Preparedness and Response Plan for Avian and Pandemic Influenza

Republic of the Philippines
FOREWORD

Republic of the Philippines

Department of Health

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FOREWORD

Since the start of the outbreaks of highly pathogenic avian influenza (HPAI) in other countries in late 2003, the Philippines has remained to be free from HPAI and does not have any reported case of avian influenza due to H5N1 both in birds and in humans.

We cannot remain complacent, though. The H5N1 continues to ravage other Asian countries bringing about more poultry deaths, illness and death among the exposed persons. The virus poses a threat not only to the economic security but to human health as well. As the avian influenza remains in birds and other animals, the risk to human health continues.

The threat of an influenza pandemic is real. Historical accounts on previous pandemics point to the fact that most had originated from avian influenza. In a simultaneous infection in humans or animals, the avian and human influenza viruses could interact and exchange genes to give rise to a totally new influenza virus which can acquire the high fatality of avian influenza virus and ease of spread of the human influenza virus. can lead to spread of a highly fatal disease across the globe, causing worldwide epidemics (pandemics), with high numbers of cases and deaths.

The continuing threat of a pandemic gives us the opportunity to improve our health care system that will be capable of responding to a severe situation such as an influenza pandemic.

The Preparedness and Response Plan for Avian and Pandemic Influenza aims to provide guidance on preparedness and courses of action for appropriate response in the event of avian influenza and pandemic influenza in our country. This plan has been prepared through consultations of representatives from various agencies, non-government agencies, various Department of Health offices and institutions. I am taking this opportunity to thank them for their valuable contributions and suggestions in the preparation of this plan.
The plan targets people who are involved in planning and in responding to avian and pandemic influenza such as: decision-makers, health planners and policy makers, public health managers, hospital administrators, health care providers, essential service providers, local government units, people involved in the media and communications and other stakeholders.

The strategic approaches in the preparedness and response to avian and pandemic influenza in humans are focused on the following:

1. Prevention of entry of the virus: ban on importation of poultry and poultry products from countries affected with avian influenza, border control, ban on sale, keeping in captivity of wild birds
2. Prevention of spread from birds-to birds: early recognition and reporting, mass culling, quarantine of affected area
3. Prevention of spread from birds to humans: human protection through proper handling of infected birds, use of protective gear by residents, poultry handlers, and response teams
4. Management of avian and pandemic influenza cases: isolation and management of cases, judicious use of antiviral agents, infection control, quarantine of contacts
5. Slowing of spread from humans to humans in an influenza pandemic: entry and exit management of passengers, border control, quarantine of contacts, isolation and management of the sick, social distancing, personal hygiene
6. Management of explosive spread: social distancing, personal hygiene, efforts shifted to maintenance of essential services
7. Management of public anxiety: public advisories and information dissemination, regular updates and briefing of media
8. Mitigating the socio-economic impact of avian and pandemic influenza: networking with other agencies, non-health sectors

The pandemic clock is ticking. It cannot be predicted when the pandemic will occur but it is always best to be prepared all the time. After all, it wasn't raining when Noah built the ark.

HON. FRANCISCO T. DUQUE III, MD, MSc
Secretary of Health
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I. INTRODUCTION AND BACKGROUND

A. Introduction

Influenza A virus, which is of varying sub-types, is harbored by other animals such as birds, swine, horses and even whales. A highly pathogenic avian influenza (HPAI) virus such as H5N1 causes severe disease and death of poultry and leads to mass destruction of poultry to prevent the spread of the virus. HPAI, commonly called bird flu, threatens to cause serious economic consequences for the agricultural sector.

The virus poses a threat not only to the economic security but to human health as well. H5N1 influenza A virus is transmitted from infected poultry to humans, causing a highly fatal disease among the exposed persons.

A highly pathogenic avian influenza (HPAI) virus such as H5N1 causes severe disease and death of poultry and leads to mass destruction of poultry to prevent the spread of the virus. HPAI, commonly called bird flu, threatens to cause serious economic consequences for the agricultural sector.

The virus poses a threat not only to the economic security but to human health as well. H5N1 influenza A virus is transmitted from infected poultry to humans, causing a highly fatal disease among the exposed persons.

An influenza pandemic occurs when the avian influenza virus undergoes genetic changes that makes it capable of human-to-human transmission and against which the human population does not have immunity or cannot be protected by existing vaccines. In a simultaneous infection in humans or animals, the avian and human influenza viruses could interact and exchange genes to give rise to a totally new influenza virus. The combination of characteristics of high fatality of avian influenza virus and ease of transmission from person to person acquired from the normally circulating human influenza virus can lead to spread of a highly fatal disease across the globe, causing worldwide epidemics (pandemics), with high numbers of cases and deaths.

B. Aims and Objectives of the Plan

The aim of this plan is to provide a comprehensive guide for preparedness and response to avian and pandemic influenza.

The plan has six major parts:

1. Introduction and Background
2. Phases/Stages of Preparedness and Response
3. Preparedness Plan
4. Response Plan
5. Preparedness and Response in Airports and Seaports
6. Annexes
The objectives of the plan are to:

1. provide information to stakeholders on avian and pandemic influenza and the rationale for the need to prepare;
2. prepare the health sector and other stakeholders for avian and pandemic influenza;
3. prepare public health and health care facilities so that they will be able to respond appropriately to avian and pandemic influenza;
4. provide a common frame of reference on specific courses of action for human protection that should be carried out in the event of avian and pandemic influenza;
5. prevent morbidity and mortality of humans from avian influenza and reduce, if not totally prevent, morbidity and mortality from pandemic influenza;
6. delay, if not prevent, spread of the disease through public health measures;
7. reduce the strain on health resources by identifying and coordinating ahead for additional resources that need to be mobilized to meet the increase in the demand for health services and to maintain essential services during a pandemic;
8. mitigate the socio-economic effects of avian and pandemic influenza through close coordination with the non-health sector and the media practitioners.

C. Coverage of the Plan

The Preparedness and Response Plan for Avian and Pandemic Influenza aims to provide guidance on preparedness efforts and courses of action for appropriate response in the event of avian and pandemic influenza.

The plan targets people who are involved in planning and in responding to avian and pandemic influenza such as: decision-makers, health planners and policy makers, public health managers, hospital administrators, health care providers, essential service providers, local government units, people involved in the media and communications and other stakeholders.

Inputs from the Department of Agriculture and the poultry industry were taken into consideration in the portions for Stages 1 and 2. Details of the implementing guidelines may be obtained from the Bureau of Animal Industry of the Department of Agriculture (BAI-DA).

D. Development of the Preparedness and Response to Avian and Pandemic Influenza Plan

The plan has been drafted by the Program for the Prevention and Control of Emerging and Re-emerging Infectious Diseases, National Center for Disease Prevention and Control, Department of Health. It has evolved through a series of consultations and meetings with other DOH offices/institutions: National Center for Health Facility Development, National Epidemiology Center, Health Emergency Management Staff, Bureau of Quarantine, Bureau of Local Health Development, Research Institute for Tropical Medicine, San Lazaro Hospital, Philippine Health Insurance Corporation; with other agencies: Departments of Agriculture, Environment and Natural Resources, the
Interior and Local Government (Local Government Development and Philippine National Police), Social Welfare and Development, Tourism, Education, Transportation and Communication (Philippine Coast Guard), Finance (Bureau of Customs), Trade and Industry, the National Security Council, National Defense and the Armed Forces of the Philippines; the medical specialty organizations such as the Philippine Society for Microbiology and Infectious Diseases, Philippine Pediatric Society, Pediatric Infectious Diseases of the Philippines and the Philippine Foundation for Vaccination and several international organizations.

E. Provisions for Revisions

Because of the current threat of avian and pandemic influenza, this plan has been developed to serve as an immediate available reference for key stakeholders. It is recognized that certain areas of this plan needs further development. New information will be available over time and comments and suggestions may be shared by other stakeholders. Any revisions or additional information in the plan will be communicated through memorandum circulars or through the DOH website: http://www.doh.gov.ph.

E. BACKGROUND INFORMATION

Influenza is recognized both as an emerging and re-emerging viral infection and is described as an unvarying disease caused by a varying virus. The virus mutates but its burden on health, lives, and manpower is consistently overwhelming.

Influenza A is of three types: A, B and C. Influenza A and B cause human illness and are responsible for occasional epidemics. Types A and B circulate in human populations and mutate constantly, resulting in the emergence of new strains and the need for a modified vaccine every year.

1. Differentiation of Seasonal (Regular) Influenza from Highly Pathogenic Avian Influenza and Pandemic Influenza

a. Seasonal (Regular) Influenza

A community outbreak of influenza increases the demand on clinics, health centers and hospitals for treatment of symptoms as well as complications of influenza. Children miss school and adults miss workdays for an average of 3 days, either because they are sick or because sick persons in the family have to be taken care of.

Influenza affects all ages but the risk for complications, hospitalizations and deaths are higher among high-risk individuals, namely, persons aged > 50 years, young children, and persons of any age with certain underlying health conditions than among healthy older children and younger adults.

Published studies have shown that otherwise healthy children under two years old were more likely to be hospitalized for serious complications of influenza such as pneumonia, acute bronchiolitis, acute otitis media and myositis than older, healthy children.

Complications of influenza commonly occur in persons who have chronic medical conditions such as chronic obstructive lung disease, cardiovascular disease and
diabetes mellitus. People over age 50 have high rate of chronic medical conditions and suffer most of the deaths associated with influenza.

Local studies done showed that 14 to 21% of acute lower respiratory tract infections caused by viral pathogens among children less than 5 years old are attributed to influenza.

b. Highly Pathogenic Avian Influenza

Avian influenza (AI) or bird flu is an infection that is due to a highly pathogenic influenza virus, H5N1. From December 2003 to the present, highly pathogenic avian influenza (HPAI), commonly known as bird flu has an unprecedented geographical spread to many countries in Asia. Bird flu due to Influenza A/ H5N1 cause severe disease and mass deaths and destruction of poultry leading to serious economic consequences for the agricultural sector.

H5N1 virus subtype has been shown to be transmitted from infected poultry to humans, causing serious illness and high mortality. The risks to human health remain so long as H5N1 continues to circulate in domestic poultry.

c. Influenza Pandemic

Widespread epidemics in birds increase opportunities for human exposure. In a simultaneous infection, the avian and human influenza viruses could interact and exchange genes to give rise to a totally new influenza virus. If that virus proves capable of spreading easily and sustainably from person to person against which most of the human population do not have natural immunity or cannot be protected by existing vaccines, then the conditions for the start of an influenza pandemic will have been met.

Since 1580, there were at least 31 documented pandemics affecting different segments of the population and with varying levels of impact. In the 20th century, the largest pandemic was in 1918, due to Influenza A/H1N1 which caused at least 20 million deaths worldwide. Adults (20-50) were extremely affected.

Other pandemics were in: 1950 due to A/H1N1, a mild influenza pandemic, 1957 caused by A/H2N2 which affected mainly infants and children and 1968 (A/H3N2), due to recombination of avian and human influenza virus, which had mortality highest among the >65 year old population and groups younger than 65 years old but with underlying medical conditions.
Table: Comparison of Seasonal, Avian and Pandemic Influenza

<table>
<thead>
<tr>
<th></th>
<th>Seasonal Influenza</th>
<th>Highly Pathogenic Avian Influenza</th>
<th>Pandemic Influenza</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Etiology</strong></td>
<td>Influenza A (H3N2, H1N1) Influenza B</td>
<td>Pathogenic to humans: H5N1, H7N7</td>
<td>new subtype or mutated H5N1 capable of human-to-human transmission</td>
</tr>
<tr>
<td><strong>Incubation Period</strong></td>
<td>2 to 3 days (range 1 to 7 days)</td>
<td>3 days (range 2 to 4 days)</td>
<td>?</td>
</tr>
<tr>
<td><strong>Transmission</strong></td>
<td>Respiratory discharges from persons infected with the usual circulating subtype, strains may vary</td>
<td>Respiratory discharges and fecal material infected birds</td>
<td>Respiratory discharges from persons infected with new virus subtype, may vary from persons infected with a new virus subtype</td>
</tr>
<tr>
<td><strong>Who are at risk of complications</strong></td>
<td>young children, persons &gt; 50 y/o, with co-morbidities</td>
<td>those with contact with infected birds</td>
<td>Uncertain</td>
</tr>
<tr>
<td><strong>Clinical manifestations</strong></td>
<td>fever, respiratory manifestations, may or may not progress</td>
<td>Fever, respiratory manifestations, 50-70% fatality, rapid progression</td>
<td>Fever, respiratory manifestations, severity, other signs to be determined</td>
</tr>
<tr>
<td><strong>Vaccine</strong></td>
<td>yearly vaccine strains</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td><strong>Treatment</strong></td>
<td>supportive, antiviral agent</td>
<td>supportive, antiviral agent</td>
<td>supportive, antiviral agent, if new virus subtype is not resistant</td>
</tr>
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</table>
### II. PHASES/STAGES OF PANDEMIC INFLUENZA PREPAREDNESS AND RESPONSE

#### A. Phases/Stages of Pandemic Influenza Preparedness and Response

<table>
<thead>
<tr>
<th>PANDEMIC PHASES (WHO)</th>
<th>DESCRIPTION</th>
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**Interpandemic Phase**

- **Phase 1** - No new influenza virus subtypes detected in humans, but may be present in animals and the risk of human infection or disease is low
  - New influenza virus subtype in animals, no poultry outbreaks, no human cases
  - Stage 1 - Avian influenza-free Philippines

- **Phase 2** - New influenza virus subtypes detected in animals and substantial risk of human infection or disease
  - New influenza virus subtype in animals, there are poultry outbreaks, no human cases
  - Stage 2 - Avian influenza in domestic fowl in the Philippines

**Pandemic Alert Period**

- **Phase 3** – Human infections with a new sub-type, but no human-to-human spread, or at most, rare instances of spread to a close contact
  - >1 unlinked human cases with clear history of exposure to an animal source/non-human source
  - Independent clusters of human cases from a common source/spread from case to close household or unprotected health-care contacts, no sustained human-to-human transmission
  - Cases with source of exposure which cannot be determined, no clusters or outbreaks of human cases
  - Stage 3 - Confirmation of avian influenza from poultry to humans in the Philippines

- **Phase 4** – Small clusters with limited human-to-human transmission but spread is highly localized
  - >1 clusters involving a small number of human cases, e.g. a cluster of <25 cases lasting <2 weeks
  - Appearance of small number of human cases in one of several geographically linked areas without a clear history of a non-human source of exposure
  - Stage 4 - Avian Influenza with human-to-human transmission of pandemic influenza causing outbreaks in the country.

- **Phase 5** – Larger clusters but human-to-human spread is still localized
  - Ongoing cluster-related transmission, but total number of cases is not rapidly increasing, e.g. cluster of 25-50 cases and lasting for 2 to 4 weeks
  - Ongoing transmission, but cases appear to be localized (remote village, university, military base, island)

- **Phase 6** – Pandemic phase: increased and sustained transmission in general population
  - Sustained transmission, increasing number of cases

**Post-pandemic phase**

- Return to inter-pandemic period

**Post-pandemic phase**

- Return to inter-pandemic period
## B. Threats and Challenges

<table>
<thead>
<tr>
<th>Stage</th>
<th>Threats</th>
<th>Challenges</th>
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<tbody>
<tr>
<td><strong>Stage 1</strong>&lt;br&gt;Bird flu (HPAI) in other countries&lt;br&gt;No bird flu in the Philippines</td>
<td>• Entry of HPAI through:&lt;br&gt;  G. Importation/smuggling of birds and poultry products from affected countries.&lt;br&gt;  H. Migratory birds</td>
<td>• Smuggling of birds in porous/coastal borders&lt;br&gt;• Unregulated sale of birds along the roads in certain areas, pet shops, and local markets&lt;br&gt;• Sale of live birds in some markets&lt;br&gt;• Sustained vigilance of local officials and the community&lt;br&gt;• Tourism implications in limiting humans in wild bird sanctuaries&lt;br&gt;• Allaying the fear of the people&lt;br&gt;• Price increases of meat and other food products because of bird flu scare</td>
</tr>
<tr>
<td><strong>Stage 2</strong>&lt;br&gt;Outbreaks of AI in domestic poultry, may be single or simultaneous in various areas</td>
<td>• Economic impact death of 90-100% of infected birds mass culling of birds within the 3 km radius&lt;br&gt; Exposure of to infected birds likely to be infected</td>
<td>• Non-reporting, deliberate or due to ignorance resulting to late containment and further spread of HPAI in other areas&lt;br&gt;• Resistance to mass culling by poultry owners within the 3-km radius&lt;br&gt;• Exposed individuals without correct knowledge on protecting themselves&lt;br&gt;• How to bring down the information to the grassroots&lt;br&gt;• Public anxiety&lt;br&gt;• Rise in prices of food products, less demand for poultry</td>
</tr>
<tr>
<td><strong>Stage 3</strong>&lt;br&gt;Human cases of AI but without person-to-person transmission</td>
<td>• High case fatality rate – 50-70 %&lt;br&gt;• Risk of re-assortment between avian and human viruses&lt;br&gt;• At risk: persons who have handled, had contact with saliva, respiratory discharges and fecal material of infected birds</td>
<td>• Early detection of human cases&lt;br&gt;• Immediate and appropriate clinical management of cases&lt;br&gt;• Availability of antiviral drug</td>
</tr>
<tr>
<td><strong>Stage 4</strong>&lt;br&gt;Human-to-human transmission of influenza in the Philippines</td>
<td>• High morbidity&lt;br&gt;• High mortality&lt;br&gt;• Public anxiety&lt;br&gt;• Socio-economic disruption</td>
<td>• Early recognition&lt;br&gt;• Increased demand for home remedies and drugs, rise in prices&lt;br&gt;• Increased demand for health services&lt;br&gt;• Essential health and non-health services may not be delivered because of illness&lt;br&gt;• Instituting extreme public health measures to prevent spread of the disease that may lead to socio-economic disruption&lt;br&gt;• Widespread fear and panic about the disease</td>
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C. Possible scenarios based on the progression of stages are as follows:

1. Stage 1 is maintained and the Philippines remains to have no cases of Avian Influenza in poultry and human
2. Stage 2 or AI in domestic fowl but is controlled and no transmission to humans
3. Stage 2 progresses to Stage 3 (AI outbreaks in fowl and cases of AI in humans exposed to sick fowl)
4. Stage 3 without progression to Stage 4
5. Stage 3 to Stage 4 – human outbreaks originating in the Philippines due to virus with person-to-person-transmission caused by a novel influenza virus subtype
6. Stage 1 directly to Stage 4 – from AI-free Philippines directly to outbreaks in humans because of a pandemic influenza virus carried by humans from other countries

III. PREPAREDNESS PLAN

A. Elements of the Preparedness Plan

1. Strengthening the management structure for the prevention and control of avian influenza and other emerging infections from the national to the local level.
2. Operationalizing the surveillance system for HPAI and pandemic influenza.
3. Enhancing capabilities of health and non-health key people in avian and pandemic influenza preparedness and response.
4. Providing antiviral agents and pandemic influenza vaccine to target groups.
5. Ensuring readiness of health facilities, service, manpower and supplies for management of avian and pandemic influenza.
6. Ensuring pandemic preparedness of agencies delivering non-health essential services.
7. Defining public health interventions to minimize spread of avian and pandemic influenza.
8. Strengthening information, education and communication for avian and pandemic influenza.
9. Soliciting support from and networking with other government and non-government agencies/institutions.

