Improving State Efforts to Prepare and Respond to Public Health Emergencies

Executive Summary

Public health disasters, like natural or manmade disasters, have the potential to overwhelm a state's emergency response capabilities resulting in widespread injury or loss of life.[1] While public health threats—such as contaminated drinking water, disease outbreaks and chemical and biological threats—may not cause physical damage to infrastructure, they can occur for prolonged and indeterminate periods of time affecting large segments of the population if not quickly contained.

Public health threats will continue to occur, usually without advanced warning, and states need to be prepared to quickly and efficiently respond to minimize the spread of disease and save lives. Governors should ensure their states have strong public health emergency management systems in place that incorporate key stakeholders, efficiently allocate limited resources, prevent delayed responses and protect the health and well-being of the public.

This paper provides governors with actions they can take to improve preparedness for public health emergencies, which include:

- Ensuring they understand their legal authority to respond in the event of a public health disaster;
- Establishing and institutionalizing coordination among key players;
- Strengthening internal and external communications; and
- Identifying gaps in baseline capabilities and available resources needed to address these gaps.[2]

Background

In recent years, states have responded to a wide range of public health threats including Ebola, Avian Influenza, the H1N1 flu and most recently, the Zika virus. These public health events have resulted in public unease, financial losses, disruption to daily life, workforce absenteeism and widespread illnesses and death. Responding to these public health events required extensive resources often exceeding many states' existing capacities as demonstrated in the examples below.

Ebola

The 2014 Ebola outbreak caused a significant strain on health care and passenger air travel systems. To protect residents of their states, airports deployed enhanced screening measures for all travelers coming from high-risk regions. Hospitals treating patients with confirmed or suspected cases of Ebola faced staffing challenges because they needed additional personnel to treat, monitor and quarantine patients.[3] Treating one Ebola patient is estimated to cost $30,000 to $50,000 per day.[4] New York City spent approximately $20 million to quarantine and treat one Ebola patient.[5]

Avian Flu

The 2015 Highly Pathogenic Avian Influenza (HPAI) H5 bird flu spread to domestic and wild bird flocks in 21 states, resulting in large financial losses to the poultry industry.[6] The United States estimated losses of $3.3 billion as a result.[7] **Iowa** alone lost over $1 billion.[8]

H1N1

The 2009 H1N1 global pandemic resulted in approx-

imately 60.8 million cases and more than 12,000 deaths in the United States.[9] A number of states ran into barriers when considering whether to close schools to prevent the spread of the disease because state law did not include measures for closing schools in the event of an epidemic. While some states were able to issue waivers to address laws mandating the number of school days, a number of states could not do so because state law did not include exemptions for influenza or epidemics.[10]

Zika Virus

The 2015 Zika virus has caused illness in those affected and microcephaly in babies born to mothers who had the virus while pregnant.[11] As of September 21, 2016, across 49 states and D.C., the follwing cases have been reported: 3,314 travel-associated cases, 43 cases of locally acquired mosquito-borne cases, 28 sexually transmitted cases and one laboratory acquired case.[12] The U.S. Department of Health and Human Services declared a public health emergency in Puerto Rico in response to the outbreak.[13] States are currently taking steps to prevent and prepare for the potential spread of the virus, which is still unfolding and its long-term consequences are still unknown. For the latest information on Zika in the states, please visit NGA's *Zika in the States: What You Need to Know* webpage.[14]

Actions Governors can take to Improve Preparedness and Response to Public Health Emergencies

Preparing for and responding to public health emergencies requires involvement of the governor's office—which coordinates and organizes the response—and multiple state agencies, such as public health, homeland security and emergency management. Each of these agencies brings unique resources and perspectives that must be considered when planning a statewide response. Although states have made progress enhancing the capabilities of these agencies, recent public health events have revealed areas where states can strengthen them. Oftentimes, individuals at the state and local level who are involved in the response do not have a clear understanding of their legal authorities or expected roles and responsibilities, which can result in a slower response. Further, agencies may not share critical information or coordinate resources with other agencies in advance of an emergency. That lack of communication and coordination can also result in delayed responses, as well as information gaps and mixed communication messages.

The following recommendations provide governors with actions they can take to improve response to public health disasters.

Understand your legal authority to respond to public health emergencies

Governors may need to take immediate executive action to respond to public health emergencies, such as issuing quarantines or mandatory school closures. However, governors' legal authorities vary across states and depend on the state constitution, laws and the extent of the governor's emergency powers. First, governors should ensure they have a basic understanding of their legal authority to respond to public health emergencies, so they will be in a position to quickly and effectively take all appropriate measures. Toward that end, governors should consult with their legal counsel to ensure their actions are within the scope of their legal authority. Legal counsel can assist with preparing emergency declarations and disaster relief agreements between the state and the Federal Emergency Management Agency as well as drafting memorandums of understanding with other states and the federal government.[15]

Other key state officials have authorities in statute or response plans that also must be brought to bear. For instance, the state public health official may have the authority to declare a public health emergency or to issue quarantines. Governors should familiarize themselves with the legal authorities of cabinet officials and other key staff as well as those responsibilities outlined in state emergency plans.

