

## CHAPTER 3 — FEDERAL GOVERNMENT RESPONSE TO A PANDEMIC

While the Implementation Plan (Plan) directs Federal departments and agencies to take action to prepare for a pandemic, it is important for the Federal Government to coordinate closely its efforts to gather relevant data and overall situational awareness in a timely manner from the initial phases of a pandemic until recovery is complete, and to communicate its approach to its international partners, State, local, and tribal entities, critical infrastructure owners and operators, and the public. This section describes the manner in which the Federal Government will coordinate its actions, the specific roles and responsibilities of the various Federal departments and agencies, and the specific actions to be taken at stages before, during, and after the occurrence of the first wave of a pandemic in the United States.

### **Command, Control, and Coordination of the Federal Response**

A pandemic will differ from most natural or manmade disasters in nearly every respect. Unlike events that are discretely bounded in space or time, a pandemic will spread across the globe over the course of months or over a year, possibly in waves, and will affect communities of all sizes and compositions. The impact of a severe pandemic may be more comparable to that of a widespread economic crisis than to a hurricane, earthquake, or act of terrorism. It may present as a particularly severe influenza season, or it may overwhelm the health and medical infrastructure of cities and have secondary and tertiary impacts on the stability of institutions and the economy. These consequences are impossible to predict before a pandemic emerges because the biological characteristics of the virus and the impact of our interventions cannot be known in advance.

Similarly, the role of the Federal Government in a pandemic response will differ in many respects from its role in most other natural or manmade events. The distributed nature of a pandemic, as well as the sheer burden of disease across the Nation, means that the physical and material support States, localities, and tribal entities can expect from the Federal Government will be limited in comparison to the aid it mobilizes for geographically and temporally bounded disasters like earthquakes or hurricanes. Nevertheless, the Federal Government must maintain complete situational awareness and be ready and able to take decisive action to ensure a comprehensive and timely national response to a pandemic. The Federal Government will also bear primary responsibility for certain critical functions, including the support of containment efforts overseas and limitation of the arrival of a pandemic to our shores; provision of clear guidance to State, local, and tribal entities, the private sector and the public on protective measures and responses that should be taken; modifications to the law and regulations to facilitate the national pandemic response; modifications to monetary policy to mitigate the economic impact of a pandemic on communities and the Nation; and many others. The Federal Government will also work to ensure the production and distribution of vaccine and antiviral medications to State, local, and tribal entities, and the acceleration of research, development, testing, and evaluation of vaccines and therapies during the outbreak.

To ensure an effective response, single points of contact within each State and Tribal Nation for the key functional areas of pandemic response will be identified. The Department of Homeland Security (DHS) will solicit from Governors and Tribal Chief Executive Officers a single point of contact within each State and Tribal Nation for overall incident management of pandemic influenza response efforts. The Department of Health and Human Services (HHS) will solicit lead points of contact for public health

and medical emergency response activities, and the Department of Agriculture (USDA) will solicit lead points of contact for veterinary response activities. DHS will coordinate the consolidation of these points of contact.

States, localities, and tribal entities across the Nation will each have to address the medical and non-medical impacts of the pandemic with available resources. This means that it is essential for State, local, and tribal entities to have plans in place to support the full spectrum of societal needs over the course of weeks or months, and for the Federal Government to provide clear guidance on the manner in which these needs can be met.

It is important that the Federal Government have a defined mechanism for coordination of its response. *The National Response Plan* (NRP) is the primary mechanism for coordination of the Federal Government response to terrorist attacks, major disasters, and other emergencies, and will form the basis of the Federal pandemic response. It defines Federal departmental responsibilities for sector-specific responses, and provides the structure and mechanisms for effective coordination among Federal, State, local, and tribal entities, the private sector, and non-governmental organizations (NGOs). Pursuant to the NRP and Homeland Security Presidential Directive 5 (HSPD-5), the Secretary of Homeland Security is responsible for coordination of Federal operations and resources, establishment of reporting requirements, and conduct of ongoing communications with Federal, State, local, and tribal governments, the private sector, and NGOs.

A pandemic will present unique challenges to the coordination of the U.S. Government response. First and foremost, the types of support that the Federal Government will provide to the Nation are of a different kind and character than those it traditionally provides to communities damaged by natural disasters. Second, although it may occur in discrete waves in any one locale, the national impact of a pandemic could last for many months. Finally, a pandemic is a sustained public health and medical emergency that will have sustained and profound consequences for the operation of critical infrastructure, the mobility of people and freight, and the global economy. Health and medical considerations will affect foreign policy, international trade and travel, domestic disease containment efforts, continuity of operations (COOP) within the Federal Government, and many other aspects of the Federal response.

