At-Risk Populations and Pandemic Influenza:

Planning Guidance for State, Territorial, Tribal, and Local Health Departments

Executive Summary

August 2008

Introduction

The Association of State and Territorial Health Officials (ASTHO) received funding from the Centers for Disease Control and Prevention (CDC) in 2007 to develop planning guidance for state, territorial, tribal, and local health departments on at-risk populations and pandemic influenza. ASTHO worked with state, local, tribal, and territorial health agencies; federal entities; and other key stakeholders to develop this guidance. The premise of the guidance is that certain populations are at increased risk of harm during an influenza pandemic; specific provisions, plans, and procedures must be in place to ensure the health and safety of these groups. Prior to this project, there was no such national guidance.

Many entities are developing plans and procedures for at-risk populations in emergencies. The "At-Risk Populations and Pandemic Influenza" guidance differs from those projects because of its singular focus on pandemic influenza. The goal of this project was to provide the audience with usable tools and recommendations on how to provide support to at-risk populations during a pandemic. The guidance is meant to supplement current pandemic and other preparedness plans. Although not the primary audience, community-based organizations (CBOs), faith-based organizations (FBOs), non-profit service providers, and businesses will also find the guidance useful for identifying key areas in which they may collaborate with public health departments to reach at-risk populations.

The guidance is intended to provide a framework and recommendations to assist planning; however, many jurisdictions may not be able to implement the full set of detailed recommendations. Planners may wish to work with their partners to determine their jurisdiction's priority planning needs related to at-risk populations and to implement selected recommendations as appropriate. Where possible, planners are encouraged to consider how to refine current activities rather than initiating new activities to ensure that the needs of at-risk populations are adequately addressed. The full guidance contains a supplement, "Proposed Timeline for Enacting Recommendations," that adapts the recommended planning activities to the various levels of proximity and severity of a pandemic to help planners further refine their activities.

This executive summary provides: a project overview; the definition of at-risk populations; the main recommended planning activities from each of the five chapters; and samples of the tools and resources identified to assist in planning.

Project Overview

Numerous stakeholders contributed their expertise and experience to develop this document:

- 19 topical experts on the advisory panel guided project development.
- 66 work group members represented a broad range of subject matter expertise.
- More than 120 members of at-risk populations, family members, or caregivers met for public engagement meetings.
- Twenty-one representatives – chiefly from national organizations working with at-risk populations – attended a stakeholders meeting.

In addition to developing the definition for at-risk populations (see below), the advisory panel members identified five key work group topics which became chapters of the guidance:

- Collaboration with and Engagement of At-Risk Populations
- Identifying At-Risk Populations
- Communications with and Education of At-Risk Populations
- Provision of Services (Clinical and Non-Clinical)
- How to Text, Exercise, Measure, and Improve Preparedness of At-Risk Populations

The work groups for each topic area convened via conference calls three times each. Public engagement meetings occurred in Boston, MA, on March 8, 2008, and in Kansas City, MO, on March 15, 2008. The national stakeholder meeting in Washington, DC took place March 20, 2008. Some findings were included directly in the guidance.

The guidance was drafted by the Center for Infectious Disease Research and Policy (CIDRAP) at the University of Minnesota between January and April, based on the input of those three key groups and supporting research by ASTHO and its project partners. The guidance then underwent concerted review by ASTHO, CIDRAP, and CDC. CIDRAP and ASTHO staff incorporated multiple drafts and feedback from a 30-day public comment period. The guidance, supporting documentation, and additional information about the methods are available on ASTHO's Web site, www.ASTHO.org.

Definition of At-Risk Populations

The project advisory panel determined that at-risk populations are those people most **at risk of severe consequences** from the pandemic, including societal, economic, and health-related effects. The advisory panel adopted a factors-based approach to defining at-risk individuals, which may further assist planners in identifying those in most need of assistance. Factors were chosen because panel members felt that they provide a more specific understanding of the populations who truly need *extra* assistance in a pandemic, as well as the specific assistance they need and the barriers that render them more at risk. The advisory panel developed the following definition:

Certain factors will increase a person's risk of negative outcomes on health, safety, and well-being; they may experience significant barriers, and therefore need help maintaining medical care, food, and shelter. Factors that increase the risk of harm during an influenza pandemic include:

- *A. Economic disadvantage (e.g., having too little money to stockpile supplies, or to stay home from work for even a short time)*
- *B. Absence of a support network (e.g., some children; homeless; travelers; and the socially, culturally, or geographically isolated)*
- *C. Needing support to be independent in daily activities because of:*
  - *a. Physical disability*
  - *b. Developmental disability*
  - *c. Mental illness or substance abuse/dependence*
  - *d. Difficulty seeing or hearing*
  - *e. Medical conditions*
- D. *Trouble reading, speaking, or understanding English*

Planners should be prepared to interpret the factors as appropriate for the locality.

