State of Ohio

2009-2010

Local H1N1 Response

PREVENTION SUCCEEDED!

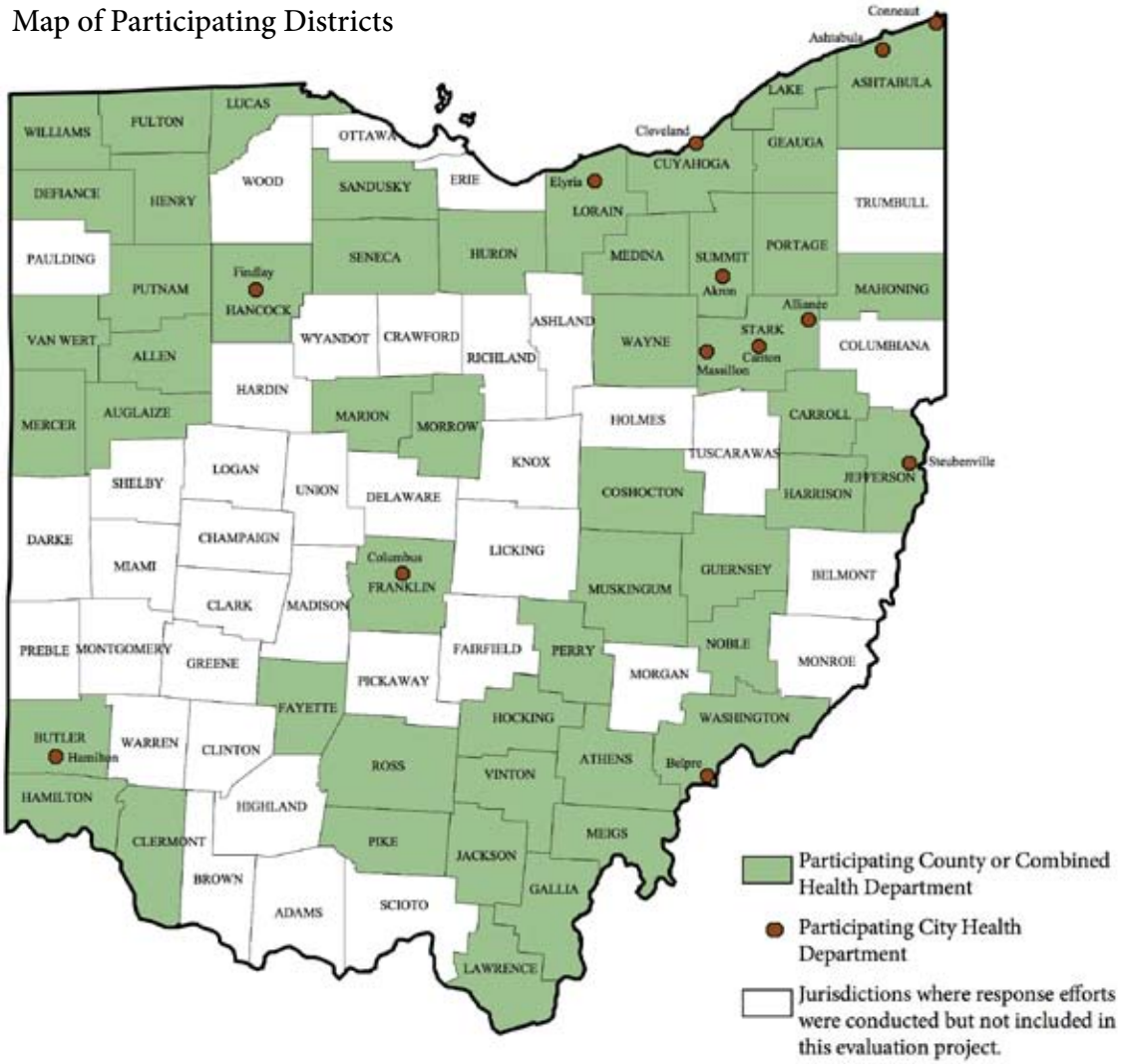
Purpose of this project

After-action review (AAR) processes are a critical part of all response efforts. These activities involve critical appraisal of response performance in drills, exercises, and actual response activities. According to federal preparedness guidelines, an after-action report must be prepared following each of these types of activities. The report is then utilized to prioritize improvements to plans, processes, and other aspects of response to a broad range of hazards.

In the fall of 2009, the mass immunization effort in response to the H1N1 influenza outbreak offered a real-time mobilization of the local, state and federal public health system that required evaluation through the AAR process. This joint evaluation project was offered by the Association of Ohio Health Commissioners, the statewide association representing the 130 local health districts in Ohio, to assist participating jurisdictions in conducting local evaluation, and also allowed for a statewide evaluation of local effort.

