

## Pandemic Influenza Preparedness and Response -- Strategic Actions for PDPH and Philadelphia Businesses

Period	Phase and Transmission	Businesses' Strategic Actions
<b>I N T E R P A N D E M I C</b>	<b>PHASE 1</b>  Influenza virus subtype in animals only (risk to humans low)	<ul style="list-style-type: none"> <li>• Prepare pandemic preparedness plan.</li> <li>• Establish infection control measures regarding environmental cleanliness. All office space, common facilities (e.g. bathrooms, conference rooms, workstations) should be cleaned regularly and surface areas (e.g. desktops, banisters, doorknobs) disinfected daily.</li> <li>• Identify appropriate public health contact and means to gain pandemic related information and recommendations for disease control</li> </ul>
	<b>PHASE 2</b>  Influenza virus subtype in animals only (risk to humans substantial)	<ul style="list-style-type: none"> <li>• Consider policies regarding sick leave, flex time and work from home solutions.</li> <li>• Prepare for 25-40% absenteeism rates during a pandemic due to employee illness, the need to care for family members. Plan shift changes, organize emergency staff call-down procedures, consider on-site housing arrangements, etc.</li> <li>• Develop strategies for passive and active surveillance of employees with influenza.                         <ul style="list-style-type: none"> <li>-Passive surveillance, i.e. employees self identify symptoms and report to human resources, nurse or supervisor.</li> <li>-Active surveillance, i.e. daily monitoring of symptoms and temperature checks of all employees.</li> <li>-Identification of influenza-like-symptoms should result in prompt exclusion from the workplace.</li> </ul> </li> <li>• Identify supply needs for 2-5 week periods; develop strategies for stockpiling or dealing with supply shortages.</li> <li>• Consider stocking items such as hand sanitizer and tissues for individual work stations.</li> </ul>

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<b>I N T E R P A N D E M I C</b>	<b>PHASE 1</b>  Influenza virus subtype in animals only (risk to humans low)	<ul style="list-style-type: none"> <li>• Prepare pandemic preparedness plan.</li> <li>• Establish surveillance in animals.</li> <li>• Establish human influenza surveillance.</li> <li>• Establish collaboration between human and animal sectors.</li> </ul>	Strengthen pandemic preparedness at all levels
	<b>PHASE 2</b>  Influenza virus subtype in animals only (risk to humans substantial)	<ul style="list-style-type: none"> <li>• Enhance animal surveillance and aggressive response to animal outbreaks.</li> <li>• Strengthen human surveillance.</li> <li>• Stockpile antivirals, PPE, etc.</li> <li>• Strengthen collaboration between different sectors and WHO/OIE/FAO.</li> <li>• Develop and implement risk communication strategy.</li> <li>• Prepare health and essential service contingency plan.</li> </ul>	Minimize the risk of transmission to humans;  Detect and report rapidly if it occurs

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<b>P A N D E M I C  A L E R T</b>	<b>PHASE 3</b> Human infection (transmission in close contacts only)	<ul style="list-style-type: none"> <li>• Establish policies for preventing influenza spread at the worksite. Promote respiratory hygiene, cough etiquette and prompt exclusion of people with influenza symptoms. Use risk communication materials provided by PDPH.</li> <li>• Develop and disseminate materials covering pandemic fundamentals (e.g. signs and symptoms of influenza, modes of transmission), personal and family protection and response strategies (e.g. hand hygiene, coughing etiquette, contingency plans). Notify employees of mandatory sick leave for anyone with symptoms.</li> <li>• Promote seasonal influenza vaccine in the work place particularly in healthcare or professions with frequent public interactions (e.g., cashiers, transportation workers)</li> <li>• Encourage employee family emergency planning strategies including mechanisms to care for children if a school closure order were to occur (potentially up to 12 weeks in a severe pandemic)</li> </ul>
	<b>PHASE 4</b> Limited human-to-human spread; small clusters <25 cases lasting <2 weeks	
	<b>PHASE 4A*</b> Limited human-to-human spread in North America	<ul style="list-style-type: none"> <li>• Enforce policies for employees who have been exposed to pandemic influenza, are suspected to be ill, or become ill at the worksite (i.e. immediate mandatory sick leave).</li> <li>• Implement passive surveillance of employees for influenza-like-illness with prompt exclusion from the workplace.</li> <li>• Implement infection control measures regarding environmental cleanliness.</li> <li>• Communicate with employees. Post signage around worksite (samples provided by PDPH).</li> <li>• Enhanced stockpile of essential business inventory may be needed. Consider a 2-5 week supply. Consider scenarios that result in an increase or decrease in demand for products and/or services during a pandemic (e.g. need for hygiene supplies, office supplies, etc.).</li> <li>• Surgical masks are recommended for those who are caring for or working with patients suspected to have influenza. If employees work in settings where close exposure to those with influenza is likely, they should consider surgical masks or similar barriers for respiratory protection, and supplies for hand hygiene.</li> </ul>
	<b>PHASE 4B*</b> Limited human-to-human spread in North-East America / Mid-Atlantic region	<ul style="list-style-type: none"> <li>• Provide sufficient and accessible infection control supplies and educate staff on proper use techniques (e.g. hand-hygiene products, tissues and receptacles for their disposal).</li> <li>• Distribute excess supplies of hand sanitizer, tissues and other common use items to promote respiratory etiquette and hand washing</li> <li>• Cancel non-essential gatherings (e.g. holiday parties, social events).</li> </ul>
	<b>PHASE 4C*</b> Limited human-to-human spread in the Philadelphia metropolitan area	<ul style="list-style-type: none"> <li>• Implement guidelines to limit the frequency and modify type of face-to-face contact (e.g. hand-shaking, seating in meetings, office layout, shared workstations, etc.). Limit shared use of common break rooms, avoid elevators, and allow three feet of spatial separation between employees.</li> <li>• Cancel face-to-face meetings; encourage conference calls and web conferencing/online meetings.</li> <li>• Implement active surveillance of employees for influenza-like-illness with prompt exclusion from the workplace.</li> <li>• Report suspected cases of influenza (including asymptomatic employees who have home or close contacts) to PDPH. Short-term home quarantine may be recommended to limit spread, or working quarantine if workforce depletion occurs in critical utilities.</li> <li>• Provide information for at-home care of ill employees and family members (CDC guidance).</li> </ul>

