

Key Elements of Departmental Pandemic Influenza Plans

The *National Strategy for Pandemic Influenza Implementation Plan* requires Federal departments and agencies to develop plans addressing (1) protection of employees, (2) maintenance of essential functions and services, (3) support for the Federal response, and (4) communication with stakeholders about pandemic planning and response. The Federal departments, agencies, and independent organizations are hereinafter referred to as “agencies.” In November 2006, Homeland Security Council (HSC) staff requested that department and agency heads certify in writing to the HSC that their respective department or agency was addressing the applicable elements of pandemic planning set forth in a checklist developed and published at <http://www.pandemicflu.gov>. That checklist provided a mechanism to assist agencies in developing their pandemic plans and ensured uniform preparedness across the U.S. Government.

The Ongoing Nature of Planning and Preparedness: Since 2006, preparedness efforts have matured, new challenges have been identified and addressed, and more Federal guidance has been released. Pandemic planning is not a static process; as a result, agencies have been encouraged to participate in interagency meetings, monitor the central web-based repository for all Federal guidance at <http://www.pandemicflu.gov/plan/Federal/index.html>, and to revise their own plans and procedures accordingly. In August 2008, the checklist below was updated following an HSC interagency process to reflect current Federal Government guidance. It is for internal agency use only, and is not intended to serve as a reporting mechanism to any third party.

General Instructions: Agencies should address all applicable elements of pandemic planning set forth in the updated checklist below. Each planning element question is complemented with *Comments* and *Supporting Documents* fields (for internal agency use to document how and where the applicable elements are addressed). New or updated planning elements are identified in the *Comments* field. Agencies should implement the applicable planning elements and synchronize pandemic planning with the Stages of the Federal Government Response.¹ Pandemic response activities should align with CDC’s Intervals, Triggers, and Actions framework (see Appendix A). Agencies should plan with the assumption that up to 40 percent of their staff may be absent for periods of about 2 weeks at the height of a pandemic wave with lower levels of absenteeism for a few weeks on either side of the peak. In addition, agencies should plan for Pandemic Severity Index Category 5 (a severe pandemic) and therefore, plan for prolonged implementation of community mitigation measures² that could impact workforce absenteeism such as school closure for up to 12 weeks.

Department and Agency Certification: In order to ensure that agency pandemic plans are current and to ensure uniform preparedness across the U.S. Government, the HSC has requested that all agency heads certify in writing to HSC, by *October 15, 2008*, that their agency is addressing the applicable elements of pandemic planning set forth in the updated checklist below.

¹ The Federal Government Response Stages are available in the *Implementation Plan for the National Strategy for Pandemic Influenza*, at <http://www.whitehouse.gov/infocus/pandemicflu/>.

² <http://www.pandemicflu.gov/plan/community/commitigation.html>

Essential Functions: As with all continuity plans, Federal Continuity Directives 1 and 2 guide the identification of essential functions. Agency pandemic influenza plans should ensure continuity of Primary Mission Essential Functions (PMEFs) and Mission Essential Functions (MEFs) throughout a pandemic. Due to the extended duration of a pandemic, essential functions addressed within pandemic plans would also include functions that cannot be deferred for 12 weeks or more without impact to an agency's mission. In addition, agency plans may address non-essential functions that could be deferred, but can be continued through telework or otherwise modified operationally to keep employee(s) from being at risk while performing those functions (as with all essential functions). The functions (and services supporting them) addressed within pandemic planning may be performed by Federal agency employees or contractors.

	Planning Element:	Comments	Supporting Documents
A. Plans and Procedures			
A.1	Has the agency designated a member of its leadership to coordinate its pandemic planning? Has the agency communicated this appointment to its components?		
A.2	Has the agency identified a structure to support the person charged with executing the agency's pandemic plan? The pandemic planning team should include representatives of relevant internal stakeholders (e.g., Senior Management, Emergency Management/Continuity of Operations, Human Capital, Telework Coordinators, Public Affairs/Communications, Information Technology, Component Agencies, etc.).	Updated Element	
A.3	Does the agency's plan include measures that are designed to minimize the health, social and economic impacts of a pandemic by:		
A.3a	Protecting employees' health and safety at work during a pandemic?³		
A.3b	Communicating guidance to stakeholders prior to and during a pandemic?		
A.4	As part of its pandemic influenza planning and preparations, is the agency: ⁴		

³ For guidance related to A.3, please see *Community Strategy for Pandemic Influenza Mitigation* available at <http://www.pandemicflu.gov/plan/community/commitigation.html>, as well as guidance safety and health guidance issued by HHS and the Department of Labor (DOL) referenced in Section H.6.)

⁴ For guidance related to A.4, please see *Preparing the Workplace for Everyone: Accounting for the Needs of People with Disabilities* (Appendix A, page 60), available at <http://www.dol.gov/odep/programs/emergency.htm>.

Planning Element:		Comments	Supporting Documents
A.4a	Accounting for the needs of employees and stakeholders, including individuals with special needs and those with disabilities?	Updated Element	
A.4b	Involving a cross section of individuals, including individuals with special needs and those with disabilities, in aspects of emergency preparedness?	Updated Element	
A.4c	Making plans and subsequent communications accessible to and usable by all employees and stakeholders, including those with special needs and those with disabilities?	Updated Element	
A.5	Has the agency, working through the Federal Executive Board,⁵ the DHS National Operations Center, other Federal agencies, and the communities in which the agency is located, aligned its plan and implementation of the plan (e.g., altering operations, flexible work schedules, sick leave, social distancing, telework, shutting down operations in affected areas, etc.) with: - The Federal Government Response Stages?⁶ - The Community Strategy for Pandemic Influenza Mitigation?⁷ - CDC's Intervals, Triggers, and Actions framework? (Appendix A) See also the discussion on Intervals on pp. 12-19 of the Federal Guidance to Assist States.⁸	Updated Element	
A.6	Has the agency (through the Federal Executive Board and/or other Federal agencies, where applicable) ensured that its plans accommodate local response plans by: ⁹	Updated Element	

⁵ Communities across the Nation are planning for a potential pandemic; community policies may impact the operations of government entities in their jurisdiction. Twenty eight Federal Executive Boards in major centers of Federal activity (Albuquerque-Santa Fe, Atlanta, Baltimore, Boston, Buffalo, Chicago, Cincinnati, Cleveland, Dallas-Fort Worth, Denver, Detroit, Honolulu, Houston, Kansas City, Los Angeles, Miami, Minneapolis-St. Paul, Newark, New Orleans, New York, Oklahoma City, Philadelphia, Pittsburgh, Portland, St. Louis, San Antonio, San Francisco, and Seattle) provide a useful mechanism for coordinating Federal activities with those of the community. (More information available at: <http://www.feb.gov/>).

