



**Evaluation of the Project Public  
Health Ready Regional Criteria**

**Volume II: Case Studies of  
Three Regions**

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## **Preface**

The Summary of Cross-case and Comparative Findings Report (2000–2005) was developed by the Association for the Study and Development of Community (ASDC) for the National Association of City and County Health Officials (NACCHO) for the Evaluation of the Project Public Health Ready (PPHR) Regional Criteria. Volume II contains case studies of three PPHR regional sites.

We would like to recognize Librada Estrada (Program Manager for Project Public Health Ready) for her leadership and support. We would like to thank Michelle Chuk (Senior Advisor for Public Health Preparedness at NACCHO) and Audrey Shiu, Kelly Haines, and Nitasha Chaudhary, Project Public Health Ready Program Associates, for their assistance. We would like to acknowledge Advisory Committee Members for their guidance and continued insight during the evaluation: Jane Richter (Center of Public Health Preparedness, University of South Carolina), Lisa Macon Harrison (North Carolina Center for Public Health Preparedness), Jeff Neistadt (Project Director, National Association of Local Boards of Health), Larry Jones (Independence Health Department), and Rebecca Head (Monroe County Health Department). Finally, we would like to thank Christina Welter (Northern Illinois Public Health Consortium) and Patrick Lenihan (Clinical Associate Professor, University of Illinois School of Public Health) for their feedback. ASDC staff contributing to this volume include: Yvette Lamb (Project Director); Mary Hyde (Deputy Project Director); and Joie Acosta (Managing Associate). Sylvia Mahon (Office Coordinator) assisted with production.

ASDC would like to thank the regional public health emergency preparedness coordinators and public health staff for their assistance with their respective case studies. These case studies would not be possible without the collaboration of many people from among the PPHR regions, including each region's partners who were willing to meet with ASDC during site visits.

Barren River District Health Department  
Bowling Green, Kentucky  
PPHR Recognized Region

Cambridge Public Health Department  
Massachusetts Emergency Preparedness  
Region 4B  
Cambridge, Massachusetts  
PPHR Recognized Region

Northern Illinois Public Health  
Consortium Inc.  
Chicago, Illinois  
PPHR Recognized Region

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## Introduction

Project Public Health Ready (PPHR), a competency-based training and recognition program managed by the National Association of County and City Health Officials (NACCHO), provides technical assistance and support to local health departments (LHDs) to increase emergency preparedness and response. For LHDs to build capacity at the regional level, PPHR criteria were developed and organized into three categories: (1) emergency preparedness planning; (2) workforce competency development; and (3) exercises and real events. By providing documentation of their capacity (i.e., measures for each category) regions can be recognized as being better prepared to respond to an emergency event.

Regions are expected to develop preparedness and response on a regional level by building capacity of their staff, refining or developing a regional plan, and participating in exercises. To understand their role and responsibility in emergency response at a regional level, LHDs must partner with other agencies in their region involved in emergency response including hospitals and other acute and long-term health care facilities (e.g., nursing homes), fire departments, police departments, emergency management systems, and community-based organizations (e.g., Red Cross).

The Association for the Study and Development of Community (ASDC) conducted an evaluation of the regional PPHR criteria to determine how effective they were in improving regional preparedness and response. Specifically, the evaluation examines in-depth how three regions applying for PPHR recognition have used the criteria to develop regional readiness. The three PPHR regional applicants were selected because each has a unique approach to improving their regional preparedness and response (i.e., standardization of preparedness functions, coordination of preparedness functions and resources, centralization of preparedness functions and resources). A case study approach was selected because of the following reasons:

- The approach provided a rich description and deep analysis of how the criteria were implemented, how they contributed to increased preparedness and responsiveness, and the extent to which the criteria impacted regional preparedness – information needed for making program improvements and for replicating successful efforts;
- The approach allows for inclusion of multiple sources of data (e.g., interviews, document review, direct observation of emergency planning meetings); and
- The approach can maximize learning through cross-site comparisons (e.g., Did the same criteria lead to increased preparedness across sites or were different criteria important depending on a region's unique characteristics?).

These case study reports summarize the use of PPHR regional criteria by each region to approach their regional preparedness. Each region's case study represents a chapter in this volume of the Evaluation of the Project Public Health Ready Regional Criteria. The analysis is based on data collected from the Evaluation Team's site visit and

information obtained from site documents (e.g., communication plans, after-action reports, and other materials).

Each report discusses the contextual factors (e.g., political leadership, and infrastructure) that supported or hindered the implementation of the PPHR regional criteria in the region and the impact of the PPHR regional criteria on regional preparedness. Included in the conclusion of each case study are:

- Components of regional preparedness in the region;
- Lessons learned in regional response preparations; and
- Recommendations for improving the criteria.

Core questions used to guide data collection and analysis at the case level include:

- How were the PPHR regional criteria used for planning and collaboration?
- How did the PPHR criteria impact the region's all-hazards planning, workforce competency, and overall preparedness?
- How were the PPHR criteria used to measure regional preparedness?

The evaluation also includes an analysis that compares these three regions with two regions engaging in preparedness planning without using the PPHR criteria; this can be found in Volume I: Summary of Cross-case and Comparative Findings.

# I

## Barren River District Health Department

### 1. Overview of the Barren River Region

Effective January 1, 1982 all health departments in KY were placed into districts based on existing Area Development Districts.<sup>1</sup> This state mandate gave district health departments oversight of LHDs in order to centralize administration. The centralization of administration allowed LHDs to shift some of their resources from administration to services. The region served by the Barren River District Health Department (BRDHD) consists of eight counties in south central Kentucky (Barren, Butler, Edmonson, Hart, Logan, Metcalfe, Simpson, and Warren) ranging from 10,197 to 98,960 people. The BRDHD was the lead agency applying for PPHR recognition.

Figure 1<sup>2</sup> depicts the regional infrastructure that exists to support preparedness and response of LHDs in the Barren River Region. The elements of this infrastructure that facilitated the preparation of the BRDHD's PPHR application included:

- *A state mandated district public health structure* which allowed the district to standardize individual and regional preparedness functions through a common template for local and regional emergency operations plans, which created accountability<sup>3</sup> of LHDs to the BRDHD to ensure the standardized elements were implemented to meet PPHR criteria, and dedicated district staff needed to coordinate the PPHR application process;
- *Healthcare Emergency Area IV Response Team (HEART)*, a group of key community partners convened in 2003 to develop a regional healthcare response plan<sup>4</sup> for events like Smallpox, provided a forum to raise questions and improve the understanding of the shared roles and responsibilities between community

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<sup>1</sup> On March 30, 1967 Governor Breathitt signed Executive Order 67-233 to divide Kentucky into 15 official districts for regional planning and development purposes. These districts are referred to as Area Development Districts.

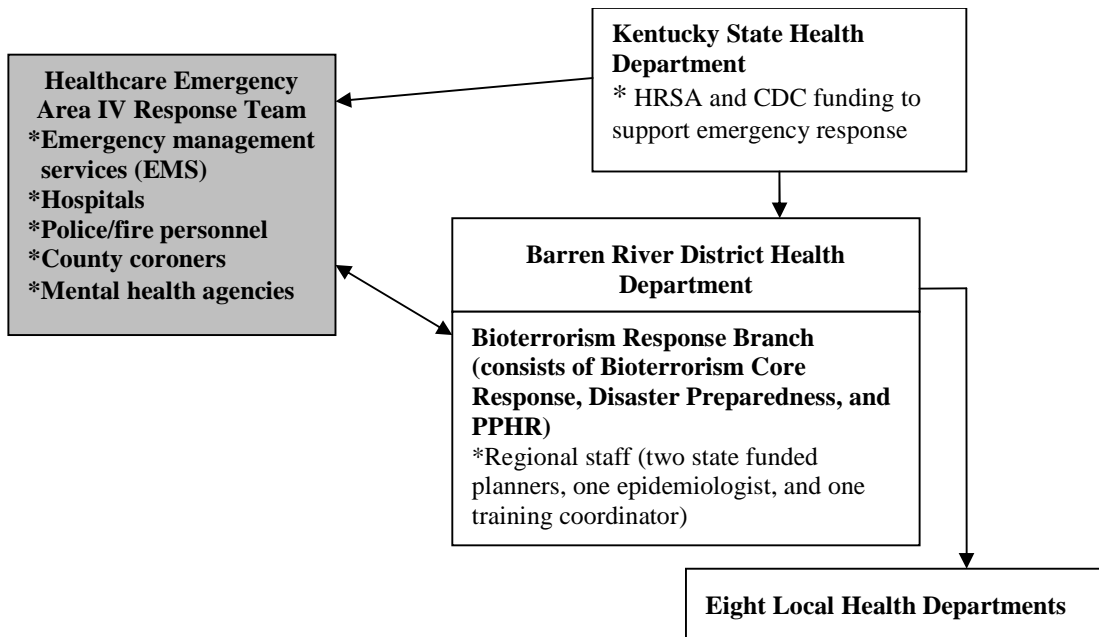
<sup>2</sup> The components of the infrastructure that are shaded gray represent groups comprised of multiple agencies from different disciplines involved in emergency response (e.g., hospitals, emergency management, public health).

