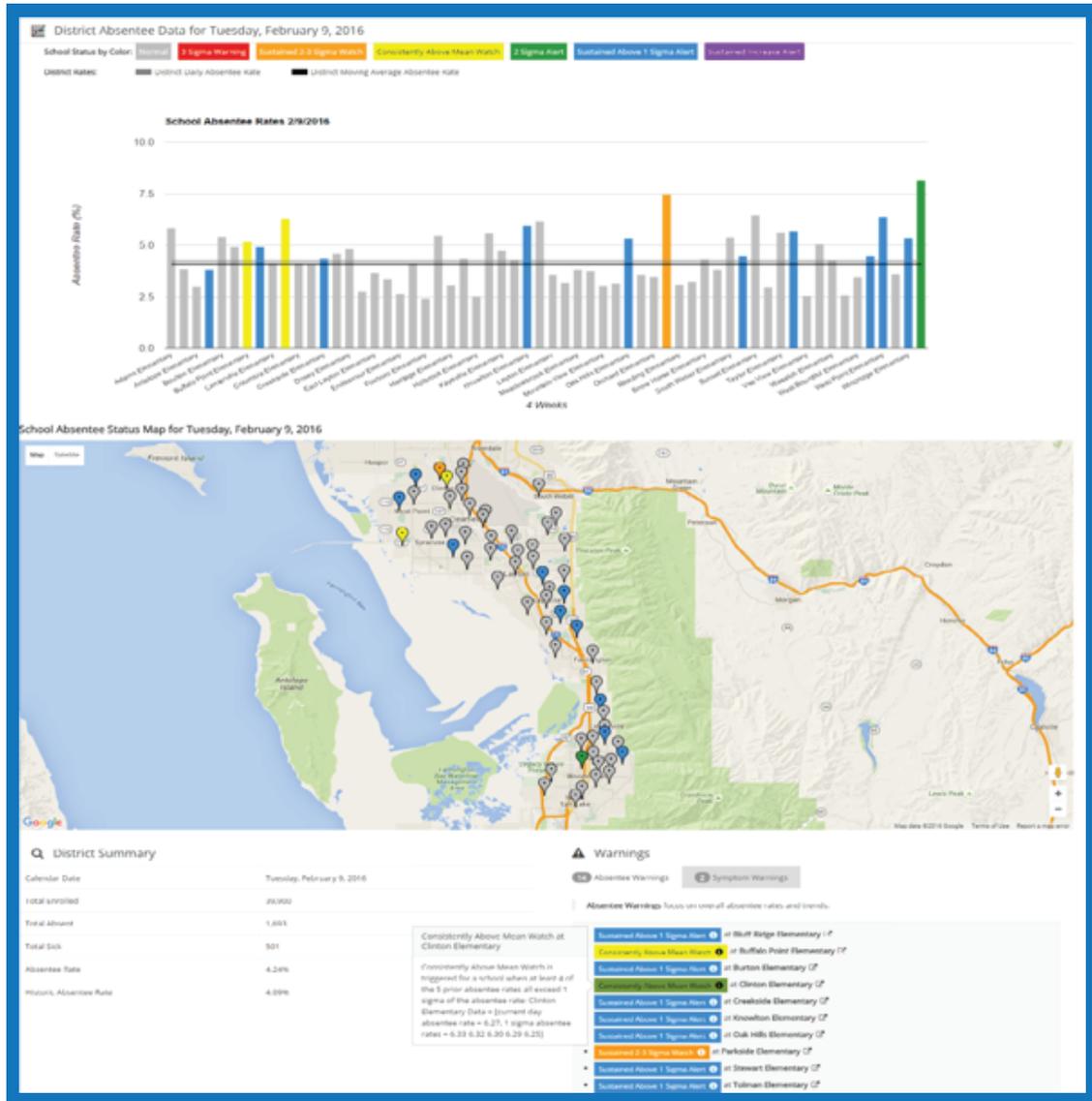


Figure I is a screenshot of the program. It features bar graphs which not only juxtapose different schools within a district, but also sets a standard for the average rate of absences per day. Depending on these rates the software can signal warnings so that the local health department can respond accordingly. Additionally, the system features a map which local authorities can use to track the prevalence of disease via absences based on certain symptoms. Further information and examples can be found on the website [www.absenteesurveillance.org](http://www.absenteesurveillance.org).

## HOW TO IDENTIFY AND PLAN FOR AT RISK POPULATIONS Vulnerable and At-Risk Populations Resource Guide Toolkit

For more information, please visit:  
[www.varpguide.com](http://www.varpguide.com)

### About the Vulnerable and At-Risk Populations Resource Guide Toolkit

#### What is its purpose?

The Vulnerable and At-Risk Populations Resource Guide (VARP) is intended to help decrease the time it takes for local health departments to identify and locate relevant information regarding at-risk populations in order to assist their planning and preparedness activities.

#### What is it?

The VARP Guide is an online resource to assist local health departments' preparedness planning for vulnerable and at-risk populations. Based on individual responses to a short series of questions, the VARP Guide provides links to population-specific resources and tools to help local health departments' work with vulnerable population groups to build or maintain partnerships. The tips and resources contained in the VARP Guide provide information related to:

1. Identifying Vulnerable and At-Risk Populations
2. Planning for Vulnerable and At-Risk Populations
3. Building Community Partnerships
4. Customizing maps to illustrate vulnerable populations at the census tract level according to the Social Vulnerability Index for Disaster Management (Flanagan et al. 2011)

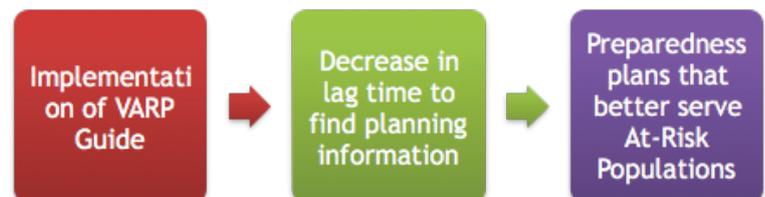
#### Who should use it?

The VARP Guide was designed for use by local health department staff responsible for vulnerable populations planning and response as well as their partners. Any jurisdiction can use the tool, but it is most helpful for smaller/low resourced departments. In addition, the VARP Guide is currently being implemented in North Carolina, Washington State (Seattle), New Mexico, West Virginia, and Georgia. If implementation in other states is funded, it could be expanded to all locations covered by the US Census.



#### What are the expected benefits?

By making it easier for local health departments to identify where at-risk populations are more prevalent, it is ultimately hoped that they will receive more attention. By doing so, they can be better served during an emergency scenario. The simplified model below illustrates the process:



#### Contact Information

Please email: [VARPguide@UNC.edu](mailto:VARPguide@UNC.edu)  
Christine Bevc [bevc@email.unc.edu](mailto:bevc@email.unc.edu)

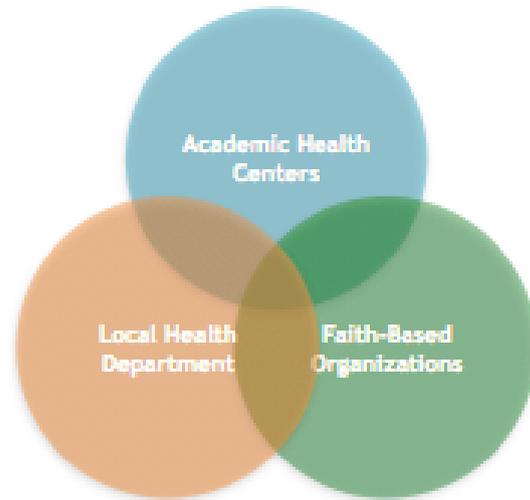
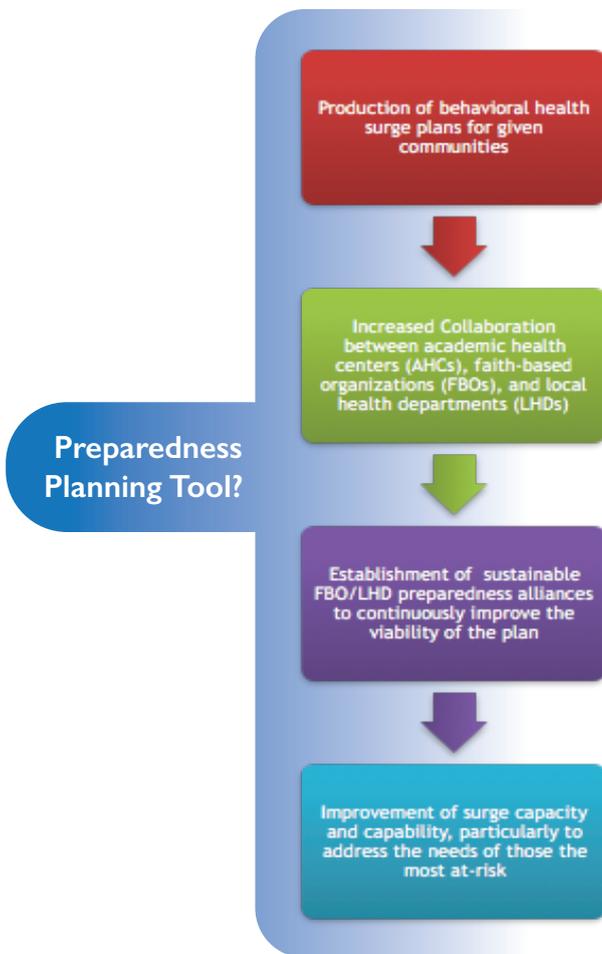
## HOW TO PLAN FOR AT RISK POPULATIONS

### Guided Preparedness Planning (GPP) Toolkit

For more information, please visit:

<http://www.jhsph.edu/research/centers-and-institutes/johns-hopkins-center-for-public-health-preparedness/training/online/guided-preparedness.html>

#### What are the expected benefits?



#### Who has already used this tool?

GPP has been successfully delivered in multiple geographic areas of the US (Illinois, Iowa, and Maryland) as well as in varied residential locales (urban, suburban, and rural) with several ethno-racial groups (African, Caucasian, and Hispanic) of different faiths (Christian, Jewish, and Muslim), and in different-sized participant groups (range: 10-60).

