Regionalization in Local Public Health Departments: The Northern Illinois Public Health Consortium

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SYNOPSIS

The Chicago metropolitan area includes several large, independent local public health departments (LPHDs). This article describes the rationale behind pursuing regionalization, the process followed, the organizational structures and functions adopted, challenges encountered along the way, and the major accomplishments and outcomes of the effort. It also focuses specifically on emergency preparedness planning as an impetus and vehicle for regionalization in recognition that much of the national emphasis on regional public health efforts has concerned planning and response for bioterrorism, pandemic influenza, and other large-scale public health emergencies. In presenting this case, it is hoped that other LPHDs that are seeking alternative ways to achieve enhanced capacity will find useful guidance for pursuing regionalization.

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The Chicago metropolitan area, which is served by several large, independent local public health departments (LPHDs), takes a regional approach to many public health issues. This article describes the rationale behind pursuing regionalization, the process followed, the organizational structures and functions adopted, challenges encountered along the way, and the major accomplishments and outcomes of the effort. Specifically, we focus on emergency preparedness planning as an impetus and vehicle for regionalization in recognition that much of the national emphasis on regional public health efforts has concerned planning and response for bioterrorism, pandemic influenza, and other large-scale public health emergencies.

METHODS

A mixed-methods approach was followed in preparing this article. We reviewed the literature on regional organization and its application to local public health, including the gray literature on public health practice. Emerging frameworks on public health regionalization, most importantly those developed by the National Association of County and City Health Officials (NACCHO), provided an applied theoretical foundation for describing those most salient characteristics of a regional effort. We obtained data on the Northern Illinois experience from document review and interviewing key informants who have participated in the regional effort. The author of this case was a participant-observer in that experience and has firsthand knowledge of the development of the region.

While a modified case-study approach and methods were employed, this is more an instructional case study than a research case study in that the purpose is to describe a specific experience rather than empirically test the application of a theory on regional public health. Nonetheless, it is hoped that the adherence to case-study research protocols has helped make the results of this case generalizable to other areas that are considering regionalization.

REGIONALIZATION

How the region is defined

The Northern Illinois Public Health Consortium (NIPHC) is a membership organization of the nine LPHDs serving the greater Chicago metropolitan area. LPHD members' jurisdictions range in size from the City of Chicago and Suburban Cook County, each at nearly 2.5 million people, to Kendall County with a population of 100,000, for an aggregate total of more than 7 million people, comprising two-thirds of the state of Illinois's total population. All have a connection to the Northeastern Illinois population growth corridor and recognize their interdependence on public health issues due to the economic, transportation, and population growth characteristics that affect all counties in the region. A profile of NIPHC and its members is presented in the Table.

Although the region is geographically distinct, its precise definition remains somewhat fluid. For example, one county (Winnebago) does not share geographic borders with other NIPHC members. The original eight members were joined in 2004 by an adjacent, rapidly growing county. Beyond geography, all members share connections based on transportation, commerce, and population growth.

Impetus for regionalization

Formation of the region occurred through an evolving confluence of factors that caused NIPHC members to look to each other as neighbors that shared more than geographic proximity. NIPHC members came together through a realization that all LPHDs shared similar demographics and health status concerns, particularly growth in population, a suburbanization of poverty, pockets of poor health status, and issues of access to health-care services. Issues that were previously associated with inner-city Chicago were now being found in the collar counties of the metropolitan area.

NIPHC members also shared a similar progressive view of public health and the role of public health agencies, driven by emerging national practice concepts, such as the 10 Essential Public Health Services, as a basis for defining the role of LPHDs.[1] While their sizes varied, all original NIPHC members were full-service LPHDs, with even the smallest member being considerably larger than the average-sized LPHDs in the remainder of the state.

The perception of growing shared needs and a progressive view of public health fostered a mutual frustration with the state health department and most other Illinois LPHDs, especially the down-state association of LPHDs, which opposed calls for public health modernization and reform. These interests also resisted acknowledging that the public health needs in the northern population centers of the state were disproportionately greater than the state resources that were being allocated to the LPHDs in that region.

The NIPHC region represents two-thirds of the state's population and has more than three-quarters of the state's communicable-disease cases, numbers of uninsured, and other heath status problems. Yet this region received less than half of the state funding that was allocated for public health programs. Both the state

Table. Northern Illinois Public Health Consortium core member characteristics[a]

Jurisdiction/ type	*Land area (in square miles)*	*2000 population (in thousands)*	*Density (population/ square mile)*	*Median household income*	*Percent below poverty*	*Agency budget (in millions)*	*Staff (FTEs, part-time)*	*Services*			
								Environ-mental health	*Community health*	*Personal health*	*Disease control*
Chicago/city	227	2,896	12,750	$38,625	19.6	$187.6	1,351	✓	✓	✓	✓
Suburban Cook County	729	2,481	5,686	$58,003	6.4	$31.4	510	✓	✓	✓	✓
DuPage County	334	904	2,710	$67,887	3.6	$39.9	674	✓	✓	✓	✓
Kane County	520	404	777	$59,351	6.7	$4.7	150	✓	✓	✓	✓
Lake County	448	644	1,440	$66,973	5.7	$39.3	870	✓	✓	✓	✓
McHenry County	604	260	431	$64,826	3.7	$3.9	135	✓	✓	✓	✓
Will County	837	502	600	$62,238	4.9	$18.6	350	✓	✓	✓	✓
Winnebago County	514	278	542	$43,886	9.6	$9.8	212	✓	✓	✓	✓

[a]Does not include three affiliate members: Grundy, Kankakee, and Kendall Counties.

