



Public Health Preparedness: A Guide for Community Stakeholders

The State of Preparedness

Trust for America's Health (TFAH) and the Robert Wood Johnson Foundation (RWJF) in 2009 released the seventh annual *Ready or Not? Protecting the Public's Health from Diseases, Disasters, and Bioterrorism* report, which finds that the H1N1 flu outbreak has exposed serious underlying gaps in the nation's ability to respond to public health emergencies and that the economic crisis is straining an already fragile public health system.

Other key findings:

- ◆ All states were assigned a preparedness score based on a 10 point scale. 8 states scored a high of 9. Wisconsin scored a solid 8
- ◆ Investments made in pandemic and public health preparedness over the past several years dramatically improved U.S. readiness for the H1N1 outbreak
- ◆ Decades of chronic underfunding meant that many core systems were not at-the-ready
- ◆ Lack of real-time coordinated disease surveillance, laboratory testing, an outdated vaccine production system, limited hospital surge capacity and a shrinking public health workforce were concerns noted

Some recommendations brought forth include:

- ◆ Ensure stable and sufficient funding (27% cut to federal funding since fiscal year 2005 must be restored)
- ◆ Conduct an H1N1 After-Action Report and Update Preparedness Plans with Lessons Learned
- ◆ Increase Accountability and Transparency (the public needs to see the progress being made)
- ◆ Improve Community Preparedness (At-Risk Populations need to be targeted more than they are)

Since September 11, 2001, and the anthrax incidents that followed, public health and hospitals have been thrust to the forefront of preparedness. Great strides have been made in Wisconsin's public health preparedness efforts, and Wisconsin's public health system is more prepared now than it has ever been before. Public health is better equipped, has improved its response plans, is planning regionally as well as locally, is training staff, and has exercised the public health response plans across the state.

What is a Public Health Emergency?

Often we think of "public health" in terms of just disease outbreaks and immunization clinics. Certainly influenza and other contagious diseases, as well as more unusual diseases such as West Nile virus, SARS (Severe Acute Respiratory Syndrome), are of immediate concern. Although influenza is common annually, many people forget that it can be deadly. Historically, more people have died from influenza and its aftermaths than any other single disease.

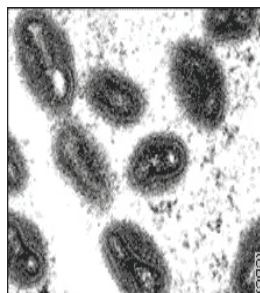


For many years, your local public health agency has been working with hospitals, clinics, and other medical providers to prepare for the usual . . . or unusual . . . public health emergencies that may occur. Some of these emergencies might be incidents of severe weather or contaminated food or drinking water. Other hazards might be chemical spills or accidental leaks. The work of public health and its planning efforts prepares us for all these types of emergencies. In recent years we have become increasingly aware of the possibility of threats from terrorism.

A Public Health Emergency Scenario

Imagine this if you can! It is mid-July during one of the hottest summers on record. Midday temperatures have been consistently above 100°F for a period of ten days. In Western Wisconsin, in particular, hospitals and clinics have been swamped with heat-related illnesses and injuries. City-wide there have been four deaths from heat-related causes, all involving elderly persons.

On a Thursday morning, the local hospital receives an urgent call from a summer school nurse at a local school, reporting what is potentially a case of smallpox. The school nurse reports that she received a call from the young mother of a seven-year old who had been absent from school for two days with a case of chickenpox. The child's mother was requesting advice on whether to take the child



to an emergency room. During the night, the child began vomiting, and reached a temperature of 101.4°F. The "spots" from the chicken-pox have deepened and spread to all the limbs, and the child is in a great deal of discomfort. Upon their arrival, the child is immediately cleared through the emergency room and is placed in an isolation ward. Initial examination indicates that the child is, in fact, suffering from smallpox.

Over the next 48 hours, a public health investigation reveals that four other children at the school have been infected with smallpox. Moreover, three other area hospitals report similar cases. In all, 11 cases of smallpox are reported among school-age children within the county.

That evening, national network news carries stories about the outbreak of smallpox among area children. By the end of the week, there have been reports of smallpox outbreaks in six other Counties in Wisconsin. The Governor of Wisconsin has declared a State of Public Health Emergency. How will the Public Health community respond?

