Domain 4: Key Components of Pandemic Influenza Operational Readiness

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**Overview**
Readiness for pandemic influenza is a critical responsibility of state, local, and territorial jurisdictions. Communities count on a coordinated, efficient effort to prevent, mitigate, or treat influenza to minimize disease and deaths.

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Over the last 17 years, the PHEP program has worked to build baseline preparedness and response capabilities readiness for all types of potential public health emergencies, to include Zika, Ebola, hurricanes, and pandemic influenza. Recent public health emergencies have challenged and strengthened the capabilities of state and local jurisdictions, and provided valuable lessons learned. These factors point to the need to strengthen capabilities to address infectious disease outbreaks.

CDC recently introduced changes to its risk-based planning approach to help jurisdictions build cross-cutting preparedness, response, and recovery capabilities based on both anthrax and pandemic influenza and other emerging infectious disease (EID) scenarios. These capabilities will also support jurisdictional ability to prepare for, respond to, and recover from potential events due to EIDs and biological threat agents.

The public health role in pandemic influenza planning and response differs from jurisdiction to jurisdiction, but it always includes strong collaboration within a health department and among all relevant jurisdictional agencies. The 2019-2024 PHEP performance period will focus on building state, local, and territorial readiness for pandemic influenza and other EIDs.

**Purpose**
Optimal response to an influenza pandemic depends upon the coordination of multiple capabilities and multiple agencies with expertise in laboratory testing, epidemiology, medical countermeasures (MCMs), and emergency management. Close collaboration within a health department, particularly between its preparedness program and immunization program, is essential, as well as strong outreach and negotiations with other agencies in the jurisdiction. Numerous reference documents and summaries of lessons learned guide the planning and response to pandemic influenza at the state and local levels.

This supplemental guidance outlines what constitutes readiness for the pandemic influenza scenario.

**Programmatic Requirements**
Per the 2019-2024 PHEP notice of funding opportunity, CDC expects PHEP recipients to work with interagency and intra-agency partners to build operational readiness for an influenza pandemic. Following are pandemic influenza
strategies and activities that, taken together, constitute operational readiness, according to CDC subject matter experts.

A jurisdiction is likely to be operationally ready for a pandemic influenza event when they can demonstrate the following activities.

1. **A comprehensive pre-event planning process** that results in a pandemic influenza plan developed with input from relevant subject matter experts and community partners including people with access and functional needs. Such a planning group would include representation from diverse sectors such as epidemiology and laboratory science, emergency management, communication experts, schools, health care providers and organizations, hospitals, private sector businesses, pharmacies, and faith-based and community organizations. Following the start of a pandemic, this planning group will continue to provide input on decisions relating to nonpharmaceutical interventions, vaccine and antiviral drug use, and other prevention, treatment, and mitigation efforts.

2. Assurance that **response roles of all participating agencies** are clearly delineated and practiced so these agencies are ready to respond. This consists of a comprehensive delineation of roles and responsibilities of federal, state, and local agencies; nongovernmental entities; private sector partners; hospitals; and transportation, education, and law enforcement agencies.

3. Ability to **standup an incident command structure**. Work with influenza subject matter experts to analyze the threat; guide incident action planning and response; make response decisions; provide guidance on mitigation measures; gain and maintain situational awareness; request and track resources; engage relevant partners to provide needed services such as vaccinations; collect, manage, and share information; and safely sustain operations during a defined response period.

4. Meet the response needs of the incident by having **adequate numbers of appropriately trained staff** and processes and procedures in place to effectively integrate surge staffing into response operations.

5. Operational capability to **distribute MCMs** including vaccines, antiviral drugs, personal protective equipment, ventilators, and antimicrobials to distribution sites, treatment centers, and hospitals.

6. Operational capability to **dispense antiviral drugs and other therapeutics** requiring a prescription (controlled dispensing, not mass dispensing) to meet jurisdictional response needs.
   - Adhere to regulatory requirements for dispensing MCMs. This includes data collection and reporting requirements for use of any investigational drugs and dissemination of fact sheets for products made available under emergency use authorizations (EUAs).
   - Coordinate with partners involved in dispensing therapeutics to ensure situational awareness.
   - Ensure stakeholders are familiar with systems to report drug and vaccine adverse events.