FTE = full-time equivalent

health agency and the state association of public health administrators were adamant in resisting the reallocation of funding based more on population or need, or considering alternative public health organizational arrangements, such as regionalization. The current county-based organizational structure and state administrative mechanisms, which support 95 independent LPHDs, siphon off a large part of state public health resources to support an antiquated administrative infrastructure. Quite simply, the eight largest health departments in Illinois were outvoted by 87 of their smaller fellow health departments and the state agency when public health reform was proposed.

Adding to this frustration, the state public health agency and the association of public health administrators had limited success in persuading the governor's office or general assembly to increase funding for public health. At the same time, administrators insisted that the root cause of dissatisfaction within the public health community was aggregate underfunding and not a misallocation of existing resources or an inefficient organizational structure. Part of this legislative ineffectiveness was a fear by the state health department of becoming too involved in legislative policy initiatives, which were not part of the governor's legislative agenda. Succumbing to pressure from the governor's office, the state health agency would privately decry the lack of state funding for public health but would publicly muster support among LPHDs for the governor's budget proposals that kept public health spending at fixed levels. An alternative source of state-level public health leadership was needed.

A growing issue related to the state's role in public health concerned the composition and capacity of the overall public health infrastructure. Historically, this has been shared among state and local public health agencies. But in more recent times, the state health agency has become increasingly susceptible to budget pressures and state politics, which has diminished its capacity. Staff turnover, hiring freezes, and budget cuts have hampered the capacity of the state agency at a time when expectations have increased. Proponents viewed establishing a regional capacity as a way to compensate for state retrenchment, which can serve as a reservoir for overall state public health capacity and leadership during lean times.

Emerging regional structures and organizations

Emerging regional structures are a blend of formal organizations and informal networks. The shape of regionalization evolved without an overarching plan or design, driven more by functional needs than any belief about a desired model or structure. Local public health in Illinois is decentralized, with 95 independent government-sponsored LPHDs, mostly at the county level. Local regional structures have not taken hold beyond the few multi-county LPHDs that are organized similarly to single-jurisdiction LPHDs. So, no formal model of regional organization or governance exists in the state.

The Illinois Department of Public Health (IDPH) had divided the state into regions, but these divisions were for IDPH administrative purposes and had little functional relevance to the larger constituent LPHDs. The NIPHC area is not a formally recognized public health region by the state and, until recently, a separate state administrative region covered much of the same geographic area. As participation in the state regional meetings fell off and new members joined NIPHC, a mutual decision was made to consolidate state regional meetings with periodic NIPHC meetings.

NIPHC member early activities included informal monthly meetings of LPHD administrators, coordination of policy positions that would be brought to the attention of the state health agency, and development of a legislative agenda for which all members agreed to use their influence to help advance. There was also an annual meeting of the boards of health to generate governance-level support for NIPHC efforts.

As NIPHC members continued to meet monthly and interact at the staff level, the need for a more formal organizational arrangement became apparent. NIPHC work was initially handled informally by the senior staff of the largest members. Committees were formed as activities increased, and additional senior staff from member LPHDs were tapped to support this work. Committees were organized around legislation, issues of the state health agency, and special projects, but the legislative agenda emerged as the principal focus of the joint efforts. As the legislative agenda came more sharply into focus, the need to more effectively advance the agenda than could be done by individual members received attention. Hiring a lobbyist was a logical conclusion and a discussion of how to pay for this service raised the idea of forming a nonprofit organization through which monies could be raised and a lobbyist hired.

NIPHC was incorporated as an Illinois nonprofit organization with 501(c)(4) status in 2001. Corporate bylaws established an eight-member board of directors, two officers, a committee structure, and the ability to hire staff and consultants. The bylaws also established a dues structure, which was set at a level to hire a contract lobbyist and cover organizational expenses. As activities expanded, a part-time executive director was engaged, assisted by a full-time policy analyst and

a cadre of contract staff, hired through a fiscal agent who manages the organization's administrative functions. The officers, along with the executive director, form an informal but functional executive committee, but most major decisions are made by consensus of the board. A committee structure is used to build consensus on direction and action prior to board endorsement. In its arrangements for organization and governance, NIPHC has characteristics of both a state-level membership association and a regional public health entity. Decisions of the board or actions of the NIPHC do not bind organizational members in a legal sense, as members completely retain all functions as independent LPHDs. NIPHC routine functions are financed by members' annual dues, with special projects paid for through special assessments.