#### Contact information

Please email:

**Lee McCabe** [lmccabe@jhmi.edu](mailto:lmccabe@jhmi.edu)

**Natalie Semon** [nsemon@jhu.edu](mailto:nsemon@jhu.edu)

## About Guided Preparedness Planning (GPP) Toolkit

#### What is its purpose?

The purpose of the GPP tool is to safeguard whole communities by addressing the physical, psychological, and spiritual health of at-risk populations during surges of demand for services caused by public health emergencies and disasters.

#### What is it?

The Guided Preparedness Planning (GPP) program consists of a day-long workshop (with a kit of supporting materials) during which community leaders are guided through a step-by-step planning protocol to produce a draft of a basic disaster preparedness plan.

#### Who should use it?

GPP is intended to increase collaboration between academic health centers (AHCs), faith-based organizations (FBOs), and local health departments (LHDs). Therefore, it works most appropriately in the context of this equal, three-entity partnership structure.



## HOW TO PLAN A POD

### Virtual POD Support Toolkit

For more information, please visit:  
<http://www.virtualpublichealth.com/index.html>

#### About the Virtual POD Toolkit

##### What is its purpose?

The Virtual POD software is intended to aid public health worker's planning in a POD by allowing them to run simulations and explore the best strategies for setting up a local POD. There is one mass dispensing clinic setup to view/modify. The user may dispense a number of items commonly needed to setup a POD.

##### What is it?

The Virtual POD is a portable virtual environment used to simulate Point of Dispense (POD) scenarios. It was created by the Preparedness, Emergency Response, and Recovery Consortium (PERRC) branch at the University of Minnesota with the collaboration of the University of Illinois at Chicago. A variety of scenarios can be built in the environment and used for training, demonstration or planning.

##### Who should use it?

The tool is designed to be used by both local health departments (LHDs) and public health professionals.



The pictures above are screenshots of the Virtual POD tool. The software can be run on a local computer without need for an Internet connection. It comes packaged with a small community with a small school, TV station, local health departments, warehouse, drive-thru bank, farm and main street with stores. There is one mass dispensing clinic setup to view/modify.

#### Contact information

Please email:

Leesa Lin [llin@hsph.harvard.edu](mailto:llin@hsph.harvard.edu)

#### What are the expected benefits?

By allowing the user to simulate a POD scenario, it is hoped that the understanding of the methodology behind creating a real POD scenario will increase. As a result, it is ultimately hoped that the rate of infection in a real scenario will be reduced due to a more effective deployment of a POD. The following model shows the process:





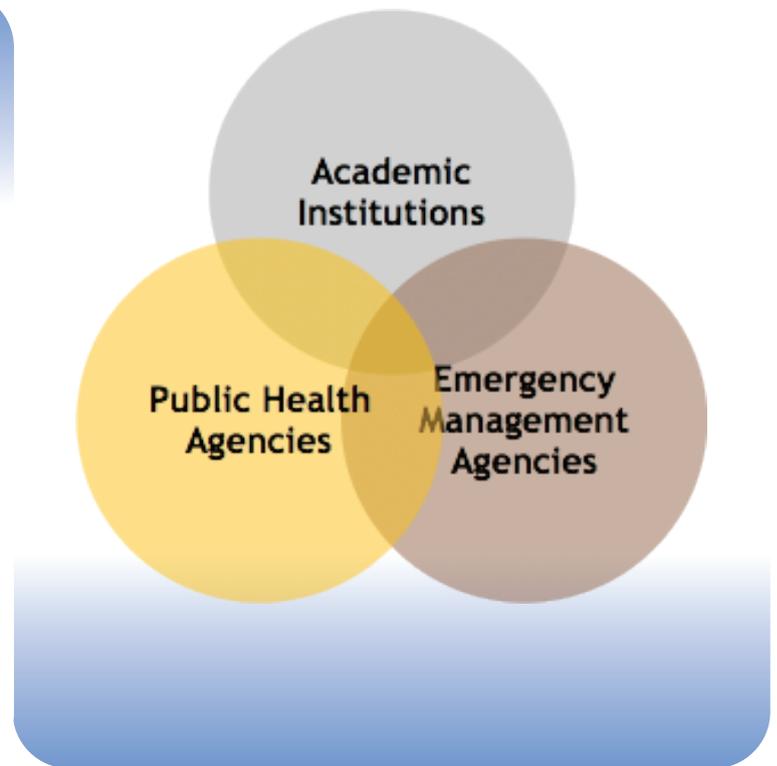
## HOW TO SUPPORT ACADEMIC-COMMUNITY PARTNERSHIP

### Academic-Community Partnerships in Preparedness Toolkit

For more information on *Training Materials for Institutional Leaders in Academic-Community Partnership for Preparedness*, please visit:  
([http://web1.sph.emory.edu/PHSR/Emory\\_PERRC/doc/PresentationforAcademicInstitutionsPublicHealthLeadersACP.pdf](http://web1.sph.emory.edu/PHSR/Emory_PERRC/doc/PresentationforAcademicInstitutionsPublicHealthLeadersACP.pdf))

For more information on *Geomapping Tool of Academic Institutions*, please visit:  
(<http://emergency.emory.edu/work/map/>)

For more information on *Checklist for building Academic-Community Partnerships*, please visit:  
([http://web1.sph.emory.edu/PHSR/Emory\\_PERRC/doc/ChecklistFacilitatorsBarriersAcademic.pdf](http://web1.sph.emory.edu/PHSR/Emory_PERRC/doc/ChecklistFacilitatorsBarriersAcademic.pdf))



#### What are the potentials benefits?

The main benefit of this tool is the establishment of sustainable relationships among academic institutions, public health agencies and emergency management.

#### Contact information

Please email:

Alex Isakov [aisakov@emory.edu](mailto:aisakov@emory.edu)



## HOW TO SUPPORT PLANNING FOR LONG TERM CARE FACILITIES Long Term Care Emergency Preparedness Web Portal (Florida & West Virginia) Toolkit

For more information, please visit:  
[www.ltcprepare.org](http://www.ltcprepare.org) (Florida) or <http://911wv.org> (West Virginia) to access the portal

### About the Long Term Care Emergency Preparedness Portal Toolkit

#### What is its purpose?

The purpose of the Long Term Care Emergency Preparedness Portal is to allow users to access up to date information with regards to emergency preparedness for their use in planning.

#### What is it?

The portal is a website that was developed by the Florida Health Care Association (FHCA) and the Emory University's Preparedness and Emergency Response Research Center (PERRC) to serve as a gateway to tools, resources and information on emergency preparedness topics.

#### Who should use it?

While this portal is designed specifically for skilled nursing and post-acute care centers (also referred to as long term care (LTC) centers), anybody with internet can access the information in the portal. In addition, it is anticipated that other national long term care providers and health care associations will use this tool for emergency preparedness planning.

#### Who has used it?

Both Florida and West Virginia's long term care association currently host the web portals. Additional training to use the portal by other states can be made available by Emory IT staff.

#### What are the expected benefits?

By having access to a portal with up to date information on emergency preparedness topics, this tool supports emergency planning for long term care facilities.

### What resources are needed to run the portal?



#### Contact Information

Please email:  
Sarah Blake [sclake@emory.edu](mailto:sclake@emory.edu)

Figure I: Screenshot of the portal (Florida)