61 local health districts, covering **70%** of Ohio's population, participated in this evaluation project.

Map of Participating Districts



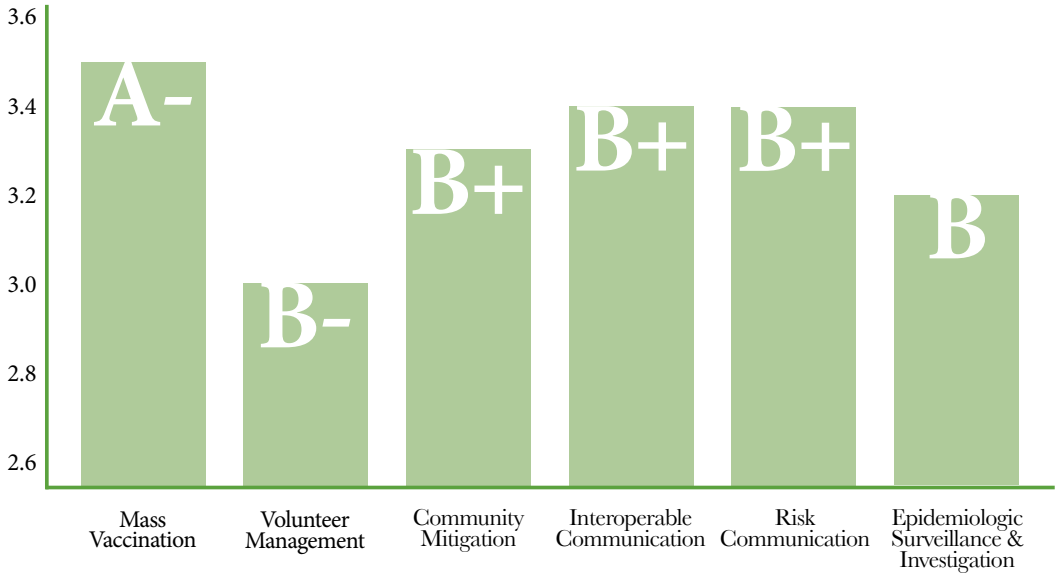
> "The one-time federal funds enabled Ohio's local health departments to effectively respond to this very real public health threat. Our capacity to respond in the way our communities demand is contingent upon adequate funding to assure an effective planning and response strategy."
>
> *Terry Allan*
> *Cuyahoga County Health Commissioner*

Background

In April 2009, novel influenza A (H1N1) emerged as the cause of illness in two children in the United States. Soon, the virus was identified in states and cities across North America. On June 11, 2009, the World Health Organization (WHO) declared a worldwide pandemic, indicating uncontained community-level transmission of the H1N1 virus in multiple areas of the world.

As vaccine became available in October 2009, the main goal of the summer and fall response was to prepare for and conduct a mass vaccination campaign initially targeted at high risk groups within the population. This response required the mobilization of public health resources and required a coordinated community, state, and national response effort.

[http://www.flu.gov/timeline/]



Average capability performance grades across all participating jurisdictions

Overall Summary - Success!

The response to H1N1 was the **largest mobilization of public health resources** to combat an emerging infection in the nation's history and required a coordinated community, state, and national response effort. Combined across the jurisdictions who participated in this evaluation project:

3,784 Total number of **clinics** held

599,011 Total number of H1N1 **vaccinations** administered by participating jurisdictions

4,772 Number of **volunteers** indentified/registered as available to assist with H1N1 response activities among participating jurisdictions as of 12/31/09

4,483 Total number of **volunteers utilized** during 2009 H1N1 response efforts

Local public health response efforts yielded a **true prevention success** through systematic mass vaccination efforts in every County of Ohio.

The full state-wide summary reports can be accessed at the following URL: http://www.aohc.net/associations/4594/files/Statewide%20H1N1%20AAR%20Final%208-10.pdf

"This is what local public health departments do. We work everyday to prevent infectious disease from spreading in your community. With your help, and by working with our partners we will be successful."

-Timothy Ingram
Hamilton County Health Commissioner
October 7, 2009

A – Capability 1: Mass Vaccination

Mass vaccination is the capability to protect the health of the population through the administration of critical interventions in response to a public health emergency in order to prevent the development of disease among those who are exposed or are potentially exposed to public health threats. This capability includes the provision of appropriate follow-up and monitoring of adverse events, as well as risk communication messages to address the concerns of the public.