⁶ The Federal Government Response Stages are available in the *Implementation Plan for the National Strategy for Pandemic Influenza*, at <http://www.whitehouse.gov/infocus/pandemicflu/>.

⁷ *The Community Strategy for Pandemic Influenza* (available at <http://www.pandemicflu.gov/plan/community/commitigation.html>) recommends early and uniform implementation of layered interventions at the community level, including targeted use of antiviral medications, voluntary home isolation and quarantine of the ill and their immediate household members, dismissal of students from school with social distancing of children, and social distancing at work and in the community.

⁸ <http://www.pandemicflu.gov/news/guidance031108.pdf>

	Planning Element:	Comments	Supporting Documents
A.6a	Accounting for likely employee absenteeism for those who must mind school age children due to potential school closures?		
A.6b	Accounting for likely employee absenteeism for those who must stay home due to their own illness, illness of a household member, and/or to provide care for other ill individuals?	Updated Element	
A.7	Before a pandemic, has the agency surveyed employees with an ADA/Rehabilitation Act-compliant questionnaire or other tool in order to estimate employee absenteeism levels or need for telework resources during a pandemic, or otherwise developed plans for assessing the need for telework resources? ¹⁰	New Element	
A.8	To ensure all-hazards preparedness in accordance with the National Incident Management System and the National Response Framework, have the agency's pandemic plans been integrated with Continuity of Operations (COOP) and Continuity of Government (COG) plans, as well as operations plans developed pursuant to HSPD-5, HSPD-8, and the Integrated Planning System?	New Element	
B. Essential Functions and Services			
B.1	Does the agency's plan include definitions and identification of essential services and functions needed to sustain agency mission and operations? ¹¹		

⁹ Communities across the Nation are planning for a potential pandemic; community policies may impact the operations of government entities in their jurisdiction. Twenty eight Federal Executive Boards in major centers of Federal activity (Albuquerque-Santa Fe, Atlanta, Baltimore, Boston, Buffalo, Chicago, Cincinnati, Cleveland, Dallas-Fort Worth, Denver, Detroit, Honolulu, Houston, Kansas City, Los Angeles, Miami, Minneapolis-St. Paul, Newark, New Orleans, New York, Oklahoma City, Philadelphia, Pittsburgh, Portland, St. Louis, San Antonio, San Francisco, and Seattle) provide a useful mechanism for coordinating Federal activities with those of the community. (More information available at: <http://www.feb.gov/>).

¹⁰ Prior to a pandemic, the Rehabilitation Act and the Americans with Disabilities Act would prohibit employers from asking employees to disclose medical conditions that could be disabilities (e.g., heart conditions, HIV, immune system deficiencies) in an effort to identify employees who may be at a greater risk of contracting pandemic influenza. The Frequently Asked Questions available at http://www.pandemicflu.gov/faq/workplace_questions/equal_employment/13.html include an ADA/Rehabilitation Act compliant approach.

¹¹ For guidance on planning and preparedness elements, see page 1 of this document.

	Planning Element:	Comments	Supporting Documents
B.2	Does the agency's plan include determination of which, if any non-essential functions can be suspended temporarily and for what duration before adversely impacting agency mission (given up to 40 percent absenteeism for 2 weeks during the peak of a pandemic, and lower levels of absenteeism for a few weeks on either side of the peak)?	Updated Element	
B.3	Does the agency's plan address its incident management roles and responsibilities as identified in the National Response Framework?	Updated Element	
B.4	Has the agency planned to sustain essential services and functions during a pandemic influenza outbreak, under the following scenarios:		
B.4a	• Workforce reductions (up to 40 percent absenteeism for 2 weeks during the peak of a pandemic, and lower levels of absenteeism for a few weeks on either side of the peak)?		
B.4b	• Limited access to facilities (e.g., because of social distancing, staffing, security concerns or other external factors)?		
B.4c	• Broad-based implementation of community mitigation measures as outlined in the Community Strategy for Pandemic Influenza Mitigation?¹²	Updated Element	
B.5	Has the agency identified positions, skills, and personnel needed to continue essential services and functions? (For pandemic purposes, essential personnel will likely include a larger percentage of the agency workforce than identified in planning for a COOP event lasting 30 days or less.) See B.8 and B.9.	Updated Element	
B.6	Has the agency developed a plan to ensure and consider:		
B.6a	• Appropriate level of staffing (Federal and contract support) to continue essential functions?		

¹² See also A.5 and A.6

	Planning Element:	Comments	Supporting Documents
B.6b	Coordination of planning with contractors, suppliers, shippers, Federal agencies and other businesses that support, or are supported by, your essential functions? (See also H.1e)		
B.7	As appropriate, has the agency initiated pre-solicited, signed, and standing agreements with contractors and other third parties to ensure fulfillment of mission essential requirements, including contingencies for backup should primary suppliers or contractors be unable to provide required personnel, services, or supplies?		
B.8	Has the agency identified and trained back-up personnel to continue essential services and functions, including back-up personnel in different geographic locations, as appropriate? ¹³		
B.9	Has the agency established a roster of personnel and back-up personnel, by position, needed to continue essential services and functions?		
C. Devolution of Control and Direction/ Delegations of Authority			
C.1	As appropriate, has the agency developed and incorporated detailed guidance for possible full or partial devolution of command and control responsibilities as a strategy to sustain essential functions during a pandemic should the outbreak render leaders and essential staff in one location incapable or unavailable to perform their defined functions, or in the event another emergency/disaster arises during a pandemic that would require devolution?	Updated Element	
C.2	Do the delegations of authority take into account the expected rate of absenteeism?		
D. Orders of Succession			

¹³ An alternative that achieves the same ends: ensure each staff member's familiarity with the roles and responsibilities of 2 additional and related positions, creating in effect a reverse 1 to 3 ratio.