Governors Executive Authority

Governors' emergency authorities are established by state constitutions and statutes or case law, or they are implied through powers assigned to the state chief executives.[16]

Executive Orders

Governors can use this authority to help prepare for and respond to emergencies. Executive orders can help enhance coordination and collaboration across multiple agencies.

Virginia Governor Terry McAuliffe created a multiagency, statewide task force to prepare for the Zika virus. Prior to mosquito season, the task force was responsible for ensuring coordination across state and local mosquito surveillance and control programs.[17]

Indiana Governor Mike Pence signed an executive order in response to an HIV outbreak to coordinate a multiagency response and to provide additional resources and tools for addressing the outbreak.[18]

Florida Governor Rick Scott signed an executive order requesting additional resources and information from Centers for Disease Control and Prevention to prepare for the Zika virus.[19]

Emergency Declaration

Governors can issue emergency declarations or declare a state of emergency to help remove barriers that can impede response or to request additional resources when the state's capacity to respond becomes overwhelmed.

Iowa Governor Terry Branstad requested a major disaster event declaration from the President to allow the Federal Highway Administration to issue a waiver for weight limits to help accelerate the disposal process for birds infected with Avian Flu.[20]

Budgetary Authority

Governors can use their budgetary authority to redirect state financial resources in the event the federal government does not provide resources.

Alabama Governor Robert Bentley authorized more than $235,000 in emergency funding for testing and treatment services in response to a Tuberculosis outbreak in 2016.[21]

Establish and institutionalize coordination among key players

Public health, homeland security and emergency management organizations are key stakeholders that play critical roles in an effective response to a public health emergency. Public health agencies provide care, conduct chemical and biological laboratory testing and perform disease surveillance monitoring to help prevent further transmission. Homeland security entities have access to classified networks that provide potential

threat information. Emergency management agencies are responsible for managing disaster response. Thus, an effective response requires advanced planning and coordination of preparedness investments across agencies well before a public health emergency; however, that coordination does not often occur.

Agency professionals need to understand not only their roles and responsibilities, but also the ways in which they connect with the broader response effort. Like governors, these officials should know and understand their legal responsibilities established in statute. Additionally, they should receive an orientation briefing on their state emergency operation and pandemic preparedness plans to ensure they are familiar with them.

Governors should understand existing ways homeland security, emergency management and public health agencies interact with one another and how federal preparedness funds can help promote interagency coordination. As chief executives of their states, governors can institute policies and practices that promote unity of effort prior to a public health disaster. The governor can use various mechanisms to institutionalize those relationships both formally—through a task force established by executive order or statute—or informally by holding routine meetings among agency leadership. Establishing good relations among agencies before an event occurs will help ensure roles and responsibilities are identified in advance of a crisis event.

Another way governors can foster collaboration is by directing all key players and partners at all levels of government to participate in training exercises. Exercises are an opportunity for officials to learn about individual roles and responsibilities and how they might act during the response. Formalizing roles and responsibilities through training helps ensure officials communicate and coordinate before, during and after a public health emergency. For example, participating in exercises allows non-emergency management individuals to understand how the incident command system works and how they fit into it. Exercises also allow individuals to build relationships prior to an incident and identify opportunities for improvement. That allows agencies to coordinate resources and personnel better, which reduces duplication of effort and the risk of a disjointed response. **Ohio** benefited from hosting a training exercise prior to a 2015 botulism outbreak. Those involved in the response had a clear understanding of their roles, responsibilities and processes for requesting resources from the Centers for Disease Control and Prevention (CDC), which greatly enhanced their response when faced with the outbreak.[22]

Strengthen internal and external communications

Communication needs to be accurate, timely and targeted to key audiences in the event of an emergency. Gaps in communication can lead to critical errors in the response. With information being shared across all levels of government, it can be challenging to identify and share all relevant information internally and externally. Oftentimes, information that states receive during a crisis can be insufficient, untimely or overwhelming. For example, during the Ebola outbreak, guidance and protocols were either not detailed enough or too technical.[23] Additionally, some states received delayed notifications about high-risk individuals coming from abroad, which did not allow the states to properly prepare. States also had difficulty identifying critical information because they received an overwhelming amount of information from multiple sources.[24] Therefore, a need for better information sharing across state, local and federal agencies exists. Governors help address these information-sharing challenges by institutionalizing internal and external communication practices among key players as outlined below.

Internal Communication

Governors can conduct frequent cabinet and threat briefings during a disaster or emergency to strengthen internal communications. During the Ebola outbreak, **Virginia** Governor Terry McAuliffe activated a statewide,

unified command group comprised of officials from the governor's office, department of health, department of emergency management, state police, department of education and other relevant agencies.[25] The group would convene regularly and brief the governor's cabinet. That helped the governor make well-informed decisions and ensure all involved stakeholders delivered and received similar messages in a timely manner.

