## Operational Plan During an Outbreak of Avian Influenza in the Domestic Poultry Population(s)

Ministry of Health and Long-Term Care Actions and Responsibilities

This document complements both the Foreign Animal Disease Emergency Response Plan (FADERP) and the Ministry of Health and Long-Term Care Ministry Emergency Response Plan. This document should be used in conjunction with both plans in the event of an AI outbreak in the domestic poultry population(s).

Note that this document is intended to provide guidance and information for planning and response purposes. It is not intended to be the sole source of action or activities in the event of an AI outbreak. Nor is it intended to provide legal advice. Kindly contact a lawyer if you require legal advice.

# Operational Plan During an AI Outbreak in the Domestic Poultry Population(s) Ministry of Health and Long-Term Care (MOHLTC) Actions and Responsibilities

#### **Amendments**

Amendment Number	Date of Amendment	Amendments Made By

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#### List of Abbreviations

AI – Avian Influenza

CFIA – Canadian Food Inspection Agency

CIDPC - Centre for Infectious Disease Prevention and Control

CMOH – Chief Medical Officer of Health (provincial)

EEMC – Executive Emergency Management Committee

EMCPA – Emergency Management and Civil Protection Act

EMO - Emergency Management Ontario

EMU – Emergency Management Unit

ER – Emergency Room

FAD - Foreign Animal Disease

FADERP – Foreign Animal Disease Emergency Response Plan

FRI – Febrile Respiratory Illness

F/P/T – Federal, Provincial, Terrirotial

HAA - Health of Animals Act

ILI – Influenza-like Illness

IMS - Incident Management System

iPHIS – integrated Pubic Health Information System

LHIN – Local Health Integrated Network

MEOC – Ministry Emergency Operation Centre

MERP – Ministry Emergency Response Plan

MOE - Ministry of the Environment

MOH – Medical Officer of Health

MOHLTC – Ministry of Health and Long-Term Care

MOL – Ministry of Labour

OCVO – Office of the Chief Veterinarian of Ontario

OGPMSS – Ontario Government Pharmaceutical and Medical Supply Service

OHSA – Occupational Health and Safety Act

OHPIP - Ontario Health Plan for an Influenza Pandemic

OIC - Orders-in-Council

OIE - Office International des Epizooties

OMAFRA – Ontario Ministry of Agriculture, Food and Rural Affairs

P/T – provinces/territories

PEOC – Provincial Emergency Operation Centre

PHAC - Public Health Agency of Canada

PHD - Public Health Division

PIDAC – Provincial Infectious Diseases Advisory Committee

PPE – Personal Protective Equipment

VPRIS - Vaccine Preventable and Respiratory Infections Surveillance

WPHSP – Workplace Health and Safety Program (Health Canada)

#### 1.0 Introduction

The Ministry of Health and Long-Term Care Emergency Response Plan (MERP) provides the overall direction and guidance necessary for the ministry to take immediate and decisive action in response to health emergencies.

The Emergency Management and Civil Protection Act (EMCPA) and the accompanying Orders-in-Council (OICs), set out and assign specific roles and responsibilities to provincial ministries and municipalities during times of emergencies. As such, the MERP is aligned with the EMCPA.

In the event of an emergency, the MERP is activated to address emergencies for which the MOHLTC is assigned a *primary* response role (health emergencies); or a *supporting* role (non-health specific emergencies such as a natural disaster).

In situations where there is a foreign animal disease (FAD) outbreak in Ontario, including an avian influenza (AI) outbreak in domestic poultry, the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) assumes a primary role, while the MOHLTC assumes a supporting role. This is in accordance to the EMCPA and Foreign Animal Disease Emergency Response Plan (FADERP).

The MOHLTC will have specific roles and responsibilities when AI is detected in the domestic poultry population(s). These roles and responsibilities will shift when there is either a significant human health risk and/or suspected or confirmed human case(s).

The purpose of this document is to: 1. clarify MOHLTC activities in the event of an AI outbreak in the domestic poultry population(s) in Ontario; 2. supplement the MERP; and 3. fulfill the MOHLTC requirements in the FADERP.

This plan was developed by the Emergency Management Unit (EMU) in collaboration with the MOHLTC's Public Health Division (PHD); as well as in consultation with OMAFRA and the Ministry of Labour (MOL). This plan was also shared with local medical officers of health (MOHs), the Ontario Hospital Association and the Ontario Medical Association for review and input.

Please note that some of the information found in this document has been adapted from the <u>Human Health Issues related to Domestic AI Outbreaks</u>, May 2006, developed by the Canadian Pandemic Influenza Committee and affiliated Working Groups, Public Health Agency of Canada. The document can be found at <a href="https://www.phac-aspc.gc.ca/publicat/daio-enia/index.html">www.phac-aspc.gc.ca/publicat/daio-enia/index.html</a>.