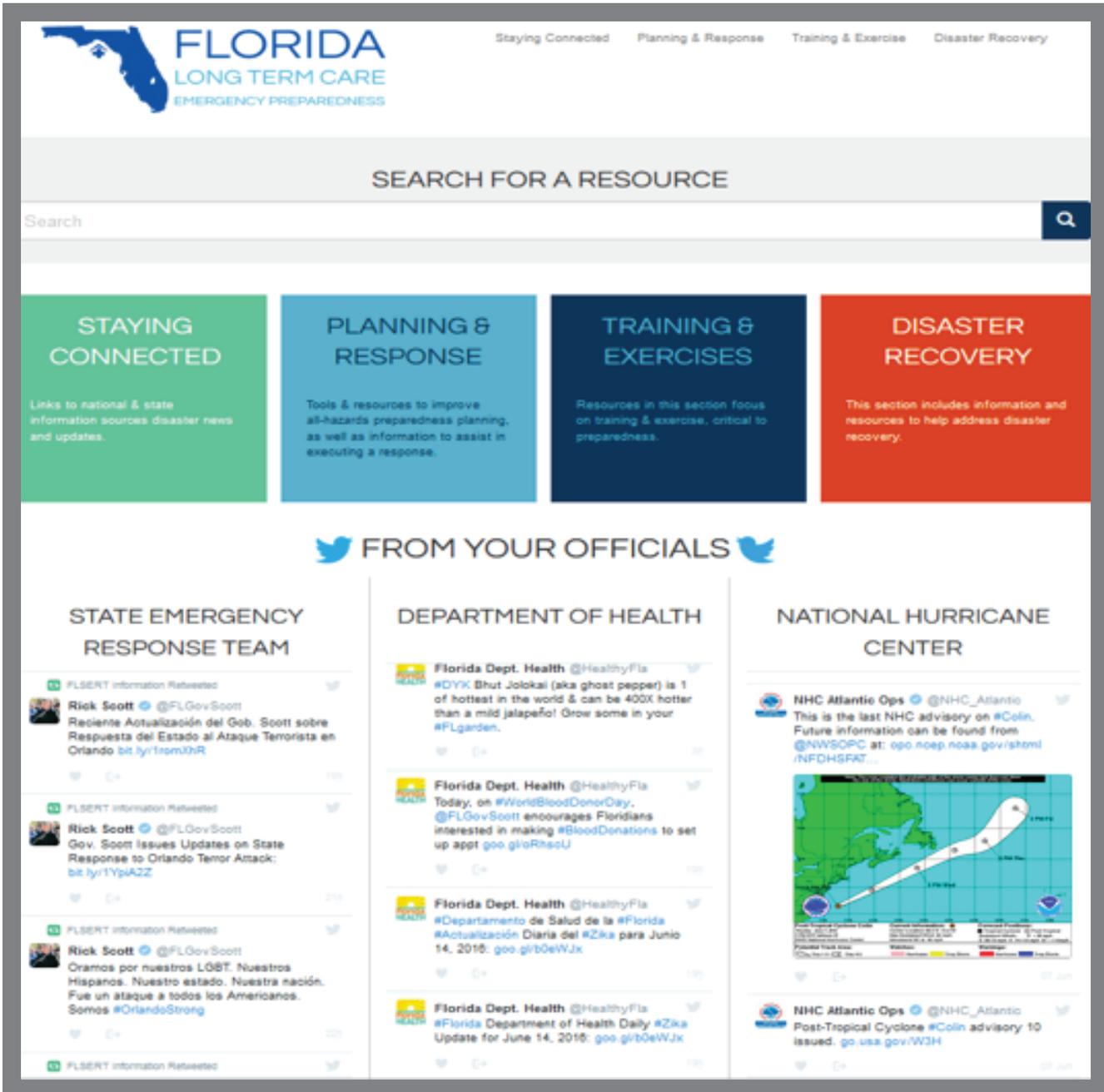


Figure I shows the basic display of the Florida’s portal, and available features (i.e. Staying Connected, Planning& Response, Training and Exercises, and Disaster Recovery). In addition, Twitter feed from local officials allows the user to be kept up to date. It is worth noting that the information provided in the portal is not exclusive to the state, but contains tools and information for any state for a wider range of preparedness activities.

## HOW TO PLAN FOR ALTERNATE CARE SITES

### Alternate Care Site (ACS) Toolkit

For more information, please visit:

[http://www.smrrc.org/ACS\\_FOLDER/ACS\\_ORG\\_CHART\\_Interactive2.html](http://www.smrrc.org/ACS_FOLDER/ACS_ORG_CHART_Interactive2.html)

#### About the Alternate Care Site Toolkit

##### What is its purpose?

The purpose of the Alternate Care Site Toolkit is to support the creation of ACS that meet the needs of individuals with functional needs.

##### What is it?

This tool is an online interactive organizational chart with links to the specific forms, responsibilities, and additional information on each role within the organizational framework. It was designed following the completion of an exercise to test full scale deployment of an Alternate Care Site during a fictional medical surge situation. As a result, this tool is tailored to help plan for the creation of an alternate care site.

##### Who should use it?

The Alternate Care Site Toolkit is intended to be used by public health officials, hospital leaders, EMS, emergency managers, and fire officials during ACS planning meetings.



##### What are the expected benefits?

By aiding healthcare agencies in establishing alternate care sites, this tool supports the planning for alternate care sites benefiting populations with specific needs such as, but not exclusive to children, communication-challenged individuals, persons with medical conditions, and persons functionally at-risk for independence.

The ACS Toolkit is enacted by a ACS planner (i.e. local health department)



Using the framework provided, local health agencies develop more efficient plans for an alternate care site



In case of an emergency, the alternate care site is created



Populations with specific needs are better served through this site

#### Contact information

Please email:

Paul Biddinger [pbiddinger@partners.org](mailto:pbiddinger@partners.org)

Leesa Lin [llin@hsph.harvard.edu](mailto:llin@hsph.harvard.edu)

Figure I: Screenshot of Alternate Care Site Toolkit's Organizational Chart

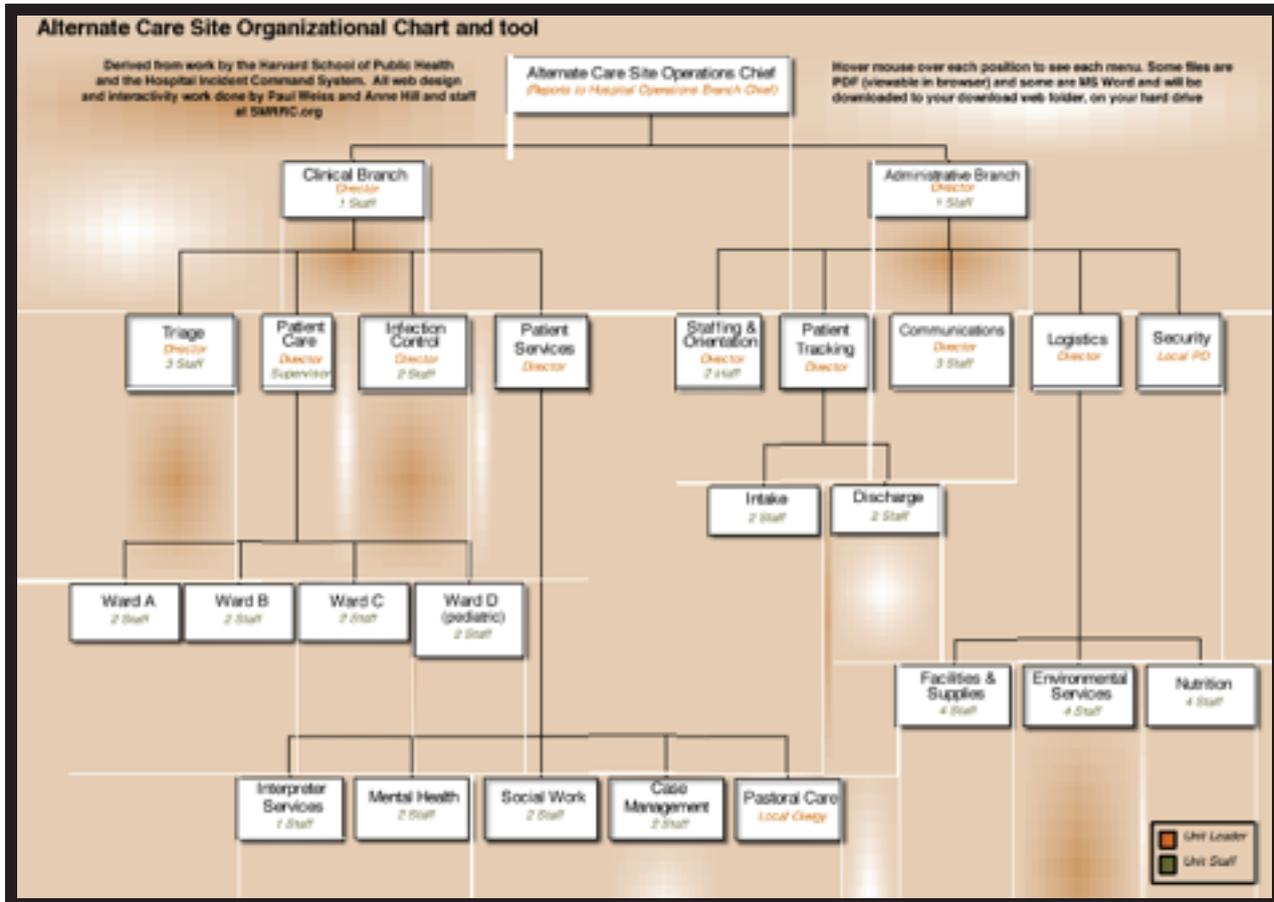


Figure I is a screenshot of the overall organizational framework provided by the Alternate Care Site Toolkit. It shows the command structure as well as the relationship between the different roles that make up the alternate care site.

Figure II: Screenshot of Links within Organizational Chart's Matrix

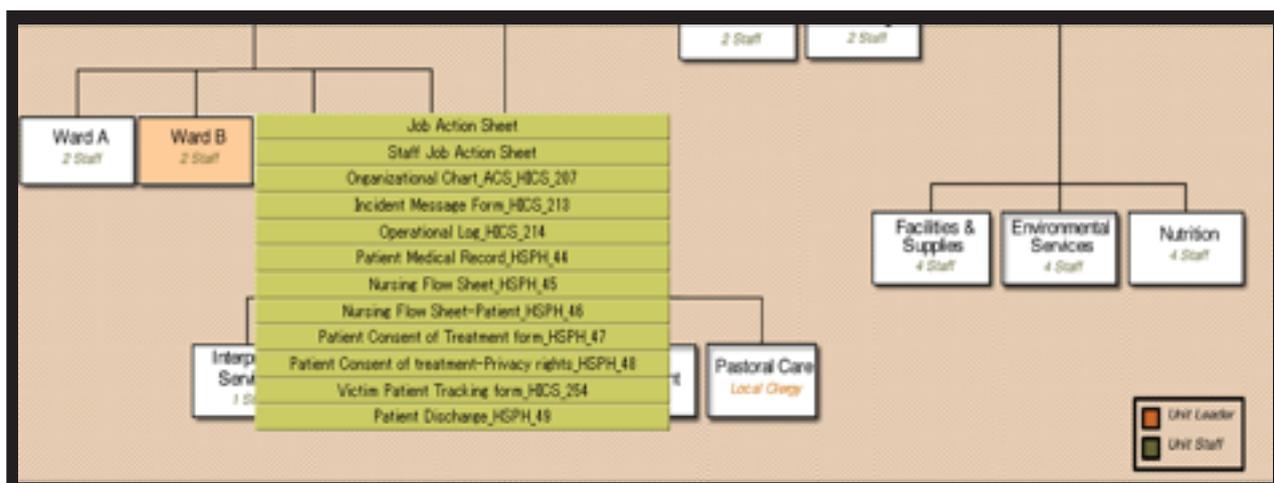


Figure II is a screenshot of links within each role to the specific forms, responsibilities, and additional information that can be accessed by scrolling over the area containing the role.