Pursuant to the NRP, as the primary agency for, and coordinator for, Emergency Support Function #8 (Public Health and Medical Services), the Secretary of Health and Human Services will lead Federal health and medical response efforts and will be the principal Federal spokesperson for public health issues, coordinating closely with DHS on public messaging pertaining to the pandemic. Pursuant to HSPD-5, as the principal Federal official for domestic incident management, the Secretary of Homeland Security will provide coordination for Federal operations and resources, establish reporting requirements, and conduct ongoing communications with Federal, State, local, and tribal governments, the private sector, and NGOs. In the context of response to a pandemic, the Secretary of Homeland Security will coordinate overall non-medical support and response actions, and ensure necessary support to the Secretary of Health and Human Services' coordination of public health and medical emergency response efforts.

The NRP stipulates mechanisms for coordination of the Federal response, but sustaining these mechanisms for several months to over a year will present unique challenges. Day-to-day situational monitoring will occur through the national operations center, and strategic policy development and coordination on domestic pandemic response issues will be accomplished through an interagency body composed of senior decision makers from across the government and chaired by the White House. These and other considera-

tions applicable to response to a pandemic will be incorporated in the NRP review process and inform recommendations on revisions and improvements to the NRP and associated annexes.

Pursuant to the NRP, policy issues that cannot be resolved at the department level will be addressed through the Homeland Security Council/National Security Council (HSC/NSC)-led policy coordination process.

## **Roles and Responsibilities**

### **The Federal Government**

The *National Response Plan* is the primary mechanism for coordination of the Federal Government response to terrorist attacks, major disasters, and other emergencies, and will form the basis of the Federal pandemic response. While the Secretary of Homeland Security is responsible for overall coordination of Federal response actions for a pandemic, nothing in the NRP alters or impedes the ability of Federal, State, local, or tribal departments and agencies to carry out their specific authorities or perform their responsibilities under all applicable laws, Executive orders, and directives. Individual departments and agencies have responsibilities within the NRP for a pandemic, consistent with what is described below:

*The Secretary of Health and Human Services* will be responsible for the overall coordination of the public health and medical emergency response during a pandemic, to include coordination of all Federal medical support to communities; provision of guidance on infection control and treatment strategies to State, local, and tribal entities, and the public; maintenance, prioritization, and distribution of countermeasures in the Strategic National Stockpile; ongoing epidemiologic assessment, modeling of the outbreak, and research into the influenza virus, novel countermeasures, and rapid diagnostics.

*The Secretary of Homeland Security*, will be responsible for coordination of the Federal response as provided by the *National Strategy for Pandemic Influenza (Strategy)*, the Homeland Security Act of 2002, and HSPD-5, and will support the Secretary of Health and Human Services' coordination of overall public health and medical emergency response efforts. The Secretary will be responsible for coordination of the overall response to the pandemic, implementation of policies that facilitate compliance with recommended social distancing measures, the provision of a common operating picture for all departments and agencies of the Federal Government, and ensuring the integrity of the Nation's infrastructure, domestic security, and entry and exit screening for influenza at the borders.

*The Secretary of State* will be responsible for the coordination of the international response, including ensuring that other nations join us in our efforts to contain or slow the spread of a pandemic virus, helping to limit the adverse impacts on trade and commerce, and coordinating our efforts to assist other nations that are impacted by the pandemic.

*The Secretary of Defense* will be responsible for protecting American interests at home and abroad. The Secretary of Defense may assist in the support of domestic infrastructure and essential government services or, at the direction of the President and in coordination with the Attorney General, the maintenance of civil order or law enforcement, in accordance with applicable law. The Secretary of Defense will retain command of military forces providing support.

*The Secretary of Transportation* will be responsible for coordination of the transportation sector and will work to ensure that appropriate coordinated actions are taken by the sector to limit spread of infection while preserving the movement of essential goods and services and limiting the impact of the pandemic on the economy.

*The Secretary of Agriculture* will be responsible for overall coordination of veterinary response to a domestic animal outbreak of a pandemic virus or virus with pandemic potential and ongoing surveillance for influenza in domestic animals and animal products. The Secretary of Agriculture will also be responsible for ensuring that the Nation's commercial supply of meat, poultry, and egg products are wholesome, not adulterated, and properly labeled and packaged.