Planning Element:		Comments	Supporting Documents
D.1	Does the agency publish, maintain, and circulate established orders of succession that are at least three deep per responsibility and geographically dispersed, as appropriate to take into account the expected rate of absenteeism?	Updated Element	
E. Primary and Alternate Operating Facilities			
E.1	Has the agency developed and implemented a plan to identify adequate alternate worksites (e.g., home or other adequate alternate worksites that maintain social distancing measures), as appropriate, to assure capability to maintain essential services for up to several months during a pandemic? (See also H.5b.)		
E.2	Has the agency identified which essential services and functions can be continued from designated operating facilities or alternative operating facilities (e.g., home or other adequate alternate worksites) and those that need to be performed at a designated department or agency operating facility? (A designated operating facility is an existing agency facility that may remain open during a pandemic with appropriate social distancing for staff that cannot perform their functions remotely and are needed to support the continuation of essential services and functions.)		
E.3	If additional disasters or emergencies occurring during a pandemic require continuity personnel to report to alternate facilities (other than where they were working as a result of the pandemic), has the agency planned to ensure the health, safety, and security of the employees who must relocate to alternate sites (other than their homes), to include food, water, and hygiene products, in sufficient quantities to sustain operations for up to 30 days or until they can return to their designated work locations? See also Section H.6 Safety and Health of Employees and their Families.	Updated Element	
F. Communications			
F.1	Has the agency developed and implemented mechanisms to communicate relevant information to internal and external stakeholders, including:		

Planning Element:		Comments	Supporting Documents
F.1a	Instructions for determining the status of agency operations and possible changes in working conditions?		
F.1b	Alternative or redundant means of communication in case normal communications are disrupted?	Updated Element	
F.1c	Establish and maintain points of contact for accurate and up-to-date information during a pandemic (e.g., Points-of contact from Department of Homeland Security [DHS] and Department of Health and Human Services [HHS])?	Updated Element	
F.1d	Safety and health information for employees and families? (For contents and related guidance, see Section H.6.)	Updated Element	
F.1e	Creation of links to http://www.pandemicflu.gov for pandemic flu related guidance and information (e.g., signs and symptoms of influenza, modes of transmission, developing individual and family plans, when to return work and school) from internal and public websites?	Updated Element	
F.1f	Mechanisms for how directive actions from the Secretary or head of the agency will be disseminated to components?		
F.1g	Has the agency implemented fully capable continuity communications pursuant to National Communications Security Directive (NCSD) 3-10 to support agency needs during all-hazards emergencies and incorporate such systems as part of pandemic planning?	New Element	
F.1h	Has the agency communicated its pandemic plan to employees and contractors?	New Element	
F.2	Has the agency developed a communication plan that ensures communications are accessible to individuals (both within and outside the continental United States) with:		
F.2a	Limited English proficiency, consistent with Executive Order 13166?		
F.2b	Vision or hearing disabilities?		

	Planning Element:	Comments	Supporting Documents
F.3	To ensure continuity capability for all-hazards emergencies or other situations that could occur during a pandemic, do agency continuity of operations activation and relocation plans include alert and notification procedures for continuity personnel throughout the phases of a continuity event, including processes for monitoring the DHS Homeland Security Advisory System, the Federal Government Response Stages for Pandemic Influenza, intelligence, and other advisory information?	New Element	
G. Vital Records and Databases			
G.1	Has the agency identified and developed plans to ensure access to vital records needed to sustain operations that may be inaccessible remotely from alternative worksites by:		
G.1a	Protecting the confidentiality of, and limiting the disclosure of, employees' personal and protected health information consistent with the Rehabilitation Act, the Privacy Act and the Health Insurance and Portability Accountability Act (HIPAA)?	Updated Element	
G.1b	Establishing security protocols for all systems, databases, and files that will need to be accessed electronically from a remote location (e.g., an employee's home or alternative workplaces)?		
G.2	Has the agency identified and ensured the integrity and continued usability of vital systems that require periodic maintenance or other direct physical intervention by employees?		
H: Human Capital			
H.1	General Human Capital		
H.1a	Has the agency reviewed and incorporated U.S. Office of Personnel Management (OPM) Human Capital Planning guidance for a Pandemic Influenza (www.opm.gov/pandemic/) in its pandemic influenza planning?	Updated Element	

	Planning Element:	Comments	Supporting Documents
H.1b	Has the agency created and implemented workforce guidelines to prevent or minimize workplace exposure to contagious disease? The guidelines must be consistent with Federal law, including equal employment opportunity laws where applicable. (See also H.3a. and H.6.)	Updated Element	
H.1c	Has the agency identified and/or developed alternative work arrangements (e.g., job sharing, flexible work schedules, telework, and expanded scopes of practice or work) available for use in the case of a pandemic health crisis?	Updated Element	
H.1d	Has the agency developed a process consistent with OPM guidance to report the status of its employees during a pandemic health crisis for the purpose of monitoring agency workforce levels?		
H.1e	Has the agency discussed the effect of pandemic related human capital issues with its procurement and contract workforce (including contract workers who are co-located with or routinely work at the same worksite as Federal employees, as well as those who are not co-located with Federal employees)?		
H.1f	Has the agency planned for pandemic-related human capital issues regarding volunteers and trainees who could provide services important to agency operations and continuity? Has the agency consulted applicable laws and regulations, if appropriate?	New Element	
H.2	Employee-Labor Relations:		
H.2a	Has the agency consulted and bargained (as appropriate) with exclusive representatives of bargaining unit employees over human resources issues that may affect employees working conditions or collective bargaining agreements (e.g., telework during a pandemic health crisis)?	Updated Element	