## HOW TO BUILD PARTNERSHIPS BETWEEN PUBLIC HEALTH AND COMMUNITY-BASED ORGANIZATIONS

### Assessment for Disaster Engagement with Partners Toolkit (ADEPT) Toolkit

For more information, please visit:

<http://cphd.ph.ucla.edu/sites/default/files/downloads/ADEPT%20Toolkit.pdf>

#### About ADEPT Toolkit

##### What is its purpose?

The purpose of the Assessment for Disaster Engagement with Partners Toolkit is to help build partnerships within a community. By doing so, its aim is to aid improvement in the following four activities which local health departments LHDs-Community-based organizations CBOs/Faith based organizations FBOs relationships are characterized by:

1. Two-way communication, outreach & coordination
2. Resource mobilization
3. Organizational capacity building
4. Partnership development and maintenance

##### What is it?

The Assessment for Disaster Engagement with Partners Toolkit (ADEPT) is designed to aid in increasing a community's disaster resilience by building partnerships. It does so by providing information that is used to evaluate and enhance collaboration between local health departments (LHDs) and community and/or faith based organizations (CBO/FBOs) through the use of exercises.

##### Who should use it?

Despite ADEPT's focus on community and faith based organizations, it is adaptable and can be used by any community or governmental organization interested in disaster preparedness and response.



#### What are the expected benefits?

More efficient and effective message distribution

Improved community resilience

Can easily be adopted at local, state, and national levels

Easy to use, doesn't require many resources

Ultimately, the entire population can benefit from its application since improved relationships between local health departments and community/faith based organizations allow for a quicker and more efficient response, which helps reduce both the length and severity of an emergency.

Examples of the ADEPT Toolkit:

Figure I: Screenshot of appendix A

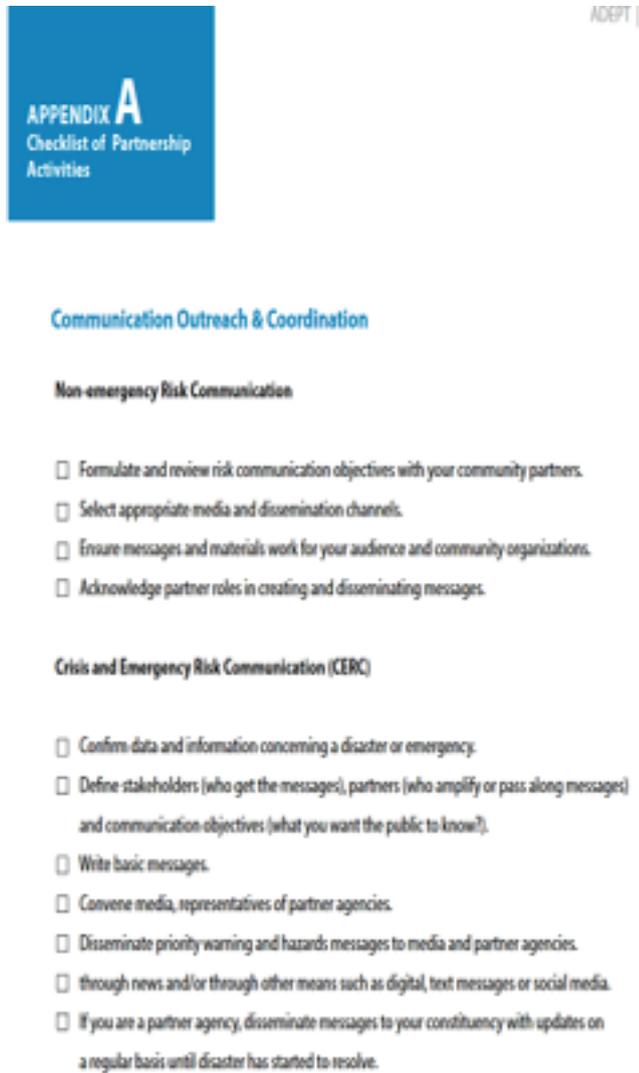


Figure I is included in Appendix A (Communication and Outreach), this is part of the ADEPT organizational assessment tool that helps local health departments evaluate their partnership activities. Via this evaluation and other similar evaluations, guidance to where improvement is needed is provided.

Figure II: Screenshot of appendix F



Figure II is from Appendix F (Social Media Communications Strategy Worksheet) and plays a role in the enhancement process. It is part of a set of activities which are recommended based on the initial assessment to enhance collaboration efforts with community based organizations as well as faith based organizations.



## HOW TO LEARN FROM EMERGENCIES

### Emergency Responder After-Action Report Template Toolkit

For more information, please visit:  
<https://cpheol.sph.umn.edu/PERL/hedberg/index.asp> (Login Required)

### About the Emergency Responder After-Action Report Template Toolkit

1. The roles responders are conducting during an event
2. How well they are able to complete said roles
3. What helped the responders fulfill their respective roles
4. What caused hindrance
5. What trainings were useful for their exact role

#### What is it?

The Emergency Responder After-Action Report Template was designed to provide guidance to local emergency responders on how to organize and facilitate an after-action debrief as well as how to compose a written after-action report.

#### Who should use it?

The template is intended for use by emergency management supervisors and responders who have responded to emergency events in addition to those who are not confident in their ability to conduct and lead an after-action debriefing. Also, the template is designed to be open ended so it can be used in a variety of different event types and jurisdictions.



#### Contact information

Please email:

**Mickey Scullard** [mickey.scullard@state.mn.us](mailto:mickey.scullard@state.mn.us)

**Craig Hedberg** [hedbe005@umn.edu](mailto:hedbe005@umn.edu)

University of Minnesota School of Public Health  
Public Health Performance Evaluation Forms



	Responsibilities During Event <i>(List your top 5 responsibilities during the disaster event)</i>	Successful Completion of Responsibility	Barriers to Successful Completion	Specific Training that Assisted Completion	Specific Partnerships With Outside Agencies that Assisted Completion	What training or prior knowledge, if any, would have assisted completion	What partnerships with outside agencies would have assisted completion
1			<input type="checkbox"/> None <input type="checkbox"/> Lack of Training <input type="checkbox"/> Communication Disruption <input type="checkbox"/> Equipment Failure <input type="checkbox"/> Insufficient Resources <input type="checkbox"/> Other (specify below)				

The figure above is a screenshot of the Emergency Responder After-Action Report Template. In this case, the information for only one responder is shown. However, there is room for four more.

#### What are the expected benefits?

It is expected that long-term use of this tool will improve future emergency responses by bringing to light improvement strategies based on previous emergency response failures.

## HOW TO LEARN FROM THE RESPONSE TO CRITICAL INCIDENTS

### Learning from Critical Incidents and Peer Assessment Toolkit

For more information, please visit

<https://www.hsph.harvard.edu/preparedness/toolkits/critical-incidents/>

### About the Learning from Critical Incidents and Peer Assessment Toolkit

#### What is its purpose?

The purpose of the Learning from Critical Incidents and Peer Assessment Toolkit is to help users analyze the response to an emergency via a process that focuses on public health systems root causes of failures and/or successes in the response.

#### What is it?

This toolkit was created to aid public health officials in improving a public health system's level of preparedness. It uses peer assessment, root cause analysis and other methods to teach users how to properly respond based on experience from previous events. The toolkit consists of three components:

1. *Online Training (teaches users how to use the toolkit)*
2. *Case Studies (teaches users root cause analysis)*
3. *Manual and Supporting Materials A.K.A "Peer Assessment Toolkit" (teaches users how to generate reports that describe lessons learned)*

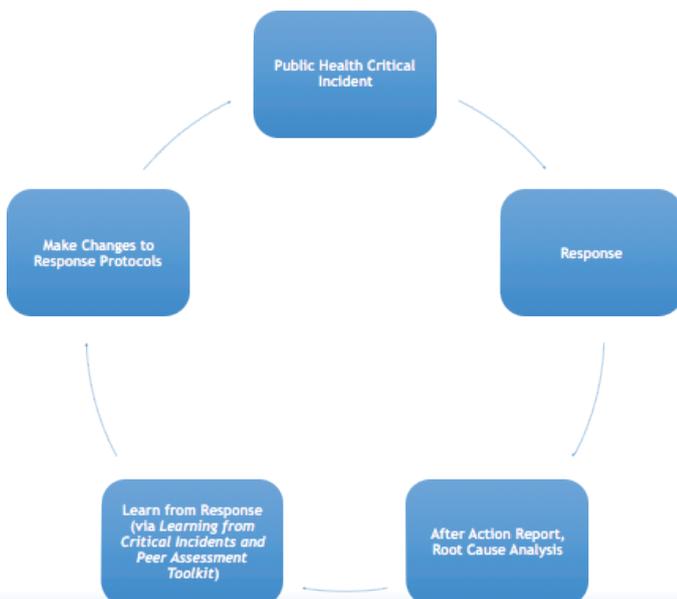
#### Who should use it?

The Learning from Critical Incidents and Peer Assessment Toolkit was designed to be used by public health officials, particularly those conducting after-action reports.



#### What are the expected benefits?

The analysis of the response to public health emergencies is often undermined by a failure to identify the root causes of specific failures and/or successes. This is largely due to a lack of knowledge of proper protocols that allow public health systems to do so. However, by teaching users how to analyze root causes and combining that information with previous case studies, the Learning from Critical Incidents and Peer Assessment Toolkit has the potential to contribute to system improvement efforts. The use of this toolkit can improve an evaluator's ability to write useful after action reports.



#### Contact information

Please email:

**Leesa Lin** [llin@hsph.harvard.edu](mailto:llin@hsph.harvard.edu)

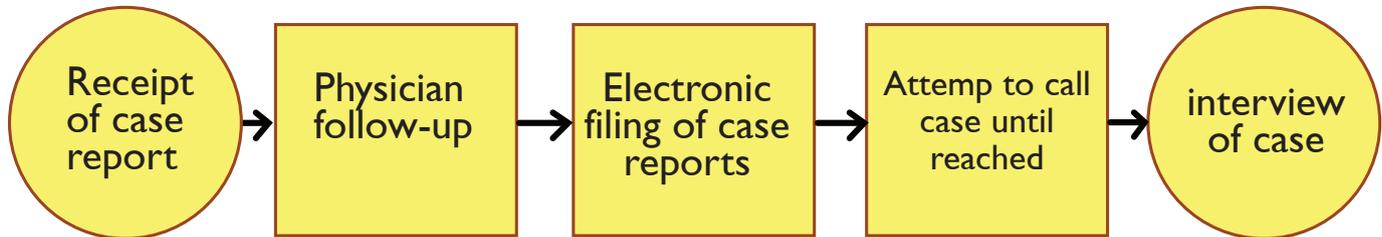


## HOW TO ASSESS HEALTH DEPARTMENT RESPONSE

### Public Health Performance Evaluation Primer Toolkit

For more information, please visit:  
<https://cpheo1.sph.umn.edu/PERL/hedberg/index.asp>

Figure 1. A process map of disease X follow-up at health department A.