Fusion centers also are a great resource for disseminating critical information to provide better situational awareness among state and local agencies before, during and after emergencies. Public health officials, however, may not have access to fusion centers or classified information. To better integrate public health and homeland security, states should consider having a public health official serve in the fusion center. The public health official can provide his or her expertise regarding potential health threats.

Another way to improve information sharing with public health officials is to nominate them for obtaining security clearances, as appropriate. In doing so, the public health official will have better awareness about emerging health threats. Alternatively, fusion centers could consider declassifying relevant products.

The **Kansas** Intelligence Fusion Center incorporates many public and private partners into its fusion center in order to share critical public health information. For example, the fusion center created a bio threat team, which includes the state epidemiologist and veterinarian as well as public health experts from the University of Kansas, Kansas State University and the private sector. The bio threat team works with fusion center analysts to develop and share threat information. These subject matter experts hold Top Secret/Sensitive Compartmented Information (TS/SCI) clearances and work at the fusion center part time, which allows the fusion center to leverage expertise that it might not otherwise have access to.

External Communication

During an emergency, the state will need to relay critical information to the public and reassure them that the state is effectively addressing the situation. Communicating a clear, consistent message to the public minimizes confusion, builds trust, puts the public at ease and helps keep the public safe. Governors should develop a communications strategy to ensure the public receives accurate, timely and consistent information. Additionally, governors should establish a formal chain of communication and determine how often officials—whether the governor, an advisor or practitioner—should address the public.

Social media, like Facebook and Twitter, are additional communications platforms that states can use to get the right information to the right people at the right time. Social media also allows homeland security and emergency management to gather information and to increase situational awareness. Managing these platforms, however, requires staff and resources. Therefore, states should identify which communication platforms to use to spread awareness, determine how they plan to use those platforms and consider who will manage their social media presence. States can use the Joint Information System—which is a system designed to integrate all information pertaining to an incident and deliver a coordinated and cohesive message—to help develop public messaging during a public health event.[26]

Governors also could leverage existing resources and tools developed by the CDC to help communicate to the public during events. For example, the CDC released a communications toolkit to help states and stakeholders respond to questions about Zika reporting and pregnancies outcomes. The toolkit provides key messages as well as a list of potential media questions and responses that state officials can use to help craft appropriate messages to the public.[27]

Identify gaps in baseline capabilities and available resources needed to address these gaps

Public health emergencies are resource intensive, requiring staff, surveillance and testing capabilities.

However, state executives are not always aware of those resources, how to obtain them or how best to use them when responding to a public health emergency. States should conduct a gap analysis among public health, homeland security and emergency management agencies to determine existing resources and capabilities such as equipment, chemical and biological laboratory testing and surveillance, that they can leverage in a public health emergency. More importantly, it is an opportunity to assess resource limitations and identify improvement priorities.

For example, many states affected by the Avian Flu in 2015 faced staffing challenges and had to hire contractors to assist with depopulation, disposal and clean-up efforts. Recognizing these challenges, **Indiana** assessed its capabilities and took steps to prepare for an Avian Flu outbreak. After a backyard flock tested positive for Avian Flu in Indiana, the Indiana State Board of Animal Health partnered with the department of corrections to train 300 low-level offenders to assist with depopulating infected bird flocks.[28]

Providing training, resources and equipment to support public health preparedness is costly. Recent cuts to public health, emergency management and homeland security grants make it difficult to provide funding and resources to manage steady state operations, let alone public health emergencies such as Ebola or Zika, making it more important to work together. Homeland security and emergency management agencies, however, may have resources to help mitigate a public health emergency. Governors should identify all available funding mechanisms across the state and determine how to properly leverage that funding in order to harmonize all preparedness investments and enhance public health preparedness. Additionally, there may be federal grant opportunities of which the state may not be aware. Therefore, states should aim to coordinate federal grant opportunities at state and local levels to minimize duplication and allocate funding effectively.

Federal Resources

- HHS Public Health Emergency Preparedness Programs and Planning Tools for State, Federal and Local Planning;[29]
- CDC Office of Public Health Preparedness and Response Funding Guidance for State and Local Health Departments;[30] and
- DHS/DOJ Fusion Process: Technical Assistance Program and Services.[31]

Conclusion

The recent emergence of the Zika virus underscores the fact that public health threats will continue to emerge with little to no warning, with the potential for long-term consequences and will require an intensive, all-of-government approach to combat. Given the unpredictable nature of these threats, it is essential that states are proactive in their preparation to avoid having to be reactive when a crisis event occurs. By implementing recommendations provided here, governors can improve collaboration among homeland security, emergency management and public health agencies to best ensure the public's health and safety.

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Endnotes

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