Recommended Planning Activities

Chapter 1: Collaboration with and Engagement of At-Risk Populations

KEY RECOMMENDATION: Join an existing network or create a network with representation from at-risk individuals, CBOs, FBOs, and additional key partners, such as media outlets, which brings together partners to conduct pandemic and all-hazards planning. This network can be exclusively for preparedness planning, or can include preparedness planning as one aspect of the network.

BACKGROUND: Strong, enduring partnerships form the core of effective public health planning with at-risk populations. For preparedness planners to understand the needs and priorities of at-risk populations requires an effective, two-way dialogue based on mutual trust. Likewise, credible policy-making depends on informed, advance input from those at-risk and the agencies and individuals who assist or care for them.

Collaborating with and engaging at-risk populations and the organizations that serve them may be pursued simultaneously at two levels:

1. Efforts to inform individuals and the organizations that serve them about an influenza pandemic and how they can prepare; and

2. Efforts to ensure at-risk individuals shape the pandemic influenza planning and policies that affect their lives.

RESOURCE FOR COLLABORATION AND ENGAGEMENT: The Public Health Workbook to Define, Locate and Reach Special, Vulnerable and At-Risk Populations in an Emergency is an excellent resource that provides a thorough treatment of community engagement, prioritizing activities, and how to maintain relationships. Available at http://www.bt.cdc.gov/workbook/pdf/ph_workbook_draft.pdf

Successful collaboration and engagement activities are time-consuming. Planners should begin identifying and working within existing networks or creating networks well before a pandemic to understand the needs and priorities of key populations. They can craft appropriate messages, which can be delivered through existing networks and by trusted messengers, to enhance community resiliency. Public engagement activities aimed at addressing specific planning challenges can help strengthen networks and provide community-supported solutions.

Regardless of whether existing or new networks (or a combination) are pursued, public health agencies should continually nurture and expand partnerships. Preparedness planners can demonstrate the value of partnering to enhance preparedness by assisting CBOs and FBOs in a variety of activities, including informal conversations, personal preparedness education, and continuity of operations (COOP) planning.

Chapter 2: Identifying At-Risk Populations

KEY RECOMMENDATIONS:

- Find and use data sources that identify the at-risk populations in the jurisdiction, based on the definition in this guidance.
- Consider prioritizing planning for populations at economic disadvantage and other large populations in the initial planning cycle. Develop an approach for adding other at-risk populations in later planning cycles to ensure they are included. Consider adding those populations based on their relative size within the jurisdiction.
- Agencies that distribute funds to other agencies or organizations must identify where the greatest needs are, in order to effectively allocate funds.

BACKGROUND: Developing a comprehensive approach to planning for those most at risk during an influenza pandemic depends on effectively identifying at-risk populations and using that information to inform planning, risk communication, and response. This chapter of the guidance examines: who is at risk; for what purpose populations will be identified; what will be done with the information gathered; tools and approaches to identify those at risk; the extent of the risk in the local community; the distribution of risk; factors that contribute to risk in a jurisdiction; and how states, territories, tribes and local entities might prioritize.

SUPPORT FOR IDENTIFYING AT-RISK POPULATIONS: State data centers coordinate data collection and activities and provide access to demographic, economic, and social statistics. Here is a list of centers: http://www.census.gov/sdc/www/revpage34to40.doc

Public health planners may be accustomed to identifying at-risk populations through demographics (e.g., age, chronic illness, or socioeconomic status). As described in the introduction to this guidance, during a pandemic, not all people in traditional at-risk groups will have increased need for resources and services; likewise, some people in traditional at-risk groups *will* have increased need for resources and services. It is also important to recognize the skills and assets of at-risk population members. For example, economically disadvantaged individuals may be at risk of adverse consequences during a pandemic because they lack funds to stockpile food and other goods; however, they may work as personal care attendants (PCA) to people with physical disabilities, have significant knowledge of their needs, and be indispensable to their clients.