The figure above is a screenshot from the case study included in the primer. It shows the process steps an example team took together to describe the process that occurs within the department between the receipt of a case report of disease X and the interview of the case.

#### What are the expected benefits?

By guiding health departments and other agencies with limited resources create evaluation methods; the Public Health Performance Evaluation Primer hopes to improve performance in a response effort. The improved performance would occur based roughly on the model below:

### About the Public Health Performance Evaluation Primer Toolkit

#### What is its purpose?

This evaluation and improvement tool will provide guidance to health departments or other public health agencies on how to improve the measurement of performance to a response. The performance information collected by this tool can support resource allocation decisions.

#### Who should use it?

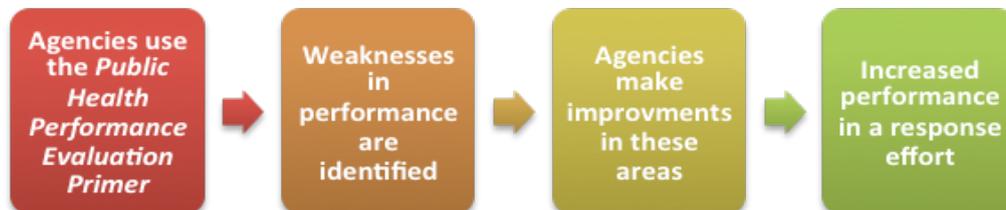
The primer is intended for use by health departments or other agencies that may have limited resources in reviewing their performance to a response as well as identifying opportunities for continuous quality improvement.

#### What is it?

The Public Health Performance Evaluation Primer is a guide on how to integrate performance measurement in public health improvement efforts.

1. Define the program goals and processes
2. Define the process performance metrics
3. Measure the process
4. Evaluate the process with Run Charts
5. Identify strategies for improvement
6. Improve processes with the Plan-Do-Check-Act cycle

In addition, the primer also presents a case study in order to illustrate these methods.



#### Contact information

Please email:  
 Craig Hedberg [hedbe005@umn.edu](mailto:hedbe005@umn.edu)  
 Mickey Scullard [mickey.scullard@state.mn.us](mailto:mickey.scullard@state.mn.us)



## HOW TO USE MIXED METHODS IN PREPAREDNESS RESEARCH

### Workshop for Mixed Methods Emergency Preparedness Research Toolkit

For more information, please visit

<http://coursecast.sph.emory.edu/Panopto/Pages/Viewer.aspx?id=73f1ce18-e40e-4b2f-a78f-c041a2b7d09c>

### About the Workshop for Mixed Methods Emergency Preparedness Research Toolkit

#### What is its purpose?

The purpose of the Workshop for Mixed Methods Emergency Preparedness Research Toolkit is to address current concerns for the use of mixed methods to support the translation of emergency preparedness research into practice.

#### What is it?

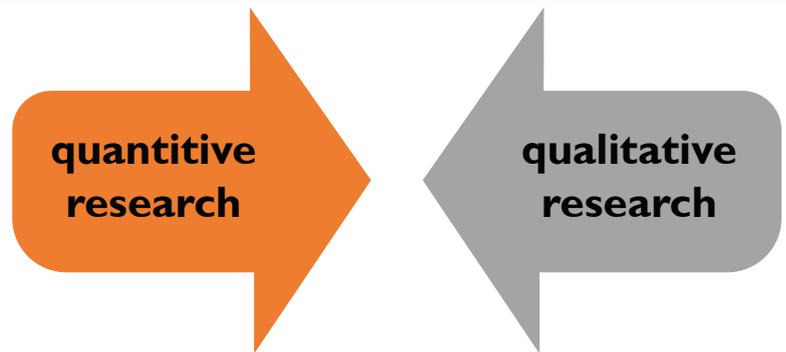
The toolkit is a 45-minute webcast that explains the use of a mixed methods approach in the translation from emergency preparedness research into practice.

The webcast does so by clarifying the role of mixed methodology in emergency preparedness translation via the following talking points:

1. Defining key terms
2. Providing a rationale for the use of mixed methods
3. Describing how to both select and use the best methods based on the context of the research
4. Suggesting strategies to avoid common challenges in mixed methods research in emergency preparedness

#### Who should use the toolkit?

While the webcast could be shown to any size audience, it is primarily designed to be shown to researchers and evaluators of emergency preparedness work, or for those studying response.



#### What are the expected benefits?

By clarifying the importance of using a mixed methods approach for translating research into practice, and by using a webcast to reach a wider audience, the use of this toolkit can result in, but is not limited to the following benefits:

- Support researchers and evaluators in preparedness with a framework for developing mixed methods studies.
- Data collected through future studies with this methodology will be more beneficial to public health practice and improve emergency preparedness and response activities.

#### Contact information

Please email:

**Ariela Freedman** [ariela@maventreeconsulting.com](mailto:ariela@maventreeconsulting.com)



Figure I: Screenshot of “Why Used Mixed-Methods” Slide

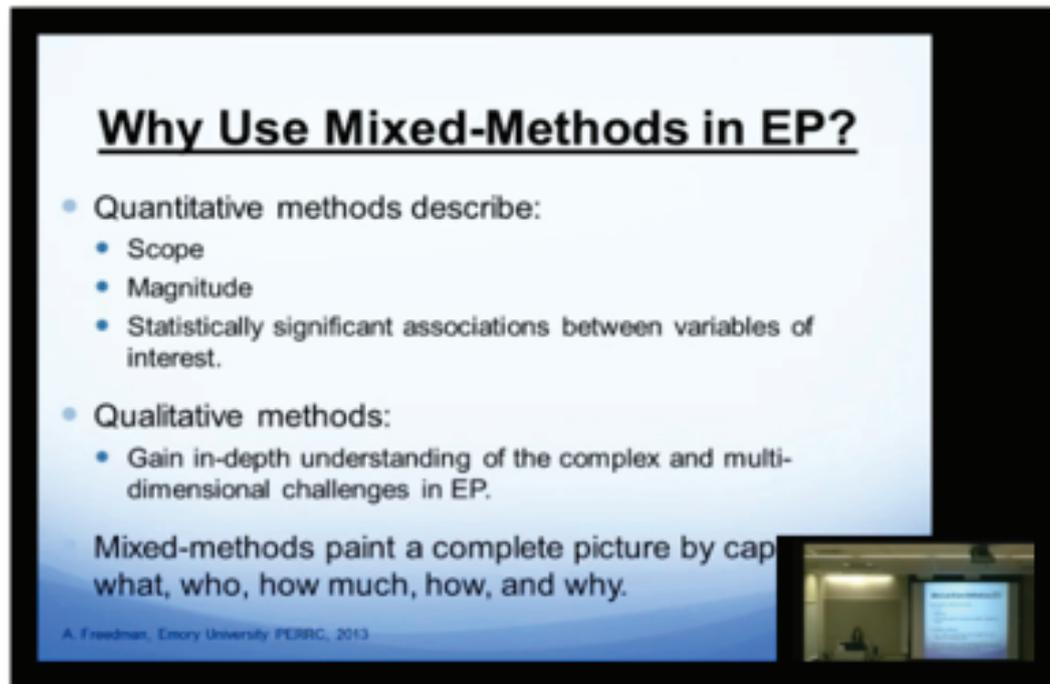


Figure I is a screenshot taken from minute 4 of the webinar for the Workshop for Mixed Methods Emergency Preparedness Research Toolkit. The slide on display advocates for the use of a mixed-methods approach in translating research into practice in emergency preparedness to the audience.

Figure II: Screenshot of “Strategies to Address Common Mixed-Methods Challenges” Slide

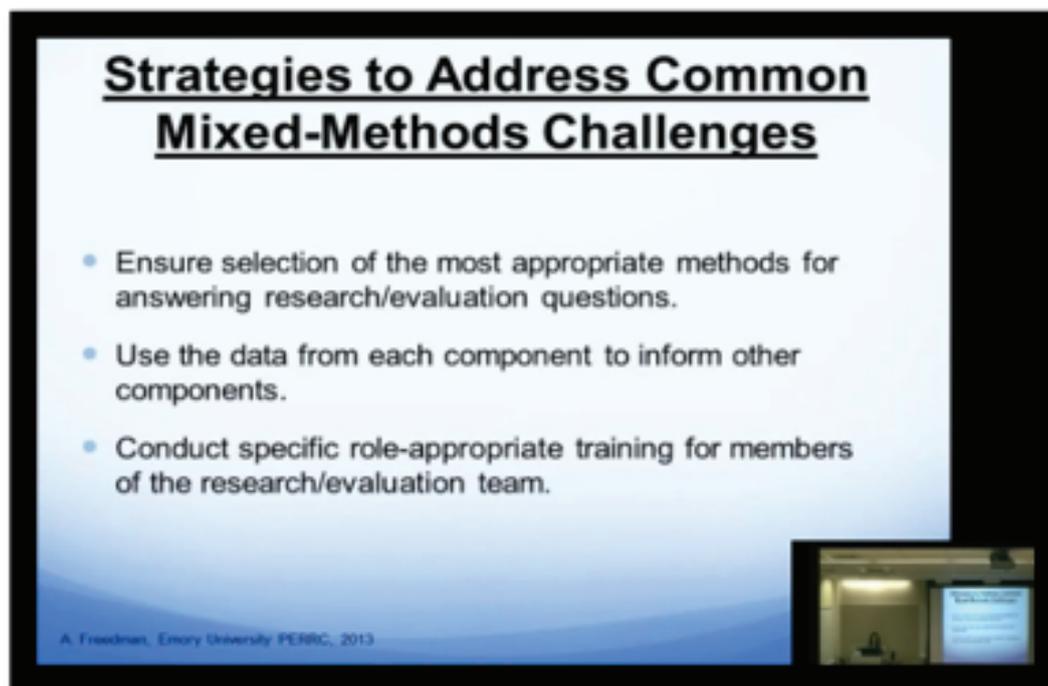


Figure II is a screenshot taken from minute 31 of the webinar for the Workshop for Mixed Methods Emergency Preparedness Research Toolkit. The slide on display serves as a means of spreading information about effective strategies to address common mixed-methods challenges.