	Planning Element:	Comments	Supporting Documents
H.2b	Has the agency developed a plan for identifying provisions of a collective bargaining agreement or other labor-management agreement that may need to be addressed to enable the agency to carry out its mission in the event of a pandemic-related emergency?		
H.2c	Has the agency developed a plan for communicating with exclusive representatives at the national and/or local level regarding any determination that will affect compliance with specific terms of a collective bargaining agreement during an emergency?		
H.2d	Has the agency developed a plan for determining what, if any, post-implementation bargaining may be necessary as the result of management actions taken during an emergency?		
H.3	Pay and Leave Policy:		
H.3a	Has the agency reviewed and revised, as necessary, agency policy and/or guidance on leave, alternative work schedules (i.e., flexible and compressed work schedules), and evacuation payments? Has the agency examined its sick leave and annual leave policies to ascertain how these policies can be utilized during a pandemic to support home isolation and quarantine, consistent with the Community Strategy for Pandemic Influenza Mitigation? See also A.5 and H.6b.	Updated Element	
H.3b	For the purpose of administering evacuation payments, has the agency identified appropriate work assignments for employees whose homes may be designated as their "safe haven" during a pandemic health crisis? ('Safe haven' means a designated area to which an employee or dependent will be or has been evacuated. 5 CFR 550.402)		
H.3c	Has the agency ensured its managers and supervisors are familiar with various leave options for seeking medical attention, the procedures and obligations for requesting and approving leave, and the limited circumstances under which an employee may be directed to take leave?		

	Planning Element:	Comments	Supporting Documents
H.3d	Has the agency prepared for requesting "buyout" repayment and dual compensation waivers (salary offset waivers for returning annuitants), if needed?		
H.3e	Has the agency assessed all agency policy, guidance, and/or requirements regarding leave, alternative work schedules, and evacuation payments for compliance with Federal law, including equal employment opportunity laws where applicable?		
H.4	Staffing Policies:	Updated Title	
H.4a	Has the agency educated its hiring officials on existing Government-wide and agency-specific hiring authorities, including emergency authorities?		
H.4b	Has the agency identified specific hiring needs (e.g., critical positions, geographic locations) and determined which hiring flexibilities the agency may need to utilize that (1) do not require OPM approval, and (2) require OPM approval?		
H.4c	For hiring needs requiring OPM approval, have agency officials developed documentation and/or compiled information that can be used to immediately request approval in the event of a pandemic health crisis?		
H.5	Telework and Information Technology Capabilities:		
H.5a	Has the agency evaluated and implemented an action plan on current technology, technology support and telecommunications infrastructure to ensure the capability exists to support essential functions and personnel, particularly if working from home or alternate worksites?	Updated Element	
H.5b	Has the agency reviewed and revised telework and related policies, including IT security and operations, to incorporate all OPM, GSA, and other relevant guidance found on www.telework.gov ?	Updated Element	

	Planning Element:	Comments	Supporting Documents
H.5c	Has the agency determined which positions would be eligible for telework during a pandemic and notified employees about the agency telework policy for social distancing during a pandemic, including eligibility criteria? (Note: During a pandemic it is expected that the number of employees teleworking will far exceed the number of usual teleworkers as agencies invoke various social distancing measures to protect workers safety and health.)	Updated Element	
H.5d	Has the agency telework coordinator been provided with training and resources necessary to ensure effectiveness and included the telework coordinator in emergency planning?	Updated Element	
H.5e	Has the agency incorporated emergency telework expectations into telework agreements?	Updated Element	
H.5f	Has the agency assessed the telework policy, guidelines, and requirements for compliance with Federal law, including equal employment opportunity laws where applicable?	Updated Element	
H.6	Safety and Health for Employees¹⁴ and their Families		
H.6a	Based on public health guidance, such as issued by CDC, has the agency established policies for restricting work-related travel to geographic areas affected by a pandemic health crisis and monitoring employees returning from affected areas? ¹⁵	Updated Element	

¹⁴ For guidance related to workplace safety and health, please see *Guidance on Preparing Workplaces for an Influenza Pandemic* (http://www.osha.gov/Publications/influenza_pandemic.html), *Pandemic Influenza Preparedness and Response Guidance for Healthcare Workers and Healthcare Employers* (www.osha.gov/Publications/OSHA_pandemic_health.pdf), and *Proposed Guidance on Stockpiling of Respirators and Facemasks in Occupational Settings* (<http://www.osha.gov/dsg/guidance/stockpiling-facemasks-respirators.html>), *Guidance on When to Return to Your Workplace or School* (website to be determined).

¹⁵ See CDC travel information related to avian influenza, including preventive measures, available at <http://www.cdc.gov/flu/avian/index.htm>. Also, general country information can be obtained from the Department of State's Consular Information Sheets at <http://travel.state.gov> and Embassy and Consulate Websites at http://www.travel.state.gov/travel/tips/embassies/embassies_1214.html.

	Planning Element:	Comments	Supporting Documents
H.6b	Has the agency established leave policies that address employees who become ill or are suspected of becoming ill while at their normal work site? The policies must be compliant with Federal law, including equal employment opportunity laws where applicable.		
H.6c	Has the agency established policies for returning recovered, non-infectious employees to work? ¹⁶ The policies must be compliant with Federal law, including equal employment opportunity laws where applicable.	Updated Element	
H.6d	Has the agency established social distancing policies for preventing pandemic influenza spread at work? The policies must be compliant with Federal law, including equal employment opportunity laws where applicable.		
H.6e	Based on public health (including occupational safety and health) guidance, has the agency disseminated and posted educational and training materials to raise awareness about pandemic and workplace related policies (i.e., stay home if you or a household member is sick, cough etiquette, appropriate use of respiratory protection such as respirators and facemasks, hand hygiene, and social distancing strategies)?	Updated Element	
H.6f	Has the agency's safety and health personnel performed and regularly updated risk assessments based on occupational exposures and assessed whether the risk can be controlled through engineering, administrative and work practice measures, and if not, procured appropriate types and quantities of infection control-related supplies (e.g., personal protective equipment, hand sanitizers, surface wipes, cleansers, and tissues)?	Updated Element	
H.6g	Has the agency identified qualified safety and health personnel to ensure infection control measures are identified and implemented, including (if applicable) the appropriate selection and use of personal protective equipment, based on HHS and DOL guidance?		