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<b>P A N D E M I C  A L E R T</b>	<b>PHASE 3</b>  Human infection (transmission in close contacts only)	<ul style="list-style-type: none"> <li>• Enhance animal surveillance and aggressive animal outbreak containment (e.g. live bird market surveillance plan).</li> <li>• Disseminate information regarding recognition of illness due to novel strain, diagnosis and treatment measures.</li> <li>• Enhance human surveillance and aggressive management of cases and contacts to minimize transmission.</li> <li>• Promote and make available seasonal influenza vaccine for select populations and for those who wish to receive it</li> <li>• Work with CDC and PA DOH to determine antiviral medication usage guidelines (e.g. prioritization, outbreak prophylaxis for select high risk personnel)</li> </ul>	Ensure rapid characterization of new virus  Detect, notify and respond to additional cases
	<b>PHASE 4</b> Limited human-to-human spread: small clusters <25 cases lasting <2 weeks		Contain the virus or delay its spread
	<b>PHASE 4A*</b>  Limited human-to-human spread in North America	<ul style="list-style-type: none"> <li>• Ongoing animal surveillance and aggressive animal outbreak containment</li> <li>• Ongoing dissemination of information regarding recognition of illness due to novel strain, diagnosis and treatment measures</li> <li>• Ongoing enhanced human surveillance and aggressive management of cases.</li> <li>• Control measures for travel associated disease (airports, seaports)</li> </ul>	
	<b>PHASE 4B*</b>  Limited human-to-human spread in North East America / Mid-Atlantic region	<ul style="list-style-type: none"> <li>• Early strategic use of antivirals to treat initial cases and to prophylax close contacts.</li> <li>• Social distancing (avoid close contact such as hand-shaking, holding, hugging and kissing; cancel large public events; schools and theaters may close).</li> <li>• Implement risk communication and public information strategies.</li> <li>• Issue alert for quick implementation of health and essential service contingency plan.</li> <li>• Ensure surveillance for early recognition and detection of cases.</li> <li>• Immediate implementation of control measures to include confinement of contacts and cases, public health monitoring of contacts.</li> </ul>	
	<b>PHASE 4C*</b>  Limited human-to-human spread in the Philadelphia metropolitan area	<ul style="list-style-type: none"> <li>• Continue actions as in 4A and 4B*.</li> <li>• Active case finding efforts and contact tracing.</li> <li>• Provide coordinated guidance and support, including surveillance information and disease control measures to critical stakeholders (e.g. first responders, critical utilities and healthcare facilities).</li> <li>• Support laboratory based confirmatory diagnostic testing in suspect patients</li> </ul>	