Regional activities and accomplishments

With organizational maturity came a growing sense that more could be accomplished, and the focus shifted from using collaboration to organize a response to common regional concerns, to serving as a broader change agent for public health reform and restructuring in Illinois. For example, initial efforts were aimed at persuading the state health agency and other Illinois LPHDs to consider some form of regionalization. Later efforts proposed a regional structure for local public health statewide and legislation to implement that restructuring, along with a concomitant change in public health funding along regional lines. The shift from a responsive posture to a proactive stance also extended to the NIPHC region in that regional activities were now taking place independently of state support or the preference of other Illinois LPHDs.

From the beginning, NIPHC has been heavily influenced by progressive thinking at the national level regarding LPHD functions and structure. NIPHC has been in the vanguard in promoting, sometimes against widespread opposition, national frameworks like the 10 Essential Public Health Services, National Public Health Performance Standards, accreditation, Project Public Health Ready,[2] and regional approaches to emergency preparedness. These frameworks and practice concepts are frequently discussed at NIPHC board meetings and are promoted in policy materials that drive NIPHC legislative initiatives and positions. NIPHC has actively followed the use of regional approaches to public health organization on the national level and has sought out practice examples, which are then used to build the case for reform.

Locally, the realization of how closely the region is connected by transportation, migration, and economic exchange helps to sustain strong support for regional efforts. While most public health incidents still remain local, nearly all public health issues are now considered on a regional basis, including, for example, responses to West Nile virus (WNV), monkeypox, seasonal influenza, and improving access to health-care services. For example, NIPHC was very active in monitoring the stock of flu vaccine supplies and cases of seasonal flu across the region during the vaccine shortage in 2005. NIPHC members coordinated media and public information to ensure a consistent message in the metro media market and drafted plans for sharing vaccine supplies in the event that a shortage in any one county became critical.

Regional action by NIPHC can best be described as the coordination of individual actions that are carried out by its members. A looser form of coordination underlying all regional activity takes place through networking, where the purpose is not to specifically coordinate action but to share information. By mutual consent, there is some standardization, particularly in the area of public information and on occasion at the policy level. Virtually no functions are centralized (i.e., ceded by member agencies to NIPHC and carried out by NIPHC on a regional level), although centralization has been considered for functions that have clear scale economies or require specialized and expensive expertise beyond what might be acquired by a member LPHD, as might be the case for a geographic information system (GIS).

One concession to centralization might be the NIPHC joint legislative agenda and use of a contract lobbyist. However, even with this function, individual NIPHC members have their own legislative priorities and most conduct independent legislative advocacy activities. A more recent move toward centralization emerged from regional pandemic flu planning in the decision by NIPHC members to regionalize the organization of pandemic influenza exercises in recognition of the efficiencies that could be obtained and the learning benefits of consolidating exercises in the region.

Barriers to regionalization

Creating a regional capacity poses challenges both from within and from the outside. There is always inertia in local public health that centers on an LPHD's internal operations, and the parochial concerns of the local jurisdiction divert energy from efforts to regionalize. Arguably, this inertia is greater for larger public health agencies given the greater organizational resource base and population served, suggesting that there is enough to do in one's own back yard and the local LPHD is large enough to do most of it alone. Within

large organizations, the lower one falls in the hierarchy, the more the focus is on narrow functional internal concerns. And because larger LPHDs are generally more self-sufficient, there is a greater expectation that they are more self-reliant for emergency preparedness, particularly concerning those incidents likely to affect their jurisdiction.

Overcoming this barrier requires leadership at the LPHD executive director level to both commit to and communicate the value of regionalization within the LPHD and to the LPHD's governing body and key elected officials. NIPHC has accomplished this by engaging LPHD staff on committee work and convening the boards of health periodically. Member executive directors reinforce the value of regional work in reporting on NIPHC activities to their governing bodies, and the NIPHC executive director has been invited to several member board and senior staff meetings to present on the role and activities of the NIPHC.

Larger LPHDs also have established a local identity and are often part of a larger governmental infrastructure, which becomes especially important during times of crisis. NIPHC member agencies have strived to strike a balance when it comes to regional action that maintains local agency identity. This is most apparent in dealing with the media. While NIPHC members work to coordinate public information materials, these materials are used in press releases and other public communication by individual members under each agency's identity. Care is taken to avoid projecting an image of NIPHC as the equivalent of a regional health department. The largest public health agencies have more control than do others over media markets (e.g., Chicago), making it difficult to have a regional approach without the dominant agency's support.

Lack of resources—both funding and staffing—can also be a barrier to regional activities. NIPHC has directly addressed this barrier in several ways, largely employing traditional methods of organizational management. NIPHC has developed a strategic plan to focus its activities. The strategic plan drives an annual budget, which is funded through dues and special assessments. The budget is managed both at the programmatic level and the fiscal level, and regular reports on budget and workplan status are presented at monthly board meetings. But each member LPHD receives funding from different sources with differing budget accountabilities, which have to be accommodated both in terms of expenditures and deliverables.