7. Readiness of the jurisdiction’s vaccine providers and partners to **vaccinate at least 80% of the jurisdiction’s adult and pediatric population** with two doses of pandemic influenza vaccine, separated by at least 21 days, within 12 weeks of pandemic influenza vaccine availability. Ability to conduct and track outreach and
engagement and implement planning efforts with a variety of vaccine providers and partners, including the following entities.

- Health care provider offices and other outpatient clinics
- Chain and independent pharmacies
- School-based health centers
- Worksites and other occupational health clinics
- Hospitals and long-term care facilities
- Federal facilities which plan to provide pandemic vaccination services within the jurisdiction
- Temporary mass vaccination sites such as schools, vaccination clinics, or points of dispensing (PODs)

8. Readiness of the jurisdiction to **vaccinate Tier 1, Tier 2, and Tier 3 critical workforce personnel** with two doses of pandemic influenza vaccine, separated by at least 21 days, within four weeks of pandemic influenza vaccine availability, as described in CDC’s *Interim Updated Planning Guidance on Allocating and Targeting Pandemic Influenza Vaccine during an Influenza Pandemic*.

9. **Ability to coordinate with health care partners** to plan for multiple eight- to 12 week pandemic waves with a 20% to 25% attack rate. This includes the ability **to monitor the impact of a pandemic on health care facilities and support implementation of health care surge strategies**.

10. **Public health laboratory capability** to perform the following activities.
    - Manage capacity to process at least a 200% increase in public health laboratory specimens and reports.
    - Detect novel influenza A viruses in the public health laboratory.
    - Foster and maintain relationships with clinical laboratories and develop plans to control the flow of specimens from clinical laboratories to the public health laboratory.
    - Rapidly incorporate any new diagnostic reagents or methods for improved detection of the pandemic virus.

11. Ability to ensure effective **rapid information sharing to inform response actions** with key partners regarding significant results from epidemiologic investigations, laboratory collection information, MCM availability, and information to and from the health care system.

12. Ability to ensure timely and **effective communication to all stakeholders and the public** regarding pandemic severity and status of the outbreak, risks, product access and treatment, vaccination, and recommended guidance regarding nonpharmaceutical and other protective measures.

13. **Epidemiological and surveillance capability** to perform the following steps.
    - Notify CDC within 24 hours of identification of a novel influenza A virus, and complete the novel influenza A case report form within three days of laboratory confirmation, during interpandemic and early pandemic periods.
    - Monitor cases and the spread of disease in jurisdictions through line lists of novel influenza A cases during the early pandemic period and routine influenza surveillance systems including the following.
      - National Respiratory and Enteric Virus Surveillance System (WHO/NREVSS) collaborating laboratories
      - Influenza-like Illness Surveillance Network (ILINet)
      - National Center for Health Statistics (NCHS) mortality surveillance
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- Influenza-associated pediatric mortality surveillance
- Influenza Hospitalization Surveillance Network (FluSurvNet (if applicable))
- State and territorial epidemiologists reports

14. Ability to collaborate pre-event and during a response with key partners to recommend and implement **nonpharmaceutical intervention strategies** to mitigate the spread of disease, including the following.
   - Voluntary home isolation of sick persons
   - School closures and dismissals
   - Social distancing measures including measures for schools, workplaces, and mass gatherings
   - Respiratory etiquette and hand hygiene
   - Environmental surface cleaning measures
   - Specific travel advisories and warnings
   - Rare instances where restrictions on movement or quarantine may be warranted
   - Business and workplace policies including liberal leave and telework policies

15. Ability to develop and execute a plan to **maintain a continuity of operations** that includes plans to do the following activities.
   - Communicate with staff during a pandemic influenza event to provide emergency notifications, updates on situational awareness, instructions for reporting to work, and guidance on protective measures they can take for themselves and their families.
   - Cross-train staff to ensure redundancy in skills and capability to maintain critical functions.
   - Allow some staff to telework (if appropriate) and have capacity to support off-site communications and computer access.
   - Monitor worker health.
   - Maintain security of facilities, supplies, and staff during a severe pandemic outbreak.

16. Planning, execution, and evaluation of **a series of progressive exercises** designed to assess, validate, and improve on operational readiness for pandemic influenza, as defined by the key components of pandemic influenza readiness and with documentation of improvement actions. Exercises should follow a progressively complex approach using Homeland Security Exercise and Evaluation Program (HSEEP) standards that includes various stakeholders and various pandemic influenza scenarios.
## Resources for Strengthening Pandemic Influenza Operational Readiness

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