B. Time Frame

Recognizing the urgency of preparing for an imminent influenza pandemic, the pandemic preparedness plan will be carried out within one year.

C. Details of the Preparedness Plan

1. Strengthening the management structure for the prevention and control of avian influenza and other emerging infections from the national to the local level.

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Actions</th>
<th>Lead/ collaborating agencies/ offices</th>
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<tbody>
<tr>
<td>1. To strengthen command and management structure from the ...</td>
<td>• Organize Inter-agency Task Force for Avian Influenza</td>
<td>DOH, DA</td>
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</tbody>
</table>
| 1. National to the local level | • Organize DOH Core Group for Surveillance, Preparedness and Response to Avian and Pandemic Influenza  
• Organize Management Committee for Emerging and Re-emerging Infectious Disease (to cover avian and pandemic influenza as well)  
• Hold regular meetings with DA and the poultry industry  
• Coordinate and involve other agencies in planning  
• Conduct meetings among DA and DOH offices |
|---|---|
| 2. To lobby to decision-makers commitment for support and funding for influenza pandemic preparedness | • Representation to the Cabinet  
• Representation to the NDCC  
• Representation to PCSO and other funding agencies  
• Representation to technical staff of other agencies |
| | Secretary of Health  
NCDPC, HEMS |
| 3. To organize a group to formulate influenza pandemic preparedness plan | • Designate organization/individuals responsible for formulating and revising the influenza pandemic preparedness plan (IPPP)  
• Identify of individuals and representatives from all organizations that will need to contribute to the plan  
• MOA among identified agencies  
• Agreement for scheduled meetings |
| | OSEC  
Management Committee for Prevention and Control of Emerging and Re-emerging Infections |
| 4. To develop plan, systems, policies, standards and guidelines for avian and pandemic influenza | • Workshops/ Writeshops for drafting the influenza pandemic preparedness plan and formulating guidelines  
• Realistic timeline of implementation plan |
| | NCDPC, Other key DOH Offices, Other government and non-government offices |
| 5. To be clear on the command and control from the national to the local level in the event of avian influenza outbreaks | • Executive Order defining the roles and functions of various agencies in the event of avian influenza outbreaks in poultry and in humans  
• Identification of members of the Inter-agency Task Force - National, Regional, Provincial and City levels  
• Mobilization of the Management Committee of DOH for avian and pandemic influenza preparedness and response (a generic group for emerging infectious diseases)  
• Consensus and coordination among BAI-DA, DOH, poultry industry and the Local Chief |
| | OSEC, NCDPC |
### Executives of the areas affected

| 5. To assist local government units prepare for avian and pandemic influenza | • Assist LGUs in formulating local preparedness and response plan  
• Organize and mobilize local task forces and monitoring and response teams in the communities  
• Facilitate availability and procurement of personal protective equipment and supplies, namely, disposable caps, N95 masks, gloves and plastic body shields, plastic bags for disposal, disinfectants  
• Identify areas for disposal of dead chickens  
• Obtain prototype materials from Department of Agriculture regional office  
• Reproduce and disseminate information from DA and DOH on appropriate response to HPAI specifically in handling and disposal of dead sick chickens, protection of response teams, mass culling, appropriate use of personal protective equipment, appropriate response to pandemic influenza. |
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<tr>
<td></td>
<td>DA, DOH, DILG through their regional offices</td>
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### 2. Operationalizing the surveillance system for HPAI and pandemic influenza

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<thead>
<tr>
<th>Objectives</th>
<th>Actions</th>
<th>Lead/ collaborating agencies/ offices</th>
</tr>
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</table>
| 1. To enhance surveillance of domestic fowl and wild birds | • Upgrading of the Philippine Animal Health Center and the Regional DA Laboratories and provision of reagents  
• Conduct surveillance of fowls  
• Develop guidelines on animal surveillance | DA, PAWB |
| 2. To develop and operationalize surveillance of human cases of avian influenza in high-risk areas | • Case definition of HPAI and pandemic influenza  
• Guidelines on reporting, collection of specimens, infection control  
• Identify persons/ strengthen coordination and partnership with DA-BAI and other representatives of agencies responsible for influenza surveillance in animals and birds  
• Conduct of training | NEC, RESUs, CHOs/PHOs/ MHOs |
| 3. To enhance surveillance of influenza and Influenza Like Illness (ILI) | • Establish or enhance routine influenza surveillance and ILI Case definition  
• Sentinel Practice (Pilot) Surveillance (Office Practitioners) | NEC, RESU, WHO, DA |
<table>
<thead>
<tr>
<th></th>
<th>Hospital Surveillance</th>
<th>Laboratory-based Surveillance</th>
<th>Unusual respiratory disease/deaths cluster with emphasis on HCW</th>
<th>On human respiratory infections associated with bird/animal deaths</th>
<th>Other Information sources</th>
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<td>Capability building for surveillance (for all levels)</td>
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<td></td>
<td>Surveillance to include the following group;</td>
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<td>o Travelers</td>
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<td>o Cullers</td>
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<td>o Handlers</td>
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<td></td>
<td>o Health care worker</td>
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<td></td>
<td></td>
<td></td>
<td>o Laboratory workers</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4. To strengthen early warning system for avian and pandemic influenza</th>
<th>Conduct rumor surveillance</th>
<th>Decide whether to continue surveillance in the early phase of a pandemic</th>
<th>NEC, RESU, WHO</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Formulate criteria for scaling up and down of surveillance</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5. To strengthen laboratory capabilities for influenza diagnosis</th>
<th>Establish RITM established as the National Influenza Center and National Reference Laboratory</th>
<th>Upgrade existing lab facilities BSL3</th>
<th>RITM, NCHFD, Regional laboratories, WHO</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strengthen protocols, referral and transport system of specimens from the local to the National Reference Laboratory</td>
<td>Plan for storage of clinical specimen</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Submit proposals for funding of laboratory needs</td>
<td>Develop of diagnostic assays for pandemic influenza strains</td>
<td></td>
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<tr>
<td></td>
<td>Develop of diagnostic assays for pandemic influenza strains</td>
<td>Identify personnel, reagents and funding for increased testing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Develop of diagnostic assays for pandemic influenza strains</td>
<td>Decisions on sharing clinical materials from confirmed pandemic cases</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Develop of diagnostic assays for pandemic influenza strains</td>
<td>Provide update advice on test results</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Develop of diagnostic assays for pandemic influenza strains</td>
<td>Development of lab website</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Develop of diagnostic assays for pandemic influenza strains</td>
<td>Provision of equipment and supplies to priority areas for collection, storage and transport of specimens from cases under investigation.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Develop of diagnostic assays for pandemic influenza strains</td>
<td>Biosecurity</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6. To define protocols on surveillance during a pandemic</th>
<th>Discontinue routine/early warning</th>
<th>Case definition for Pandemic</th>
<th>NEC, RESU, Hospitals, Medical Specialties</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hospital Admission Monitor</td>
<td>Death Monitor</td>
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</tr>
</tbody>
</table>
3. Enhancing capabilities of health and non-health key personnel

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Actions</th>
<th>Lead/ collaborating agencies/offices</th>
</tr>
</thead>
</table>
| 1. To strengthen the capabilities of sub-national offices and assist LGUs on surveillance and appropriate response to AI and pandemic influenza | • Develop/ reproduce training materials on AI and pandemic influenza  
• Orient DOH and DA staff from the regional offices on Preparedness and Response to avian and pandemic influenza  
• Train key regional personnel and epidemiology and surveillance unit personnel  
• Train field veterinary personnel  
• Train Provincial/ City Response Teams (PHOs, CHOs, Hospital Chiefs, Veterinary Officers)  
• Train Municipal Health Officers and Agriculture Officers  
• Train Municipal & Barangay Health Emergency Response Teams  
• Train RESUs on GIS and On-line reporting | DA, DOH Task Force |
| 2. To strengthen capabilities of hospitals in responding to AI and pandemic influenza | • Develop/ Reproduce training materials  
• Update key staff of National Referral Hospitals and Regional Hospital and Medical Centers  
• Train Provincial, City Hospitals, District and Municipal Hospitals  
• Provision of Personal Protective Equipment (additional PPE for replenishment of stocks) | DOH, DA Task Force, DOH |
| 3. To strengthen capabilities of government facilities to attain prescribed levels of capability for laboratory diagnosis of emerging infections | Identify capabilities at different level  
Develop and reproduce training module  
Train laboratory staff and response team for the collection, storage and transport of specimens | DOH-NCHFD, NCDPC, CHDs, Hospital Administrators |

- Recovery Monitor
- Workforce Absenteeism
- Vaccine Usage
- Influenza vaccine
- Antiviral use
- Adverse Reactions from Drugs and Vaccine
4. To strengthen capabilities of key staff on risk communication

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Actions</th>
<th>Lead/ collaborating agencies/ offices</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Providing antiviral agents and pandemic influenza vaccine to high-risk groups</td>
<td></td>
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<tr>
<td><strong>ANTIVIRAL AGENTS</strong></td>
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</tbody>
</table>
| 1. To formulate guidelines on use of antiviral agents                    | • Develop treatment guidelines on the use of anti-viral drugs (during avian influenza outbreaks and during a pandemic)  
  • Identify priority recipients of antiviral agents                       | NCDPC, NCHFD, Specialty Organizations                                                             |
<p>|                                                                           | • Formulate guidelines in the storage and distribution of antiviral agents                      |                                                                                                      |
| 2. To advocate for funding/ sourcing of antiviral agents                  | • Advocate to PCSO                                                                           | NCDPC, OSEC BIHC BLHD Undersecretary for Health Regulation PHIC Business sector                     |
|                                                                           | • Advocate to international agencies                                                           |                                                                                                      |
|                                                                           | • Advocate to LGUs                                                                             |                                                                                                      |
|                                                                           | • MOA with pharmaceuticals ensuring the availability of supplies for the pandemic phase         |                                                                                                      |
|                                                                           | • Develop benefit package                                                                      |                                                                                                      |
|                                                                           | • Encourage local and international donors stockpile for their firm and to share supplies      |                                                                                                      |
| 3. To make representation to other international agencies on providing the Philippines stocks of antiviral agents from their stockpile | • Request to WHO, other international organizations, other governments | Office of External Affairs, BIHC, NCDPC                                                             |
| 4. To undertake collaborative efforts with LGUs for the provision of antiviral agents and other supplies | • Identify needs for antiviral drugs and other needs and identify funding source – e.g. calamity fund, donors, PCSO funds for DOH stockpile | CHDs, NCDPC                                                                                         |
| <strong>VACCINE</strong>                                                              |                                                                                               |                                                                                                      |
| 1. To formulate guidelines on influenza vaccination                      | • Formulate guidelines in consultation with the private sector                                | NCDPC, NCHFD, Hospitals, Specialty Organizations                                                     |
|                                                                           | • Develop the implementing guidelines (adopt the measles guideline) on administration, distribution strategy of the vaccine, monitoring |                                                                                                      |
| 2. To develop funding strategy for routine                               | • Advocate to LGUs for funding                                                                 | BLHD NCDPC, PHIC                                                                                     |
|                                                                           | • Develop a benefit package for health care                                                    |                                                                                                      |</p>
<table>
<thead>
<tr>
<th><strong>Objective</strong></th>
<th><strong>Actions</strong></th>
<th><strong>Lead/ Collaborating Agencies/ Offices</strong></th>
</tr>
</thead>
</table>
| 1. To develop policies, guidelines and protocols and strengthen systems on appropriate response to and management of avian and pandemic influenza | - Develop guidelines and protocols for appropriate response to and management of avian influenza and pandemic influenza:  
  - Adjust standards for health facilities and clinical management prepared for the SARS program  
  - Adapt PSMID CPG on antibiotic use  
  - Develop checklist for preparedness of health care facilities  
  - Develop protocol for the appropriate disposal of dead bodies  
  - Consultative meetings with specialty organizations  
  - Conduct refresher courses on infection control for HCWs  
  - Conduct basic training for infection control for volunteers | NCDPC, NCHFD, BLHD, PHICS, PSMID, PPS, PIDSP, PHA, PMA, Other medical/ paramedical organizations, TWG for Influenza |
| 2. To ensure availability/ readiness of health facilities for management of avian influenza and pandemic influenza | **1. HEALTH SERVICE FACILITIES**  
- Adopt AO 134 (Strengthen the functionality of the existing referral system on each level of health care facilities)  
- Determine potential alternative sites for medical care  
- Determine and coordinate for alternative sites for medical care, e.g., use of schools, tents, military facilities  
- Coordinate clinical care and health services plans  
- Develop executive order to facilitate transit from one political area to another  
- Advocate to Local Chief Executives, government and private hospital | NCHFD, HEMS, NCDPC, Hospital Administrators, (Private and Government), LGUs |

**5. Ensuring readiness of health facilities, service, manpower and supplies for management of avian and pandemic influenza**

### 3. To facilitate provision of interpandemic (regular) and pandemic influenza vaccine in the Philippines

- Initiatives to lower cost of regular influenza vaccine for poultry handlers/workers
- Develop a contingency plan for procuring the vaccine or management of a pandemic without pandemic vaccine available
- MOA with vaccine companies for arrangements on vaccine availability during a pandemic

**Lead/ Collaborating Agencies/ Offices:** NCDPC, Specialty organizations Office, BFAD, Vaccine companies
| 3. To ensure availability of health manpower in the event of an influenza pandemic. | **HEALTH SERVICE MANPOWER**  
- Identify community support groups for health manpower augmentation  
- Maintain/update a directory of contact persons at the national level and of government and private medical practitioners and paramedical workers at the local level  
- Hospitals and health centers to arrange places and schedule of duties during the pandemic with a regular updating  
- Develop a policies/guidelines on  
  - Deciding on suitability of volunteers  
  - Accepting and training for defined health care roles for volunteers  
  - Liability, insurance and temporary licensing issues for retired health care workers and volunteers  
- Arrange with PRC for a memorandum allowing retired health care workers and volunteers to practice their profession in case of influenza pandemic  
- Develop guidelines or policy prepared by the Legal Group for the  
- Memorandum of agreement between the national offices of organizations and the Department of Health  
- Social mobilization of professional organizations, unions and NGOs for volunteerism during a pandemic  
- Involve DSWD for the provision of social services and counseling services related to the pandemic  
- Develop a contingency plan to provide food and other provisions for health personnel and volunteers rendering service during a pandemic | **HEMS, BLHD, NCHFD, NCDPC, CHDs, LGUs, PMA, PHA, PNA, IMAP, Specialty organizations, Hospital administrators, Professional Regulation Commission, DSWD Legal Officers of involved agencies, PNRC** |

| 4. To facilitate availability of medical supplies during an influenza pandemic. |  
- Develop a protocol/guidelines to fast-track procurement of extra medical supplies and drugs, including PPE  
- Tap NGOs and other organizations to donate additional supplies  
- Develop a guideline/protocol for determining the level of care appropriate for primary alternative health care facilities and criteria for provision of equipment and | **NCDPC, NCHFD, Procurement and Logistics Service** |
### 6. Ensuring pandemic preparedness of agencies delivering non-health essential services

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Actions</th>
<th>Lead/ collaborating agencies/ offices</th>
</tr>
</thead>
</table>
| 1. To advocate and assist agencies/ institutions providing non-health services in developing contingency plans to ensure services during a pandemic | • Identify non-health essential services providers whose absence would pose a serious threat to public safety  
• Provide guidance on the preparation of contingency plans of concerned agencies  
• Consultative meetings with the heads of concerned agencies | HEMS, NCDPC  
DND, PNP, DILG, NDCC, PNRC |
| 2. To develop a protection program for non-health essential service providers | • Decisions on use of antiviral agents and pandemic influenza vaccine for non-health essential service providers  
• Discussions on use of Personal Protective Equipment  
• Information materials on personal hygiene and other measures to prevent illness | National offices/organizations concerned like PNP, AFP, BFP, ATO-DOTC, DOE, energy and water service providers and local government units  
Business sector |
| 3. To prepare contingency plan to ensure the delivery of essential services. | • Estimate the number and list of personnel whose absence will pose a threat to public safety or will interfere in the appropriate response to a pandemic  
• Determine the minimum number necessary for a sustained pandemic response  
• Identify personnel who may be available to assist in the maintenance of essential non-health care services.  
• Develop a back-up system for personnel to maintain services during a pandemic  
• Seek assistance from non-government organizations, the church, military or volunteers groups for replacement of personnel.  
• Prepare licensing/ temporary permits to volunteers and workers.  
• Discuss with professional organizations and other health essential services the plan to ensure delivery of appropriate services | National offices/organizations concerned like PNP, AFP, BFP, ATO-DOTC, DOE, energy and water service providers and local government units  
Business sector |
7. Defining public health interventions to minimize spread of avian and pandemic influenza.