<sup>3</sup> The state mandated district structure creates accountability because local health departments rely on the BRDHD to allocate them funds from their district's Health Resources and Services Administration (HRSA) and Centers for Disease Control and Prevention (CDC) funds. HRSA and CDC funds were allocated to state's to distribute to local health departments to increase their capacity for terrorism preparedness and emergency response. Kentucky distributed their state funding to district health departments to allocate to local health departments.

<sup>4</sup> Healthcare response refers to the collaborative response of agencies in the community that would be responsible for providing care for the public during a disease outbreak. Kentucky is divided into 14 planning regions to collaboratively develop healthcare response plans among relevant agencies.

- partners and the unique role and responsibilities of LHDs in an emergency event; and
- *The dedication of a branch of the district health department to bioterrorism response legitimized and elevated the importance of emergency response functions (i.e., bioterrorism response) in the eyes of public health staff.*

**Figure 1: Regional Infrastructure Supporting Preparedness and Response of Local Health Departments in the Barren River Region**



## 2. Methodology

A site visit was conducted to collect data for the case study. Two members of the Association for the Study and Development evaluation team visited the BRDHD on August 10, 2006, and interviewed 11 people from the Barren River Region. One person was also interviewed via telephone after the site visit as she was not available to meet with the team during the visit. During the site visit the evaluation team interviewed individuals involved in the BRDHD's PPHR regional planning process, as well as community leaders and providers knowledgeable about the public health community and the impact of regional preparedness on the larger community. Interviewees were selected based on feedback from the BRDHD representative coordinating their PPHR application. The evaluation team also attended a HEART planning meeting.

*The Barren River Region was selected for a case study because they standardized individual LHDs' preparedness functions across jurisdictions to improve regional preparedness and response. Local and regional standardized emergency operations plans allow local capacities to "be combined, without special effort, during an*

emergency incident and function to deliver a unified, cohesive regional response” (NACCHO, 2005). This case study report summarizes the Barren River Region’s findings.

### **3. Contextual Factors that Supported or Hindered the Implementation of the PPHR Regional Criteria**

Important political, economic, and social conditions in the region facilitated and hindered the implementation of the criteria. These conditions are discussed in the following sections.

#### ***3.1 Contextual Factors that Supported the Implementation of the PPHR Regional Criteria***

Significant contextual factors related to the infrastructure depicted in Figure 1 supported the implementation of the PPHR regional criteria:

- *Members of HEART had been working together for several years and had developed trusting relationships; and*
- *Leadership at the district health department valued the PPHR process (i.e., district public health director).*

The *HEART* was a key component to the Barren River Region’s preparedness because it provided a leadership body to make decisions about emergency management funding.<sup>5</sup> HEART also allowed the region to leverage additional resources through the formal and informal partnerships developed between HEART partners over time and capitalized on relationships HEART members have with others in the community to help inform them about available resources and strategies to address gaps in their response capacity. For example, to address a lack of refrigerated holding sites during a large-scale event with mass casualties, a HEART member was able to offer knowledge of and serve as a contact to several local businesses with freezers that could be used as holding sites

*The leadership at the district health department (i.e., district public health director) facilitated the implementation of PPHR because the district public health director values the role of public health in emergency response and sees PPHR as an opportunity for recognizing the quality of and level of preparedness. This is seen as an important tool to increase state and community confidence that the local and district health departments are offering quality services to the public, to improve respect for public health within the emergency response community, to provide justification for future funding, and to create a tangible quality improvement process for public health.*

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<sup>5</sup> Decisions were made by HEART via consensus with no formal structure because partners trusted each other and because partners were committed to doing what was best for the community (i.e., no personal agendas came first); this active decision making helped to keep partners engaged in the monthly meetings.

### **3.2 Contextual Factors that Hindered the Implementation of the PPHR Regional Criteria**

The contextual factors that hindered the implementation of the PPHR regional criteria included:

- *A lack of connection between the regional and state emergency response bodies.* The State Department of Homeland Security that was responsible for providing the district with after-action reports from their training exercises was slow or did not provide the feedback on lessons learned from training exercises.
- *Limited resources* made it difficult to implement the PPHR criteria because it is a time consuming and costly to implement. The BRDHD has developed a four-year staff training plan and a two-year implementation plan to address PPHR requirements over time that they were not able to fully complete in the time allotted for PPHR because of the amount of time it took them to complete the process was longer than allotted for the PPHR application.<sup>6</sup>

## **4. Impact of the PPHR Regional Criteria on Regional Preparedness**

Participants felt the PPHR criteria were relevant for their region. Criteria were comprehensive, flexible, and all criteria were needed to ensure the region was prepared. The PPHR regional criteria improved the Barren River Region's preparedness in the following ways:

***Provided guidelines and a timeline to help identify gaps in planning and training.*** As a result of their efforts to meet *Goal 1: All-hazards Planning* the BRDHD identified the need for environmental surety to be part of their regional all-hazards plan and will integrate it over the next year. The criteria for *Goal 2: Workforce Competency* provided guidelines to assess competency and training needs that were not in place prior to PPHR. The training needs assessment added a quality control component for the public health workforce that was lacking before PPHR. The criteria for *Goal 3: Exercises* helped identify gaps in training and planning. Specifically, the exercises conducted by BRDHD emphasized the need for training on operating a Joint Information Center (JIC), a "co-located group of representatives from agencies and organizations involved in an event that are designated to handle public information needs" (United States National Response Team, 2000). To meet their communications plan requirements, the BRDHD is working on improving their JIC capability.

***Formalized their current procedures.*** As a result of their efforts to meet the *Goal 1* criteria, the region developed written epidemiology and communications plans based on existing procedures. Formalizing their existing strategies and capacities will provide guidance for new employees taking over key response positions at the regional level,

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<sup>6</sup> For PPHR recognition it is often sufficient to show a plan to address gaps that have been identified through the process. Regions often identify priority areas that they can complete during the application time period and create plans to address any remaining gaps.

which is especially important because 31% of staff is expected to retire in the next five years.

***Developed tools for everyday use.*** As a part of their communications plan (*Goal 1*), BRDHD developed worksheets and task assignment/checklists to guide communication functions (e.g., press conference direction) and a crisis communication assignment log to track the people assigned to complete the checklists. These sheets, while useful to guide people in an emergency event also outlined the communication plan for public health in times of non-emergency.

***Increased the BRDHD's credibility with the state.*** Although relationships between the BRDHD and the Kentucky Department of Public Health have not substantially changed, the state's role in emergency response has been further clarified and participants felt that the BRDHD is seen with increasing credibility by the state because of their participation in PPHR. Being seen as a credible agency in its emergency preparedness efforts by the state is important because it improves community confidence that the BRDHD is offering quality services to the public and may help to provide justification for future or continued investment of resources (e.g., funds, staff) from the state.

***Helped the BRDHD meet federal National Incident Management System requirements.*** *Goal 1* requires regions to comply with the NIMS, allowing the BRDHD to meet both PPHR and federal requirements.

***Helped the district health department to assess the emergency response plans of their community partners vis a vis their currency and usefulness.*** For example, when developing their mass clinic plan the BRDHD had to create Memoranda of Understanding with community clinics and consequently collected and reviewed emergency response plans for numerous community facilities.

***Further developed relationships.*** As a result of the work the BRDHD conducted to meet the three goals of the PPHR criteria, relationships among agencies involved in emergency response in the Barren River Region (i.e., HEART) have been strengthened. As a result, *key agencies involved in emergency response are more aware of the roles and responsibilities of their partners, especially public health.* For example, the local hospitals are now more engaged with the BRDHD because of a shared interest and respect developed through their pursuit of improved emergency management (i.e., both PPHR and the emergency management component of the Joint Commission have similar goals). The strengthening of this relationship has increased their commitment to HEART and further clarified roles and responsibilities for all agencies involved in emergency response in the Barren River Region.