Best practices:

- Central coordination in tracking vaccine and supplies
- Site-specific data systems
- Use of clear staff roles via the Incident Command System
- Targeted clinic locations for hard to reach populations

Ongoing Challenges:

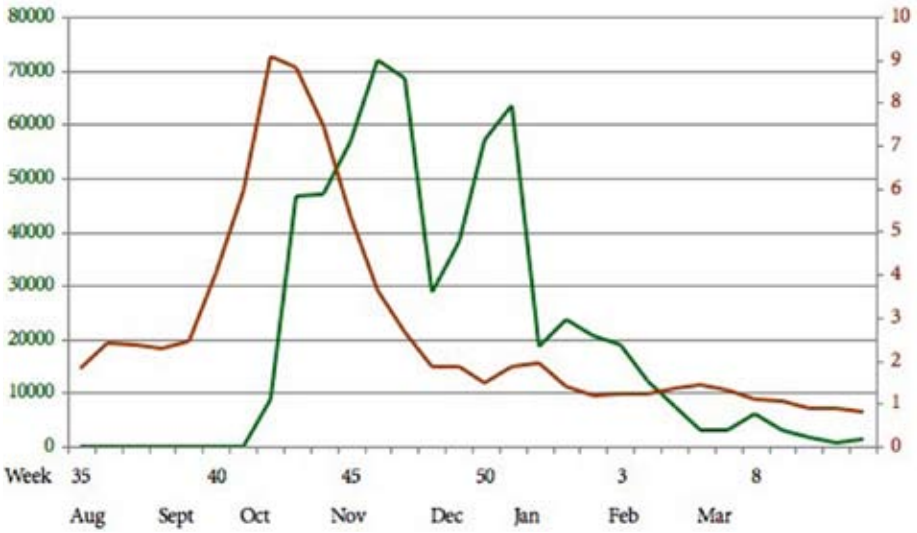
- Statewide immunization data system needs
- Private vaccine provider concerns

Mass vaccination lessons learned:

- Communication is key
- Planning is critical
- Team-work is vital
- Community-wide partners are essential

> "The most important consideration for mass vaccination that the Health District learned as a result of H1N1 mass vaccination activities was that the response would have not gone as smoothly and efficiently as it did without the support of the clinic location hosts. Additionally, all of the past efforts for training to operate PODs made the process easier."
>
> *–Clermont County Health Department*

3,784 Total number of clinics held
10/7/2009 First clinic reported
3/31/2010 Last clinic reported
599,011 Total number of H1N1 vaccinations administered by participating LHDs
891,383 Total number of H1N1 vaccine doses shipped to participating LHDs
67.2% Proportion of available H1N1 vaccine administered during reporting period



Vaccination administered in participating jurisdictions

Percent of outpatient visits for influenza-like illness reported in HHS Region 5 *(IL, IN, MI, MN, CH, WI)*
Source: http:cdc.gov/flu/weekly/regions2009-2010/senreg5.htm

B– Capability 2: Volunteer Management

Volunteer Management is the capability to effectively coordinate the use of volunteers in support of domestic incident management.

Best practices:

- Contact database of volunteers
- Volunteer credentialing
- Volunteer recognition

Ongoing Challenges:

- Limited number of volunteers and recruitment
- Limited volunteer training

2009 H1N1 clinic volunteer recruitment activities:

- Communication with Medical Response Corp (MRC) members
- Advertisements in multiple forms of media
- Contact with local schools of nursing, medicine, and/or pharmacy
- Presentations at community events

> "Our department kept open lines of communication with the volunteers and ensured that they had any information or resources needed to assist them in accomplishing their task. We determined that the training provided prior to the clinics was essential in assisting our department in operating successful clinics."
>
> *–Findlay City Health Department*

4772 Number of Volunteers indentified/registered as available to assist with H1N1response activities among participating jurisdictions as of 12/31/09

4483 Total number of volunteers utilized during 2009 H1N1 response efforts




B+ Capability 3: Community Mitigation

Community Mitigation is the capability to protect the health of the population through the use of community-level measures in order to contain the spread of disease. Isolation of ill individuals may occur in homes, hospitals, designated health care facilities, or alternate facilities. Other actions may include steps aimed at separation and restriction of movement of persons who, while not yet ill, have been exposed to an infectious agent and may become infectious.

Best practices:

- Public service announcements and media messages
- School-based communications

Ongoing Challenges:

- Community engagement
- Intra-organizational communication and cooperation
- Implementation of public health recommendations

> "Education was the key; getting into as many businesses and schools as possible to provide correct information early, with updates. That way the correct message was getting out there."
>
> *–Hamilton City Health Department*

15 Number of H1N1-related school closures reported by participating jurisdictions

> *"The public no longer sees H1N1 flu as a threat due to both the decline in the number of local cases and the mild nature of most cases."*
>
> -Henry County Health Department

B+

Capability 4: Interoperable Communication

Communications interoperability is the ability of response partners to talk within and across agencies and jurisdictions via all available communications systems, exchanging voice, data and/or video with one another on demand, in real time, when needed, and when authorized.