*The Secretary of the Treasury* will be responsible for monitoring and evaluating the economic impacts of the pandemic and will help formulate the economic policy response and advise on the likely economic impacts of containment efforts. The Secretary of the Treasury will also be responsible for preparing policy responses to pandemic-related international economic developments, for example, leading the Federal Government's engagement with the multilateral development banks (MDB) and international financial institutions (IFI), including encouraging MDB and IFI efforts to assist countries to address the impact of pandemic influenza.

The Secretary of Labor will be responsible for promoting the health, safety, and welfare of employees and tracking changes in employment, prices, and other economic measurements.

*Other Cabinet heads* will retain responsibility for their respective sectors. All departments and agencies will be responsible for developing pandemic plans that (1) provide for the health and safety of their employees; (2) ensure that the department or agency will be able to maintain its essential functions and services in the face of significant and sustained absenteeism; (3) provide clear direction on the manner in which the department will execute its responsibilities in support of the Federal response to a pandemic as described in this Plan; and (4) communicate pandemic preparedness and response guidance to all stakeholders of the department or agency.

### **Non-Federal Entities**

The *Strategy* and this Plan clearly articulate expectations for all stakeholders for pandemic preparedness and response, including international partners, State, local, and tribal entities, the private sector and infrastructure providers, and individuals and families. These expectations can be found under "Roles and Responsibilities" in the subsequent chapters and the "Actions and Expectations" contained at the end of each chapter.

## **Federal Government Actions during a Pandemic**

While the majority of this Plan describes specific actions that will be taken to improve our preparedness, it is important to show how this preparedness will translate to action in the period of time immediately before, during, and after the emergence of a pandemic. The unpredictable nature of a pandemic, the character of the pandemic virus, and the state of our preparedness efforts when a pandemic begins make it difficult to accurately predict all actions that the Federal Government will take during a pandemic. Nevertheless, it is possible to describe what action would be taken if a pandemic begins tomorrow, recognizing that our preparedness and ability to respond will improve with each passing month.

For containment to be effective, the United States and the international community must develop a comprehensive containment strategy that involves commitments of funding, supplies, equipment, training, expertise, personnel, countermeasures (e.g., antiviral medications, vaccine, and personal protective equipment (PPE)), and animal and public health measures in a coordinated, global approach. The success of such an effort, however, will be highly dependent on early notification of influenza cases, in

both humans and animals, caused by strains that have pandemic potential. Countries must immediately notify the World Health Organization (WHO) of such infections in humans, and the World Organization for Animal Health (OIE) for infections in animals, and provide timely sharing of samples to allow for an international response to be initiated.

### **World Health Organization Phases of a Pandemic**

It is most appropriate to link our actions to the phases of a pandemic. The WHO has defined six phases, before and during a pandemic, that are linked to the characteristics of a new influenza virus and its spread through the population. This characterization represents a useful starting point for discussion about Federal Government actions.

#### **Inter-Pandemic Period** (period of time between pandemics)

*Phase 1:* No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals. If present in animals, the risk of human disease is considered to be low.

*Phase 2:* No new influenza virus subtypes have been detected in humans. However, a circulating animal influenza virus subtype poses a substantial risk of human disease.

#### **Pandemic Alert Period**

*Phase 3:* Human infection(s) with a new subtype, but no human-to-human spread, or at most rare instances of spread to a close contact.

*Phase 4:* Small cluster(s) with limited human-to-human transmission but spread is highly localized, suggesting that the virus is not well adapted to humans.

*Phase 5:* Larger cluster(s) but human-to-human spread still localized, suggesting that the virus is becoming increasingly better adapted to humans, but may not yet be fully transmissible (substantial pandemic risk).

#### **Pandemic Period**

*Phase 6:* Pandemic phase: increased and sustained transmission in general population.

We are currently in WHO Phase 3 of the Pandemic Alert Period. As previously described, significant action is underway to prepare for a pandemic. It is the policy of the Federal Government to accelerate these preparedness efforts prior to WHO Phase 4, then initiate pandemic response actions at Phase 4, when epidemiological evidence of two generations of human-to-human transmission of a new influenza virus is documented anywhere in the world.

