

Louisville Metro Department of Public Health and  
Wellness

Pandemic Influenza and Highly Infectious  
Respiratory Disease

Standard Operating Guide







## Table of Contents

Purpose: .....	1
Authority.....	1
Introduction: .....	2
I. Situation:.....	3
II. Assumptions: .....	6
IV. Concept of Operations: .....	8
V. Direction and Control.....	14
VI. Assignment of Responsibilities:.....	15
VII. Tabs .....	16
Tab 1 .....	17
WHO Global Pandemic Phases and the U.S. Government Stages for Response .....	17
Tab 1a .....	18
Pandemic Severity Index by Epidemiological Characteristics .....	18
Tab 1b .....	19
Summary of the U.S. Government Community Mitigation Strategy by Pandemic Severity .....	19
Tab 2 .....	21
Recommended Healthcare and Community Control Measures of Pandemic Influenza.....	21
Tab 3 .....	22
Vaccine and Antiviral Distribution: .....	22
Tab 4 .....	24
Interim Guidance for Laboratory Testing of Persons with Suspected Infection with Avian Influenza A (H5N1) Virus in the U.S.....	24
Tab 5 .....	26
Interim Guidance for Specimen Collection and Testing.....	26
Tab 6 .....	28
Hospital and Health Care Worker Procedures .....	28
Tab 7 .....	33
Pandemic Influenza Risk Communication .....	33
Tab 8 .....	38
Definitions .....	38
Tab 9 .....	39
Louisville Metro Department of Public Health and Wellness .....	39
Contact Numbers .....	39

## **Purpose:**

This SOG describes the roles, responsibilities, and activities of the Louisville Metro Department of Public Health and Wellness while outlining activities to educate and prepare the general public and community partners. This SOG is intended to limit the mortality, morbidity and spread of a pandemic influenza virus or other highly infectious respiratory disease. This SOG supports the LMPHW's EOP and the Emergency Support Function 8 (Health and Medical Services) of the Louisville Jefferson County Emergency Operations Plan.

## **Authority**

This SOG operates under the guidance of the Louisville Jefferson County Emergency Operations Plan and the Louisville Metro Department of Public Health and Wellness Emergency Operations Plan.

The Louisville Metro Department of Public Health and Wellness's **Pandemic Influenza and Highly Infectious Respiratory Disease** Standard Operating Guide is a working document subject to change. All modifications, additions, and updates are subject to review. This version has been reviewed for content.

## **Introduction:**

Influenza viruses cause significant morbidity and mortality every year throughout the world. Approximately 30,000 people die annually in the United States alone due to influenza. The influenza virus changes a small amount every year via a phenomenon called antigenic drift, allowing the virus to evade community immunity and cause new disease in a population. Antigenic drift occasionally produces a new virus very different than the viruses of the preceding several years. These very different viruses cause influenza pandemics, characterized by sharp increases in the number of people who both become ill and die due to influenza.

Over the last 3 centuries a worldwide pandemic has occurred on average every 35 years. It is not known, however, when the next event will occur. The last influenza pandemic occurred in 1968 and resulted in approximately 1 million deaths worldwide. Other pandemics of the twentieth century occurred in 1918 and 1957. The 1918 influenza pandemic resulted in 30-50 million deaths worldwide and was the single most deadly infectious outbreak in recorded history.

The exact impact on morbidity and mortality that the next pandemic will have cannot be predicted. Several variables will define the pandemic's character. The distinct virus causing a pandemic will have unique clinical characteristics that define the degree of worldwide illness that occurs. Social factors such as crowding and a community's medical resources are also determining factors.

The United States Department of Health and Human Services has issued a Pandemic Influenza Preparedness Plan, which outlines its plans for response to future pandemic as well as state and local health department responsibilities.

In future pandemics, the medical resources available to developed countries, such as the United States, will likely ameliorate loss of life. It will be vitally important to use the resources in the Louisville community as efficiently as possible.

Other issues that will need to be addressed in the future include: the homebound, homeless, and non-English speaking populations; all of whom will need specific resources directed toward their care. Clearly, this project will take years of continued investment to fully develop.

**I. Situation:**

- A. The H5N1 avian influenza virus that is endemic to the bird populations of Southeast Asia, and has led to occasional severe human disease in that part of the world, is considered a potential source of a future worldwide influenza pandemic. While H5N1 may or may not cause a pandemic, an influenza pandemic at some point in the future is inevitable.
- B. We are currently in WHO Phase 3 of the Pandemic Alert Period.
- C. Currently the United States does not have the capacity to produce adequate vaccine, or antiviral medication, for the potential need.
- D. Influenza is generally highly contagious and spreads rapidly from person to person in a community. This will likely be particularly true for a pandemic influenza virus to which the entire population will be susceptible.
- E. The LMPHW is working with all area hospitals to assure that information regarding resources such as open in-patient beds and Emergency Department wait times are shared in a timely fashion.
- F. Local laws exist to address the potential need for forcible quarantining of the ill, however, it has been decades since these laws enacted and updating is necessary.
- G. When symptoms develop after exposure: The typical incubation period of influenza is two days (range one to four days).
- H. When influenza is infectious: Viral shedding, during which a person may be infectious to others, typically:
  - 1. Begins the day before symptoms start
  - 2. Peaks on about the second day of symptoms
  - 3. Lasts five to seven days in adults.
- I. Young children and immunocompromised persons may shed virus for weeks.
- J. Infection with a pandemic influenza strain may result in an increase in the amount of virus shed and a prolongation of the viral shedding period, making each patient more infectious.
- K. Persons infected with H5N1 virus can shed virus for up to 17 days.

- L. Asymptomatically infected persons may also transmit the influenza virus.
- M. Clinical symptoms of influenza can range from mild upper respiratory tract illness (the “common cold”) with no fever to illness characterized by high fever, constitutional symptoms, and cough. Young children may present with sepsis-like syndrome (high fevers, low blood pressure and rapid heart rate) or febrile seizures, and one-third may have diarrhea.

N. Pandemic Influenza versus a Typical Seasonal Flu

<b>Pandemic Influenza</b>	<b>Typical Seasonal Flu</b>
Comes from a novel virus to which few have any immunity	Circulating viruses slightly mutated (antigenic drift) from previous year
Attack rate may be as high as 60% of population	
Patients are often severely ill	Illness usually causes minor symptoms
Likely limited vaccine availability	Vaccine available prior to illness for most of population at high risk of severe disease
May be resistant to some antivirals	Several antiviral medications are available
Excess mortality (3 to 7 times the normal rate)	Normal flu mortality – 36,000/year in U.S.
Patients may present with primary viral pneumonia	Pneumonia is usually a later complication
May be severe in all ages	Severe in the very old and the very young
Can occur at any time of the year	Seasonal – occurs in the winter
May have more than one wave of illness	Usually just one wave of illness
Spreads rapidly throughout the world	

O. Common complications of influenza

1. Complications include viral and/or bacterial pneumonia.
2. Less common complications include heart failure, muscle aches and inflammation (“myositis”), Reye syndrome, and inflammation of the brain (“encephalitis”), among others.

