AVIAN INFLUENZA PROTECTION PROGRAM

MANUAL OF PROCEDURES (2016)

Department of Agriculture –
Bureau of Animal Industry
PHILIPPINES

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FOREWORD

The Philippine Avian Influenza Protection Program (AIPP) was developed during the height of the outbreak of Highly Pathogenic Avian Influenza (HPAI) in South East Asia. It was adopted on April 20, 2005 through Joint Department of Agriculture (DA) and Department of Health (DOH) Administrative Order No. 001 which also established the National Avian Influenza Task Force (NAITF). The AIPP Manual of Procedures has become one of the primary references for information on the government's AI prevention program and preparedness plan. The courses of action mainly address HPAI incursion.

Since then, there have been developments in the knowledge on AI. Technological advancements have improved the understanding of the disease – information on new pathologic strains, development or improvement of control measures, and increased preparedness and capabilities to address related situations. In 2010, the DOH has released the Philippine Preparedness and Response Plan for Pandemic and Avian Influenza to address AI and other emerging infectious diseases.

There have been several attempts to review, update and revise the MOP for the animal health sector (AIPP Stages 1 and 2) in the earlier years, but only in the latter part of 2014 and first semester of 2015 were the efforts sustained. A Technical Working Group composed of some of the original and new members of the NAITF was able to draft the initial document containing the following revisions:

- Minor changes in terminology
- Incorporation of the courses of action to be taken in an event of the detection of Notifiable Avian Influenza of Low Pathogenicity
- Inclusion of preventive measures for Influenza A (H7N9)
- Updating of sections to consider current capability status

The working document was presented in a public consultative meeting held in Sequoia Hotel last June 2015 which was attended by representatives from the national, regional and local government offices, the academe, and poultry industry organizations. Insights and inputs were gathered to finalize the revision of this manual.

AVIAN INFLUENZA TECHNICAL WORKING GROUP

ACRONYMS

ADDRL	Animal Disease Diagnostic and Reference Laboratory
AFP	Armed Forces of the Philippines
AFVDBCD	Animal Feeds, Veterinary Drugs and Biologics Control Division
AGID	Agar Gel Immunodiffusion
AI	Avian Influenza
AIPP	Avian Influenza Preparedness Program
AITF	Avian Influenza Task Force
AIV-A	Avian Influenza Type A Virus
ALDF	ASEAN Laboratory Directors Forum
AO	Administrative Order
ASEAN	Association of Southeast Asian Nations
BAI	Bureau of Animal Industry
BHERT	Barangay Health Emergency Response Team
BMB	Biodiversity Management Bureau
BoQ	Bureau of Quarantine
BSC	Biological Safety Cabinet
BSL	Biosafety Level
CEPA	Communication, Education, Preparation and Awareness (formerly known as IEC)
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
DA	Department of Agriculture
DENR	Department of Environment and Natural Resources
DILG	Department of Interior and Local Government
DIVA	Differentiating Infected from Vaccinated Animals
DOF	Department of Finance
DOH	Department of Health
DOTC	Department of Transportation and Communication
DPCB	Disease Prevention and Control Bureau
EB	Epidemiology Bureau
ELISA	Enzyme-Linked Immunosorbent Assay
FAO	Food and Agriculture Organization of the United Nations
FO	Field Office
HI	Hemagglutination-Inhibition
HPAI	Highly Pathogenic Avian Influenza
IEC	Information, Education and Communication
IB	Infectious Bronchitis
ILD	Integrated Laboratory Division
ILT	Infectious Laryngotracheitis
LCE	Local Chief Executive
LGU	Local Government Unit
LBM	Live Bird Market
MO	Memorandum Order
NAI	Notifiable Avian Influenza
NAITF	National Avian Influenza Task Force
ND	Newcastle Disease
NDRRMC	National Disaster Risk Reduction and Management Council
NVQSD	National Veterinary Quarantine Services Division
NMIS	National Meat Inspection Service
OIE	Office International des Epizooties/World Organization for Animal Health
OP	Oropharyngeal
PAHC	Philippine Animal Health Center
PCR	Polymerase Chain Reaction
PENRO	Provincial Environment and Natural Resources Officer

PNP	Philippine National Police
PPE	Personal Protective Equipment
PRP	Preparedness and Response Plan
PDRRMC	Provincial Disaster Risk Reduction and Management Council
QRF	Quick Response Fund
QRT	Quick Response Team
RA	Republic Act
RADDL	Regional Animal Disease Diagnostic Laboratory
RAIDL	Regional Avian Influenza Diagnostic Laboratory
RDRRMC	Regional Disaster Risk Reduction and Management Council
RED	Regional Executive Director
RESU	Regional Epidemiology and Surveillance Unit
RFO	Regional Field Office
RO	Regional Office
SPS	Sanitary and Phytosanitary Measures
TA	Technical Advisory
TAD	Transboundary Animal Disease
VLD	Veterinary Laboratory Division
VQC	Veterinary Quarantine Clearance
VQO	Veterinary Quarantine Officer
WEO	Wildlife Enforcement Officer

GLOSSARY

Animal Disease Diagnosis and Reference Laboratory (ADDRL)
- formerly the Philippine Animal Health Center (PAHC), a section under the Veterinary Laboratory Division (VLD) of the Bureau of Animal Industry (BAI)

Avian Influenza Type A Virus
- under the Family Orthomyxoviridae under Genus Influenza A; there are 3 genera - A, B and C; only Influenza A viruses are known to infect birds

Aviary- a large facility (may be a cage, building or enclosure) for confining birds

Backyard Poultry Farm
- any farm or household raising at least one head of bird and does not qualify as a commercial farm

Bird Parks
- specialty zoos with extensive aviaries where there are specimens of bird life from around the world

Broiler - poultry (i.e. chicken) raised for meat purposes only

Commercial PoultryFarm
- refers to any farm which satisfies at least one of the following conditions:
  a) 500 layers or 1,000 broilers
  b) 100 layers and 100 broilers if raised in combination
  c) 100 head of duck regardless of age

Control Area
- shall be the area with a seven (7) kilometer radius from the periphery of the Quarantine Area that shall serve as a buffer between the Quarantine Area and the NAI Free Areas

Day-Old Chick (DOC) - newly hatched chick

Disinfection
- the process of killing (inactivating) harmful and objectionable bacteria, cysts and other microorganisms (pathogenic) by various agents such as chemicals, heat, ultraviolet light, ultrasonic waves, or radiation.

DIVA (Differentiating Infected from Vaccinated Animals)Strategy
- for Avian Influenza, this can be achieved by using a vaccine based on a different strain (e.g. H5N2) than the current field strain (e.g. H5N1) and using a serological test that can differentiate between vaccine-induced antibodies (e.g. against N2) and antibodies against the field virus (N1)

Dressing Plant - the premises/facilities used in the slaughter of poultry.

Duck
- general term for waterfowl belonging to the family Anatidae of either sex; also refers to female duck.

Free-Range Chicken
- refers to chickens which are raised to roam freely

Gamefowl
- domesticated chicken, regardless of breed, age and sex, raised solely for game or recreation purposes

Hatchery
- refers to a facility where eggs are incubated and chicks are hatched under artificial conditions

Infected Premises
- any site with avian population in which Notifiable Avian Influenza (NAI) is confirmed to exist

Layer - female chicken, regardless of age, raisedmainly for table egg production

Live Bird Market - area where traders sell live poultry

Meat - the fresh, chilled or frozen edible carcass, including offal, derived from food animals

Meat Establishment
- refers to premises such as a slaughterhouse, poultry dressing plant, cold storage, warehouse and other meat outlets that is approved by and registered by the National Meat Inspection Service (NMIS) for the slaughter, preparation, processing, handling, packing or storing of food animals and meat products

Native Chicken
- refers to chicken found in one geographical location that developed unique physical characteristics, behavior, product attributes, adapted to the local environment and are products of selection with no infusion of exotic breed for at least 5 generations

Notifiable Avian Influenza(NAI)
- an infection of poultry or birds caused by any influenza A virus of the H5 or H7 subtypes; it may be highly pathogenic or low pathogenic H5 or H7 subtype

NAI Free Area
- area which has no NAI based on the requirements specified by the latest OIE International Animal Health Code

Philippine Animal Health Center
- oldname of the Animal Disease Diagnosis and Reference Laboratory (ADDRL) of BAI

Poultry
- includes broilers, culls, day old chicks, gamefowl, native chicken, quails, pigeons, ducks and other domesticated waterfowls, turkeys, hatching eggs and hobby birds

Poultry By-products – include manure, used litter, offal, feathers, mortalities, etc.

Poultry Holding Facilities
- include commercial farms, gamefowl farms, backyard units, hatcheries, meat and egg processing plants, poultry dressing plants and aviaries

Premises- any site with avian population

Quarantine Area

- refers to the area within a minimum one (1) kilometer radius from the Infected Premises; this shall cover all sites with avian population including major markets, processing plants and general service areas.

Rendering

- any process that converts condemned animals and its parts or meat and meat products into products not fit for human consumption by heating

RestPeriod- period from last disinfection to loading or restocking of bird/s

Slaughter- butchering of animal for the purpose of human consumption

Slaughterhouse

- the premises that are approved and registered by the controlling authority in which food animals are slaughtered for human consumption

Stakeholder

- any person or institution who is affected by an issue, and particularly has anything to gain or lose

Suspect Premises

- refers to any site with avian population that have been possibly exposed to an NAI virus, such that quarantine, monitoring and surveillance, but no pre-emptive slaughter, are warranted.

Suspect Products

- shall be the domestic and wild birds and their products, by-products andwastes or any item introduced from an Infected Premises twenty-one (21) days prior to thedeclaration of the premises as Infected.

Value Chain

- groups of people linked by an activity to supply a specific commodity

Water fowls

- according to the Ramsar Convention, these are birds that are ecologically dependent on wetlands

Wild birds

- refer to wild forms and varieties of avian species, in all developmental stages, including those which are being bred or propagated

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2. Philippine College of Poultry Practitioners
3. United Broiler Raisers Association
4. Philippine Egg Board
5. Department of Environment and Natural Resource – Biodiversity Management Bureau
6. Department of Health
7. National Meat Inspection Service
8. Philippine College of Swine Practitioners
9. National Advisory Committee for Animal Disease Control and Emergency
10. Department of Agriculture Regional Field Offices
11. Local Government Units
12. Private Stakeholders

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AVIAN INFLUENZA PROTECTION PROGRAM

STAGE 1

Manual of Procedures

A. PREVENTION PROGRAMS

Section 1. Ban on Importation of all Live Poultry and/or Wild Birds, including Day-old Chicks, Semen, Eggs and Other Poultry Products and By-products from Notifiable Avian Influenza (NAI) Affected Countries or Zones

1.1. The Secretary of the Department of Agriculture (DA), upon the recommendation of the Director of the Bureau of Animal Industry (BAI), shall issue a Memorandum Order (MO) imposing a temporary ban on the importation of all live domestic and wild birds, poultry and/or all poultry products from NAI-affected countries or zones.

In an event of detection of NAI in wild birds, the Secretary of the Department of Environment and Natural Resources (DENR), upon the recommendation of the Director of the Biodiversity Management Bureau (BMB), shall issue a Technical Advisory (TA) imposing a temporary ban on the importation of wild birds and/or its products from the NAI infected country or zones.

1.1.1. DA-BAI shall source information from the World Organisation for Animal Health or Office International des Epizooties (OIE) or from the notification of an NAI-affected country or zone in recommending an MO on any ban on importation.

1.1.2. The National Veterinary Quarantine Services Division (NVQSD) of BAI shall draft the MO to be endorsed by the Director of BAI for the approval of the DA Secretary.

1.2. The DA-BAI will furnish a copy of the said MOtothe listed agencies within three (3) days upon approval by the Secretary of DA. However, an advanced verbal notice can be relayed to all concerned parties upon confirmation that a country or zone is NAI-affected.

- All importers of live poultry and/or poultry products
- Office of the Press Secretary
- Embassies
- Department of Agriculture (DA)
  - National Meat Inspection Service (NMIS)
- Department of Environment and Natural Resources (DENR)
  - Biodiversity Management Bureau (BMB)
- Department of Transportation and Communication (DOTC)
  - Office of the Secretary
  - Air Transportation Office
  - International Airport/Seaport Authorities
  - Philippine Coast Guard
- Department of Finance (DOF)
  - Bureau of Customs
- Department of Interior and Local Government (DILG)
  - Local Government Bureaus
  - Philippine National Police (PNP)
    - PNP Chief
    - Aviations Security Group
    - Maritime Group

- Department of Health (DOH)
  - Office of the Secretary
  - Epidemiology Bureau (EB)
  - Bureau of Quarantine (BoQ)
  - Disease Prevention Control Bureau (DPCB)

1.3. The BAI-NVQSD shall immediately suspend the processing of all import documents for live poultry and/or poultry products and the issuance of a Veterinary Quarantine Clearance (VQC)/Sanitary and Phytosanitary Measures (SPS) Import Clearance from a country or zone declared as NAI affected.

DENR-BMB shall likewise suspend issuance of Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) Import Permits on importation from a country with report of detection of NAI in wild birds. All affected importers shall be advised accordingly.

1.4. Upon declaration that a country is NAI-affected, VQCs/SPS Import Clearances for live poultry and birds and their products/by-products approved prior to the declaration which have not yet been shipped from the country of origin shall be cancelled by the BAI-NVQSD. The concerned importers and exporters shall shoulder the costs of fees and other incidental expenses to be incurred as imposed by the BAI-NVQSD.

1.4.1. Any live poultry and bird and their product/by-product importation in transit prior to declaration by OIE of its source country or transshipment country or zone as NAI-affected shall not be allowed entry into the Philippines.

1.4.2. The DA-BAI shall advise the exporting country or zone of the decision to have cargo entry discontinued and the courses of action to be taken by the Philippines.

1.4.2.1. Live poultry and bird importation will be humanely destroyed upon arrival in the Philippines and buried in a designated area.
1.4.2.2. Poultry and bird product including hatching egg importation will be destroyed and disinfected prior to burying in designated area (see Annex1).
1.4.2.3. Processed poultry product importation will be rendered and buried in designated area (see Annex 1).

Section 2. Prevention Programs in Airports and Seaports

2.1. All international and domestic airports & seaports shall have disinfection mat installations to be placed at the nearest possible point from disembarkation from the plane or vessel.

2.2. The assigned authorities of the DOF-Bureau of Customs and the PNP-Aviation Security Group, when necessary, may inspect luggage of travelers on direct flight from or in-transit through an NAI-affected country or zone.

The discovery of any live poultry and/or poultry products or wild birds and/or their by-products is to be immediately reported to the BAI Veterinary Quarantine Officer (VQO) or DENR Wildlife Enforcement Officer (WEO) and/or the PNP-Aviation Security Group or PNP-Maritime Group for confiscation and proper disposal (see Annex 1).

2.3. The DOF-Bureau of Customs District Collectors, PNP-Aviation Security Group and/or PNP-Maritime Group will immediately turnover all live poultry and/or poultry products or wild birds and/or their by-products, regardless of point of origin, that do not have proper import licenses/permits/documentation or government clearance from the BAI or DENR-BMB to BAI-VQO for proper disposition.

Section 3. Minimum Biosecurity Measures

3.1. Domestic poultry and birds should be kept in confined areas by providing houses and/or fences to limit their movement and contact with other animals.

3.1.1. If different species of poultry or birds are being raised, they should be kept in separate confinements.

3.1.2. Domestic poultry and birds should be separated from swine.

3.1.3. Domestic poultry and birds should be confined in bird-proofed facilities.

3.1.4. Domestic poultry, i.e. waterfowls, should not be permitted to roam or be raised in areas frequented by migratory birds.

3.2. Farm owners should regulate and control movement of humans, animals and farm effects in and out of the farm.

3.2.1. Farm owners should not allow personnel or any visitors who may have been in contact with or may have come to bring items from premises with sick or dead poultryinto the farm.

3.2.2. Farm owners should have means of documenting movement of humans, animals and farm effects in and out of the farm which is readily available for review if needed. The following are the pertinent information that should be documented:

- Name of person
- Time of arrival & departure
- Vehicle plate number (if applicable)
- Last poultry or livestock facility visited & date
- Next poultry or livestock facility to be visited & date
- Purpose of visit
- Description of items brought into/out of the farm and the corresponding source/destination

3.2.3. Farm owners should implement biosecurity control points where cleaning and disinfection may be done (see Annex 2).

3.2.3.1. Vehicle wheel baths or designated vehicle disinfection area should be available.

3.2.3.2. Farms should have a shower room for personnel and/or visitors and a change of clean clothes and foot wear before entering and leaving the farm premises, especially the poultry house. If this is not possible, an area should be provided where personnel and/or visitors can wash their hands and clean and disinfect their footwear.

3.2.3.3. Disinfection/fumigation area for farm effects should be available where items will be disinfected/fumigated before being introduced into or brought out of the farm/poultry house.

3.2.4. Farm owners should ensure that poultry houses and other facilities/premises are secured from unauthorized personnel.

3.2.5. Farm personnel should avoid going in and out of poultry houses and other facilities/premises unless necessary.

3.3. Farm owners should observe minimum quarantine protocols in the farm.

3.3.1. Visit and/or examination or handling of birds/flock should be from the younger birds to the older ones, healthy birds to sick one.

3.3.2. Sick poultry/bird should be separated and isolated from the rest of the flock if medical intervention is to be done.

3.3.3. Dead poultry/bird should be gathered and properly disposed immediately within the farm premise.

3.4. Poultry/birds to be placed in the farm/poultry house should be healthy and should come from reputable sources.

3.4.1. Whenever possible, all-in-all-out system should be implemented in the farm or poultry house.

3.4.2. Strict implementation of the proper cleaning and disinfection procedures of farmhouses and other structures in the farm, as well as appropriate rest period should be observed. The recommended minimum number of days of rest period shall be:

For poultry in an all-in-all-out set-up:	7 days
For game fowls: growing houses:	14 days
adult compartments:	30 days
For adult layers/caged ducks:	14 days

3.4.3. If new stocks will be introduced in the farm, new birds should be placed in a designated quarantine area with significant distance from the present stocks, where they will be kept for a minimum of two (2) weeks for monitoring and evaluation. Once deemed healthy and clear of any disease, the new stocks may be mixed with the old ones.

3.5. Regular cleaning of farm/poultry house and surrounding premises should be done, followed by disinfection if necessary and applicable.

3.6. For live bird markets (LBMs), the following measures will be implemented:

3.6.1. LBMs should have separate areas allowing segregation by type (chicken vs. ducks vs. quail vs. pet birds).

3.6.2. There must be daily cleaning and disinfection of live bird markets and surrounding areas, including the surfaces and cages. Feathers and manure should be disposed of in secure, designated areas.

3.6.3. There must be proper drainage facilities to prevent pooling of wastewater.

3.6.4. Disinfectant and high-pressure washers should be provided at the market's exit for cleaning transport cages and vehicles after poultry stocks are delivered to the market and before the vehicles return to their places of origin.

3.6.5. There must be a market rest day once a week for intensive general cleaning and disinfection.

3.6.6. There must behand-washing facilities with clean water and soap that are physically separated from the areas where the birds are kept or sold.

3.6.7. A logbook of traded poultry should be maintained at every LBM by market management (see Annex3).

Section 4. Surveillance

4.1. Poultry Critical Areas in the Philippines

4.1.1. The DA-BAI shall conduct surveillance of the identified critical areas in terms of introduction of avian influenza virus (AIV) in the Philippines on a bi-annual basis.

4.1.2. The following will be the criteria for critical areas:

A. Presence of water fowls and shore birds (migratory or resident) and any of the following:

A.1. presence of duck grazing areas
A.2 density of local duck population
A.3. density of commercial poultry population

B. Identified hotspots for illegal trade and wildlife.

C. Presence of live bird markets

4.1.3. The surveillance in the critical areas (see Annex 4) shall be done in coordination with the DARFO.

4.1.3.1. The primary target population during the surveillance shall be the ducks and other waterfowls. In cases where there are no significant duck/waterfowl population in the area, native chickens, turkeys and/or backyard gamefowl will be considered for sample collection.

4.1.3.2. For every critical area, six (6) barangays shall be identified for sample collection.Thirty (30) blood samples, 30 oropharyngeal and 30 cloacal swabs shall be collected from target poultry in each of the six (6) identified barangays(see Annex 5).

4.1.3.3. All collected samples shall be tested in the BAI – Veterinary Laboratory Division (VLD) - Animal Disease Diagnostic and Reference Laboratory (ADDRL) or Regional Avian Influenza Laboratories (RAIDLs) of DA-BAI.

4.2. Live Bird Markets (LBMs)

The DA-BAI shall conduct sample collection in identified LBMs in the Philippines to be submitted to BAI-VLD-ADDRL (see Annex 6).

4.2.1. The surveillance in the LBMs shall be done in coordination with the DARFOs and local government units (LGUs).

4.2.2. All species should be included in the sample collection (oropharyngeal and cloacal swabs), including pet birds, focusing on chickens, quails and geese being the priority targets.

4.2.3. Environmental swabs shall also be collected in each identified LBM.

4.2.4. A minimum of 60 samples shall be collected per market (50% from live animals and 50% from the environment)

4.2.5. Collecting routine mortality is strongly recommended at LBMs.

4.3. Laboratory Tests to be Conducted

4.3.1. Samples collected from surveillance of critical areas

4.3.1.1. Serum samples will be screened for antibodies to AIV-A using enzyme-linked immunosorbent assay (ELISA).

4.3.1.2. Positive reactors from the ELISA will be tested using the Hemagglutination-Inhibition (HI) Test using subtypes H5 and H7 antigen. Any positive samples will be further tested with HI using the same antigen subtype (e.g. H5 or H7 or both) but with different N antigens to rule out cross reactions.

4.3.1.3 Cloacal and/or oropharyngeal swabs from flock of reactor samples will be tested with Reverse Transcription Polymerase Chain Reaction (RT-PCR) for Influenza A. Positive samples will be tested further with RT-PCR for H5 and H7. An H7 positive sample will be tested for N9 using RT-PCR.

4.3.1.4. H5, H7 or H7N9 RT-PCR positivesamples will be sent to the AI Reference Laboratory for confirmation and further characterization.

4.3.2. Samples collected from surveillance of LBMs

Environmental swabs, cloacal and/or oropharyngeal swabs will follow procedures stated in 4.2.

4.4. Migratory/Wild Birds

The Biodiversity Management Bureau of the Department of Environment and Natural Resources (BMB-DENR) shall report any occurrence of dead migratory or wild bird/s and shall submit the dead bird sample/s for laboratory testing at the DA-RADDL or BAI-VLD-ADDRL.