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<b>P A N D E M I C  A L E R T</b>	<b>PHASE 5</b> Localized human-to-human spread; larger clusters 25-50 cases over 2-4 weeks	
	<b>PHASE 5A*</b> Employee or close contact is identified within facility/building	<ul style="list-style-type: none"> <li>• Critical workers should consider:               <ul style="list-style-type: none"> <li>-infection control protocols for field staff</li> <li>-working quarantine for exposed field staff (implement active surveillance for illness; consider wearing PPE at work and while commuting)</li> </ul> </li> <li>• Implement policies so previously ill employees may return to work. Employee health officers should track recovered employees and assign to critical functions.</li> <li>• Institute employee telecommuting and remote customer access when feasible and appropriate for your business.</li> </ul>
	<b>PHASE 5B*</b> Unrelated / non-epi linked clusters occur within Philadelphia metropolitan area	<ul style="list-style-type: none"> <li>• Support home quarantine orders and reduce spread of illness by implementing work leave policies and work from home solutions.</li> <li>• Support home quarantine orders through provision of services to homebound (e.g. home visiting, food and supply delivery, etc.).</li> </ul>
<b>P A N D E M I C</b>	<b>PHASE 6</b> Widespread in general population	<ul style="list-style-type: none"> <li>• Continue actions as in 5A* and 5B*</li> <li>• Anticipate possible short-term closure of businesses, temporary reduction in services, or shortened hours of operation.</li> <li>• Anticipate reduction of operations to core business activities with diminished workforce.</li> <li>• Ongoing risk communication to reinforce control measures including social distancing strategies.</li> <li>• Vaccine / antiviral distribution, if available.</li> <li>• Ongoing support of home quarantine orders.</li> <li>• Recovered employees may return to work. Ongoing assignment of recovered employees to critical functions.</li> </ul>
	<b>PHASE 7*</b> Recovery phase and preparation for next wave; return to limited human to human spread; small clusters in the community	<ul style="list-style-type: none"> <li>• Continue actions as in 6</li> <li>• Maintain communications with PDPH to follow course of pandemic.</li> <li>• Prepare recovery strategies to reconstitute workforce, supplies and maintain facility in order to attempt to return to normal business activity.</li> <li>• Restock supplies accordingly in preparation for subsequent pandemic waves.</li> <li>• Communicate with staff regarding plans for resuming the normal business schedule and normal work policies.</li> <li>• Continue to implement passive surveillance of new cases.</li> <li>• Maintain protocols for exclusion and reporting of ill and exposed staff and students.</li> <li>• Assess and critique actions during pandemic wave and make necessary adjustments/improvements to plan.</li> </ul>

\*Phase proposed by PDPH

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<b>P A N D E M I C  A L E R T</b>	<b>PHASE 5</b>  Localized human-to-human spread; larger clusters 25-50 cases over 2-4 weeks		Maximum efforts to contain or delay the spread
	<b>PHASE 5A*</b>  Employee or close contact is identified within facility/building	<ul style="list-style-type: none"> <li>• Conduct surveillance of influenza cases through provider reporting, emergency room activity, hospital admissions and 9-1-1 call center.</li> <li>• Monitor epidemic at local, state and national levels; provide frequent updates to medical community and public.</li> <li>• Monitor universities, schools and other institutions to identify trigger points for closure or suspension of services.</li> <li>• Enhanced surveillance in settings with cases, quarantine, monitoring of high-risk contacts</li> </ul>	
	<b>PHASE 5B*</b>  Unrelated / non-epi linked clusters occur within Philadelphia metropolitan area	<ul style="list-style-type: none"> <li>• Conduct health education campaign to promote disease control measures (e.g. respiratory hygiene, social distancing strategies, etc.).</li> <li>• If available, distribute vaccine and antiviral medications to priority groups.</li> <li>• Provide support to critical groups, such as healthcare facilities, critical infrastructure and utilities.</li> <li>• Coordinate resources with Voluntary Organizations Active in Disasters (VOAD) and other social service providers to support individuals in home or facility confinement when necessary; provide social services, mental health support, etc.</li> </ul>	
<b>P A N D E M I C</b>	<b>PHASE 6</b>  Widespread in general population	<ul style="list-style-type: none"> <li>• Continue actions as in 5A and 5B*.</li> <li>• Implement health and essential services contingency plan.</li> <li>• Social distancing: close schools, ban gatherings.</li> <li>• Ongoing distribution of vaccine and antiviral medications to appropriate target populations, as available.</li> <li>• Ongoing public information to reinforce control measures including social distancing strategies.</li> <li>• Ongoing coordination with social service support agencies.</li> <li>• Ongoing coordination with other emergency management public safety agencies to ensure infrastructure support, continuity of operations of critical government functions and other critical utilities.</li> <li>• Ongoing pandemic surveillance updates with eventual expectation of early identification of reduction in community-wide disease transmission.</li> </ul>	Minimize the impact of the pandemic
	<b>PHASE 7*</b>  Recovery phase and preparation for next wave; return to limited human to human spread; small clusters in the community	<ul style="list-style-type: none"> <li>• Continue actions as in 6.</li> <li>• Assess and critique actions during pandemic wave and make necessary adjustments/improvements to PDPH plan.</li> <li>• Determine vaccine availability and implement distribution plan if able.</li> <li>• Maintain active surveillance of cases to follow course of illness for at least 4 months after previous pandemic wave subsides.</li> <li>• Continue to disseminate pandemic updates to the public and healthcare community.</li> <li>• Continue to submit clinical specimens of sporadic cases to the BOL for ongoing surveillance of circulating viral strains and subtypes and resistance patterns.</li> </ul>	Minimize the impact of the pandemic

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