### **Stages of the Federal Government Response**

The WHO phases provide succinct statements about the global risk for a pandemic and provide benchmarks against which to measure global response capabilities. In order to describe the Federal Government approach to the pandemic response, however, it is more useful to characterize the stages of an outbreak in terms of the immediate and specific threat a pandemic virus poses to the U.S. population

(See *WHO Global Pandemic Phases and the Stages for Federal Government Response* between Chapters 5 and 6). The following stages provide a framework for Federal Government actions:

*Stage 0: New Domestic Animal Outbreak in At-Risk Country*

*Stage 1: Suspected Human Outbreak Overseas*

*Stage 2: Confirmed Human Outbreak Overseas*

*Stage 3: Widespread Human Outbreaks in Multiple Locations Overseas*

*Stage 4: First Human Case in North America*

*Stage 5: Spread throughout United States*

*Stage 6: Recovery and Preparation for Subsequent Waves*

The following description of the Federal Government response at each of these stages is divided into objectives, actions, policy decisions, and messaging considerations (see *Stages of Federal Government Response* between Chapters 5 and 6). “Immediate Actions” reflect those agreed-upon measures that would be triggered as each landmark for increasing risk to the U.S. population was passed. “Policy Decisions” reflect issues that would have to be considered by the Federal Government at the time, in the context of the available information about the pandemic and the status of our response. Finally, “Communications and Outreach” describes the high-level objectives of the guidance that is provided to the public; institutions; State, local, and tribal authorities; and our international partners.

This Plan will be updated on a regular basis to reflect ongoing policy decisions, as well as improvements in domestic preparedness (e.g., increases in the size of our domestic stockpile or vaccine production capacity).

The list of decisions and actions is not exhaustive—it is intended to provide a high-level overview of the Federal Government approach to a pandemic response. It should also be recognized that during a pandemic a number of actions and decisions will proceed in the face of incomplete information, or in the setting of a rapidly evolving epidemiologic or societal picture. It will be important to maintain a flexible and nimble response posture throughout the response, and adjust our approach as additional situational information becomes available. Finally, there are a series of crosscutting actions that will occur throughout the response. We will continuously review, reassess, and adjust our strategy as new information or response capabilities become available, in areas such as risk communication to the public, our allocation scheme for countermeasures, and the support provided to different sectors of critical infrastructure and the economy.

While this set of actions and decisions represents the Federal Government approach to the pandemic response, this approach will not be taken in a vacuum. We will ensure that our response is closely coordinated with our international partners, multilateral organizations, and State, local, and tribal entities, and that we provide clear, accurate, credible, and timely information about our response to the public and all other stakeholders on an ongoing basis.

## Summary of Federal Government Actions during a Pandemic

### Stage 0: New Domestic Animal Outbreak in At-Risk Country (WHO Phase 1, 2, or 3)

A human pandemic influenza virus could emerge outside the United States or within our borders. Because of the potential for an HPAI virus, including the current HPAI H5N1, to become a pandemic strain, many international animal health initiatives are being implemented to assist affected countries with their response to disease outbreaks in poultry. Control of threatening viruses among animals is a critical element of the strategy to reduce the level of human exposure, a key risk factor for infection and, therefore, emergence of a pandemic strain.

Regardless of where the risk exists for emergence of a pandemic strain, we must be prepared to respond appropriately. A robust surveillance system in domestic animals and wildlife is required to ensure detection and identify new outbreaks in previously unaffected countries. Of the two, outbreaks in domestic animals present a relatively higher likelihood of human exposure to influenza virus than do outbreaks in wildlife. Domestic animal infections may also present more opportunity than do wildlife infections for an influenza virus to undergo genetic reassortment and become a human pandemic strain. This means that when an influenza virus with human pandemic potential is introduced into domestic birds or other domestic animals in a previously unaffected country, the infection must be detected and eradicated as quickly as possible. If such a virus is found in wild birds or other wildlife, efforts should be directed at preventing it from being introduced into domestic birds or other susceptible animals.

Perhaps most importantly, surveillance of animals needs to be integrated with human influenza surveillance activities at a national level. It is important for results of animal surveillance to serve as an input that may help target human surveillance efforts, relative to temporal, geographic, or other risk factors, especially when an influenza virus with human pandemic potential is detected in birds or other animals.

A confirmed outbreak in domestic animals of an influenza virus with pandemic potential, especially one that has already shown the ability to cause illness in humans, signals an important opportunity to decrease the risk of a human pandemic. When such an outbreak occurs in a country that is not currently experiencing other outbreaks caused by that strain of influenza virus, there will be a variety of actions that need to be taken to address the situation. It is incumbent upon the international community to take rapid action to ascertain the facts on the ground and provide appropriate assistance to the affected country. The steps taken in this stage will be closely coordinated with our international partners and multilateral organizations such as the United Nations Food and Agriculture Organization (FAO) and the OIE.