Finally, opposition from the state health department and other LPHDS, which do not believe in regional approaches, can present a barrier to regional action in two ways. Passive opposition can create friction and sap organizational energy in that nearly every action is conducted defensively with the knowledge that there is a fundamental lack of support beyond the region. More active opposition can also thwart action, as resources and energies are devoted to countering the opposition. Staying focused, consciously avoiding unnecessary conflict (picking one's battles), being open to teachable moments, and building relationships are constant activities to overcome resistance and make converts.

Impact of regionalization on preparedness

Emergency preparedness has been a major focus of NIPHC members over the past three years, but the purpose of the region and NIPHC is rooted more broadly in shared public health concerns and functions. The level of formality in the relationship among members does vary by function with separate formal plans and assessments in place for emergency preparedness.

For several years, the health departments in the Northern Illinois region have shared data on reportable diseases in recognition of the arbitrary nature of political boundaries when it comes to communicable-disease outbreaks or other public health events. While the region is composed of distinct political entities, it is linked in many ways that are relevant to bioterrorism planning. The region shares a common Chicago-based media market. Chicago and suburban Cook County are home to some of the nation's premier centers of academic medicine. Residents throughout Northern Illinois utilize area hospitals, especially trauma, burn, and perinatal centers, which are referral sites for hospitals throughout the region. As employment opportunities have spread to the suburbs, there are large numbers of people who live in the city and work in the suburbs, as well as those who utilize a more traditional commuting pattern. The Chicago metropolitan area is easily accessible via various modes of transportation. Chicago shares commuter train lines with many other counties within the region. O'Hare and Midway Airports, within the City of Chicago, serve the entire region. The area borders Lake Michigan, granting nautical access on the region's entire eastern border. Accessibility via seven interstates, as well as the Amtrak rail system, also makes the area attractive to travelers.

It is due to these factors that a regionalized public health collaborative response is integral to the region's ability to detect, address, and confront a bioterrorism event or other public health emergency. Since late 2002, the health departments in Northern Illinois have more actively participated in regional emergency preparedness coordination and planning. These health departments have met monthly to address numer-

ous topics, including continued data sharing, use of mutual aid agreements to share resources, hospital coordination, education and training, pharmaceutical distribution planning, and public information, among other emergency preparedness and response issues. Benefits to these meetings were many. In addition to joint information sharing and relationship development, the first regional plan was developed.

To further regional planning efforts, NIPHC felt that acceptance into Project Public Health Ready (PPHR) provided a unique opportunity to continue the discussion on regional readiness. (PPHR is a project of NACCHO, sponsored by the Centers for Disease Control and Prevention [CDC], to help LPHDs develop a capacity to respond to public health emergencies, including bioterrorism. LPHDs that meet the criteria are recognized for this accomplishment and, to date, more than 24 LPHDs have achieved this status. NACCHO has developed a special track for LPHDs that wish to approach the development of emergency preparedness on a regional basis, and recognition has been given to eight LPHDs, including the NIPHC.) In the summer of 2004, six county health departments and NIPHC members in the Chicago metropolitan area were accepted by NACCHO as a region for participation in the second round of PPHR. Chicago, which is independently funded by CDC for bioterrorism preparedness, did not formally apply for PPHR designation but participated in the regional effort as the region's largest health department. Winnebago County Health Department has already achieved PPHR designation and as a member of NIPHC, it supported and participated in the designation activities of the other NIPHC members.

Defining regionalization in preparedness efforts

Throughout the PPHR planning process, NIPHC committees struggled to define public health regional preparedness and response. One key concern centered on the question of NIPHC's authority to respond to a public health event. Group consensus suggested that response authority is derived from individual LPHDs' governing bodies and legal framework (such as County Boards and respective ordinances, rules, and regulations), as NIPHC has no such governing body or legal reference. Planning groups pondered how and why the region could jointly plan and respond to an emergency when each LPHD must address its own jurisdictional situation and needs. The results of these conversations led NIPHC to develop a PPHR submission document that, although addressing PPHR criteria, was based on a concept of regionalization that would not be expected in a typical response plan.

By consensus, the PPHR planning groups conceptualized regionalization first by recognizing that the strength of the region's response derives from the strength of each health department's capacity. Through pooling preparedness and response efforts of LPHDs working together, the region would leverage collective resources to address emerging, ongoing, or emergency public health. This concept applies not only to response activities, but especially to preparedness planning. Planning groups, working together on defined projects, would better identify gaps in each respective LPHD's response plan and thereby see how, through a regional approach, these gaps could be filled.