In addition, these strengthened relationships and improved communication between agencies involved in emergency response. As a result of improved communication agencies were able to *identify available and missing resources region-wide and contacts needed to leverage additional resources.* For example, HEART

identified the need for satellite radios and, through a HEART member, was able to get the state to agree to purchase them. Their work also encouraged the state to fund satellite radios for all Area Development District's in Kentucky.

Two PPHR measures required the BRDHD to develop or strengthen relationships with other agencies involved in emergency response.

- *Communication Plan (Measure 1-M)*: One of the subsections of this measure (m2) requests that regions show documentation to support the development of a public information system including the use of a JIC. During their 'Wings of Fall' exercise, the region realized that they had not adequately developed relationships with other agencies involved in emergency response needed to mobilize their JIC. The BRDHD needs to work closely with other agencies involved in emergency response in the Barren River Region to complete the documentation needed for this measure.
- *Laboratory Data and Sample Testing (Measure 1-O)*: This measure details documentation needed to manage laboratory data and sample testing (i.e., how the lab samples will be tested, packaged and shipped, transported, and who will be responsible for each of these steps). Since the Kentucky Department of Public Health is responsible for running lab tests the BRDHD had to work closely with the state to complete the documentation needed for this measure.

***Improved the response capacity of local and district public health and other agencies involved in emergency response.*** Because the State Department of Homeland Security did not complete an after action report for one of their two regional exercises, the Barren River District has not yet demonstrated improvement in exercising as a result of the PPHR application process. However, participants indicated that when asked to provide services for 200 evacuees from Katrina, the HEART was able to access the resources needed to provide shelter and support to evacuees from agencies involved in emergency response (e.g., United Way, American Red Cross) with efficiency and ease. Their regional response was ready in time for the estimated arrival time of the evacuees. Participants felt the improvements to regional capacity that have occurred as a result of PPHR helped to increase the ease and efficiency of this collaborative response.

## **5. Recommendations and Conclusion**

The BRDHD has submitted their documentation and have been recognized as meeting the requirements for Project Public Health Ready. As a result of the PPHR regional application process, LHDs have access to more resources to aid in a response (e.g., as described previously the BRDHD now has access to satellite radios). The Barren River District will continue to exercise and reflect on real events and the staff competency and training assessment will be institutionalized district-wide.

Through their participation in the PPHR application process, the BRDHD gained insight about engaging partners to improve the ability of LHDs to respond in a comprehensive manner. Using public health as a convener for the emergency response

community can help reduce turf battles between agencies involved in emergency response, such as competition between hospitals over niche markets in healthcare (e.g., heart transplant). Additionally, hospitals must exercise their emergency response two times a year, so regional collaborations may be able to engage hospitals by appealing to their need to meet Joint Commission requirements.

### **5.1 Components of Regional Preparedness in the Barren River Region**

Although there is currently limited guidance from the state about the meaning of regional preparedness in Kentucky, participants from the Barren River Region discussed several important components for their district to achieve preparedness. Table 1 details the components of regional preparedness in the Barren River Region, how they are measured by the PPHR criteria (if applicable), and suggestions to improve the PPHR criteria to more appropriately capture regional preparedness in the Barren River Region.

### **5.2 Recommendations**

To further refine and improve the criteria's ability to be implemented and to better capture the key elements of regional preparedness outlined in the PPHR criteria and by the Barren River Region, participants suggested that NACCHO consider revising the regional criteria in the following ways:

***Emphasize the importance of communications as a foundation or first step to completing the rest of the PPHR criteria.*** Participants indicated that communications is a key component to creating the relationships needed to implement the PPHR criteria. By prioritizing or emphasizing communications (e.g., conference call for jurisdictions to talk about messaging) it will help create the foundation of relationships needed for regions to continue pursuing additional PPHR goals.

***Integrate the Goal 3 criteria for exercising/real events, plan of correction, and future exercise plan*** (measures 7, 8, and 9). Because of the overlap of information requested in these three measures, participants suggested that it would be more efficient for applicants if NACCHO integrated these criteria.

***Reduce the level of detail needed to report future training and exercises*** (i.e., difficult to describe exercises that are not planned yet). Participants indicated that state support, funding, and time constraints will impact future training and exercises, making it difficult for them to describe the time, date, and details of specific training and exercises that they plan to participate in the future.

**Table 1: Components of Regional Preparedness in the Barren River Region**

<b>Components of Regional Preparedness</b>	<b>Representation of the Components of Regional Preparedness in the PPHR Criteria</b>	<b>Suggestions to Improve the Representation of the Components of Regional Preparedness in the PPHR Criteria</b>
A model integrated with the existing emergency management system (e.g., common plan and language)	Goal 1 measures for NIMS Compliance (1-I) and development of a communication plan (1-M).	The Barren River Region interpreted these criteria to suggest that they need to create NIMS within public health. Directions detailing how to integrate public health into existing NIMS in the region, as one way of meeting these criteria, may be helpful for future PPHR regions.
A process to improve performance based on lessons learned during exercises and real events	Goal 3 measures for exercises/real events (7), developing plans of correction (8), and future exercise plans (9).	Key components for a performance improvement process are included in the criteria. Suggestions for integrating Goal 3 with Goal 2 measures of training are provided in the recommendations below.
Memorandum's of agreement to pool available resources	Goal 1 measure describing mutual aid (1-E).	None.
Strong and developed relationships between agencies involved in emergency response (e.g., participate in cross-training and collaboration)	Goal 1 measures for the development of a communication plan (1-M) and procedures for laboratory data and sample testing (1-O).	The criteria measure presence of relationships not strength or quality of relationships. Indicators of quality relationships may be embedded in applications (e.g., sharing of staff and resources, cross-training, co-developed policies), but developing explicit criteria for quality of relationships may be a more effective way to measure this component.
Resources to support the infrastructure needed to participate in an integrated system	None.	No PPHR criteria assess the infrastructure or resources available in the region. NACCHO may consider developing an assessment tool for regions to capture their current resources.
Authority to protect the public in a time of emergency (e.g., official advisors to local elected officials)	Goal 1 measure detailing the signatures and acknowledgements needed from authority (1-D).	None.

***Integrate the training and exercise goals.*** Participants indicated that gaps in training are identified through both the training assessment and the exercises. NACCHO may want to consider developing a more transparent mechanism to link the training needs identified in Goal 2 with the training needs identified in Goal 3 (i.e., plan of correction) to reduce duplication in applications.

***Link the PPHR criteria with criteria, tools, and activities that LHDs do everyday*** to improve the applicability and utility to public health department staff. For example, the BRDHD has developed communication templates (measure 1-M) that can be adapted to guide daily public health communications or communications during a public health emergency.

***Prepare regions for the task of application by providing an estimate of the time and money it takes to apply.*** Participants described the PPHR application process as extensive and time consuming. It would be helpful for NACCHO to prepare regions for the effort that is needed to apply for recognition by estimating time and budget and providing a concrete figure for sites. Additionally, to expedite the application process participants suggested developing a quick reference tool guiding applicants through the criteria and additional, more extensive, templates to help guide regions through each measure in the process.

### **5.3 Conclusion**

The BRDHD provides a template or model for other rural regions with a district public health infrastructure to improve their ability to respond as a region to an emergency event by standardizing preparedness functions, while simultaneously improving daily local public health practice. The BRDHD's philosophy underlying their PPHR application is that a "coordinated prepared response to community issues must underlie all public health efforts" and that "disaster preparedness training must be integrated into the total matrix of employee competency activities" (BRDHD, 2006). The next step for the BRDHD is to follow their own philosophy and access or develop creative and engaging trainings for public health staff that integrate emergency response and daily public health practice.

## **6. References**

Barren River District Health Department (2006). *Executive Summary* to their October, 2006 application for Project Public Health Ready recognition by the National Association of County and City Officials.

National Association for City and County Health Officials (2005). *Regional approaches to preparedness: A Project Public Health Ready Working Paper.*

United States National Response Team (2000). *Joint Information Center Model: Collaborative communications during emergency response.*

# II

## Massachusetts Emergency Preparedness Region 4B

### 1. Overview of Emergency Preparedness Region 4B

In 2003, the Massachusetts Department of Public Health (MDPH) divided its 352 independently organized (i.e., home rule) cities and towns into seven emergency preparedness regions in an effort to help strengthen local public health infrastructure throughout the state. Massachusetts Emergency Preparedness Region 4 was divided into two regions (4A and 4B) because of its large population. Region 4B, which self-selected its member health departments, was approved by the state and receives funding by the state, which they appropriate to member LHDs and for region-wide expenditures.

