

Pandemic Influenza Community Containment Measures

OVERVIEW

Public Health has the lead role in pandemic influenza (Pandemic) and other communicable disease-related events from early in response through recovery, and possibly through long-term follow-up.

OBJECTIVES

The course and impacts of Pandemic can be mitigated by public health interventions, nevertheless, a pandemic will have serious health, social, and economic impacts.

In light of this, the strategic goals in preparing for and responding to a pandemic are:

- to maintain an intact community, and
- to minimize the health, social and economic impacts of the pandemic.

ACTIVATION



ADDITIONAL RESOURCES

Pandemic will likely begin elsewhere in the world. Our epidemiologist will routinely brief our Agency Executives on its progress. At some point the *Agency Executive* will activate this plan under Chapter 2, and assign Incident Commander(s) and other staff and resources to manage operations that will mitigate health impacts as waves of Pan Flu pass through Multnomah County.

For More Information:

Tab A, Epidemiology and Surveillance

Tab B, Mass Prophylaxis

Tab E, Isolation and Quarantine

Tab G, Risk Communication

Tab P, Pharmacy

Tab S, Strategic National Stockpile

URLs:

<http://www.pandemicflu.gov/>

http://www.pandemicflu.gov/plan/community/community_mitigation.pdf

<http://www.bt.cdc.gov/>

<http://oregon.gov/DHS/ph/acd/bioterrorism/btepi.shtml>

<http://www.dhs.state.or.us/publichealth/preparedness/han/index.cfm>

<http://mint.co.multnomah.or.us/health/emergprep/>

<http://oregon.gov/DHS/ph/acd/flu/oregonfluplan.pdf>

ASSUMPTIONS

Our local approach is based on assumptions that will have to be replaced by actual observation, analysis, and fact when an actual Pandemic event begins passage around the world. These assumptions are:

- Pandemic will occur in waves sweeping around the world as influenza is transmitted from person to person, each wave spanning several weeks. These waves will be separated by weeks of little or no disease activity.
- Infection may occur in up to 30% of the population with rates highest among school-aged children (40%).
- Half of those infected may require medical care.
- Vaccine for the pandemic strain of influenza may not be available for up to 6 to 9 months after the strain is detected. Even then, vaccine supplies may be limited and targeted for use.
- Antiviral medications will be in short supply and will be used primarily for treatment of those that are already ill. Prophylactic use will be focused, and limited in scope.
- Because of limitations on vaccine and anti-viral drugs as interventions, community containment measures (as endorsed by the federal government and CDC) and supportive medical treatment will be the primary strategies employed locally during early pandemic activity which will vary in degree depending on the pandemic severity.
- Pandemic severity will be determined at an international/national level. Real-time disease surveillance and analysis early on in a pandemic will determine severity and as the pandemic spreads the severity level may change.
- MCHD will activate this plan and its response organization if there is sustained human-to-human transmission anywhere in the world. The degree of activation will depend on the operational objectives of that response organization. For example, if transmission is only on other continents, the MCHD response may emphasize public information, local impacts of international travel, and enhanced monitoring of the world situation and local surveillance. If there is significant local transmission, the response organization will manage public health and health care delivery operations.

Graded Implementation of Community Containment Measures Dependent on Pandemic Severity (more details on select measures can be found on http://www.pandemicflu.gov/plan/community/community_mitigation.pdf pages 35-40, the table is revised from that source)

The following table provides a range of actions or general goals that public health and partner Incident Commanders (ICs) comprising a Unified Command (UC) are expected to redefine as SMART objectives, and then achieve. In doing this, the IC/UC organization must be supported by:

- suitable delegated authorities and policy guidance of Agency Executives and elected officials
- related IC/UC organizations (e.g. at hospitals), and the
- support and coordination activities of emergency managers and/or Emergency Operations Centers (EOCs) of political jurisdictions and other supporting response organizations activated for the Pandemic.

The table is designed to show an escalation of response goals during a range of Pandemic scenarios. Start at the most benign scenario at the left column in the first row. The first row represents the least virulent strain of a pandemic and the first column represents the beginning period of the pandemic, likely far from Oregon. As the virulence increases or the disease nears or arrives in Oregon additional response measures are added to those noted in columns to the left and above. In order to simplify the table measures are not repeated. If multiple response organizations are activated, there should be agreement between leaders to differentiate each goal into objectives that are allocated among response organizations in a way that allows priority goals to be efficiently and effectively achieved.

Limited but confirmed human to human transmission in locations overseas	First human cases confirmed in North America	Spread throughout the United States and identification of a confirmed case or cases, which present a plausible risk of spread in Multnomah County
<i>Strategies</i>	<i>Strategies</i>	<i>Strategies</i>
<ul style="list-style-type: none"> • Coordinate local response • Communicate with stakeholders • Reduce public panic 	<ul style="list-style-type: none"> • Refine organizational objectives • Project local impact • Enhance public information 	<ul style="list-style-type: none"> • Mitigate local impact • Respond to local patterns • Enhance public information