¹⁶ http://www1.va.gov/emshg/docs/Brochure_8_When_to_Return_508_Compliant.pdf

	Planning Element:	Comments	Supporting Documents
H.6h	Based on guidance issued by HHS/CDC and the Environmental Protection Agency, has the agency disseminated to contractors and cleaning crews information on routine cleaning practices and environmental management strategies that can be used during influenza seasons as well as during an influenza pandemic?	Updated Element This guidance has not yet been issued and will be found on www.pandemicflu.gov	Interim Guidance on Environmental Management of Pandemic Influenza A Virus, http://www.pandemicflu.gov/plan/healthcare/influenzaguidance.html .
H.6i	Has the agency identified a Pandemic Coordinator and two backups as the points-of-contact for vaccine and antiviral prioritization information and distribution before and during a pandemic? (Recommendations for the use of vaccines and antivirals before and during a pandemic will depend on the nature of the pandemic. While general guidelines are now available, final decisions on prioritization and distribution will not be made until a pandemic occurs, when information about transmission, spread, and illness characteristics of the pandemic virus are known.) ¹⁷	Updated Element	
H.6j	Has the agency reviewed and updated where necessary service contracts with healthcare providers to administer pandemic flu vaccinations (when available), antiviral and supportive medications, or perform other health service related duties during a pandemic?	New Element	
H.6k	Has the agency reviewed its Employee Assistance Program (EAP) and other resources available to employees to ensure they are equipped to prepare and respond to the psychological and social needs of employees prior to, during, and after a pandemic health crisis (e.g., survivor assistance programs)?		
H.6l	Has the agency provided employees with information to promote preparedness at home and in the community? ¹⁸	New Element	

¹⁷ <http://www.pandemicflu.gov/vaccine/allocationguidance.pdf>

¹⁸ Guidance for individuals and families preparing for pandemic is posted at <http://www.pandemicflu.gov/plan/individual/index.html>. Planning information for community organizations is available at <http://www.pandemicflu.gov/plan/community/index.html>.

	Planning Element:	Comments	Supporting Documents
H.6m	Has your agency planned to purchase and stockpile antiviral drugs and personal protective equipment (PPE) for employees identified through the risk assessments conducted pursuant to H.6f? ¹⁹	New Element	
I. Test, Training and Exercise			
I.1	Has the agency conducted pandemic influenza-related exercises (involving essential personnel, managers, senior leadership, and contract support) to examine the impact of a pandemic on agency's ability to carry out essential functions?		
I.2	Has the agency developed processes to evaluate program plans, procedures, and capabilities through periodic reviews, testing, post-incident reports, lessons learned, performance evaluations, and exercises?		
I.3	Has the agency developed processes to ensure that corrective action is taken on any deficiency identified in the evaluation process and to revise at a minimum the relevant policy(ies), guidance, personnel, procedures, training, equipage, facilities, as well as plan(s)?		
J. Reconstitution			
J.1	Does your agency have processes to assess the sufficiency of resources to commence reconstitution efforts?		
J.2	Does your agency have a process for calling up former Federal employees to ensure that mission essential functions are fulfilled?		
J.3	Has the agency developed a plan or procedures to notify all personnel when the actual emergency or threat of an emergency no longer exists?	New Element	

¹⁹ Guidance documents for antiviral drugs and personal protective equipment are available at <http://aspe.hhs.gov/panflu/antiviral-n-masks.shtml> and <http://www.osha.gov/dsg/guidance/stockpiling-facemasks-respirators.html>. Agencies should prepare to procure medical countermeasures and material for very high exposure risk, high exposure risk, and medium exposure risk FTEs, consistent with the guidance documents under development. It is anticipated that many agencies will have few or no FTE that will meet the criteria as very high-risk, high-risk, or medium-risk.

	Planning Element:	Comments	Supporting Documents
J.4	Has the agency developed a plan or procedures to instruct personnel on how to resume normal operations?	New Element	
J.5	Has the agency developed a plan or procedures to supervise a return to the normal operating facility or a move to another temporary or permanent primary operating facility if events have rendered normal facilities unavailable?	New Element	

Appendix A

Pandemic Intervals, Triggers, and Actions

In November 2005, the President of the United States released the National Strategy for Pandemic Influenza, followed by the Implementation Plan in May 2006. These documents introduced the concept of “stages” for Federal Government response.²⁰ The six USG stages have provided greater specificity for U.S. preparedness and response efforts than the pandemic phases outlined in the World Health Organization (WHO) global pandemic plan.²¹ The stages have facilitated initial planning efforts by identifying objectives, actions, policy decisions, and messaging considerations for each stage. While the stages have provided a high-level overview of the Federal Government approach to a pandemic response, more detailed planning for Federal, State, and local responses requires a greater level of specificity than is afforded with the current USG stages.

The Pandemic Intervals

The incorporation of known principles regarding epidemic influenza transmission, along with the adoption of well-defined triggers for action, will enhance the development of more detailed plans and guidance. Moreover, these refinements will facilitate better coordinated and timelier containment and mitigation strategies at all levels, while acknowledging the heterogeneity of conditions affecting different U.S. communities during the progression of a pandemic.

Typically, epidemic curves are used to monitor an outbreak as it is occurring or to describe the outbreak retrospectively. While epidemic curves are useful during an outbreak or retrospectively for noting the possible effects of interventions (graphically showing when they are or were implemented relative to the rise and fall of the epidemic), model epidemic or pandemic curves can also be used to describe likely events over time. These hypothetical models may be particularly valuable prospectively for anticipating conditions and identifying the key actions that could be taken at certain points in time to alter the epidemic or pandemic curve. Classic epidemic curves have been described in the literature as having a: growth phase, hyperendemic phase, decline, endemic or equilibrium phase, and potentially an elimination phase.^{22,23}

For the purposes of pandemic preparedness, the Federal Government will use intervals representing the sequential units of time that occur along a hypothetical pandemic curve.^{24,25} For State and local planning, using the intervals to describe the progression of the pandemic within communities in a State helps to provide a more granular framework for defining when to respond with various interventions

²⁰ Pandemicflu.gov – Federal Planning & Response Activities. Available at <http://www.pandemicflu.gov/plan/federal/index.html#national>.