The Cambridge Public Health Department (CPHD), the host agency for Region 4B, is responsible for the coordination of planning and response activities for the region, which covers an estimated population of 980,000 residents and encompasses 27 LHDs in the metro-Boston area with jurisdictions that range from 7,261 to 101,355 people. Communities in Region 4B are: Arlington, Belmont, Braintree, Brookline, Cambridge, Canton, Chelsea, Cohasset, Dedham, Everett, Hanover, Hingham, Hull, Milton, Needham, Newton, Norwell, Norwood, Quincy, Revere, Scituate, Somerville, Watertown, Wellesley, Westwood, Weymouth and Winthrop. Each community has its own independent local public health authority.

Figure 1<sup>7</sup> depicts the regional infrastructure that exists to support preparedness and response of LHDs in Region 4B. The elements of this infrastructure that facilitated the preparation of the region's PPHR application were:

- *State-supported regional staff* funded by the MDPH (i.e., Regional Health Educator, a Regional Response Coordinator<sup>8</sup>, and a Regional Hospital Coordinator) dedicated some of their time to preparing the PPHR application and coordinating regional exercises. The Regional Coordinator, because she was selected by the CPHD, had knowledge of the available resources (e.g., staff, relationships) needed to implement the PPHR criteria within Region 4B.
- *Regional Executive Committee*<sup>9</sup> provided guidance to the regional staff throughout the PPHR process by developing policy and funding recommendations

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<sup>7</sup> The components of the infrastructure that are shaded gray represent groups comprised of multiple agencies from different disciplines involved in emergency response (e.g., hospitals, emergency management, public health).

<sup>8</sup> Region 4B was unique because they selected and hired their own Regional Coordinator. In other regions throughout the state (with the exception of the city of Boston) regions were not allowed to select and hire their own Regional Coordinator – Regional Coordinators were appointed by the state.

<sup>9</sup> The Executive Committee is made up of five representatives, four of whom are elected representatives of

- (e.g., made recommendations on the type of resources and trainings needed by LHDs) for the region to take back to the LHDs for their support and input.
- *A regional consultant worked with the four regional liaisons to develop National Incident Management System (NIMS) compliant all-hazards local and regional plans with similar core components.* As of September 2006, 26 of the 27 communities had an all-hazards plan<sup>10</sup> with a risk communication component, emergency dispensing site action plan, and continuity of operations plan. There is also a regional emergency operations plan that identifies the responsibilities of local, state, and federal public health entities in an emergency event.
  - *Partnerships existed between the CPHD and other bodies representing multiple agencies involved in emergency response (e.g., the Cambridge Public Health Alliance and the Massachusetts Emergency Management Agency).* The CPHD is part of the Cambridge Public Health Alliance (CPHA) which includes three hospitals and a number of primary and managed care centers. The CPHD is co-located and works closely with the Alliance members, facilitating access to knowledge needed to prepare their PPHR application. Another key partner of the CPHD is the Massachusetts Emergency Management Agency (MEMA) which is responsible for coordinating federal, state, and local resources throughout the state during a disaster or other emergency event. MEMA also maintains and operates the State Emergency Operations Center (SEOC), a 24-hour, seven days a week central clearinghouse for state-wide disaster-related information. These partners provided a forum to raise questions and improve the understanding of the shared roles and responsibilities between community partners and the unique role and responsibilities of LHDs in an emergency event.
  - *Mutual aid agreements* re-allocated pooled resources to participating communities in time of need. The mutual aid agreement was drafted by staff at the Cambridge Advanced Practice Center<sup>11</sup> (APC) with the assistance of attorneys from the City Solicitors and Town Counsel Association, the Massachusetts Association of Health Boards (MAHB), and the Massachusetts Department of Public Health's Center for Emergency Preparedness. As of September 2006, 21 of 27 communities have approved Region 4B's mutual aid agreements, and participants indicated that the remaining communities are in the process of adopting the agreements.

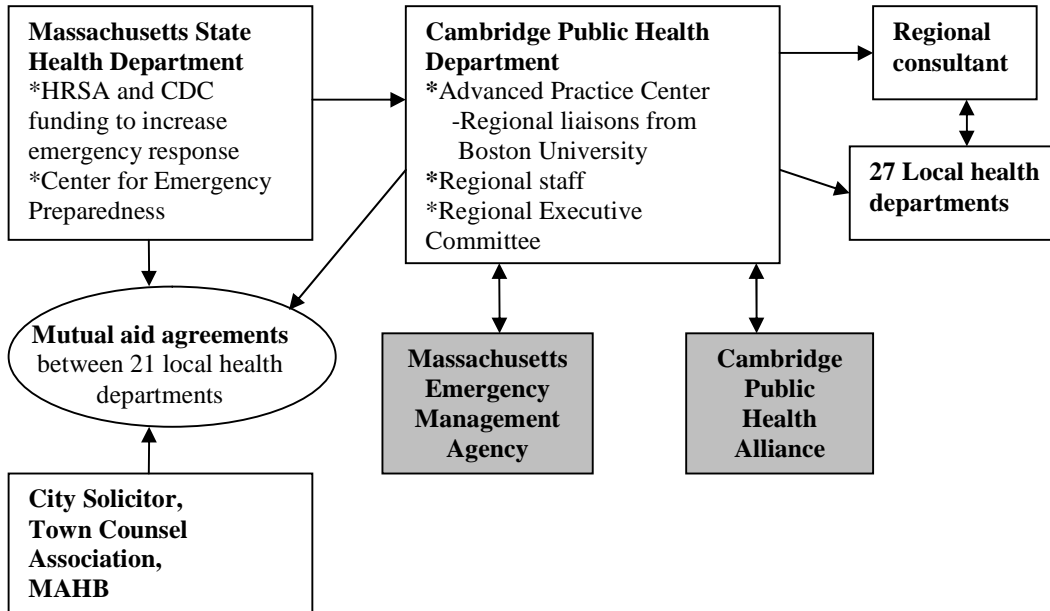
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public health departments in Region 4B. These four elected people represent public health departments of different sizes.

<sup>10</sup> A capacity assessment conducted in 2005 revealed that only five of 27 communities in the region had a written plan.

<sup>11</sup> Advanced Practice Centers (APC) are LHDs that are "developing cutting-edge tools and resources that will help [them] and other LHDs nationwide prepare for, respond to, and recover from major emergencies." More information about the APC program, supported by NACCHO and the Centers for Disease Control and Prevention, can be found at [www.naccho.org/topics/emergency/apc.cfm](http://www.naccho.org/topics/emergency/apc.cfm).

**Figure 1: Regional Infrastructure Supporting Preparedness and Response of Local Health Departments in Emergency Preparedness Region 4B**



## 2. Methodology

A site visit was conducted to collect data for the case study. Two members of the Association for the Study and Development of Community Evaluation Team visited Region 4B on August 22, 2006, and interviewed eight people from Region 4B. Three people were also interviewed via telephone after the site visit as they were not available to meet with us during the visit. During the site visit the evaluation team interviewed individuals involved in Region 4B’s PPHR planning process, as well as community leaders and providers knowledgeable about the public health community and the impact of regional preparedness on the larger community. Interviewees were selected based on feedback from the Region 4B representative coordinating their PPHR application.

*Region 4B was selected for a case study because they pooled or centralized* resources and capacities of individual LHDs “in recognition that no single local health department within a region would have the resources or capacities to respond” to an emergency event across multiple jurisdictions (NACCHO, 2005). This case study report summarizes Region 4B’s findings.

### **3. Contextual Factors that Supported or Hindered the Implementation of the PPHR Regional Criteria**

Important political, economic, and social conditions in the region both facilitated and hindered the implementation of the criteria. These conditions are discussed in the following sections.

#### **3.1 Contextual Factors that Supported the Implementation of the PPHR Regional Criteria**

Important contextual factors related to the infrastructure depicted in Figure 1 supported the implementation of the PPHR regional criteria:

- Region 4B has experience working together (e.g., they self-defined as a region) and with other members of the emergency response community (i.e., CPHA)
- Being an Advanced Practice Center (APC) site provided support (e.g., regional liaisons) and leadership to regional staff and LHDs.

*Before being mandated by the state to participate in regional planning, the LHDs in Region 4B had come together to address the outbreak of West Nile virus in their state.* The commitment to regional preparedness, displayed by their continued involvement, facilitated their involvement in the PPHR application process. LHDs in Region 4B have worked together on a number of state-funded public health response issues including West Nile virus (mosquito spraying), smoking prevention, and anthrax. As the benefits of these coordinated efforts were realized, LHDs in Region 4B became more invested in working together and were encouraged to enter into public health mutual aid agreements.