Mild: 20-40% illness rate with less than 0.1% fatality

<i>Alert¹</i>	<i>Standby²</i>	<i>Activate³</i>
<i>Command Actions</i>	<i>Command Actions</i>	<i>Command Actions</i>
<ul style="list-style-type: none"> • Response Plan(s) and suitable ICS response organization(s) activated • Initiate contact and determine POCs for medical, health, elected officials, and community stakeholders that will be required to coordinate efforts • Project the local impact of the disease and likely required operations and resource • Initiate supply chain of critical resources likely to be in short supply as well as alternatives resources and altered standards of care that may be required 	<ul style="list-style-type: none"> • Form and refine communications and relationships between ICS-based response organizations activated for this emergency • Advise prospective response organizations to activate response organizations focused on Pandemic • Continue contact with community stakeholders 	<ul style="list-style-type: none"> • Continue contact with community stakeholders
<i>Clinical Actions</i>	<i>Clinical Actions</i>	<i>Clinical Actions</i>
<ul style="list-style-type: none"> • Determine case definition and project local impacts • Remove assumptions - translate this Tab's assumptions into details of this Pandemic • Project hospital and clinical surge needs in consultation with hospitals (see above note on supply chain) 	<ul style="list-style-type: none"> • Prepare for imminent hospital surge capacity if necessary 	<ul style="list-style-type: none"> • Activate hospital and clinical surge capacity based on incoming information/local epidemiology
<i>Public Information</i>	<i>Public Information</i>	<i>Public Information</i>
<ul style="list-style-type: none"> • Form JIC and relations with other response organization PIOs or JICs in order to form a JIS • Conduct a public information campaign focusing on infection control 	<ul style="list-style-type: none"> • Provide appropriate public information based on communication plan and incoming information 	<ul style="list-style-type: none"> • Provide appropriate public information based on communication plan and incoming information with focus on voluntary isolation of ill, informed use of hospital/outpatient resources, and home health care guidelines

¹ Notification of critical systems and personnel of their impending activation.

² Initiate decision-making processes for imminent activation, including any mobilization of resources and personnel.

³ Implementation of community mitigation strategies.

<p>Limited but confirmed human to human transmission in multiple locations overseas</p>	<p>First human cases confirmed in North America</p>	<p>Spread throughout the United States and identification of a confirmed case or cases, which present a plausible risk of spread in Multnomah County</p>
<p>Moderate: 20-40% illness rate with fatality between 0.1% and 0.5%</p>		
<p><i>Alert</i></p> <p>Command Actions</p> <ul style="list-style-type: none"> • Response Plan(s) and suitable ICS response organization(s) activated • Initiate contact with community stakeholders with specific emphasis on community containment strategies decision-making and timeline <p>Clinical Actions</p> <ul style="list-style-type: none"> • Assess potential hospital and clinical surge needs based on incoming information <p>Public Information</p> <ul style="list-style-type: none"> • Form JIC • Provide public information based on communication plan and incoming information with focus on impending community containment strategies 	<p><i>Standby</i></p> <p>Command Actions</p> <ul style="list-style-type: none"> • Continue contact with community stakeholders • Mobilize resources necessary to imminently activate community containment measures if necessary <p>Clinical Actions</p> <ul style="list-style-type: none"> • Prepare to imminently activate hospital and clinical surge capacity <p>Public Information</p> <ul style="list-style-type: none"> • Provide public information based on communication plan and incoming information with focus on impending community containment strategies and exact timelines/duration 	<p><i>Activate</i></p> <p>Command Actions</p> <ul style="list-style-type: none"> • Continue contact with community stakeholders • Activate community containment strategies • Prepare to monitor effectiveness of community containment strategies <p>Clinical Actions</p> <ul style="list-style-type: none"> • Activate hospital surge plans based on incoming information/local epidemiology <p>Communications/Public Information</p> <ul style="list-style-type: none"> • Provide public information based on communication plan and incoming information with focus on voluntary isolation of ill, informed use of health care, home health care guidelines, voluntary quarantine of household members with ill persons • Provide specific information on up to 4 weeks of school/day care closures and out-of-school community mixing and workplace/community social distancing measures

¹ Implementation of community mitigation strategies.

<p>Limited but confirmed human to human transmission in multiple locations overseas</p>	<p>First human cases confirmed in North America (move directly to activate if cases are in Pacific Northwest)*</p>	<p>Spread throughout the United States and identification of a confirmed case or cases, which present a plausible risk of spread in Multnomah County</p>
<p>Severe: 20-40% illness rate with between 1.0% and 2.0% fatality</p>		
<p><i>Alert</i></p> <p>Command Actions</p> <ul style="list-style-type: none"> • Response Plan(s) and suitable ICS response organization(s) activated • Initiate contact with community stakeholders • Mobilize resources necessary to imminently activate community containment measures <p>Clinical Actions</p> <ul style="list-style-type: none"> • Assess potential hospital and clinical surge needs based on incoming information <p>Public Information</p> <ul style="list-style-type: none"> • Form JIC • Provide public information based on communication plan and incoming information with focus on impending community containment strategies/timelines/duration 	<p><i>Standby/Activate*</i></p> <p>Command Actions</p> <ul style="list-style-type: none"> • Continue contact with community stakeholders • Implement community containment measures as appropriate to levels of disease in the region <p>Clinical Actions</p> <ul style="list-style-type: none"> • Prepare for imminent activation of hospital and clinical surge capacity <p>Public Information</p> <ul style="list-style-type: none"> • Provide public information based on communication plan and incoming information with focus on impending community containment strategies/timelines/duration 	<p><i>Activate</i></p> <p>Command Actions</p> <ul style="list-style-type: none"> • Continue contact with community stakeholders • Activate community containment strategies • Prepare to monitor effectiveness of community containment strategies <p>Clinical Actions</p> <ul style="list-style-type: none"> • Activate hospital and clinical surge capacity based on incoming information/local epidemiology <p>Public Information</p> <ul style="list-style-type: none"> • Provide public information based on communication plan and incoming information with focus on voluntary isolation of ill, informed use of healthcare, home health care guidelines, voluntary quarantine of household members with ill persons • Provide specific information on up to 3 months of school/day care closures and out-of-school community mixing and workplace/community social distancing measures