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Actions</th>
<th>Lead/ collaborating agencies/ offices</th>
</tr>
</thead>
</table>
| 1. To have a clear plan of action when there are cases of avian influenza and during an influenza pandemic                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | • Define specific courses of action on community response, referral and transport of avian influenza cases  
• Define specific public health interventions in schools, workplace, community and other settings  
• Develop information materials/ guidelines for use of LGUs and communities  
• Develop a communication plan for public health interventions  
• Conduct meeting with airport and seaport authorities on entry and exit management of passengers  
• Conduct meetings with the other agencies like DILG, DepEd, DOLE, DSWD, PNRC, PNP, DND for support and action and also to define their specific roles during outbreaks                                                                                                                                                                                                                                                                                                                                                              | NCDPC, NCHP, BLHD, BQ, CHDs, DepEd, DILG, DOLE, DSWD, PNRC, PNP, DND, PIA, Airport/seaport authorities,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

8. Strengthening information, education and communication for avian and pandemic influenza

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Actions</th>
<th>Lead/ collaborating agencies/ offices</th>
</tr>
</thead>
</table>
| 1. To strengthen communication links with international organizations and embassies                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | • Communicate with international organizations / offices and embassies  
• Coordinate with DFA  
Provide update and on government’s efforts to embassies/ diplomatic corps                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | NCDPC, NEC, DFA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 2. To strengthen communication links with national organizations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | • Designate a representative to liaise with senior bureaucrats and politicians in health and other areas  
• Identify and maintain directory of contact persons  
• Mechanism for distribution of information between national bodies  
• Link with national communication network represented by government agencies  
• Provide update on AI and pandemic influenza  
• Identify their specific roles and tasks in the event of AI outbreaks in birds and during a pandemic                                                                                                                                                                                                                                                                                                                                                           | NCDPC, HEMS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
3. To ensure communication with regional and local governments
   - Develop a national directory of hospital administrators, DOH Central Office and Regional key staff for Emerging Infections
   - Provide information to regional coordinators through e-mails, DOH website, text message
   - Identify/Conduct training of speakers, regional coordinators, city and provincial coordinators
   - Zonal Pandemic Conferences with webcast
   - National Coordinating Body (NCDPC), National Environmental Committee (NEC), NCPH, Institute of Medicine (IMS), National Coordinating Body (NCDPC)

4. To strengthen communication links with news media
   - Educate/orient media to report news responsibly
   - Conduct media summit
   - Conduct regular press briefing
   - National Coordinating Body (NCDPC), Media Research Unit (MRU), Philippine Information Agency (PIA)

5. To develop a multi-phase communication plan
   - Identify specific key messages and prototype materials for each stage of avian and pandemic influenza
   - Develop audience-based IEC materials
   - Coordinate with other groups for dissemination of information
   - Disseminate through websites, press releases, media interviews
   - National Coordinating Body (NCDPC), Media Research Unit (MRU), Philippine Information Agency (PIA)

6. To disseminate information on avian influenza, its prevention and control
   - Develop prototype materials for various target audiences and identify/package information for circulation through the website
   - Conduct information campaigns (Regional Summits) with LGEs, poultry owners, health officers as target audience
   - Conduct information campaigns in elementary and high schools
   - Department of Health (DOH), Department of Agriculture (DA)

9. Soliciting support from and networking with other government and non-government agencies/institutions

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Measures</th>
<th>Lead/ collaborating agencies/offices</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To define critical roles, functions and tasks of various agencies in preparedness and response to avian and pandemic influenza</td>
<td>Formulation of roles, tasks and functions</td>
<td>Involved agencies</td>
</tr>
<tr>
<td>2. To provide a forum for agencies</td>
<td>Meetings, Consultations</td>
<td>DA, DOH, NDCC</td>
</tr>
<tr>
<td>3. To formulate plans, guidelines,</td>
<td>Meetings, writeshops</td>
<td>Involved agencies</td>
</tr>
</tbody>
</table>
A communication plan in their respective agencies

4. To identify financial, technical, financial and logistic support that can be mobilized during outbreaks of avian influenza and in an influenza pandemic

- Meetings with other agencies,
- Medical/paramedical associations
- Key non-government organizations
- Inventory of manpower and logistics
NDCC, NSC DOH, DA, DILG,

IV. RESPONSE PLAN

A. The Response Plan for Avian and Pandemic Influenza consists of four stages:

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Avian influenza-free Philippines</td>
</tr>
<tr>
<td>2</td>
<td>Avian influenza in domestic fowl in the Philippines</td>
</tr>
<tr>
<td>3</td>
<td>Confirmation of avian influenza from poultry to humans in the Philippines</td>
</tr>
<tr>
<td>4</td>
<td>Avian Influenza with human-to-human transmission of pandemic influenza causing outbreaks in the country</td>
</tr>
</tbody>
</table>

B. Strategic Approaches

The Response Plan for the Prevention and Control of Avian and Pandemic Influenza is summarized in terms of the strategic approaches identified for each of the four stages:

9. **Stage 1 (lead agency: Department of Agriculture)**

a. Prevention of entry of the virus: ban on importation of poultry and poultry products from countries affected with avian influenza, border control, safety measures in farms, ban on sale, keeping in captivity of wild birds, public information

2. **Stage 2 (lead agency: Department of Agriculture)**

a. Prevention of spread from birds-to-birds: early recognition and reporting, mass culling, quarantine of affected area, public information
b. Prevention of spread from birds to humans: human protection through proper handling of infected birds, use of protective gear by residents, poultry handlers, and response teams

3. **Stage 3 (lead agency: Department of Health)**

a. Management of avian influenza cases: isolation and management of cases, judicious use of antiviral agents, infection control, quarantine of contacts
4. Stage 4 (lead agency Department of Health)

a. Slowing of spread from humans to humans in an influenza pandemic: entry and exit management of passengers, border control, quarantine of contacts, isolation and management of the sick, social distancing, personal hygiene, maintenance of essential services during the pandemic

b. Management of public anxiety and mitigation of the socio-economic impact of pandemic influenza: public advisories and information dissemination, regular updates and briefing of media, networking with other agencies, non-health sectors

C. Response plan by stage:

Stage 1 No highly pathogenic avian influenza in poultry and in humans in the Philippines

Goal: To maintain the Philippines free from Highly Pathogenic Avian Influenza

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Activities/ measures</th>
<th>Agencies involved</th>
</tr>
</thead>
</table>
| A. To sustain ban on importation of all domestic and wild birds and their products from affected countries | • Coordination with OIE, FAO  
• Updated directives  
• Ban covers ALL poultry products originating from AI-affected countries, including those that are already in transit at the time the ban is declared  
  - No Veterinary Quarantine Clearance will be issued  
  - Live birds or eggs will be destroyed  
  - Processed poultry products will be returned to origin  
• Transshipment through an AI-affected country is also prohibited | DA, Bureau of Customs, Traders, Importers (through their organizations) |
| B. To formulate directives, policies and guidelines | • Formulate technical guidance on preparedness and response  
• Issue a Memorandum Circular on preventive measures and preparedness and response to HPAI  
• Conduct consultations with the private sector, academe and other stakeholders in the formulation of policies and guidelines | DA, DOH  
DILG  
DA, DOH, medical and veterinary organizations, academe |
| C. To strengthen monitoring of smuggling of fowl | • Monitoring of coastal areas | LGU, PNP |
| | • Monitoring of houses/ markets with wild birds and snuggled poultry from affected countries | LGU, PNP |
| D. To strictly enforce the | • No permits for poultry wildlife or exotic | PAWB-DENR, DA- |
| Wildlife Law | poultry species from AI-affected countries  
|• No collection of migratory birds, regardless of purpose or collection technique | BAI, LGU, DILG |
| E. To strengthen surveillance and prevention in airports and seaports |  
|• Standardized footbath installations and replenishment of disinfectants  
|• Inspection of luggage / cargo from AI-infected countries  
|• Confiscation and destruction of unlicensed cargo  
|• Screening for the AI virus upon arrival at airport or seaport of all imported poultry and poultry products coming from AI-free countries | BAI-DA, Airport/seaport authorities, Bureau of Customs, Philippine Coast Guard |
| F. To strengthen surveillance domestic fowl |  
|• 20 critical sites identified  
|• Target poultry are not wildlife, but native chickens, ducks, gamefowl, etc. in the vicinity  
|• 6 barangays per location to be selected for sample collection  
|• Monitoring  
|• Laboratory diagnosis  
|• Upgrading of the Philippine Animal Health Center and of the Regional DA Laboratories | DA-BAI, RADDL, Regional Veterinarians, LGU |
| G. To maintain minimum biosecurity measures |  
|• Biosecurity control points e.g. gates, shower rooms, footbaths, fumigation boxes  
|• Proper rest period and disinfection between flocks  
|• Inaccessible to stray animals and free-flying birds  
|• Proper disposal of mortalities  
|• No domestic ducks and free-range poultry in migratory bird areas, especially wetlands  
|• No mixing of poultry and swine in same holding facility  
|• Record all movement to and from the facility e.g. visitors, vehicles, deliveries | BAI-DA, Poultry owners |
| H. To establish Compartmentalized Poultry Zones |  
|• Regulated movement between zones of live poultry and its by-products – through health certificates and shipping permits  
|• Strategically-located checkpoints | BAI-DA, LGU |
| I. To build capacities of Regional Veterinarians and LGUs |  
|• Training of Field health personnel | DA |
### J. To conduct IEC campaigns to prevent HPAI
- Develop prototype materials for lectures to be used by local government units and for circulation through the website
- Conduct information campaigns in elementary and high schools
- Develop materials for teachers and students

<table>
<thead>
<tr>
<th>Involved agencies/ persons</th>
<th>DOH, DA</th>
</tr>
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<tbody>
<tr>
<td>DepEd</td>
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</table>

### K. To advocate to key offices for support
- Enjoin local government units and the Philippine National Police
- Advocacy to funding agencies
- Advocacy to decision-makers for resources

<table>
<thead>
<tr>
<th>Involved agencies/ persons</th>
<th>DILG, DOH, DA</th>
</tr>
</thead>
</table>

### Stage 2: Outbreaks of highly pathogenic avian influenza in birds

**Goal:** To control and eradicate HPAI in domestic fowl

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Actions</th>
<th>Involved agencies/ offices persons</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. To maintain a functional command and control structure during outbreaks of avian influenza in poultry</td>
<td>Mobilize Inter-agency Avian Influenza Task Force Task Force at the National, Provincial/ City and Municipal levels</td>
<td>DA, DOH, Poultry owners, Other concerned agencies, LGUs, NDCC, Office of the President</td>
</tr>
<tr>
<td>B. To ensure early recognition and notification of avian influenza in birds for prompt action.</td>
<td><strong>Suspect farm</strong>&lt;br&gt;Commercial farms: 1-day mortality of 3%, increasing twice over or more over the next 3 days&lt;br&gt;Backyard: Any unexplained mortality in 2 or more households&lt;br&gt;<strong>Confirmation by isolation of the HPAI virus, OR</strong>&lt;br&gt;Positive for ALL of the ff. factors:&lt;br&gt;At least 50% of samples test positive in the rapid test for influenza A virus&lt;br&gt;Tests show no indication of infection for other diseases&lt;br&gt;Mortality continues to increase rapidly</td>
<td>NEC, RESUs, LGU, Private practitioners, Hospital – based health workers</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reporting</th>
<th>Farm vet or owner to BAI, RFU-DA or City/ Municipal/ Provincial Vet</th>
</tr>
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<thead>
<tr>
<th>Investigation</th>
<th>City/ Municipal/ Provincial Vet and the RADDL Technician</th>
</tr>
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<tbody>
<tr>
<td>done within 24 hours</td>
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<tr>
<td>Accompanied by a Barangay Representative and Local PNP who</td>
<td></td>
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</tbody>
</table>
C. To prevent spread of avian influenza

<table>
<thead>
<tr>
<th>Action</th>
<th>Responsible Parties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Declaration of a Quarantine Zone Level 1 (3 km radius from the suspect farm)</td>
<td>RFU-DA, in coordination with LGU</td>
</tr>
<tr>
<td>Enact an ordinance imposing strict movement control of poultry, livestock and other animal products within the 3-km radius, with penalties for non-compliance</td>
<td>LGU</td>
</tr>
<tr>
<td>Persons may move in and out of the zone, but must not visit any poultry holding facility</td>
<td></td>
</tr>
<tr>
<td>If farm is confirmed: Quarantine Zone Level 1 raised to Quarantine Zone level 2 and a 7-km Control Zone</td>
<td>BAI and RFU-DA, in coordination with the LGU</td>
</tr>
<tr>
<td>ALL birds in the Infected Premises and Quarantine Zone Level 2 will be STAMPED OUT</td>
<td>BAI representative, official veterinarian, farm hands and 1 military personnel per 1,000 birds, excavator operator</td>
</tr>
</tbody>
</table>

**Protection of people**

- Personal protective equipment
- Antiviral agents to exposed persons

**Disposal**

- All dead birds, feeds, manure, eggs, rice hulls, etc. should be buried in an on-site pit

**Control Zone (within 7 km radius from the Quarantine Zone)**

- All respiratory cases to be reported and evaluated, can lead to identification of new suspect premises
- No movement of poultry and poultry products for the first 15 days
- Live bird markets, cockfights and other gatherings of poultry and other birds will be PROHIBITED
- No re-stocking of poultry farms within control zone

**Considerations on vaccination of birds:** Only in case of related outbreaks - Successive outbreaks occurring within the immediate vicinity of a Control Zone

- Farm vet or owner to BAI, RFU-DA or City/ Municipal/ Provincial Vet
- LGU, Local PNP

- DAI-BAI, Poultry owners, LGUs
Recommend either:
- Vaccination of existing poultry population within a 50-km radius from Infected Premises
- Stamping out, if more economical than vaccination

<table>
<thead>
<tr>
<th>D. To allay public anxiety/ ensure appropriate public Information</th>
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<tbody>
<tr>
<td><strong>Public Information on:</strong></td>
</tr>
<tr>
<td>o Update on HPAI status</td>
</tr>
<tr>
<td>o Recognition of HPAI</td>
</tr>
<tr>
<td>o Protection of poultry handlers</td>
</tr>
<tr>
<td>&gt; Hand gloves or any plastic material, face mask and eye goggles or any transparent eye shield plastic material to cover clothing</td>
</tr>
<tr>
<td>&gt; Proper hand washing</td>
</tr>
<tr>
<td>&gt; Slowly remove clothing and take a bath immediately after handling birds</td>
</tr>
<tr>
<td>o Protection of the general public</td>
</tr>
<tr>
<td>o Food safety</td>
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<tr>
<td><strong>Public information through:</strong></td>
</tr>
<tr>
<td>o Regular press briefing</td>
</tr>
<tr>
<td>o Hotlines</td>
</tr>
<tr>
<td>o Press releases/ advisories</td>
</tr>
<tr>
<td>o Quad media features</td>
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<tr>
<td>o Fora, lectures</td>
</tr>
<tr>
<td><strong>Designate spokesperson</strong></td>
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<thead>
<tr>
<th>E. To assist in the recovery process of affected farms</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Clean-up, disinfection and 21-day rest period</strong></td>
</tr>
<tr>
<td><strong>Re-stocking with sentinel chicken at 2% of farm capacity for commercial farms, or 5 birds for backyard farms</strong></td>
</tr>
<tr>
<td><strong>Day-old broilers for broiler farms, day-old cockerels for layer farms, game fowl and others</strong></td>
</tr>
<tr>
<td><strong>42-day growing period</strong></td>
</tr>
<tr>
<td><strong>Samples taken and tested at 21 days and prior to culling</strong></td>
</tr>
<tr>
<td><strong>Repopulation at farm capacity, subject to BAI approval</strong></td>
</tr>
<tr>
<td><strong>Declare as DISEASE-FREE</strong></td>
</tr>
</tbody>
</table>

| DA, DOH, Poultry industry groups |

Poultry farm owners
Supervision and monitoring of DA-BAI and RFU-DA
**Stage 3: Avian influenza in Humans**  
Outbreaks of AI in poultry and AI cases in humans exposed to chickens with AI but without person-to-person transmission

**Goal:**  
To prevent/ reduce mortality from avian influenza

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Actions</th>
<th>Involved agencies</th>
</tr>
</thead>
</table>
| C. To maintain a functional command and control structure in the event of avian influenza in humans. | • Mobilize DOH Management Committee  
• Provide regular updates to the National Disaster Coordinating Council and the Office of the President | DOH, Other concerned agencies, LGUs, NDCC, Office of the President |
| B. To ensure early recognition and notification of human cases of avian influenza. | • Surveillance of exposed persons-In areas where H5N1 has been reported or is suspected  
  o Poultry handlers/workers  
  o Sellers/people in live chicken sale  
  o Aviary workers/ Ornithologists  
  o Cullers  
  o People living near poultry farms  
  o Any individual in close contact with infected birds  
• Case definition  
• Reporting of cases from communities and hospitals  
• Rumor surveillance | NEC, RESUs, LGU, Private practitioners, Hospital – based health workers |
| C. To prevent spread of H5N1 | • Community (family/ health worker) Response to a suspect avian influenza case:  
  o Place patient in separate holding area  
  o Provide face mask to the patient  
  o Face mask and eye goggles/ glasses for the caregiver  
  o 1 meter distance from the patient  
  o Handwashing  
  o Report immediately to local health officer for assessment and possible referral  
• Actions of Municipal/ City Health Officer:  
  o Notify the Provincial Health Office and the Regional Epidemiology and Surveillance Unit  
  o Arrange for transfer and refer | Household member of the AI human case, Barangay Health Emergency Response Team, local health worker |
exposed person/s who develop signs and symptoms of influenza to the regional hospital.
  o Provide PPE to the driver and accompanying transport staff
  o Identify/Quarantine exposed persons for 7 days and monitor for signs and symptoms of illness

**Transport of the patient:**
  o PPE
  o Provide an adequate barrier between the patient and the driver should be provided
  o Disinfect the vehicle

**Management of contacts of the AI case:**
  o Quarantine for 7 days
  o Stay at home and self-monitoring of fever, cough or difficulty of breathing or any sign and symptoms of illness.
  o Provide antiviral agents for prophylaxis (1 capsule daily for at least 7 days or while there is exposure)
  o Sick persons to the Referral Hospital for SARS and other severe emerging infections.

**Initial measures at the Referral Hospital:**
  o Patient to the Holding Area
  o Infection control precautions
  o Patient at the Isolation Room for clinical management.