Strong coordination is required if LPHDs are to jointly plan and respond. NIPHC PPHR planning groups worked to define methods for coordination, and identified four approaches for collaboration based on the NACCHO PPHR typology:

1. Networking: NIPHC committees meet monthly, share information via e-mail, and have access to trainings offered by other member agencies. By simply sharing information and resources, LPHDs are able to gain information that is not otherwise accessible. Networking was a step shy of coordination where some intended alignment of activity would be achieved. Coordination may happen but would be largely serendipitous. But networking underlies all other levels of regional action.
2. Coordination: As defined in the NACCHO typology, coordination involves active harmonization of individual LPHD efforts.
3. Developing and adopting standards of practice: This was another level of regional readiness defined by PPHR planning groups. One distinction from the NACCHO typology was the development of best practices, suggesting that by sharing information from each LPHD, best practices within the region could be identified or standards of practice could be developed.
4. Centralizing: LPHDs felt that for some functions, centralizing resources (e.g., training) would be beneficial to help achieve some efficiencies and avoid duplication of efforts or allow new capacities to be obtained without a major investment of resources by any one LPHD.

As with NACCHO's PPHR typology, these four levels were hierarchical on a continuum based on a coordination dimension.

To apply this framework to emergency preparedness functions that would largely be carried out by independent LPHDs, an assessment tool was developed to

inventory the existing functional capabilities of NIPHC members and solicit their views on how each function should be handled regionally. Each LPHD completed the tool and the results were consolidated and reported back to members in several early planning sessions. This activity served as a form of strategic assessment and vision development that permitted NIPHC members to project a realistic vision of regional preparedness that would be both functionally based and grounded in the reality of current capabilities. This was necessary as, while nearly all participants could see in principle the value of a regional approach to preparedness, all were operating from the experience of their individual LPHD efforts, making it difficult to see functionally what would happen at the regional level.

While the vision for regional preparedness for nearly all functions revolved around coordination, as opposed to standardization or centralization, a mechanism was needed to ensure the alignment or harmonization of individual actions. It was decided that coordination could be best achieved through a set of policies that would govern each function. These policies provided guidelines for how each member LPHD agreed to carry out a particular function. The policies also provided a necessary level of uniformity and predictability for regional preparedness, while preserving the autonomy and flexibility that individual LPHDs required to integrate that function into a local emergency response repertoire.

By comparison, standardization creates a higher degree of uniformity among LPHD functions by prescribing a single set of procedures, protocols, or standards to which all LPHDs would adhere. For larger independent LPHDs, standardization does not necessarily improve performance unless the standardized functions fill well within an LPHD's response repertoire. A one-size-fits-all approach may not adequately take into account the functional diversity that has been deliberately derived from a planned configuration of local resources. NIPHC standardized few functions including some training, public information message content, mutual aid, and region-wide communication.

Making regionalization work for preparedness

Collaborative action does not just happen by good intentions alone; carrying out collaborative activities requires work. NIPHC's role in assisting the northern region LPHDs involves providing technical assistance to coordinate preparedness and response activities and creating the infrastructure for LPHD staff to better fulfill their job duties. NIPHC project staff assist the region in pursuing common goals by managing projects and meetings set by various committees, assisting with the development of standard policies, maintaining a centralized information database, or helping to implement policy recommendations.

Emergency preparedness and PPHR have caused NIPHC to take a more critical look at what regionalization means and how it should be organized and governed, given the complexities of collaborative action in this area. NIPHC has extended its existing mechanisms for organization, governance, and decision making for use in emergency preparedness, especially for PPHR.

- The NIPHC Board of Directors met monthly to review the PPHR workplan updates, oversee and approve the project, and approve a final version of the PPHR plans.
- A PPHR Steering Committee consisting of the NIPHC Executive Director, the NIPHC 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 oversaw the PPHR project. The Steering Committee assigned tasks to other committees, monitored and reviewed project progress, and ultimately provided the final document to the NIPHC Executive Committee for approval. The Steering Committee met at least weekly to manage the project.
- The NIPHC Emergency Preparedness Committee provided technical guidance on the project and reviewed and approved plan components generated by the Steering Committee or other NIPHC committees. This committee provided final review of the overall PPHR submission.
- NIPHC PPHR committees, including the Public Information Officers and Communicable Disease and Epidemiology Committee, managed the technical and content-oriented components of the PPHR plan.
- Two consultants were engaged to write the actual response plans.

One result of regional PPHR planning that reflects the complexity and differing nature of regional emergency preparedness and response, compared with other functions, is the greater formality in the creation of written plans and memoranda of understanding. Most decisions made by the board are documented in minutes of board meetings requiring few other forms of formal documentation beyond routine contracts

and communications with external entities. However, for emergency preparedness, several additional documents were created. An early regional response plan was prepared in 2003 under the leadership of the Chicago Department of Public Health (CDPH). This plan was a required deliverable under the grant agreement between CDPH and CDC, which directly funded Chicago for emergency preparedness. A formal mutual aid agreement among LPHDs was also put into place about this time. While this agreement was statewide, NIPHC members recognized its practical importance as a vehicle for mutual assistance across jurisdictions in the Northern Illinois region and worked collaboratively to ensure that the terms of the agreement were most suitable for mutual aid among NIPHC members. The most extensive planning document resulted from the PPHR effort. While a formal plan was not a specific requirement of PPHR, it was soon realized that a formal regional emergency response plan would be needed to capture the full range of policies, agreements, and proposed actions that had emerged from the emergency preparedness planning conducted under PPHR.