## HOW TO ASSESS IMMUNIZATION PROGRAMS

### Immunization Program Managers (IPM) Survey Toolkit

For more information on the 2009 IPM Survey Tool, please visit:

[http://web1.sph.emory.edu/PHSR/Emory\\_PERRC/documents/Emory%20PERRC%202009%20IPM%20Survey.pdf](http://web1.sph.emory.edu/PHSR/Emory_PERRC/documents/Emory%20PERRC%202009%20IPM%20Survey.pdf)

For more information on the 2010 IPM Survey Tool, please visit:

[http://web1.sph.emory.edu/PHSR/Emory\\_PERRC/documents/2010IPMSurvey\\_2010%2010%2020%20format%20for%20sharing.pdf](http://web1.sph.emory.edu/PHSR/Emory_PERRC/documents/2010IPMSurvey_2010%2010%2020%20format%20for%20sharing.pdf)

For more information on the 2012 IPM Survey Tool, please visit:

[http://web1.sph.emory.edu/PHSR/Emory\\_PERRC/documents/Emory%20PERRC%202012%20IPM%20Survey.pdf](http://web1.sph.emory.edu/PHSR/Emory_PERRC/documents/Emory%20PERRC%202012%20IPM%20Survey.pdf)

### About the IPM Survey Toolkit

#### What is its purpose?

The purpose of the Immunization Program Managers Survey Toolkit is to gain a better understanding of immunization and emergency preparedness, and use this knowledge to promote appropriate changes in immunization program policy.

#### What is it?

This toolkit is a compilation of three different IPM survey tools dated from 2009, 2010, and 2012. In addition to the surveys themselves, the toolkit includes a cover letter, FAQ sheet and an incentive for each corresponding survey. In unison, these components are designed to do the following:

1. Determine aspects of state immunization program policies that helped or hindered response to previous vaccine shortages
2. Assess the roles of state immunization programs in state preparedness planning efforts
3. Identify capabilities of state based immunization information systems
4. Provide recommendations to enhance preparedness for future public health emergencies

#### Who should use this tool?

This toolkit is designed to be used by Immunization program managers and Emergency Preparedness directors for use in state and local health.



#### What are the expected benefits?

By assessing current capabilities in immunization program policy and preparedness allocation of vaccine resources can be enhanced and occupational risk for those participating in immunization programs reduced. The following model describes the process of how these changes would occur:



#### Contact information

Please email:

Katy Seib [kseib@emory.edu](mailto:kseib@emory.edu)

# HOW TO ASSESS HEALTH DEPARTMENTS' PREPAREDNESS CAPABILITIES

## Public Health Emergency Capabilities Assessment (PHEP CAT) Toolkit

For more information, please visit:

[https://unc.az1.qualtrics.com/jfe5/form/SV\\_cjicFl6AqcifYYB](https://unc.az1.qualtrics.com/jfe5/form/SV_cjicFl6AqcifYYB)

Figure I: Screenshot of PHEP CAT Survey

**Capability 1: Community Preparedness**

Community preparedness is the ability of communities to prepare for, withstand, and recover — in both the short and long terms — from public health incidents. By engaging and coordinating with emergency management, healthcare organizations (private and community-based), mental/behavioral health providers, community and faith-based partners, state, local, and territorial, public health's role in community preparedness is to do the following:

Please answer the following questions to the best of your (and your agency's) knowledge. All responses remain confidential.

Does your community preparedness planning include any of the following?

	Yes	No	Not Applicable
Completion of a hazard/vulnerability analysis and jurisdictional risk assessments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Establishment of Memoranda of Understanding (MOUs) or other letters of agreement to build partnerships with community organizations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Access to services and/or expertise in GIS to assist in identification of size and geographic distribution of at-risk populations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Coordination of training and/or educational materials for organizations serving at-risk populations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

### What are the expected benefits?

By supporting the identification of practices, resources, and trainings relevant to specific needs, as well as the ability to be used repeatedly, PHEP CAT allows local health departments to assess different needs to enhance their public health preparedness and response practices.

Figure I is a screenshot of the PHEP CAT survey assessing capability 1 (community preparedness) via simple yes or no questions.

## About PHEP CAT Toolkit

### What is its purpose?

The PHEP CAT toolkit aims to allow local health departments with the means to quickly assess their needs and readily access vetted public health preparedness and response practices, trainings and other resources.

### What is it?

The Public Health Emergency Capabilities Assessment Tool (PHEP CAT) provides local health departments with means to quickly assess their preparedness capabilities and identify needed resources. Currently (as of July 2016), the PHEP CAT addresses 5 of the 15 CDC capabilities.

- Community Preparedness (Capability #1)
- Information Sharing (Capability #6)
- Medical Countermeasure Dispensing (Capability #8)
- Medical Materiel Management & Distribution (Capability #9)
- Public Health Surveillance & Epidemiological Investigation (Capability #13)

### Who should use it?

This tool is intended to be used by local health departments.

### Contact information

Please email:

**Christine A. Bevc** [bevc@email.unc.edu](mailto:bevc@email.unc.edu)



## HOW TO ASSESS AND ENHANCE WILLINGNESS TO RESPOND

### Johns Hopkins Public Health Infrastructure Training (JH-PHIT) Toolkit

For more information, please visit:

[trams.jhsph.edu/trams/index.cfm?event=login.loginStart](https://trams.jhsph.edu/trams/index.cfm?event=login.loginStart) (login required)

### About the JH-PHIT Toolkit

#### What is its purpose?

The Johns Hopkins Public Health Infrastructure Training (JH-PHIT) tool's aim is to enhance agency-wide response willingness of the local public health workforce toward a variety of representative scenarios across the all-hazards continuum.

#### What is this tool?

The JH-PHIT tool is a combination of survey methodology and practice based training to enhance the public health workforce's willingness to respond. Based off of the results of the Johns Hopkins Public Health Infrastructure Response Survey Tool (which gauges the response willingness, attitudes, and beliefs of local public health workers toward an array of emergency scenarios), the Public Health Infrastructure Training (JH-PHIT) curriculum is then tailored to address response willingness gaps as identified. The JH-PHIT course is a 7 hour, blended learning, train-the-trainer curriculum for local health departments designed for completion over a 6-month period. JH-PHIT is comprised of three parts:

1. The first part of JH-PHIT is an in-person, facilitator-led discussion session
2. The second part of JH-PHIT comprises a series of independent activities designed to build efficacy and address employees' perceptions of threat constructively
3. The third part is a table top discussion as well as a role playing exercise and a hotwash" discussion to reinforce the knowledge as well as answer any further questions

\*The JH-PHIT tool can also function as a standalone tool, without the need for the JH-PHIRST survey.

#### Who should use this toolkit?

The JH-PHIT training is intended for delivery to the entire workforce of any health department.

#### What are the expected benefits?

JH-PHIT is intended to benefit those with occupational risks. It does this by enhancing agency-wide response willingness of the local public health workforce across the all-hazards continuum. It should reduce said risks based on the following model:



**Radiation Safety and Protection**

- Exposure = Intensity x Time
- The "Big Three" — time, distance, shielding

Source: US NRC

**Stress Management Pyramid**

- How did your answers compare to the "Stress Management Pyramid"?

\*The images above are screenshots from PHIT part 2: Individual Learning Activities.

The image to the left shows the proper way to act during a radiation release event. The image to the right shows a model which teaches the best ways to manage stress and asks the students to compare it to their own stress management assessments.

## HOW TO EXERCISE FOR HAZARDOUS MATERIALS INCIDENTS

### Hazardous Material Exercise Toolkit

For more information, please visit:

[www.hsph.harvard.edu/preparedness/drills-exercises/hospital-exercise-resources](http://www.hsph.harvard.edu/preparedness/drills-exercises/hospital-exercise-resources)

For the more information on the Master Scenario Event List:

<https://cdn1.sph.harvard.edu/wpcontent/uploads/sites/1608/2014/06/HAZMAT-MSEL.pdf>

### About the Hazardous Material Exercise Toolkit

#### What is its purpose?

The Hazardous Material Exercise Toolkit is designed to help individual hospitals, communities, regions and/or states assess their plans and procedures to request and deploy CHEMPACK assets and to perform decontamination of victims.

#### What is it?

The exercise toolkit is a tabletop exercise/ evaluation tool that supports emergency response planners to test and assess the response to a simulated mass casualty incident caused by chemicals requiring the deployment of CHEMPACK assets. It does so based on the following five objectives:

1. Discuss relevant protocols and procedures involved in obtaining and deploying CHEMPACK assets
2. Examine key assumptions and actions that relate to hospital based decontamination during a HAZMAT incident
3. Assess the communication systems and networks used during a large scale hazardous materials event that support field and hospital situational awareness regarding the responders' capability to respond
4. Name best practices in the flow and care of contaminated and uncontaminated patients, visitors and medical personnel to the hospital during the event
5. Identify essential recovery issues related to the incident, including the supplies, staff and resources needed to demobilize and return to normal operations

#### Who should use it?

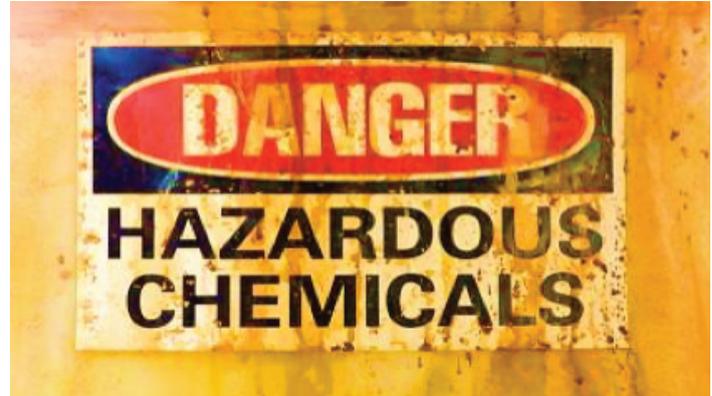
The exercise toolkit is intended to be used by public health officials, hospital leaders, EMS, emergency managers, individual communities, and coalitions. Ideally, groups will work together collaboratively to enhance the utility of the exercise.