**At the Isolation Room:**
  o Laboratory specimens: serum samples and a respiratory sample (e.g. nasopharyngeal swab or aspirate).
  o Specimens in a virus transport media to the Research Institute for Tropical Medicine
  o Infection Control
  o Clinical management of cases – antiviral agents for treatment
  o Supportive care
  o Management of pneumonia (based on PSMID guidelines on management of community-acquired pneumonia)
  o Use of PPE for health workers

**D. To isolate and manage human cases of AI.**
E. To allay public anxiety/ ensure appropriate public Information

- Public Information on:
  - Quarantine of exposed persons
  - Prevention of spread
  - Early consultation of suspect cases
  - Infection control measures in the health care setting and in the community

- Public information through:
  - Regular press briefing
  - Hotlines
  - Press releases/ advisories
  - Quadri-media features
  - Fora, lectures
  - Text messaging
  - Call center

- Designated spokesperson

<table>
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<tr>
<th>Stage 4: Human-to-human transmission</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Goal:</strong> To minimize the public health and socio-economic impact of influenza pandemic in the Philippines</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Actions</th>
<th>DOH, PIA, Specialty groups, Telephone companies, service providers</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. To maintain a functional command and control structure during an influenza pandemic</td>
<td>Mobilize DOH Management Committee</td>
<td>DOH-OSEC, Central Command of the Management Committee for PCREID</td>
</tr>
<tr>
<td></td>
<td>Coordinate with the National Disaster Coordinating Council and the Office of the President for mobilization of resources</td>
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<tr>
<td>B. To adopt early warning system for pandemic influenza</td>
<td>Conduct rumor surveillance in the early warning phase to identify possible cases of pandemic strain influenza that might not be notified by routine or enhanced surveillance.</td>
<td>NEC, CHDs, LGU</td>
</tr>
<tr>
<td></td>
<td>If routine influenza or ILI surveillance is conducted, decide whether to continue this surveillance in the early phase of a pandemic.</td>
<td></td>
</tr>
<tr>
<td>C. To identify and monitor cases of pandemic influenza</td>
<td>Conduct surveillance of the following:</td>
<td>Hospitals, Health centers, Private practitioners</td>
</tr>
<tr>
<td></td>
<td>Sentinel Practice (Pilot) Surveillance (Office Practitioners)</td>
<td>LGUs, RESU, NEC</td>
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<tr>
<td></td>
<td>Hospital Surveillance</td>
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<td></td>
<td>Lab Based Surveillance</td>
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<td></td>
<td>Real-Time Hospital Admission</td>
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<td></td>
<td>Real-Time death Data</td>
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<td></td>
<td>Unusual respiratory disease, /deaths cluster with emphasis on HCW</td>
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<td></td>
<td>On human respiratory infections</td>
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 assoc. with bird/animal deaths  
  o Other Information sources

| D. To manage large numbers of ill and dying people | **Patients who should stay at home**  
Patients with fever, cough, individuals without serious medical conditions may stay at home for symptomatic treatment, take adequate rest, practice personal hygiene to prevent spread of the disease  
**To consult with the local health centers**  
Patients with persistent fever, started to experience difficulty in breathing and become weak  
**Patients who should be admitted to the hospitals**  
o Age 6 to 23 months 50 yrs and above  
o With underlying diseases such as chronic cardiovascular disease, chronic lung disease, chronic metabolic diseases, immunosuppressed and those with hemoglobinopathies  
o Residents of nursing homes  
o Health care workers  
**Primary level**  
  • **Manpower**  
o Volunteers for augmentation of existing manpower  
o Personal protective equipment - caps, masks, gloves and gowns should be provided to the health staff.  
• **Triage System**  
o Assigned staff shall screen all patients--- those with respiratory signs shall be led in a designated area. While patients with non-respiratory complaints shall be separated in another designated area.  
• **Alternative health centers:**  
  School buildings, gymnasium or other facilities shall be used as additional | Hospitals, Health centers, Private practitioners LGUs  
LGUs |


<table>
<thead>
<tr>
<th>Consultation areas.</th>
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<tbody>
<tr>
<td><strong>Mobilization of resources</strong></td>
</tr>
<tr>
<td>- mobilize resources for food, improvised beds, blankets, drugs for use of patients and PPE and food for regular and volunteer health workers.</td>
</tr>
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<thead>
<tr>
<th>Hospital Services</th>
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<tbody>
<tr>
<td>- Adopt policies on what cases will be admitted, prioritizing on the more serious, severe and urgent cases.</td>
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<tr>
<td>Hospital beds</td>
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<tr>
<td>- Augmenting hospital beds</td>
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<tr>
<td>- vacant wards to be utilized</td>
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<tr>
<td>- cohorting of cases</td>
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<tr>
<td>- temporary infirmaries such as school buildings, covered gymnasiums, military facilities to augment hospital beds</td>
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<tr>
<th>Health service Personnel</th>
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<tbody>
<tr>
<td>- Mobilize volunteers</td>
</tr>
<tr>
<td>- Identified personnel to man the triage, OPD, ARI wards, ICU wards, power and water utilities maintenance with back-up staff in case of illness.</td>
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<thead>
<tr>
<th>Arrangements in hospitals</th>
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</thead>
<tbody>
<tr>
<td>- Triage and patient flow</td>
</tr>
<tr>
<td>- Central bed registries</td>
</tr>
<tr>
<td>- Centralized ambulance dispatch</td>
</tr>
<tr>
<td>- Call centers/hotlines</td>
</tr>
<tr>
<td>- Alternative sites for medical care</td>
</tr>
<tr>
<td>- Border jurisdiction of patients and coordinate referral of patients not under the hospitals jurisdiction</td>
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<thead>
<tr>
<th>Preventing nosocomial spread</th>
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</thead>
<tbody>
<tr>
<td>- isolation of cases</td>
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<tr>
<td>- standard and droplet precautions for infection control</td>
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</table>

| Hospital chiefs in coordination with LGU, DepEd and DND, and other agencies with available facilities |

| Medical and paramedical organizations such as the Philippine Medical Association, Philippine Nurses Association, Integrated Midwives association of the Philippines, organization of private Duty Nurses, Medical Specialty Societies, Association of Public Health Workers |

| Hospitals, government and private |
| E. To maintain essential services during a pandemic | • Back-up system for personnel to maintain services during a pandemic  
• Identify personnel who may be available to assist in the maintenance of essential non-health care services.  
• Assistance from non-government organizations, the church, the military or volunteers groups | All agencies/institutions providing non-health essential services |
| --- | --- | --- |
| F. To prevent spread of influenza through public health interventions | • Personal hygiene  
• Public information on personal hygiene  
• Frequent hand washing shall be encouraged.  
• Closing schools would be an option if teacher’s absenteeism reached levels at which schools could not function.  
• For vehicles of transportation: o buses and taxicabs as well as private vehicles shall shut off the air-conditioning systems and shall have the windows open.  
• curtains in buses will be removed  
• Infection control measures shall be carried out in crowded areas, military barracks, schools and workplace.  
• In a pandemic setting, use of masks in public places is reasonable.  
• In a pandemic situation, people who... | All government agencies and private sector |
have had contact with influenza cases shall stay in their own homes.
- Students and school staff and office workers who have fever and respiratory illness shall not be allowed to report to schools or offices, respectively.
- Entry-exit management at ports and airports of entry.
  - screening of passengers, the proper handling of patients on board the plane and referral of patients to hospitals.
  - Travel restrictions shall be announced by the Secretary of Health as deemed necessary after discussions of the Department of Health with the Department of Foreign Affairs and the World Health Organization
- Information materials shall be posted in public vehicles, offices and establishments.

<table>
<thead>
<tr>
<th>G. To manage public anxiety and panic and ensure effective and appropriate information, education and campaign (IEC)</th>
<th>Management of public anxiety communications management</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Communication with international organizations</td>
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<td></td>
<td>• Communication among national organizations</td>
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<td>• Communication from the national to the regional level</td>
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<td></td>
<td>• Communication from the regional to the local level</td>
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<td></td>
<td>• Communication to the public</td>
</tr>
<tr>
<td></td>
<td>• Communication to patients</td>
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<tr>
<td></td>
<td>• Public information on:</td>
</tr>
<tr>
<td></td>
<td>- Personal hygiene</td>
</tr>
<tr>
<td></td>
<td>- Respiratory etiquette</td>
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<tr>
<td></td>
<td>- Social distancing</td>
</tr>
<tr>
<td></td>
<td>- Use of masks, antiviral agents, vaccines</td>
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<tr>
<td></td>
<td>- Advice on public health interventions</td>
</tr>
<tr>
<td></td>
<td>Other concerns during the pandemic</td>
</tr>
<tr>
<td></td>
<td>• Public information through:</td>
</tr>
<tr>
<td></td>
<td>- Regular press briefing</td>
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<td></td>
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</tr>
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<td></td>
<td>- Press releases/ advisories</td>
</tr>
</tbody>
</table>

DOH, Other concerned agencies
Details of the Response Plan

A. Stage 1:
Avian influenza-free Philippines
No outbreaks of highly pathogenic avian influenza (HPAI) among poultry in the Philippines

1. Goal:
To maintain the Philippines free from highly pathogenic avian influenza.

2. Plan of action:
   a. Measures at the Sub-national level to prevent HPAI (DA, DOH, DTI, DILG-PNP, DOF-Bureau of Customs, PAWB, DOTC)
      1) Organize the Regional Inter-agency Task Force for Bird Flu (highly pathogenic avian influenza).
      2) Disseminate information on avian and pandemic influenza, guidelines, protocols and systems developed by the national offices to the Local Government Units.
   b. Measures to be carried out by Local Government Units to prevent HPAI
      1) Mobilize the local disaster coordinating council for avian influenza
      2) Enact ordinance/enforce law on prohibition/ban on:
         • importation of poultry and poultry products from countries bird flu-affected countries;
         • feeding, catching, getting near, sale or keeping in captivity wild birds;
         • sale of live birds if there is confirmed bird flu in the area;
         • cockfighting in the presence of bird flu.
      3) Monitor and apprehend offenders involved in smuggling activities and illegal trading of poultry from countries affected by bird flu.
      4) Intensify information campaign to the community to prevent and reduce the risk of HPAI and to be vigilant, monitor and report:
         • unusual deaths of fowl, domestic or wild in their respective areas
         • illness and death among persons with history of exposure to sick or dead birds or who have gone near migratory birds or their sanctuaries.
   c. Preparedness of Local Government Units
      With the assistance from the Department of Agriculture, Department of Health and Department of Interior and Local Government,
      • Formulate a preparedness and response plan for any event of bird flu outbreak in the area to cover the following:
      • Organize and mobilize monitoring and response teams in the Communities to be composed of; Municipal agricultural officer, technician/assigned culler, ensuring a support team composed of PNP, DSWD and MHO
• Ensure availability/Procure supplies and personal protective equipment, namely, disposable caps, N95 masks, gloves and plastic body shields, plastic bags for disposal, disinfectants
• Identify areas for disposal of dead chickens
• Obtain information from Department of Agriculture regional office on appropriate response to HPAI specifically in handling and disposal of dead of sick chickens, protection of response teams, mass culling, appropriate use of personal protective equipment
• Obtain information from the Department of Health on appropriate response to pandemic influenza.

d. Key messages on community measures for prevention and reduction of risk of HPAI
  1) maintain cleanliness in surroundings
  2) construct bird houses and do not allow chickens to roam
  3) prevent domestic ducks from having access to open ponds, lakes or creeks or where wild water birds stay
  4) keep ducks and other poultry away from wild birds
  5) bird-proof poultry sheds to prevent contact between wild birds and poultry
  6) do not sell live poultry in markets
  7) do not get near or keep in captivity wild birds
  8) do not crowd or mix poultry, pigs and other animals in one enclosed area
  9) to keep away said animals from human abodes
  10) report to your local agricultural officer any unusual death of birds in your area

B. Stage 2
- Outbreaks of AI in domestic poultry, may be single or simultaneous in various areas

   An outbreak of bird flu may occur in a poultry farm or in a backyard where poultry is raised or among the wild birds. It is very important that any resident in the community is aware of the signs of bird flu in poultry to ensure early recognition, immediate reporting and appropriate control measures. Any person handling the sick or dead fowl is at risk of developing the infection, thus, it is likewise very important that information on proper handling and disposal of the fowl and self-protection is disseminated to the public.

1. Goal:
   To prevent the spread of highly pathogenic avian influenza to other areas within the Philippines.
   To prevent human infections from infected birds.

2. Plan of Action
a. Actions to be carried out by a resident if there is suspected bird flu in birds

   Note: Details of the implementing guidelines on response to avian influenza outbreaks may be obtained from the Bureau of Animal Industry-Department of Agriculture.

   1) Use a protective gear in handling the sick or dead fowl.
• Use gloves or any plastic material for the hands. Do not handle sick or dead chickens with bare hands.
• Use any available facemask and goggles or any transparent eye shield so that droplets or aerosols do not get into the mouth, nose or eyes.
• Use any plastic material to cover one’s clothing while handling the affected birds.

2) Wash hands with soap and water after handling the sick/dead fowl, before touching one’s face or before eating.

3) If one or few birds are sick or died, wrap them in a thick impermeable double plastic bag and keep in a container with ice, while waiting for the specimen collection by the veterinarian or trained staff.

4) After handling infected birds, slowly remove clothing and avoid agitation. Take a bath immediately.

5) If the sick or dead birds are in a poultry farm, seek help from the local veterinarian or agricultural officer for proper disposal of the birds.

6) Do not cook any poultry that died of bird flu or any other sickness as this may cause infection while handling or slaughtering the sick or dead fowl.

7) Do not allow persons not directly involved in the response to avian influenza to get near the area where there are dead birds.

8) Immediately report to a barangay official who will inform the local veterinarian or agricultural officer about the death of the bird/s.

b. Actions to be carried out by the Municipal Agricultural Office, Provincial and Regional Veterinary Office:

1) Discuss with the Local Chief Executive and the Philippine National Police on the following:
   • The area within the 3-km radius (restricted areas) will be secured by police officers. All the domestic birds within that radius will be culled, disinfected prior to burying in designated areas.
   • Disinfection prior to burial using sodium hypochlorite
   • Disposal of dead and culled birds will be in the within the infected premises
   • Other persons who are not involved in response are not allowed to get near the infected premises (within 100 meters from the area of sick or dead fowl)
   • Transfer of fowl in and out area of the within the 3-km radius of sick or dead chickens will not be allowed.

2) Ensure the availability of the following supplies:
   • appropriate self-protective gear for response team– caps, masks, gloves, impermeable or plastic gowns
   • materials needed for culling such as disinfecting solutions, plastic bags

3) With the culling team, ensure that procedures are done appropriately.

4) Further assess the extent of the outbreak.

5) Collect needed specimens for confirmation of HPAI following the appropriate procedures in collection, storage and transport based on BAI guidelines.

6) Report to the Bureau of Animal Industry within the 8 hours and provide details of the outbreak following the prescribed reporting forms.

7) Coordinate with the Center for Health Development Core Team for the assessment and monitoring of contacts or exposed persons.
c. Upon report of suspected bird flu, the Municipal or City Mayor will Carry out the following:

1) Assist the affected area by promptly sending the municipal response teams and the PNP to maintain order and to control human movement during the eradication operations.
2) Provide logistics for protection of the cullers, culling, disinfection and disposal of affected poultry.
3) Instruct the Municipal Health Officer to assess persons exposed to sick/dead birds.
4) Take the lead in the management of affected areas (within the 3-km radius from the infected premises).
5) Completely stop trading of all animals within the area.
6) No transport of all animals out of the restricted areas
7) No sale of live birds if there is confirmed bird flu in the affected
8) No cockfighting in the presence of bird flu


d. Recommendations for Protection of Persons Involved in the Mass Slaughter of Animals Potentially Infected with Highly Pathogenic Avian Influenza (HPAI) Viruses

1) Provide cullers and transporters with appropriate personal protective equipment (PPE)
   - Protective clothing, preferably coveralls plus an impermeable apron
   - Heavy duty rubber work gloves that may be disinfected
   - N95 respirator masks are preferred, if not available, well-fitted surgical masks should be used
   - Goggles
   - Rubber or polyurethane boots that can be disinfected or protective foot covers that can be discarded
2) All persons who have been in close contact with infected animals should wash their hands frequently with soap and water. Cullers and transporters should disinfect their hands after operation.
3) Carry out environmental clean up in areas of culling, using the same protective measures stated above.
4) All persons exposed to infected chickens or to farms under suspicion should be under close monitoring by local health authorities.

e. Food safety guidance for consumers

There is no evidence that any human cases of avian influenza have been acquired by eating poultry products. Influenza viruses such as H5N2, H7N2, and H5N1 are destroyed by adequate heat, as are other food-borne pathogens. However, exposure is possible during the slaughtering process and when plucking the feathers, thus, it is not recommended that meat of sick chickens are taken as food by humans. Also, feeding animals with sick poultry should not be done.

Consumers are reminded to follow proper food preparation and handling practices, including

1) Cook all poultry and poultry (including eggs) thoroughly before eating. The chicken should be cooked until it reaches a temperature of 70°C throughout each piece of chicken.
2) Raw poultry always should be handled hygienically because it can be associated with many infections, including salmonella. Therefore, all utensils and surfaces (including hands) that come in contact with raw poultry should be cleaned carefully with water and soap immediately afterwards.

C. Stage 3
Human cases of AI but without person-to-person transmission

1. Goal:
   To prevent/ reduce mortality from avian influenza

2. Objectives:
   a. To maintain a functional command and control structure during an influenza pandemic
   b. To ensure early recognition and notification of human cases of avian influenza.
   c. To prevent spread of H5N1
   d. To isolate and manage human cases of AI.
   e. To allay public anxiety/ ensure appropriate public Information

3. Plan of Action
   a. Recognition of human cases of Avian Influenza
      1) Persons with history of exposure/contact with sick/dead birds with respiratory signs and symptoms shall be considered as suspect case
      2) Persons with respiratory signs and symptoms and with history of travel to areas with AI outbreaks/infections among the poultry.
   b. Notification
      1) Any resident, local officials, private individuals or organizational who has identified as suspected case of avian influenza shall immediately notify the local health authorities (the municipal/city or provincial Health Office)
      2) He/she shall immediately refer the patient to a Referral Hospital for isolation and management
   c. Community measures prior to transport to the Referral Hospital
      1) All persons involved in the assessment/care and transport of the patient shall carry out infection control measures.
      2) Patient shall be placed in a holding area in a house/health facility where the patients have been identified.
      3) The holding area shall be any area where the patient is placed away from other people by at least 1-meter distance. The holding area has a bed or any improvised lying area for the patient to use while waiting for transport.
      4) Only persons who take care of the patient shall be allowed in the holding area but should be provided masks, gloves and gowns, if feasible.
      5) The patient shall use a surgical mask to prevent transmission of the disease
   d. Actions/ measures to be carried out by local health authorities
      1) Monitor poultry cullers, others involved in the process and their family members for development of fever and/or respiratory manifestations within a week from exposure.
2) Instruct them to report any relevant health problems (respiratory complaints, flu-like illnesses or eye infections) to a health care facility.

3) Vaccinate with recommended influenza vaccine to avoid simultaneous infection by human influenza and avian influenza and to minimize the possibility of a reassortment of the virus genes.

4) Provide antiviral drugs to all exposed persons. It is recommended that Oseltalimivir be readily available for the treatment of suspected H5N1 respiratory infections in cullers and farm workers involved in mass culling.

5) Ensure that the exposed persons are on quarantine and are monitored for signs and symptoms of illness.

6) Supervise and coordinate with the BHERT on the quarantine procedures.

e. Tasks of Barangay Health Emergency Response Team (BHERT) in the event of bird flu outbreaks

1) Immediately notify the local chief executive through the Municipal Agricultural Officer about bird flu in fowl.

2) Instruct residents not to get near the area within 100 m. radius from the impact site.

3) Identify and list all persons who got into contact with the sick or dead birds or who may have been exposed to the common source of infection.

f. Referral and Isolation of Patients Suspected to have Avian Influenza

All patients shall be immediately transported to the Referral Hospital.

1) Satellite Referral Hospitals
   • Regional Hospitals/ Medical Centers of 16 Regions

2) Sub-national Referral Centers
   • San Lazaro Hospital
   • Lung Center of the Philippines
   • Vicente Sotto Memorial Medical Center
   • Davao Medical Center

3) National Referral Hospital
   • Research Institute for Tropical Medicine

D. Stage 4:

Influenza Cases with Person-to-person transmission caused by new influenza subtype

1. What should be anticipated in a pandemic

   a. High morbidity
   b. High mortality
   c. Increased number of people seeking medical care in hospitals

   Influenza cases with severe pneumonia will seek hospitalization thus increased demand for hospital care facilities like ventilators, chest x-ray, drugs, and hospital staff is anticipated.

   d. Essential services may not be delivered because of illness
Among the essential services are those providing medical care in emergency rooms, persons providing surgical services to the acute and serious cases, persons manning the intensive care unit?