The resulting regional preparedness plan was not the usual emergency operations plan that was developed by each LPHD for their jurisdictions, but more a policy plan and resource inventory that integrated the individual LPHD plans and identified region-wide resources that could be called on, if needed, during an emergency. But the plan set the stage for other regional efforts needed to enhance preparedness capacity. These included:

- Training of epidemiologists on use of Epi Info and GIS tools;
- Regional message mapping and development of a media strategy;
- Shared data files for more uniform communicable-disease investigation;
- Joint consideration of the legal environment of each jurisdiction that would have to be engaged in a preparedness response; and
- Joint advocacy in pressing the state health agency for a greater role in statewide emergency preparedness planning, including preparation of the grant proposal to CDC and funding allocation decisions.

While many partner organizations of the region's governmental public health agencies are involved in the emergency preparedness planning work of NIPHC and its individual member LPHDs, most emergency preparedness planning activities conducted by NIPHC do not involve these partner organizations. This reflects the role of NIPHC efforts to coordinate its members' actions and the preference of members to not have NIPHC usurp any function or the identity of member LPHDs. One exception has been the tabletop exercise conducted for PPHR, which did involve external organizations.

For the NIPHC, a regional approach existed before preparedness activities. NIPHC members were coordinating their activities for a variety of public health conditions including WNV, seasonal flu vaccine shortage, emerging infections (i.e., monkeypox), and responding to local flooding. More broadly, NIPHC members dealt regionally with issues such as surveillance and disease reporting, laboratory capacity, hospital and medical care availability, and public health reform. Beyond coordinating member LPHD action for these issues, a major focus of pre-preparedness work was to advocate for state action on these issues.

This earlier experience created a core regional organizational capacity to take on the complexities of preparedness and PPHR. It also shifted the focus from what the state heath agency could do to be more responsive to the region, to how the region itself could be more self-reliant and a source of public health leadership in Illinois. Part of this was a realization that the needs of smaller down-state LPHDs were always going to dominate the attention of the state health agency. Rather than challenge this orientation, a more effective response would be to create a workable division of responsibility for public health activities statewide, with the state health agency more focused on where it was most needed and the NIPHC region taking greater responsibility for the Northern Illinois area.

Regional influence was demonstrated in a dispute between Chicago and the state health agency over the functionality of electronic disease surveillance systems. Both the city and the state had embarked on building separate systems that were not fully compatible, and neither side seemed ready to compromise. The possibility of two incompatible systems alarmed non-Chicago NIPHC members, which were expected to use both systems. NIPHC created a forum for the city and state to showcase their systems in an effort to create a pathway to compatibility, while at the same time gently informing both sides that incompatibility would force a choice between systems and risk that the system not selected would eventually be orphaned. The city and state quickly resolved their differences, resulting in a best-of-breed approach that permits interoperability.

PPHR allowed that greater sense of responsibility and independence to take shape in the NIPHC region. The greater level of operational detail required in PPHR and regional preparedness planning advanced

the region's capacity for joint action, not just for preparedness, but for other public health functions as well. This capacity was tested with the response to Hurricane Katrina. While the region was not directly affected by the hurricane, Northern Illinois received evacuees. Relief efforts were coordinated on a regional basis and NIPHC member LPHDs routinely shared information, investigated rumors, monitored resource capacity, and supported those members that did receive evacuees. The greatest impact of these efforts probably was less in enhancing the actual response and more in raising awareness in a very concrete way of the need to address specific gaps in response capacity. Having reserve capacity in the region allowed those LPHDs that did receive evacuees to meet these new demands, while at the same time maintaining all routine local public health functions. Unlike mutual aid, which is not part of a jurisdiction's resource base and is only tapped in a clear emergency, regional capacity is more routinely present and can be called upon more readily to handle a greater variety of events.

Efforts to build regional preparedness capacity also set the stage for pandemic flu planning. The planning infrastructure that was established for PPHR was activated for pandemic flu. Through the pandemic flu concurrence process, NIPHC persuaded the state health agency to take a statewide regional approach for planning and response. This was implemented through state funding from the federal pandemic flu grant to NIPHC and other regions for pandemic flu planning. While the focus of preparedness would still be on individual LPHDs statewide, a regional structure would now play a major role. The state agency now recognized the capacity of NIPHC and delegated responsibility for plan development and convening exercises to NIPHC for the Chicago metropolitan area. The state health agency has specified the overall framework and guidelines for meeting the federal grant deliverables, but responsibility for meeting the deliverables lies with NIPHC. A much more collaborative working relationship with the state agency has resulted, with state staff actively participating in NIPHC pandemic flu regional work and NIPHC preparedness staff serving as staff to the state health agency when the state is taking the lead role. This may be one of the most significant accomplishments from building regional preparedness. For the first time, state and local resources are being applied in a synergistic manner, and the result is expected to reflect the greater capacity that has been tapped.