P. Routes of Influenza Transmission

1. Influenza is a respiratory infection that is spread from person-to-person primarily by contact with respiratory droplets. Contact with these respiratory droplets can occur via the following mechanisms:
  - a. Direct body-to-body surface contact.
  - b. Indirect contact with contaminated intermediate objects such as contaminated hands or inanimate objects such as clothing or countertops.

- c. Transmission of droplets by coughing or sneezing come into contact with another person's conjunctiva, mouth or nasal mucosa
- d. These droplets travel short distances, and generally one must be within 3 feet of the person coughing or sneezing. These droplets generally are large and do not stay suspended in the air, so this mode of transmission is not affected by special air handling or control of room pressures.
- e. Airborne transmission of small infectious droplet nuclei. In contrast with larger droplets, these droplets can remain suspended in the air and be disseminated by air currents in a room or through a facility to be inhaled by a susceptible host. Preventing the spread of droplet nuclei requires the use of special air handling and ventilation procedures.

**Note:** The closer the contact, the greater the likelihood of virus passage; thus, direct body-to-body contact is the most efficient manner of passing a virus, while airborne transmission is the least efficient manner and often plays a minimal role in the virus' passage through a community.

#### Q. High-Risk Groups

1. **Health Care Workers:** Health care workers (HCWs) may be particularly vulnerable to infection given their frequent occupational exposure. High rates of work absenteeism are likely to occur as HCWs become ill or need to care for ill family members. Absenteeism could also occur if HCWs become concerned that they may be at undue risk of contracting severe disease. Staffed hospital beds may be a more limiting factor than bed availability alone.
2. **Residents of Long-term Care Facilities:** An influenza pandemic poses special challenges for long-term care facilities (LTCF). Influenza outbreaks occur not uncommonly in long-term care facilities, leading to attack rates that may exceed 50 percent among unvaccinated persons. Most LTCF residents, because of their age and underlying medical conditions, are at high risk for severe influenza infection. LTCF staff may have less training in infection control compared with staff at hospitals.
3. **First Responders:** In addition to those at risk of serious disease, it is also crucial to identify those who will play vital roles in responding to a pandemic and preserving community order and function. And in doing so will most likely come into contact with infected persons. These include, but are not limited to, police, fire, sheriff office, health care providers, members of Louisville Metro Government and other

community members providing crucial health and infrastructure services.

4. **Special Needs Population:** An influenza pandemic poses special challenges for those populations having “special needs”. The LMPHW must:
  - a. Identify and define Special Needs populations
  - b. Determine and prioritize the services required by the Special needs populations during an influenza pandemic

## II. Assumptions:

- A. Efficient and sustained person-to-person transmission signals an imminent pandemic.
- B. Epidemics will last 6 to 8 weeks in affected communities.
- C. Multiple waves of illness are likely to occur with each wave lasting 2 to 3 months.
- D. Vaccine and antivirals may be in short supply and need to be targeted to defined priority groups during the initial pandemic alert.
- E. Populations have no baseline immunity to pandemic influenza strains, it is probable that more vaccine will be required per person for immunity.
- F. Most, if not all, people will be susceptible to the pandemic influenza virus
- G. The attack rate will likely be 30%, or higher,
- H. Half of those who become ill will seek medical care,
  - I. Illness rates may be highest among school-aged children
- J. An average of 20% of working adults will become ill
- K. Illness rates may decline with age
- L. Rates of serious illness, hospitalization, and deaths will depend on the virulence of the pandemic virus,
- M. Some persons will become infected but not develop clinically significant symptoms

- N. Asymptomatic or minimally symptomatic individuals can transmit infection and develop immunity to subsequent infection.
- O. Pandemic Influenza Community Epidemiology (Based on previous pandemics):
  - 1. One-third of the population is likely to become infected
  - 2. Most of the impact is likely to occur in 4 to 8 weeks.
- P. During the event hospitalizations could total 2,873, or higher, requiring the use of alternate medical care facilities
  - 1. Demand for inpatient and intensive care unit beds and for assisted ventilation may increase by more than 25%,
- Q. Outpatient visits could total 128,314, or higher
- R. Antiviral prophylaxis should be given within 2 days of exposure.
- S. Nonpharmaceutical interventions are defined by CDC and HHS as:
  - 1. Isolation and treatment (as appropriate) with influenza antiviral medications of all persons with confirmed or probable pandemic influenza. Isolation may occur in the home or healthcare setting, depending on the severity of an individual's illness and/or the current capacity of the healthcare infrastructure.
  - 2. Voluntary home quarantine of members of households with confirmed or probable influenza cases(s) and consideration of combining this intervention with the prophylactic use of antiviral medications, providing sufficient quantities of effective medications exist and that a feasible means of distributing them is in place.
  - 3. Dismissal of students from school (including public and private schools as well as colleges and universities) and school-based activities and closure of childcare programs, coupled with protecting children and teenagers through social distancing in the community to achieve reductions of out-of-school social contacts and community mixing.
  - 4. Use of social distancing measures to reduce contact between adults in the community and workplace, including, cancellation of large public gatherings and alteration of workplace environments and schedules to decrease social density and preserve a health workplace to the greatest extent possible without disrupting essential services. Enable

institution of workplace leave policies that align incentives and facilitate adherence with the nonpharmaceutical interventions outlined above.

**IV. Concept of Operations:**

- A. The Centers for Disease Control and Prevention (CDC) and the U.S. Department of Health and Human Services (HHS) suggest that the primary activation trigger for initiating nonpharmaceutical interventions be the arrival and transmission of a cluster of pandemic virus cases within a U.S. State or proximate epidemiological region.
- B. This trigger is best defined by a laboratory-confirmed cluster of infection with a novel influenza virus and evidence of community transmission.
- C. The U.S. Government’s pandemic stages are in terms of the immediate and specific threat of a pandemic virus to the U.S. population.
- D. The CDC and HHS recommend the following triggers for implementation of mitigation strategy’s; such as, nonpharmaceutical interventions.

Pandemic Severity Index	WHO Phase 6, U.S. Government Stage 3	WHO Phase 6, U.S. Government Stage 4 and First human case in the U.S.	WHO Phase 6, U.S. Government Stage 5 and First laboratory confirmed cluster in state or region
1	Alert	Standby	Activate
2 and 3	Alert	Standby	Activate
4 and 5	Standby	Standby/Activate	Activate

- 1. Alert – Notification of critical systems and personnel of their impending activation
  - 2. Standby – Initiate decision-making processes for imminent activation, including mobilization of resources and personnel
  - 3. Activate – Implementation of the community mitigation strategy.
- E. For purposes of consistency, comparability, and coordination of the national, state, and local response, the CDC and HHS will identify and declare U.S. government pandemic “stages” at the national level.
  - F. The LMPHW will take the lead in disseminating information to the general public and local medical providers regarding symptoms and prognosis of disease, treatment information, and resource availability.
  - G. Decisions about what tools should be used during a pandemic will be based on:
    - 1. The observed severity of the event,

2. Its impact on specific subpopulations,
3. The expected benefit of the interventions,
4. The feasibility of success in modern society,
5. The direct and indirect costs,
6. The consequences on critical infrastructure, healthcare delivery, and society.