Non-health essential services include services to maintain peace and order, members of emergency and disaster response teams, transportation and air traffic control, food provision and security, fire control and power and water utilities.

e. Increased demand for home remedies and drugs such as antipyretics, liniments and antibiotics

f. there could be widespread fear and panic about the disease

Setting the scene

a. Predicted spread

Typically, new virus strains start in the Far East, spread to other countries along trade and transportation routes.

In inter pandemic periods, spread of the new variant of the existing strain will take 18 months, thus allowing the incorporation of the strain into the annual vaccine before it causes widespread occurrence of illness.

Previous pandemics spread in six months, with successive waves of epidemics over a long period. Shorter travel time because of improved means of transportation may hasten the spread of influenza virus.

The 1889 pandemic originated in China to Russia to Western Europe and hence to North America and then Japan. In the early months of 1918, it was recognized in Spain, and by April, it was widespread in Western Europe. In spring and summer, large numbers of people were affected but had mild disease. In Autumn – high mortality and again in the early part of 1919.

The 1957 Asian flu pandemic took 6-7 months from the first isolate being identified in China (Feb 1957) until the peak of illness in United Kingdom and other parts of Europe. “Hongkong” flu virus which was due to a less dramatic virus ‘shift’ was first isolated in Hongkong in July 1968. It spread worldwide during the following two winters, causing greater morbidity in some countries.

b. Time of year

Pandemic Influenza may appear at any time of the year, not necessarily during the expected influenza season which occurs during the inter-pandemic periods.

c. Attack Rate

The World Health Organization suggests that plans are in place against a pandemic causing illness in 25% of the population. The worst possible scenario would be a 100% attack rate.
d. **Age and Sex**

In interpandemic periods, most of the influenza infection is in children, but serious morbidity and mortality is almost entirely among elderly people with underlying chronic disease. A different pattern may happen in a pandemic. In 1918-19 pandemic, mainly healthy young adults were affected and those at the extremes of life. Similarly, in 1957, schoolchildren and young adults were most affected.

e. **Effect on general practice**

New general practice consultations for influenza-like illness will likely exceed 500-1,000/100,000 population/week during the peak of a pandemic. For every 10,000 patients at least 50 new patients a week are expected to be seen. There will be lower rates for prolonged period of activity.

f. **Effects on hospital admissions**

In Europe, 8-10% of the insured population was estimated to have lost 3 or more working days at some time during the epidemic. The percentage absenteeism during this period increased by 4.5 – 6.0% in several; large organizations, though some smaller factories suffered more severely.

In 1968/69 just over 1 million excess sickness claims were received over 5 months and, in 1969/70, 1.5 million over 6 weeks.

g. **Health care staff**

In UK (Liverpool) in 1957, it was estimated that 12.6-19.4% of nurses were absent during the first 4 weeks of the epidemic, in one hospital, nearly a third were absent at the peak.

h. **Effect on schools**

Influenza can spread rapidly in schools. In 1957, up to 50% of schoolchildren developed influenza.

3. **Goal:**
To minimize the public health and socio-economic impact of influenza pandemic in the Philippines.

4. **Objectives:**
   a. To maintain command and control during a pandemic
   b. To reduce morbidity and mortality from pandemic influenza
   c. To manage large numbers of ill and dying people
   d. To maintain essential services during a pandemic
   e. To prevent spread through public health interventions.
   f. To manage public anxiety and panic and ensure effective and appropriate information, education and communication (IEC) dissemination
5. **Policy Statements:**
   a. Public health measures shall be carried out to prevent spread of illness.
   b. All government and private hospitals shall develop their contingency plans to ensure health services needed during an influenza pandemic.
   c. All government and private hospitals shall adopt policies and guidelines on prioritizing hospital beds, equipments, drugs and supplies.
   d. All government agencies and private entities shall develop their contingency plans to ensure that essential services are maintained during an influenza pandemic.
   e. All concerned agencies shall ensure adequacy and prevent untoward increase of prices of drugs and supplies during an influenza pandemic.

6. **The following critical areas of concern during a pandemic influenza shall be addressed:**
   a. reduction of mortality and morbidity
      1) immunization
      2) use of antiviral agents
   b. management of large numbers of ill and dying people
      1) decisions on who should stay home and should seek hospitalization
      2) categories of patients
      3) levels of health care where patients in a pandemic may be treated
      4) services, manpower and supplies at the primary level
      5) hospital services
   c. maintenance of essential services
   d. prevention of spread through public health interventions
      1) guiding principles
      2) decisions on public health measures
      3) public health measures
      4) critical roles of other agencies
   e. Management of public anxiety and communications
      Communication with international organizations
      1) Communication among national organizations
      2) Communication from the national to the regional level
      3) Communication from the regional to the local level
      4) Communication to the public

7. **Plan of Action**
   a. **Reducing Morbidity and mortality**
      1) Immunization to prevent the complications of influenza

      Immunization with appropriately formulated influenza vaccine can reduce the impact, particularly among those groups most at risk of serious illness or death from influenza. However, vaccine is likely to be in short supply because production of vaccine takes time and high worldwide demand.

      The vaccine specifically against the pandemic influenza virus will likely be developed and may be available after at least six (6) months from the start of the
pandemic depending on the rate of isolation of the virus, applicability of current technology and culture cells and the quantity of the vaccine doses that can be produced.

The Philippines does not have a manufacturing capacity for influenza vaccine. Availability of the vaccine to the Philippines will depend on the manufacturing rate of vaccine companies, allocation to the Philippines in the midst of enormous demand by other countries and the available funds from the Philippine government.

It is expected that not all of the Philippine population will be provided the pandemic influenza vaccine, thus, the following options are considered.

- **Option 1**

  Assuming that there will be funds available for the vaccine, there is a need to determine the quantity that can be provided to the Philippines. Should a decision be made to procure the vaccine, sources of funds need to be identified. The most possible funding source will be the Philippine Charity Sweepstakes Office.

  Assurance for the provision or allocation to the Philippines needs to be secured from vaccine companies. However, this will entail assurance from the government that funds will be available for procurement of the vaccine.

  The vaccine will have to be distributed equitably and administered to the pre-determined groups. The public will have to be educated on the reasons why the vaccine is not being generally distributed.

  **Priority groups for influenza immunization**

  Vaccine supply will be likely limited, priority groups that should receive the vaccine needs to be identified, the precise order depending on the recommendations of the Technical Working Group for Influenza in the light of information on the changing epidemiology of the influenza pandemic.

  - Health care staff with patient contact (including ambulance staff)
  - Those providing essential services which would be disrupted by excess absenteeism during an outbreak e.g. police, fire, security, communications, utilities, undertakers, armed forces
  - Those with chronic respiratory or heart disease, renal failure, diabetes mellitus or immunosuppression due to diseases or treatment

  Considering the fact that the pandemic influenza vaccine is a new vaccine which may be made available in four to six months after the start of the pandemic, it is uncertain to what extent clinical trials have been done. Thus, monitoring of adverse events of the pandemic vaccine will be done by the health facilities providing vaccination and will be reported to the NEC-DOH.

  Moreover, waivers have to be signed by the recipients to remove the liabilities of the vaccine provider.
• **Option 2**

Not all of the priority groups can be provided the vaccine. No vaccine will be procured by the government vaccine is considered as an option. However, severe and stern public health measures to prevent the spread of the infection may be decided upon.

• **Option 3**

The government requests vaccine companies to allocate vaccine to the Philippines. Each individual will shoulder cost of vaccines.

2) **Use of antiviral agents**

Under pandemic conditions, antiviral agents are highly important on the first wave of infection, when vaccines are not yet available. In the absence of vaccines, antivirals are the only medical intervention for providing both protection against disease and therapeutic benefit in persons who are ill.

During a pandemic, antiviral agents may be not enough to meet the demands of many countries. When the attack rate is so high, then the antiviral agents on national stockpile will be provided to areas where the first cases of pandemic influenza are seen.

Priority groups to receive antiviral agents for prophylaxis will be the following:

- health workers
- first responders
- workers providing essential services

For treatment, priority will be the patients considered at high risk of severe disease. Clinical predictors of serious outcomes would be needed to better target the use of limited supplies.

Furthermore, with quarantine of contacts of cases and isolation of cases, suspension of public events and the practice of personal hygiene will serve as supporting public health measures. Influenza cases within the areas where the cases are first seen will be provided antiviral agents for treatment and contacts of cases for prophylaxis. This is aimed to prevent the spread of the illness to other areas of the country.

Efforts are being made for the procurement of Oseltamivir capsules for prophylaxis and treatment of cases. Upon report of an upsurge of cases of influenza within a province or region, a pre-designated staff shall be immediately deployed to the area bringing with him the antiviral agent.

Centers for Health Development and local government units shall coordinated with pharmacies within the region for the antiviral drug stocked for pandemic influenza cases.
See Annex on Guidelines on Use of antiviral Agents

b. Management of large numbers of ill and dying people

1) Decisions on who should stay home and who should be admitted

- **Who should stay at home?**
  
  Patients with fever and/or cough or individuals without serious medical conditions may stay at home for symptomatic treatment, take adequate rest, practice personal hygiene to prevent spread of the disease

- **Who should consult with the local health centers?**
  
  Consultation is advised for patients with persistent fever, difficulty of breathing has started, or patient become weak

- **Who should be admitted to the hospitals?**
  
  The following patients with flu-like symptoms should be admitted:
  
  - Age 6 to 23 months, 50 yrs and above
  - With underlying diseases such as chronic cardiovascular disease, chronic lung disease, chronic metabolic diseases, immunosuppressed and those with hemoglobinopathies
  - Residents of nursing homes
  - Health care workers

2) Levels of health care where patients in a pandemic may be treated

- Influenza cases manifesting with fever and manifestations of upper respiratory tract involvement such as runny nose, cough may stay at home.
- Influenza cases with beginning symptoms of mild pneumonia will be managed by health centers, general practitioners in private clinics.
- Pneumonia cases will be admitted and managed by community and district hospitals
- Cases with severe and very severe pneumonia will be admitted and managed by tertiary hospitals.

3) Patients are categorized as follows:

<table>
<thead>
<tr>
<th>Category</th>
<th>Recommended Action/ Referral</th>
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<tbody>
<tr>
<td><strong>Category 1</strong>&lt;br&gt; o Patients 2–50 years old with fever, upper respiratory manifestations such as runny nose, cough, without other medical conditions such as cardiac, pulmonary and renal disease, immunosuppression, diabetes mellitus without signs of pneumonia</td>
<td>Home care with antipyretics, analgesics, anti viral agents, if available, may be given within the 1st 2 days of illness</td>
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<tr>
<td>Category 2</td>
<td>Category 3</td>
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<tr>
<td>----------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>o Patients <strong>&lt;2 years and &gt;50 y/o</strong> fever, with fever, upper respiratory</td>
<td>o Patients of <strong>any age</strong> with influenza who developed signs of severe</td>
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<tr>
<td>manifestations such as runny nose, cough, such as runny nose, cough</td>
<td>pneumonia</td>
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<tr>
<td>without signs of pneumonia or other complications</td>
<td></td>
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<tr>
<td>o Patients <strong>2 –50 years old</strong> with fever, runny nose, cough, <strong>with mild</strong></td>
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<tr>
<td>or beginning pneumonia</td>
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<td></td>
<td>Admission to secondary hospital, municipal and district hospitals</td>
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<td></td>
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<tr>
<td>Consultation in Health centers, Private clinics, OPD</td>
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<tr>
<td>Antipyretics, analgesics, anti viral agents if available</td>
<td></td>
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<tr>
<td>Further assessment</td>
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<td></td>
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<tr>
<td>Category 4</td>
<td></td>
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<tr>
<td>o Patients of <strong>any age</strong> with severe pneumonia who require ventilators</td>
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<tr>
<td>and other special procedures and life-support measures</td>
<td></td>
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<tr>
<td></td>
<td>Tertiary hospital e.g. provincial, regional hospital or medical centers</td>
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</table>

4) Services, manpower and supplies

**At the primary Level**

Local health centers and outpatient department by influx of patients or may be overwhelmed seeking consultation. Manpower, drugs and supplies may not be enough. Further spread of the virus may be hastened by the crowding of people thus, triage be carried out in health centers. Patients with respiratory signs and symptoms should practice personal hygiene.

- **Manpower**

Volunteers from support groups, non-government organizations and other agencies will be mobilized. Personal protective equipment do include caps, masks, gloves and gowns should be provided to the health staff.

- **Triage System**

A triage system shall be established/practiced in the health centers. An assigned staff shall screen all patients. Those with respiratory signs shall be led in a designated area while patients with non-respiratory complaints shall be separated in another designated area.
• Management of Cases at the Primary Level
  
  o For fever, salicylates should not be given to patients less than 12 years old to prevent development of Reye’s syndrome – a syndrome consisting of signs and symptoms of hepatic and CNS involvements among children <12 years old given aspirins.
  
  o Antibiotics shall be given only to patients with complications such as pneumonia.
  
  o Nebulization may be done only when necessary but should be in a designated place away from the place for the other patients to prevent further spread of the virus through aerosolization.
  
  o If available, Oseltamivir may be given within the first 2 days of illness.

• Ensuring availability

  o Local government units shall allocate funds for the purchase of drugs and medicines.
  
  o Local government units shall ensure availability of drugs and medicines and to prevent hoarding/unreasonable price increase should do arrangements with the pharmacies in communities.
  
  o LGU’s shall provide antipyretics, antibiotics, antiviral agents as standby supplies for pandemic influenza, based on reasonable estimates and attack rates of pandemic influenza may vary among communities.
  
  o LGU’s shall devise mechanisms to ensure fast mobilization of resources and manpower during a pandemic.

• Alternative health centers:

  In the event of mass numbers of sick people that cannot be accommodated by health centers, school buildings, gymnasium or other facilities shall be used as consultation areas. Temporary infirmaries shall be put up to augment hospital beds for patients needing close medical attention as planned before the pandemic by hospital administrators and the local government executives.

• Mobilization of resources

  LGU’s, with the assistance of DSWD, PNRC and other agencies shall mobilize resources for provision of food, improvised beds, blankets, drugs for use of patients and PPE and food for regular and volunteer health workers.

  A declaration of a calamity may be done to allow use of LGU funds for the pandemic in the following circumstances:
a) when there is a 20% increase in consultations over the past 2 weeks, compared to the same period of the previous year.

Hospital Services

Shortage of beds equipments and supplies is foreseen during the pandemic. Hospitals will adopt policies on admissions, to include policies on what cases will be admitted, prioritizing on the more serious, severe and urgent cases. (Please see preceding portion on categories of patients)

- **Hospital beds**

  In the event of mass members of patient seeking admission, a contingency plan shall be developed for augmenting hospital beds with the following

  - vacant wards to be utilized
  - cohorting of cases
  - temporary infirmaries such as school buildings, covered gymnasiums military facilities

  Hospital chiefs shall coordinate with LGU, DepEd and DND, military facilities, schools on use of the mobilization of resources and identification of funding source.

- **Health service Personnel**

  To ensure continuous availability of manpower, medical and paramedical organizations and specialty societies such as the Philippine Medical Association, Philippine Nurses Association, Integrated Midwives Association of the Philippines, Organization of Private Duty Nurses, Medical Specialty Societies, and Association of Public Health Workers shall mobilize their members earlier enlisted as volunteers to augment the existing health personnel in hospitals.

- **Arrangements to maintain essential health services**

  There is a need to ensure that essential services are provided despite high absentee rates.

  Hospitals should prepare a list of personnel to man the triage, OPD, ARI wards, ICU wards, and power and water utilities maintenance with back-up staff in case of illness.

  Hospital administrators shall mobilize manpower resources from local medical and nursing associations and preparation of a directory of government and private medical practitioners and paramedical workers needs to be prepared.
Food provisions and sleeping quarters shall be provided by the hospital administrators.

- **Management of Pandemic Influenza Cases**

  Representatives from the World Health Organization, the medical specialty societies and the Department of Health, Technical Working Group for Influenza shall comprise as the Expert Panel for Pandemic Influenza. It shall be responsible for updating the management guidelines based on reports and observations obtained during the pandemic.

  Unless shown otherwise during a pandemic, it is presumed that antiviral agents, if given within the first two days of illness, may be effective in halting the progress of the illness and in the prevention of complications.

  - Osetalmivir may be given to patients with 1st 2 days of illness, if available
  - Antibiotics given IV shall be provided to influenza cases with pneumonia complications
  - IV fluids and IV paraphernalia
  - Ventilator will be used only if indicated and appropriate infection measures shall be carried out.
  - Management of pneumonia shall be based on the PSMID Guidelines of community-acquired pneumonia.

- **Supplies of drugs and equipment**

  Supplies of relevant drugs (e.g. antibiotics) and equipment (e.g. Ventilator Equipment) will need to be secured. Identify/coordinate with suppliers of drugs, IV fluids, ventilators, X-ray plates

  Hospitals shall prepare estimates of the following:
  - Estimated number of patients who will need to be admitted
    - Population of catchment area:
    - Resource Requirement for Hospital Admissions

<table>
<thead>
<tr>
<th>Needs</th>
<th>Estimated No. of Patients</th>
<th>Quantity</th>
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<tbody>
<tr>
<td>Pneumonia Cases</td>
<td>Estimated Cost</td>
<td></td>
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<tr>
<td>Severe &amp; Very severe Pneumonia</td>
<td>Estimated Cost</td>
<td></td>
</tr>
<tr>
<td>Bed capacity</td>
<td></td>
<td></td>
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<tr>
<td>Bed requirement</td>
<td></td>
<td></td>
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<tr>
<td>ICU capacity</td>
<td></td>
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<tr>
<td>Antibiotics- Oral &amp; IV</td>
<td></td>
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<tr>
<td>IV Fluids</td>
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<td>Ventilators</td>
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<tr>
<td>Estimated Cost</td>
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</tr>
</tbody>
</table>
Arrangements in hospitals

- Triage and patient flow
- Central bed registries
- Centralized ambulance dispatch
- Call centers/hotlines
- Alternative sites for medical care
- Border jurisdiction of patients and coordinate referral of patients not under the hospitals jurisdiction

Preventing nosocomial spread

The risk of nosocomial spread may be reduced by isolation of cases, practice of standard and droplet precautions for infection control, cancellation of less serious conditions during the epidemic, particularly those with high risk medical conditions, and adopting a policy of, as far as possible, admitting patients with influenza only if they have medical complications.

Health facilities shall institute appropriate infection control measures.

Transport of patients

Patients needing tertiary care will be transported to health facility capable of providing such level of care using the ambulance/vehicle of the referring facility.