In a more parochial sense, another significant accomplishment is that a functional and sustainable regional emergency planning and response infrastructure is in place for the NIPHC region composed of people, organizational structures, decision mechanisms, and resources. One indirect but important benefit of regional efforts is more robust individual LPHD capacity. This is largely accomplished through the routine sharing and exchange of information that is a byproduct of working together. This exchange exposes individual members to the experiences of their colleagues and shortens the learning curve in adopting best practices for all.

A sense of mutual trust has also evolved among members who not only share what works well, but also are candid about deficiencies and challenges that they face. There is even an expectation that an LPHD's preparedness plans may be deficient in one area compared with a neighboring jurisdiction and that a candid exploration of plans will expose and correct these deficiencies. This is an important attitude shift, as many LPHDs are quite protective of their preparedness plans, fearing too much exposure will surface a deficiency and risk public criticism. This new attitude reflects a belief in synergy among NIPHC members. The region is better prepared because of collective action, but individual LPHDs are also better prepared by participating in that regional effort. And the latter is most important given the strong emphasis on individual LPHD autonomy and identity in the region.

ROLE OF THE STATE AND FEDERAL GOVERNMENTS

The relationship between the NIPHC region and the state heath agency was strained through much of the regional preparedness capacity building. PPHR was undertaken by NIPHC despite the state health agency's initial misgivings about regionalization. The state public health agency was ambivalent to regions for emergency preparedness, having first established regions for this purpose in 2000, only to change its mind just as NIPHC efforts for PPHR were starting to unfold. The state's ambivalence reflected a change in leadership during this time but also an uncertainty about how to organize local emergency preparedness, together with a belief that NIPHC efforts would encroach on the state's prerogative and authority.

The vast majority of LPHDs in Illinois are small and rely on the state health agency for guidance and to carry out some functions, so the state-local relationship is rather paternalistic. Chicago has always acted in an independent manner, which has been largely accepted by the state agency. This independence was reinforced for bioterrorism preparedness by the independent funding of Chicago (and three other large cities) by CDC. However, the largest LPHDs in the Chicago met-

ropolitan area, outside of Chicago, had only grudgingly accepted the state's paternalistic role. The formation of the NIPHC signaled a change in this relationship and with PPHR, this change was perceived at the state level as somewhat threatening. The state first attempted to ignore the effort, seldom participating in regional planning activities and expressly dealing with the individual members on emergency preparedness matters as if the regional effort did not exist. This action tended to complicate the regional planning efforts, as LPHD emergency preparedness coordinators were caught between the state's expectations for individual LPHD performance and regional planning efforts. Despite this situation, NIPHC leaders extended invitations to state staff to participate in regional planning meetings, and by the time regional tabletop exercises were held, several state emergency planning staff participated in the exercise.

Actions by federal agencies indirectly supported the regional preparedness efforts in three ways. The biggest benefit came from the local concurrence expectation required of states by CDC for the bioterrorism grant. States were required to formally obtain concurrence of LPHDs representing the majority of the state's population on the grant proposal before its submission. Representing two-thirds of the state's population, NIPHC members leveraged the concurrence process to create a more supportive state framework for the regional work. Increasing federal performance expectations also indirectly helped regional efforts in that meeting those expectations within the resources available required greater state and local cooperation and consideration of alternative approaches to meet the expectations. Finally, federal agencies reported on the success of other regional efforts to bioterrorism preparedness capacity. Reports of these efforts helped reinforce the credibility of regionalization as an effective approach to preparedness.

CONCLUSIONS

The impact of regionalization and its focus on preparedness has acted as a positive self-reinforcing loop for both preparedness and broader public health functions. The initial NIPHC regional efforts allowed preparedness to be successfully approached, which in turn created greater capacity and confidence for broader regional efforts. NACCHO's recognition of PPHR was an important ingredient in this sequence as it provided an independent form of validation that the efforts were successful.

The PPHR effort followed by pandemic flu planning has established regionalization as a legitimate approach to organizing emergency preparedness in Illinois. NIPHC members have specifically placed greater statewide regionalization on the priority issue agenda for the state health agency to address over the next year, and has made this a condition for concurrence with the state bioterrorism grant application in 2007 and 2008. A clear expectation was made known by NIPHC to the state health agency that long-term plans for bioterrorism and emergency preparedness planning must move the state toward greater regionalization both in building capacity and in distributing funds. Also part of the recent concurrence letter was an expectation for greater transparency and involvement of the state's largest LPHDs in the decision-making process on emergency preparedness. In response, the state health agency recently held a mini strategic planning retreat to address this issue, and greater regionalization emerged as a consensus priority among LPHD representatives statewide—not just from Northern Illinois.

This latter point reflects a more general impact of regional efforts, which is an expectation for more shared leadership statewide among the state health department and the largest LPHDs in the Northern Illinois region. This second source of statewide leadership was one of the original goals for the formation of the NIPHC, recognizing that relying solely on the state agency for leadership was risky and ineffective, as evidenced by the failure to secure increases in public health funding over the past decade. As an executive department of the governor, the state health agency was too often unable to exert independent leadership to advance statewide public health issues. This was the case regardless of which person or political party occupied the governor's mansion or who held the office of state health director. Even though NIPHC member LPHD directors were often appointees of their local political governance, NIPHC as a regional consortium was better positioned than individual members to challenge the status quo in the general assembly. Individual members who felt uncomfortable with a position could simply decline to actively support it, but passively allow it to move forward through the Consortium.