*Additional support for regional response planning comes from the APC located within the CPHD.* Because of their relationships with the academic and hospital community in Region 4B, the APC provided access to experts and students from surrounding universities (i.e., Tufts, Harvard, and Boston University) and helped to bridge hospital and LHDs preparedness planning. Part of the support to regional preparedness staff that the APC helped to coordinate and support was the regional liaisons. *Regional liaisons*<sup>12</sup>, public health students from Boston University, were assigned to assist several local communities with planning, presentations, data collections, and exercises. Student regional liaisons helped to improve communications between the local communities and CPHD needed to clarify roles and responsibilities between the region and LHDs.

The APC also provided some funding for consultants to work with LHDs to develop their all-hazards plans and helped develop the mutual aid agreements. The additional resources from the APC were of particular importance to smaller health departments that lacked the infrastructure (i.e., staff time, money) to engage in planning and exercising in addition to their other public health functions.

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<sup>12</sup> The regional liaison was a voluntary unpaid internship for public health students.

### **3.2 Contextual Factors that Hindered the Implementation of the PPHR Regional Criteria**

The contextual factors that hindered the implementation of the PPHR regional criteria included:

- *State training requirements.* The state of Massachusetts has its own mandated training exercises program. The LHDs do not plan their own training exercises, instead they must rely on the state's designs for drills and their assessments of training competencies.
- *Lack of regional authority/ accountability.* CPHD has no authority over LHDs and must rely on them to keep track of staff trainings needed to meet the PPHR criteria. Training requirements in addition to the state requirements created confusion within LHDs about the trainings staff members should attend.
- *Staff turnover at the state health department* posed another challenge for the region in implementing the PPHR criteria. The region had initial support from the state staff in the PPHR process, but that support was lost due to internal staff turnover.

## **4. Impact of the PPHR Regional Criteria on Regional Preparedness**

Site visit participants indicated that most of the criteria were useful in increasing regional preparedness and appropriate to measure regional preparedness. The CPHD regional staff provided guidance and a hub to centralize or pool some resources that LHDs need in an emergency event. However, participants felt that some of the criteria were not relevant to their region because they did not reflect the function of the CPHD. The PPHR regional criteria improved Region 4B's preparedness for the following reasons:

***Strengthened relationships between the LHDs needed to create their buy-in for mutual aid agreements.*** Many of the communities in Region 4B (i.e., Boston, Brookline, Cambridge, Chelsea, Everett, Quincy, Revere, Somerville, and Winthrop) collaborate on a regular basis for the U.S. Department of Homeland Security's Urban Area Security Initiative (UASI). This initiative is a federal grant to strengthen emergency preparedness and response efforts. Although these LHDs were already collaborating, the regular monthly meetings around the PPHR criteria helped to strengthen trust among participating LHDs.

***Increased coordination of resources and staff to respond to public health emergencies through the development of mutual aid agreements.*** The mutual aid agreements, as described previously, allow the CPHD to reallocate resources that LHDs have centralized or pooled to LHDs in need during an emergency event. Participants felt

that the mutual aid agreements were a strong measure of the collaboration among public health departments because they were signed by 21 of 27 LHDs.<sup>13</sup>

***Increased access to volunteers necessary to have the surge capacity to respond to an emergency event through the development of a regional Medical Reserve Corps<sup>14</sup> (MRC).*** The Medical Reserve Corps in Region 4B consists of approximately 1,100 nursing and administrative volunteers that have been trained and can be deployed across the region.

***Improved understanding of roles and responsibilities of state, regional, and local health departments.*** Specifically, the measures for activation sequences (1-F) and roles and responsibilities of regional partners (1-G) helped the regional staff define their concept of operations in relation to local and state health departments (as discussed earlier). Regional staff refined their concept of operations as seated in guidance and coordination of resources and communications. They support the development of capabilities of LHD directors and staff and the development of capabilities and infrastructure for municipalities to come together to respond.

***Created a “common language” (i.e., incident command structure) for LHDs to develop relationships with other emergency responders needed during an emergency event.*** In order to implement an incident command structure (ICS) by which public health can easily interface with other agencies involved in emergency response, LHDs needed to develop a common language and define their approach to ICS.

***Created goals and timelines to compel the region (with limited authority) to complete tasks that improved their preparedness.*** The criteria for *Goal 2: Workforce Competency* helped to prioritize training for staff and increased their awareness of trainings. In addition, the criteria for this goal (especially the training assessment) provided a means of quality control through the documentation of staff training participation. As a result staff training certifications are now kept on file.

***Provided guidance and a framework to organize existing capacity, and to identify gaps and areas to improve.*** The criteria for *Goal 2 and Goal 3: Exercises* have also helped to shape the future direction for the CPHD, providing perspective about training and exercising goals they have accomplished and raising questions about how to manage future exercises and trainings.

***Improved hospital and public health surge and response capacity by encouraging the CPHA to take a more integrated view of the management of hospital***

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<sup>13</sup> As of September 2006 the remaining six mutual aid agreements were pending approval by local health departments, but had been given a verbal recognition.

<sup>14</sup> The Medical Reserve Corps (MRC) supplements existing local emergency and public health resources by organizing medical, public health and other community volunteers. More information about the MRC program sponsored by the Office of the Surgeon General, in cooperation with the White House's USA Freedom Corps, and the Department of Homeland Security's Citizen Corps can be found at [www.medicalreservecorps.gov](http://www.medicalreservecorps.gov).

*and public health preparedness* (e.g., joint credentialing system for volunteers).<sup>15</sup> The material and resources in Region 4B for surge were garnered through collaboration. Therefore surge capacity was an indicator of established relationships between public health and hospitals in Region 4B. As a result of the PPHR process, hospitals in the region also participated in preparedness training drills, helping to improve the ability of public health and hospitals to coordinate during an emergency event.

*Encouraged the region to exercise.* A 24/7 statewide notification system quickly coordinates staff and resources to respond to an emergency event. This system was tested as part of providing documentation to NACCHO for the PPHR process. Participants felt that their ability to implement regional drills and exercises was an indicator of collaboration between public health and other emergency responders in their region.

*Increased peer-networking, information sharing, and improved access to additional resources and expertise.* For example, the process provided support to smaller departments in terms of training, resources, information-sharing, additional staff and expertise (e.g., APC and regional consultants).

*Benefits gained from applying for PPHR recognition may have negatively impacted Region 4B's ability to sustain their preparedness and response capacity.* An unintended consequence that occurred in conjunction with the PPHR application process is that Region 4B now faces a loss of potential funding from the state. The successful collaboration among LHDs in Region 4B has made it appear to the state and other regions that Region 4B is rich in resources. The Region is currently anticipating major cuts in funding from the state. Additionally, the PPHR process also created tension between Region 4B and other regions because it highlighted the accomplishments of their Regional Coordinator, a source of tension because Region 4B selected its own Regional Coordinator, while other regions have state-appointed Coordinators. Region 4B was already working together as a region before the state designated the current emergency preparedness regions. In recognition of their efforts the state allowed the region to keep its current members and select its own coordinator.

## **5. Recommendations and Conclusion**

Region 4B has submitted their documentation and has been recognized as meeting the requirements for Project Public Health Ready. The momentum has been established in the region to address emergency preparedness and regional partners will continue to meet monthly. The mutual aid agreements, regional MRC, and clarified roles and responsibilities will help to guide regional preparedness and response in the future. However, Region 4B will continue to need funding to support regional staff and infrastructure development. Without funding, acquiring staff and practitioners to continue

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<sup>15</sup> The work of the APC housed at the CDPH was also instrumental in the integration of hospital and public health preparedness.

the process will be a challenge for the region. Currently, Region 4B is facing funding cuts from the state.

The participation of Region 4B in the PPHR application process provided some insight about working with LHDs with a range of staff and competency levels. Some smaller LHDs have very few full-time staff so training of LHD staff needs to be available in different formats and at different times. In addition, LHD staff and directors vary in their level of competency/training so it is easiest to offer the lower level trainings for all staff and then tailor additional training to specific towns, and levels of competency. It is essential to create a set of core training courses to help alleviate some of the challenges associated with staff turnover during the implementation of the PPHR regional criteria.

### ***5.1 Components of Regional Preparedness in Region 4B***

Participants in Region 4B are still refining the concept of regional preparedness. Table 1 details the components of regional preparedness in Region 4B, their measurement by the PPHR criteria (if applicable), and suggestions for the improvement of the PPHR criteria to more aptly capture preparedness in Region 4B.