²¹ WHO global influenza preparedness plan: The role of WHO and recommendations for national measures before and during pandemics. Available at http://www.who.int/csr/resources/publications/influenza/GIP_2005_5Eweb.pdf

²² Liang W, Zhu Z, Guo J, et al. Severe acute respiratory syndrome, Beijing, 2003. *Emerg Infect Dis* (2004); 10(1): 25-31. <http://www.cdc.gov/ncidod/EiD/vol10no1/pdfs/03-0553.pdf>

²³ Wasserheit JN, Aral SO. The dynamic typology of sexually transmitted disease epidemics: Implications for prevention strategies. *J Infect Dis* (1996); 174 (suppl 2): S201-13.

²⁴ Pandemic curves can be drawn to represent many different outbreaks—an epidemic curve for the world is distributed over a long period of time and around the globe and might be correlated to the WHO phases. A pandemic curve for the United States is likely shorter and references only the geographic bounds of the United States, and can be correlated with the U.S. Government planning stages. A pandemic curve for a State or community is likely shorter still and references only the geographic bounds of the State or community. In this document, we apply these intervals to State and community planning during U.S. Government stages 4, 5 and 6. (Of course these intervals have utility for national and international efforts as well.)

²⁵ Because we recognize that the pandemic may begin, or first be detected, in the United States or elsewhere in North America, the intervals do not distinguish between the occurrence of pre-pandemic or pandemic cases overseas versus the occurrence of cases domestically. Therefore, this framework can be applied in community, State, national, or international settings.

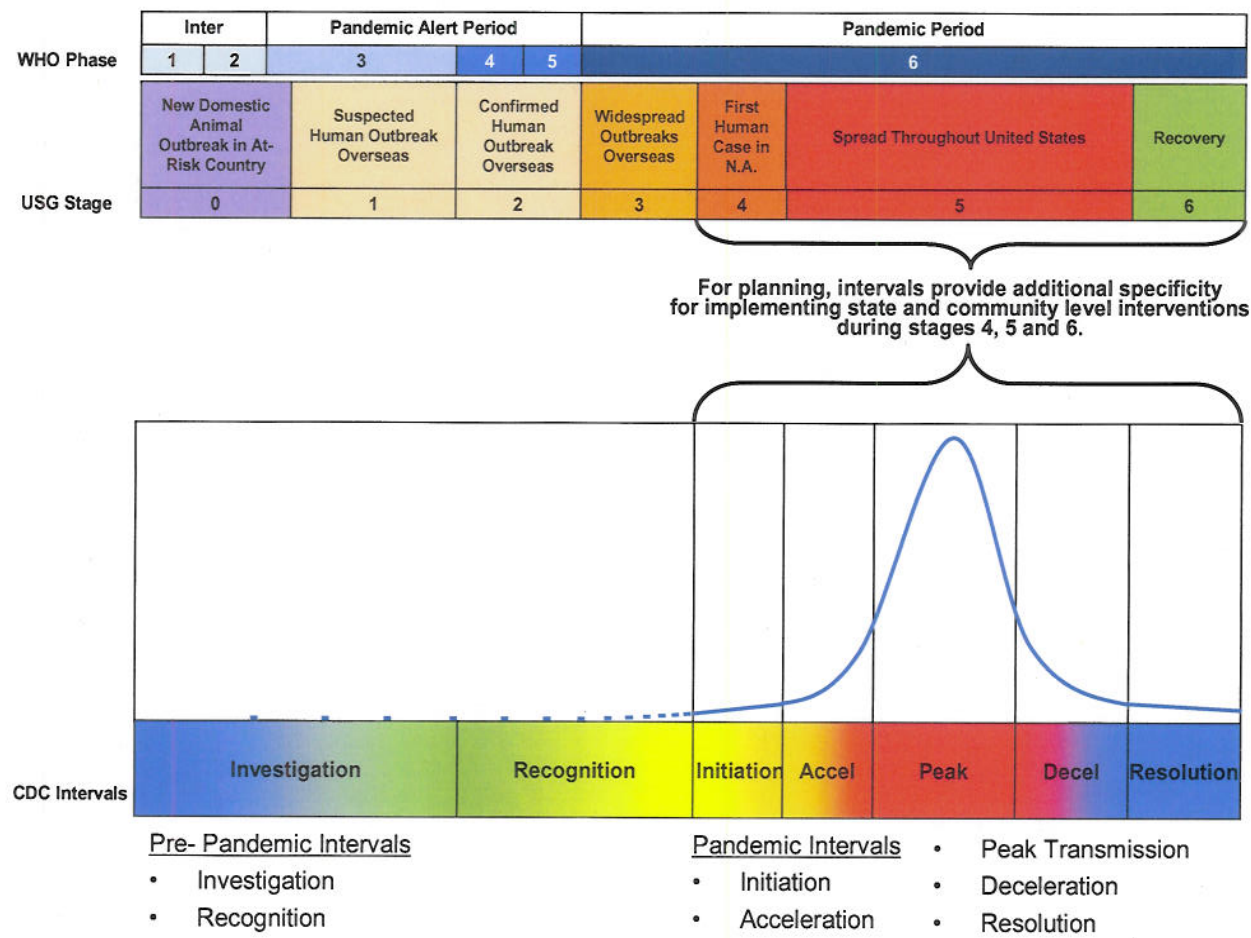
during U.S. Government stages 4, 5 and 6 (Figure 2). These intervals could happen in any community from the time sustained and efficient transmission is confirmed.

While it is difficult to forecast the duration of a pandemic, we expect there will be definable periods between when the pandemic begins, when transmission is established and peaks, when resolution is achieved, and when subsequent waves begin. While there will be one epidemic curve for the United States, the larger curve is made up of many smaller curves that occur on a community by community basis. Therefore, the intervals serve as additional points of reference within the phases and stages to provide a common orientation and better epidemiologic understanding of what is taking place. State health authorities may elect to implement interventions asynchronously within their States by focusing early efforts on communities that are first affected. The intervals thus can assist in identifying when to intervene in these affected communities. The intervals are also a valuable means for communicating the status of the pandemic by quantifying different levels of disease, and linking that status with triggers for interventions.