Local government executives with the jurisdiction of the referral facility shall allow and facilitate transport of the patient from one political area to another.

Mortuary arrangements

In the event of a large number of deaths, mortuary arrangements shall be based on culturally appropriate disposal of dead bodies (cremation, immediate burial). Burial sites and cadaver bags also need to be prepared.

A protocol previously developed by HEMS for the culturally appropriate disposal of dead bodies shall be adapted (Annex)

c. Maintaining essential services

1) Essential Non-health Service Personnel

In a pandemic situation, essential services providers may get sick resulting to massive absenteeism resulting to threat to public safety and will interfere in the appropriate response in the pandemic. Volunteers from identified support groups will be mobilized to augment manpower needs.
What are the non-health essential services?
   1) Peace and order
   2) fire control
   3) air, land, transport –
   4) water and power utility
   5) emergency and disaster response teams
   6) communication
   7) food supply maintenance - NFA

d. Public Health Interventions to slow the spread of infection

1) Guiding principles

The spread of influenza is unlikely to be stopped but some slowing of the spread of infection is possible by reducing unnecessary, especially, long distance travel, and by encouraging those suffering from illness to stay at home.

When faced with a pandemic situation, the general public will be strongly advised to carry out personal protective measures and behaviors, though not all of these are effective. Such measures are permitted provided that they cause no harm and do not have major impact and burden on resources and will not cause serious and economic disruption. Adoption of measures will involve coordination with and involvement of other sectors.

Confirmation of human-to-human transmissions will trigger for aggressive measures aimed at averting a pandemic. Local measures will be done in specific areas where transmission is occurring.

The effectiveness of many interventions will depend on the behaviour of the virus as determined by its pathogenicity, principal mode of transmission (droplet or aerosol), attack rate in different age groups, duration of virus shedding, and susceptibility to antivirals. Considerations in the adoption of appropriate measures are effectiveness, the feasibility, costs, available resources, ease of implementation within existing infrastructures, the broader impact of possible interventions and likely acceptability to the public.

2) Decisions on public health measures:

Public health interventions to “increase social distance” like a) suspension of public events, b) limitation of movement from one area with outbreaks of influenza to an area with no or few cases of pandemic influenza, c) suspension of travel to a country with outbreaks of influenza, d) closure or limitation of people in public places or establishments e) cancellation of mass gatherings may be made but only after careful assessment of the situation at the time of the pandemic since these actions may have adverse economic and economic consequences.
Other non-medical interventions include public risk communication, isolation of cases, tracing and appropriate management of contacts.

3) Specific measures:

- **Personal hygiene**
  Public information on personal hygiene to prevent spread of respiratory diseases is a continuing effort even before the pandemic. Frequent hand washing shall be encouraged.
  Offices and establishments shall provide hand washing facilities with adequate water.
  Closing schools would be an option to be considered particularly if teacher absenteeism reached levels at which schools could not function.
  For vehicles of transportation: To lessen the rate of transmission public vehicles such as the light rail trains, buses and taxicabs as well as private vehicles
    - shall shut off the air-conditioning systems and shall have the windows open.
    - curtains in buses will be removed as they may harbor the influenza virus for a certain period of time and can be source of infection.
  Infection control measures shall be carried out in crowded areas, military barracks, schools, and offices. In a pandemic setting, use of masks in public places is reasonable. Frequent hand washing shall be encouraged.
  In a pandemic situation, people who have had contact with influenza cases shall stay in their own homes.
  Students and school staff and office workers who have fever and respiratory illness shall not be allowed to report to schools or offices, respectively.
  Entry-exit management at ports and airports of entry.
    - Airline companies shall coordinate with the Bureau of Quarantine on the screening of passengers, the proper handling of patients on board the plane and referral of patients to hospitals.
  Travel restrictions shall be announced as deemed necessary and shall be based upon discussions of the Department of Health, the Department of Foreign Affairs and the World Health Organization
  Information materials shall be posted in public vehicles, offices and establishments.

e. Management of public anxiety and communications

1) Communication with international organizations

Information from international organizations such as WHO, will be coursed officially to the Secretary of Health. Links with websites are available. Influenza groups for public health and surveillance have included the Philippine key players in international e-groups.

2) Communication among national organizations at the National level

The Department Personnel Order on Task Force for Avian and Pandemic Influenza has identified the persons in charge of coordination with the Department of Agriculture. The inter-agency Task force for Avian and pandemic
Flu meets at least once a month as agreed upon with the DOH as the coordinating office. The EO 280

Communication maybe through meetings, telephone, or e-mail. Updates on the situation, guidelines and protocols are shared among the representative for dissemination

3) Communication from the national body to regional group

Information to the CHD’s on the current situation, guidelines and requirements for preparedness will be coursed through the undersecretaries for Luzon and for Visayas and Mindanao.

Development of fact sheets, frequently asked questions and other IEC materials will be a cooperative effort of the DOH Task Force and other agencies.

4) Communication from regional to local groups and vice versa

Centers for Health Development will further disseminate information to the local units on the nature, prevention and control of avian influenza and will provide guidance to LGU’s in their pandemic preparedness. As necessary, the DOH national offices involved in preparation of the guide for Pandemic Preparedness may be invited.

The unusual number of consultations of respiratory illness over a one-week period shall be reported immediately to the MHO/CHO who shall notify the RESU.

5) Communication with the public

Communication links will be ensured at both national and local level through telephone lines. Regular information will be cascaded to doctors at all levels through health updates. The Centers for Health Development will be the conduit of information provided to the peripheral level.

Advisories previously drafted and updated with relevant information during the pandemic, will be disseminated through the tri-media. Linkages with the media at the national and local level need to be established in advance to encourage supportive reporting and to avoid unnecessary scares.

Spokespersons will be designated by the Secretary of Health to discuss updates and issues pertaining to pandemic influenza. Spokespersons at the regional and local level, to be designated by the head of office, will provide updates and information to the public, other agencies and the general public within their area of jurisdiction.

Press briefing will be regularly conducted.
6) Communication from the Primary Care level facility:

Communication to patients
The local health facility should advice patients and the accompanying persons the following:

- Practice of personal hygiene
- Not to give salicylates to children <12 years old
- Stay at home when sick.
- Watch out and seek consultation for the following signs and symptoms:
  - difficulty of breathing
  - rapid breathing
  - intercostal retractions
  - weakness
  - inability to eat/drink
  - drowsiness/non-response

Communication to the Community
- Practice of personal hygiene
- Staying at home
- Avoiding unnecessary travel/crowded areas
- Seek consultation for signs of severe illness as indicated above

f. Legal Issues:

A state of emergency will be declared by the Chief Executive upon determination of the extent of the pandemic, the areas affected and may be called at the local or national level. Updating and consultation with the involved agencies such as DOH, DILG, DSWD, and the National Security Council Secretariat will be done.

Upon recommendation of the Secretary of Health, the Chief Executive will institute public health measures based on the existing laws or executive orders as deemed as necessary and within the frame of International Health Regulation.

Preparation of the preparedness and response plan by other agencies and local government units is being encouraged. Regular desk top review of the response and simulation exercises should be done.

g. Critical roles of other agencies/institutions

- All institutions/agencies, private or government with health related functions shall be mobilized.
- The DILG shall take the lead in the issuance of memorandum and guidelines to LGUs and mobilization of resources.
- LGU shall ensure availability of supplies and personal protective equipment, namely, disposable caps, N95 masks, gloves and plastic body shields, eye shields or goggles, plastic bags for disposal, disinfectants.
- The PNP shall ensure law enforcement, security and transport, evacuation and relief.
The DSWD will augment financial resources, food and non-food provisions, and manpower to LGUs.

The Department of Education shall implement guidelines on infection control measures in schools, rules in attendance and what should be the early indicators to close schools in a pandemic event.

The Department of Labor and Employment shall provide guidelines for the workplace setting.

The PNRC shall augment the health manpower.

The PCSO/PAGCOR shall provide financial support.

PIA shall support in the information dissemination.

The Philippine Coast Guard shall assist in the entry and exit management of passengers through seaports and other points of entry.

The DND/AFP/OCD-NDCC shall coordinate, mobilize and augment resources needed for response to outbreaks of avian and pandemic influenza.

V. PREPAREDNESS AND RESPONSE IN AIRPORTS AND SEAPORTS
(BUREAU OF QUARANTINE)

Entry-Exit Management at Ports and Airports

F. PREPAREDNESS
1. Dissemination of case definition identification of infectious disease outbreak to all Quarantine Medical Officers and Quarantine Stations
2. Preparation of protocol for the management of inbound and outbound travelers. (see Annex 1-A and 1-B)
3. Preparation on guidelines on the handling of suspects/cases while on board aircraft or vessel. (see Annex 2)
4. Preparation of Health Check List for arriving aircraft/vessel’s crew and passengers. (see Annex 3)
5. Preparation of a List of High Index of Suspicion for the crew of airline and vessel. (see Annex 4)
6. Preparation of Alert Levels in the entry-exit management. (see Annex 5)
7. Networking with airport/port authorities (Customs, Immigration, Dept. of Agriculture); airline/shipping companies; airport/port security; concerned DOH agencies and NGOs
8. Effective coordination and collaboration between the Bureau of Quarantine and the various concerned government and non-government agencies, both national and international.

G. RESPONSE
Implementation of the tailored-action plans. (Annex 1-A and 1-B)
Screening of all incoming passengers and crew coming from AI affected countries:
- Filling up Health Check List/Declaration
- Body Temperature check through an infrared thermal camera
- History of travel and contact/exposure
- Clinical evaluation of suspects at the holding area
- Prompt referral to dedicated hospitals for isolation and quarantine
Referral to the National Epidemiology Center (NEC) for contact tracing and surveillance

C. LOGISTIC REQUIREMENTS

- Human Resource Development
  - Training on Entry-Exit Management
  - Training on Infection Control
  - Advanced Training on Quarantine
- Equipment and Supplies
  - Personal Protective Equipment
  - Thermal Scanner for Screening measures
  - Duplicator/Printer
  - Fax Machines
  - Info Tech Wares
  - Transport (Ambulance)
- Upgrading of Laboratory Capacity

D. ROLES AND RESPONSIBILITIES IN PUBLIC HEALTH EMERGENCIES

- Develops protocols and field operation guidelines on entry-exit management.
- Conducts health surveillance at ports and airports of entry
- Monitors public health threats from foreign countries
- Assists in the Health Sector’s public health emergency plans.
- Provides technical inputs for alert level systems and training designs.
- Ensures effective networking and coordination with various stakeholders

Sequence of Activities:

- Notification to the Bureau of Quarantine of any presence of illness on board aircraft or vessel by airline and shipping companies
- Arrangement for medical assistance upon arrival
- Disease control and containment measures
- Aircraft/vessel disinfection
- Contact tracing of crew and other passengers
- Coordination with National Epidemiology Center (NEC) and other DOH agencies (HEMS, NCDPC, NHFD)

E. ALERT LEVELS IN AVIAN INFLUENZA / PANDEMIC
# Stages in Avian Influenza/Pandemic Entry-Exit Management

<table>
<thead>
<tr>
<th>Pandemic PHASE – WHO</th>
<th>STAGE</th>
<th>SCENARIO</th>
<th>ENTRY (Inbound)</th>
<th>EXIT (Outbound)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interpandemic Period</strong>&lt;br&gt;<strong>Phase 1</strong>&lt;br&gt;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 infection or disease is considered to be low.</td>
<td>1</td>
<td>(+) evidence of A.I. case/s or HPAI virus activity in susceptible animal species occurring OUTSIDE the country.&lt;br&gt;No new influenza subtype detected in humans&lt;br&gt;&lt;strong&gt;No AI occurring in DOMESTIC poultry&lt;/strong&gt;</td>
<td>Disseminates definition and identification of Avian influenza to all Quarantine Medical Officers&lt;br&gt;2) Disseminates protocols and field operation guidelines on quarantine entry-exit management&lt;br&gt;Provides technical inputs in the development of training design and materials on quarantine management.&lt;br&gt;Inform all Quarantine stations&lt;br&gt;Inform concerned agencies</td>
<td>Routine referral from airlines of crew and passengers with communicable disease</td>
</tr>
<tr>
<td><strong>Phase 2</strong>&lt;br&gt;No new influenza virus subtypes have been detected in humans. However, a circulating influenza virus subtype poses a substantial risk of human disease.</td>
<td>“same”</td>
<td>(+) NOVEL AI VIRUS subtype poses a substantial risk of transmission to humans OUTSIDE the country&lt;br&gt;&lt;strong&gt;No AI occurring in DOMESTIC poultry&lt;/strong&gt;</td>
<td>“same as Stage 1”&lt;br&gt;and&lt;br&gt;Routine temperature check on passengers coming from affected countries&lt;br&gt;Heightened alert and intensified monitoring and surveillance of disease outbreaks occurring outside the country, and airports and ports of entry</td>
<td>“same as Stage 1”</td>
</tr>
<tr>
<td><strong>Pandemic Alert Period</strong>&lt;br&gt;<strong>Phase 3</strong>&lt;br&gt;Human infection(s) with a new subtype, but no human-to-human spread, or at most rare instances of spread to a close contact.</td>
<td>2</td>
<td>(+) evidence of A.I. cases in human OUTSIDE the country. but no human-to-human transmission&lt;br&gt; (+) AI VIRUS occurring in DOMESTIC poultry</td>
<td>“same as Phase 1”</td>
<td>“same as Stage 1”</td>
</tr>
<tr>
<td><strong>Phase 4</strong>&lt;br&gt;Small cluster(s) with limited human-to-human transmission</td>
<td>3</td>
<td>(+) evidence of A.I. cases with limited human-to-human transmission OUTSIDE</td>
<td>“same as Stage 2”&lt;br&gt;and</td>
<td></td>
</tr>
</tbody>
</table>
but spread is highly localized, suggesting that the virus is not well adapted to humans.

+ (+) AI VIRUS isolated in human case/s occurring **INSIDE** the country. 
+ No evidence of human-to-human transmission
+ Health Check List to be accomplished by arriving crew and passengers

| Phase 5 | (+) evidence of larger cases of A.I. cases in humans but still localized **OUTSIDE** the country. | “same as Stage 3” **and**
+ Use of PPEs for airport and port quarantine personnel and other health workers in the frontline
| “same as Stage 3” **and** | (+) A.I. case/s with limited human-to-human transmission **INSIDE** the country | “same as Stage 4a” **OR**
+ Widespread and sustained transmission in the general population
+ Shifting of priorities:
  - To minimize morbidity and mortality
  - * Political measures (e.g., social disruption) upon approval by the President as recommended by the Secretary of Health.
| “same as Stage 4a” **OR** | Pandemic increased and sustained transmission in general population. | “same as Stage 4a” **OR**
+ Shifting of priorities:
  - To minimize morbidity and mortality
  - * Political measures (e.g., social disruption) upon approval by the President as recommended by the Secretary of Health.

* Once a pandemic begins, its overall management would move outside the public health sector and take on great political and economic significance. In addition, populations would need to be prepared for the even greater social disruption, linked to high morbidity and mortality, that could be expected as the pandemic progressed*.

“Although WHO will recommend to the countries what activities could be carried out per pandemic stages, countries need to adjust these general recommendations to the local organization and infrastructure. Therefore, response per phase should be developed, bringing together all other aspects of preparedness” – WHO Influenza Pandemic Preparedness Checklist, (Nov 2004 version)
ENTRY (Inbound) MANAGEMENT AT AIRPORT OR SEAPORT

Filling up of HEALTH CHECK LIST on

HEALTH CHECK LIST to be submitted to the Quarantine Medical Officer upon arrival

Symptomatic upon arrival (Presence of fever, cough, sorethroat, difficulty of breathing, etc.)

Asymptomatic upon arrival (Absence of signs and symptoms)

Initial examination by

Suspect

Not Suspect

Home Confinement for 14 days “Voluntary Domestic Quarantine” (Keep at home and be on alert if signs and symptoms develop)

Still asymptomatic after 14 days

Safe

Refer to *RITM or **SLH; or to the

Holding Area – Suspects are further assessed for hospitalization or not

If signs and symptoms develop within 14 days of arrival. (The passenger calls up the health

National Epidemiology Center (NEC) 741-7048 ; 742-1937 Bureau of Quarantine 301-91-00 -- 17
EXIT (Outbound) MANAGEMENT AT AIRPORT
* (In an event where there is community transmission)

Temperature Check of all outbound travelers

≥ 38
Filling up of Health Check
Medical assessment by
Travel to be deferred and possible referral to hospital for evaluation

< 38
Allowed to Depart

* Recommend that ill persons postpone their travel
Guidelines in Handling Passenger-Patients Allegedly Suffering from Emerging Infectious Disease On Board Aircraft

- Call for medical assistance from physician on board, if any.
- Place the passenger-patient at the back seat of the aircraft and limit his/her movements.
- Place face mask on the patient.
- Immediate notification of the health authority at the nearest airport.
- Proper handling of the passenger-patient as well as of contaminated clothing or other contaminated fomites with routine standard barrier precautions (use of mask, gloves, eye protection, gowns).
- Thorough washing of hands every after handling of the patient.
- Avoidance of unnecessary contact with the patient.
- Place all waste materials used by the patient including the clothings in a yellow-colored plastic bag for proper disposal.
- Upon arrival of the aircraft, the protocol for Arriving Aircraft shall be followed.
- The passenger-patient should be the last one to disembark.

Annex 3

For your own protection, for the safety of your family and the community

TO ALL TRAVELERS:

IMPORTANT REMINDER: Accomplish this form honestly and completely to facilitate quarantine procedures. Anyone found giving false information is liable and punishable in accordance with Philippine laws.

Travel History:

Arrival Date:_________ Port of Origin:_________ Fit #:_________ Seat #:_________

Countries visited in the past three (3) weeks:
- Philippines
- Taiwan
- Vietnam
- Canada
- China
- Thailand
- Japan
- Singapore
- Indonesia
- U.S.
- Cambodia
- Pakistan
- Korea
- Laos
- Others

Personal Data:

Name: ___________________________ Last Name: ___________ First Name: ___________ Middle Name: ___________

Sex: _______ Age: _______ Nationality: _______ Civil Status: _______

Occupation:
- works in a hospital, clinic or nursing home
- household help
- other (specify): ___________

Address in the Philippines: ____________________________________________________________

Tel. Mobile No.: _____________________________

Please check if you have any of the following at present or during the past 14 days:

- Fever
- Body Weakness
- Difficulty of Breathing
- Cough
- Diarrhea
- Sore Throat
- Headache
- other(s) (specify): __________________________

Did you visit any health worker, hospital, clinic or nursing home? ____________

Did you visit any poultry farm, animal market or have been in contact with birds/chickens? ____________

Were you confined in a hospital? ____________

Do you have any household members or close friends currently having fever, cough and/or respiratory problems? ____________

Note: If you have been to a "SARS BIRD FLU"-infected country:

a. Quarantine or confine yourself at home for 10 days and limit your contact with household members.

b. Should you develop signs and symptoms, cover your mouth and nose with a piece of cloth, handkerchief or surgical mask.

c. You may call any of the following numbers:

Bureau of Quarantine & International Health Surveillance (BQIHS):
Tel. No. (632) 527-5552  Fax No. (632) 527-4676
(632) 527-4654 to 59

National Epidemiology Center (NEC)  Tel. No. (632) 741-7048

For Foreign Tourists: If you develop signs and symptoms during your stay, please contact the local health authorities for management and coordination with the Department of Health.