H. During the **U.S. Government Response Stage 0 and Stage 1**, the Louisville Metro Department of Public Health and Wellness will:

1. Work to improve communication between LMPHW and private sector partners that are likely to be involved in the response to a pandemic.
2. Develop, organize, and implement public and private continuity plans and facilitate the accompanying planning process.
3. Develop, organize, and implement training for response personnel to address pandemic influenza events.
4. Develop, organize, and implement community-wide exercises related to pandemic influenza events.
5. Perform a needs assessment and vulnerability analysis of the general population, special needs population, businesses, medical community, and government agencies of Louisville Metro in regards to a pandemic influenza event.
6. Stockpile and/or supply needed medical items for a pandemic influenza event to the general population, special needs population, businesses, medical community and government agencies of Louisville Metro.
7. Increase the capacity and capability of the LMPHW lab to process and/or test for H5N1.

I. During the **U.S. Government Response Stage 2 and Stage 3**, the LMPHW will:

1. Maintain and update information relayed by the CDC, the KyDPH and other appropriate sources,
2. Maintain, update and disseminate information via the Health Alert Network (HAN) to community health partners,
3. Conduct an epidemiological investigation to rapidly determine the disease organism

4. Identify the population, including populations identified with special needs, at risk and coordinate their appropriate treatment.
  5. Provide antivirals, vaccines, and other necessary supplies to citizens and health care professionals in the community.
  6. Increase Louisville Metro's medical surge capacity,
  7. Coordinate the use of inpatient and outpatient hospital resources during the time of a pandemic influenza event,
  8. Inform the public as to the spread of the virus in the community and appropriate measures for self-protection,
  9. Provide medical professionals with relevant information for diagnosis and treatment,
  10. Recommend quarantine measures both enforced and voluntary to be coordinated with the county attorney and law enforcement officials,
  11. Take other public health measures as needed.
- J. During the **U.S. Government Response Stage 4 and Stage 5**, the LMPHW will implement the following:
1. Increased collection of surveillance data from local physicians participating in influenza surveillance program,
  2. Distribution of pandemic specific information, containment strategies and supplies to area hospitals, primary care facilities, long-term care facilities, physicians, clinics, outpatient treatment centers, and others.
  3. Develop specific clinical symptomatology descriptions with recommendations regarding testing, isolation and treatment of patients. Distribution of this information will occur via blast fax through the HAN, dialogic, and through the Greater Louisville Medical Society (GLMS) community communications as necessary.
  4. The Communicable Disease nurses of the LMPHW will communicate directly with infection control nurses at all area hospitals and all area emergency rooms and urgent care centers to assure timely distribution of information.
  5. Distribute containment strategy information to the public via local television, radio stations and print media in coordination with the Health Department Director and the Mayor's office.

6. Distribute information relating to health-care acquired influenza to healthcare workers. The HAN, dialogic and GLMS communication networks will also distribute this information.
7. Staff a “flu hotline” to distribute current pandemic information and influenza education. This system will be a phone bank established in conjunction with the health department Disaster Operations Center.
8. Evaluate our resources for providing vaccine or antiviral therapy to the public.
9. LMPHW would request increased collection of respiratory specimens from persons with acute febrile and respiratory illnesses with subtyping of all influenza A isolates.
10. The LMPHW will coordinate testing of respiratory specimens with the State
11. Mandatory reporting by hospitals of the following information that LMPHW will collect and communicate:
  - a. Number of available Intensive Care Unit beds (adult and pediatric)
  - b. Number of available medical beds (adult and pediatric)
  - c. Number of available emergency department (ED) beds (monitored and non-monitored)
  - d. Number of patients and/or waiting time in the ED
  - e. Number of patients waiting for inpatient beds (in ED, clinics, etc)
  - f. Number of hospitals on ED diversion
  - g. Morgue capacity
  - h. Shortages of medical supplies or equipment
- K. If the CDC and/or HHS issues an **Activate Trigger OR, pandemic influenza cases are identified** in Louisville Metro, then LMPHW will:
  1. Open the LMPHW Department Operations Center (DOC) utilizing a NIMS compliant Incident Command System
  2. Attempt to slow the spread of pandemic influenza to provide additional time for the development, manufacture, distribution and administration of influenza vaccine and the manufacture and the distribution of influenza antiviral medications

3. Distribute influenza vaccine and antiviral according to CDC and KyDPH guidance
4. Implement **Community Transmission Control Strategies/Social Distancing** (Must use early in the outbreak) including:
  - a. Use of surgical masks and other protective supplies
  - b. Closing of schools
  - c. Restrict or cancel large public gatherings and meetings (Concerts, Sporting Events)
  - d. Closures of specific office buildings, colleges/universities or other groups.
  - e. Isolate persons testing positive for influenza A until the isolate is subtyped.
5. Distribute healthcare and community control measures.
6. Utilize Quarantine and Isolation

KRS 214.020 authorizes the Louisville Metro Department of Public Health and Wellness (LMPHW) to take such action and adopt and enforce such rules and regulations, as it deems efficient in preventing the introduction or spread of such infectious or contagious disease or diseases, and to establish and strictly maintain quarantine and isolation at such places, as it deems proper.

- a. Aggressive surveillance to detect the first few cases in the Louisville community will be vital to making quarantine a possible option.
- b. The current consensus is that quarantine and isolation is most beneficial at the beginning of a pandemic when restrictions on an exposed or infected person might delay introduction of a novel virus. Once a pandemic strain has become established, quarantine and isolation would be of limited practical value.
- c. The utility of quarantine measures will depend upon the infectivity of the virus, which can vary in influenza viruses from strain to strain. For less infectious influenza strains, quarantine may be utilized.
- d. Forced quarantine, with legal support, is only useful for containing an outbreak within a very small population.

- e. Voluntary quarantine is more practical and effective when more than 15-20 cases present in the community.
  - f. Isolate persons with known or suspected influenza at home or, if medically necessary, in a hospital
  - g. Isolate persons for seven (7) days or until viral shedding is no longer detected, whichever is longer, or the viral isolate is laboratory-confirmed not to be a novel influenza A virus.
  - h. Isolate if a person has influenza-like-illness and is a recent (within seven days) traveler to an implicated region.
  - i. Quarantine contacts of infected persons at home for seven (7) days or until negative influenza in their contact.
  - j. Federal, State, and local government must be prepared to provide care and support including:
    - 1) Physical, nutritional, medical, and financial care
    - 2) Information and communication to family and friends
- L. If an animal source is identified with ongoing transmission in animal population then LMPHW will:
- 1. Coordinate with agricultural authorities to eliminate the source of the novel virus from domestic animals as much as possible.
  - 2. Advise persons who may be in contact with potentially infected animals to:
    - a. Adhere to proper hand hygiene after contact with infected or exposed animal,
      - 1) Hand hygiene should consist of washing with soap and water for 15-20 seconds or the use of other standard hand-disinfection procedures as specified by the Kentucky Department of Agriculture, USDA, or Kentucky Department of Public Health.
    - b. Wear Personal Protective Equipment (PPE) including,
      - 1) Disposable gloves made of lightweight nitrile or vinyl or heavy duty rubber work gloves that can be disinfected