### ***5.2 Recommendations***

To further refine and improve the criteria's ability to be implemented and capture the essential elements of regional preparedness outlined in the PPHR criteria and by Region 4B, participants suggested that NACCHO consider revising the regional criteria in the following ways:

***Specify the elements of regional coordination that should come from the state (e.g., public safety coordination).*** Region 4B struggled to identify the elements of the criteria that their region could address and the elements that were the responsibility of the state. NACCHO may consider identifying some core elements that are typically the state's responsibility and making applicants aware of these elements to make the application process more efficient for regions.

***Clarify the purpose and potential benefits of recognition.*** Participants were unclear if the PPHR recognition process was to provide incentive, offer credit, increase recognition or collaboration, or to create a peer-to-peer learning process. As the program moves forward, NACCHO may want to clarify the purpose and potential benefits for regional applications.

**Table 1: Components of Regional Preparedness in Region 4B**

<b>Components of Regional Preparedness</b>	<b>Representation of the Components of Regional Preparedness in the PPHR Criteria</b>	<b>Suggestions to Improve the Representation of the Components of Regional Preparedness in the PPHR Criteria</b>
A regional preparedness planning process that builds partnerships between hospitals, community health centers, long-term care providers, and law enforcement	Goal 1 measures describe the regional all-hazards plan but the process is not explicitly represented in the criteria.	NACCHO may consider offering some tangible guidance (i.e., training, toolkit) on the best practices or types of processes that regions can utilize to build partnerships.
A workable relationship with the state health department necessary to access additional funding and resources from the state, as well as encourage the participation of public safety officials in preparedness planning	Not explicitly represented in the criteria.	Indicators of a relationship with the state may be embedded in the criteria (e.g., laboratory data and sample testing) but their location in the criteria varies by region. Developing explicit criteria with measures of the quality of the relationship with the state may be a more effective way to measure this component.
Defined functions for state, regional, and LHD staff during each phase of an emergency event (preparation, protection of public, response, recovery)	Goal 1 measures of activation sequences (1-F) and roles and responsibilities of regional partners (1-G) helped the regional staff define their concept of operations in relation to local and state health departments.	Functions for state and LHDs and regional staff are embedded in the criteria (e.g., laboratory data and sample testing) but their location depends on the unique context of the region. Developing explicit criteria that require regions to define the function of each level and their interaction may be a more effective way to measure this component.
Definition and development of the capabilities needed for state, regional, and LHDs to perform their required functions during an emergency event (e.g., policy, exercises, resource acquisition)	Goal 2 describes competencies needed for individual public health staff but does not define regional capabilities.	To help regions prepare for the application process NACCHO may consider defining capabilities that regions need to meet the criteria and offering training or technical assistance to help regions develop these capabilities before they apply.
Resources to develop the capabilities needed for state, regional, and LHDs to perform their required functions during an emergency event (e.g., money)	None.	NACCHO may consider developing a toolkit to help regions identify funding streams and other resources needed to improve their regional capacity.

***Improve the clarity of guidance from NACCHO.*** Participants suggested that NACCHO should clarify the application directions (e.g., offer more explanation about the sections in the process) and include an introductory section explaining the variation that exists between regions. This introductory section needs to be explicit and assure regions that their answers to each of the sections will be unique and should reflect their unique organization and regional policies and conditions.

***Emphasize the development of procedures, policies, and systems in the criteria.*** For example, the detailed level of the training criteria (*Goal 2*) presumes that LHDs need to agree about the way in which training goals are accomplished, which was difficult for Region 4B because training of individual LHD staff was not a part of their responsibility or within their authority. Participants felt that to improve the training criteria NACCHO may want to consider asking regions to establish training procedures and providing criteria about what those procedures need to encompass. The Rapid Training Curriculum criteria (1-N), for example, should ask for LHDs to meet specific goals and objectives around training and not require that one specific curriculum be used. It is difficult and unnecessary to get all LHDs in the region to agree on one specific curriculum needed to meet the goals of Rapid Training. The development of systems, policies, and procedures will ensure that regions applying for PPHR recognition have a more sustainable and ongoing process for improving regional preparedness and response.

***Refine the content of the criteria.*** Participants indicated that some of the criteria were not relevant in their region. For example, the criteria describing how the region will assimilate staff and/or volunteers into preparedness operations (1-N) was not relevant to the region because the regional staff provides coordination of volunteers but the LHDs are responsible for mobilizing and assimilating them into preparedness operations. In addition, the criteria asking how lab samples will be shared with military installations or neighboring jurisdictions are not relevant to the region because testing and sharing of lab samples are the state's responsibilities.

***Clarify the definition of workforce competency.*** Participants indicated that Measure 5-A should be labeled "assurance of competence" because regions must show that they have trained staff, not that staff have demonstrated competency in an exercise or real event. This interpretation is different than other regions' interpretations of this criteria suggesting that clarification of the concept of workforce competency (i.e., test of knowledge or evidence of training) may help regions to better understand what is needed to meet this PPHR criteria.

***Revisit the measure of NIMS Compliance (6-B).*** IS-800 is not required for all public health personnel in Region 4B and participants were unclear about why it was required for PPHR recognition.

**Refine the format for Goal 1.** Participants suggested that the flow of the measures in *Goal 1* was not linear and created confusion and overlap between sections. Participants suggested that a more logical sequence to introduce *Goal 1* would be:

- Discussion of purpose and scope
- Activations sequences
- Concept of operations and background.

**Refine the self-review and assessment procedures.** Participants indicated that the self-review was repetitive and should be eliminated. The function of the self-review was to (1) critically review your own application, and (2) dialogue with reviewers about your application. However, these functions were already served by the cross-walk and executive summary, respectively. Participants also suggested that NACCHO may want to consider providing regions with a self-assessment that will help to assess the information they need to meet the criteria. Participants from Region 4B indicated that they assessed themselves throughout the process and a thorough self-assessment at the beginning may help to expedite the application process.

**Prepare regions for the task of application.** Participants described the PPHR process as time and resource consuming and suggested NACCHO may want to consider alerting regions that if they apply they will be required to dedicate extra hours and staff to implementing the PPHR process.

**Link the PPHR criteria with criteria, tools, and activities that LHDs do everyday** to improve their applicability and usefulness to public health staff. The PPHR process was beneficial to daily public health practice in Region 4B because it provided opportunities to work with others and learn from the trainings, to receive additional resources for trainings, and to share best-practices with staff in other communities (e.g., job actions sheets, EDS flowcharts).

### **5.3 Conclusion**

Region 4B provides a model for other regions using policies, procedures, and systems change to centralize or pool resources in an effort to improve regional preparedness and response. During their PPHR application process the region developed mutual aid agreements to facilitate resource sharing between LHDs in the region during an emergency event. This template is available to be used as a model for other regions.<sup>16</sup> The region also put into place a regional system to coordinate MRC to ensure that the region has the surge capacity necessary to respond to an emergency event. Finally the region developed a concept of operations to guide preparedness roles and responsibilities for regional staff, the state, and LHDs. The changes to policies and procedures in Region 4B are institutionalized change and pending continued funding from the state, the improved regional infrastructure will also be institutionalized. This institutionalized foundation creates promise for increasing regional preparedness and response in the future.

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<sup>16</sup> The mutual aid agreement template can be downloaded from the internet at <http://www.cambridgepublichealth.org/services/emergency-preparedness/products.php>

## **6. References**

National Association for City and County Health Officials. (2005). *Regional approaches to preparedness: A Project Public Health Ready Working Paper.*

# III

## Northern Illinois Public Health Consortium, Inc.

### 1. Overview of the Northern Illinois Public Health Consortium, Inc.

The NIPHC, Inc. is a nonprofit membership organization consisting of 11 local public health officials from Cook, DuPage, Kane, Lake, McHenry, Will and Winnebago counties, the city of Chicago, Grundy, Kankakee, and Kendall County.<sup>17</sup> LHDs participating in the consortium represent jurisdictions that range from 2.9 million to 43,838 people. LHDs are certified by the Illinois Department of Public Health (IDPH), and maintain all planning and response authority within their jurisdictions.

The function of the NIPHC is to coordinate efforts of LHDs by providing guidance in four key areas: (1) Information sharing (e.g., monthly committee meetings, access to training and resources); (2) Best practices and standards (e.g., standardizing messages in press releases); (3) Centralization of resources (e.g., trainings) so that they are accessible to NIPHC participating agencies; and (4) Advocacy to improve funding and leveraging of resources for LHDs.