The intervals are designed to inform and complement the use of the Pandemic Severity Index (PSI) for choosing appropriate community mitigation strategies.²⁶ The PSI guides the range of interventions to consider and/or implement given the epidemiological characteristics of the pandemic. The intervals are more closely aligned with triggers to indicate *when* to act, while the PSI is used to indicate *how* to act.

²⁶ CDC. *Interim Pre-Pandemic Planning Guidance: Community Strategy for Pandemic Influenza Mitigation in the United States – Early, Targeted, Layered Use of Nonpharmaceutical Interventions*. February 2007. Available at <http://www.pandemicflu.gov/plan/community/commitigation.html>

Figure A: Periods, Phases, Stages, and Intervals



Definitions of the Different Pandemic Intervals

For each interval shown in Figure A, a definition of the interval is provided below for communities, States and for the Nation.

For States that are “affected” (i.e., they have met the definition for the interval), selected actions to initiate during the interval are provided. For States that are “unaffected” (i.e., they have not met the definition for the interval at a time when other States have met the definition), selected actions and preparations are provided. Questions regarding the use of these intervals can be obtained at intervals@cdc.gov.

“Investigation” Interval – Investigation of Novel Influenza Cases: This pre-pandemic interval represents the time period when sporadic cases of novel influenza may be occurring overseas or within the United States. During this interval, public health authorities will use routine surveillance and epidemiologic investigations to identify human cases of novel influenza and assess the potential for the strain to cause significant disease in humans. Investigations of animal outbreaks also will be conducted to determine any human health implications. During this interval, pandemic preparedness efforts should be developed and strengthened. Case-based control measures (i.e., antiviral treatment and isolation of cases and antiviral prophylaxis of contacts) are the primary public health strategy for responding to cases of novel influenza infection. The national case definition for novel influenza is located at http://www.cdc.gov/ncphi/disss/nndss/casedef/novel_influenzaA.htm.

Affected State – A State where a sporadic case of novel influenza is detected.

- Voluntarily isolate and treat human cases
- Voluntarily quarantine if human-to-human transmission is suspected, monitor, and provide chemoprophylaxis to contacts
- Assess case contacts to determine human to human transmission and risk factors for infection
- Share information with animal and human health officials and other stakeholders, including reporting of cases according to the Nationally Notifiable Diseases Surveillance System and sharing virus samples
- Disseminate risk communication messages

Unaffected State – A State not currently investigating novel influenza cases.

- Continue to maintain State surveillance
- Continue to build State and local countermeasures stockpile
- Continue to develop and promote community mitigation preparedness activities, including plans and exercises
- Continue refining and testing healthcare surge plans

“Recognition” Interval – Recognition of Efficient and Sustained Transmission: This interval occurs when clusters of cases of novel influenza virus in humans are identified and there is confirmation of sustained and efficient human-to-human transmission indicating that a pandemic strain has emerged overseas or within the United States. During the recognition interval, public health officials in the affected country and community will attempt to contain the outbreak and limit the potential for further spread in the original community. Case-based control measures, including isolation and treatment of cases and voluntary quarantine of contacts, will be the primary public health strategy to contain the spread of infection; however, addition of rapid implementation of community-wide antiviral prophylaxis may be attempted to fully contain an emerging pandemic.

Affected State – A State where human to human transmission of a novel influenza virus infection is occurring and where the transmission of the virus has an efficiency and sustainability that indicates it has potential to cause a pandemic. This represents the detection of a potential pandemic in the United States before recognition elsewhere in the world.

- Continue/initiate actions as above (Investigation)
- Implement case-based investigation and containment
- Implement voluntary contact quarantine and chemoprophylaxis
- Confirm all suspect cases at public health laboratory
- Consider rapid containment of emerging pandemic influenza
- Report cases according to Nationally Notifiable Diseases Surveillance System
- Conduct enhanced pandemic surveillance
- Prepare to receive SNS countermeasures
- Disseminate risk communication messages, including when to seek care and how to care for ill at home
- Implement appropriate screening of travelers and other border health strategies, as directed by CDC

Unaffected State – A State not meeting the criteria above. This may represent either that recognition of a potential pandemic is occurring in another State, or is occurring outside the United States.

- Continue/initiate actions as above (Investigation)

- Prepare for investigation and response
- Conduct enhanced pandemic surveillance
- Prepare to receive SNS countermeasures
- Disseminate risk communication messages
- Implement appropriate screening of travelers and other border health strategies, as directed by CDC

“Initiation” Interval – Initiation of the Pandemic Wave: This interval begins with the identification and laboratory-confirmation of the first human case due to pandemic influenza virus in the United States. If the United States is the first country to recognize the emerging pandemic strain, then the “Recognition” and “Initiation” intervals are the same for affected States. As this interval progresses, continued implementation of case-based control measures (i.e., isolation and treatment of cases, voluntary prophylaxis and quarantine of contacts) will be important, along with enhanced surveillance for detecting potential pandemic cases to determine when community mitigation interventions will be implemented.

Affected State – A State with at least one laboratory-confirmed pandemic case.

- Continue/initiate actions as above (Recognition)
- Declare Community Mitigation Alert if PSI Category 1 to 3, declare Standby²⁷ if PSI Category is 4 or 5
- Continue enhanced State and local surveillance
- Implement (pre-pandemic) vaccination campaigns if (pre-pandemic) vaccine is available
- Offer mental health services to health care workers.

Unaffected States – A State with no laboratory-confirmed pandemic cases.