- 2) Protective clothing, preferably disposable outer garments and an impermeable apron or surgical gowns with long cuffed sleeves
  - 3) Disposable protective shoe covers or rubber or polyurethane boots that can be cleaned and disinfected
  - 4) Safety goggles
  - 5) Disposable particulate respirators (N-95, N-99, N-100) with fit-test
- c. Dispose and/or disinfect PPE properly.
  - d. Receive influenza vaccine to reduce the possibility of a co-infection with novel influenza virus and circulating human influenza virus,
  - e. Use antiviral chemoprophylaxis.
3. Monitor for febrile, respiratory and conjunctival illness among persons exposed to infected animals or the animals' contaminated environment.
  4. If persons exposed to the animal source of influenza become ill
    - a. Isolate at home or, if medically necessary, in a hospital for seven days or viral shedding is no longer detected, whichever is longer, or until the viral isolate is laboratory-confirmed not to be a novel influenza A virus.
    - b. Conduct rapid testing for influenza and arrange for viral culture of respiratory specimens at designated facilities.
    - c. Provide antiviral medication for treatment, although its use would not affect isolation instructions since infected persons taking antiviral medication still may shed influenza virus (and possibly antiviral drug-resistant viruses).

## **V. Direction and Control**

- A. The LMPHW will operate in coordination with:
  1. The CDC and HHS
  2. Kentucky Department for Public Health,
  3. Kentucky Emergency Management (KyEM),

4. The Louisville Metro Emergency Management Agency (LMEMA) and others as necessary.
- B. The LMPHW will operate within NIMS, Emergency Support Function 8.
  - C. Response will be in accordance with the Louisville Metro Department of Public Health and Wellness Emergency Operations Plan.

## **VI. Assignment of Responsibilities:**

- A. Emergency Support Function #8, Health and Medical (ESF-8)
  1. Mission: To meet public health and medical care needs following a disaster or emergency or during a potential developing medical situation.
- B. ESF-8 Primary Agency:
  1. The LMPHW is the primary agency for ESF-8 and coordinates the provision of health and medical assistance at the local level.
- C. Local ESF-8 support agencies:
  1. Family Health Centers
  2. Jefferson County Coroner's Office
  3. Kentucky Community Crisis Response Board
  4. L/JC Metro Emergency Management Agency
  5. Louisville Metro Corrections Department
  6. Louisville Metro Emergency Medical Services
  7. Louisville Metro General Services Administration
  8. Louisville Metro Human Services
  9. Louisville Metro Purchasing Department
  10. Kentucky Hospital Association Members
  11. Medical Reserve Corps
  12. National Disaster Medical System Members
- D. ESF-8 involves assisting Louisville Metro government in identifying and meeting the health and medical needs of the community during times of emergency. This support is categorized in the following functional areas:
  1. Assessment of health and medical needs
  2. Health surveillance
  3. Medical care personnel
  4. Health and medical equipment and supplies
  5. Patient evacuation

6. In-hospital care
7. Food/drug/medical device safety
8. Worker health and safety
9. Radiological/chemical/biological hazards consultation
10. Mental health care
11. Public health information
12. Vector control
13. Potable water/wastewater and solid waste disposal
14. Victim identification/mortuary services
15. Veterinary services

## **VII. Tabs**

- A. Tab 1 – WHO Global Pandemic Stages and the U.S. Government Stages for Response
- B. Tab 1a – Pandemic Severity Index by Epidemiological Characteristics
- C. Tab 1b – Summary of the U.S. Government Community Mitigation Strategy by Pandemic Severity
- D. Tab 2 – Recommended Healthcare and Community Control Measures
- E. Tab 3 – Vaccine and Antiviral Distribution (KyDPH)
- F. Tab 4 – Interim Guidance for Laboratory Testing of H5N1
- G. Tab 5 – Interim Guidance for Specimen Collecting and Testing
- H. Tab 6 – Hospital and Health Care Worker Procedures
  - I. Tab 7 – Pandemic Influenza Risk Communication
- J. Tab 8 – Definitions
- K. Tab 9 - Louisville Metro Department of Public Health and Wellness Contact Numbers

**Tab 1  
 WHO Global Pandemic Phases and the U.S. Government Stages for  
 Response**

WHO Phases		Federal Government Response Stages	
<b>INTER-PANDEMIC PERIOD</b>			
<b>1</b>	No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals. If present in animals, the risk of human disease is considered to be low.	<b>0</b>	New domestic animal outbreak in at-risk country
<b>2</b>	No new influenza virus subtypes have been detected in humans. However, a circulating animal influenza virus subtype poses a substantial risk of human disease.		
<b>PANDEMIC ALERT PERIOD</b>			
<b>3</b>	Human infection(s) with a new subtype, but no human-to-human spread, or at most rare instances of spread to a close contact	<b>0</b>	New domestic animal outbreak in at risk-country
		<b>1</b>	Suspected human outbreak overseas
<b>4</b>	Small cluster(s) with limited human-to-human transmission but spread is highly localized, suggesting that the virus is not well adapted to humans	<b>2</b>	Confirmed human outbreak overseas
<b>5</b>	Larger cluster(s) but human-to-human spread still localized, suggesting that the virus is becoming increasingly better adapted to humans, but may not yet be fully transmissible (substantial pandemic risk)		
<b>PANDEMIC PERIOD</b>			
<b>6</b>	Pandemic phase: Increased and sustained transmission in general population	<b>3</b>	Widespread human outbreaks in multiple locations overseas
		<b>4</b>	First human case in North America
		<b>5</b>	Spread throughout United States
		<b>6</b>	Recovery and preparation for subsequent waves

**Tab 1a  
 Pandemic Severity Index by Epidemiological Characteristics**

Characteristics	Pandemic Severity Index (PSI)				
	Category 1	Category 2	Category 3	Category 4	Category 5
Case Fatality Ratio (%)	<0.1	0.1-<0.5	0.5-<1.0	1.0-<2.0	≥2.0
Excess Death Rate (per 100,000)	<30	30-<150	150-<300	300-<600	>600
Illness Rate (percentage of the population)	20-40	20-40	20-40	20-40	20-40
Potential Number of Deaths (based on 2006 U.S. population)	<90,000	90,000-<450,000	450,000-<900,000	900,000-<1.8 million	≥1.8 million
20 <sup>th</sup> Century U.S. Experience	Seasonal Influenza (illness rate 5-20%)	1957, 1968	None	None	1918 Pandemic