#### Contact information

Please email:

**Paul Biddinger** [pbiddinger@partners.org](mailto:pbiddinger@partners.org)

**Leesa Lin** [llin@hsph.harvard.edu](mailto:llin@hsph.harvard.edu)



#### What are the expected benefits?

By assessing the performance of the HAZMAT/CHEMPACK plans for those involved, it is hoped that this tool will improve these plans and increase performance. It could do so based on the following model:



## HOW TO EXERCISE HOSPITAL EVACUATION

### Hospital Evacuation Exercise Toolkit

For more information, please visit:

<https://www.hsph.harvard.edu/preparedness/drills-exercises/hospital-exercise-resources/>

### About the Hospital Evacuation Toolkit

#### What is its purpose?

The Hospital Evacuation Toolkit is designed to help individual hospitals, communities, regions and/or states assess their plans and procedures to support the emergency evacuation of a hospital. This is done by qualitatively and quantitatively measuring performance.

#### What is it?

The exercise toolkit is a tabletop exercise/ evaluation tool that supports emergency response planning to test and assess the response to a simulated need for the evacuation of a hospital as well as the need for local, regional, and state support. It does so by providing guidance on how to:

1. Evaluate and discuss the trigger points and issues related to hospital leadership deciding when to evacuate the facility during full power/HVAC failure in accordance with current plans/policies
2. Discuss the options and issues with the triage of patients by clinical staff for evacuation in accordance with current plans/policies and best practice guidelines
3. Discuss and explore the options for the efficient integration of response partners into evacuation operations by all responding hospital staff in alignment with HICS/NIMS
4. Outline the methods and mechanisms used by hospital staff (and co-responders) to support patient needs during the evacuation process based on existing standards of care and with consideration for "crisis standards of care" concepts
5. Demonstrate and discuss the methods and mechanisms used by hospital staff to perform comprehensive patient tracking during and after the evacuation in accordance with existing policies/procedures

#### Who should use it?

The Hospital Evacuation exercise toolkit is intended for public health officials, EMS, emergency managers, and fire officials in hospitals, communities, coalitions, and hospital associations.



#### What are the expected benefits?

By assessing the performance of the evacuation plans for those involved, it is hoped that this tool will improve these plans and increase performance in the advent of a real hospital evacuation scenario. It could do so based on the following model:



#### Contact information

Please email:

**Paul Biddinger** [pbiddinger@partners.org](mailto:pbiddinger@partners.org)

**Leesa Lin** [llin@hsph.harvard.edu](mailto:llin@hsph.harvard.edu)

Figure I: Screenshot of Sample Scenario for Exercise

Moments ago, the entire building began to vibrate and shake for a period of nearly 20 seconds. Your initial thoughts were of an explosion of some kind, but as a more side-to-side rocking motion became evident you incredulously concluded that it was an earthquake. Around the facility, items have been knocked off shelves and at least a few cracks are visible in the drywall and/or cinder block interior walls. You can hear a mix of alarms sounding, including those of cars outside.

Within the first 25 minutes following the quake, your hospital emergency management team has provided the following preliminary information:

- Twitter feeds suggest that a 5.2 Richter scale temblor has just hit the immediate area.
- You are not currently aware of any major damage to any hospitals in the Region.
- Public safety officials are not immediately reporting large numbers of casualties or catastrophes.
- Your hospital is currently operating at its average daily census, except as below:
- All your hospital ICU beds are currently full
  - Your emergency department is currently full, with 1 patient requiring an ICU bed and 4 patients boarding in the ED awaiting admission.
- Grid power is currently offline and the hospital is currently operating on generator power. Generator power is mostly sufficient as planned across the campus; however a few isolated pockets have outages.
- Much of the campus appears to be without water. Most units report limited or no water pressure. Some leaking flooding has occurred in several areas including the central pharmacy, partly due to ruptured fire sprinkler lines. You have no estimate yet about when the water service may return.
- Numerous superficial cracks are evident around the building(s), and facilities staff are awaiting the emergency arrival of consulting expert engineers.
- Elevators appear to be working.
- The primary hospital Heating Ventilation and Air Conditioning (HVAC) system is currently offline.

Figure I shows a sample from page 4 of the master scenario event list (MSEL). The scenario is part of the table top exercise, from which participants are expected to respond to questions from the facilitator based on their current hospital evacuation plans.

Figure II: Screenshot of Sample Evaluation Metric

1. Demonstrate ability to receive and act on initial incident information			
Response Element	Checklist of Actions (check all boxes and fill in spaces as appropriate)	Specific Data for exercise (Additional information specific to the exercise is listed in this column)	Overall performance (1 = Unsatisfactory performance, 5 = Good performance, 10 = Excellent performance)
Initial assessment of significance and impact of the incident	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No	Discussed significance of information Made initial assessment of immediate and potential future impact on the entity you are observing	Prompt: Ask how they determined how significant they believed the information was 1 2 3 4 5 6 7 8 9 10
Integration of ICS of hospital with ICS of first responders and other response partners	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No	Discussed/identified clear roles and responsibilities within hospital and first responders' ICS Described/identified systems in place to coordinate the responses between the hospital and first responders and other response partners Discussed/identified a system to implement and coordinate effective and reliable interoperable communications between EMS, IC, public health and healthcare facilities Discussed/identified transition to unified command (or how this would occur)	Who is the IC at your hospital during an evacuation? _____ Who will draft the incident action plan? _____ List any best practice observed: _____ _____ _____

## HOW TO EXERCISE HOSPITAL SURGE

### Hospital Surge Exercise Toolkit

For more information, please visit:

<https://www.hsph.harvard.edu/preparedness/drills-exercises/hospital-exercise-resources/>

For more information on Master Scenario Events List please visit:

<https://cdn1.sph.harvard.edu/wp-content/uploads/sites/1608/2014/06/Surge-TTX-MSEL.pdf>



#### What are the expected benefits?

By assessing the adequacy of the hospital's surge plans, it is hoped that this tool will improve planning and response. It could do so based on the following model:



### About the Hospital Surge Exercise Toolkit

#### What is its purpose?

The Hospital Surge Exercise Toolkit is designed to help participants assess their plans and procedures to support the need to accommodate a major surge in medical care need in the community.

#### What is it?

The exercise toolkit is a tabletop exercise/ evaluation tool that tests and assesses the response to a simulated major surge in outpatient and inpatient hospital care capability. It is focused on the following five objectives:

1. Discuss the trigger points and relevant plans/policies/ procedures related to the sequential transitions from normal operations to escalating hospital surge activities and evaluate the mechanisms used for internal and external information exchange for obtaining and maintaining situational awareness at the hospital, local, regional and state levels
2. Demonstrate and discuss the relevant roles and responsibilities of internal staff and associated mechanisms for efficient integration of community partners during escalating hospital surge activities
3. Evaluate the strategies available for hospital staff to optimize the caching and use of potentially scarce critical resources in accordance to existing plans/policies
4. Explore the options for outpatient surge mitigation and discuss the efficient integration of nearby health systems during a surge response in accordance to existing plans/policies
5. Outline and discuss the strategies and mechanisms for efficiently requesting, receiving and utilizing scarce and/or critical resources in the context of surge mitigation activities. Discuss and identify the anticipated/envisioned roles of both DPH and emergency management agency in support of hospital surge coordination and operations continuity at both the regional and state levels

#### Who should use it?

The exercise is intended for public health officials, hospital leaders, fire officials, and EMS. The tool can be implemented at hospital coalitions, hospital.

#### Contact information

Please email:

**Paul Biddinger** [pbiddinger@partners.org](mailto:pbiddinger@partners.org)

Figure I: Screenshot of Sample Scenario for Exercise

Date and Time: Friday, March 16<sup>th</sup>, 2012 at 5:45pm.

Weather: It is overcast, 45 degrees, and there is a 40% chance of precipitation. Winds are out of the West at 5mph. A recent thaw has melted the last snowfall.

Location: A high school located approximately 25 minutes from your facility.

---

A high school in a nearby town is hosting a basketball game between their team and a neighboring rival. Attendance at the game is estimated at 650 people. At 5:45pm, during the half-time break, fans seated in the visiting team bleachers begin coughing, experiencing difficulty breathing, and vomiting. Other fans begin drooling, experiencing headaches, blurred vision, tearing, and feeling tightness in their chest.

Multiple fans call 9-1-1 from their cell phones and State Police is inundated with calls for help at the high school. At 5:46pm, a student inside the gymnasium pulls the fire alarm. There are two police officers at the event on a detail for security and traffic control who are the first responders on scene. Assisted by school teachers and staff, the officers attempt to evacuate the building and keep fans from leaving the scene. The senior police officer directs local dispatch to alert responding units that there is a suspected hazardous material incident at the school and the cause is unknown. The officer states that a large number of people at the high school are having difficulty breathing and some have reported smelling a sulfurous odor in the gymnasium.

Additional Police, Fire, and EMS units begin to arrive on scene at the high school at 5:50pm. Teachers at the school report to responders that they think everyone is out of the building. The ranking Fire Officer on scene confirms with the town dispatcher that there is a potential hazardous materials incident at the high school with a large number of people sick or injured and assumes incident command.