Should such an outbreak occur within the United States, appropriate response and coordination activities will be initiated as presented in Chapter 7 — Protecting Animal Health.

#### Objectives

- Track outbreaks until control/resolution.
- Provide coordination mechanisms, logistical support, and technical guidance.
- Monitor for reoccurrence of disease.

### **Immediate Actions**

- Initiate dialogue with FAO, other relevant international health organizations, and other international partners to ensure complete coordinated support (Department of State (DOS) and USDA).
- Initiate dialogue with affected nation through diplomatic, animal health, and human health channels to ascertain situation, offer scientific, technical, and, potentially, economic and trade assistance, and encourage full and open sharing of information (DOS, HHS, and USDA).
- Prepare to deploy rapid response team including influenza epidemiology, diagnostics, public-health management, and communications, as part of bilateral and multilateral teams to assess situation and requirements for successful animal disease eradication and human disease prevention effort (DOS, USDA, U.S. Agency for International Development (USAID), Department of Defense (DOD), and HHS).
- Prepare to supply testing protocols and deploy reagents and equipment to support diagnostic requirements for both animal and human testing (USDA, HHS, DOD, and DHS).
- Prepare to deploy animal disease response materiel, including PPE (USDA and USAID).

### **Policy Decisions**

- Deployment of countermeasures to affected country as part of the U.S. contribution to an animal disease control and eradication effort.

### **Communications and Outreach**

- All: Advise that the Federal Government, along with international partners, is working to ascertain situation as quickly as possible, and that information will be communicated as it becomes available.
- International: Encourage nations and international animal and public health organizations to engage in rapid, coordinated assessments and coordinated communication of findings.
- Public: Reassure public that disease containment measures have been implemented and indicate that measures are targeted at preventing animal-to-animal and animal-to-human transmission.

### **Stage 1: Suspected Human Outbreak Overseas (WHO Phase 3)**

There are many ways in which suspicious clusters of illness may come to our attention, including through reporting to the WHO, news reporting, clinical results in regional laboratories, or through word of mouth or other informal channels. It is incumbent upon the international community to take rapid action to ascertain the facts on the ground, irrespective of the manner in which the reporting occurs. The steps taken here and at subsequent stages will be closely coordinated with our international partners and multilateral organizations such as the WHO.

With the WHO Secretariat and other partners, countries should agree ahead of time on the core content of basic information packages that will be necessary to give to the public in the event of a pandemic, and, to the greatest extent possible, develop an agreed “script” of common, harmonized messages to broadcast



to the public immediately and continuing for at least 36 to 48 hours after a pandemic has potentially begun.

### **Objectives**

- Rapidly investigate and confirm or refute reports of human-to-human transmission.
- Initiate coordination mechanisms and logistical support that will be necessary if outbreak confirmed.

### **Immediate Actions**

- Initiate dialogue with WHO and other relevant international health organizations to ensure complete coordinated support (DOS and HHS).
- Deploy rapid response team including influenza epidemiology, microbiology, public health management, infection control, and communications, as part of bilateral and multilateral teams to assess situation and identify situation-specific requirements for successful containment effort if human-to-human transmission strongly suspected or confirmed (HHS).
- Ensure rapid genetic sequencing of viral isolates is performed, providing U.S. facilities and resources to support sequencing and comparison with existing influenza gene libraries as needed (HHS).
- Activate logistical capability to transport samples to the United States or other key locations (HHS and DOD).
- Prepare to deploy reagents to support surge diagnostic requirements (HHS).
- Amplify laboratory-based and clinical surveillance in region (DOD and HHS).
- Prepare to provide logistical support for deployment of stockpile materiel to region, including identification of necessary equipment, supplies, and personnel (DOD and HHS).
- Activate Assistant Secretary-level task force to track developments in region, coordinate and communicate information flow across interagency, and coordinate response efforts and decisions (DOS, HHS, and DHS).
- Initiate dialogue with potentially affected nations through diplomatic and health channels to ascertain situation, offer scientific, technical, and potentially economic and trade assistance, and encourage full and open sharing of information; initiate dialogue with international partners to ensure complete coordinated support (DOS and HHS).
- Review domestic plans to increase layered protective measures at borders and prepare to implement travel restrictions from affected areas, as appropriate (DHS, HHS, and Department of Transportation (DOT)).