**Tab 1b**  
**Summary of the U.S. Government Community Mitigation Strategy by Pandemic Severity**

<b>Interventions by Setting</b>	<b>Pandemic Severity Index</b>		
	<b>1</b>	<b>2 and 3</b>	<b>4 and 5</b>
<b>Home</b> <b>Voluntary Isolation</b> of ill at home (adults and children); combine with use of antiviral treatment as available and indicated.	Recommend	Recommend	Recommend
<b>Voluntary Quarantine</b> of household members in homes with ill persons (adults and children); consider combining with antiviral prophylaxis if effective, feasible, and quantities sufficient	Generally not recommended	Consider	Recommend
<b>School</b> <b>Child social distancing</b>  -dismissal of students from schools and school based activities, and closure of child care programs  -reduce out-of-school social contacts and community mixing	Generally not recommended	Consider: ≤4 weeks	Recommend: ≤12 weeks
<b>Workplace/Community Adult Social Distancing</b>  -decrease number of social contacts (e.g. encourage teleconferences, alternatives to face-to-face meetings)  -increase distance between persons (e.g. reduce density in public transit, workplace)  -modify postpone, or cancel selected public gatherings to promote social distance (e.g. postpone indoor stadium events, theatre performances)  -modify workplace schedules and practices (e.g. telework, staggered shifts)	Generally not recommended	Consider: ≤4 weeks	Recommend: ≤12 weeks
	Generally not recommended	Consider	Recommend
	Generally not recommended	Consider	Recommend
	Generally not recommended	Consider	Recommend
	Generally not recommended	Consider	Recommend

**Tab 1c - Jefferson County Public Schools Levels of Response**

WHO Phases		Federal Government Response Stages	LMPHW Response	JCPS Levels of Response
<b>INTER-PANDEMIC PERIOD</b>				
<b>1</b>	No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals. If present in animals, the risk of human disease is considered to be low.	<b>0</b> New domestic animal outbreak in at-risk country	On-going Community Emergency Preparedness	<b>1</b> On-going Operational Community & District Emergency Preparedness
<b>2</b>	No new influenza virus subtypes have been detected in humans. However, a circulating animal influenza virus subtype poses a substantial risk of human disease.			
<b>PANDEMIC ALERT PERIOD</b>				
<b>3</b>	Human infection(s) with a new subtype, but no human-to-human spread, or at most rare instances of spread to a close contact	<b>0</b> New domestic animal outbreak in at risk-country		
		<b>1</b> Suspected human outbreak overseas		
<b>4</b>	Small cluster(s) with limited human-to-human transmission but spread is highly localized, suggesting that the virus is not well adapted to humans	<b>2</b> Confirmed human outbreak overseas	Maintain, update and disseminate HHS, CDC, and other public health data	<b>2</b> Mitigation & Prevention
<b>5</b>	Larger cluster(s) but human-to-human spread still localized, suggesting that the virus is becoming increasingly better adapted to humans, but may not yet be fully transmissible (substantial pandemic risk)			
<b>PANDEMIC PERIOD</b>				
<b>6</b>	Pandemic phase: Increased and sustained transmission in general population	<b>3</b> Widespread human outbreaks in multiple locations overseas		
		<b>4</b> First human case in North America	Implement local community health emergency response plans	<b>3</b> Advance Precautions
				<b>4</b> Surveillance, Reporting & Heightened Awareness
		<b>5</b> Spread throughout United States		<b>5</b> Preparation for Possible School Closure
				<b>6</b> Public Health Emergency/School Closures
<b>6</b> Recovery and preparation for subsequent waves		Recovery	<b>7</b> Recovery	

**Tab 2**

**Recommended Healthcare and Community Control Measures of Pandemic Influenza**

	<b>Healthcare Setting</b>	<b>Community</b>
<b>Decrease Potential for Contact</b>	<ul style="list-style-type: none"> <li>▪ Private room or cohorting with other influenza patients</li> <li>▪ Negative pressure room, if feasible</li> <li>▪ Designate specific wards or hospitals for admission of case patients</li> <li>▪ Minimize transportation of patient outside of room</li> <li>▪ Limit the number of healthcare workers caring for influenza patients</li> <li>▪ Limit number of visitors to influenza patients</li> <li>▪ Environmental decontamination for influenza following existing guidelines</li> </ul>	<ul style="list-style-type: none"> <li>▪ Provide advisories or limit travel to areas where a novel influenza strain is causing disease</li> <li>▪ Screen travelers for febrile and respiratory illness on exit from an area where a novel influenza strain is causing disease</li> <li>▪ Cancel large group gatherings</li> <li>▪ Close schools</li> <li>▪ Encourage telecommuting</li> <li>▪ Limit availability of public transportation</li> <li>▪ Avoid unnecessary visits to hospitals</li> <li>▪ Discourage hand shaking</li> <li>▪ Identify cases early through public education and self-assessment for symptoms, including fever, leading to early isolation at home or in healthcare settings</li> <li>▪ Early quarantine of contacts of suspected cases</li> </ul>
<b>Decrease potential for infection if contact occurs</b>	<ul style="list-style-type: none"> <li>▪ Antiviral chemoprophylaxis for healthcare workers</li> <li>▪ Vaccination of healthcare workers</li> <li>▪ Hand hygiene</li> <li>▪ Respiratory hygiene/cough etiquette</li> <li>▪ Standard and droplet precautions including use of gowns, gloves and masks by healthcare workers or visitors to influenza patients</li> </ul>	<ul style="list-style-type: none"> <li>▪ Hand hygiene</li> <li>▪ Respiratory hygiene/cough etiquette</li> <li>▪ Wear masks in public</li> <li>▪ Antiviral chemoprophylaxis or vaccination if available</li> </ul>

**Tab 3**

**Vaccine and Antiviral Distribution:**

- I. The LMPHW will distribute antiviral and influenza vaccine using the predetermined Points of Distribution (POD), and distribution standard operating guides, currently identified in the LMPHW Disaster Response Plan (DRP) and the Distribution of Needed Medical Items SOG.
  - A. Vaccine will be distributed to the population of Louisville Metro according to the following priority, established by the Kentucky Department for Public Health
    - 1. The following groups are considered a priority to receive vaccination so that response activities and basic services are maintained:
      - a. First Responders
      - b. Healthcare Workers
      - c. Staff of long-term care facilities
      - d. Others vital for response and maintenance of basic services.
    - 2. Priority Population Groups for Vaccine:

<b>Tier</b>	<b>Priority Group</b>
1 A	Vaccine and antiviral manufacturers and other essential to manufacturing and critical support; medical workers and public health workers who are involved in direct patient contact;
1 B	Persons > 65 years with 1 or more influenza high-risk conditions and residents in long term care facilities; persons 6 months to 64 years with 2 or more influenza high risk conditions; persons 6 months or older with history of hospitalization for pneumonia or influenza or other influenza high risk condition in the past year
C	Pregnant women; household contacts of severely immunocompromised persons who would not be vaccinated due to likely poor response to vaccine; household contacts of children < 6 months old
D	Public health emergency response workers critical to pandemic response; key government leaders
2 A	Healthy 65 years and older; 6 months to 64 years with 1 high risk condition; 6- 23 months old, healthy
2 B	Other public health emergency responders; public safety workers including police, fire, 911 dispatchers, and correctional facility staff; utility workers essential for maintenance of power, water, and sewage system functioning; transportation workers transporting fuel, water, food, and medical supplies; telecommunication/ IT for essential network operations and maintenance
3	Other key government health decision makers, funeral directors/ embalmers
4	Healthy person 2-64 years not included in the above categories