### 2.0 MOHLTC Roles and Responsibilities

#### **EMCPA**

The EMCPA is administered by Emergency Management Ontario (EMO), and provides the authority to assign the following roles responsibilities to the MOHLTC:

- Human health, disease and epidemics, and
- Health services during an emergency

The "human health, disease and epidemics" is a lead role that is assigned to MOHLTC in those emergency situations where health is a primary focus of the response effort. In these situations, MOHLTC would ensure

appropriate measures are in place in the health care system to manage, control and eliminate the outbreak/human illness. Examples would include an infectious disease outbreak, including AI in humans.

The "health services during an emergency" is a supporting role that is assigned to MOHLTC in those emergency situations where health is not the primary focus of the response effort. Examples could include emergency situations from natural hazards *or* an outbreak of AI in the domestic poultry population(s), with no occurrence of cases in humans. MOHLTC would not lead the provincial response to such incidents, but would be responsible for ensuring the continuity and coordination of health services during the emergency and addressing the human health needs of those involved.

#### 2.1 Significance of Zoonosis

Zoonosis refers to the ability of an animal disease to cause illness in humans. It is postulated that the next influenza pandemic will start as an animal disease that spreads to humans. As such, the MOHLTC must be vigilant in any AI outbreak for detecting possible cases in humans and must be prepared to broaden the role of the ministry in managing the human cases/outbreak, as well as advising on aspects of the animal outbreak (see sections 5.0 and 6.0).

#### 2.2 Role and Activities of MOHLTC under FADERP

Canadian Food Inspection Agency (CFIA) is responsible for the administration and enforcement of the Federal Health of Animals Act (FHAA). It is also the lead agency for monitoring, control and eradication of all FAD in Canada - including AI in the domestic poultry population(s).

The FADERP was released in August 2004 and is the result of collaboration among CFIA, OMAFRA and EMO as well as other provincial ministries including MOHLTC. The plan delineates the specific responsibilities of provincial ministries, including MOHLTC.

MOHLTC responsibilities in a FAD are:

- 1. upon being informed that a suspected FAD has been detected, determine the public health risk and impact, if any, and advise OMAFRA, Office of the Chief Veterinarian of Ontario (OCVO), CFIA and EMO accordingly;
- 2. if the FAD is zoonotic, collaborate with OMAFRA, OCVO, Public Health Agency of Canada (PHAC), CFIA, the Provincial Emergency Operations Centre (PEOC) and local public health units to coordinate surveillance and investigation of human cases; and implement prevention and control measures to protect human health;
- 3. assess and advise the public health risk associated with burial, composting or incineration of dead and affected animals;
- 4. undertake surveillance mechanisms to monitor human health impacts; and
- 5. coordinate human epidemiological investigations.

Note: Please refer to the FADERP for more information on roles, responsibilities and activities for all ministries and government agencies during a FAD outbreak.

#### 2.3 Roles and Activities During an Al Outbreak

When a suspect AI outbreak is detected in the domestic poultry population(s), response activities are undertaken by various agencies to manage, control and eliminate the AI outbreak. The following is a list of the core agencies involved and their respective roles:

#### CFIA

- communicate with its provincial counterparts;
- conduct surveillance and investigation of affected premises;
- oversee on-site management of outbreaks including disposal of affected poultry;
- ensure the health and safety of its deployed workers;
- identify and acquire vaccines, if appropriate and available; and
- direct and coordinate recovery efforts to mitigate future outbreaks.

#### **OMAFRA**

- direct the primary provincial response effort to contain and manage the outbreak;
- works collaboratively with the CFIA (leader at the federal level and has overall primacy);
- provide physical and technical assistance where feasible and assists in sourcing and disposal options.

#### MOL

- Provide advice and direction on safe workplace practices and worker safety support
- Develop consistent and timely processes throughout the Ministry of Labour for prioritizing the handling of occupational health and safety issues and for the provision of Occupational Health and Safety Act (OHSA) enforcement during an avian influenza emergency; and
- Develop strategies and protocols to address various issues related to MOL statutes and regulations related to an AI emergency.

#### **MOHLTC**

- work collaboratively with CFIA, OCVO, OMAFRA, MOL, Provincial Infectious Diseases Advisory Committee (PIDAC) and PHAC, as appropriate to review available science regarding the outbreak in terms of human health impacts and risks;
- assess any broader public health impacts; and
- conduct *limited* ongoing monitoring of AI outbreaks, especially internationally, through PHD's Surveillance and Outbreak Management Unit.

Note: MOHLTC's role during an AI outbreak in the domestic poultry population(s) is advisory. Should the AI outbreak extend beyond one local public health unit, or pose a serious risk to human health, MOHLTC would assess whether the management of the health issue should be raised to the provincial level (see Section 6.0 for more details).

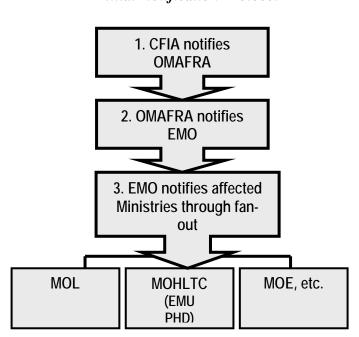
#### **Local PHU**

- maintain ongoing monitoring and surveillance for human cases;
- notify provincial public health officials as required:
- support the health and safety of public health inspectors (and other workers, if needed)

#### 2.4 AI Detected in Domestic Poultry Population(s): Notification

#### Provincial Notification by CFIA

The current notification protocol among key agencies when a suspect AI outbreak in the domestic poultry population(s) is illustrated below:



**Initial Notification Protocol** 

#### EMO Notification of MOHLTC

The formal protocol is that EMO notifies both the public health physician on-call through the Public Health Call Centre and the Director of the EMU. The physician on-call would notify the Senior Veterinary Consultant and the Chief Medical Officer of Health (CMOH). The local public heath unit would also be notified.

