

Research Brief

June 2010

H1N1 After Action Review: Local Health Departments in North Carolina

Introduction

In June 2009, the North Carolina Preparedness and Emergency Response Research Center (NCPERRC) agreed to help several local health departments (LHDs) conduct a comprehensive evaluation of their response to the 2009 H1N1 outbreak. During H1N1 site visits to nine LHDs in August and September 2009, NCPERRC facilitated After Action Reviews in the form of a look-back study. After Action Reviews focused on LHD response activities from April through August 2009, which was part of the Phase 1 response period. This report provides observations about the response of these nine agencies to H1N1, and makes recommendations that might improve the response to future events (including but not limited to H1N1 outbreaks).

Background

On April 17, 2009, the Centers for Disease Control and Prevention (CDC) announced the first confirmed cases of H1N1 in United States. The two initial cases occurred in California and affected children under the age of 12. On April 26, the CDC declared a Public Health Emergency. By the end of the month, H1N1 cases had been identified in 12 countries and the United States had reported its first fatality.

North Carolina announced its first confirmed case on May 1. In response, state and local public health officials activated their internal incident command systems (ICS) and began response planning and mitigation. As the outbreak spread across the state, LHDs responded by reassigning staff to the outbreak

and dedicating additional working hours to response activities.

In August and September 2009, the North Carolina Preparedness and Emergency Response Research Center (NCPERRC) facilitated After Action Reviews at nine local health departments to evaluate their response to the 2009 H1N1 outbreak. This report provides observations about the response of these agencies to H1N1, and makes recommendations that might improve the response to future events (including but not limited to H1N1).

Common Areas of High Performance

The following was observed in at least half (5 of 9) LHDs:

1. Local Emergency Management Officials (EMOs) were actively involved in LHD planning, including attending all partner planning meetings and assisting with logistical issues as needed.
2. LHDs developed an internal ICS structure for H1N1 response. This included assigning staff to ICS positions, reporting incident response up the chain of command, and coordinating response activities among those assigned to ICS positions.
3. LHD plans addressed the provision of law enforcement for containment measures during an outbreak if such measures were to become necessary.

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4. Contact information for response partners (clinicians, daycare facilities, and pharmacies) was up-to-date and readily available when LHDs needed to send H1N1 notices and guidance.
5. An internal, trained LHD Public Information Officer (PIO) took part in the H1N1 response.
6. Communicable disease staff maintained a line listing of suspected and confirmed cases that included information related to testing, contact tracing, and communication with affected parties.
7. Laboratory plans/protocols were followed (includes specimen collection and handling at LHD).
8. LHDs worked closely with school nurses to actively monitor the disease outbreak.
9. LHDs involved local non-profit and/or faith-based organizations in their response activities.
10. LHDs encouraged public health volunteers to register on SERVNC, the NC volunteer management system.

Common Areas for Performance Improvement and Recommendation

The following was observed in at least half (5 of 9) LHDs:

1. LHDs had multiple preparedness plans with duplicative, outdated information.
Recommendation: Consider integrating internal plans where possible. Plans should be scalable and written so that volunteers who may assist in a large event can read and understand them quickly. (See note below.)
2. Plans and/or protocols did not include specific strategies to provide food, medication, water, and other services to individuals who are placed under isolation/quarantine.
Recommendation: Work with local EMOs, human services agencies, and non-profit and faith-based organizations to establish written

agreements to ensure access to basic necessities for those who are home-bound due to isolation and quarantine orders.

3. LHDs did not have an internal mechanism (coordinator or common drive) to coordinate all outgoing messages to clinicians and other response partners at the local level.
Recommendation: Consider assigning one person (such as PIO or administrative staff) to manage outgoing messages to ensure consistency and reduce duplication. Maintain a log of outgoing messages available to other LHD responders in a central location such as a shared intranet drive.
4. LHDs did not use WebEOC locally for H1N1 response.
Recommendation: Ensure that staff members receive WebEOC training prior to an event. Consider using events such as H1N1 as hands-on training opportunities for use of applications like WebEOC. (See note below.)
5. Daycare facilities were not actively engaged in response and surveillance activities.
Recommendation: Given the likelihood of H1N1 transmission among children and staff in daycare centers, involve local childcare facilities in planning and response efforts.
6. LHDs did not actively engage local businesses in response activities.
Recommendation: Consider adopting ideas offered by some LHDs to actively engage businesses, including: inviting the Chamber of Commerce to participate in H1N1 planning and response meetings; developing binders for the business community that cover business-related issues for H1N1; and holding forums where local businesses can ask questions of LHD staff.

Notes on Recommendations

Recommendation 1: Integrating internal plans is often referred to as the all-hazards approach, which NACCHO describes as integrating public health

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preparedness efforts “into the public health infrastructure within epidemiology, nursing, community outreach, and education efforts.”¹ While specific planning may be necessary for some events, it may be beneficial to review current plans for duplication and combine common information into the overall LHD Emergency Operations Plan. Examples of “common” information include National Incident Management System (NIMS) concepts such as Public Health legal authority, lines of communication, interaction/integration with state and local officials, and surge capacity. LHDs can find guidance documents and examples of plans on the NACCHO website at www.naccho.org and on the Lessons Learned Information Systems (LLIS) database. (Public health professionals can sign up to access the LLIS database, www.llis.dhs.gov. Additional information about all-hazards planning is available on the CDC’s website, <http://www.bt.cdc.gov/hazards-all.asp>.)

Recommendation 4: WebEOC is an internet-based ICS-compliant online communication tool. State and local response partners in North Carolina used WebEOC to allow real-time cross-agency communication during disasters and facilitate a coordinated response. LHDs reported that they did not use WebEOC because it was not available, because it was not necessary given the level of response, and because they used other systems. Those that used WebEOC reported that the H1N1 event provided a valuable learning opportunity for staff to use the system.

Conclusions/Summary

Although these recommendations should be viewed as suggestions only, LHDs may wish to consider implementing them when they conduct preparedness planning. In some cases, agencies may determine the benefits of implementation are insufficient to outweigh the costs; in others, agencies may identify alternative solutions that are more effective. Each agency should review the recommendations and determine the most

appropriate actions and the time needed to implement them.

References

1. NAACHO (2009). Statement of Policy: Local Public Health All-Hazards Preparedness. Retrieved October 5, 2009; <http://www.naccho.org/advocacy/positions/upload/03-03-All-Hazards-Preparedness.pdf>.

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