Section 5. Enforcement of the Wildlife Act

The DENR shall be responsible for the enforcement of Republic Act (RA) 9147 (Wildlife Resources Conservation and Protection Act). In particular, the DENR through its Regional Offices (ROs) and/or BMB shall:

5.1. Coordinate with the authorities of the LGUs and the PNP-Provincial District Offices and the PNP-City or Municipal Stations for the enforcement of the RA 9147, or the Wildlife Act;

5.2. Suspend and/or disapprove the issuance of any CITES certification for wildlife coming from countries affected by AI virus;

5.3. Suspend any permit to collect migratory birds unless for disease-screening and related research purposes. Any person engaged in trade or in possession of migratory birds in violation hereof shall be penalized in accordance with Section 27 (Illegal Acts) of RA 9147;

5.4. Release public advisory on precautionary measures in dealing with migratory birds, especially from October to February(the peak season of bird migration through the Philippines);

5.5. Continuously monitor the population, destination and species of migratory birds passing through the different areas of the Philippines.

Section 6. Preventive Measures for Persons Working in Avian Facilities

6.1. All workers directly or indirectly involved with handling live poultry should be given the current season's influenza vaccine to reduce the possibility of dual infection with human and influenza viruses.

6.1.1. The DOH shall coordinate with vaccine suppliers on the yearly availability and reasonable cost of the Influenza vaccine for humans, especially for those stated in 6.1.

6.1.2. The yearly vaccination of poultry workers and/or employees with regular or periodic direct contact with poultry shall be at the expense of the employer.

6.1.3. Occupations at risk for exposure to AI:

- Veterinarians and other professionals involved in poultry operations
- Avian facility worker (poultry boys, farm hands, etc.)
- Poultry processing plant worker
- Workers in live animal market (viajero network)
- Transporters of live birds
- Trader, dealer or owner of pet birds
- Health care worker

6.2. The DOH shall ensure the availability of prophylactic medicines for humans in the event of an outbreak of AI in poultry.

6.3. Persons not directly involved in taking care of poultry should avoid contact with chickens, ducks or other live poultry as much as possible. Children, in any instance, should be discouraged from handling live poultry.

For persons in contact with live poultry, ensure that necessary cleaning, washing of hands and, when possible, disinfection with commercial 70% alcohol be done.

6.4. The DOH shall regularly release advisories on proper cooking of poultry meat.

Section 7. Capacity Building Exercises

In order to ensure preparedness and promote awareness of the implementation of the Avian Influenza Preparedness Plan (AIPP), capacity building exercises shall be conducted annually on a national level.

B. ESTABLISHMENT OF NAI-FREE POULTRY PRODUCTION ZONES

Section 1. Definition of Terms:

1.1. A **Zone** shall be a territory that has natural geographic boundaries such as bodies of water, mountain ranges or controllable points of entry. This shall consider the existing administrative divisions or regions organizing the different provinces of the country to facilitate effective movement and quarantine controls.

The **Region** shall be the different DARFOs, except for the NCR which shall be covered by the BAI:

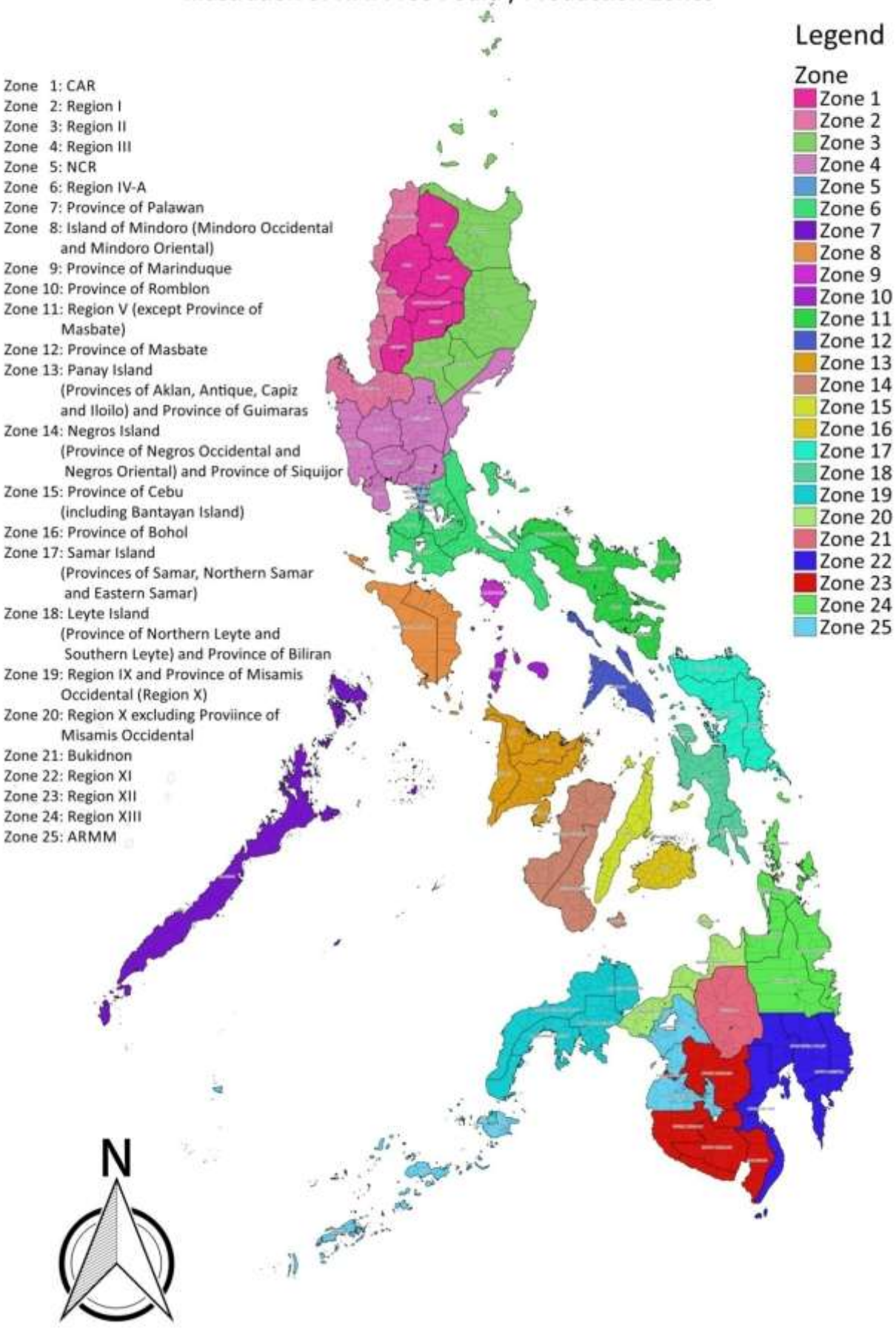
NCR	(National Capital Region)
CAR	(Cordillera Administrative Region)
Region I	(Ilocos Region)
Region II	(CagayanValley)
Region III	(Central Luzon)
Region IV-A	(CALABARZON)
Region IV-B	(MIMAROPA)
Region V	(Bicol Region)
Region VI	(Western Visayas)
Region VII	(Central Visayas)
Region VIII	(Eastern Visayas)
Region IX	(Western Mindanao)
Region X	(Northern Mindanao)
Region XI	(Southern Mindanao)
Region XII	(SOCSARGEN)
Region XIII	(CARAGA)
ARMM	(Autonomous Region of Muslim Mindanao)
NIR	Negros Island Region

1.2. For purposes of the AIPP, a Zone can include island(s) separated from the mainland surrounded by bodies of water and with backyard poultry population only. This can be later categorized as a subzone in an event of a detection of NAI.

The Zones are the following:

Zone 1: CAR
Zone 2: Region I
Zone 3: Region II
Zone 4: Region III
Zone 5: NCR
Zone6: Region IV-A
Zone 7: Palawan
Zone8: Mindoro
Zone 9: Marinduque
Zone 10: Romblon
Zone 11: Region V (except Masbate)
Zone 12: Masbate
Zone 13: Panay Island (Aklan, Capiz, Antique, Iloilo) and Guimaras
Zone 14: Negros Island Region including Siquijor
Zone 15: Cebu including Bantayan Island
Zone 16: Bohol
Zone 17: Samar Island
Zone 18: Leyte Island including Biliran
Zone 19: Region IX with Misamis Occidental
Zone 20: Lanao del Norte and Misamis Oriental
Zone 21: Bukidnon
Zone 22: Region XI
Zone 23: Region XII
Zone 24: Region XIII
Zone 25: ARMM

Illustration of NAI Free Poultry Production Zones



1.3. The following are the objectives/rationale of establishing the Zones:

1.3.1. To recognize defined territories with existing administrative jurisdictions which can prevent the entry or control the spread of NAI;

1.3.2. To facilitate a more efficient surveillance and detection of the disease; and

1.3.3. To ensure availability of distinct and disease free production areas both for export and local markets.

1.4. The LGUs shall implement national policies necessary to ensure successful implementation of surveillance and quarantine measures. This includes documented movement of poultry and poultry products from one zone to another and the regular and prompt reporting of poultry disease occurrence.

Section 2. Disease Surveillance

2.1. Building a Sampling Frame

This includes the list of all farm or poultry owners in a locality, as well as other supporting units/industries that handles poultry and poultry products.

For poultry demographics, all holdings having poultry in each zone should be identified. These shall include:

- List of farm owners, farm location, population density, hatcheries, processing/slaughter houses, aviaries, feed mills;
- Species of the poultry: broiler breeders, layer breeders, layers, broilers, gamefowls, ducks, quails, native chicken, hobby birds;
- Disease profile, biosecurity practices, vaccination programs; and
- Marketing practice: live bird market, fresh chilled or frozen.

2.2. The LGU shall be the front liners in the surveillance of AI. The responsibility shall be with the Provincial, City and Municipal Veterinarians.

The BAI shall be responsible for diagnosis and standards of surveillance. The implementation and funding of related activities shall be shared by the national and local government.

2.2.1. All the concerned staff in the field should have sufficient knowledge about AI and its epidemiological behavior. They should have a working knowledge of the prevention strategies implemented in the zone. They should be able to recognize and take appropriate action in case of suspected breaks.

2.2.2. Households shall be visited by the City/Municipal or Provincial Veterinarian to conduct a census of the number of poultry population within the locality.

2.2.3. The City/Municipal Veterinarian should submit a Negative Monitoring Report to the local and then to the provincial office. Regular reporting by the LGUs or DARFOs to the BAI should be done in order to establish a database for profiling of the poultry sector's health status.

2.2.4. Extensive awareness programs shall be conducted by the DARFOs to emphasize the responsibility of poultry owners to immediately report abnormally high mortalities to local authorities.

2.3. Based on the sampling frame, testing shall be made by RAIDLs or BAI-VLD-ADDRL at least twice a year.

The BAI shall identify the areas to be sampled and the number of samples needed per area. The DARFOs shall be responsible for the collection of samples in the identified areas.

Section 3. Control of Movement between Zones

3.1. The movement of poultry and poultry by-products from one zone to another shall be regulated/controlled. The movement shall be allowed provided that a licensed and deputized veterinarian from the area of origin has issued a health certificate and shipping permits. LGUs should enforce the BAI Memorandum dated July 13, 2004 on the local transport of animals that includes poultry and poultry by-products.

3.2. Strategically located checkpoints shall be set up by the LGUs in highway boundaries and/or in seaports and airports in coordination with BAI-NVQSD. PNP and/or AFP personnel shall assist VQOs in these checkpoints.

C. INFORMATION, EDUCATION AND COMMUNICATION(IEC)/ COMMUNICATION, EDUCATION, PARTICIPATION AND AWARENESS (CEPA)

Section 1. All IEC/CEPA materials will focus on keeping the Philippines NAI free.

Stakeholders should be made aware of the NAI Prevention Program Manual of Procedures (NAIPP Manual) and of safety measures needed to keep the Philippines NAI-free.

Stakeholders including the poultry industry and workers, retail trade, hotels, restaurants and related institutions, market workers and customers, National Government Agencies, LGUs, international health organizations, foreign buyers and tourists, general public, and the media.

Section 2. Various communication media will be used to reach identified stakeholders.

2.1. Identified stakeholders, general message content, communication media to be used, and lead implementing agencies are indicated below.

Stakeholder	Over-all Message	Communication Media
2.1. Poultry Industry and Workers	Bird Flu causes, carriers, symptoms, modes of transmission, preventive measures (Annex7)	Brochures, posters AIPP Manual AI website

2.2. Retail trade, hotels, restaurants, and other institutions	-do-	Print, TV, Radio AI Website Brochures
2.3 Market Workers and Customers	Food preparation and hygiene (Annex 8)	
2.4. National Govt. Agencies	AIPP manual details and responsibilities specific to various govt. agencies as identified in the AIPP(Stage 1)	Orientation Workshop on AIPP and Agency's AI Operations Manual: Trainor's Training 1. Regional 2. Provincial 3. City/Municipal 4. Barangay
2.5. LGUs	AIPP manual details and LGU responsibilities identified in the AIPP(Stage 1)	Orientation Workshop on AIPP: Trainor's Training 1. Regional 2. Provincial 3. City/Municipal 4. Barangay
2.6. Int'l Health Organizations	Preventive measures undertaken by stakeholders	News Bulletins/Updates AI Website
2.7. Foreign Buyers/Tourists	-do-	Print (industry magazines, in flight magazines, press releases) Standees, Posters (airports, seaports) AI Website
2.8.General Public	Bird Flu causes, carriers, symptoms, modes of transmission, preventive measures (Annex 7)	Print, TV, Radio AI Website Brochures Posters: - public markets, cockpits - airports, seaports
2.9. Media (national and local)	Bird Flu causes, carriers, symptoms, modes of transmission, preventive measures (Annex 7) Preventive measures undertaken by stakeholders	News Bulletins / Updates / Press Releases / TV / Print AI Website

D. AI DIAGNOSTIC CAPABILITY

Section 1. All government and private animal disease diagnostic laboratories will comprise the network of diagnostic laboratories involved in the initial screening of Avian Influenza (AI).

The BAI Veterinary Laboratory Division - Animal Disease Diagnostic and Reference Laboratory (VLD-ADDRL) shall be the lead institution in the diagnosis of AI. The BAI-VLD-ADDRL shall conduct the AI confirmatory testing.

1.1. All government and non-government animal disease diagnostic laboratories will be evaluated and accredited to enable them to perform initial screening of AI.

1.2. The six (6) DA Regional AI Diagnostic Laboratories (RAIDLs) shall perform initial AI screening test.

Section 2. The ADDRL AI Laboratory has the capability to handle and manipulate AIV.

The AI Laboratory of BAI-VLD-ADDRL located at the Philippine Animal Health Center (PAHC) building is a Biosafety Level (BSL) II containment laboratory.

2.1. The containment conditions of BSL II allows testing of animal clinical specimens from suspect HPAI by PCR assays using BSL II work practices in a Class II Biological Safety Cabinet (BSC) II, commercial antigen detection testing, and specimen processing for packaging. However, HPAI viruses must be worked with under BSL III laboratory conditions. Manipulations involving growth of the agent should be in a BSL III.

2.2. Equipment and reagents are available at the BAI-VLD-ADDRL to perform the tests for diagnosis, surveillance and monitoring of AI. The capabilities of the BAI-VLD-ADDRL are shown in Table 1.

Table 1. AI Diagnostic Capabilities at ADDRL

Test	Specimen	Detects
Enzyme-Linked Immunosorbent Assay (ELISA)	serum	antibody
Agar Gel Immunodiffusion test (AGID)	serum	antibody
Hemagglutination Inhibition (HI) test	serum	antibody
Real Time Reverse TranscriptionPolymerase Chain Reaction (qRT-PCR): Matrix (AIV-A), H5, H7, N9	swab, tissue	antigen (Southeast Asian H5 subtypes, H7 subtypes viruses (Australian), N9 (China H7N9 strain)
Virus isolation in embryonated eggs	swab, tissue	antigen

Section 3. The AI diagnostic capabilities were established in six DA-RAIDLs.

The capabilities for AI diagnosis of the DA-RAIDLs are shown in Table 2.

Table 2. DA-RAIDL capabilities for AI Diagnosis

Laboratory	Test
Region II (Tuguegarao)	ELISA, AGID, HI
Region III (Pampanga)	ELISA, AGID, HI, Conventional PCR (AIV-A)
Region VII (Cebu)	ELISA, AGID, HI
Region IX (Zamboanga)	ELISA, AGID, HI
Region X (Cagayan de Oro)	ELISA, AGID, HI
Region XII (General Santos)	ELISA, AGID, HI

Section 4. Trainings and Quality Assurance shall be a continuing program for all laboratories in the network.

4.1. Trainings shall be conducted both at VLD and regional laboratories.

4.1.1. Other laboratories in the network may request for specific trainings. Venues may be the requesting laboratories.

4.1.2. Scope of training shall include the following:

a. Samplecollection, preservation and transport
b. Post-mortem examination/differential diagnosis of AI
c. Rapid AI antigen detection
d. Hemagglutination/Hemagglutination-Inhibition
e. Enzyme Immunoassay
f. Virus Isolation

4.2. Quality Assurance for all laboratories shall be encouraged and shall be pursued as a routine program.

4.3. Test for competency shall be performed regularly to increase confidence of member laboratories/diagnostician.

E. PREPAREDNESS FROM THE NATIONAL TO THE LOCAL LEVEL

Section 1. The National Avian Influenza Task Force (NAITF)

1.1. Initially, Executive Order No. 280 dated February 5, 2004 (Annex 9) has identified the DOH as Crisis Manager in the event of a NAI outbreak, and the DA as Co-Crisis Manager.

1.2. DA and DOH Joint Administrative Order No. 1 dated April 20, 2005 (Annex 10) states the adoption of the AIPP and the establishment of the National Avian Influenza Task Force (NAITF).

1.3. The following shall be the functions of the Task Force:

1.3.1. To regularly review and update the AIPPand manage its effective implementation.

1.3.2. To organize the AI Task Force at the regional level and secure their cooperation in the implementation of AIPP. Their capabilities shall be developed and their roles and responsibilities shall be defined in the event of an outbreak.

1.3.3. To provide additional necessary materials (reagents, PPEs, disinfectants, etc.) and support from Stage 1 to Stage 4 of the AIPP.

1.3.4. To establish linkages with the stakeholders both domestic and international to gather support for the success of the plan.

1.3.5. To undertake information and education campaign activities to draw up support for the effective implementation of the plan.

1.3.6. To initiate enactment of laws and ordinances pertaining to AI prevention at the National Level and bring it down to the regional/provincial/city/municipal levels.

1.3.7. To perform and undertake other functions as maybe necessary in the effective and efficient implementation of the AIPP.

1.4. Organizational structure of the NAITF (see Annex 10)

Section 2. The Regional AI Task Forces to Complement the National AI Task Force at the Regional Level

2.1. The Regional Task Force shall be composed of the government and private sectors, and other stakeholders. The Regional Executive Directors (REDs) shall be the over-all coordinator and the Regional AI Coordinator shall be the co-coordinator. The members of the team shall include but not limited to the provincial, city and the municipal veterinarians.

2.2. The Regional AI Task Force (RAITF) shall have the following components:

a. Surveillance Team
b. Laboratory Diagnosis Team
c. Public Information Team
d. Database/ GIS Team
e. Animal Movement Control Team
f. Vaccination Team

2.3. The Regional AI Task Force shall have the following functions:

2.3.1. To carry out the proper implementation of the AIPP at the regional and zonal levels.

2.3.2. To assist and provide resources and response capabilities necessary to effectively deal with the outbreak.

2.3.3. To ensure that quarantine measures are properly in place during outbreak.

2.3.4. To conduct initial investigation in the event of an emergency disease situation.

2.3.5. To conduct seminars on AI awareness, prevention and preparedness and what to do during outbreak.

2.3.6. To request RADDL or ADDRLto make the diagnosis as soon as possible in suspect cases.

2.3.7. To coordinate and cooperate with the AI National Task Force in the emergency response to the fullest extent possible.

2.3.8. To identify priority areas which are at risk based on the laboratory results of the samples collected by the Surveillance Team.

2.3.9. To accomplish Epidemiological Surveillance Forms and send to BAI Database / GIS Team.

2.3.10. To enhance biosecurity practices in all levels of poultry production and processing industry.

2.3.11. To impose immediate closure of farm which is confirmed to be infectedwithNAI virus.

2.3.12. To recruit, select and train volunteer vaccinators, just in case of a decision to conduct vaccination.

2.4. Organizational Structure of the RAITF (see Annex 11)

Section 3. Preparation of National Avian Influenza Preparedness and Response Plan by the Local Government Units (LGUs)

3.1. Organizational Structure of LGU AI Task Forces (see Annex 11)

3.2. All LGUs, in coordination with the Office of the Veterinarian and/or Agriculturist, shall prepare a National Avian Influenza Preparedness and Response Plan (NAIRPP). The plan shall consist of four (4) stages to support the national government's plan.

3.2.1. Stage 1. Avian Influenza-Free Philippines

3.2.1.1. Strategies or activities at the local level will include but shall not be limited to the following:

- Support to DA such as purchase of necessary materials (sample collection materials, disinfectants, PPEs, etc.)
- Monitoring of domestic fowl
- Monitoring of LBMs/congregation points
- Mobilization of Veterinarians/Agriculturists

3.1.1.2. Details of responsibilities can be found in DILG Memorandum Circular No. 2004-37 dated March 30, 2004 (Annex 12) with the subject LGU Support for the Prevention and Control of Avian Influenza or Bird Flu.

3.1.2. Stage 2: Avian Influenza in Domestic Fowl

3.1.2.1. Support to DA

- Stamping out all fowls within the Infected Premises and Quarantine Area
- Vaccination of fowls within the Control Area
- Prohibition of sale of poultry within the Control Area
- Continuing quarantine activities
- Surveillance of Al in poultry in the Control Area
- Cleaning and disinfection of the Infected Premises and Quarantine Area
- Temporary market closure in the affected area
- Liaison with PNP over the maintenance of disease control restrictions

3.1.2.2. Support to DOH

- Surveillance of AI in humans

3.1.3. Stage 3: Avian Influenza in Humans

3.1.3.1. Support to DA

- Similar to 3.1.2.1.

3.1.3.2. Support to DOH

- Surveillance of AI in humans
- Clinical management of human cases

3.1.4. Stage 4: Avian Influenza Outbreaks in Poultry and in Humans

3.1.4.1. Support to DOH

- Quarantine of infected persons
- Clinical management of human cases

3.2. Other activities to be undertaken by the LGUs as part of their NAIPRP (Notifiable Avian Influenza Preparedness and Response Plan):

3.2.1. Enactment of a Local Ordinance on the Avian Influenza

3.2.1.1. In order to sustain local efforts on the prevention, control or regulation on the entry of the avian influenza or bird flu, all local government units shall enact an ordinance incorporating among others the appropriate measures/strategies which the concerned local government unit deemed necessary. Such measures may include but not limited to the following:

a. Prohibitions
b. Reporting
c. Enforcement of biosecurity measures in LBMs

3.2.1.2. The local ordinance shall provide foremost basic information on bird flu: its causes; its transmission in chickens and other birds and fowls and in humans; and its signs or symptoms in chicken and in human.