### **Policy Decisions**

- Pre-positioning of U.S. contribution to international stockpile assets in region of suspected outbreak.

- Vaccination of selected populations with pre-pandemic vaccine.

### **Communications and Outreach**

- All: Advise that the Federal Government, along with international partners, is working to ascertain situation as quickly as possible, and that information will be communicated as it becomes available.
- International: Encourage nations and international organizations to engage in rapid, coordinated assessments and coordinated communication of findings.
- State/local/tribal entities and Institutions: Review pandemic plans and direct to trusted information sources such as [www.pandemicflu.gov](http://www.pandemicflu.gov).
- Public: Reassure public, explain confirmed facts, and direct to trusted information sources such as [www.pandemicflu.gov](http://www.pandemicflu.gov).

### **Stage 2: Confirmed Human Outbreak Overseas (WHO Phase 4 or 5)**

We will rely upon the WHO to confirm sustained human-to-human transmission of a novel influenza virus, but it is possible that confirmation will come directly from an affected nation or through our own scientists in the affected region.

#### **Objectives**

- Contain the outbreak to the affected region(s) and limit potential for spread to the United States.
- Activate the domestic public health and medical response.

#### **Immediate Actions**

- Deploy non-countermeasure components of international stockpile and diagnostic reagents to support outbreak investigation, as well as technical and medical assistance (DOS, HHS, and DOD).
- Rapidly assess conditions and likelihood of international containment or slowing of pandemic spread (HHS, DHS, DOD, and DOS).
- Support international deployment of countermeasures to affected region(s) (see below).
- Work with other countries to implement host country pre-departure screening and initiate U.S. en route and arrival screening at U.S. ports of entry (DOS, DOT, DHS, HHS, and DOD).
- Consider travel or routing restrictions from the affected area and for countries that do not have adequate pre-departure screening (DHS, DOT, DOS, and DOD).
- Implement protocols for cargo handling that allow trade to continue, when possible (DHS, DOD, DOS, and DOT).

- Implement protocols to manage or divert inbound international flights with suspected cases of pandemic influenza and prepare to limit domestic ports of entry to manage increased demand for screening, as needed (DOT, DOS, DHS, HHS, and DOD).
- Activate domestic quarantine stations and ensure coordination at State, local, and tribal level, especially with health care resources (HHS and DHS).
- Declare Incident of National Significance (DHS in coordination with other Federal departments).
- Amplify hospital-based surveillance in all communities (HHS).
- Develop seed for vaccine and prepare to produce monovalent vaccine (HHS).
- Meet with vaccine and pharmaceutical manufacturers to discuss maximal exploitation of production capacity and regulatory modifications to facilitate countermeasure production (HHS).
- Develop, produce, and deploy diagnostic reagents for pandemic virus to Laboratory Response Network (LRN) laboratories (HHS).
- Prepare to provide military bases and installation support to Federal, State, local, and tribal agencies (DOD).
- Evaluate ability of pandemic virus to infect and replicate efficiently in poultry or other animals and take appropriate actions based on the results of the evaluation (USDA).
- Determine whether pre-pandemic vaccine is effective against pandemic strain (HHS).
- Review domestic pandemic plans and prepare for response, placing critical staff on recall and pre-deploying assets where appropriate (All).

### **Policy Decisions**

- Deployment of countermeasures to affected region(s) as part of the U.S. contribution to a containment effort.
- Entry/exit screening criteria, nations/regions involved, protocol for isolation and quarantine of passengers and employees.
- Diversion of annual trivalent vaccine production to monovalent pandemic vaccine when seed virus available.
- Pre-vaccination with or administration of a primer dose of pre-pandemic (unmatched) vaccine for emergency response teams (to be followed by pandemic strain vaccine, when available).
- Revision of prioritization and allocation scheme for pandemic vaccine and antiviral medications, based upon real-time situational analysis of characteristics of the pandemic virus, epidemiological analyses, and the most recent data regarding available stockpiles of countermeasures.

- Deployment of pre-pandemic vaccine to State/tribal entities and to Federal departments and agencies, and initiation of vaccination.