- B. Antiviral Priority Groups: Antiviral will be distributed to the population of Louisville Metro according to the following priority, established by the Kentucky Department for Public Health:
1. Patients admitted to hospital
  2. Health care workers (HCW) with direct patient contact and emergency medical services (EMS) providers
  3. Highest risk outpatients-immunocompromised persons and pregnant women
  4. Pandemic health responders (public health, vaccinators, vaccine and antiviral manufacturers), public safety (police, fire, corrections), and government decision-makers
  5. Increased risk outpatients-young children 12-23 months old, persons  $\geq 65$  years old, and persons with underlying medical conditions
  6. Outbreak response in nursing homes and other residential settings
  7. HCWs in emergency departments, intensive care units, dialysis centers and EMS providers
  8. Pandemic societal responders (e.g., critical infrastructure groups as defined in the vaccine priorities) and HCW without direct patient contact
  9. Other outpatients
  10. High risk outpatients
  11. Other HCWs with direct patient contact
- II. When production is adequate to supply the entire Louisville Metro population with antiviral and/or influenza vaccine
- A. The LMPHW will work closely with the CDC and the Kentucky Department of Public Health to determine the proper time to implement a mass vaccination
  - B. The LMPHW will vaccinate at least 90% of the Louisville Metro population within 21 days.
  - C. This mass vaccination will be carried out according to the LMPHW's Emergency Operations Plan

## Tab 4

### **Interim Guidance for Laboratory Testing of Persons with Suspected Infection with Avian Influenza A (H5N1) Virus in the U.S.**

- I. Testing for Avian Influenza A virus infection is recommended for a patient who has an illness that:
  - A. Requires hospitalization or is fatal; AND
  - B. Has or had a documented temperature of  $\geq 38^{\circ}\text{C}$  ( $\geq 100.4^{\circ}\text{F}$ ); AND
  - C. Has radiographically confirmed pneumonia, acute respiratory distress syndrome (ARDS), or other severe respiratory illness for which an alternate diagnosis has not been established; AND
  - D. Has at least one of the following potential exposures within 10 days of symptom onset:
    1. History of travel to a country with influenza H5N1 documented in poultry, wild birds, and/or humans, AND had at least one of the following potential exposures during travel:
      - a. Direct contact with (e.g., touching) sick or dead domestic poultry;
      - b. Direct contact with surfaces contaminated with poultry feces;
      - c. Consumption of raw or incompletely cooked poultry or poultry products;
      - d. Direct contact with sick or dead wild birds suspected or confirmed to have influenza H5N1;
      - e. Close contact (approach within 1 meter [approx. 3 feet]) of a person who was hospitalized or died due to a severe unexplained respiratory illness;
    2. Close contact (approach within 1 meter [approx. 3 feet]) of an ill patient who was confirmed or suspected to have H5N1;
    3. Worked with live influenza H5N1 virus in a laboratory
- II. Testing for avian influenza A (H5N1) virus infection can be considered on a case-by-case basis, in consultation with local and state health departments, for:

- A. A patient with mild or atypical disease‡ (hospitalized or ambulatory) who has one of the exposures listed above (criteria A, B, or C); OR
- B. A patient with severe or fatal respiratory disease whose epidemiological information is uncertain, unavailable, or otherwise suspicious but does not meet the criteria above (examples include: a returned traveler from an influenza H5N1-affected country whose exposures are unclear or suspicious, a person who had contact with sick or well-appearing poultry, etc.)

**Tab 5**

**Interim Guidance for Specimen Collection and Testing**

- I. Oropharyngeal swab specimens and lower respiratory tract specimens (e.g., bronchoalveolar lavage or tracheal aspirates) are preferred because they appear to contain the highest quantity of virus for influenza H5N1 detection, as determined on the basis of available data. Nasal or nasopharyngeal swab specimens are acceptable, but may contain less virus and therefore not be optimal specimens for virus detection.
- II. Detection of influenza H5N1 is more likely from specimens collected within the first 3 days of illness onset. If possible, serial specimens should be obtained over several days from the same patient.
- III. Bronchoalveolar lavage is considered to be a high-risk aerosol-generating procedure. Therefore, infection control precautions should include the use of gloves, gown, goggles or face shield, and a fit-tested respirator with an N-95 or higher rated filter. A loose-fitting powered air-purifying respirator (PAPR) may be used if fit-testing is not possible (for example, if the person has a beard). Detailed guidance on infection control precautions for health care workers caring for suspected influenza H5N1 patients is available.
- IV. Swabs used for specimen collection should have a Dacron tip and an aluminum or plastic shaft. Swabs with calcium alginate or cotton tips and wooden shafts are not recommended. § Specimens should be placed at 4°C immediately after collection.
- V. For reverse-transcriptase polymerase chain reaction (RT-PCR) analysis, nucleic acid extraction lysis buffer can be added to specimens (for virus inactivation and RNA stabilization), after which specimens can be stored and shipped at 4°C. Otherwise, specimens should be frozen at or below -70°C and shipped on dry ice. For viral isolation, specimens can be stored and shipped at 4°C. If specimens are not expected to be inoculated into culture within 2 days, they should be frozen at or below -70°C and shipped on dry ice. Avoid repeated freeze/thaw cycles.
- VI. Influenza H5N1-specific RT-PCR testing conducted under Biosafety Level 2 conditions ¶ is the preferred method for diagnosis. All state public health laboratories, several local public health laboratories, and CDC are able to perform influenza H5N1 RT-PCR testing, and are the recommended sites for initial diagnosis.
- VII. Viral culture should NOT be attempted on specimens from patients suspected to have influenza H5N1, unless conducted under Biosafety Level 3 conditions with enhancements.

- VIII. Commercial rapid influenza antigen testing in the evaluation of suspected influenza H5N1 cases should be interpreted with caution. Clinicians should be aware that these tests have relatively low sensitivities, and a negative result would not exclude a diagnosis of influenza H5N1. In addition, a positive result does not distinguish between seasonal and avian influenza A viruses.
- IX. Serologic testing for influenza H5N1-specific antibody, using appropriately timed specimens, can be considered if other influenza H5N1 diagnostic testing methods are unsuccessful (for example, due to delays in respiratory specimen collection). Paired serum specimens from the same patient are required for influenza H5N1 diagnosis: one sample should be tested within the first week of illness, and a second sample should be tested 2-4 weeks later. A demonstrated rise in the H5N1-specific antibody level is required for a diagnosis of H5N1 infection. Currently, the microneutralization assay, which requires live virus, is the recommended test for measuring H5N1-specific antibody. Any work with live wild-type highly pathogenic influenza H5N1 viruses must be conducted in a USDA approved Biosafety Level 3 enhanced containment facility. Visit <http://www.cdc.gov/flu/h2n2bsl3.htm> for more information about procedures and facilities recommended for manipulating highly pathogenic avian influenza viruses.
- X. Laboratory testing results positive for influenza A (H5N1) in the United States should be confirmed at CDC, which has been designated as a WHO H5 Reference Laboratory. Before sending specimens, state and local health departments should contact CDC's on-call epidemiologist at (404) 639-3747 or (404) 639-3591 (Monday – Friday, 8:30 AM - 5:00 PM) or (770) 488-7100 (all other times).