Traditional at-risk groups (e.g., the elderly, the disabled) often do not share many characteristics with each other, making it difficult to locate and quantify them. For instance, children with cystic fibrosis and

people with Alzheimer's or congestive heart failure may be at increased risk during an influenza pandemic. The factors-based definition in this document helps to ensure that these disparate groups are identified – based on their needs for clinical services, in-home support, and specialized nutrition.

Chapter 3: Communications with and Education of At-Risk Populations

KEY RECOMMENDATIONS:

- Use effective methods to reach priority at-risk populations, including appropriate risk communication techniques, trusted messengers, appropriate technologies, media, and formats.
- Establish and follow a protocol for evaluating risk communication messages for at-risk populations. It may include: evaluating the channels used for messages; evaluating the ability of collaborative partners to disseminate emergency messages; and measuring the impact and effectiveness of messages on preparedness levels of at-risk populations.

BACKGROUND: Communicating effectively with at-risk populations before, during, and after an influenza pandemic is integral to minimizing illness, disability, and death.

Risk communication principles dictate that one must be first, be right, and be credible. Effective communication with at-risk audiences requires additional steps because of the varying needs of each population. One of the most important considerations in communicating with and educating at-risk populations is to understand that it will be a time- and labor-intensive activity. Resources should be identified to enable this effort, and the process should begin as early as possible.

Many factors that put people at risk may also complicate effective communications. At-risk populations may face a variety of barriers that make communication challenging. It is important to identify factors that hinder effective communication and plan for alternative methods to reach these populations.

Because of the varied barriers to successful communication with at-risk populations, no one-size-fits-all approach will work. For example, reaching the geographically isolated may entail communicating through neighbors, schools, or faith communities, while reaching people who are deaf may rely heavily on technology such as TTYs, video relays (a telephone system with video that enables the deaf and hard of hearing to communicate with hearing people through a sign language interpreter), e-mail, text-messaging, and social and cultural networks.

SPANISH-LANGUAGE OUTREACH: *Gripe Pandémica,* from the North Carolina Division of Public Health, is an example of a Spanish language fotonovela on preparing for pandemic influenza. http://www.ncpanflu.gov/panFluAndYou.htm

Nonetheless, effective communications with at-risk populations have some common attributes. They must incorporate at least these three key components: audience-appropriate messages, trusted messengers, and effective methods, including technologies appropriate to the groups at risk. Each of these key components must be understood and effectively managed relative to the at-risk populations.

Evaluating the effectiveness of risk-communication messages is a way to assess the preparedness levels of both the jurisdiction and at-risk populations. This evaluation process can occur by assessing the impact of a media campaign, or conducting pre- and post-tests at pandemic influenza education sessions. The information gleaned during the evaluation process can be used to identify areas for follow-up activities. Planners will need to integrate a set of tools into their organizational and project activities to evaluate the effectiveness of risk-communication messages. Evaluation can also occur as a part of exercises. When conducting exercises, planners need to incorporate evaluation tools to ensure that messages are appropriate, accurate, timely, and effective at enhancing preparedness levels of at-risk populations.

Chapter 4: Provision of Services (Clinical and Non-Clinical)

KEY RECOMMENDATION: Convene the appropriate agencies and provide the framework for the necessary planning activities for clinical and non-clinical services for at-risk populations.

BACKGROUND: Many at-risk populations will be vulnerable to harm during a pandemic because they rely on various essential services to survive and live independently. Populations may be at risk due to interruptions in their support systems, in addition to personal or population-specific risk factors. Essential services (e.g. healthcare and critical infrastructure) will be degraded during an influenza pandemic, forcing people to care for themselves. There are some people, however, who will be unable to do so. Providing services to at-risk populations during an influenza pandemic requires an understanding of their daily living needs and how a pandemic might affect those needs.

Public health agencies provide some services that at-risk populations need to survive an influenza pandemic. In addition, there are a number of other services that are beyond the scope of public health. Public health agencies have the dual role of delivering services themselves, as well as facilitating activities with other clinical and non-clinical service providers.