#### **Communications and Outreach**

- All: Place all on alert that a high likelihood of a pandemic exists, educate all stakeholders on Federal Government response and containment strategies and expectations for all entities below.
- International: Encourage rapid, coordinated containment effort and coordinated actions to limit from region and to screen passengers.
- State/local/tribal: Place on alert for spread of outbreak to the United States; activate preparedness/response plans and surveillance systems; initiate regular calls with Governors and State/tribal public health and emergency preparedness leaders to provide guidance on preparedness actions necessary and to coordinate messaging.
- Institutions: Make organizations aware of continuity plans and measures to limit infection transmission in workplace; reassure that efforts will be made to limit adverse impact on movement of goods, services and people.
- Public: Prepare public for possibility of a pandemic while providing information about containment efforts, reassure that we have not yet seen cases domestically; review actions that reduce likelihood of influenza exposure and limit influenza transmission.

#### **Stage 3: Widespread Human Outbreaks in Multiple Locations Overseas (WHO Phase 6)**

The occurrence of widespread outbreaks suggests that efforts are unlikely to be successful in containing the emerging pandemic. We will focus our efforts on our domestic preparedness posture and response actions and on delaying the onset of epidemics within the United States.

#### **Objectives**

- Delay the emergence of pandemic influenza in the U.S. and North American populations.
- Ensure the earliest warning possible of the first case(s) in North America.
- Prepare our domestic containment and response mechanisms.

#### **Immediate Actions**

- Re-examine limitation on international travel from affected regions (or regions that do not institute pre-departure screening) and maintain layered screening measures for host country pre-departure, en route, and arrival of U.S.-bound travelers (DOS, DHS, and HHS).
- Prepare “containment stockpile” for deployment to quarantine stations and other locations as appropriate (HHS).
- Maintain heightened hospital-based surveillance in all communities (HHS).

- If not previously available, develop and deploy diagnostic reagents for pandemic virus to all LRN laboratories (HHS).
- Perform real-time modeling and epidemiological analyses to characterize the virus, its speed of spread, and impact on the population to inform recommendations concerning public health interventions and countermeasure prioritization (HHS).
- Deploy antiviral stockpile with appropriate security to State/tribal entities and to Federal departments and agencies, with prioritization and treatment recommendations (HHS).
- Prepare to implement surge plans at Federal medical facilities (HHS, DOD and Department of Veterans Affairs (VA)).
- Activate domestic emergency medical personnel plans (HHS and VA).
- If not previously done, divert annual trivalent vaccine production to monovalent pandemic vaccine (HHS).
- Deploy pre-pandemic vaccine to State/tribal entities and to Federal agencies, and initiation of vaccination.

#### **Policy Decisions**

- Prioritize efforts for domestic preparedness and response.

#### **Communications and Outreach**

- International: Reinforce importance of limiting travel in affected areas and continuing entry/exit screening.
- State/local/tribal: Advise governments to activate pandemic response plans; review influenza case definition and testing protocols used by public health and medical community; announce preliminary conclusions of epidemiologic assessments and modeling; request that State, local, and tribal leadership reach out to critical infrastructure providers to ensure that continuity plans are in place.
- Institutions: Review COOP guidance.
- Public: Review preparedness and countermeasure distribution guidance; advise public to prepare to reduce non-essential domestic travel once epidemic reaches United States.

#### **Stage 4: First Human Case in North America (WHO Phase 6)**

We recognize that the development of the first case anywhere in North America represents a significant threat to the entire continent, as for practical purposes it will be impossible to prevent completely the migration of disease across land borders. We also recognize that a pandemic could originate in North America, rather than overseas, in which case our response would begin with the steps below. We will work with Canada and Mexico to delay the spread of the pandemic across North America through aggressive attempts to contain the initial North American outbreaks, recognizing the challenges associated with such an effort.

### **Objectives**

- Contain the first cases on the continent with slowing of first and subsequent pandemic waves of spread.
- Antiviral treatment and prophylaxis.
- Implement the national response.

### **Immediate Actions**

- Deploy “containment stockpile,” if available, to any domestic region with confirmed or suspected cases of pandemic influenza, if an epidemiologic link to an affected region exists (HHS).
- Limit non-essential passenger travel in affected areas and institute protective measures/social distancing, and support continued delivery of essential goods and services (DHS, DOT, and HHS).
- Ensure that pandemic plans are activated across all levels of government and in all institutions (HHS and DHS).
- Continue with development of pandemic vaccine (HHS).
- Activate surge plans within Federal health care systems and request that State, local, and tribal entities do the same (HHS and DHS).
- Continue to develop and deploy diagnostic reagents for pandemic virus to all LRN laboratories and other laboratories with capability and expertise in pandemic influenza diagnostic testing (HHS).
- Antiviral treatment and targeted antiviral prophylaxis (HHS).