## **Tab 6**

### **Hospital and Health Care Worker Procedures**

- I. Recommendations for hospital mass care planning during a pandemic flu event
  - A. Planning patient flow
    1. Review and revise criteria for admission.
    2. Plan for use of alternative space for emergency care.
    3. Separate waiting areas for persons with febrile and respiratory disease from other patients.
    4. Expand use of a triage officer to manage patient flow, including patient referral to other clinics within the facility or to local physicians' offices or non-traditional care settings when ED care is not required.
    5. Review policies to assure adequate staffing of the emergency department and other outpatient areas.
    6. Assure that high-risk outpatients presenting for procedures such as dialysis or chemotherapy are separate from those who may have influenza; these patients and their care providers should receive influenza vaccine when it is available.
    7. Coordinate with home health care agencies to provide follow-up for persons who are not admitted to the hospital or are discharged earlier than usual.
  - B. Education and management of staff
    1. Healthcare workers should be educated about influenza disease, diagnosis, and management.
    2. Ensure that the facility's time-off policies and procedures adequately consider staffing needs in periods of clinical crisis.
    3. Expand hospital-sponsored sick care services for the children of hospital staff to reduce staff absenteeism. Childcare staff should be immunized when vaccine is available.
    4. Increase clinical care staff from current employees. Within reasonable limits of clinical competency, consider use of registered nurses and

other health care providers currently serving in administrative positions to provide patient care.

5. Use retired health care providers as volunteers for some patient care roles.
6. Use community volunteers for functions such as patient or specimen transport and for maintaining good patient flow in crowded emergency department settings.

C. Influenza isolation/control guidelines for health care settings:

1. Patients should be placed in a negative air pressure room or placed together with other patients with suspected or proven influenza in an area of the hospital with an independent air supply and exhaust system.
2. Health care personnel should wear a surgical mask when entering the room of a patient and use standard droplet and contact precautions, including hand washing, use of gloves, and gown and eye protection if they are apt to come into contact with body fluids or contaminated surfaces.
3. Because of the possibility of prolonged shedding of influenza virus during a pandemic, all influenza specific bed management measures should be maintained for at least seven days after onset of illness or longer if symptoms persist.
4. Uninfected patients who are at high-risk for influenza complications should be considered for private rooms.
5. Movement and transport of influenza infected patients should be limited as much as possible. If a patient must be transported, the patient should wear a surgical mask to decrease the risk of virus transmission to other patients and health care workers. In settings where patient transport is common, such as from the Emergency Department to radiology, consider using alternate routes for persons with possible influenza infection and those who have no symptoms of influenza.
6. Further infection control guidelines as mandated by the CDC and local and state public health officials will be communicated to hospital infection control personnel in a timely fashion.

D. The LMPHW recommends that health care organizations implement other pandemic response activities. These may include:

1. Review policies for scheduling elective procedures and develop guidelines and contingency plans to limit elective admissions and surgery. Including canceling elective admissions and surgeries.
2. Evaluating bed availability and expanding capacity, including implementing plans for early discharge of patients who do not require ongoing inpatient care
3. Establishing specific triage and waiting areas for persons with respiratory illness
4. Educating patients about what they can do to decrease transmission of influenza to other patients, health care workers, and visitors. To include posting of information on Respiratory Hygiene/Cough Etiquette.
5. Congregation of patients should be minimized to prevent spreading of illness by non-symptomatic or undiagnosed persons.
6. Visitors should be limited as much as possible to reduce the likelihood of transmission of influenza among visitors, patients, and health care workers.
7. The use of family members and volunteers to assist in patient care during a pandemic may be considered with documented policies and education in place.
8. As part of the health care organization's responsibility to implement measures that reduce transmission of infection, it may be optimal to exclude personnel from patient contact if they have symptoms of febrile upper respiratory tract infection suggestive of influenza. This is especially critical if the health care worker cares for severely immunocompromised patients including neonates, young infants, and patients in the intensive care unit.

## II. Healthcare Worker Care

- A. The following recommendations will be communicated to community health care providers by dialogic, HAN and GLMS communications:
  1. Indications and opportunities for vaccination of staff and patients before the annual influenza epidemic.
  2. HCWs should be educated about influenza clinical manifestations, diagnosis, and management. Education also should highlight the value of annual vaccination for both HCWs and patients and the role of

antiviral drugs in preventing disease and reducing the rates of severe influenza and its complications.

3. To reduce the likelihood of excluding personnel from duty, all health care workers should be strongly encouraged to receive annual influenza vaccine and receive pandemic strain vaccine once it is available.
- B. Standard Precautions during the care of a patient with suspected or confirmed influenza:
1. Wear gloves at all times when in contact with suspected, or confirmed, influenza patients.
  2. Wear a gown if soiling of clothes with patient's respiratory secretions is expected.
  3. Change gloves and gowns after each patient encounter and before touching any noncontaminated items or touching another patient, and perform hand hygiene.
  4. Decontaminate hands before and after touching the patient, after touching the patient's environment, or after touching the patient's respiratory secretions, whether or not gloves are worn.
  5. When hands are visibly soiled or contaminated with respiratory secretions, wash hands with either a non-antimicrobial or an antimicrobial soap and water. Hand hygiene with plain soap or detergent for at least 10 to 15 seconds under running water is an effective method of removing soil and transient microorganisms. If sinks for hand hygiene are not readily available, alcohol-based agents can be used.
  6. If hands are not visibly soiled and after glove removal, use an alcohol-based hand rub for routinely decontaminating hands in clinical situations. Alternatively, wash hands with an antimicrobial soap and water.
  7. Influenza precautions should be maintained for the duration of the respiratory illness.
- III. Home health care
- A. Home health care personnel need to apply infection control as scrupulously as hospital personnel, given their potential to spread infection between households.

- B. Hand hygiene, masks, and gloves should be used as described above.
- C. Home health care workers and home health patients should receive influenza vaccine annually and the pandemic strain vaccine should be administered once it is available.

#### IV. Long-Term Care Facilities

- A. All LTCFs should have preparedness and response plans that include:
  - 1. Vaccination recommendations,
  - 2. Surveillance,
  - 3. Infection control,
  - 4. Policies regarding visitors,
  - 5. Use of antiviral prophylaxis and therapy
  - 6. Outbreak reporting and management,
  - 7. Clinical care guidelines
- B. Annual influenza vaccination of LTCF residents to decrease risk of infection and prevent mortality.