Figure 1<sup>18</sup> depicts the regional infrastructure that exists to support preparedness and response of LHDs in the Northern Illinois Region.<sup>19</sup> The elements of this infrastructure that facilitated the preparation of the NIPHC's PPHR application were:

- *The PPHR Steering Committee.*<sup>20</sup> This committee had oversight and facilitated the PPHR process. NIPHC staff members assist the Steering Committee with day-to-day operations; and
- *The Emergency Preparedness Subcommittee.* This subcommittee is one of seven sub-committees within the Consortium that have been meeting on a monthly basis, since before PPHR, via conference call or face-to-face to develop plans, programs, and policies that are beneficial to LHDs as well as to the region as a whole. The Emergency Preparedness Subcommittee provided lead technical

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<sup>17</sup> Grundy, Kankakee, and Kendall are affiliate members added to the Consortium in 2004.

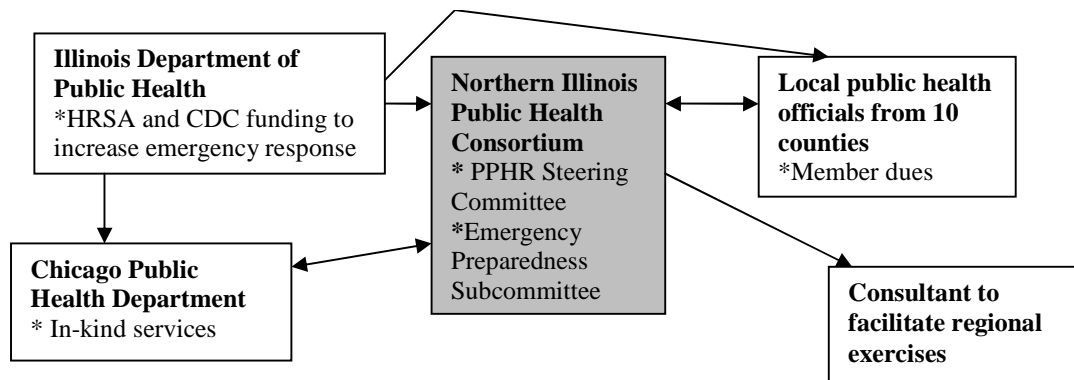
<sup>18</sup> The components of the infrastructure that are shaded gray represent groups comprised of multiple agencies from different disciplines involved in emergency response (e.g., hospitals, emergency management, public health).

<sup>19</sup> For purposes of this report the Northern Illinois Region is comprised of the jurisdictions of the 11 local health departments that participate in the NIPHC.

<sup>20</sup> The PPHR Steering Committee, housed at the NIPHC, consists of the Executive Director of the Consortium, the Preparedness Committee Co-chairpersons, a representative from the Illinois Public Health Preparedness Center at the University of Illinois, Chicago School of Public Health, and an emergency planner from one of the participant counties.

oversight and guidance over all-hazards plan components facilitating the ability of the NIPHC to address *Goal 1* of the PPHR criteria. The other subcommittees include Environmental Health, Health and Human Services, Legislative, Mental Health, Communicable Disease and Epidemiology, and Public Information.

**Figure 1: Regional Infrastructure Supporting Preparedness and Response of Local Health Departments in the Northern Illinois**



## 2. Methodology

A site visit was conducted to collect data for the case study. Two members of the Association for the Study and Development of Community Evaluation Team visited the NIPHC on August 17, 2006, and interviewed six members of the Consortium. One person was also interviewed after the site visit as she was not available to meet with the team during the visit. During the site visit the evaluation team interviewed Consortium members involved in the NIPHC’s PPHR regional planning process, as well as members knowledgeable about the public health community and the impact of regional preparedness on the larger community. Consortium members were selected based on feedback from the NIPHC representative coordinating its PPHR application.

*The NIPHC was selected for a case study because they coordinated* “individual local health departments, each with sufficient capacity to respond to a public health emergency within its own jurisdiction” to improve regional preparedness and response (NACCHO, 2005). This case study report summarizes the NIPHC findings.

## 3. Contextual Factors that Supported or Hindered the Implementation of the PPHR Regional Criteria

Important political, economic, and social conditions in the region facilitated and hindered the implementation of the criteria. These factors are discussed in the following sections.

### **3.1 Contextual Factors that Supported the Implementation of the PPHR Regional Criteria**

*Established working relationships among local health officials in the region facilitated the PPHR process.* Prior relationships among LHDs in the region created the foundation needed to work jointly to achieve the PPHR criteria and strengthened their capacity to share information and best practices. Trust between partners had been built through time and informal relationships. LHDs in the northern region of Illinois have worked informally together as a region since the late 1990's. They initially came together because of funding issues and policy directives from the state's Tobacco Settlement Funds. The collaboration became official with the creation of the Northern Illinois Public Health Consortium, Inc. in 2001. Although many of the NIPHC's participating agencies are capable of coordinating and managing a public health response individually at the local level, county representatives recognized that responses on a regional level were more effective in minimizing the effect an event has on any one area.

### **3.2 Contextual Factors that Hindered the Implementation of the PPHR Regional Criteria**

Contextual factors that hindered the implementation of the PPHR regional criteria included:

- *Geographic isolation from the Illinois Public Health Department (IPHD).* The IPHD is located in Springfield, a predominately rural area in southern Illinois, while the NIPHC is located in the northern part of the state; it has within its boundaries the city of Chicago, the fourth largest metropolitan area in the nation which is home to approximately 70% of the state's population. The geographic isolation increases the difficulty for the IPHD to provide support to the region during an emergency event and increases the perception that the IPHD was not aware of the needs of the region.
- *State reporting requirements.* Emergency managers and LHD staff (e.g., epidemiologists) have to comply with state mandates (e.g., specimen handling, laboratory procedures, disease outbreak reporting) that require specific disease reporting requirements, as well as some emergency response protocol for EMS personnel. These mandates were a challenge to the NIPHC when preparing their PPHR application; they had to be aware of these mandates and work flexibly with their PPHR requirements to ensure that they were not contradicting their state requirements.
- *Local reporting requirements.* LHDs in the state are independently certified by the IDPH. Each of the LHDs has different structural organizations and reporting responsibilities. For example, the Chicago Department of Public Health reports directly to the Mayor, while other LHDs may report to County Boards. It was a challenge to coordinate a region of health departments each charged with upholding different laws and ordinances.

#### **4. Impact of the PPHR Regional Criteria on Regional Preparedness**

Participants considered all aspects of the criteria important to preparedness and response of LHDs across a region. However, some of the criteria were thought to be more relevant in improving the response of individual LHDs. Specifically, participants felt the criteria in *Goal 1* provided a framework for preparedness planning that was more appropriate to help LHDs identify gaps in their individual response plans.

Individual LHDs in Northern Illinois have the capacity to manage a public health emergency event. The function of the NIPHC is to provide technical assistance and guidance in helping LHDs to become better prepared. Consequently, a number of the criteria were not relevant to the function of the NIPHC. For example, the emergency operation center criteria were not relevant because emergency management personnel, not public health staff, in the region are required under state mandate to activate the emergency operation center in the case of an emergency event. Similarly, epidemiologists in the region are mandated by state law to follow certain protocols making criteria around sample testing not relevant to them.

Participants felt that the criteria helped improve aspects of their preparedness (i.e., planning and coordination in select components) but did not strengthen their overall ability to respond as a region. The PPHR regional criteria helped improve the NIPHC's preparedness in the following ways:

***Improved the communications infrastructure of the region.*** Before the PPHR process, the region did not have a written communications plan to ensure that all participating NIPHC local affiliates are releasing the same type of message to the general public. As a result of the PPHR process, a written communications plan was developed. In addition, NIPHC established a conference call bridge to allow Consortium members from across the region to have a tool to quickly convene and make decisions during an emergency event. Improved communications were evident during an outbreak of mumps in which respective Consortium members participated in a conference call and developed a joint press release using the conference call bridge developed as a result of the PPHR process.

***Increased opportunities for local health officials to work together, share information and identify best practices in the planning process.*** The criteria for *Goal 2: Workforce Competency* promoted sharing of LHD trainings. To implement the criteria the NIPHC established a peer technical assistance process in which PPHR planning tasks were assigned to those who would actually implement the process. Training coordinators were able to identify and coordinate uniform trainings throughout the region in an effort to produce a uniform emergency response. As a result of PPHR, the Communicable Disease Committee now hosts an on-line list serve to promote the sharing of resources, trainings, presentations, and other materials related to emergency and non-emergency public health functions.