3.3. Communication, Education, Participation and Awareness (CEPA)

In coordination with concerned agencies, the private sector and non-government organizations, all LGUs shall conduct province-wide information campaign on avian influenza prevention, containment and control through local media (radio, television, and publications) and public/community assemblies.

3.4. Mobilization of Barangay Health Emergency Response Teams (BHERTs)

To maximize efforts on the grassroots level, the organized BHERTs, pursuant to DILG Memorandum Circular No. 2003-95 dated May 7, 2003 shall be mobilized to provide assistance to LGUs in the implementation of their Avian Influenza Preparedness and Response Plan.

AVIAN INFLUENZA PROTECTION PROGRAM

STAGE 2

MANUAL OF PROCEDURES

AVIAN INFLUENZA PROTECTION PROGRAM - STAGE 2
MANUAL OF PROCEDURES

A. SUSPECT PREMISES

Section 1. Identification of Suspect Premises

Premises shall be considered as Suspect Premises upon observation of the following:

1.1. For commercial poultry operations:
- Occurrence of a one (1) day mortality of 3% (on the basis of the house population) followed by a two-fold increasing trend for the next three (3) days with no evident cause attributable to management, nutritional or environmental factors.

1.2. For backyard poultry raisers:
- Any unexplained mortality of poultry in two (2) or more households within a Barangay/Purok in a span of two days.

1.3. For caged birds, aviaries and wild birds
- Any unexplained mortality with no evident cause attributable to nutritional, management or environmental factors or human intervention.

1.4. For facilities with serologically positive birds:
- Healthy birds subjected to serological tests as requirement for transport and/or active surveillance and yielded positive results (H5 or H7).

Section 2. Reporting and Diagnosis of Suspect Premises

2.1. The veterinarian in-charge of the suspected commercial poultry farm shall initiate and complete, within 24 hours from reporting by the field personnel, the diagnostic procedures as follows:

2.1.1. For farms with diagnostic laboratory capabilities, the veterinarian may opt to initially conduct an in-farm testing of a minimum of 30 tracheal/oropharyngeal swabs collected from poultry that recently died or from poultry showing any clinical signs, using a rapid test for Influenza A virus.

The veterinarian will submit 30 blood and tracheal/oropharyngeal (OP) samples (15 from apparently healthy and 15 from sick birds) to the Animal Disease Diagnostic and Reference Laboratory (ADDRL) of the Veterinary Laboratory Division (VLD) of Department of Agriculture (DA) – Bureau of Animal Industry (BAI) or Regional Avian Influenza Laboratories (RAIDLs) of identified DA Regional Field Offices (DARFOs) (see Annex 5).

The samples should also be subjected to differential laboratory diagnosis for Newcastle Disease (ND), Infectious Bronchitis (IB), Infectious Laryngotracheitis (ILT) and Fowl Cholera, among others.

2.1.2. For farms with no diagnostic laboratory capabilities, the veterinarian shall collect 30 tracheal swabs to be submitted to the BAI-VLD-ADDRL for Reverse Transcription Polymerase Chain Reaction (RT-PCR) testing within 24 hours from

reporting for BAI confirmation. All pertinent information and/or flock history should be provided as indicated in Annex 13.

2.1.3. For farms without a veterinarian, the farm owner/manager shall report within 24 hours to the nearest barangay official and/or City/Municipal/Provincial Veterinarian or Agricultural Officer about the occurrence of unexplained mortality in order to initiate disease investigation procedures.

2.2. Backyard poultry raisers or owners of caged birds, aviaries and wild birds shall report within 24 hours to the nearest barangay official, City/Municipal/Provincial Veterinarian or Agricultural Officer about the occurrence of unexplained mortality in order to initiate disease investigation procedures.

The City/Municipal/Provincial Veterinarian shall report all pertinent history and initial disease investigation findings to the BAI Animal Health and Welfare Division (AHWD) and DARFO or Department of Environment and Natural Resources Field Office (DENRFO) concerned.

2.3. Detection of serologically positive (H5 or H7) birds tested in any of the Avian Influenza (AI) laboratories as requirement for transport and/or active surveillance shall be reported to BAI-AHWD. Corresponding samples for confirmatory testing shall be forwarded to the BAI-VLD-ADDRL. BAI-VLD-ADDRL shall provide the BAI-AHWD with the results of the confirmatory tests for appropriate action.

2.4. After receipt of initial report, an Investigating Team will be formed to conduct an investigation within 24 hours and shall be composed of the following:

- City/Municipal/Provincial Veterinarian or Agriculturist;
- Technical Staff of the Regional Animal Disease Diagnostic Laboratory (RADDL) of the Integrated Laboratory Division (ILD) of DARFO concerned; and
- DENR local officers (if case involves wild birds)

2.4.1. The Investigating Team shall be accompanied by the following, who shall remain outside the Suspect Premises while maintaining order and controlling human movement:

- Barangay Representative; or
- Local Philippine National Police (PNP)

2.4.2. The Investigating Team shall use personnel protective equipment (PPE) (refer to Annex 14).

The items for implementing intensified biosecurity measures and for disease investigation are enumerated in Annex 15.

2.4.3. The Investigating Team shall submit blood and/or tracheal/oropharyngeal samples or samples of dead poultry collected immediately to RADDL or BAI-VLD-ADDRL following procedures stated in the Annex 5.

2.4.4. The Investigating Team shall submit a written report to the BAI Director within 24 hours.

Section 3. Movement Control in Suspect Premises

3.1. All farm personnel or any person from Suspect Premises, including the Investigating Team, shall be instructed by local authorities to remain in the premises for the next 24-72 hours while awaiting laboratory results and further instructions.

3.2. Movement of poultry, poultry products, equipment, supplies, feeds, manure, etc. out of the Suspect Premises is strictly prohibited and shall be imposed by the veterinarian in authority. Additional assistance from the Philippine National Police (PNP) and local chief executives (LCEs) shall be sought in case there is a need to enforce regulations.

3.3. All dead birds must be properly disposed within the boundaries of the Suspect Premises (Annex 16).

Section 4. Other Biosecurity Measures in the Suspect Premises

4.1. All stray animals (e.g. dogs, cats, large animals, and other poultry species) within the Suspect Premises shall either be put on a leash or caged to prevent these from roaming out of the Suspect Premises.

4.2. An intensified rodent control program shall immediately be implemented in Suspect Premises by installing rodent bait stations in and around strategic locations within the Suspect Premises. The bait stations shall be regularly monitored for replenishment of the bait and/or collection of captured rodents for proper disposal.

4.3. The veterinarian shall implement the spraying of a virucidal agent inside and outside poultry houses or around the Suspect Premises for at least five (5) times a day.

4.4. The veterinarian shall implement spraying of larvicide and insecticide (attractant type) within the Suspect Premises, to be repeated as necessary.

B. INFECTED PREMISES

Section 1. Reclassification of Suspect to Highly Pathogenic Avian Influenza (HPAI) Infected Premises

1.1. The Suspect Premises shall be reclassified into HPAI Infected Premises when RT-PCR tests in BAI-VLD-ADDRL are positive for H5 or H7.

1.2. All positive reactors in RT-PCR will be subjected to gene sequencing in the reference laboratory to determine its pathogenicity.

1.3. The BAI-AHWD shall submit a formal case report to the BAI Director recommending the reclassification of Suspect Premises to HPAI Infected Premises.

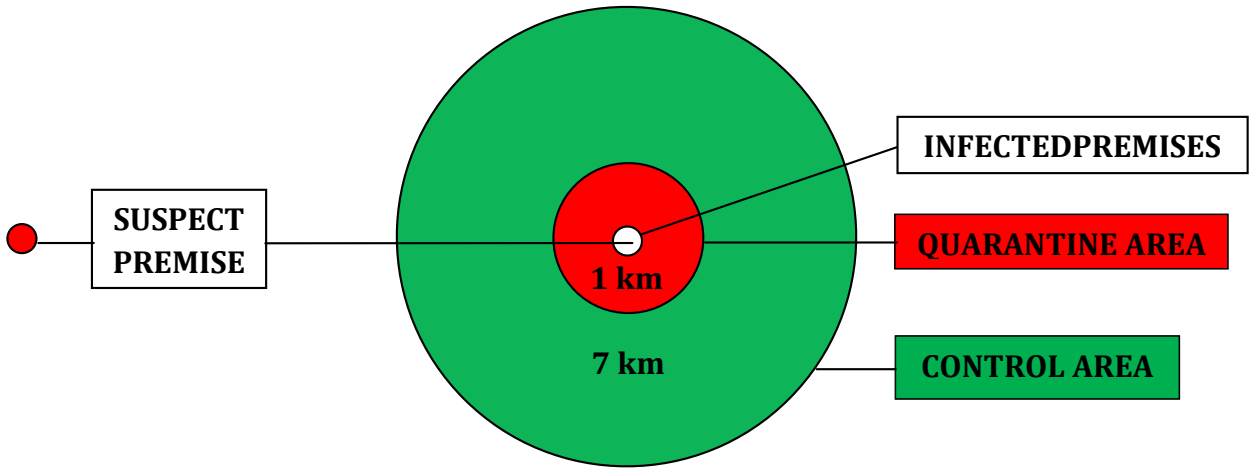
1.4. The BAI Director will inform the DA Secretary and coordinate with the DARFO, DENR, Department of Health (DOH) and local government unit (LGU) concerned before the formal declaration of the area as HPAI Infected Premises.

1.5. The LGU shall acknowledge the declaration through a local ordinance stating the activities to be carried out in an Infected Premises and the responsibilities of the different government agencies.

Section 2. Declaration of Quarantine Area

Upon declaration of the HPAI Infected Premises, the DARFO, in coordination with the BAI and LGU, shall declare a minimum of 1-km radius from the Infected Premises to be the Quarantine Area. This shall be contained in the local ordinance stated in Section B.1.5.

Illustration of Premises and Areas



Section 3: Activities in the HPAI Infected Premises and Quarantine Area

3.1. Stamping out of all poultry shall be implemented in the HPAI Infected Premises. All other susceptible poultry and birds in captivity in the Quarantine Area shall be euthanized at the shortest possible time.

3.2. The above activities shall be implemented by the following personnel:

- DA and BAI representatives
- LGU Representatives
- Official Veterinarian (LGU and Farm Veterinarian)
- Farm personnel
- Military personnel
- Excavator operator
- PNP Personnel

3.3. Human health monitoring and movement will be the responsibility of the DOH.

3.3.1. Persons in contact with live poultry should also be closely monitored for illness during and after responding to outbreaks of Notifiable Avian Influenza (NAI) among poultry jointly by the DOH Epidemiology Bureau (EB), Regional Epidemiology and Surveillance Unit (RESU) of the concerned DOH Regional Office (RO) and local health authorities.

3.3.2. Biosecurity and infection prevention and control protocols will be strictly implemented.

3.3.3. Use of PPE will be recommended for identified person.

3.3.4. Immediate transport and referral to the nearest DOH referral hospital or health facility of symptomatic and/or laboratory confirmed cases will be undertaken.

3.3.5. Provision of antiviral agents to exposed persons will be implemented.

3.4. The safety of all personnel involved in the stamping out activity is of utmost importance, thus the following should be observed:

3.4.1. Every person involved in the destruction of the birds shall wear protective gear such as cover-all, mask, headgear, rubber boots and waterproof gloves. Farm owners shall be required to secure the necessary protective gears for their farm personnel. Specifically, the following protective gears must be used:

- Protective clothing, preferably coveralls plus an impermeable apron or surgical gowns with long cuffed sleeves plus an impermeable apron
- Heavy duty rubber work gloves that may be disinfected
- N95 masks
- Safety Goggles
- Rubber or polyurethane boots that can be disinfected or protective foot covers that can be discarded

3.4.2. All persons who have been in close contact with the infected animals shall wash their hands frequently with soap and water. This shall be followed by hand disinfection with a 70% alcohol or iodine based hand wash.

3.4.3. All persons exposed to poultry in the Infected Premises and in the Quarantine Area shall be under close monitoring by local health authorities.

3.4.4. The local health authorities shall prescribe the use of prophylactic medication for all persons involved in the stamping out activity in Infected Premises and Quarantine Area.

3.5. Methods and procedures by which poultry or birds will be euthanized in the conduct of the stamping out activity are enumerated in Annex16.

3.6. When applicable, poultry houses during the stamping out procedure should be closed down to prevent the airborne spread of the virus and to minimize entry of free flying birds that can come in contact with the infected birds and spread the infection mechanically.

3.7. Carcasses should be placed in heavy duty sealed plastic bags before bringing these to the nearest designated burial site.

Section 4. Disposal of Euthanized Poultry or birds and of Other Products

4.1. All poultry products and materials associated with euthanized poultry or birds in the Infected Premises and Quarantine Area shall be included in the disposal. This shall include rice hulls, eggs, manure, feeds, etc.

4.2. Surface of containers with carcasses and other contaminated materials shall be disinfected prior to disposal.

4.3. Methods and procedures for the disposal of poultry products and materials associated with euthanized poultry or birds are enumerated in Annex16.

Section 5. Movement Restriction in the Quarantine Area

5.1. Humans

5.1.1. The DOH, through the local health authorities, shall release information material stating all the necessary guidelines on human movement limitations & restrictions.

5.1.2. Farm personnel or any person not showing signs and symptoms of any disease coming from the Infected Premises shall be subject to quarantine in the designated temporary quarters for ten (10) days from the last day of stay in the Infected Premises.

5.1.3. All entry and exit of persons shall be closely monitored and recorded by the PNP/Barangay Health Emergency Response Teams (BHERTs).

5.1.4. The local health authorities, assisted by and in coordination with DOH-RO-RESU and DOH-EB, shall conduct daily monitoring for fever and/or respiratory signs among people who were in close contact with poultry from the Infected Premises. Appropriate assistance and quarantine procedures will be applied as needed based on the assessment of the Municipal or City Health Officer.

Anti-viral drugs should be given within the first two (2) days of exposure to persons in close contact with poultry within the Quarantine Area.

5.1.5. Movement of persons from Quarantine Area to the Infected Premises shall be restricted and will be allowed only upon approval of local health authorities, in coordination with DOH.

5.1.6. Movement of persons from the Quarantine Area to the Control Area shall be allowed, but these persons should comply with a policy prohibiting visit to any poultry holding facility. This shall be stipulated in the local ordinance stated in Section B.1.5.

5.1.7. Persons involved in a stamping out activity, however, shall be restricted and allowed movement only after ten (10) days from the last day of the stamping out activity which shall be monitored by the local health authority in coordination with the DOH.

5.1.8. Transport and referral of symptomatic and/or laboratory confirmed human cases to the nearest DOH referral hospital or health facility will be immediately implemented.

5.2. Poultry and Poultry Products

5.2.1. Movement of any live poultry or bird, poultry products or poultry by-products from the Infected Premises and Quarantine Area is strictly prohibited.

5.2.2. Checkpoints manned by local PNP along thoroughfares in the periphery of Quarantine Area should be in place to ensure compliance with Section B 5.1.7.

5.2.3. Meat from poultry coming from the Infected Premises and the Quarantine Area should not, in any instance, be used as human food nor as feed for other animal population.

5.3. Live Swine

5.3.1. Movement of live swine will be prohibited in and out of the Quarantine Area until it is cleared and reclassified as Disease Free Area.

5.3.2. Nasal/oropharyngeal swab sample collection in pigs will be done in the Quarantine Area for PCR testing for H5 and H7 in BAI-VLD-ADDRL upon the recommendation of the Investigating Team.

If negative, pigs maybe slaughtered for human consumption but only within the quarantine area.If there is any positive reactor, all pigs must be condemned and disposed of humanely.

5.3.3. Mandatory vaccination for Swine Influenza within the Quarantine Area will be enforced immediately after testing negative in the laboratory.

5.4. Movement of other animal species aside from poultry and swine shall be regulated in Quarantine Area and shall be under the authority of DA-BAI.

C. CONTROL AREA

Section 1. Identification of Control Area

Upon declaration of Infected Premises, the BAI Director shall identify a seven (7) kilometer zone radius from the periphery of the boundary of the Quarantine Area as Control Area, which may be extended as deemed necessary. The BAI Director shall also advise the DILG to direct the local chief executives concerned to enforce mandatory quarantine measures.

Section 2. Surveillance of Avian Species

2.1. Representative avian population shall be subjected to a rapid field test procedure for the detection of Influenza A by the BAI or DARFO during the stamping out activity in the Infected and Quarantine Area. Tracheal/oropharyngeal swabs will also be collected and submitted to BAI-ADDRL for RT-PCR testing.

2.2. The DA-BAI shall intensify the information campaign for all poultry raisers and other concerned stakeholders to monitor poultry/birds for any qualifying indication of Suspect Premises.

2.3. Observation of clinical signs suggestive of avian influenza in any avian population such as respiratory and nervous signs and high mortalities should be immediately reported to the City/Municipal/Provincial Veterinarian/Agriculturist so that immediate evaluation of avian health status can be done.

Section 3. Monitoring of Other Susceptible Animals

3.1. City/Municipal/Provincial Veterinarian/Agriculturist shall monitor other susceptible animals within the Control Area for any sign of respiratory disease.

3.2. Animals with respiratory signs shall be subjected to a rapid field test procedure for the detection of Influenza A by the BAI or DARFO. Tracheal/oropharyngeal swabs will also be collected and submitted to BAI-ADDRL for RT-PCR testing.

3.3. Positive reactors will be destroyed.

Section 4. Movement Limitations & Restrictions in Control Area

4.1. Poultry/Birds & poultry products

4.1.1. Any activity involving the gathering of any poultry/bird species in the Control Area shall be prohibited during the period of stamping out and restocking of the Infected Premises and Quarantine Area. This shall include cockfighting, sale of live birds in public market or in any road network, trade fair or show of poultry, etc.

4.1.2. Movement of poultry and poultry products out of the Control Area shall be prohibited after the completion of stamping out and restocking activities until such time that the outbreak is declared cleared.

4.1.3. If no new case is reported after a 21-day period, movement will be allowed provided shipment is accompanied by a Veterinary Health Certificate and Shipping Permit issued by BAI.

4.1.4. Movement of live poultry/birds from a Disease Free Zone via major thoroughfare(s) through the Control Area shall be allowed provided that:

- These are accompanied by a Veterinary Health Certificate, Shipping Permit and other pertinent documents.
- The final destination shall be to a Disease Free Area.

4.2. Live Swine

A Certificate of PCR-Negative Results for Influenza A, Veterinary Health Certificate and Shipping Permit issued by BAI should accompany movement of live swine from the Control Area.

4.3. Humans

4.3.1 Movement of humans from the Control Area shall be allowed subject to the monitoring of local health authorities and the DOH.

4.3.2. All potential human cases with respiratory symptoms for possible testing in Control Area will be reported to and evaluated by DOH; any laboratory confirmed human case shall be referred and managed accordingly.

4.3.3. Updates will be provided to the community in the Control Area regarding the status of the adjacent Quarantine Area.

Section 5. Poultry Vaccination as Last Resort

5.1. Vaccination shall be considered as an option in case stamping out is not successful or cannot be implemented for whatever reason (e.g. successive infections).

5.2. Vaccination, if resorted to, shall be done in accordance with OIE and FAO recommendations.

5.3. Vaccines to be used shall be manufactured according to OIE standards for AI vaccines.

5.4. The BAI Animal Feeds, Veterinary Drugs and Biologics Control Division (AFVDBCD) shall continuously evaluate possible candidate vaccines available in the international market that may be used.

5.4.1. A DIVA (Differentiating Infected from Vaccinated Animals) strategy shall be a qualifier in the evaluation of candidate vaccine.

5.4.2. Vaccine/Antigen Bank, if available, may be considered as vaccine source.

D. Tracing of Suspect Products

Section 1. Identification and Tracing of Suspect Products

1.1. The following shall be considered as potential facilities with Suspect Products:

- Hatchery
- Poultry farms (including gamefowl farms, racing pigeons)
- Processing Plants
- Poultry and poultry product retail outlets
- Live bird markets (including pet shops)
- Aviaries
- Egg depots
- Cold storage facilities

These facilities shall be those that received products and by-products (e.g. eggs, day old chicks, live birds and poultry meat) and related equipment and farm implements from Infected Premises 21 days prior to declaration of being infected.

1.2. All live avian species and its products stated in Section 1.1 which have been in the area 21 days before said premises were declared infected shall be located, identified and disposed of properly.

1.3. Equipment and other farm implements must be properly and thoroughly cleaned and disinfected.

E. Recovery & Repopulation

Section 1. Cleaning

1.1. The surfaces of the interior and the exterior of the poultry house, cage and/or teepee shall be thoroughly washed with water and detergent.

1.2. Manual scrubbing of all surfaces shall be done to effectively remove any remaining manure or dirt adhering to these surfaces.

1.3. The order of the washing shall be roof first, followed by the wall, and then the floor. This shall be implemented in all houses or confinements.

1.4. The washing of any poultry equipment shall be done within the area where the poultry was housed.

1.5. All other structures in the Infected Premises shall be adequately cleaned.

1.6. An authorized veterinarian shall assess the adequacy of cleaning prior to the start of disinfection activity.

Section 2. Disinfection

2.1. The order of disinfection of any poultry structure shall be roof first, followed by the wall, and then the floor.

2.2. For backyard poultry, use of a knapsack sprayer for spraying the surroundings with an approved disinfectant can be done.

2.3. Only approved disinfectants and dilution shall be used. All surfaces shall be thoroughly soaked with the disinfectant solution (see Annex 2).

2.4. Caustic soda shall be applied liberally on the surface of the burial site.

2.5. Aerial spraying with a virucidal disinfectant shall be done after disinfection of all surfaces.

2.6. Other structures in the Infected Premises and Quarantine Area that cannot be subjected to disinfection similar to that of a poultry structure shall be disinfected.

2.7. A final disinfection of the poultry housing structure shall be done 14 days after the first disinfection. Formalin-based disinfectant is highly recommended for the Infected Premises.

Section 3. Restocking with Sentinel Poultry

3.1. There shall be a rest period of 21 days prior to restocking with sentinel poultry.

3.2. Restocking of sentinel poultry at two percent (2%) of the house population(for commercial poultry operation) or 30 heads (for backyard poultry operation) shall be done in the Infected Premises and in selected locations within the Quarantine Area.

3.3. Broiler chicks shall be used as sentinel birds.

3.4. The poultry shall be given the basic vaccination program for IBD, IB and ND.

3.5. The sentinel poultry shall be grown to a minimum period of 35 days.

3.5.1. Observe sentinel animals for clinical signs daily.

3.5.2. Thirty (30) oropharyngeal or tracheal swab samples from the same set of poultry shall be taken on days 1, 7, 14, 21 and 28. On day 35, thirty (30) representative sentinel animals shall be sacrificed for necropsy and organ sampling for testing. For backyard farms, minimum of ten (10) birds shall be sampled.