There are several groups of essential service providers that public health agencies should convene as part of pandemic planning efforts. Of particular relevance are:

- At-risk individuals and people who support them;
- CBOs and FBOs;
- Organizations and clinics that provide care and services to the underserved, indigent, migrant, and undocumented;
- Agencies providing essential services not specifically focused on healthcare, including homeland security, local emergency management agencies (EMAs), transportation agencies, and others;
- Providers of health outreach in general emergencies;
- Personal care and home health attendants; and
- Healthcare providers and healthcare systems.

Many CBOs, FBOs, and disability service providers have not been integrated into pandemic plans, yet they provide a variety of services necessary to daily survival and well-being, such as lodging, low-cost meals, and language interpretation. Lack of integration between local government and community agencies may exacerbate shortages in a pandemic. Community groups may be unaware that they are expected to provide services; planners may be unaware of the resources available in CBOs and FBOs.

CONTINUITY OF OPERATIONS FOR CBOS/FBOS: This brief planning guide provides CBOs with information and templates on staff roles, prioritization of services, necessary supplies, and staff protection during a pandemic. http://www.hennepin.us/images/HCInternet/YCG/Doing Business With Hennepin/Human Services Provider Relations/HSPH Files/Template_Part 2_Pandemic Influenza Planning Guide.doc

Public health agencies can convene agencies, groups, and organizations to determine overarching planning recommendations and policies and encourage organizations to: develop a continuity of operations (COOP) plan; determine how they would train volunteers or other personnel if they lacked staff; and teach staff, volunteers, and at-risk clients about personal preparedness. There are people with chronic medical conditions whose situations demand special medications, diets, and/or devices. Planners need to provide materials and information to help such individuals develop personal preparedness plans. Finally, public health can encourage organizations that will work closely with government agencies to learn the National Incident Management System (NIMS) approach to emergency management.

Chapter 5: How to Test, Exercise, Measure, and Improve Preparedness of At-Risk Populations

KEY RECOMMENDATIONS:

- Include at-risk populations in evaluation as planners, participants, and part of scenario development in exercise design, implementation, and evaluation.

- Implement a quality assurance program for at-risk populations and pandemic influenza planning that tests, evaluates, exercises, and improves the process of providing services for at-risk populations.

BACKGROUND: Testing, exercising, measuring, and improving preparedness is important to reduce risk before, during, and after an influenza pandemic. By testing, exercising, and measuring the processes and outcomes of pandemic influenza planning activities, communities will improve their preparedness levels both in the general population and among at-risk populations.

Assessing public health activities geared toward the general population is important; however, evaluation is particularly important for understanding the unique barriers that at-risk populations face. Effective evaluation will incorporate factors that place people at risk, which will help public health departments better address identified barriers.

Testing, exercising, and measuring preparedness for at-risk populations can be incorporated into current planning and routine organizational quality assurance activities. Planning may include a variety of activities, from keeping checklists, periodically analyzing existing databases, and taking minutes of meetings, to tracking joint efforts with community organizations, surveying staff, implementing pre- and post-tests for education discussion-based and operations-based exercises, and conducting after-action reviews following real-world incidents.

SUPPLEMENTAL EVALUATION TOOLS: Three separate Indiana State Department of Health pandemic influenza preparedness evaluations measure the preparedness level of individuals/families, workplaces, and schools: http://www.pandemicpractices.org/practices/resource.do?resource-id=96&state-id=19

The Homeland Security Exercise and Evaluation Program (HSEEP) is commonly used by traditional emergency responders (e.g., law enforcement, fire departments), but can be adapted to other disciplines, such as public health and commerce. While still relatively new to public health agencies, using the program is required for receipt of federal preparedness funds. Agencies and organizations not obligated to use HSEEP to receive funding (such as CBOs and FBOS) can still apply HSEEP concepts to their preparedness activities; doing so will simplify collaborations with agencies receiving federal preparedness funds.

Conclusion

The guidance "At-Risk Populations and Pandemic Influenza: Planning Guidance for State, Territorial, Tribal, and Local Health Departments" is the result of a fruitful and intensive collaboration using the best collective professional judgment, and drawing upon many real world experiences and lessons to assist at-risk populations during an influenza pandemic. We hope the guidance, informed through this combination of expertise and experience, helps you and your organization further that same mission.