Figure II: Screenshot of Sample Evaluation Metric

2. Demonstrate ability to assess and identify strategies for information flow, coordinating messages and communication			
Response Element	Checklist of Actions (check all boxes and fill in spaces as appropriate)	Specific Data for exercise (Additional information specific to the exercise is listed in this column)	Overall performance (1 = Unsatisfactory performance, 5 = Good performance, 10 = Excellent performance)
Identification or assessment of flow of information to leadership	<input type="checkbox"/> Yes <input type="checkbox"/> No Discussed <u>how and from whom</u> information would be obtained <input type="checkbox"/> Yes <input type="checkbox"/> No Discussed <u>what</u> information should be relayed to EOC/UC <input type="checkbox"/> Yes <input type="checkbox"/> No Discussed <u>how</u> information would be relayed to EOC/UC	Specify from whom and how information would be relayed: _____ _____ What information should be relayed to DPH? _____ _____	1 2 3 4 5 6 7 8 9 10
Coordination and maintenance of information sharing across responding agencies	<input type="checkbox"/> Yes <input type="checkbox"/> No Identified relevant agencies, entities and officials to be included in the information sharing framework <input type="checkbox"/> Yes <input type="checkbox"/> No Identified an effective and technologically sufficient process for sharing information <input type="checkbox"/> Yes <input type="checkbox"/> No Discussed/identified how to ensure information is verified, accurate and up-to-date <input type="checkbox"/> Yes <input type="checkbox"/> No Discussed/identified how to maintained a common operating picture for real time information sharing with all participating agencies at all levels to ensure all entities are working from the same information <input type="checkbox"/> Yes <input type="checkbox"/> No Discussed/identified how to establish a schedule or procedure for obtaining updates from participating agencies <input type="checkbox"/> Yes <input type="checkbox"/> No Identified a template to use to obtain relevant information from all entities	List who they included in their information sharing: _____ _____ _____ What and how is information being shared? _____ _____ _____ If a template was used, please obtain a copy of it.	1 2 3 4 5 6 7 8 9 10

Figure II shows a sample from page 6 of the evaluation matrix for the scenario in Figure I. The facilitator is responsible for filling out this form in order to conduct an evaluation of the participants' current hospital surge plans.

## HOW TO EVALUATE PERFORMANCE DURING EXERCISES

### Emergency Preparedness Exercise Evaluation Toolkit

For more information on evaluation, please visit:

[phasevtechnologies.com/studies/lamps/downloads/getDownload.php?fid=4](http://phasevtechnologies.com/studies/lamps/downloads/getDownload.php?fid=4)

For more information on the toolkit, please visit:

<https://phasevtechnologies.com/studies/lamps/index.php>

### About the Emergency Preparedness Exercise Evaluation Toolkit

#### What is its purpose?

The Emergency Preparedness Exercise Evaluation Toolkit is designed to help emergency response planners evaluate the given public health system's performance during exercises.

#### What is it?

This toolkit is an evaluation instrument that collects performance data when observing public health and health emergency response activities in exercises. The toolkit is designed to aid in the documentation of performance measures based on an AHS checklist of actions. Doing so allows users to objectively document the performance of specific actions while simultaneously subjectively rating the quality of said performance.

The toolkit includes training materials, a database of exercise performance measures, as well as an online analytical tool that generates performance reports during exercise. It is organized into the following eight sections:

1. Evaluation Methodology
2. Exercise Basics
3. Facilitator Guidelines
4. Evaluator Guidelines
5. Exercise Evaluation Tools
6. Emergency Preparedness Exercise Evaluation Database
7. After Action Reports
8. References

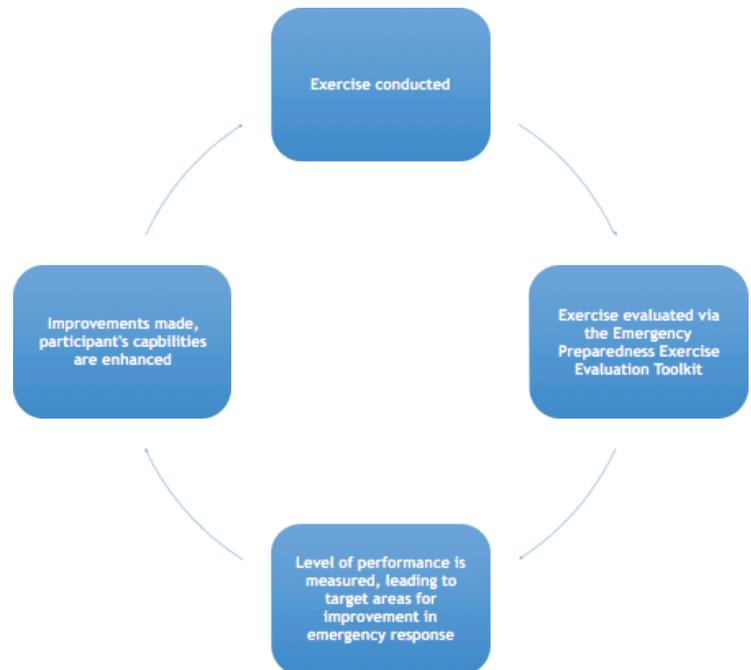
Once the exercise is completed, and the data is entered, the toolkit generates a graphical output of the level of performance.

#### Who should use it?

The toolkit is designed to be used by public health officials, hospital leaders, EMS, emergency managers and fire officials at health departments, community settings, and emergency management meetings.

#### What are the expected benefits?

Evaluating the performance of public health agencies during exercises gives responders the opportunity to assess their current capabilities and identify areas for improvement. By improving on the areas identified in the Emergency Preparedness Exercise Evaluation Toolkit, public health systems can increase their capabilities in planning for and responding to a vast array of situations. The process is highlighted in the following figure.



#### Contact information

Please email:

Leesa Lin [llin@hsph.harvard.edu](mailto:llin@hsph.harvard.edu)

Figure I and IA: Screenshots of Options Available for Creating a Custom Evaluation Form

### EMERGENCY PREPAREDNESS EXERCISE EVALUATION TOOL

**Public Health and Healthcare Capabilities**

Community Preparedness

Community Recovery

Emergency Operations Coordination

Emergency Public Information and Warning

Healthcare System Preparedness

Healthcare System Recovery

Information Sharing

Medical Countermeasure Dispensing

Medical Material Management and Distribution

Medical Surge

Non-Pharmaceutical Interventions

Public Health Laboratory Testing

Public Health Surveillance and Epidemiological Investigation

Responder Safety and Health

Volunteer Management

**Incident Response Stage**

Incident Recognition

Notification

Activation/Mobilization

Incident Response

Recovery

Submit

Figure I is a screenshot taken from the Emergency Preparedness Exercise Evaluation Toolkit’s customizable evaluation form feature found under “Create your own form (without logging in)”. Here, the user can input the intended target areas (based on capabilities and response stages) of their exercise and the toolkit will generate an evaluation form tailored the user’s input pictured in Figure IA.

Exercise Date:	Exercise Name:	Evaluator Name:	Date:
General Task	Specific Action (Yes/No)	Detailed Observations	Overall Performance for General Task
	<small>(check all boxes and fill in spaces as appropriate)</small>		<small>1= Un satisfactory 5= Good 10=Exc</small>
Activation/Mobilization of Continuity of Operations Plans (COOP)	<input type="checkbox"/> Yes <input type="checkbox"/> No	Followed appropriate procedure/protocol to activate COOP	1 2 3 4 5 6 7 8 9 10
	<input type="checkbox"/> Yes <input type="checkbox"/> No	Identified clear trigger(s) for Activation/Mobilization	-
Activation/Mobilization of JIC	<input type="checkbox"/> Yes <input type="checkbox"/> No	Identified/Discussed clear trigger(s) for Activation/Mobilization of JIC	1 2 3 4 5 6 7 8 9 10
	<input type="checkbox"/> Yes <input type="checkbox"/> No	Identified/Discussed how partner agencies are notified of Activation/Mobilization of JIC	-
	<input type="checkbox"/> Yes <input type="checkbox"/> No	Identified/Discussed how PIO and other appropriate staff are assigned and briefed	-

Figure IA is a representative screenshot of the custom evaluation form that is created based on user input. These forms are given to evaluators, and the information entered from these sheets generates a graphical report on the level of performance.



## HOW TO EXERCISE COMMUNICATION SYSTEMS A Pandemic Influenza Tabletop Exercise Toolkit

For more information, please visit:

<http://www.nwcp.org/training/opportunities/drills-exercises/communication-tabletop>

### About the Pandemic Influenza Tabletop Exercise Toolkit

#### What is its purpose?

The Pandemic Influenza Tabletop Exercise is designed to help public health organizations create evidence-based practice, protocols, and policy around emergency communications.

#### What is it?

The tabletop exercise is a tool including materials to design a tabletop exercise which enables participants to identify the strengths and gaps in current policies, procedures, and resources related to communication systems during a pandemic influenza outbreak. It does so by simulating a major, multi-agency incident in a large county and teaches research-validated communication methods and strategies by focusing on the following learning objectives:

- Identifying the agency's current strengths and gaps in emergency communication and coordination
- Reviewing and listing the roles, plans, and procedures related to emergency communication
- Identifying issues related to building effective communication channels between public health, health care, and the public, including vulnerable populations
- Incorporating Northwest Preparedness and Emergency Response Research Center findings into the agency's communication practice, protocols, and policy

#### Who should use it?

While the tabletop exercise is designed to help public health organizations, anyone with an interest in public health emergency communications at any level could benefit from this exercise (e.g., potential responders to a public health emergency). Additionally, the background information can be modified to better fit the realities and needs of local communities.



#### What are the expected benefits?

By assessing the performance of the communication systems for those involved, it is hoped that this tool will improve said plans and increase performance in the advent of a real pandemic. It could do so based on the following model:



#### Contact information

Please email:

Dr. Baseman [jbaseman@u.washington.edu](mailto:jbaseman@u.washington.edu) or [nwcp@uw.edu](mailto:nwcp@uw.edu)