3.5.3. These samples shall be tested using RT-PCR for H5 or H7.

3.6. Any incidence of unusual high mortality shall be monitored daily and reported to BAI-AHWD.

3.7. In the event that signs are indicative of a potential repeat of infection in the Infected Premises, the growing of the sentinel birds shall be immediately terminated. The same procedure as in the Stamping Out activity shall be implemented.

3.8. Upon completion of the 35-day period and confirmation by BAI-VLD-ADDRL of the absence of the NAI virus, the premises shall be subjected to cleaning and disinfection (Section E.1 and E.2) in preparation for repopulation.

Section 4. Declaration of a Disease Free Area

4.1. The Director of BAI shall declare an Infected Area as a Disease Free Area when no indication of infection is detected in the sentinel population.

4.2. The declaration shall be based on RT-PCR test results from BAI-VLD-ADDRL.

Section 5. Repopulation

Repopulation of the previously Infected Premises shall be carried out upon approval by DA-BAI based on results of growing the sentinel poultry.

F. GUIDELINES FOR NOTIFIABLE AVIAN INFLUENZA (H5 and H7 LPAI)

This guideline shall apply to situations wherein the reference laboratory has determined that the isolate is of low pathogenicity.

1. Birds in the Infected Premises will be stamped out within 24 hours upon declaration.

2. Animal movement restriction and intensified surveillance will be conducted in the one (1) kilometer radius Quarantine Area.

3. Intensified surveillance will be conducted in a minimum 1-km radius Control Area.

4. All other applicable activities for reclassification from infected to disease free area must be followed as determined by BAI.

G. INFORMATION, EDUCATION AND COMMUNICATION (IEC)/ COMMUNICATION, EDUCATION, PREPARATION AND AWARENESS

Section 1. All communication efforts will focus on information management, prevention/containment of NAI spread to other areas, and ensuring public safety.

Stakeholders shall be made aware of the AI Prevention and Response Plan (AI PRP) and of containment measures to limit the spread of AI.

1.1. Stakeholders include the poultry industry, poultry workers in affected areas, residents in outbreak areas, retail trade, hotels, restaurants and related institutions, national government agencies, LGUs, international health organizations, foreign buyers and tourists, general public, and the media.

1.2. Prudence should be exercised at all times in managing and releasing information to minimize adverse effects/reactions to the outbreak.

Section 2. Various communication media will be used to reach identified stakeholders.

Identified stakeholders, general message content, communication media to be used, and lead implementing agencies are indicated below:

2.1. Poultry Industry (growers/owners of broilers, culls, day old chicks, pullets, gamefowls, native chicken, ducks, hatching eggs, hobby birds)

2.1.1. Overall message content of materials developed for the poultry industry will focus on coverage or boundaries of Suspect and Infected Premises and movement limitations/restrictions in Suspect Premises, Quarantine Areas, and Control Areas.

2.1.2. Communication Media and Lead agencies are as follows:

Communication Media	Lead Agency
Brochures, Posters	BAI, Veterinary Drug company sponsors
News Bulletins/ Updates/ Press Releases/ TV / Print	BAI
AI Website	Private sector
Zone boundary signages	LGUs

2.2. Poultry workers in affected areas / Residents in outbreak areas

2.2.1. Overall message content of materials developed for poultry workers and residents in affected areas will focus on information given to the poultry industry and AIPP manual details on Stage 2 Manual of Procedures.

2.2.2. Communication Media and Lead agencies are as follows:

Communication Media	Lead Agency
Brochures, Posters	BAI, Veterinary Drug company sponsors
News Bulletins/Updates/ Press Releases/ TV / Print	BAI
Zone boundary signages	LGUs

2.3. Retail trade, hotels, restaurants, and other institutions

2.3.1. Overall message content of materials developed for the retail trade, hotels, restaurants, and other institutions will focus on identified Infected Premises, measures undertaken to control infection, test results, and safe alternative poultry sources.

2.3.2. Communication media and Lead agencies are as follows:

Communication Media	Lead Agency
Print, TV, Radio	DA, DOH
AI Website	Private sector

2.4. National Government Agencies (DA, DOH, PNP, NSC, DENR, PAWB, DOF, DILG, DOTC)

2.4.1. Overall message content of materials developed for national government agencies will focus on AIPP manual details and responsibilities specific to various government agencies as identified in the AIPP Stage 2 Manual of Procedures.

2.4.2. Communication Media and Lead agencies are as follows:

Communication Media	Lead Agency
Orientation Workshop on Agency's AI Operations Manual: Trainor's Training (focusing on Stage 2 material) 1. Regional 2. Provincial 3. City/Municipal 4. Barangay	 National Agency Office Regional Agency Offices Provincial Agency Offices City / Municipal Agency Offices

2.5. Local Government Units

2.5.1. Overall message content of materials developed for LGUs will focus on AIPP manual details and LGU responsibilities identified in the AIPP Stage 2 Manual of Procedures.

2.5.2. Communication Media and Lead agencies are as follows:

Communication Media	Lead Agency
Orientation Workshop on Agency's AI Operations Manual: Trainor's Training (focusing on Stage 2 material) 1. Regional 2. Provincial 3. City/Municipal 4. Barangay	 National Agency Office Regional Agency Offices Provincial Agency Offices City / Municipal Agency Offices

2.6. International health (human and animal) organizations, foreign buyers, tourists, and media (national and local)

2.6.1. Overall message content of materials developed for international health organizations will focus on identified Infected Premises, measures undertaken to control infection, and test results.

2.6.2. Communication Media and Lead agencies are as follows:

Communication Media	Lead Agency
News Bulletins/Updates/Press Releases	BAI
AI Website	Private sector

2.7. General Public

2.7.1. Overall message content of materials developed for the general public will focus on identified Infected Premises, measures undertaken to control infection, test results, and safe alternative poultry sources.

2.7.2. Communication Media and Lead agencies are as follows:

Communication Media	Lead Agency
Print, TV, Radio	DA, DOH
AI Website	Private sector
Brochures	BAI, Veterinary Drug company sponsors
Posters 1. Public Markets, Cockpits 2. Airports, Seaports	 BAI Veterinary Drug company sponsors

AVIAN INFLUENZA PROTECTION PROGRAM

FOR H7N9

MANUAL OF PROCEDURES

AVIAN INFLUENZA PROTECTION PROGRAM FOR H7N9
MANUAL OF PROCEDURES

SCENARIO I: Avian Influenza A (H7N9) detected in poultry or poultry facilities/ establishments but no human cases reported.

Section 1. Identification of Positive Case for H7N9

Only cases detected through the Reverse Transcriptase Polymerase Chain Reaction (RT-PCR) test by the Bureau of Animal Industry - Veterinary Laboratory Division - Animal Disease Diagnostic and Reference Laboratory (BAI-VLD-ADDRL) and confirmed by the World Organisation for Animal Health (OIE) Avian Influenza (AI) reference laboratory shall be considered positive.

Section 2. Declaration of the Presence of H7N9

2.1. The Director of Bureau of Animal Industry (BAI) shall immediately inform the Secretaries of the Department of Agriculture (DA) and Department of Health (DOH) of a confirmed H7N9 case in domestic poultry in the country.

2.2. The Secretaries of DA and DOH shall jointly coordinate with the concerned local government unit (LGU) and stakeholders prior to a declaration of a case of H7N9.

2.1.1. Consult with the concerned governor, mayor(s), councilor(s) and barangay captain(s).

2.1.2. Inform the farm/facility owner and stakeholders.

2.3. The DA Secretary shall declare the presence of H7N9 in domestic poultry within 48 hours from the identification of a positive H7N9 case.

2.4. The BAI shall use the Quick Response Fund (QRF) for the implementation of activities related to the response, control, management and elimination of the virus in birds, in accordance with prescribed guidelines.

Section 3. Mobilization of the Regional, Provincial and City/Municipal AI Task Forces (AITFs)

3.1. Concerned DA Regional Field Offices (RFOs) and local government units or LGUs (provincial and city/municipal levels) shall mobilize their respective Avian Influenza Task Forces (AITF) within 24 hours of the declaration of the DA Secretary of the identification of positive case for H7N9 in the concerned locality.

3.2. The Regional, Provincial and City/Municipal AI Task Forces shall have the following functions:

3.1.1. Implementation of the Avian Influenza Protection Program (AIPP) at the local level

3.1.2. Mobilization of the four action teams, namely:

a. Rapid Action Team
b. Surveillance Team
c. Quarantine Team
d. Information Dissemination Team

3.3. The Regional AI Task Force will be responsible for the coordination with the National AITF in the implementation of the AIPP.

Section 4. Action Teams of the Regional, Provincial and City/Municipal AITFs

4.1. The Rapid Action Team shall have the following responsibilities:

4.1.1. Stamping out of poultry population within the facility/establishment where index case was identified. The stamping out activity shall be conducted immediately after the declaration of the DA Secretary of a positive H7N9 case.

If the positive H7N9 case was detected in a live bird market (LBM), all birds and swine in said LBM shall be humanely depopulated.

4.1.2. Proper disposal/burial of carcass, by-products (such as feathers and manure) and other materials in identified site.

4.1.2.1. If stamping out was conducted in the farm, burial shall be onsite.

4.1.2.2. If in a LBM, animal carcasses and other materials shall be loaded and transported for incineration or burial in a designated area.

4.1.3. Cleaning and disinfection of infected premises, conveyances, and materials that came into contact with poultry that were infected or exposed to H7N9 virus.

4.2. The Surveillance Team (for animals) shall have the following responsibilities:

4.2.1. Conduct of risk-based surveillance along the market chain

4.2.1.1. Initial surveillance shall be conducted in LBMs, especially those which gather many different bird species from different production systems and geographic areas.

4.2.1.2. For each LBM in which the virus has been found, or that has tested seropositive, the geographic area supplying market traders should be defined. Within this area, sampling should be undertaken in markets and farms that supply the positive LBM.

4.2.1.3. For LBMs and farms found to be contaminated or seropositive, their connections with other LBMs and farms should be investigated. Likewise, a serological survey should be conducted in the areas surrounding the infected farms to assess the extent of local virus spread.

4.2.2. Collection and submission of appropriate samples to BAI-VLD-ADDRL

4.2.3. Conduct of disease investigation and submission of report to BAI Director.

4.3. The Quarantine Team shall have the following responsibilities:

4.3.1. Closure of infected premises

4.3.1.1. If premise is a farm, procedures/activities for reclassification from infected to disease free area must be followed as determined by BAI.

4.3.1.2. If premise is a live bird market, there should be a rest period of one month after the last day of cleaning and disinfection.

4.3.2. Prohibition of movement of birds, swine, animal products, litter, and offal within and around the vicinity of infected poultry facility/establishment.

4.3.3. Prohibition of live poultry trading and other activities involving live birds within 100 meters around the vicinity of infected poultry facility/establishment.

4.3.4. Manning of identified checkpoints

4.3.5. Seizure, confiscation and proper disposal of undocumented live poultry shipments

4.4. Communication, Education, Participation and Awareness (CEPA) Teamshall have the following responsibilities:

a. Official source of information for dissemination to the public
b. Documentation of all activities of the AITF

SCENARIO II: Non-indigenous or Imported Human Influenza H7N9 Infection Reported; No Case Reported in Poultry

Section 1. Identification of Human Influenza H7N9 Infection

1.1. The DOH, through the Disease Prevention and Control Bureau (DPCB), and aided by the Bureau of Quarantine (BOQ) and the Epidemiology Bureau (EB), shall inform the BAI of any case of an imported human infection.

1.2. DOH shall deploy human health personnel to the site along with guidelines for isolation, referral and management of cases and quarantine of exposed individuals.

1.3. The BAI shall coordinate with the DOH for participation in contact tracing activities.

1.4. The following shall be the pertinent data to be gathered in contact tracing activities:

a. data on animal facilities visited by the infected person for the past 14 days prior to his/her arrival in the country
b. data on facilities visited after the infected person's arrival in the country
c. patient's profile including all animals in his/her household and immediate vicinity

Section 2. Surveillance after Contact Tracing

2.1. There shall be an intensified surveillance of poultry farms, live bird markets, bird parks, and/or other poultry premises visited by the infected human within 21 days from his/her arrival.

2.2. Surveillance activities should include the following:

a. reactivation of the AITFs at the national, regional and local levels (provincial and city/municipal)
b. inventory and completion of field and laboratory surveillance supplies
c. provision of field and laboratory surveillance supplies
d. coordination between the BOQ, EB and BAI to ensure the prevention of exposure of human health and animal health personnel through biosecurity protocols.
e. immediate laboratory testing of samples from both human and animals under investigation
f. immediate referral and management of human cases to the nearest DOH referral hospital or health facility

Section 3. CEPA Activities

The BAI and DARFO shall conduct CEPA campaign among local chief executives (LCEs) and different poultry stakeholders on matters related with animal disease prevention activities, while DOH shall address public health issues/concerns, within 24 hours with considerations on the following:

a. mobilization of speakers' bureau
b. distribution of uniform IEC material design as to content and lay-out
c. briefing and orientation of regional executives and local officials
d. promotion of good animal health practices
e. promotion of good hygiene and slaughtering practices

SCENARIO III: Influenza H7N9 detected in human being (non-imported case) and traced back to poultry or contaminated environment in the country.

Section 1. Initial Action Plan

1.1. In the event of detection of Influenza H7N9 in human being, the DOH, through the DPCB and aided by EB, shall inform the BAI of the positive case to conduct joint contact tracing activities.

1.2. DOH and local counterparts shall implement DOH guidelines on surveillance, isolation, referral and management of cases.

1.3. BAI shall mobilize the surveillance teams of the Regional, Provincial and City/Municipal AITFs.

1.3.1. There shall be an intensified surveillance of poultry farms, live bird markets, bird parks, and/or other poultry premises visited by the infected human within 21 days prior to hospital admission due to illness.

1.3.2. Necessary samples will be taken from animals in the course of the contact tracing activity by BAI for laboratory testing in BAI-ADDRL.

1.3.3. Only cases detected by BAI-VLD-ADDRL and confirmed by the OIE AI reference laboratory shall be considered positive.

1.4. DA and DOH shall activate their respective Risk Communication Plans within 24 hours.

1.5. Agencies shall utilize available budget and resources for the various activities necessary for the control, containment and elimination of the disease.

Section 2. Reporting of the Case

2.1. DA and DOH shall submit a joint report to the President for announcement of the detection of AI A (H7N9) virus in both humans and poultry within 24 hours from laboratory confirmation of the case in poultry.

2.2. The case shall be reported to OIE and WHO by DA and DOH, respectively.

2.3. Regular/periodic updates from the field/ground shall be submitted to the DA and DOH Secretaries.

2.3.1. DA and DOH Secretaries shall submit report/update to the President.

2.3.2. Similarly, reports/updates shall be provided to concerned stakeholders.

Section 3. Quarantine

3.1. DOH, in coordination with local counterparts, shall impose quarantine protocols in the infected site/premises, and identified additional quarantine area and/or surveillance area.

DOH and local counterparts shall implement DOH guidelines on human quarantine and containment with close monitoring of all exposed humans and immediate transport and referral to nearest DOH referral hospital or health facility.

3.2. BAI shall mobilize the quarantine teams of the Regional, Provincial and City/Municipal AITFs and carry out activities as in Scenario 1.

Section 4. Stamping-Out

BAI shall mobilize the rapid action teams of the Regional, Provincial and City/Municipal AITFs and carry out applicable activities as in Scenario 1.

Section 5. Recovery and Rehabilitation

5.1. DA and DOH shall assist in the recovery and rehabilitation of the affected premise/area until it is declared a Disease Free Zone.

5.2. DA shall prepare a rehabilitation plan (e.g. restocking) to assist the affected farm(s).

ANNEXES

ANNEX 1. CONFISCATION AND CONDEMNATION PROCESS FLOW

A. Live Birds

1. Conduct of inspection/verification by the Veterinary Quarantine Inspector (VQO)
2. Evaluation of Inspection Report
3. Submission of Report/Recommendation noted by BAI Director to Custom Bonded Warehouse Supervisor
4. Endorsement of Report/Recommendation to Chief of Bonded Warehouse Supervisor, Bureau of Customs (BOC)
5. Notification of the consignee about the recommendation
6. Approval of recommendation of the Veterinary Quarantine Services (VQS) by the District Collector of Customs
7. Turnover of shipment to the VQS, BAI for immediate condemnation
8. Arrival at MIASCOR and preparation of materials for euthanasia by gas inhalation
9. Counting of the birds and identification and tallying of the leg rings
10. Euthanasia with the use of carbon dioxide in the presence of VQO, Commission on Audit (COA) representative and BOC official
11. Cleaning and disinfection of premises, materials, and equipment used.
12. Signing of the Certificate of Disposal
13. Securing of equipment and transport of commodity to BAI
14. Incineration at the Philippine Animal Health Center, BAI

B. Meat Products

Destruction by means of Rendering

1. Customs notify the VQO regarding the list of condemnable and abandoned meat cargoes due for disposal
2. The VQO recommends disposal thru destruction by means of Rendering with prior thawing
3. Thawing period (not less than 1 month and not more than 4 months)
4. Cargo is transferred to the Rendering Plant
5. The VQO supervises the processing at the Rendering Plant, institutes bio-security measures when necessary (Enzyme treatment)
6. The VQO notifies the Director of Animal Industry, copy furnish the Customs and all concerned when disposal processing is finished.

Destruction by means of Dumping/ Burying

1. Customs notify the VQO regarding the list of condemnable and abandoned meat cargoes due for disposal
2. The VQO recommends disposal thru destruction by means of Dumping/ Burying with prior thawing
3. Thawing period (maximum period is recommended to prevent pilferage at the Dumping/ Burying site)
4. Cargo is transferred to the Dumping/ Burying site
5. The VQO supervises the dumping/ burying process at the site, institutes bio-security measures when necessary (Enzyme treatment)
6. The VQO notifies the Director of Animal Industry, copy furnish the Customs and all concerned when disposal processing is finished.

ANNEX 2. PRESCRIBED DISINFECTANTS AND DILUTION RATES

Disinfectant Group	Strength		Contact time	Application	Items
	Usual Dilution	Final			
Soaps and detergents	Solid or liquids	As appropriate	10 min.	Thorough cleaning is an integral part of effective decontamination	Human and animal housing, equipment, human, vehicles, clothing
Oxidizing Agents:					
Sodium hypochlorite NaOCl	1:5	2-3% available chlorine	10-30 min.	Effective for most applications except when in the presence of organic material. Less stable in warm, sunny conditions above 15°C.	Human and animal housing, equipment, clothing
Calcium hypochlorite $Ca(Ocl)_2$	30g / liter				
Virkon®	20g / liter	2-4% available chlorine, 2% (w/v)	10 min.		Human and animal housing, equipment, clothing
Acids:					
Hydrochloric acid	1:50	2% (w/v)	10 min.	Used only when better disinfectants not available. Corrosive for many metals and concrete.	
Citric Acid	2g / liter	0.2% (w/v)	30 min.	Safe for clothes and body decontamination	Humans, clothing
Alkalis:					
Sodium hydroxide	20g / liter	2% (w/v)	10 min	Do not use in the presence of aluminum and derived alloys	Human and animal housing, effluent, manure, clothing
Sodium carbonate					
Anhydrous (Na_2CO_3)	40g / liter	4% (w/v)	10 min	Recommended for presence of high concentrations of organic material	
Washing soda ($Na_2CO_3 10H_2O$)	100g / liter	10% (w/v)	30 min.		