- Continue/initiate actions as above (Recognition)
- Declare Community Mitigation Standby if PSI Category 4 or 5
- Prepare for investigation and response
- Prepare for healthcare surge
- Review and prepare to deploy mortuary surge plan
- Deploy State/local caches
- Prepare to transition into emergency operations

“Acceleration” Interval – Acceleration of the Pandemic Wave: This interval begins in a State when public health officials have identified that containment efforts have not succeeded, onward transmission is occurring, or there are two or more laboratory-confirmed cases in the State that are not epidemiologically linked to any previous case. It will be important to rapidly initiate community mitigation activities such as school dismissal and childcare closures, social distancing, and the efficient management of public health resources.²⁸ Isolation and treatment of cases along with voluntary quarantine of contacts should continue as a key mitigation measure. Historical analyses and mathematical modeling indicate that early institution of combined, concurrent community mitigation

²⁷ Alert includes notification of critical systems and personnel of their impending activation, Standby includes initiation of decision-making processes for imminent activation, including mobilization of resources and personnel, and Activate refers to implementation of the specified pandemic mitigation measures. From: CDC. *Interim Pre-Pandemic Planning Guidance: Community Strategy for Pandemic Influenza Mitigation in the United States – Early, Targeted, Layered Use of Nonpharmaceutical Interventions*. February 2007. Available at <http://www.pandemicflu.gov/plan/community/commitigation.html>

²⁸ CDC. *Interim Pre-Pandemic Planning Guidance: Community Strategy for Pandemic Influenza Mitigation in the United States – Early, Targeted, Layered Use of Nonpharmaceutical Interventions*. February 2007. Available at <http://www.pandemicflu.gov/plan/community/commitigation.html>

measures may maximize reduction of disease transmission (and subsequent mortality) in the affected areas.^{29,30,31,32}

Affected State – A State that has two or more laboratory-confirmed pandemic cases in a State that are not epidemiologically linked to any previous case; or, has increasing numbers of cases that exceed resources to provide case-based control measures

- Continue/initiate actions as above (Initiation)
- Activate community mitigation interventions for affected communities
- Transition from case-based containment/contact chemoprophylaxis to community interventions
- Transition surveillance from individual case confirmation to mortality and syndromic disease monitoring
- Begin pre-shift healthcare worker physical and mental health wellness screening
- Implement vaccination campaigns if (pre-pandemic) vaccine is available
- Monitor vaccination coverage levels, antiviral use, and adverse events
- Monitor effectiveness of community mitigation activities

Unaffected State – A State that has not met the criteria above.

- Continue/initiate actions as above (Initiation)
- Prepare for investigation and response
- Prepare for healthcare surge
- Review and prepare to deploy mortuary surge plan
- Deploy State/local caches
- Prepare to transition into emergency operations
- Implement vaccination campaigns if (pre-pandemic) vaccine is available
- Monitor vaccination coverage levels, antiviral use, and adverse events

“Peak/Established Transmission” Interval – *Transmission is Established and Peak of the Pandemic Wave*: This interval encompasses the time period when there is extensive transmission in the community and the State has reached its greatest number of newly identified cases. The ability to provide treatment when the healthcare system is overburdened will be particularly challenging. To reduce the societal effects of the pandemic, available resources must be optimized to maintain the critical infrastructure and key resources in the face of widespread disease.

Affected State – A State in which 1) >10% of specimens from patients with influenza-like illness submitted to the State public health laboratory are positive for the pandemic strain during a seven day period, or, 2) “regional” pandemic influenza activity is reported by the State Epidemiologist using CDC-defined criteria, or, 3) the healthcare system surge capacity has been exceeded.

- Continue/initiate actions as above (Acceleration)
- Manage health care surge
- Maintain critical infrastructure and key resources
- Laboratory confirmation of only a sample of cases as required for virologic surveillance
- Implement surveillance primarily for mortality and syndromic disease

²⁹ Hatchett RJ, Mecher CE, Lipsitch M. Public health interventions and epidemic intensity during the 1918 influenza pandemic. *Proceedings of National Academy of Sciences of USA*, (2007); 104 (18): 7583-7587.

³⁰ Markel H, Lipman HB, Navarro JA, et al. Nonpharmaceutical Interventions Implemented by US Cities During the 1918-1919 Influenza Pandemic. *JAMA* (2007);298 (6): 644-654.

³¹ Ferguson NM, Cummings DA, Fraser C, et al. Strategies for mitigating an influenza pandemic *Nature* (2006); 442:7: 448-452.

³² Bootsma MC, Ferguson NM. The effect of public health measures on the 1918 influenza pandemic in U.S. cities. *Proceedings of National Academy of Sciences of USA*, (2007);104 (18): 7588-7593.

Unaffected States – As transmission increases in the United States, States are likely to be in different intervals. Thus, States should anticipate the actions needed for subsequent intervals and plan accordingly.

“Deceleration” Interval – Deceleration of the Pandemic Wave: During this interval, it is evident that the rates of pandemic infection are declining. The decline provides an opportunity to begin planning for appropriate suspension of community mitigation activities and recovery. State health officials may choose to rescind community mitigation intervention measures in selected regions within their jurisdiction, as appropriate; however mathematical models suggest that cessation of community mitigation measures are most effective when new cases are not occurring or occur very infrequently.³³

Affected State – A State where <10% of specimens from patients with influenza-like illness submitted to the State public health laboratory are positive for the pandemic strain for at least two consecutive weeks, or, the healthcare system capacity is below surge capacity.

- Continue/initiate actions as above (Peak/Established Transmission)
- Assess, plan for, and implement targeted cessation of community mitigation measures if appropriate
- Transition surveillance from syndromic to case-based monitoring and confirmation
- Initiate targeted cessation of surge capacity strategies
- Maintain aggressive infection control measures in the community

“Resolution” Interval – Resolution of the Pandemic Wave: In this interval, pandemic cases are occurring only sporadically. The primary actions to be taken during this interval include discontinuing all community mitigation interventions, facilitating the recovery of the public health and healthcare infrastructure, resuming enhanced surveillance protocols to detect possible subsequent waves, and preparing for next waves of infection should they occur.

Affected State – A State where active virologic surveillance detects pandemic cases occurring sporadically.

- Continue/initiate actions as above (Deceleration)
- Rescind community mitigation interventions
- Continue case confirmation of selected cases to verify resolution of pandemic wave
- Resume enhanced virologic surveillance to detect emergence of increased transmission.
- Prepare for possible second wave
- Continue to promote community mitigation preparedness activities on standby for second wave
- Conduct after-action review for lessons learned
- Replenish stockpiles/caches as able

³³ Davey VJ, Glass RJ. Rescinding Community Mitigation Strategies in an Influenza Pandemic. *Emerging Infectious Diseases*, (2008);14 (3): 365-372. Available at: http://www.cdc.gov/eid/content/14/3/365.htm?s_cid=eid365_c#cit