## Tab 7 Pandemic Influenza Risk Communication

- I. Timely dissemination of accurate and science-based information on what is known and not known about the outbreak and the progress of the response effort builds public trust and confidence. Coordination of messages and release of information among international, federal, state, and local health officials and affected institutions are critical to avoiding contradictions and confusion that can undermine public trust and impede containment measures. Risk communications regarding pandemic influenza should include the following:
  - A. Information should be technically correct and sufficiently complete to support policies and actions without being patronizing.
  - B. Guidance to community members on actions needed to protect themselves and their family members and colleagues.
  - C. Information should be limited to objective data; messages should guard against excessive speculation, over-interpretation of data, overly confident assessments of investigations and control measures, and comments related to other jurisdictions.
  - D. Rumors, misinformation, misperceptions, and stigmatization of affected groups must be addressed promptly and definitively.
  - E. Education and training of healthcare workers and public health staff on appropriate strategies to recognize the infection and implement control measures.
- II. Example messages
  - A. We have learned a great deal about influenza and this information is helping us prepare for a pandemic outbreak.
  - B. Pandemic influenza can be controlled by rapid, appropriate public health action that includes surveillance, identification and isolation of influenza cases, infection control, and intense contact tracing. These measures can be a temporary inconvenience to those involved but are essential for containing a pandemic outbreak.
  - C. The United States is preparing for a possible reappearance of pandemic influenza by: 1) educating healthcare workers about pandemic influenza and disease diagnosis, 2) enhancing surveillance systems to determine if and where influenza strains with pandemic potential have emerged, 3) developing the capacity to rapidly produce vaccines that will work against

- pandemic strains, 4) improving laboratory tests for influenza, and 5) enhancing influenza treatment options.
- D. The HHS is committed to preserving the health and safety of Americans and pandemic influenza preparedness is an important component of national biodefense readiness activities.
- III. LMPHW information regarding Bird Flu – What You Need to Know
- A. What is it?
1. It is an infection caused by a new influenza virus known as H5N1.
  2. It occurs naturally in wild birds that transmit the virus through their feces.
  3. It is highly contagious among birds.
- B. Where is it?
1. H5N1 originated in Southeast Asia. The World Health Organization (WHO) is monitoring bird flu and has reported that it has now spread to Africa, the Middle East and Eastern Europe.
- C. Should I be worried about catching it?
1. The risk to Americans right now is extremely low.
  2. H5N1 passes quickly from bird to bird. It does not pass well from bird to human and almost never from human to human.
  3. H5N1 has not been found in birds or humans in North America.
  4. Very few people have been infected with avian influenza. There have been 180 reported cases of bird flu worldwide. However, over half of those infected have died.
  5. All reported human cases but one resulted from passage of H5N1 from birds to humans.
  6. The U.S. Centers for Disease Control and the World Health Organization are vigorously monitoring the bird flu around the world. No cases have occurred in the U.S. but **officials predict it is likely to arrive in the United States in the bird population some time this year.** It is unclear when the virus might appear in Louisville.

7. Keep in mind, bird flu passes quickly from bird to bird. It does not yet pass well from bird to human or from human to human. The virus does continue to change as it spreads, and it could eventually change enough that it becomes effective at infecting humans. The virus will need to undergo many changes over time to be able to effectively infect people.

D. What is our city doing to prepare?

1. We are preparing for avian influenza in Louisville in multiple different areas:
  - a. Surveillance - LMPHW conjunction with KyDPH are developing plans to make a rapid PCR test that can detect H5N1 virus available for animal and human testing in Louisville within the next year.
  - b. Communication - Our close relationship with the Jefferson County Medical Society and the State of Kentucky's Health Alert Network will allow for rapid communication of vital information to local medical providers and our public health partners throughout the state.
  - c. We are working with local hospitals to develop plans to assure that our medical resources will be used effectively in the event of a pandemic
  - d. Providing vaccine - It will likely be at least three years before an effective avian influenza vaccine is available for worldwide use. Our responsibility during that time is to develop an effective plan for vaccinating the population of Louisville. Our Emergency Preparedness division is working with multiple community groups, including the local EMA, the University of Louisville, Louisville's Medical Reserve Corps, and local law enforcement agencies to develop plans to provide vaccine efficiently to the citizens of our community.
  - e. Louisville Influenza Pandemic Summit - LMPHW is taking the lead in preparing for a pandemic. We recently hosted the Louisville Influenza Pandemic Summit that brought together local government leaders, public health personnel, business entities, law enforcement personnel, community medical providers, and other community groups to discuss the threats that a pandemic will pose. We addressed not only specific medical issues associated with a pandemic, but also the potential for disruptions in the workplace and basic community services.

E. How can I protect myself?

1. If you travel to a country that has reported cases of bird flu, avoid contact with poultry and feces from poultry.
2. Other than that you always help to protect yourself from any disease when you use good preventive health practices such as:
  - a. Covering your nose and mouth with a tissue when coughing or sneezing
  - b. Washing your hands thoroughly and often
  - c. Avoid touching eyes, nose or mouth
  - d. Stay home when you are sick
  - e. Getting a flu shot or other immunizations as suggested or required
3. Visit [www.cdc.gov/germstopper](http://www.cdc.gov/germstopper) for more information

F. Do I need to be stockpiling food and other supplies?

1. With the worldwide surveillance measures already in place, we are likely to have a warning period of several months before an influenza pandemic comes to Louisville.
2. However, it is always reasonable to have an emergency supply kit at home or in your car. The kit should include water, food and other vital supplies. For a family planning checklist go to <http://www.pandemicflu.gov/>
3. For suggestions on personal preparedness and what to include in a disaster emergency kit go to [www.bt.cdc.gov/planning/#personal](http://www.bt.cdc.gov/planning/#personal)

G. What are the bird flu symptoms?

1. Initial bird flu symptoms look no different than the common cold. They consist of:
  - a. Fever, Cough, Sore throat, Muscle aches
  - b. Eventual severe pulmonary disease is the hallmark of human avian influenza disease.

H. What's the treatment?

1. The antiviral medication tamiflu seems to help people infected with avian influenza. However, using preventive measures to reduce the risk of getting infected is the best therapy.

I. Where can I get more information?

1. U.S. Dept of Health and Human Services <http://www.pandemicflu.gov/>
2. World Health Organization  
[http://www.who.int/csr/disease/avian\\_influenza/en/index.html](http://www.who.int/csr/disease/avian_influenza/en/index.html)
3. Centers for Disease Control and Prevention  
<http://www.cdc.gov/flu/avian/gen-info/qa.htm#1>

## Tab 8 Definitions

**Containment measures:** Isolation, surveillance, and quarantine used together. When these tools are applied to an individual or individuals not defined by geographic area (including population-specific measures), the term refers to individual containment measures. When these tools are applied to a group of persons in a specific geographic area, the term refers to community containment measures.

**Isolation:** Restriction of movement or activities or separation of an ill person(s) with contagious disease

- Usually in hospital, but can be in home or dedicated isolation facility
- Typically applied on an individual level

**Quarantine:** Restriction of movement and activities or separation of well person(s) believed to have been exposed to a contagious disease

- Usually at home, but can be in a dedicated facility or hospital
- Can be applied to individuals, populations, or geographic areas
- Can be applied to restriction of movement into or out of buildings, other structures, and large conveyances, such as a plane or ship.

**Surveillance:** Close observation of a well person(s) exposed to a contagious disease for signs and symptoms of disease

- Usually at home, but can be in dedicated facility or hospital—can be passive relying on spontaneous reporting from the person(s) or active where information is systematically and periodically obtained for all persons under surveillance
- Can be applied to an individual or a population

**Contact:** Persons residing in the same home and persons working within six feet of a suspected person.)

**Tab 9**  
**Louisville Metro Department of Public Health and Wellness**  
**Contact Numbers**

Information:	574-6520
Administration:	574-6530
Reportable Diseases:	574-6677