Aldehydes:					
Glutaraldehyde	As appropriate	2% (w/v)	10 – 30 min.		
Formalin	1:12 formaldehyde	8% (w/v)		Disinfectant: releases irritating toxic gas	
Formaldehyde gas			15 – 24 hr	Toxic gas, recommended only if other methods of decontamination cannot be used	Electrical equipment, animal houses

ANNEX 3. SAMPLE LOGBOOK OF TRADED POULTRY AT LBM

Market Name: _____

Address of Market: _____

Date: _____

			Origin				Duration	Number of birds by type				
Trader's Name	Truck Plate No.	No. of Farms Visited during the trip	Type of Place	Province	City/Town	Brgy.	How long have the birds been on the truck	Quails	Broiler	Layer	Ducks	Others
			Farm 1									
			Farm 2									
			Farm 1									
			Farm 2									

ANNEX 4. POULTRY CRITICAL AREAS IN THE PHILIPPINES

REG.	*PROVINCE*	*RISK AREAS*	*PRESENCE OF WATERFOWLS & SHOREBIRDS*	*PRESENCE OF DUCK GRAZING AREA*	*DENSITY OF LOCAL DUCK POPULATION*	*DENSITY OF COMMERCIAL POULTRY POPULATION*	*PRESENCE OF HOTSPOTS FOR ILLEGAL TRADE*	*LBMs*	*SCORE*
			1	***0.5***	***<500 - .25***	***≥ 10,000 - 0.5***	***1***	***1***	***(*Perfect***
					500-5,000 - 0.5				***Score: 5.0)***
					>5,000 – 1.0				
CARAGA	**Agusan del Norte**	Butuan City	1.0	0.5	1.0	0.5		1.0	**4.0**
CARAGA	**Agusan del Sur**	San Francisco	1.0	0.5	1.0			1.0	**3.5**
CARAGA	**Agusan del Sur**	Sta. Josefa	1.0	0.5	1.0			1.0	**3.5**
XII	**South Cotabato**	Banga	1.0	0.5	1.0			1.0	**3.5**
XII	**South Cotabato**	Norala	1.0	0.5	1.0			1.0	**3.5**
XII	**South Cotabato**	Sto Niño	1.0	0.5	1.0			1.0	**3.5**
XII	**South Cotabato**	Tantangan	1.0	0.5	1.0			1.0	**3.5**
CAR	**Benguet**	Bokod-Brgy. Ambuclao	1.0	0.5	1.0			1.0	**3.5**
VI	**Guimaras**	Brgy. Bugnay, Jordan – coastal area	1.0	0.5	1.0	0.5			**3.0**
CARAGA	**Agusan del Sur**	Talacogon	1.0	0.5	0.50			1.0	**3.0**
CARAGA	**Agusan del Sur**	Bunawan	1.0	0.5	0.50			1.0	**3.0**
CARAGA	**Agusan del Sur**	Rosario	1.0	0.5	0.50			1.0	**3.0**
CARAGA	**Agusan del Sur**	Veruela	1.0	0.5	0.50			1.0	**3.0**
II	**Isabela**	Magat Dam Reservoir, Ramon, Isabela	1.0	0.5	1.0	0.5			**3.0**
II	**Isabela**	Monterey Lake, Cauayan City, Isabela	1.0	0.5	1.0	0.5			**3.0**

II	**Nueva Vizcaya**	Brgys. Villa Coloma, Murong, Lantap, Panique, Sta. Lucia, Baretbet, Villa Quirino, Sta. Cruz, Bagabag	1.0	0.5	1.0	0.5			**3.0**
II	**Nueva Vizcaya**	Brgys. PD Galima, Tucal, Bagahabag, Aggub, Bangar, Solano	1.0	0.5	1.0	0.5			**3.0**
V	**Camarines Sur**	Cabusao Wetland	1.0	0.5	1.0	0.5			**3.0**
V	**Camarines Norte**	Brgy. Tabugon, Sta. Elena	x	0.5	1.0	0.5	1.0		**3.0**
VI	**Iloilo**	Dumangas(Iloilo Site)	1.0	0.5	1.0	0.5			**3.0**
VI	**Iloilo**	Sara	1.0	0.5	1.0	0.5			**3.0**
VI	**Antique**	Sibalom	1.0	0.5	1.0	0.5			**3.0**
VII	**Cebu**	Cebu City	1.0	0.5	1.0	0.5			**3.0**
XII	**South Cotabato**	Surallah	1.0	0.5	0.5			1.0	**3.0**
CARAGA	**Agusan del Norte**	Santiago	1.0	0.5	0.5			1.0	**3.0**
CARAGA	**Agusan del Norte**	Jabonga	1.0	0.5	0.5			1.0	**3.0**
CARAGA	**Agusan del Norte**	Kitcharao	1.0	0.5	0.5			1.0	**3.0**
CARAGA	**Agusan del Sur**	La Paz	1.0	0.5	0.5			1.0	**3.0**
CARAGA	**Agusan del Sur**	Loreto	1.0	0.5	0.5			1.0	**3.0**
CARAGA	**Surigao del Norte**	Alegria	1.0	0.5	0.5			1.0	**3.0**
CARAGA	**Surigao del Norte**	Mainit	1.0	0.5	0.5			1.0	**3.0**
III	**Bulacan**	Baliuag*	1.0	0.5	1.0	0.5			**3.0**
III	**Bulacan**	Calumpit*	1.0	0.5	1.0	0.5			**3.0**
III	**Bulacan**	Plaridel*	1.0	0.5	1.0	0.5			**3.0**
III	**Bulacan**	Pulilan*	1.0	0.5	1.0	0.5			**3.0**
III	**Bulacan**	San Rafael*	1.0	0.5	1.0	0.5			**3.0**
III	**Bulacan**	San Ildefonso*	1.0	0.5	1.0	0.5			**3.0**
III	**Bulacan**	San Miguel*	1.0	0.5	1.0	0.5			**3.0**
CAR	**Benguet**	Mankayan-Brgys. Paco and Colalo	1.0	0.5	1.0			1.0	**2.5**

VI	**Iloilo**	Ajuy	1.0	0.5	0.5	0.5			**2.5**
VI	**Iloilo**	Concepcion	1.0	0.5	0.5	0.5			**2.5**
VI	**Negros Occidental**	Sipalay	1.0	0.5	1.0				**2.5**
II	**Isabela**	Malasi Lake, Cabagan, Isabela	1.0	0.5	0.5	0.5			**2.5**
II	**Nueva Vizcaya**	Brgys. Nagbitin, Poblacion, Bintawan and Ibong, Villaverde	1.0	0.5	0.5	0.5			**2.5**
IVA	**Laguna**	Brgy. Butadero, Halayhayin, Siniloan	1.0	0.5	0.5	0.5			**2.5**
IVA	**Laguna**	San Isidro, Calauan	1.0		1.0	0.5			**2.5**
IVB	**Oriental Mindoro**	Bongabong	1.0	0.5	1.0				**2.5**
IVB	**Oriental Mindoro**	Calapan	1.0	0.5	1.0				**2.5**
IVB	**Oriental Mindoro**	Naujan	1.0	0.5	1.0				**2.5**
VII	**Cebu**	Lapu-Lapu City (Olango)	1.0	0.5	0.5	0.5			**2.5**
VII	**Siquijor**		1.0	0.5	0.5	0.5			**2.5**
VIII	**Southern Leyte**	Hinunangan- St. Bernard Wetlands	1.0	0.5	1.0				**2.5**
IX	**ZamboangaSibugay**	Diplahan, Titay, Naga	1.0	0.5	1.0				**2.5**
III	**Pampanga**	Bahay Pare, Candaba	1.0	0.5	1.0				**2.5**
III	**Pampanga**	Paligue	1.0	0.5	1.0				**2.5**
III	**Pampanga**	Pangclara	1.0	0.5	1.0				**2.5**
III	**Pampanga**	PulongGubat	1.0	0.5	1.0				**2.5**
III	**Pampanga**	Tenejero	1.0	0.5	1.0				**2.5**
III	**Pampanga**	Visal San Pablo	1.0	0.5	1.0				**2.5**
III	**Pampanga**	Dawe	1.0	0.5	1.0				**2.5**
III	**Pampanga**	Lourdes	1.0	0.5	1.0				**2.5**
III	**Pampanga**	San Isidro	1.0	0.5	1.0				**2.5**
IVA	**Batangas**	Lian (Brgy San Diego)	1.0	0.5	0.5	0.5			**2.5**

IVA	**Batangas**	San Juan (Brgys.Pinagbayanan, Catmon and Poctol)	1.0	0.5	0.5	0.5			**2.5**
V	**Masbate**	Ticao	1.0		1.0	0.5			**2.5**

ANNEX 5. SAMPLE SWAB COLLECTIONAND SUBMISSION PROCEDURES

Swab collection

- Use synthetic or semi-synthetic swabs (e.g. polyester, rayon, nylon) with plastic handle (flocked or spun head).

- Avoid cotton or calcium alginate swabs or swabs with wooden handles which have been shown to inactivate virus and inhibit PCR invalidating the laboratory test results.

1. Tracheal/oropharyngeal (TR/OP) swabs (Figures b-d)
   - The opening of the trachea and mouth can be swabbed (avoiding the esophagus), bringing the swab up through the choanal cleft (collectively referred to as TR/OP swab) - the sinuses drain into the choanal cleft, therefore swabbing will capture material from the upper respiratory tract (refer to Figure a).
   - Tracheal swabs, if needed, are best obtained from fresh carcasses.

2. Cloacal (CL) swabs (Figures e-f)

   - Following sample collection, vigorously swirl the swab in the transport media, squeezing the excess liquid from the swab inside the specimen tube and then discarding the swab in an appropriate container – the entire swab suspension is submitted for diagnostic testing.

   - Note: swabs left inside the sample tube may result in media being drawn into the swab, leaving limited material for diagnostic testing

   - If swabs remain in the specimen tube, all swab tips must be fully immersed in the transport media.

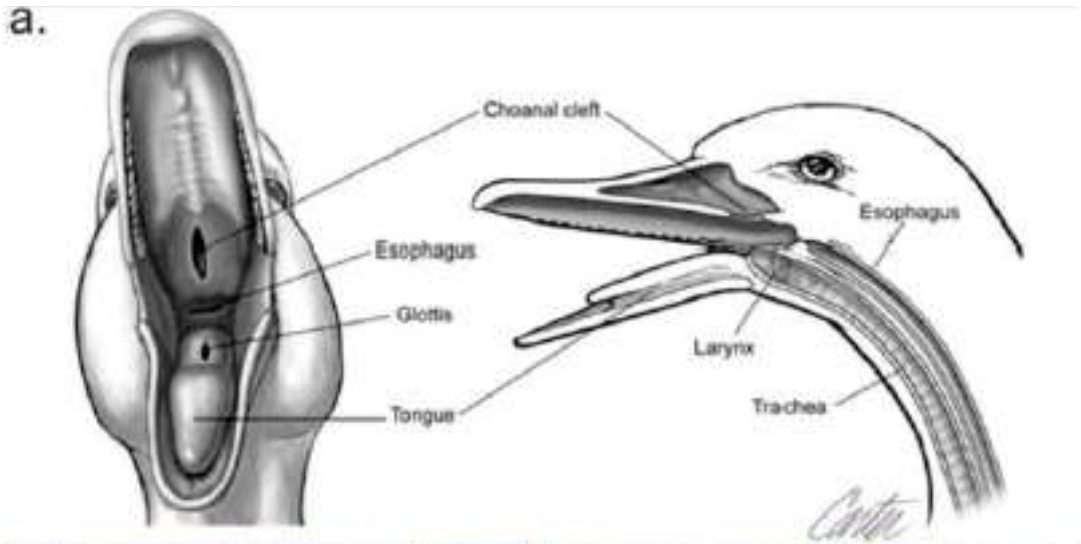
Pooling procedures

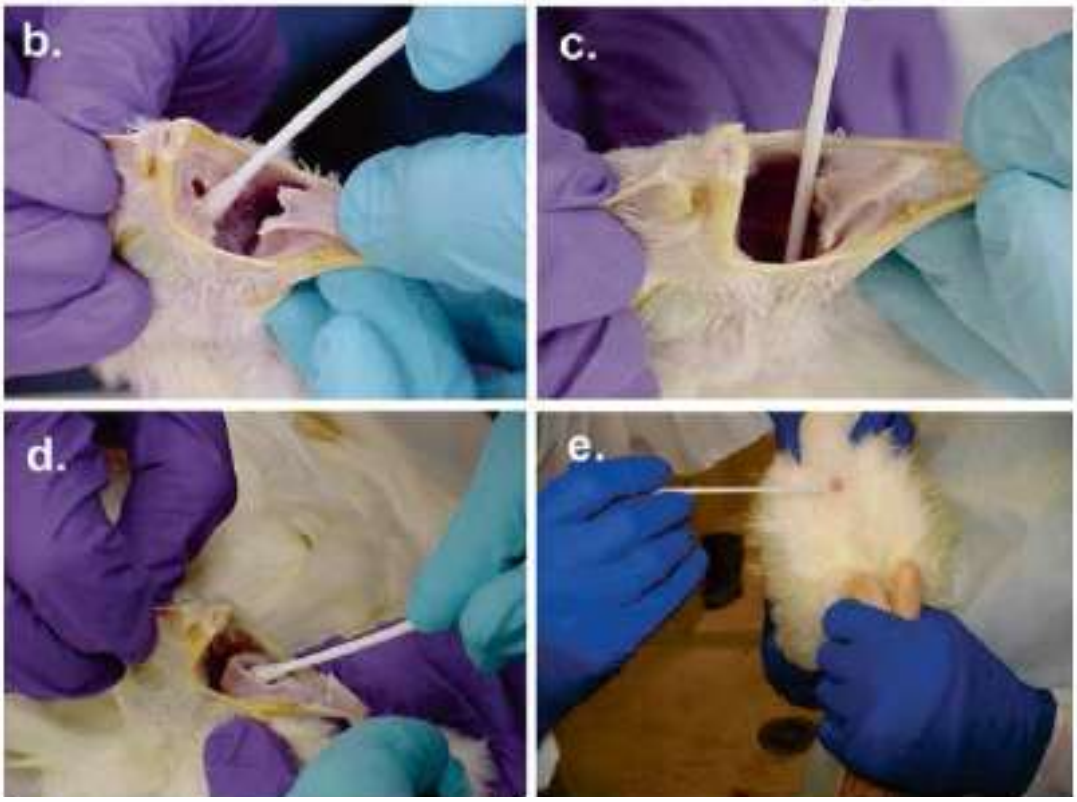
Following the SEA (Southeast Asia) Regional Laboratory Network for Avian Influenza-A Diagnosis, pooling of samples should be avoided whenever possible; it is best done at the laboratory. Pooling of samples is done by combining a maximum of five (5) similar samples per pool, coming from the same sample type, species and epidemiological unit.

Important!
Pool appropriate tissues together from a single bird (e.g. respiratory vs. enteric vs. reproductive) - do not pool tissues from more than one bird.

Submission Procedure:

Samples should be placed in a thick plastic bag. Tie the end of the bag and disinfect. Place the bag in a 2nd thick plastic bag, tying the end and disinfecting it. Place it in the thermic container with ice. The thermic ice must be disinfected before leaving the premises. They must be properly sealed and labeled. Precautions to avoid leakage must be taken at all times.





a. Schematic of oral cavity
b.
c. } Tracheal/oropharyngeal (TR/OP) swabs
d.
e.
f. } Cloacal swabs

ANNEX 6. DEPARTMENT OFAGRICULTURE A.O. NO. 15, SERIES OF 2014 - PROTOCOL FOR AVIAN INFLUENZA A (H7N9) RISK-BASED SURVEILLANCE

Republic of the Philippines
Department of Agriculture
OFFICE OF THE SECRETARY
Elliptical Road, Diliman
Quezon City 1100, Philippines

BUREAU OF ANIMAL INDUSTRY
RECEIVED
DATE 11/25/14
BY
TIME

2013 International Year of RICE

24 November 2014

ADMINISTRATIVE ORDER
No. 15
Series of 2014

Subject: Protocol for Avian Influenza A (H7N9) Risk-Based Surveillance

WHEREAS, on 31 March 2013, the authorities of the People's Republic of China reported three human cases of infection with a novel avian influenza A strain of subtype H7N9 in Shanghai, Eastern China and as of July 2014, 450 human cases have been reported with a case fatality rate of 36%;

WHEREAS, the Chinese authorities detected avian influenza A(H7N9) virus in surveillance samples taken from chickens, ducks and pigeons, mostly at live poultry markets (LPMs) and from poultry vendors linked to human cases;

WHEREAS, the recent avian influenza A (H7N9) event in China is a cause of great concern in the region considering almost borderless trade among countries, and the significant progress in transportation, where more people and products can travel between countries faster than incubation period of aforementioned disease.

WHEREAS, H7N9 virus is unique in that it does not cause any disease or apparent production loss in poultry population but has high infectivity for humans. Thus, this low pathogenic influenza H7N9 has a significant potential to silently spread widely in poultry populations without being detected.

WHEREAS, a risk based surveillance in live poultry markets (LPMs) to determine whether the A (H7N9) virus has already been circulating within domestic or wild bird populations as well as to enhance early detection of the virus's incursion into the domestic bird population would allow for a quick response;

NOW THEREFORE, I, PROCESO J. ALCALA, Secretary of Agriculture, by the powers vested in me by law do hereby issue the following protocol on risk-based surveillance for H7N9 for observance and guidance of all concerned:

1. Initial surveillance shall be conducted in livestock poultry markets. Ideally it is necessary to understand the poultry trading networks especially those that involve LPMs and to identify LPMs with a central role in these networks.

2. Selecting LPMs for sampling shall depend on the following criteria:

   - Provinces with high poultry population density

49-14-02-8252

- Within the selected provinces, market selection may be based on the following criteria:
  - Markets with the most poultry sellers or poultry sold.
  - Markets with low market biosecurity practices : low biosecurity and poor implementation of disinfection and hygienic measures, unsold birds reoffered for sale the following day, no segregation of bird species, etc.
  - Markets with slaughter facilities supplied with birds coming from various origins.

3. Based from the Philippine National Atlas of Farm Animal Resources (EAHMI Publication), the following provinces have a high poultry population density:
   - Pampanga
   - Bulacan
   - Nueva Ecija
   - Cavite
   - Batangas
   - Manila (market point)
   - Laguna
   - Bukidnon
   - Misamis Oriental

   Provinces (areas within provinces) with the second highest poultry population density are the following:
   - Cebu
   - Zamboanga City
   - Iloilo
   - Pangasinan
   - Tarlac
   - Camarines Sur

4. Select a maximum of ten markets per province given the criteria for selection. Note that the objective is to detect the presence of the virus at the national/area level rather than the provincial level hence a maximum of 10 (so could be less than 10) markets shall be enough.

5. Samples types:
   a. Environmental samples shall be collected from the following sample locations: tables where birds are displayed; moist areas of baskets holding bird parts; waste bins containing wet poultry waste; processing tables; wet cloths/rags; birds' drinking water. Pooling of samples in batches of five is acceptable as long as samples from different locations and environments (drinking water and table tops, for instance) are not pooled together.

   b. Live birds: a focus on oropharyngeal swabs from chickens, quail and geese is recommended. The birds' samples shall be representative of the overall live bird population in the market.

Maximum of 60 samples per market shall do (at 95% confidence level and assuming number of birds in the market at a given time is unknown).

c. Pooling of samples in batches of five is acceptable, as long as environmental and oropharyngeal samples from different species are kept separate.

d. Sampling is to be done once a year preferably during the months of the flu season (September – March).

6. The samples shall be tested at the Philippine Animal Health Center (PAHC) or in the nearest Regional Animal Disease Diagnostic Laboratory (RADDL) with RT-PCR capability.

7. All test results shall be forwarded to the Animal Health Division (AHD) and Philippine Animal Health Information System (PhilAHIS) for analysis and evaluation.

8. A market is considered positive if at least one sample or pool of samples – environmental or oropharyngeal is found positive according to the virological diagnostic test. A market is also considered positive if at least one positive H7 hemagglutinin inhibition (HI) case is found and confirmed by a neuraminidase (NA) – N9 positive test.

9. If a positive is confirmed, the AIPP provisions on response to H7N9 shall be activated.

If any provision of this Order is declared unconstitutional or invalid, the remaining portions thereof which are not affected shall continue to be in full force and effect.

All existing administrative orders, rules and regulations or parts thereof which are inconsistent with the provisions of this Order are hereby repealed or modified accordingly.

This Order shall take effect immediately.

Approved this 24th day of November 2014 in Quezon City, Philippines.

Recommending Approval:

RUBINA O CRESENCIO, DVM
Acting Director IV

APPROVED:

PROCESO J. ALCALA
Secretary

DEPARTMENT OF AGRICULTURE
In replying pls cite this code:
For Signature: S-11-14-0318
Received : 11/26/2014 01:51 PM

ANNEX 7. General Information on Highly Pathogenic Avian Influenza (HPAI)

Measures for Prevention of Bird Flu or HPAI:

1. Avoid smuggling or bringing in infected birds (such as layers, breeders, broilers, game fowl, eggs, and their products) from AI affected countries.
2. Avoid areas where migratory birds congregate.
3. Maintain cleanliness in surroundings.
4. Construct bird houses and do not allow chickens to roam.
5. Prevent domestic ducks from having access to open ponds, lakes, or creeks or where wild water birds stay.
6. Keep ducks and other poultry away from wild birds.
7. Bird-proof poultry sheds to prevent contact between wild birds and poultry.
8. Do not sell live poultry in markets.
9. Do not get near wild birds or keep them in captivity.
10. Do not crowd or mix poultry, pigs, and other animals in one enclosed area
11. Report to authorities any illegal entry of poultry and its by-products or any unusual death of birds in your area.

How to identify possible bird flu in poultry:

1. unexplained high mortality over 3 consecutive days
2. lack of appetite or a significant decrease in feed and water consumption
3. severe depression, listlessness, and droopiness
4. drastic decline in egg production
5. ruffled feathers
6. soft-shelled or misshapen eggs
7. diarrhea
8. facial edema with swollen and cyanotic combs, wattles, eyelids, and hocks
9. the presence of severe respiratory signs including sneezing, coughs, and nasal discharge
10. hemorrhages in internal organs
11. gasping of breath
12. muscle weakness / paralysis

How bird flu is transmitted to other birds:

1. direct contact with discharges from infected birds, especially feces and respiratory secretions
2. contaminated feed, water, cages, equipment, vehicles, and clothing
3. clinically normal water fowl and sea birds may introduce the virus into flocks
4. broken contaminated eggs may infect chicks in the incubator

How bird flu is transmitted to humans:

1. close contact with infected birds or through inhalation or contamination with infected discharges, feces or sick birds
2. virus is excreted in feces, which dries, is pulverized, and is inhaled
3. flapping of wings hasten transmission

ANNEX 8. FOOD PREPARATION AND HYGIENE

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 70^0C 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.

ANNEX 9. EXECUTIVE ORDER NO. 280

MALACAÑANG
Manila

BY THE PRESIDENT OF THE PHILIPPINES
EXECUTIVE ORDER NO. 280

DEFINING THE POWERS, FUNCTIONS, AND RESPONSIBILITIES OF GOVERNMENT AGENCIES IN RESPONSE TO AVIAN INFLUENZA (AI) OR BIRD FLU VIRUS AND RELATED MATTERS THERETO

WHEREAS, due to an outbreak of Avian Influenza (AI), otherwise referred to as the Bird Flu virus which has affected many countries in Asia, including the deaths of at least twelve people in Vietnam and Thailand, bold, preemptive, active and immediate measures must be taken by the Philippines in order to avert or minimize its grave effects;

WHEREAS, in the event the epidemic can no longer be prevented and in order to confine, minimize, restrict, or regulate the further spread of the contagion, such measures and actions relative to fowl, poultry, other birds or animals and people, infected or suspected to be infected with the virus need to be implemented;

WHEREAS, Article II, Section 15 of the Constitution provides that the State shall protect and promote the health of the people and instill health consciousness among them;

WHEREAS, from past experiences with the SARS virus, effective prevention and containment procedures, guidelines, and strict implementation contributed to the success of the Philippines in minimizing the effects and mortality of said virus;

NOW, THEREFORE, I, GLORIA MACAPAGAL ARROYO, President of the Republic of the Philippines, by virtue of the powers vested in me by law, do hereby direct arid order that:

SECTION 1.***Crisis Manager*** - The Secretary of Health is hereby designated Over-all, Crisis Manager for the Avian Influenza or Bird Flu Virus pandemic influenza.

The Department of Agriculture, through the Secretary of Agriculture, is hereby designated as Co-Manager for matters pertaining or primarily affecting poultry, birds, other fowl, and any other animal, including their by-products.

Sec 2.*Delineation of Powers and Authority*- The Secretary of Health is hereby granted and bestowed such powers and authority as would be necessary in order to prevent, restrict, or otherwise regulate the entry, movement, or surveillance of people coming from infected countries or in any instance where the highly pathogenic avian influenza has infected, or suspected to have infected, humans.

The Secretary of Agriculture is hereby granted and bestowed such powers and functions as would be necessary in order to contain, control, prevent, regulate and otherwise restrict the entry, movement, proliferation, of poultry, fowl, birds, and other animals, including their by-products, which are infected, or suspected to be, infected or potential carrier of the Avian influenza virus.