To the PHYSICIAN:

The person presenting this card has recently been abroad, and could have been exposed to a communicable disease. Please refer the individual to the Municipal Health Officer or Provincial Health Officer or to the Bureau of Quarantine or Center for Health Development (CHD) for further management and monitoring by the Surveillance Unit of the area.

(Sgd.) EDGARDO C. SALBUTSAK, MD, MPH, CESCO III
Director IV
Bureau of Quarantine & Intl Health Surveillance

Approved:

(Sgd.) FRANCISCO T. DUQUE III, MD, MSc.
Secretary of Health
or chest pain, hemoptysis, increased perspiration or shock.
- Maculo-papular, vesicular lesions and/or skin ulcer with black crust or eschar.
- Abdominal pain, nausea, vomiting, fever and diarrhea with or without blood.
- Sudden attack of afebrile flaccid paralysis, drooping eyelids, weakened jaw clench, difficulty of swallowing or speaking, difficulty of vision and respiratory paralysis.

PRECAUTIONARY MEASURES WHILE ON BOARD THE AIRCRAFT

- Those in direct contact with the passenger-patient, particularly the cabin crew, should wear an N95 mask, eye goggle, gown and disposable gloves.
- Other passengers nearest to the suspect case must also wear an N95 mask.
- The rest of the passengers may wear a surgical mask or an N95.
- Passenger-patient’s seat must be disinfected as well as the comfort room used.
- Frequent washing of hands.

VI. ANNEXES

OPERATIONAL GUIDELINES

1. National Inter-agency Task Force for Avian Influenza Protection Program

   Al National Task Force

   Executive Committee
   - Secretariat
   - Policy
   - Logistics
   - Communications

   Committee on Human Health Protection
   - Surveillance / Lab
   - Clinical Mgt / Hospitals
   - Resource Mobilization
   - Public Health Response
   - Quarantine

   Committee on Animal Health Protection
   - Surveillance / Lab
   - Containment
   - Resource Mobilization
   - Quarantine

   - Secretary of Agriculture
   - Secretary of Health
   - DA USec for Livestock and Fisheries
   - DOH Usec for Health Operations
   - BAI Director
   - NMIS Director
   - DOH Program Manager for Emerging & Re-emerging Infections
2. Regional Inter-agency Task Force for Avian Influenza Protection Program

AI Regional Task Force

- DA Regional Director
- DOH Regional Director
- DILG Regional Director
- PNP Regional Director
- Regional Disaster Coordinating Council
- Private Sector

Rapid Action Team
Surveillance Team Committee
Quarantine Team
Census Team
IEC Team

3. Provincial/ City Inter-agency Task Force for Avian Influenza Protection Program

AI Regional/ Provincial Task Force

- DA Provincial Officer
- DOH Provincial Officer
- PNP Provincial Director
- Provincial Disaster Coordinating Council
- Private Sector

Rapid Action Team
Surveillance Team Committee
Quarantine Team
Census Team
IEC Team
4. DOH Management Committee on Prevention and Control of Emerging and Re-emerging Infectious Diseases (DOHMC– PCEREID)

Republic of the Philippines
Department of Health

OFFICE OF THE SECRETARY
Bldg. 1, San Lazaro Compound, Rizal Avenue, Sta. Cruz, 1003 Manila
Telefax: (632) 743-1829  Trunkline: 743-8301 local 1125-32
Direct line: 711-9502 - 03
E-mail: osec@doh.gov.ph

July 15, 2005

DEPARTMENT PERSONNEL ORDER
No. 2005 _________

SUBJECT: Creation of a Management Committee on Prevention and Control of Emerging and Re-emerging Infectious Diseases (DOHMC– PCEREID)

Emerging infectious diseases (EIDs) are infections that have newly appeared in a population or have existed but are rapidly increasing in incidence or geographic range. Emerging infections are those whose incidence in humans has increased within the past two decades or threatens to increase in the near future. Re-emerging infectious diseases are known infections which reappear after a decline in incidence.

Emerging infectious diseases pose a serious threat to public health, may cause extreme public anxiety, and may have devastating social and economic effects.

Avian Influenza (AI) or bird flu due to a highly pathogenic influenza virus, H5N1, is currently affecting at least eight countries in Asia causing severe poultry outbreaks and mortality to infected humans. Widespread epidemics in birds increase opportunities for human exposure with a possible exchange of avian and human genetic material may produce a new virus which may be capable of spreading easily from person to person, leading to an influenza pandemic. The unpredictability of the influenza virus and the serious consequences that may occur in a pandemic warrant constant vigilance and good planning in order to reduce the impact of a possible pandemic.

Preparedness for AI and other emerging infections with potential for causing high morbidity and mortality are currently being done, with efforts to integrate prevention and control measures that are applicable for emerging and re-emerging infections. The existing systems and organizational structures need to be further strengthened in any event of resurgence of SARS or emergence of a highly pathogenic and contagious disease.
A DOH Management Committee on Prevention and Control of Emerging and Re-emerging Infectious Diseases (DOHMC-PCREID) composed of the Central Command and sub-committees is hereby created as illustrated in the following organization chart:

The Central Command serves as the policy-making as well as the coordinating and overseeing body over the sub-committees.

The Sub-committee on Surveillance and Epidemiology provides surveillance and epidemiological data and other needed information to the Central Command and to the line sub-committees for International Quarantine, Field Operations and Hospital Operations for appropriate measures that need to be carried out.

Communication and coordination will be maintained among the said line committees to ensure appropriate preparedness and response.

The Expert Committee is an advisory committee and shall be in direct communication and coordination with the Central Command. The Committee shall be composed of private and government medical specialists and clinicians duly chosen by the Secretary of Health and/or the Central Command depending on the nature of the emerging infectious disease.

The Sub-committees for Communications, External Affairs Logistics and the Secretariat will be the support groups for the Central Command and the three line sub-committees.

The DOH Management Committee on the Prevention and Control of Emerging and Re-emerging Infectious Diseases (DOHMC-PCREID) shall be composed of the Central Command, the Sub-Committees, the Expert Panel and the Secretariat.
To ensure proper coordination, the Central Command shall hold regular meetings or as frequently as deemed necessary, with the Sub-committee heads to identify and address gaps, duplications, needs and other issues. Two or more sub-committees may hold joint meetings as needed.

The Central Command and the Sub-committees have the following composition and functions:

I. **DOH Central Command on Prevention and Control of Emerging and Re-emerging Infectious Diseases**

A. **Composition**

- **Chairperson**: Secretary of Health
- **Vice – Chairperson**: Usec. for Health Program Development Cluster
- **Members**: Usec. for Luzon, Usec. for Visayas & Mindanao, Usec. for External Affairs, Usec. for Special Concerns, Executive Dir. - RITM, Dir. IV - NEC, Dir. IV - NCDPC, Dir. IV - NCHFD, Dir. IV - NCHP, Dir. IV – BOQ

B. **Functions**

1. Defines policies, standards, guidelines and systems for National Emerging and Re-emerging Infectious Diseases (EREID) Prevention and Control
2. Oversees the effective and efficient implementation of EREID prevention and control measures during a limited outbreak and when there is a major emergency
3. Monitors resource utilization for EREID related activities
4. Supervises the various Sub-Committees under the Central Command
5. Performs other functions as instructed by the President of the Republic of the Philippines
6. To create and establish committees or bodies as may deem necessary.
7. Coordinate with concerned agencies (i.e. RITM) regarding development of vaccines, biologicals and rapid drug tests for avian flu.
8. Shall assign spokesperson to respond to media queries on updates/ issues related to emerging and re-emerging infectious diseases.

II. **DOHMC – PCEREID Sub – Committees**

A) **International Quarantine Sub- Committee (IQSC)**

1.) **Composition**

...
2.) Functions

a. Oversees the planning and operations of international quarantine of inbound and outbound passengers at all ports of entry and exit, including non-official routes

b. Coordinates with WHO, the Department of Foreign Affairs, the Department of Labor and Employment, OWWA, the Coast Guard and other units that may be necessary in order to implement efficient quarantine measures of suspected EREID cases

c. In collaboration with NEC, the Bureau of Quarantine, Air Transportation office and other units, facilitates CHD and field activities on early detection, contact tracing, surveillance, investigation and follow-up of EREID suspects in the communities, field health facilities, domestic airports and seaports, among others, the timely and accurate reporting of epidemiologic data to the NEC, and the deployment of CHD and LGU members to EREID outbreak, response teams

d. In collaboration with NEC, the Bureau of Quarantine facilitates the efficient referral and immediate transport from the vessel to the hospital admission of EREID suspects detected at the regional / sub regional levels

e. Ensures the immediate and complete reporting to NEC of identified suspected EREID from inbound and outbound passengers

f. Estimates the resource requirements of their operations and coordinates with the Sub-Committee on External Affairs and Logistics and other budget finance units of the DOH

g. Designates their sub-committee secretariat that will link with the DOHMC – PCEREID Secretariat.

h. Performs other functions as instructed by the Secretary of Health

B ) Field Operations Sub-Committee (FOSC)

1) Composition
   Chairperson : Usec. for Luzon
                  Usec. for Visayas and Mindanao
   Vice-Chairperson : Director IV – NCDPC
   Members : Prog. Mgr. for Emerging and Re-emerging Infectious Diseases Prevention and Control
             Director, Infectious Disease Office
             Director, BLHD
             Representative from BIHC
             Representative from HEMS
             Representative from HHRDB
2) Functions

a. Formulates and recommends policies, standards, guidelines, approaches and training modules on the public health prevention and control measures against EREID

b. Based on directives by the DOH Central Command, oversees and coordinates the planning, development of systems and operations of CHDs, LGUs and local health facilities in the prevention and control of EREID such as ensuring adequate awareness and understanding by field staff of official guidelines and the effective implementation of these e.g. patient triaging and community control measures, among others

c. In collaboration with the Hospital Operations sub-Committee, ensures that the hospitals not designated as EREID referral hospitals and clinics, public and private, understand and comply with relevant infection control procedures for triaging and referring EREID suspects

d. Plans, coordinates, and collaborates with partner agencies for activities related to EREID prevention and control

e. Estimates the resource requirements of their operations and coordinates with the Sub-committee on External Affairs and Logistics and other budget and finance units of the DOH

f. Designated their sub-committee secretariat that will link with the DOHMC – PCEREID Secretariat

g. Performs other functions as instructed by the Secretary of Health

C) Hospital Operations Sub – Committee (HOSC)

1) Composition

   Chairperson : Director – NCHFD
   Vice-Chairperson : Director – RITM
   Members : Medical Center Chief – SLH
             Representative from NCHFD
             Representative from HEMS
             Representative from BIHC
             COHs of EI referral Hospitals
   Advisers : Representative from PSMID
             Representative from PMA
             Representative from PHA

2) Functions

a. In collaboration with the International Quarantine SC, epidemiology SSC, WHO and professional societies for infectious diseases, formulates and recommends policies, standards, guidelines and systems on the efficient and effective transport, triage, case management and referral of
EREID suspects and cases, including autopsy and proper
disposal of dead bodies, handling and transport of laboratory
specimen, and other health facility – based procedures and
activities
b. In collaboration with WHO and appropriate local Professional
Societies such as the PSMID, provides infectious disease
specialists to assist, train and improve systems in various
health facilities in the clinical case management of EREID
and the infection control measures in health facilities
c. Ensures the enforcement of these health facility-based
guidelines and standards, most especially the strict isolation
of EREID suspects and cases especially in designated
EREID referral hospitals
d. Plans, coordinates and monitors the needs and operations of
the EREID referral hospitals including adequate orientation
and training on infection control and emotional preparedness
of health workers to treat and manage EREID suspects and
cases
e. Facilitates the timely and accurate reporting by the
designated EREID referral hospitals on the daily status of
EREID suspects and cases under their care
f. As necessary, recommends the designation of additional
EREID referral hospitals – public and private – and facilitates
the preparation, training and monitoring of these
g. Estimates the resource requirements of their operations and
coordinates with the sub-committee on External Affairs and
Logistics and other budget and finance units of the DOH
h. Designates their sub-committee secretariat that will link with
the DOHMC-PCREID Secretariat
i. Performs other functions as instructed by the Secretary of
Health

D ) External Affairs and Logistics Sub-Committee (EALSC)

1) Composition
Chairperson : Usec. for External Affairs
Vice- Chairperson : Asec. for Management Support
Members : Head, MMD
Head, PLS
Director – Finance
PHIC Rep.
BHIC

2 ) Functions
a ) Coordinates the formulation of a logistics plan for EREID
prevention and control based on the needs of the various
Sub-Committees and health facilities for EREID prevention,
control and case management
b ) Networks with the private and business sectors, schools,
civic and social organizations to identify and mobilize local
and international donors, partners, and sources of funds for the use of various units working in EREID prevention and control

c) Based on the logistics plan approved by the DOHMC-PCEREID, provides the needed resources to various EREID prevention and control units
d) Coordinates other needs of and the support provided by external organizations and the private sector and links them with other sub-committees and DOH units as necessary
e) Designates their sub-committee secretariat that will link with the DOHMC – PCEREID Secretariat
f) Performs other functions as instructed by the Secretary of Health

E) Epidemiology and Surveillance Sub-Committee (ESSC)

1) Composition
   Chairperson : Director – NEC
   Vice – Chairperson : Division Chief – Survey, Risk Assessment & Evaluation Division
   Members : All other NEC Division Chiefs & Selected Staff
             Head, CHD RESU

2) Functions
   a) In collaboration with the Bureau of Quarantine and WHO and local professional societies, formulate and recommend policies, standards, procedures, guidelines and systems on the early detection, contact tracing, surveillance, investigation and follow-up of EREID suspects and the timely and accurate recording, reporting and collation of epidemiological data on EREID
   b) Through the NEC, manages and monitors the EREID surveillance system in the country and the DOH EREID hotlines
   c) Executes proper handling and transport of laboratory specimen, according to the guidelines set by the Hospital Operations sub-Committee
   d) Collates and counterchecks epidemiologic information and submits EREID epidemiology reports to the National Crisis Manager
   e) In collaboration with the FOSC, develop the plan and procedures for EREID Outbreak Response (OR) and composition of these EREID OR teams
   f) Designates their sub-committee secretariat that will link with the DOHMC – PCEREID Secretariat
   g) Performs other functions as instructed by the Secretary of Health

F) Communications Group sub-Committee (CGSC)

1) Composition
Chairperson : Director, NCHP
Vice Chairperson : Head, MRU
Members : All other MRU Staff
Director – IMS
Selected NCHP Staff

2 ) Functions

a ) Media Relations Group:
• Based on the data submitted by NEC and after confirmation and clearance by the EREID Crisis Manager, prepares and disseminates press releases, plans and coordinates press conferences on the status of detection, surveillance and case management of EREID suspects and cases
• Organizes a speaker’s bureau NEC, NCDPC, PSMID and coordinates deployment of speakers to respond to various demands from the other agencies/private groups

b) Creative Communications:
• Based on technical inputs from the National Center for Disease Prevention and Control, NEC, WHO and professional societies, identifies key messages that will answer the questions of the general public and key target groups in the country and develops and produces various IEC prototypes and materials that will answer these questions
• Develops a multi-media communications plan addressed at various target audiences that will ensure the full dissemination of the identified key messages on EREID, communicate the various DOH guidelines to the public, enhance national awareness and promote positive attitude and behavior to reduce public fear and anxiety
• Develops and produces various IEC prototypes and materials that will also be needed for advocacy, health education and training on EREID prevention and control by the various working groups and Sub- Committees
• Designates their sub-committee secretariat that will link with the DOHMC – PCEREID Secretariat
• Performs other functions as instructed by the Secretary of Health

G ) EREID Expert Panel

Lead Coordinator : Director, RITM

Upon recommendation of the Director of RITM and the initiative of the Secretary of health, the Expert panel may be convened in coordination with World Health Organization (WHO)

III. DOHMC-PCEREID Secretariat

1 ) Composition
Chairperson : Director, NCDPC
Vice-Chairperson: Director, NEC
Members: Rep. from Usec. for HPDC
          Prog. Mgr. for Emerging & Re-emerging Infectious Diseases Prevention and Control
          Support Staff – NEC
          IMS Representative
          IDO Staff

2) Functions

a) Documents the discussions, recommendations and decisions during DOHMC–PCEREID meetings and facilitates the immediate implementation and follow through of these decisions

b) Collates and consolidates the minutes of meetings and the recommendations by the various sub-committees

c) Assists the various sub-committees to attain their outputs and perform their designated tasks especially by facilitating the finalization of key paper outputs of the various sub-committees

d) Assists linkage, communication and coordination among the various sub-committees and units of the DOHMC–PCEREID

e) Monitors and consolidates Sub-committee outputs and need, especially problems and bottlenecks to facilitate action

f) Compiles and codifies all documents related to EREID

g) Performs other functions as instructed by the Secretary of Health

All administrative issuances, including Department order No. 82, series of 2003, “Creation of a DOH Task Force on Severe Acute Respiratory Syndrome Control” (DOHTF-SARSC) which are contrary or inconsistent with this Order are hereby deemed modified and/or revoked accordingly.

The DOHMC-PCEREID being the successor in interest, all documents, equipment, materials, donations, records, unutilized moneys shall accordingly be transferred to the new task force for proper disposition.

Under this Order, meals/snacks, supplies, materials, gasoline, reproduction materials, travelling and other incidental expenses that may be incurred in the conduct of meetings and other related activities of the Central Command-PCEREID shall be charged against the funds of the OSEC–GOP, respective hospital and CHD funds and against a special EREID fund that shall be created for this purpose from various donations and funds from public and private sources.

This order shall take effect immediately.

(Sgd) FRANCISCO T. DUQUE III, MD, MSc.
Secretary of Health
TECHNICAL INFORMATION

A. Exposure to Highly Pathogenic Influenza

1. Persons with possible exposure to Highly Pathogenic Avian Influenza (HPAI) during outbreaks among poultry

It is possible that HPAI could be transmitted to humans, namely:

a. Individuals participating in Avian Influenza Outbreak Control and Eradication Activities

Persons involved in outbreak control and eradication activities (e.g., euthanasia, carcass disposal, and cleaning and disinfections of premises affected by avian influenza) on poultry farms or live bird markets are at increased risk for exposure to avian influenza. They often have prolonged, direct contact with infected birds and/or contaminated surfaces in an enclosed setting.