Understanding Public Health

The backbone of the nation's public health system starts at the Local Public Health Agency. Often, providing low cost health care services in communities is what many people think of



when they hear the term "public health," but those services are only a small fraction of public health activities. Through assessment, policy development and assurance, Wisconsin's Local Public Health Agencies strive to protect

and promote the health of the people of Wisconsin by:

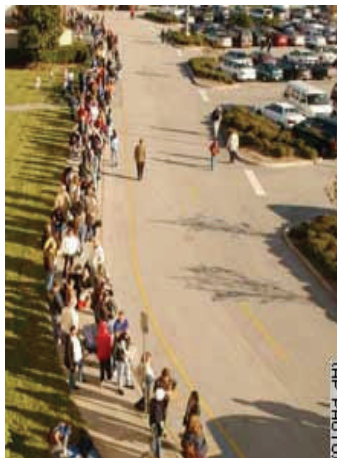
- ◆ Preventing and controlling epidemics and the spread of communicable diseases
- ◆ Protecting against environmental hazards such as mold
- ◆ Educating the public and community stakeholders
- ◆ Preventing injuries and disabilities
- ◆ Promoting and encouraging healthy behaviors such as nutrition and physical fitness
- ◆ Responding to and assisting communities in recovery

In a bioterrorism incident, epidemic, or infectious disease outbreak, local and state public officials will provide help, but many times local public health will be in the response forefront during the first critical minutes and hours following an incident.

Understanding How Public Health Responds in Emergencies

Whether an act of bioterrorism or infectious disease outbreak, regardless of the type of disaster, it is the job of the public health community to respond in order to protect the health of the public. To respond effectively and efficiently, public health will respond in three stages that are typical of any public health response: Detection, Response and Containment.

Detection: It is critical to detect an act of bioterrorism or infectious disease outbreak as soon as possible in order to control the spread. Detection can occur many ways—through an obvious scene or release of a bioterrorism agent, people presenting at hospitals, clinics, emergency rooms, high absenteeism rates in schools, workplaces and even churches, or even by unusually high prescriptions being administered by pharmacists.



Response: Once a public health emergency has been recognized or detected, public health officials will kick into high gear. Public Health Officials are likely to begin notification of community partners, begin disease investigations through interviews and contact tracing; confirm disease or agent through using the Wisconsin Lab Network and finally, begin treating or prophylaxing emergency responders and the community if necessary.

Containment: Once a public health emergency has been confirmed, public health officials may use a variety of tactics to control its effects, ranging from distributing antibiotics to using quarantine strategies.

Wisconsin Public Health Powers

Under Wisconsin State Statutes, Local Public Health Officials have several statutory powers that allow them to contain and control the spread of disease in order to protect the health of the community. These include:

- ◆ The ability to quarantine or isolate a patient or individual
- ◆ Conduct investigations
- ◆ Order compulsory vaccinations during a state of emergency
- ◆ Close or prohibit public gatherings including schools



A Closer Look at Wisconsin Public Health Preparedness Plans

Public Health Emergency Plan (PHEP)

The PHEP is an all-hazards public health plan, a one-stop shop plan, that can be used to respond to acts of bioterrorism, infectious disease outbreaks and other public health threats and emergencies. All Public Health plans are integrated with other emergency response partner's plans.

A qualified disaster for PHEP is an incident which overwhelms the resources and staff and requires mutual aid with other responders, community, regional, state or national resources. PHEP outlines critical public health responses including but not limited to isolation and quarantine, legal issues, risk communication, mutual aid, personal protective equipment, communications, mass clinic operations, agent and disease specific information, command and control, and special needs populations.

Local Public Health Officer's, in coordination with other local emergency response partners, will decide to activate, partially or fully, the Public Health Emergency Plan in an emergency.

Strategic National Stockpile (SNS)

The Strategic National Stockpile (SNS) is a national repository of critical medical supplies designed to supplement and re-supply state and local public health agencies in the event of a national emergency anywhere and at anytime within the United States or its territories. The goal of the SNS program is to provide rapid delivery of SNS lifesaving pharmaceuticals to any location within all U.S. states and territories within 12 hours or less from the federal decision to deploy. The SNS program is managed by the Center for Disease Control and Prevention (CDC) and is carried out in conjunction with the Wisconsin Division of Public Health and Local Public Health Departments. SNS only distributes medical supplies—it does not operate mass casualty centers or clinics.