Sec. 3.*The Secretary of Health: Specific Areas of Concern and Responsibility.* - The Secretary of Health shall exercise such powers and prerogatives, incidental or otherwise, as would:

a. Prevent, minimize, regulate, or otherwise restrict the entry of the avian flu virus, through the Bureau of Quarantine and International Health Services (BQIHS), by adopting, restricting, or regulating the movement and entry of people coming from infected countries or other countries suspected to be carriers, or potential carriers, of the virus, through a system of surveillance methods utilizing rigid screening and identification procedures in all ports of entry, and adopting isolation and quarantine measures whenever deemed necessary;

b. Prevent, minimize and regulate the spread and local transmission of the virus through enforcement of triage, contact tracing, surveillance, quarantine and isolation procedures of people, as may be appropriate;

c. Care, render assistance, cure, of minimize death or sickness through effective clinical management of people, resources, hospitals, and other facilities, whether public or private;

The Secretary of Health shall also exercise such other functions and powers as may be incidental, related or otherwise connected with the above mentioned authority,

Sec. 4.*The Secretary of Agriculture: Specific Area of Concern and Responsibility*. - The Secretary of Agriculture shall take such measures and actions as would:

a. Prevent, restrict, minimize or otherwise regulate the entry of poultry, fowl, birds, or other animals coming from infected countries or from any other country which are potential or suspected to be, afflicted or carriers of the avian flu virus, including the imposition of total or partial, bans on imports of poultry and other animals;

b. Conduct surveillance, mapping, identification, isolation, quarantine of chickens, their by-products, and other animals infected or suspected to be infected by the avian flu virus within the country, or any part thereof, including the culling or stamping out of infected chickens and quarantine of chicken or poultry farms and other, affected areas, as may be determined by the Secretary.

c. Monitor, trace, plot, or otherwise observe, in coordination with the Department of Environment and Natural Resources (DENR), the sanctuaries and movement patterns of migratory birds from within and without the country taking into consideration the safety and well-being of the people and giving due regard to nature.

The Secretary of Agriculture shall also exercise such other functions and powers as may be incident related or otherwise connected with the above mentioned authority.

Sec. 5.*Information Dissemination and Coordination.* - As Crisis Manager, the Secretary of Health shall have the responsibility to:

a. Continuously educate and disseminate information, as appropriate, in order to prepare and educate the media and the general public with a better understanding of the avian flu virus, promote positive health values and behavior, and prevent disinformation, confusion, or panic;

b. Coordinate responses together with oilier government agencies and the private sector through meetings, conferences and the like; or otherwise constructively engage the public and affected sectors in general.

c. Issue the necessary bulletins, advisories and health warnings on matters concerning the foregoing.

Sec. 6. ***Assistance and Support*** - The Over-All Crisis Manager is hereby empowered to call upon ail agencies of Government for support and assistance in the enforcement of this Order, including but not necessarily limited to the:

Department of Agriculture (DA);
Department of Interior and Local Government (DILG);
Department of Foreign Affairs (DFA);
Department of Transportation and Communications (DoTC);
Department of Finance (DoF);
Department of Education (DepEd);
Department of Labor and Employment (DOLE);
Department of National Defense (DND);
Office of the Press Secretary (OPS);

The Crisis Manager shall be empowered to seek the assistance and support of the abovementioned agencies, including their respective attached offices, in order to effectively implement the provisions of this Order.

All agencies, offices, manager, and personnel are hereby directed to cooperate and provide such assistance and support as may be requested or needed by the Crisis Manager in the containment of the Avian flu virus.

Defense and law enforcement agencies, particularly the Armed Forces of the Philippines (AFP), the Philippine National Police (PNP) and the Philippine Coast Guard (PCG), shall give priority to the directives or orders issued and promulgated by the Crisis Manager affecting their specific areas of concern.

Sec. 7.*Funding*. - An amount not exceeding Two Hundred Fifty Million (P 250,000,000.00) Pesos is hereby set aside from the funds of the Philippine Charity Sweepstakes Office (PCSO) to cover the financial requirements of this Order.

Sec. 8.*Rules and Regulations*. - The Secretary of Health shall promulgate such rules and regulations as may be necessary, related, incidental or consistent with the purpose, intent, and objective of this Order.

Sec. 9.*Applicability of Executive Order No. 201.* - For purposes of this Order and in so far as it may be practicable, the provisions of Order No. 201, series of 2003, shall he deemed suppletory hereto.

Sec. 10.*Constitutionality*. - Should any of the provisions contained herein be declared illegal or unconstitutional, the rest or other such provisions not so declared shall remain valid and effective.

Sec. 11.*Effectivity.* - This executive Order shall take effect immediately.

DONE in the City of Manila, this 5th day of February in the year of Our Lord, Two Thousand and Four.

By the President:

ANNEX 10. LAW ON THE ADOPTION OF THE AIPP-MOP AND ESTABLISHMENT OF THE NAITF

Joint A.O.
2006

JOINT ADMINISTRATIVE ORDER NO. 001
BY THE DEPARTMENT OF HEALTH
AND DEPARTMENT OF AGRICULTURE

ADOPTING THE AVIAN INFLUENZA PROTECTION PROGRAM (AIPP) MANUAL OF PROCEDURES AND ESTABLISHING THE NATIONAL AVIAN INFLUENZA TASK FORCE (NAITF)

WHEREAS, the highly-pathogenic avian influenza virus, notably the H5N1 virus, continues to spread in many Asian countries;

WHEREAS, the transmission of the avian influenza virus from fowls to humans has been identified in several countries;

WHEREAS, the Philippines remains to be avian influenza-free but has to strengthen its defenses against the virus in the wake of the continued outbreaks in neighboring Asian countries;

WHEREAS, the Department of Agriculture, the Department of Health and the poultry industry have recently drafted a comprehensive Avian Influenza Protection Program (AIPP) Manual of Procedures after extensive consultations with various stakeholders;

WHEREAS, the full commitment, close cooperation and concerted efforts among the national government, local governments and the private sector are imperative for the effective delivery of the AIPP.

NOW THEREFORE, WE, for and in consideration of the above premises, and in consideration of Executive Order No. 280 Defining the Powers, Functions and Responsibilities of Government Agencies in Response to Avian Influenza (AI) or Bird Flu Virus and Related Matters Thereto, Manuel M. Dayrit, Secretary of Health and Arthur C. Yap, Secretary of Agriculture, jointly undertake the following measures:

1. The Avian Influenza Protection Program (AIPP) Manual of Procedures, as drafted by the AI Working Group composed of government representatives and various industry stakeholders, is hereby adopted as the official AI prevention and preparedness plan of the country.

2. A National Avian Influenza Task Force (NAITF) is hereby established to implement the AIPP. The NAITF shall be composed of the following:

   2.1 An Executive Committee led by the Secretary of Health and Secretary of Agriculture, with the following members: DOH Undersecretary for Health Operations, DA Undersecretary for Livestock and Fisheries, BAI Director, NMIS Director, the DOH Program Manager for Emerging and Re-emerging Infections and representative members from the private sector,

particularly from the broiler, layer and gamefowl industry associations and from an organization of poultry veterinarians or technical practitioners.

2.2 Six (6) units will support the Executive Committee, as follows:

- Sub-committee on Human Health Protection
- Sub-committee on Animal Health Protection
- Policy
- Communications
- Logistics
- Secretariat

2.3 The Sub-committee on Human Health Protection shall be composed of teams to focus on:

- Surveillance / Laboratory
- Clinical Management / Hospital
- Resource Mobilization
- Public Health Response
- Quarantine

2.4 The Sub-committee on Animal Health Protection shall be composed of teams to focus on:

- Surveillance / Laboratory
- Containment
- Resource Mobilization
- Quarantine

3. Regional and provincial task forces shall also be organized to implement the AIPP in their respective areas. These task forces shall be organized as follows:

3.1 Regional Level - A Regional Executive Committee will have the following members:

- DOH Regional Director
- DA Regional Director
- PNP Regional Director
- Representative of the Regional Disaster Coordinating Council
- Private sector representative/s

3.2 Five (5) units will support the Regional Executive Committee, as follows:

- *Rapid Action Team*: shall be composed of members who will carry out the immediate diagnosis of the Suspect Premises and the initiation and implementation of the stamping out procedures.

- *Surveillance Team*: shall be composed of members who will conduct the regular surveillance and profiling of poultry diseases in the identified priority areas in their respective region.

- *Quarantine Team*: shall be composed of members who shall ensure the implementation of the prescribed minimum biosecurity measures

and the regulation and/or prohibition of animal movement as stated in Stages 1 & 2 of the AIPP Manual.

- *Census Team:* shall be composed of members who will conduct periodic identification and consolidation of data on poultry population, kinds, and location in their respective region.

- *IEC Team:* shall be composed of members who will ensure adequate awareness of the general public on matters and updates pertaining to AI.

3.3 Provincial Level - A Provincial Executive Committee will be headed by the Governor with the following members:
- Provincial Health Officer
- Provincial Veterinarian
- PNP Provincial Director
- Representative of the Provincial Disaster Coordinating Council
- Private sector representative/s

3.4 Five (5) units to support the Provincial Executive Committee will follow the organizational structure at the Regional level.

4. DOH, DA and the private sector shall appoint full-time personnel to the NAITF Secretariat to ensure the sustained implementation of the AIPP.

5. DOH, DA and the private sector shall provide program funds which shall be determined in the first organizational meeting of the NAITF.

This Joint Administrative Order shall take effect immediately.

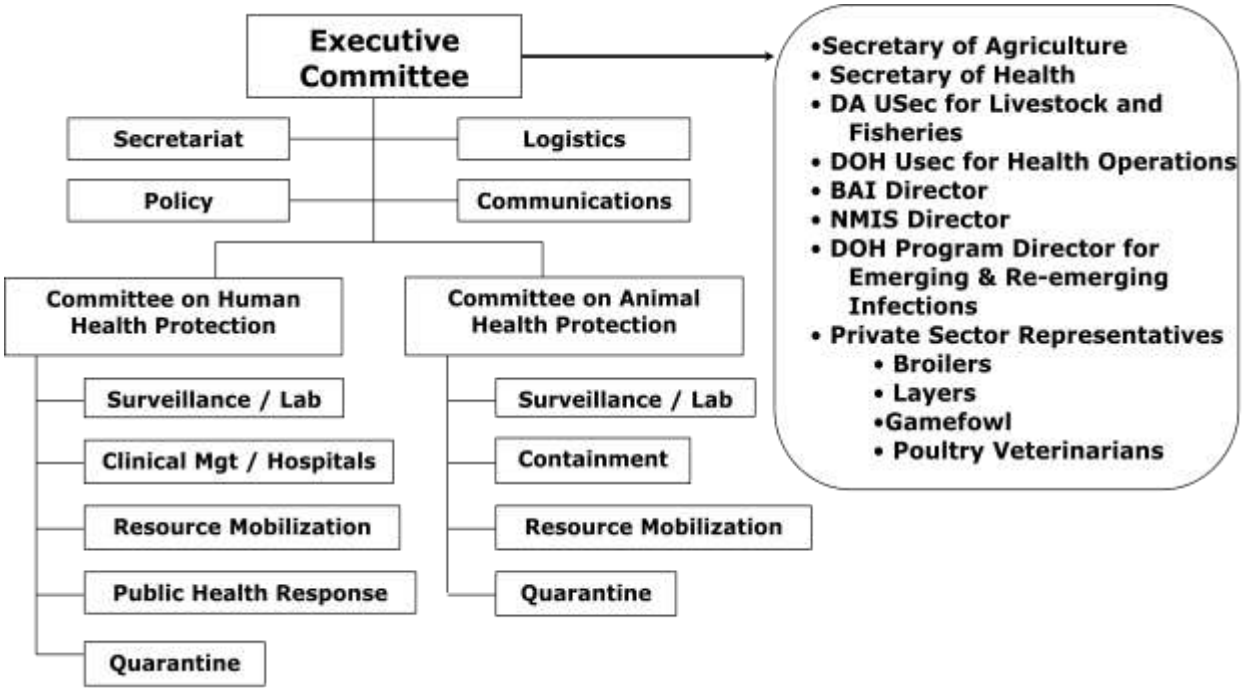
DONE in the Municipality of Magalang, Pampanga, on the occasion of the First AI Regional Summit, this 20th day of April, in the year of Our Lord, Two Thousand and Five.

MANUEL M. DAYRIT
Secretary
Department of Health

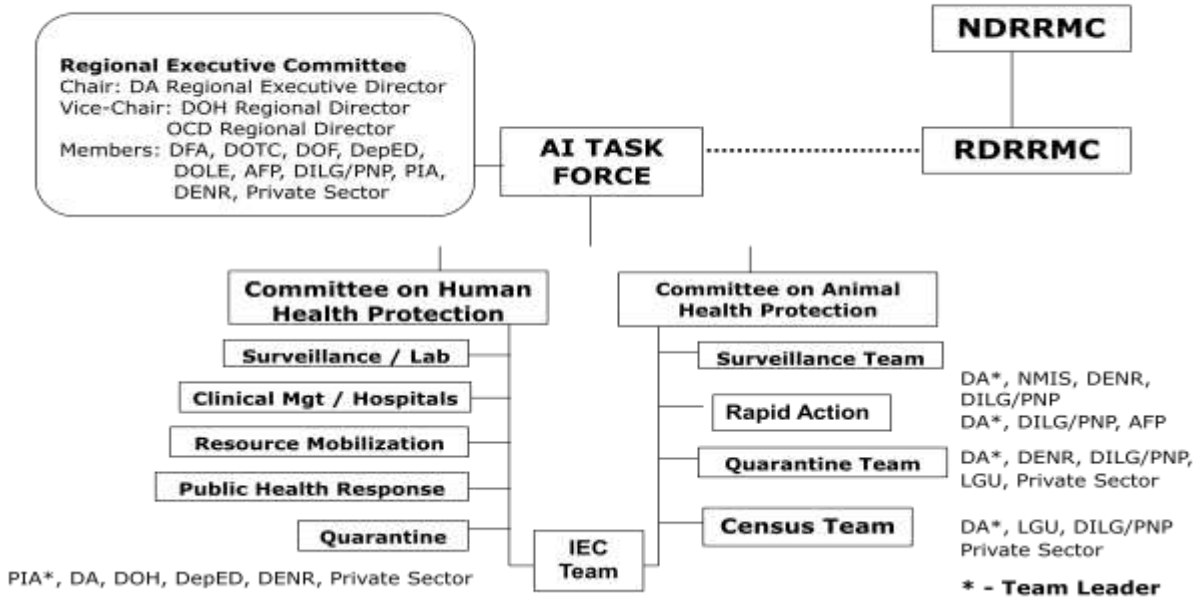
ARTHUR C. YAP
Secretary
Department of Agriculture

ANNEX 11. ORGANIZATIONAL STRUCTURE OF THE DIFFERENT AI TASK FORCES

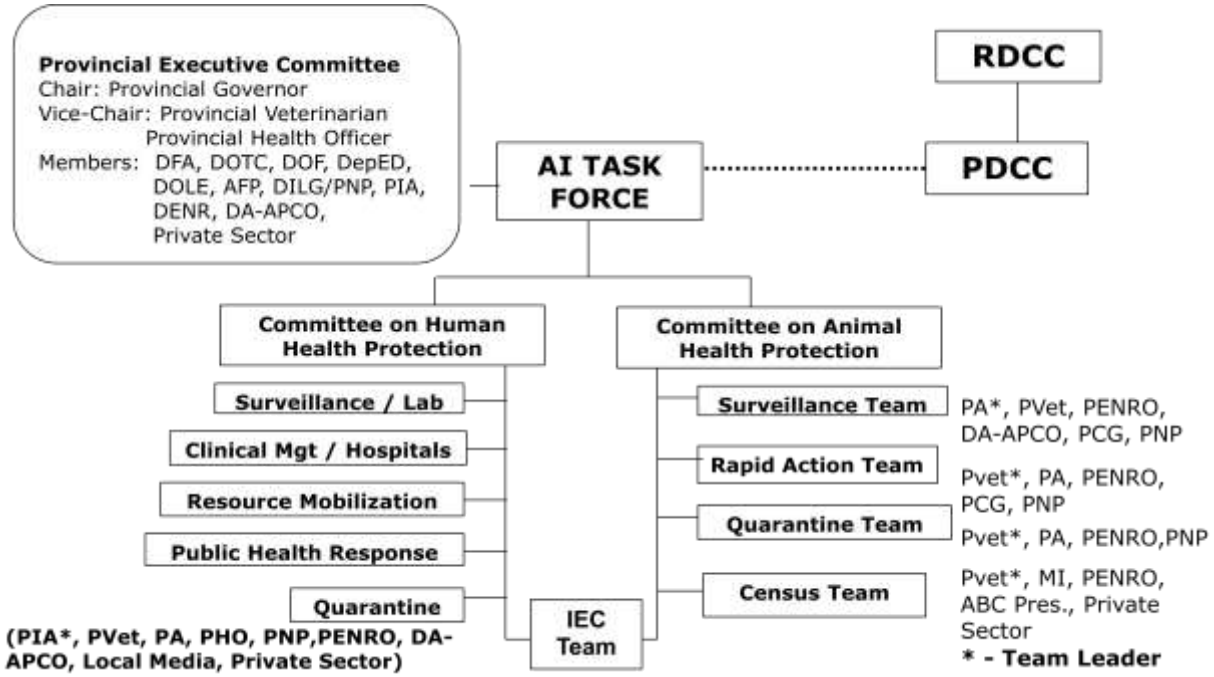
A. National AITF



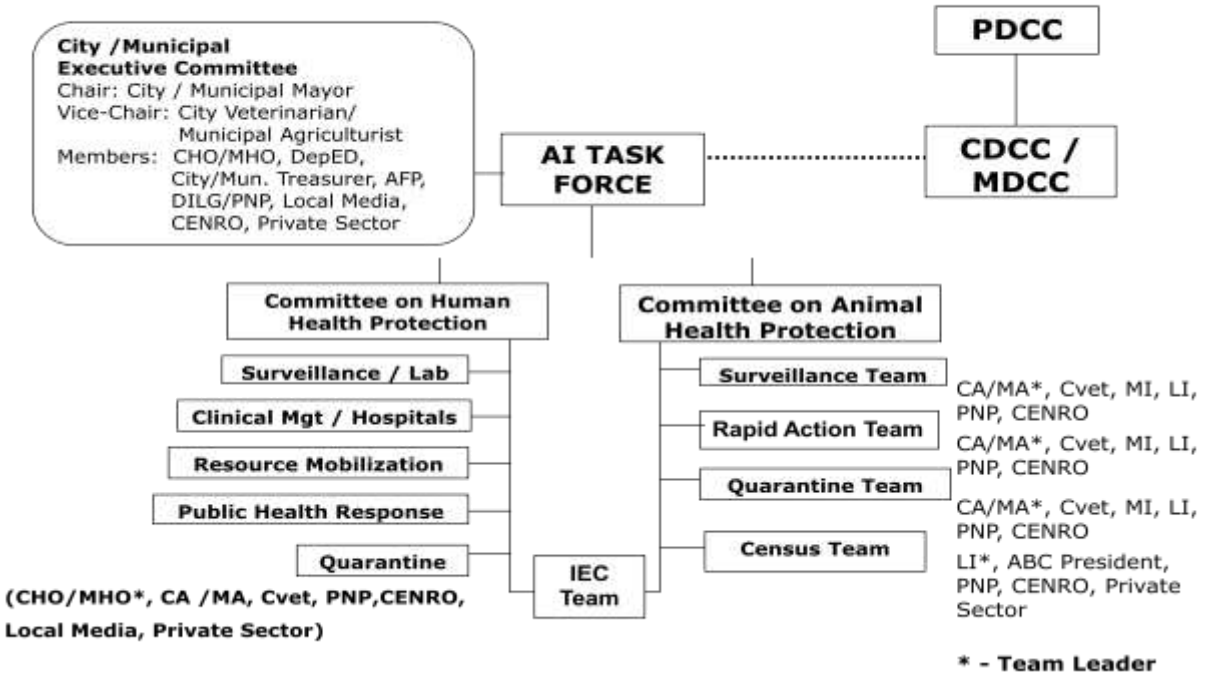
B. Regional AITF



C. Provincial AITF



D. City/Municipal AITF



ANNEX 12. LGU SUPPORT FOR THE PREVENTION AND CONTROL OF AI

REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF THE INTERIOR AND LOCAL GOVERNMENT
A. Francisco Gold Condominium II, EDSA cor. Mapagmahal St.,
Diliman, Quezon City

March 30, 2004

MEMORANDUM CIRCULAR

NO. 2004-37

TO : ALL PROVINCIAL GOVERNORS, CITY/MUNICIPAL MAYORS, PUNONG BARANGAYS, DILG REGIONAL DIRECTORS, AND OTHER CONCERNED

SUBJECT : LGU SUPPORT FOR THE PREVENTION AND CONTROL OF AVIAN INFLUENZA OR BIRD FLU

Prefatory Statement

For the past months, many countries in Asia such as Vietnam, South Korea, Japan, China, Indonesia, Laos, Cambodia, Thailand, Taiwan, and Pakistan are reported to have been affected by the Avian Influenza (AI) otherwise known as the Bird Flu virus. The outbreak had led to severe disease, deaths, and destruction of chicken and ducks. This highly pathogenic influenza virus, H5N1, has the capacity to be transmitted from infected chickens to cause severe disease and mortality in humans.

In the light of the growing concern of the bird flu outbreak and the possible adverse effects to the country, Her Excellency, President Gloria Macapagal- Arroyo issued Executive Order No. 280 dated February 5, 2004 designating the Secretary of Health as the Over-all Crisis Manager on the prevention, restriction, or regulation on the entry, movement, or surveillance of people coming from infected countries or in instance where the highly pathogenic avian influenza has infected, or suspected to have infected humans. Likewise, the Secretary of Agriculture has been designated as the Co-Manager specifically to contain, control, prevent, regulate and otherwise restrict the entry, movement, proliferation of poultry, birds, fowl, and other animals, including their by products which are infected, or suspected to be infected or potential carrier of the Avian Influenza virus.

EO 280 further empowers the Over-All Crisis Manager to call upon agencies which include but not limited to DA, DILG, DFA, DOTC, DOF, DepEd, DOLE, DND, and the Office of the Press Secretary for support and assistance; the Armed Forces of the Philippines, the Philippine National Police, and the Philippine Coast Guard to give priority to the directives affecting their specific areas of concern.

As provided in Article II, Section 15 of the Philippine Constitution, it is the obligation of the state to protect and promote the health of the people and instill health consciousness among them. Supplementary to this Constitutional provision, the Local Government Code of 1991, specifically Section 16 mandates the local government units to promote health and safety of the people within their respective jurisdictions.

In view of the foregoing and to ensure country preparedness for any eventual entry of this contagious virus, all local government units are hereby enjoined to assist the government , particularly the Departments of Health and Agriculture, to closely monitor and report the presence of cases of such nature in their respective localities to prevent the spread thereof.