Persons at high risk for severe complications of influenza (e.g., immunocompromised, over 60 years old, or with known chronic heart or lung disease) should avoid working with affected chickens.

b. Other Individuals with Possible Exposure to Avian Influenza

The risk of transmission of avian influenza to humans is lower among persons with shorter duration and indirect contact with poultry or contaminated surfaces or equipment on affected farms or in live bird markets.

Individuals who develop a febrile respiratory illness within a week after their last exposure to avian-infected or exposed birds or potentially contaminated surfaces should consult a health-care provider. Before visiting a health-care setting, tell the provider about symptoms and recent possible exposure to influenza.

c. Occupations at risk for HPAI

1) domestic fowl worker
2) domestic fowl processing plant worker
3) domestic fowl culler (catching, bagging, or transporting birds, disposing of dead birds)
4) worker in live animal market
5) chef working with live or recently killed domestic fowl
6) dealer or trader in pet birds, health care worker.

2. What is considered to be an exposure?

During the 7 days before the onset of symptoms, one or more of the following is considered an exposure:

a) contact (within 1 meter) with live or dead domestic fowl or wild birds;

b) exposure to settings where domestic fowl were or had been confined in
the previous 6 weeks;
c) contact (within touching or speaking distance) with a person for whom the
diagnosis of influenza A(H5N1) is being considered;
d) contact (within touching or speaking distance) with a person with an
unexplained acute respiratory illness that later resulted in death.

B. Guidelines on Management of Avian Influenza and Infection Control in
the Health Care Setting

1. Objectives
a. Early implementation of infection control precautions to minimize
   nosocomial spread of disease.
b. Proper case management to prevent severe illness and death.

   Early identification and follow-up of persons at risk of infection to facilitate
   early intervention. With antiviral therapy, reduce morbidity and mortality and limit
   further spread of the disease.

   In areas experiencing outbreaks of highly pathogenic avian influenza due to
   influenza A (H5N1) in poultry should vaccinate health care workers (HCWs) at risk
   with the WHO-recommended seasonal vaccine.

   The rationale is to reduce opportunities for the simultaneous infection of
   humans with avian and human influenza viruses. In turn, this reduces opportunities
   for reassortment and for the eventual emergence of a novel influenza virus with
   pandemic potential.

2. General considerations

   Existing infection control measures include the application of standard
   precautions to all patients receiving care in hospitals. If the diagnosis of influenza
   A(H5N1) infection is being considered on the basis of clinical features, additional
   precautions should be implemented until that diagnosis can be ruled out.

   Transmission of human influenza is by droplets and fine droplet nuclei
   (airborne). Transmission by direct and indirect contact is also recognized. So far
   there is no evidence to suggest airborne transmission of the disease in the current
   outbreaks in Thailand and Viet Nam. Nevertheless, because of the high mortality of
   the disease and the possibility of the virus mutating to cause efficient human-to-
   human transmission, WHO is currently recommending the use of high-efficiency
   masks (N95) in addition to droplet and contact precautions. In addition, a negative
   pressure room – if available – is recommended.

3. Guidelines on Clinical Management of HPAI

   Based on WHO Interim Guidelines
   a. Take respiratory and blood specimens for laboratory testing for influenza
      and other infections as clinically indicated.
   b. Treat with a neuraminidase inhibitor such as oseltamivir (75 mg orally, twice
daily for 5 days) as early in the clinical course as possible. The benefits of
oseltamivir, the optimal dosage and schedule for later-stage intervention in severe influenza illness are unknown.

c. If clinically indicated, hospitalize patients under appropriate infection control precautions as described in a separate section.

d. Provide supportive care. Monitor oxygen saturation and treat desaturation with supplemental oxygen as required.

e. As nebulizers and high-air-flow oxygen masks have been potentially implicated in the nosocomial spread of severe acute respiratory syndrome, use these measures only if clinically justified and apply them under strict infection control, including airborne transmission precautions.

f. Take respiratory and blood specimens serially to check for possible bacterial infection.

g. Consider intravenous antibiotic therapy to control secondary bacterial infections as required.

4. Guidelines on Infection Control

a. Isolate the patient to a single room. If a single room is not available, cohort patients separately in designated multi-bed rooms or wards; beds should be placed more than 1 meter apart and preferably be separated by a physical barrier (e.g. curtain, partition).

b. Reinforce standard precautions with droplet and contact precautions.

c. Use appropriate personal protective equipment (PPE) for all those entering patients’ rooms consists of mask (high efficiency mask if available or surgical mask), gown, face shield or goggles, and gloves.

d. Limit the number of HCWs who have direct contact with the patient(s); these HCWs should not look after other patients. The number of other hospital employees (e.g. cleaners, laboratory personnel) with access to the environment of these patients should also be limited. Designated HCWs should all be properly trained in infection control precautions.

e. Restrict the number of visitors and provide them with appropriate PPE and instruct them in its use.

f. Ask HCWs with direct patient contact to monitor their own temperature twice daily and report to hospital authorities any febrile event. An HCW who has a fever (>38 ºC) and who has had direct patient contact should be treated immediately.

g. Offer post-exposure prophylaxis (for example, oseltamivir 75 mg daily orally for 7 days) to any HCW who has had potential contact with droplets from a patient without having had adequate PPE.

h. HCWs who are unwell should not be involved in direct patient care since they are more vulnerable and may be more likely to develop severe illness when exposed to influenza A(H5N1) viruses.

i. Dispose of waste properly by placing it in sealed, impermeable bags which should be clearly labelled “Biohazard” and disposed of according to existing laws. Linen and reusable materials that have been in contact with patients should be handled separately and disinfected.

5. Discharge guidelines

a. Until further evidence is available, WHO recommends that infection control precautions for adult patients remain in place for 7 days after resolution of
fever. Previous human influenza studies have indicated that children younger than 12 years can shed virus for 21 days after onset of illness. Therefore, infection control measures for children should ideally remain in place for this period.

b. Where this is not feasible (because of a lack of local resources), the family should be educated on personal hygiene and infection control measures (e.g. hand-washing and use of a paper or surgical mask by a child who is still coughing). Children should not attend school during this period.

C. Public health measures to prevent transmission of HPAI in humans

1. Identify all persons who got into contact with the sick or dead birds or who may have been exposed to the common source of infection.

   - Contacts are persons who shared a defined setting (household, extended family, hospital or other residential institution, military barracks or recreational camps) with a person for whom the diagnosis of influenza A(H5N1) is being considered during the latter’s infectious period (i.e. from 1 day before onset of symptoms to 7 days after onset of symptoms).

2. In spite of no evidence of human- to-human transmission, contacts should quarantine themselves for 7 days from the first day of exposure, by staying at home and self-monitoring of fever, cough or difficulty of breathing or any sign and symptoms of illness.

3. A person who is being monitored develops fever (>38 °C) and cough or shortness of breath, he or she should be sent and treated immediately to the Referral Hospital for SARS and other severe emerging infections.

4. Contacts should quarantine themselves for 7 days from the first day of exposure, by staying at home and self-monitoring of fever, cough or difficulty of breathing or any sign and symptoms of illness.

5. Immediately report to the Municipal or City Health Officer or Medical Officer illness on humans with exposure to dead/sick fowl.

D. Management of influenza

1. Supportive Management

   a. A patient diagnosed on clinical examination as having a high temperature and other non-specific signs and symptoms as joint pains, muscle pains with or without respiratory manifestations, indicative of an influenza-like illness, patient should be managed/advised as follows:

      - rest at home as advised by the physician
      - plenty of oral fluids
      - paracetamol as needed for fever, Aspirin should be avoided in children because of the risk of Reye’s syndrome.
2. **Use of antibiotics**

   a. Antibiotics are not indicated in the treatment of uncomplicated influenza, although its use may be necessary for the treatment of associated bacterial respiratory complications.
   
   b. If the patient’s condition worsens or is not getting better within 72 hours or shows signs of secondary lung infection, an antibiotic may be prescribed.
   
   c. Antibiotics may be prescribed earlier for the elderly or other patients identified to be at risk of complications.
   
   d. When treating a secondary lung infection, the risk of Staphylococcus aureus infection should be considered, and oxacillin may be indicated alongside other antibiotics.
   
   e. Decision on the choice of antibiotics should be based on prevalent bacterial strains and resistance patterns.

3. **Antiviral agents**

   a. **Use of antiviral agents for chemoprophylaxis and treatment**

   1) **During normal seasonal epidemics**

       Research has shown that antiviral drugs are effective for both the prevention (chemoprophylaxis) and early treatment of influenza, if administered within 48 hours following the onset of illness. During normal seasonal epidemics, antivirals are adjuncts to vaccination as a strategy for reducing the medical and economic burden of influenza. Their use can reduce the duration of uncomplicated disease and the likelihood of complications requiring antimicrobial treatment and possibly hospitalization. Though studies are not adequate, antiviral agents are seen to reduce serious complications and mortality in groups at highest risk, including the elderly and persons with underlying disease.

   2) **During the pre-pandemic period when a new virus has emerged**

       Antivirals in the outbreak foci could reduce opportunities for adaptive mutation and reassortment between avian and human viruses and thus possibly prevent the virus from establishing efficient human-to-human transmission.

   3) **When there is no evidence of human-to-human-transmission**

       At the phase when no human-to-human transmission has been documented, antivirals would be used for the prophylaxis of persons, such as poultry pullers, at high risk of exposure, the protection of teams investigating the outbreak, and the early treatment of symptomatic persons. Prophylaxis of groups at high risk should be combined with administration of vaccine protective against circulating strains of influenza virus to reduce
the risk of reassortment following human co-infection with avian and human viruses.

4) Where there is limited human-to-human transmission

At the phase where there is limited human-to-human transmission has been confirmed, the use of antivirals will be used on clusters of cases with the objective of reducing further human cases and thus preventing or at least delaying further spread. Targeted and aggressive use of antivirals might also limit opportunities for the virus to improve its transmissibility through adaptive mutation during continuing chains of transmission.

Antivirals would be used for the early treatment of suspected cases, prophylaxis of contacts, including health care workers, and around a limited number of small, well-defined clusters.

5) During a pandemic

Under pandemic conditions, antiviral agents are highly important on the first wave of infection, when vaccines are not yet available. In the absence of vaccines, antivirals are the only medical intervention for providing both protection against disease and therapeutic benefit in persons who are ill.

During a pandemic, antiviral agents may be not enough to demands of many countries. Priority groups to receive antiviral agents will be health workers and first responders and workers providing essential municipal services for prophylaxis.

For treatment, priority will be the patients considered at high risk of severe disease. For this purpose, clinical predictors of serious outcomes would be needed to better target the use of limited supplies.

b. Kinds of antiviral agents against influenza

1) Amantadanes – Amantadine
2) Rimantadine – Rimantadine
3) Neuraminidase Inhibitor
   - Oseltamivir
   - Zanamivir

Studies have shown that Amantadine and Rimantadine are effective against Influenza A only while Oseltamivir is effective against both Influenza A and B. Oseltamivir is indicated as chemoprophylaxis against influenza A and B for individuals 13 yrs old and above.

Only Amantadine and Oseltamivir are listed in the Philippine National Drug Formulary and are available in the Philippines.

c. Patients who may be given antiviral agents
1) Children and nonpregnant adolescents at high risk of complication
2) Children and adolescents with severe influenza
3) Patients who are in contact with people at high risk as treatment may reduce the risk of transmission.
4) Patients with special family, school or social situations, such as upcoming important examination, trips or athletic competition

d. Timing and Duration

1) If antiviral therapy is contemplated, it should be given within the first 48 hours of illness to reduce the duration of uncomplicated influenza.
2) High-risk or severely ill patients seen after 48 hours may still be given an antiviral agent.
3) Treatment should be continued for 5 days or for 24 to 48 hours after acute symptoms resolve in immunocompetent patients.
4) Antiviral treatment may be prolonged for immunocompromised patients.

e. Patients who may be given antiviral agents

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3) Antiviral treatment may be prolonged for immunocompromised patients.
### g. Recommended Daily Dosage of Antiviral Agents for Chemoprophylaxis and Treatment

<table>
<thead>
<tr>
<th>Antiviral agent</th>
<th>Formulation</th>
<th>Approved ages and dosage</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Treatment</td>
<td>Prophylaxis</td>
<td></td>
</tr>
<tr>
<td><strong>AMANTADINE</strong> (Influenza A only)</td>
<td>Tablet (100 mg)</td>
<td>1-9 y/o: 5 mg/kg/day</td>
<td>&gt;1 year</td>
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<tr>
<td></td>
<td>Syrup (50 mg/5ml)</td>
<td>(in 2 doses not to exceed 150 mg/day</td>
<td>1-9 y/o: 5 mg/kg/day (in 2 doses not to exceed 150 mg/day</td>
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<tr>
<td></td>
<td></td>
<td>10 y/o-64 y/o. 100 mg BID</td>
<td>10 y/o-64 y/o. 100 mg BID</td>
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<td></td>
<td></td>
<td>&gt;65 y/o</td>
<td>&gt;65 y/o</td>
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<td></td>
<td></td>
<td>100 mg/day</td>
<td>100 mg/day</td>
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<tr>
<td><strong>RIMANTADINE</strong> (Influenza A only)</td>
<td>Tablet (100 mg)</td>
<td>13-64 y/o: 100 mg bid</td>
<td>1-9 y/o: 5 mg/kg/day (in 2 doses not to exceed 150 mg/day</td>
<td></td>
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<tr>
<td></td>
<td>Syrup (50 mg/5ml)</td>
<td>&gt;65 y/o</td>
<td>10 y/o-64 y/o. 100 mg BID</td>
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<td></td>
<td></td>
<td>100 mg/day</td>
<td>&gt;65 y/o</td>
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<td></td>
<td></td>
<td></td>
<td>100 mg/day</td>
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<tr>
<td><strong>OSELTAMIVIR</strong> (Influenza A &amp; B)</td>
<td>Capsule (75 mg)</td>
<td>&gt;1 y/o</td>
<td>&gt;13 y/o</td>
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<tr>
<td></td>
<td>Solution (12 mg/ml)</td>
<td>Treatment</td>
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<td></td>
<td></td>
<td>&lt;15 kg: 30 mg BID</td>
<td>75 mg once daily</td>
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<td>&gt;15-23 kg: 30 mg BID</td>
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<td>&gt;23-40 kg: 60 mg BID</td>
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<td>&gt;40 kg: 75 mg BID</td>
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<tr>
<td><strong>ZANAMIVIR</strong> (Not approved for prophylaxis)</td>
<td>Inhaler (5 mg powder blisters)</td>
<td>&gt;7 y/o</td>
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<td></td>
<td></td>
<td>&gt; 7 y/o: 10 mg BID</td>
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</table>

### h. Side effects and Adverse Reactions of Antiviral Agents

<table>
<thead>
<tr>
<th>Antiviral agent</th>
<th>Side Effects</th>
<th>Drug Interactions</th>
<th>Comments</th>
</tr>
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<tbody>
<tr>
<td>AMANTADINE</td>
<td>CNS and gastrointestinal side effects when administered to young, healthy adults at equivalent dosages of 200 mg/day, mild and cease soon after discontinuing the drug</td>
<td>Caution with concomitant use of drugs that affect CNS, including CNS stimulants antihistamines or anticholinergic drugs can increase incidence of adverse reactions</td>
<td>Reduce dosage in patients with renal impairment 150 mg/day in children 10 yr and older weighing &lt;40 kg, dosage should be 5 mg/kg/day</td>
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<tr>
<td>Drug</td>
<td>Adverse Reactions</td>
<td>Reduced Dosage</td>
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<tr>
<td>RIMANTADINE</td>
<td>Same as in amantadine</td>
<td>Reduce dosage in patients with creatinine clearance &lt; 10 ml/min or with severe hepatic dysfunction</td>
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<tr>
<td>(Influenza A only)</td>
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<tr>
<td>OSELTAMIVIR</td>
<td>Nausea and vomiting more frequent among adults receiving oseltamivir for treatment or prophylaxis, less severe if taken with food</td>
<td>Limited data on drug interactions</td>
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<tr>
<td></td>
<td></td>
<td>Reduce dosage in patients with creatinine clearance &lt; 30 ml/min</td>
<td></td>
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<tr>
<td>ZANAMIVIR</td>
<td>Bronchospasm, respiratory function deterioration after inhalation for patients with underlying airway disease. Hypersensitivity, oropharyngeal or facial edema, diarrhea, nausea, sinusitis, bronchitis, cough, headache, dizziness, and ear, nose, and throat infections</td>
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**i. Use during Pregnancy**

Because of the unknown effects of influenza antiviral drugs on pregnant women and their fetuses, these four drugs should be used during pregnancy only if the potential benefit outweighs the potential risk to the embryo or fetus.

**E. COMMUNICATION MESSAGES**
Proper Handwashing Procedure

1. Wet hands and wrist. Apply soap.
2. Right palm over left, left over right.
3. Palm to palm, fingers interlaced.
4. Back fingers to opposing fingers interlocked.
5. Rotational rubbing of right thumb clasped in left palm and vice versa.
6. Rotational rubbing backwards and forwards with tops of fingers and thumb of right hand in left and vice versa.

Make it a habit to wash your hands with soap and water.

National Center for Disease Prevention and Control
National Center for Health Promotion
Department of Health, Manitoba
2005
This document on Preparedness and Response to Avian and Pandemic Influenza has been developed by the Program for the Prevention and Control of Emerging and Re-emerging Infectious Diseases, National Center for Disease Prevention and Control, Department of Health. Consultation has been done with representatives from other DOH Offices/ institutions: National Center for Health Promotion, National Center for Health Facility Development, National Epidemiology Center, Health Emergency Management Staff, Bureau of Quarantine, Research Institute for Tropical Medicine, San Lazaro Hospital, other agencies: Departments of Agriculture, Environment and Natural Resources, Interior and Local Government (Local Government Development and Philippine National Police), Tourism, Education, Transportation and Communication (Philippine Coast Guard), Finance (Bureau of Customs), Trade and Industry, the National Security Council and the Armed Forces of the Philippines, the medical specialty organizations such as the Philippine Society for Microbiology and Infectious Diseases, Philippine Pediatric Society, Pediatric Infectious Diseases of the Philippines and the Philippine Foundation for Vaccination.

Further consultation with other offices and stakeholders is ongoing.

For technical inquiries, suggestions and comments, please communicate with: Dr. Luningning E. Villa Program Manager for the Prevention and Control of Emerging and Re-emerging Infectious Diseases, NCDPC,DOH at levilla@doh.gov.ph or telephone number: (632) 711-68-08 or (632) -743-83-01 loc 2350 to 2352 (Alternate: Mr. Aldrin Reyes)

For updates and more information, please visit the website www.doh.gov.ph.