Best practices:

- Traditional modes of communication
- Voice over Internet protocol

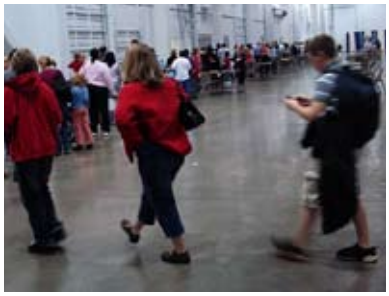
Ongoing Challenges:

- Overwhelmed infrastructure
- Diffusion of timely and accurate information

91% of participating jurisdictions reported that all communications systems were functional during H1N1 response.

> "Communications infrastructure built over past years provided a strong foundation for rapidly developing response based communications plans. Problems were rapidly identified and solutions were typically easy and quickly resolved using plans developed and resources available in the community."
>
> *–Franklin County Health Department*

> *"There were times when there were not enough hours in the day to assure all information was pushed out to local planning partners. Information changed so rapidly that it was difficult to stay current."*
>
> -Van Wert County Health Department



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Capability 5: Risk Communication

The Risk Communication capability includes public information, alert/warning and notification. It involves developing, coordinating, and disseminating information to the public, coordinating officials, and incident management and responders across all jurisdictions and disciplines effectively.

Best practices:

- Organization and planning
- Developing and disseminating a consistent media message
- Timely updates

Ongoing Challenges:

- Frequently-changing information
- Rumors, misinformation and complacency
- Reaching targeted subpopulations

68% of participating jurisdictions reported the need to refute vaccine safety mis-information provided by other groups.

> "Saturating the media outlets with H1N1 information and making it available on our web site has proven to be very effective. H1N1 information and clinic schedules being placed at various sites in the county assists those that do not read the paper or have internet access."
>
> *–Wayne County Health Department*

> *"The hardest thing to overcome was attempting to explain to an elderly person (65 or over with or without a medical condition) that they were initially not eligible for vaccination."*
>
> -Elyria City Health Department

B Capability 6: Epidemiologic Surveillance & Investigation

The Epidemiological Surveillance and Investigation capability is the capacity to rapidly conduct epidemiological investigations. It includes exposure and disease detection, rapid implementation of active surveillance, maintenance of ongoing surveillance activities, epidemiological investigation, analysis, and communication with the public and providers about case definitions, disease risk and mitigation, and recommendation for the implementation of control measures.

Best practices:

- Effective, efficient communication with partners
- School surveillance systems
- Applying standard practices to a novel situation

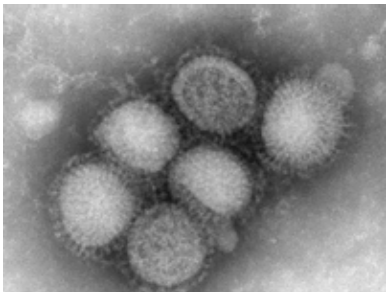
Ongoing Challenges:

- Cooperation from surveillance partners
- Quality and timeliness of data collection

10 Number of influenza associated pediatric mortalities during the 2009-2010 influenza season.

> "Establishing a close working relationship with hospital ICP nurse and local physicians was critical as we navigated the ever-changing H1N1 situation. Working over the past several years fostering these relationships was critical for communicating health messages and H1N1 testing algorithms."
>
> *–Coshocton County Health Department*

> *"...the data we were collecting did not match what the public wanted to know."*
>
> -Pike County Health Department



Influenza-related surveillance indicators tracked for H1N1:

- Emergency department visits
- Over-the-counter sales of thermometers and related medications
- Ohio Disease Reporting System
- Direct reports by physicians and hospitals
- Influenza-associated deaths (especially pediatric)

Ohio Summary of Selected Influenza Surveillance Components

2009-2010 Influenza Season*

Laboratory Confirmations

Influenza-associated Hospitalizations	Seasonal Influenza A/(H1)	Seasonal Influenza A/(H3)	Influenza B	Pandemic Influenza H1N1	Pandemic Influenza A/(H1) Inconclusive
3201	1	1	0	1194	29

Provisional data from the Ohio Disease Reporting System and the Laboratory Information Tracking System.
Numbers subject to change due to reporting delays.
*2009-2010 influenza season: August 30, 2009 (Week 35) to May 22, 2010 (Week 20).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