Preparation of Avian Influenza Preparedness and Response Plan

All local government units, in coordination with the Office of the Agriculturist and/or Veterinarian, shall prepare an Avian Influenza (Bird Flu) Preparedness and Response Plan (BFPRP). The plan shall consist of four (4) stages which support the national government's plan :

Stage 1 **Avian Influenza-free Philippines**

- Strategies or activities at the local level will include but not limited to the following:

>Support to the Department of Agriculture
- Monitoring of domestic fowl
- Mobilization of Veterinarians/Agriculturists

>Support to DENR
- Monitoring of wild birds
- Strict Implementation of the Wild Life Law

>Support to Department of Health (DOH)
- Surveillance of humans
- Vaccination of poultry workers/handlers

>Support to Philippine Coast Guard
- Coastal monitoring of smuggling of fowl

>Support to the Philippine Information Agency (PIA)
- Conduct of Community Assemblies/ Public Information

>Support to DTI
- Price Monitoring of Meat Products

>Sustained vigilance of local health officials and community

Such measures may include but not limited to the following:

A. Prohibition

- Prohibition/reporting of sale of fowl like cage and pet wild birds, game fowl and breeders coming from countries affected by bird flu
- Prohibition of catching, getting near or keeping in captivity wild birds
- Prohibition of sale of live chickens in the market while there is a threat of bird flu
- Prohibition of placing chickens, ducks and pigs together in one area cages or pens
- Not allowing chickens to roam freely

B. Reporting

- Reporting to the local agricultural office for any unusual death or sickness of chicken and other fowl
- Reporting to the nearest health worker for any suspected case of bird flu
- Reporting to the Department of Environment and Natural Resources (DENR) on smuggling, trading or capture of wild birds by an individual.

The local ordinance shall provide foremost basic information on bird flu; its causes; its transmission in chickens and other birds and fowls and in human; and signs and symptoms of bird flu in chicken and in human.

Information, Education and Communication

In coordination with concerned agencies, the private sector and non-government organizations, all LGUs are directed to conduct province-wide information campaign on avian influenza prevention, containment and control through local media (radio, television, and publications) and public/community assemblies.

Mobilization of Barangay Health Emergency Response Teams (BHERTS)

To maximize efforts on the ground, the organized Barangay Health Emergency Response Teams (BHERTS) pursuant to DILG Memorandum Circular No. 2003-95 dated May 7, 2003 shall be mobilized to provide assistance to LGUs in the implementation of their Avian Influenza Preparedness and Response Plan.

Responsibility of DILG Regional and Field Offices

All DILG Regional directors and Field Officers are hereby directed to coordinate with concerned Local Officials within their areas of assignment to ensure the compliance of this Memorandum Circular.

For the information and guidance of all concerned.

JOSE D. LINA, JR.
Secretary

ANNEX 13. CASE INVESTIGATION FORMS OF BAI

AVIAN INFLUENZA
Case Investigation Form

Date of Outbreak (mm/dd/yy): _____/_____/_____
Date of Report: ____/____/_____
Reporting Officer: _____ Phone number: _____
Office/Address of Reporting Officer: _____
Type of Investigation: Suspicion _____ Confirmation _____
Initial _____ Follow-up _____

Name of Farm: _____ Farm Code: __ __-__ __ -__ __-__ __ __
Address of Farm: _____
Barangay: _____ City/Municipality: _____ Province: _____
Owner: _____
Address of the owner: _____ Phone: _____
Company: _____
Information provided by: _____
Farm Veterinarian: Dr. _____ Present During the Visit: NO ____ YES ___

FARM INFORMATION

TYPE OF FARM:
Backyard ____ Commercial ____

CATEGORY / PRODUCTION LINE:
Table-egg layers _____ Meat birds _____

TYPE:
Grandparents _____ Meat-type (broiler) _____
Parents _____ Layers _____
Pullets _____

OTHER INFORMATION REQUIRED:

1. **Topography of Establishment**
   A map of the infected premises must be drawn, clearly indicating the productive units; the animals housed inside them. Main routes of access to the premises must be clearly indicated. Use back sheet.

2. **Data on the Introduction / Spread of Infection**
   Information necessary must be collected for all movements of animals / people/ equipment.

   a. **Movement of birds**

      i. *Introduction of birds from other establishments / hatcheries / farms* (Twenty one days before the onset of the first clinical signs)
      NO _____ YES _____

Date: ____/ ____/ ____ Species _____ Farm: _____ Hatchery: _____
Name of Farm: _____ Farm code: ___ ___-___ ___-___ ___-___ ___ ___
Address: _____
Barangay: _____ City/Municipality: _____ Province: _____

ii. Exit of birds / eggs to other farms / establishment
(in the time span between 20 days before the onset of the first clinical signs and the date the farm was put under restriction)
NO _____ YES _____

Date: ____/ ____/ ____ Species _____
Destination: Other Farm ___ Hatchery ___ Abattoir ___ Others _____
Name of Farm: _____ Farm code: ___ ___-___ ___-___ ___-___ ___ ___
Address: _____
Barangay: _____ City/Municipality: _____ Province: _____

b. **Movement of People** NO _____ YES _____

Date: ___/ ___/ ___ Complete Name: _____
_____Veterinarian _____Technician _____Other farmer
_____Dealer _____Others _____
Address: _____ Phone number: _____
Barangay: _____ City/Municipality: _____ Province: _____

i. Previously visited farm:
Name of Farm: _____ Farm code: ___ ___-___ ___-___ ___-___ ___ ___
Address: _____
Barangay: _____City/Municipality: _____ Province: _____

c. Movement of Vehicles (in the time span between 20 days before the onset of the first clinical signs and the date the farm was put under restriction)

(A)Transport of animals, (B) Transport of feeds, (C) Transport of eggs, (D) Collection of dead animals, (E) Fuel/Gas, (Others) Specify

Date of Entry	Vehicle (A/B/C/ D/E/Oth er)	Name of Compa ny	Fax / Phone No.	Vehicle Plate No. (Tracto r)	Vehicle Plate No. (Trailer)	Transpor t Company	Driver	Phone No.

d. **Indirect contact with other poultry establishments** NO _____ YES _____

(Sharing of equipment, vehicles, feeds, staff, etc. in the time span between 20 days before the onset of the first clinical signs and the date the farm was put under restriction)

Date: ____/ ____/ ____
Name of Farm: _____ Farm code: ___ ___-___ ___-___ ___-___ ___ ___
Address: _____
Barangay: _____ City/Municipality: _____ Province: _____
Species _____

Destination: Other Farm _____ Hatchery _____ Abattoir _____ Others _____
_____ shared vehicle _____ shared feed _____ shared equipment
_____ shared staff _____ collection / recycle of litter
_____ others _____

3. **Other farms owned by the same owner** NO _____ YES _____
Name of Farm: _____ Farm code: ___ ___-___ ___-___ ___-___ ___ ___
Address: _____
Barangay: _____ City/Municipality: _____ Province: _____
Species _____ Population _____
Empty _____ Full _____

4. Poultry farms located near the outbreak
Name of Farm: _____ Farm code: ___ ___-___ ___-___ ___-___ ___ ___
Address: _____
Barangay: _____ City/Municipality: _____ Province: _____
Species_____Population_____
Empty _____ Full _____

5. Estimated Population At-Risk

ANAMNESTIC DATA

Species	Estimated Population At-Risk		
	Within Farm	Within 3 km radius	Within 10 km radius

WEEKLY MORTALITY

Nd: data concerning mortality rates recorded in the 6 weeks prior to the onset of clinical signs
Remarks:
_____

WEEK		NUMBER OF ANIMALS DEAD
FROM	TO	

Date of onset of AI clinical signs: __/ __/ __ Date of end of Outbreak: __/ __/ ___
Clinical signs observed by the farmer: _____

_____

ND: this information must refer to the data collected when the farm has been put under restriction with mortality and morbidity referring to the suspicion of AI.

TOTAL NUMBER OF BIRDS			
Number of birds (dead or alive) put under restriction	**Number of ill birds (Farm put under restriction)**	**Number of dead birds (Farm put under restriction)**	**Number of birds depopulated**

VACCINATION OF BIRDS

Vaccination of birds is practiced: NO ____ YES ____

Date of vaccination	**Type of vaccine**	**Commercial name**	**Administration route**
___/ ___/ ___	**_____**	**_____**	**_____**
___/ ___/ ___	**_____**	**_____**	**_____**
___/ ___/ ___	**_____**	**_____**	**_____**

VACCINATING STAFF:
____ Family ____ Employees ____ External staff ____Others _____
Remarks: _____

ANNEX 14. PROPER PROCEDURE OF WEARING AND TAKING OFF PERSONNEL PROTECTIVE EQUIPMENT (PPE)

PPE shall be worn as follows:

1. Cut four 6 inches of long duct tape per member.
2. Wear cover-all.
3. Wear the shoe cover, with the cover-all inside and taped around.
4. Wear the facemask, goggles and head cap.
5. Wear the 1st gloves, with the cover-all inside and taped around.
6. Wear the 2nd gloves.

Dressing down Procedure:

1. Remove the 2nd glove
2. Remove head cap and mask
3. Remove cover-all, rolling down inside-out
4. Remove shoe cover
5. Remove 1st gloves

ANNEX 15. ITEMS TO BE BROUGHT BY INVESTIGATING TEAM TO THE SUSPECT PREMISES

Biosecurity measures provisions:

- Temporary housing provision (e.g. tents)
- Minimum feed requirements for the next 72 hours,
- Sufficient food supply for the farm personnel
- Rodenticides
- Virucidal disinfectant
- Insecticides (attractants) and larvicides

Disease Investigation materials:

- Paper and pens
- Epidemiological inquiry forms
- Personal Protective Equipment (PPE)
    - 2 disposal suits
    - 5 pairs of disposal shoe covers
    - 5 pairs of latex gloves
    - Disposable caps and face masks
    - 2 Goggles
- Collecting equipment
    - 4 leak proof containers (or large garbage bag)
    - 6 leak proof and thick water resistant plastic bags
    - 50 pieces 2.5 ml disposable syringes with needle
    - 100 thin, small plastic bags or Petri dishes
    - 4 pairs surgical scissors, sterile
    - 4 pairs forceps, sterile
    - Sterile cotton swabs
    - Screw-capped tubes containing TC media with antibiotics and 0.5% BSA
    - Masking and duct tapes and scissors
    - 1 thermic container
- Others
    - Paper tissues
    - Active Disinfectant Solution (see Annex 2)
    - Ice packs
    - Clean extra cloths

ANNEX 16. CULLING AND DISPOSAL

The following shall be the methods and procedures by which poultry shall be destroyed:

A. ***Cervical Dislocation (Manual or Mechanical)*** - Poultry may be killed by either manual cervical dislocation (stretching) or mechanical neck crushing using a pair of pliers. Both methods result in death from asphyxiation and/or cerebral anoxia, but neither is likely to produce immediate unconsciousness.

- Birds shall be handled and restrained.
- Killing should be performed in one stretch to sever the spinal cord. Mechanical pliers can be used to crush the cervical vertebrae with consequent major damage to the spinal cord. Breathing should then stop and the eye pupils should be dilated.
- Consistent results require strength and skill so the personnel should be rested regularly

B. ***Carbon Dioxide (CO2)*** – Animals shall be exposed to an atmosphere of at least 30% CO2 to ensure loss of consciousness and at least 70% CO2 to kill the animal.

- Animals shall be placed in an air-filled container.
- CO2 shall flow into the containers until the concentration rises to at least 70%. This level shall be maintained for at least 30 minutes.
- Animals shall be left in the container until rigor mortis sets in.

C. ***Electrical Single Application***– killing poultry by immersion in an electrified water bath.

- Each bird must be manually handled and placed in an electrified water bath.
- A low frequency (50 Hz) current shall be applied for a minimum of 10 seconds to kill the birds. (The required minimum current to kill chickens is at 160 mA.)
- An effective kill can be verified by the absence of rhythmic breathing.

When applicable, poultry houses during the slaughter procedure should be closed down to prevent the airborne spread of virus and to minimize entry of free flying wild birds that can come in contact with the infected birds and spread infection mechanically.

Carcasses should be placed in intact plastic bags before bringing these to the burial site.

Disposal of Destroyed Poultry and Other Products

- All poultry products and materials associated with destroyed poultry in the Infected Premises and Quarantine Area shall be included in the disposal. This shall include rice hulls, eggs, manure, feeds, etc.

- Surface of containers with carcasses and other contaminated materials shall be disinfected prior to disposal.

- Burial of Carcasses and Contaminated Materials

  <u>Location</u>

  - An on-site location for burial of carcasses and other contaminated materials shall be designated so that subsequent monitoring of contamination level or exposure of restocked population can be easily achieved.

- An off-site location can be used if multiple Infected Premises are simultaneously found in the surrounding area (1 km distance at most).

Burial Pit Construction

- The dimension of the burial pit shall be dependent on the site consideration and the volume of material to be buried. The preferred dimensions are for pits to be as deep as practically possible.

- The pit should not be wider than can be filled evenly with the material to be buried, given available equipment.

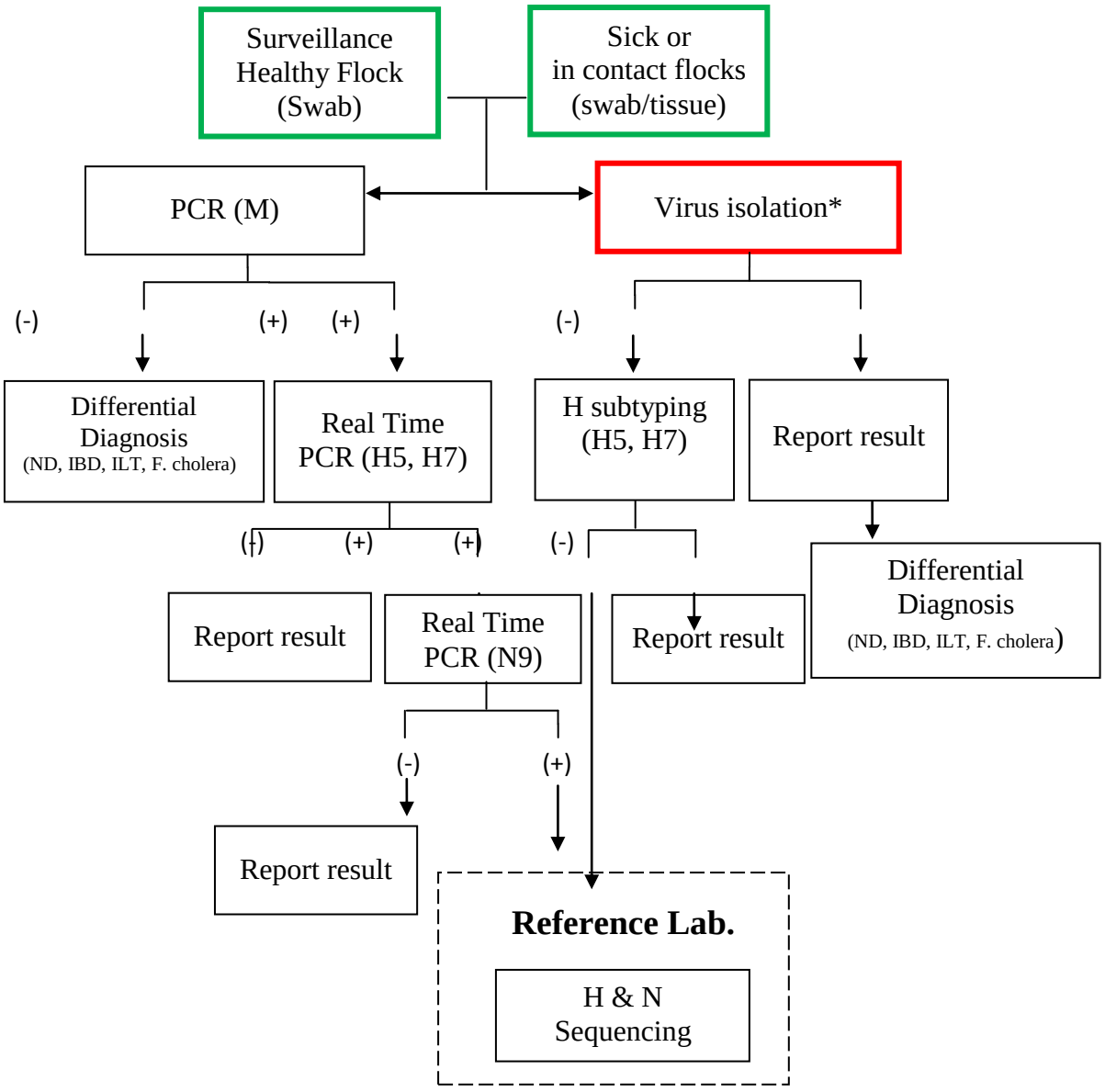
- The base of the pit should be at least 1 meter above the water level.

- Take necessary precautions with underground services like electric cable, telephone wires, drainage pipes, sewerage, etc.

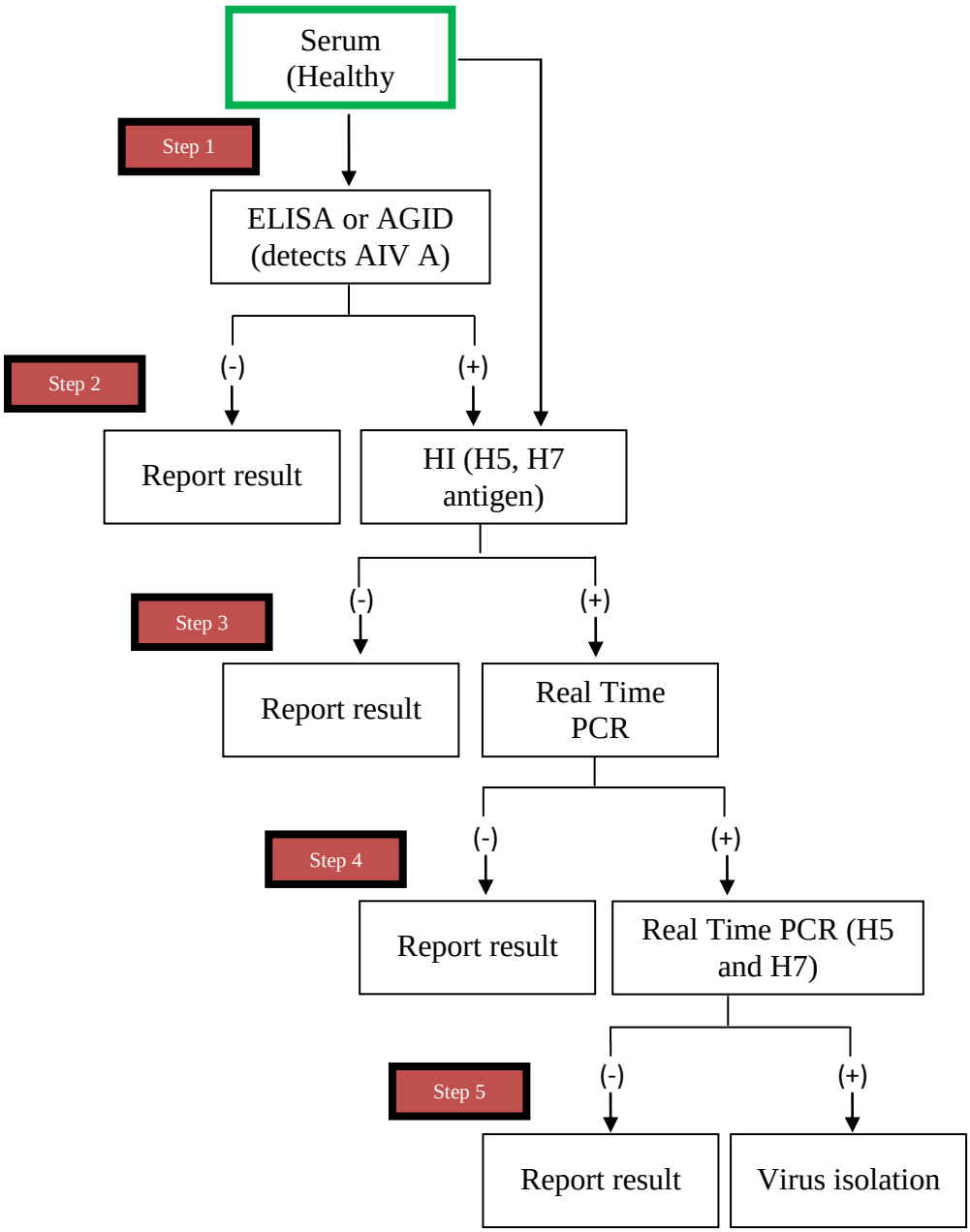
- Burial Activity
  - Carcasses shall be unloaded or pushed into the pit from one end of the long side.
  - The carcasses shall be covered with soil and an unbroken layer of slaked lime shall be added before filling is completed.
  - Lime should not be placed directly on carcasses because it may slow down decomposition process
  - At least 2 meters of soil should be able to cover carcasses to ground level.
  - Surplus soil should be heaped over the pit as overfill.

ANNEX 17. AI LABORATORY ALGORITHM

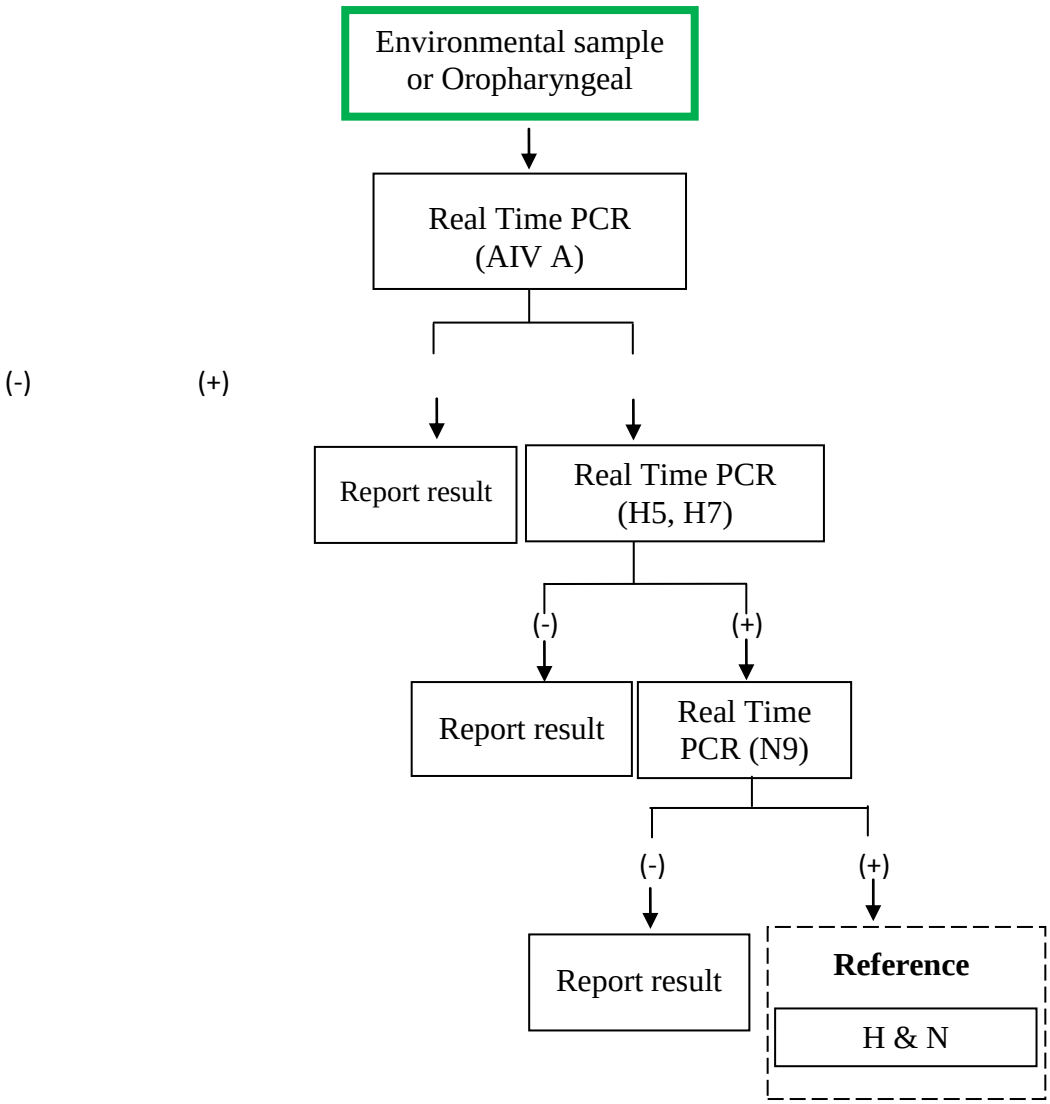
Avian Influenza *Investigation* Laboratory Algorithm



Avian Influenza *Surveillance* Laboratory Algorithm



Algorithm for Surveillance AIV A (H7N9) by PCR



ANNEX 18. GENERAL INFORMATION ON AVIAN INFLUENZA A (H7N9)

What is Influenza A(H7N9)?