### **Policy Decisions**

- Revision of prioritization and allocation scheme for pandemic vaccine as appropriate, based upon characteristics of the pandemic virus and available quantities of vaccine.

### **Communications and Outreach**

- All: Communicate up-to-date information on epidemiologic characteristics of virus and outbreak modeling.
- International: Reinforce importance of travel restrictions and entry/exit screening.
- State/local/tribal: Advise State, local, and tribal leadership to implement pandemic response plans; provide guidance on public communication.
- Institutions: Advise institutions to implement continuity plans.
- Public: Review actions that reduce likelihood of influenza exposure and limit influenza transmission; assure public of ability to maintain domestic safety and security; advise public to

curtail non-essential travel and prepare for implementation of community disease containment measures as epidemic spreads (See *Individual, Family, and Community Response to Pandemic Influenza* between chapters 5 and 6).

### **Stage 5: Spread throughout United States (WHO Phase 6)**

The emergence of human cases in multiple locations around the country will portend a progressive increase in case load on communities and a resulting impact on all institutions, including those supporting critical infrastructure.

#### **Objectives**

- Support community responses to the extent possible to mitigate illness, suffering, and death.
- Preserve the functioning of critical infrastructure and mitigate impact to the economy and functioning of society.

#### **Immediate Actions**

- Maintain continuous situational awareness of community needs, triage, and direct Federal support of health and medical systems, infrastructure, and maintenance of civil order as feasible (All).
- Deploy pandemic vaccine, if available, with continuously updated guidance on prioritization and use (HHS).
- Continuously evaluate the epidemiology of the pandemic virus and update recommendations on treatment of patients and protective actions for all sectors on an ongoing basis (HHS and DHS).
- Provide guidance on judicious use of key commodities to reduce the likelihood of shortages (DHS).

#### **Policy Decisions**

- Determination of whether (and if so, the form of) Federal intervention is required to support critical infrastructure and the availability of key goods and services (such as food, utilities, and medical supplies and services).
- Determination of when travel restrictions previously enacted can be lifted.

#### **Communications and Outreach**

- International: Advise that the United States is executing its plans to assure continuity of society and national defense.
- State/local/tribal entities and Institutions: Advise that Federal Government will continue to provide support, as possible; advise continued implementation of continuity plans, update guidance on epidemiology and successful COOP plans.

- Public: Review actions that reduce likelihood of influenza exposure and limit influenza transmission; provide candid messages about the epidemiology of the virus, the likelihood of contracting influenza and likelihood of severe illness.

### **Stage 6: Recovery and Preparation for Subsequent Waves (WHO Phase 6 or 5)**

While a pandemic may impact the Nation for several months or over a year, a given community can expect to be affected by a pandemic over the course of 6 to 8 weeks. While subsequent waves have been the norm in previous pandemics, it will be important for communities to begin reconstituting themselves as soon as possible in order to mitigate persistent secondary and tertiary impacts of the outbreak, including the adverse economic consequences that are anticipated.

#### **Objectives**

- Return all sectors to a pre-pandemic level of functioning as soon as possible.
- Prepare for subsequent waves of pandemic.

#### **Immediate Actions**

- Work with private sector, State, local, and tribal entities to prioritize and begin restoring essential services and reviewing plans to maintain continuity of operations in subsequent waves with support of employees that are immunized or have developed immunity (DHS and HHS).
- Redeploy and refit Federal response assets (All).
- Resume essential Federal functions and ensure continuity of operation through subsequent waves (DHS and All).
- Maintain continuous situational awareness of disease in communities, in order to forecast the reduction in illness and reduction in strain on critical infrastructure (HHS and DHS).
- Provide continuously updated information about the epidemiology of the virus, effective treatments, and lessons learned from the first wave, so as to enhance preparedness for subsequent waves (HHS).
- Continue deployment of pandemic vaccine in preparation for subsequent waves (HHS).
- Review lessons learned to develop strategies for subsequent waves (All).

#### **Policy Decisions**

- Determination as to whether Federal support is needed for any sector(s) unable to function effectively after the pandemic.

#### **Communications and Outreach**

- All: Advise that additional waves of the pandemic may occur and emphasize need to prepare accordingly; communicate key lessons learned to all sectors, and recommend actions to enhance preparedness for subsequent waves.