Regionalization has given LPHDs expanded influence for addressing broader health issues, such as access to health-care services, that are felt on a regional level and require regional (if not statewide) action to be effectively addressed. NIPHC has served to organize the access-to-care concerns of individual members and to focus those concerns in regional forums called on the subject, in addition to coordinating proposals for action—especially at the legislative level. For example, the financial burden faced by Cook County Hospital was seen not just as an issue for Cook County, but also

as a regional issue in recognition of the small but real role that the hospital played in accepting patients from throughout the region. NIPHC also took the lead in proposing innovative changes to the state's Medicaid reimbursement policy that would take advantage of federal Medicaid payment rules to increase payment for health-care services sponsored by LPHDs, at no additional cost to the state. While individual health departments may have limited influence on some issues, by concentrating their efforts and providing a more targeted focus, this influence can be leveraged by allowing them to participate as players in regional issue arenas and through organizing behind solutions. While this is not a new strategy for other organizations (i.e., hospitals, which have used it for decades), LPHDs have yet to effectively exploit it.

NIPHC's model of regionalization may also present a workable alternative to how regionalization is usually conceptualized. Traditional notions of local public health regionalization often envision the equivalent of a large regional health department, which consolidates all functions, administration, and governance across multiple jurisdictions. This centralization is often not practical to implement due to political resistance, legal barriers, geographic distance, or administrative feasibility. The NIPHC model creates an effective balance that preserves the positive features of LPHDs but overcomes the limitations. Consolidation is selective and, in the case of NIPHC, minimal. A highly focused coordination of functions allows virtual consolidation in a strategic manner while maintaining the constituent members' autonomy and independence. The focus of regionalization is primarily on planning and policy development, which is in keeping with regional approaches adopted by other sectors such as education, transportation, and economic development

Region-specific themes and issues

While much of the Northern Illinois regional experience should be relevant to other areas considering regionalization, there are certain characteristics of this region and its approach to regional work that make this case at least somewhat unique. One is the presence of a very large city in the region. The largest cities behave in many ways like states and, while the City of Chicago is a founding member of the region and participates in the regional activities, its influence is often in greater proportion than its actual size. This influence derives from its traditional independence as an LPHD in the state, and from a political, financial, and functional perspective as the nation's third-largest city.

A related characteristic is that with Chicago, the Northern Illinois region is so much larger than the remaining portion of the state outside the region, so it may be difficult not to feel that the region is too dominant and therefore threatening to both the state and to other LPHD interests. The potential for upsetting the overall balance is great, and NIPHC's organization as a 501(c)4 entity may contribute to this perception. The strong role that policy plays as a focus and organizing force in this region may also make it unusual. This, too, grows out of the size of the individual members and the clear understanding that the first purpose of the NIPHC is enhancing the capacity of the individual members as opposed to building a centralized capacity that would substitute for function that members could not perform without the regional effort.

A related theme is the NIPHC's lack of formal authority. Perhaps the most relevant implication of this feature is that it demonstrates that authority is not absolutely necessary for either regional formation or effective regional action, especially if this action is focused on coordination and policy. Even when there is some opposition from a usual source of authority (e.g., the state health agency), regional work is possible. Not having formal authority may present certain advantages, especially for preparedness, as its absence avoids conflicts with other entities that may be protective of their roles, and it provides flexibility in pursuing purposes and functions based on need as opposed to some official and potentially constraining mandate.

The structure of the Northern Illinois region may also pose some unique challenges. Not having a clearly defined and officially recognized purpose (e.g., emergency preparedness planning) means that work on defining the purpose must be ongoing, which is reflected in the emphasis that the NIPHC places on strategic planning. Additionally, while agency directors are committed to regional efforts, that commitment often is not fully communicated internally and does not always trickle down to staff assigned to regional projects.

At the agency level, reaching and maintaining consensus among diverse members, each having their own local interests and needs, can be tricky. It is also difficult to manage clear NIPHC project deliverables in a manner that creates value for each LPHD and encourages participation, but does not place an additional work burden on each LPHD staff participant.

Finally, other functions with which LPHDs interact in Illinois also have regional structures (e.g., homeland security, hospital planning, emergency response) that do not match those of public health. So, having a regional public health entity in Northern Illinois on one hand is helpful in creating visibility and reducing fragmentation that multiple public health agencies

present to these other regional players. But not having the same geographic boundaries as these other regional entities can undercut this positive feature, as it may be easier in some cases for the individual NIPHC member public health agencies to deal with these other regional entities because their more compact geography provides a better fit.

While public health regionalization in Illinois is still very much a work in progress, regionalization has gotten a secure foothold in the Chicago metropolitan area, from which regional approaches to emergency preparedness and broader public health functions can expand to improve the effectiveness and influence of public health statewide.

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