- H7N9 is a new subtype of avian influenza virus. The current H7N9 virus is a reassortant (i.e. mix) of viruses previously detected in wild birds and poultry. This particular A(H7N9) virus had not previously been seen in humans until it was found in March 2013 in China.

- Generally viruses of H7 subtypes are referred to as low pathogenic when they cause mild or no disease in domestic poultry. Genetic analysis of the avian influenza A (H7N9) virus shows that it is low pathogenic for chickens. Low pathogenic viruses are difficult to detect in chickens since infected birds often do not show any signs of illness.

What are the main symptoms of human infection with avian influenza A (H7N9) virus?

Thus far, patients with this infection have had severe pneumonia. Symptoms include fever, cough and shortness of breath. However, information is still limited about the full spectrum of clinical signs due to infection with the H7N9 virus. (*Source: WHO)*

How is H7N9 associated with animals?

Chinese authorities have officially reported their detection of this H7N9 virus in bird samples collected from chickens, ducks and captive-bred pigeons at live bird markets in areas where humans have been affected.

The only previous reports of infections with this virus subtype in Asia in animals come from surveillance activities in 2008 in the Republic of Korea and Mongolia where H7N9 subtype was isolated from wild birds.

What is the source of avian influenza A (H7N9) virus that is infecting humans?

The source of infection has not yet been confirmed. Most of the cases of human infection with this avian H7N9 virus have reported recent exposure to live poultry or potentially contaminated environments, especially markets where live birds have been sold. This virus does not appear to transmit easily from person to person, and sustained human-to-human transmission has not been reported.

The genetic analysis of the viruses isolated show components that are avian in origin, but the precise source of these human infections has yet to be determined.

What role does live bird markets play?

OIE expert mission confirms that many of the human cases of H7N9 appear to have a link with live bird markets. To date no human cases or animal infections of H7N9 have been detected on poultry farms. During the mission the team made the hypothesis that people could be infected through exposure to infected birds in markets or to a contaminated environment such as live poultry markets where virus is present.

The experts believe that live bird markets may play a key role in human and animal infections with H7N9 and that, even if the overall level of infection is relatively low (having not been detected yet in poultry farms), live bird markets provide an environment for amplification and maintenance of the H7N9 virus.

The mission also confirms that currently infection with H7N9 does not cause visible disease in poultry therefore Veterinary Services must be especially involved in preventing its further spread in poultry, particularly through the supervision of the implementation of biosecurity measures on farms.

Is poultry meat safe for consumption?

Influenza viruses are not transmitted through consumption of well-cooked food. Influenza viruses are inactivated by normal temperatures used for cooking (so that food reaches 70°C in all parts- "piping" hot), hence, it is safe to eat properly prepared and cooked meat, including from poultry and game birds.

Diseased animals and animals that have died of diseases should not be eaten. Such animals should also not be fed to other animals.

Meat products can be safely consumed provided that these items are properly cooked and properly handled during food preparation. Egg and egg-containing dishes should also be fully cooked. *Source: WHO and FAO*

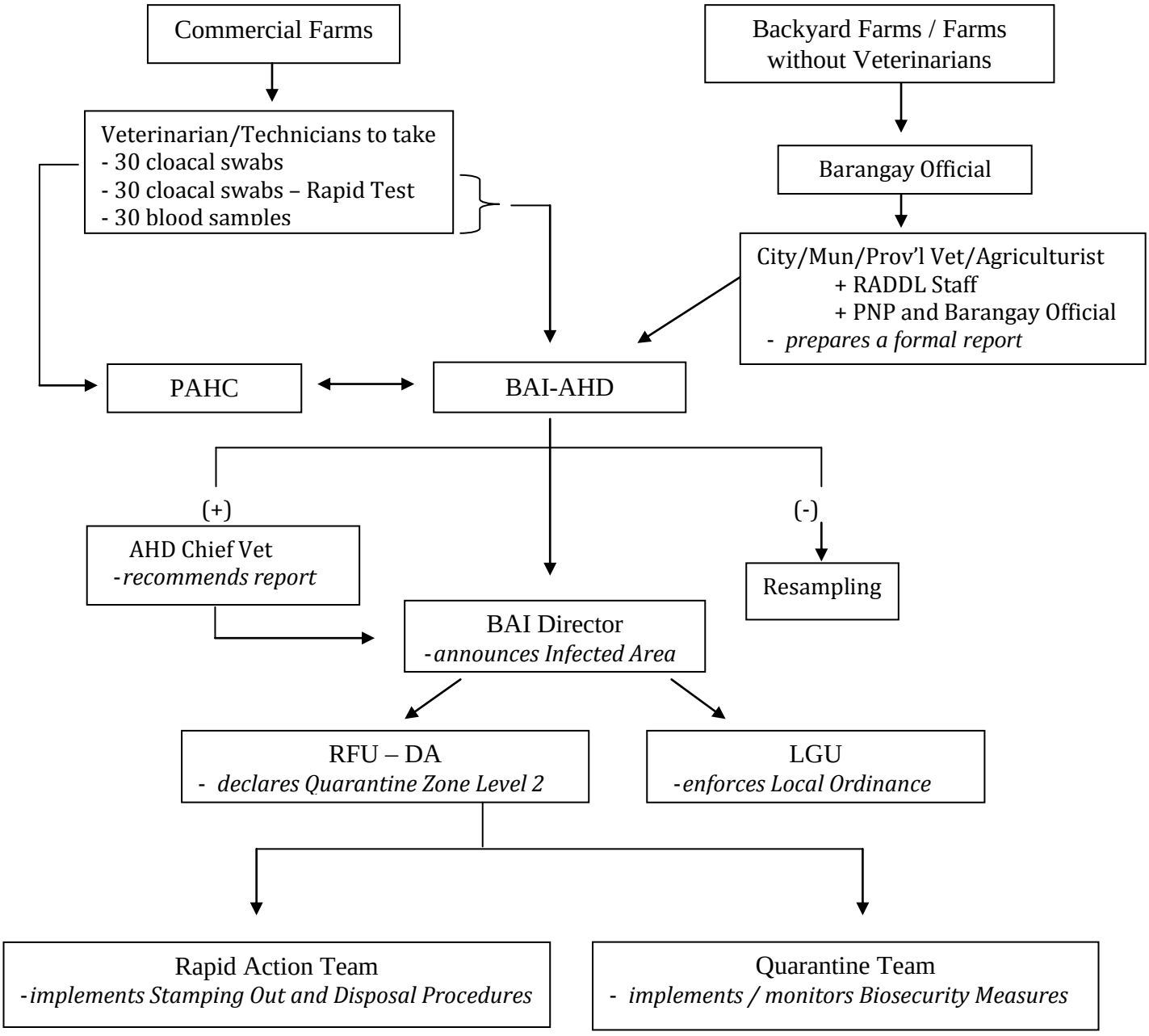
Have wild birds been identified as a carrier of the influenza A(H7N9) virus?

There has been no evidence of infection of this particular H7N9 virus in wild migratory birds in China since the virus was first identified. Surveillance efforts in wildlife and environmental sampling are ongoing in affected areas. FAO advises strongly against culling wild birds. Poultry and other domestic animals should be kept separate from wild birds and other wildlife.

How is influenza A(H7N9) transmitted and spread among birds?

All AI viruses can be transmitted among birds through direct contact with secretions from infected birds, especially feces or through contaminated feed, water, equipment, and human clothing. They are readily transmitted from farm to farm by the movement of domestic live birds, people (especially when shoes and other clothing are contaminated), and contaminated vehicles, equipment, feed, and cages. Several factors can contribute to the spread of all AI viruses including the movements of people and goods, marketing practices (live bird markets), farming practices and the presence of the viruses in migratory wild birds.

ANNEX 19. STAGE 2 - FLOW CHART OF ACTIVITIES



ANNEX 20. RATIONALE FOR THE DEVELOPMENT OF AVIAN INFLUENZA A (H7N9) PREPAREDNESS PLAN

The Philippines remains free from highly pathogenic Avian Influenza A (H5N1) that has caused tremendous damage to poultry industries in the world, with severe impact to public health since 1997, when the virus was first detected in humans. The Philippines has long made preparations against the disease starting in 2004, at the height of HPAI outbreaks in Asian region. This preparedness plan called Avian Influenza Protection Program (AIPP) has since been in place, as the government and the private sector provided a collaborative environment that has nurtured the effort to prevent incursion of the dreaded disease in the country.

Against the background of an exponentially growing population, improving world economies that translate to increased urbanization and higher disposable income to middle income families, the higher demand of protein from animal source has presented a good opportunity for increased production to support market needs. This environment provides for a potential to increased income and livelihood to farmers. Consequently, the same potential for growth in the industry also supported the environment for the emergence of high impact diseases like HPAI, where the world has been wary on the serious potential for low pathogenic strains to have a transgenic shift to a highly virulent form. The decreasing market borders in the past decades due to free trade further aggravate the situation against high impact diseases of animals with fatal implication to public health.

In the early part of 2013, cases of human infection with a novel Avian Influenza virus A (H7N9) has been reported in Eastern China. While the source of the infection has not yet been confirmed, reports suggest that many human cases have had direct or indirect contact with poultry prior to the onset of disease, and the large scale virological surveillance being conducted in China has shown evidence of the presence of infection in chickens, ducks and pigeons. In addition, a number of environmental samples collected from several live bird markets (LBM) have been found to be positive. So far the virus has not been found in wild birds and swine. The mode of infection from animals to humans is believed to be through the respiratory route, causing a range of clinical signs in humans from subclinical to mild disease to severe pneumonia. The case fatality rate is estimated to be at 20 percent.

The H7N9 virus is unique in that it does not cause any disease or apparent production loss in poultry population but has high infectivity for humans. Thus, this low pathogenic influenza H7N9, which is a mixture of at least 4 different Avian Influenza viruses, has a significant potential to silently spread widely which has also shown affinity for mammalian cells. Therefore there is a significant cause for concern as this virus can infect, in addition to humans, other mammalian animal species and act as secondary reservoirs. This further enhances the opportunity for transmission of the virus to a much larger geographical area within and outside China.

ANNEX 21. PREPARATION FOR AVIAN INFLUENZA A (H7N9) PREPAREDNESS PLAN

The recent Avian Influenza A (H7N9) virus event in China is a cause of great concern in the region considering almost borderless trade among countries, and the significant progress in transportation, where more people and products can travel between countries faster than incubation period of aforementioned disease. Given that the country's existing preparedness plan was developed with H5N1 as the particular threat in mind, the recent emergence of H7N9, and possible complicities of future threats, necessitates a need to revisit the current Avian Influenza preparedness plan. Accordingly, as the current preparedness plan remains valid for H5N1, the urgency to revise this plan as a whole takes a secondary role on the need to develop a fit-for-purpose H7N9 preparedness plan, which is considered the most current threat.

It is therefore envisaged that an H7N9 preparedness plan can be immediately developed given the present threat of the disease, afterwards incorporating this plan to an overall (revised) Avian Influenza protection program for the country, as a major sub-section as proposed in the meeting. In this context, for purposes of simplicity and clarity, the preparedness plan targeting H7N9 will dwell on particular foreseen scenarios, by which the disease is expected to present itself. The scenarios are the internationally recognized possibilities on how H7N9 might be found in the country. And in the same manner, collective thoughts on how this is possibly addressed were the main substance of this plan. The response was generated in a collegial process where government veterinarians from all levels, with the equal participation of veterinary professionals coming from the private sector, with particular expertise in poultry practice, deliberated and agreed as a group. A particular response from a particular group was then presented to the plenary for a discussion of the meeting as a whole.

The above pertains to the description of the expected scenario for H7N9 incursion in the country and the response the poultry sector and the government deemed more appropriate. For the purpose of discussing the preparedness plan, these scenarios and responses will basically form the preparedness plan for H7N9. The listed scenarios and responses hereto described in this plan must be seen as the detailed plan for reacting on a given event. However there are more intensive and detailed part of the preparation that needs to be considered in order for these responses to be carried out realistically and effectively in actual event.

The preparedness plan must be seen as part of a more holistic endeavor that will provide the enabling environment for an effective prevention and control program, with the following key questions as primary guide considerations:

- **Can we detect incursion early enough to mitigate risk of further spread and public health risk?**
- **Do we have necessary plans to sustain effort for disease prevention? Or control disease outbreak?**
- **Do we have existing initiatives to prevent incursion and implement necessary control measures in case of disease outbreaks?**

As guided by existing experience in dealing with H7N9, understanding the overall landscape that prevails in the poultry sector is crucial in implementing a preparedness plan on the ground. Most countries in Southeast Asia (SEA), particularly those sharing borders with China have implemented necessary value chain studies to understand the full range of activities which are required to bring a product from the production area, including those that undergo physical transformation (for processing and other valued added manufacturing), to the final consumers. It is understood that these range of activities involved group or groups of stakeholders, in particular nodes along the chain, that are responsible in moving the product from the source to the consumers, and therefore have a part in driving spread of a disease, and perhaps even influence its emergence. The FAO Value Chain Approach to Animal Diseases Risk Management, which utilizes value chain mapping and analysis, provides a systematic framework for determining how people manage domestic livestock populations and their products.

ANNEX 22. KEY ELEMENTS IN MAINTAINING THE PHILIPPINES FREE FROM H7N9 AND OTHER NAI VIRUSES

1. Policy Support

The Avian Influenza A (H7N9) virus is a low pathogenic strain of Avian Influenza. It does not immediately show clinical signs to infected birds, but has fatal outcome to infected humans as seen in outbreaks in China. Development of comprehensive program to support prevention measures, and control and eradication in case of disease incidence, is a necessary step to take with regards to this disease. In this context, the government shall have a policy that will provide legal cover to the activities of the veterinary services in relation to maintaining the country free from H7N9, and/or any relevant activities that are warranted in case the disease breaks out in the country. The lack of necessary policies on animal health results in inherent problems which range from lack of concrete programs to insufficient funding support. It must be noted that maintaining the country free from H7N9 and other animal influenza viruses necessitate the institutionalization of the following key elements of disease detection and early warning system.

- Surveillance program – An active screening for influenza A virus is currently in place. Any positive result, by protocol, requires further tests to determine specific strains. This overall protocol is incorporated in the AIPP. In this context, the private sector must also be in close coordination with the government in providing test results conducted in private laboratories, as the majority holdings of the poultry sector is in commercial scale. An agreement on sharing information must be in place in this regard.

- Risk/Crisis Communication – Information dissemination to gather full support and cooperation among industry stakeholders preempting and during times of crisis.

- Continuing Education – Conduct of Avian Influenza Preparedness workshops/trainings/simulation exercises/seminars to develop/strengthen disease readiness skills of program implementers and field personnel and update on current trends/innovative strategic practices that are relevant to the performance of official duties

- Protocol and Guidelines on Disease Prevention, Control and Eradication – Involves quarantine, destruction of infected and immediate slaughter of exposed animal with utmost consideration on animal welfare and public health. This includes the proper disposal of destroyed animals to remove the source of infection. A protocol with detailed guidelines, including indemnification/ compensation when appropriate, will be developed as annex to this plan.

- Quarantine and Movement Controls – Control of traffic of animals, animal products and personnel in infected areas to prevent spread of infection. This would cover veterinary quarantine checkpoints and animal quarantine desks in airports and seaports stationed all over the country.

2. Epidemiology Capacity Development and Networking to support surveillance

Epidemiology is basically the science that deals in understanding the incidence of a particular disease, including its patterns, causes and effect, with the end goal of providing appropriate measures to control the disease agent. In this context, it is one of the most important disciplines that contribute to the prevention, early detection, rapid response, and analysis of relevant information on a particular disease to effectively implement prevention and control measures.

In as much as the importance of epidemiology is central in the effort to prevent and control disease, this particular field is one where most countries in the region have significant gaps, including the Philippines. The Bureau of Animal Industry (BAI) has the Veterinary Epidemiology Section in the rationalization plan of the Bureau. There will be dedicated staff to handle epidemiological concerns in handling reported animal diseases. The present Philippine Animal Health Information System (PhilAHIS) is capable to collect and manage an efficient database system. As it is, epidemiology is reliant on information which can be generated through a system of reporting which, conveniently, PhilAHIS can offer, and through networking for other bits of information which may not be necessarily captured by the system. The private sector also have significant data holding as regards to animal health, and it will be useful if such data holding will be shared with the government for purposes of analysis to provide a scientific foundation to policy development.

In this case, BAI, the lead veterinary service, will strengthen the Applied Veterinary Epidemiology Training (AVET) Program that will improve the epidemiology capacity in the government and private sector and come up with human resource and institutional level capacity development in veterinary epidemiology. And as aligned to the regional strategic framework for veterinary capacity development in ASEAN, the following needs to be implemented to support effort to prevent incursion of H7N9, and if need be, provide appropriate response in case of outbreak;

a. Enhancement and promotion of linkages, partnerships, networks, coordination, and collaboration among veterinary and human health services and concerned stakeholders to maximize efficient and sustainable use of available resources
b. Strengthening of human resources capacity and management to ensure effective use of trained veterinary epidemiologists and to effectively deliver national animal health programs in compliance with international standards
c. Enhancement and promotion of awareness and understanding of veterinary epidemiology to provide policy support, to ensure science based decision making, and to efficiently mobilize resources based on needs

3. Laboratory capacity development and networking

The Philippine Animal Health Center (PAHC) is involved in a series and ongoing capacity development programs in the region. This initiative has started to address the threat of Avian Influenza A (H5N1) in the region in 2004, supported by both FAO and OIE. The initiative has since grown to include other transboundary animal diseases (TADs), which later on resulted in the establishment of an *ad hoc* laboratory focal group in ASEAN - the ASEAN Laboratory Director's Forum (ALDF). This focal group was basically created to oversee the implementation of the Regional Strategic Framework for Laboratory Capacity Development and Networking in ASEAN, or the Lab Framework.

The capacity to diagnose emerging infectious diseases, including Avian Influenza A (H7N9) as part of the national program, needs to be coherent with the regional approach due in part to the fact that there are geographical areas where closely related viruses were shared and frequent virus incursion/exchange is expected. While the Philippines may be an archipelagic country, its trade and interaction in ASEAN are prominent and must be considered. Accordingly, the national laboratory strategies, with full policy support, must be a major component of the national program. This is to ensure that necessary activities are carried out and sustained, including training for staff and funding to support purchase and maintenance of necessary equipment that will provide the minimum capacity for the concerned laboratories.

As the poultry industry is a major contributor to the agriculture economy, and has a capability to support diagnosis at farm level, enhancement and promotion of linkages and sharing of

information among laboratories and stakeholders to ensure rational use of laboratory services must be considered.

4. Public Awareness

The capacity to communicate risk and provide guidance to the general public is a necessity, not only to ensure order in time of outbreak, but more importantly to support efforts to prevent disease incursion and spread. Along this line, public support is also a necessity in order to establish a support base for government programs. It must be given due recognition that aside from birds/poultry and meat, people are a major contributor to disease incursion and spread. This is brought about by both travel and trade activities which have shorter periods than most incubation periods of zoonotic diseases.

In this case, public awareness through communication and advocacy must be institutionalized at the veterinary services, primarily the Bureau of Animal Industry. Effective use of communication is one of the key components for a successful animal health program providing the necessary tools to clearly depict the situation on the ground, allowing a deeper understanding of the circumstances on the disease environment, and guiding how people should appreciate the situation based on available scientific bases. Communication plans, brought about by a thorough and inclusive planning on the needs against existing capacities and potentials, are a necessary tool to provide guide and directions to policy makers, and more importantly, technical people who might deal on actual situations on the ground. These plans are necessary to identify people or groups, who are particularly important to share information with, to educate on the importance of a particular program, and as necessary, to advocate on the cause of the program. This would include sensitization of policy makers which is important given the relative autonomy of the local government units from the executive department.

Types of Communication Plans that maybe considered at this point.

- **Risk Communication Plan** is used to provide the receiver with information about an expected type of outcome (or risk) and its magnitude to prepare for the possibility of that outcome to occur, and if possible, provide appropriate steps to monitor for the risk.

- **Crisis Communication Plan** is used when an unexpected and unpleasant event happens. It is an approach used by community leaders to address the situation, and inform its stakeholder for rapid and efficient recovery from the event. It requires coordination and cooperation between authorities.

As communication is main avenue to raise public awareness, this component needs to be sustained. Accordingly, various tools are available to elicit the required results. These would include:

- Mass media (radio, print, TV, press release) - Mass media are generally costly avenue to disseminate information. However, this medium allows for a better control, particularly official information with the proper use of forum, where information can be further expounded and explained to target audiences.

- Information and Communication Technologies (social media, website) – ICT can be relatively cheap but there may be limited control on information as most of these sites are open to public. While this will allow multi-interaction among the viewer-participants, the discussion can have a tendency to veer away from the original intended message.

- Focus Group Discussion (community forum, public awareness) - Focus Group Discussion (FGD) is also a low cost method of communicating to specific target audiences. As it is, it targets specific group of people compared to mass and social media where messages may pass on to unintended people or groups. FGD is also a process that can have an immediate feedback from the target people or groups. This immediate feedback system coupled with the relative low cost of facilitating this medium makes this an efficient tool for communication.