***Provided guidance and a framework to organize existing capacity, and to identify gaps and area sin need of improvement.*** In response to a gap identified in *Goal 1: Preparedness Planning* the region developed a Communicable Disease and Epidemiology Annex to the regional plan which provides detailed information about disease triggers, activation plans, roles and responsibilities, and sampling protocols for how individuals should work together prior to and during an emergency. The need for improved technology in the area of Global Information Systems (GIS) was another gap identified during the PPHR planning process that the NIPHC is currently working to address. GIS technology will help LHDs in the region respond more efficiently because it provides emergency responders with accurate, real-time data about the geographical layout and population density of the region.

***Enhanced the ability of the region to exercise.*** The criteria for *Goal 3: Exercises* resulted in an exercise protocol for the regional plan. NIPHC worked with consultants to help them create and facilitate a regional tabletop exercise for all agencies in the Consortium. Participants felt that the exercises were the best indicators of the improved relationships among LHDs and between LHDs and other emergency response agencies.

***Improved NIPHC's ability to influence public-policy that impacts public health preparedness and response.*** As tangible emergency preparedness and response capacities became evident in the LHDs in the Northern Illinois Region, the state began participating more in meetings and discussions with the NIPHC. The state's increased participation allowed NIPHC members to have greater influence on state policies and protocols. For example, members of the Communicable Disease Committee provided feedback to the state on hours of operation in state labs and the drop-off procedures for specimens. As a result the state amended their hours to include week-ends and developed a protocol to ensure that specimens would be delivered to the appropriate public health staff

***Applying for PPHR recognition may have negatively impacted the NIPHC's ability to sustain their preparedness and response capacity.*** The state of Illinois has a history of being an active political area. An unintended consequence of the PPHR application was that it created tension between the Consortium and the state, the Consortium and the city of Chicago, and between the city of Chicago and the state. For example, the state and the city of Chicago each have their own HAN networks. NIPHC's Emergency Response Coordinators used Chicago's HAN to host their activities, leading to the perception that they valued the City of Chicago more than the state. This dynamic is important because politicians and people in the field of public health are cognizant of the Consortium favoring the state or the City of Chicago, which could have implications for future relationships, funding, and other resources.

## **5. Recommendations and Conclusion**

The NIPHC has submitted their documentation and been recognized as meeting the requirements for Project Public Health Ready. NIPHC will continue to have regular meetings with its Steering Committee and other sub-committees. The communication

infrastructure in the region will continue to be strengthened. For example, the Public Information Subcommittee is in the process of developing a message mapping campaign that will be shared with the region.

The NIPHC's approach to preparedness and response provided insight about how the PPHR criteria for individual LHDs can be used to inform regional preparedness and response of LHDs. NIPHC used the PPHR criteria for LHDs as an assessment tool to identify gaps in the preparedness and response of LHDs. Based on the assessment results, twenty-three regionally-based policies were developed to guide LHDs collective response. These policies were eventually detailed in a regional work plan that helped to guide the development of the PPHR regional criteria.

### ***5.1 Components of Regional Preparedness in the Northern Illinois Region***

Although the NIPHC is still developing its understanding of the meaning of regional preparedness, participants discussed several key components for their region to achieve preparedness. Table 1 details the components of regional preparedness in the Northern Illinois Region, how they are measured by the PPHR criteria (if applicable), and suggestions to improve the PPHR criteria to more appropriately capture regional preparedness in the Northern Illinois Region.

### ***5.2 Recommendations***

To further refine and improve the criteria's ability to be implemented and capture the most important elements of regional preparedness outlined in the PPHR criteria and by the NIPHC, participants suggested that the NACCHO consider revising the regional criteria in the following ways:

***Emphasize developing regional policies rather than regional plans.*** Policies will allow counties to decide among themselves the extent to which they would like to work together, in addition to providing them with the opportunity to survey their own region and decide what criteria are relevant and important to them. However, it is important to note that this recommendation may only be relevant in regions in which LHDs are capable of coordinating and managing responses to public events on their own. The NIPHC's use of the individual PPHR criteria to develop regional policies may help NACCHO begin to think about a way to utilize existing criteria to develop policies relevant to regional preparedness and response. For example, NACCHO may consider revising the criteria to include three components (1) an in-depth assessment of LHDs in the region to identify gaps in their planning and training using the current PPHR criteria; and (2) development, implementation, and monitoring of policies to address those gaps and (3) exercise/real events to assess and improve regional response.

**Table 1: Components of Regional Preparedness in the Northern Illinois Region**

<b>Components of Regional Preparedness</b>	<b>Representation of the Components of Regional Preparedness in the PPHR Criteria</b>	<b>Suggestions to Improve the Representation of the Components of Regional Preparedness in the PPHR Criteria</b>
Communication infrastructure for LHDs in the region	Goal 1 measures describing the regional communication plan (1-M).	Emphasize the importance of communications as a foundation for meeting PPHR criteria (see recommendations below).
Coordination of LHDs that is easily interfaced/integrated into existing response structures (e.g., emergency managers utilize their own regional plan of emergency preparedness developed in response to CDC guidelines)	Goal 1 measures for NIMS Compliance (1-I) and development of a communication plan (1-M).	NIPHC is still assessing how their approach will integrate into existing regional emergency management systems. Directions detailing how to integrate public health into existing NIMS in the region may be helpful for future PPHR regions.
An open, solid relationship with the state to facilitate access to additional funding, resources, and technical support in emergency and non-emergency situations and provide an opportunity for Consortium members to work with the state to address their concerns and issues	Not explicitly represented in the criteria.	Indicators of a relationship with the state may be embedded in the criteria (e.g., change in communicable disease policies) but their location depended on the unique context of the region. Developing explicit criteria with measures of the quality of the relationship with the state may be a more effective way to measure this component.
Access to and the ability to influence local government/county administrators to inform their decision making during an emergency	Goal 1 measures detailing the signatures and acknowledgements needed from authority (1-D).	None.

***Improve the clarity of guidance from NACCHO.*** Participants suggested NACCHO personally visit regional groups before they begin the PPHR process, to more clearly communicate the expectations and the resources needed to complete the project. It was also suggested that communications with NACCHO be ongoing and not end after submissions.

***Provide more guidance to inform the application of the criteria.*** Guidance on the types of processes that regions can build upon to implement the criteria would facilitate the application of criteria. For example, participants felt that it would be beneficial to regions applying to incorporate best practices for all-hazards planning into the criteria.

***Emphasize communications planning, and the importance of building up a region's communications infrastructure.*** Participants indicated that a strong communications infrastructure is vital to a coordinated regional response. By prioritizing or emphasizing communication planning and infrastructure it will help create the foundation needed for regions to continue pursuing additional PPHR goals.

***Offer basic, intermediate, or advanced objectives from which regions could select those objectives that meet the needs of their region.*** The advance objectives would emphasize planning for mental health and special populations.

***Create templates to help guide regions through the planning process.*** Templates for each measure (e.g., a form fillable electronic document for staff demographics) would facilitate the organization and entry of information for the application.

***Prepare regions for the burden of application.*** Participants described the PPHR application process as very time consuming. NACCHO should make regions aware that additional staff and resources may be necessary to meet application deadlines. For example, the NIPHC utilized consultants to help them coordinate and manage the PPHR process.

***Link the PPHR with criteria, tools, and activities that LHDs do everyday*** to improve their applicability and usefulness to LHD staff. For example, the Communicable Disease Committee developed a list serve that allows for the daily sharing of information and resources. Improving the applicability of the criteria will provide avenues for creative marketing of PPHR to people that are reluctant to engage in additional planning processes.

### **5.3 Conclusion**

The effectiveness of the response in Northern Illinois will be based upon the actions of the individual counties and their local leadership. The goal of the NIPHC was to develop a more effective coordinated response to a public health event. While the Consortium itself will not serve as a command and control center in the event of an emergency, they will uphold the responsibility of activating appropriate response protocols, and ensuring that counties remain in communications with one another throughout the event.

The efforts of the NIPHC provide a model for networks of local LHDs to come together to improve their regional preparedness through coordination. Although most participants felt that the criteria did not necessarily improve their regional response, the criteria did help the Consortium to institutionalize their improvements to coordination (i.e., through policies) and according to Consortium members the “sooner the region begins to coordinate, the more likely service to the public will improve.”

## **6. References**

National Association for City and County Health Officials. (2005). *Regional approaches to preparedness: A Project Public Health Ready Working Paper*.