The SNS contains multiple caches of medical supplies stored in warehouses in different regions across the country. These caches include antibiotics, chemical antidotes, antitoxins, life-support medications, intravenous (IV) administration, airway maintenance supplies, and medical/surgical items.

Mass Clinic Plan

Depending on the nature of the outbreak, Public Health Officials may decide to activate a mass clinic. Some reasons to activate a mass clinic include: if the number of cases is high, if outbreaks occur in a number of locations, and/or if the outbreaks continue to grow despite all attempts to contain the spread. In the event of a mass clinic, an entire community or even the entire county's population may become infected

or exposed to an act of bioterrorism or infectious disease and must receive vaccination or prophylaxis.

Using the Incident Command System, the Mass Clinic Plan is an organized approach to receive and distribute oral antibiotics or vaccines to an entire county's population within 48 hours. The Mass Clinic Plan has been developed to be consistent across the State of Wisconsin to ensure the most effective and efficient response from the Public Health community.



Interim Pharmaceutical Stockpile (IPS)

The Interim Pharmaceutical Stockpile (IPS) provides a strategy to purchase, store, and distribute pharmaceuticals to hospitals and Local Public Health Agencies and tribes for prophylaxis and/or post-exposure treatment of first responders, healthcare workers and their family members in response to an act of bioterrorism or an outbreak of infectious disease. This is critical to ensure a working emergency response community.

The IPS provides appropriate prophylaxis and/or post-exposure treatment to prevent disease and death in healthcare and first responder personnel and their family members for up to 3 days. It is the intent that pharmaceuticals from the IPS will be delivered to any requesting hospital(s) or Local Public Health Department(s) within 4 hours of activation.

Pandemic Influenza Response Plan

The H1N1 Pandemic has certainly tested the public health response at all levels. While there have been many positive results and promising practices shown, it has become quite apparent that much remains to be done to ensure the public's safety should a more serious pandemic occur.



Local, State and Federal Health Officials have been aggressively planning with other healthcare partners for a pandemic influenza. Local Public Health Department plans are integrated with the

Wisconsin Division of Public Health and the CDC's plan to include guidelines for Command and Control, Surveillance, Communication, Emergency Response, Communications, Vaccine and Antiviral Medications.

Continuity of Operations (COOP) Planning

Due to the H1N1 Pandemic, many government entities as well as private businesses have pushed Continuity of Operations planning to the forefront. Public Health's main goal of COOP Planning are to determine which functions must still occur during an emergency, which can be reduced, and which can be temporarily halted. By prioritizing current functions within any business, agencies are able to plan for future emergencies that may reduce the resources they currently have and place them in more critical areas relevant to the emergency response. Public Health continues to lead the way by developing plans that will ensure critical business functions will continue and the resources needed to be able to respond to the emergency can and will be there.





The Western Region Partnership for Public Health Preparedness (WRPPHP)

Our mission is to protect the health and safety of the citizens living in the jurisdictions of the member agencies by supporting and promoting the professional development of its individual and organizational members in public health emergency preparedness.

WRPPHP is an eighteen county and two tribal public health preparedness consortium located in Western Wisconsin. Formed in

2003 through funds provided by the Center for Disease Control and Prevention, WRPPHP is a partnership of Local Public Health Agencies from Barron, Buffalo, Burnett, Chippewa, Clark, Douglas, Dunn, Eau Claire, Ho-Chunk Nation, Jackson, La Crosse, Monroe, Pepin, Pierce, Polk, Rusk, St. Croix, St. Croix Tribe, Trempealeau, and Washburn Counties.

WRPPHP was established to develop core expertise and preparedness in response to bioterrorism, infectious disease outbreaks, and other public health threats. We do this through networking, coordinating, standardizing, and centralizing our resources and planning efforts among the twenty local public health agency partners in Western Wisconsin. For more information regarding the WRPPHP or Public Health Preparedness, please visit us online at www.wrpphp.org or contact us at (715)485-8800.