#### Notification by MOHLTC

In the event that MOHLTC receives information regarding a suspect AI outbreak in the domestic poultry population(s) through other channels (e.g. a local public health unit), the MOHLTC would notify the EMO Duty Officer and the OCVO.

#### 2.5 Terminology

The intention of this section is to clarify some of the terminology to be used. The case definitions below are only sample case definitions adapted from *Human Health Issues related to Domestic AI Outbreaks, May 2006* PHAC (also see Summary of Terminology, page 12).

#### **Definitions**

#### Human Suspect Case

An individual presenting with:

- Onset of two or more of conjunctivitis and/or influenza-like illness (ILI) symptoms related to a specific AI virus strain, occurring between 1 day after first exposure/contact and 7 days after last exposure/contact, inclusive, to a potential source of AI virus; and
- Symptoms not fully attributable to another known etiology.

#### Human Confirmed Case

• An individual who fulfills the criteria of a suspect case and has **laboratory** confirmation of the AI virus causing the outbreak in the domestic poultry population(s) (same strain that is included in the suspect case definition).

Note: With a new virus, laboratory confirmation may not be possible if the appropriate test is not available.

#### Asymptomatic or Atypical Infection

An individual that has:

- no clinical symptoms; OR
- a clinical presentation unique from that of a suspect case; YET
- has laboratory confirmation (i.e. as detailed for a confirmed case) of an infection with the AI strain causing the outbreak in the domestic poultry population(s) (same strain that is included in the suspect case definition).

Note: With a new virus, laboratory confirmation may not be possible if the appropriate test is not available.

#### Contact - Animal Source

An asymptomatic individual who has been in direct contact with a bird source or potential bird source of AI. This excludes individuals whose only exposure was to another individual known to be infected with AI.

Note: For surveillance purposes, if this individual develops symptoms and meets the case definition they would be referred to as a primary case. However, if the individual develops a confirmed infection but is asymptomatic or atypical in clinical presentation, they would be considered to have a primary source infection.

#### Contact - Human Source

An asymptomatic individual who has been in close contact with an individual known to be, or is suspect to be, infected with AI.

Note: For surveillance purposes, if this individual develops symptoms and meets the case definition they would be referred to as a secondary case. However, if the individual develops a confirmed infection but is asymptomatic or atypical in clinical presentation, they would be considered to have a secondary source infection.

#### Affected Site

Any site at which:

- There is laboratory confirmed of AI in one or more birds, OR
- There is a higher than normal rate of morbidity and/or mortality consistent with AI strain under investigation.

**Note:** It is imperative that consensus is reached on the case definitions used at the outset of an outbreak. Since the case definitions are meant to be used nationally, their development should be through collaboration with the federal, provincial and territorial (F/P/T) Vaccine Preventable and Respiratory Infections Surveillance (VPRIS) committee. The VPRIS committee has been developed to assist with issues surrounding national surveillance. It is recognized that the case definitions may change as new information becomes available. Additionally, case definitions will be virus strain specific, as symptoms of human illness varies depending on the AI strain causing human illness.

#### **Summary of Terminology**

DEFINITION	SYMPTOMS	LABORATORY CONFIRMATION	ILL ANIMAL CONTACT	ILL HUMAN CONTAC T
HUMAN SUSPECT CASE	Symptoms consistent with AI and NOT consistent with other etiology	NA		
HUMAN CONFIRMED CASE	Symptoms consistent with AI and NOT consistent with other etiology	Laboratory results confirm AI  Note: laboratory test may not be available if new virus		
HUMAN ASYMPTOMATIC/ATYPICAL INFECTION	Symptoms absent OR not consistent with AI	Laboratory results confirm AI		
HUMAN CONTACT: ANIMAL SOURCE	None	NA	Yes	None
HUMAN CONTACT: HUMAN SOURCE	None	NA	No	Yes

#### 3.0 Human Surveillance

When AI is detected in the domestic poultry population(s) human surveillance is critical to the early detection of possible human cases. The role of MOHLTC and public health in surveillance activities is as follows

#### **Provincial Level**

#### MOHLTC - when the AI outbreak is NOT in Ontario

monitoring of the outbreak and potential impact on the population in the respective jurisdictions.

#### MOHLTC - when the AI outbreak is in Ontario

- tailoring of national recommendations to suit the local situation/epidemiology;
- developing additional public health recommendations as needed based on the local situation/epidemiology;
- Implementing the Febrile Respiratory Illness (FRI) protocol (modified protocol to be considered by PIDAC) in order to support enhanced surveillance activities for potential human cases;
- liaison with PHAC (and CFIA as/if required) to ensure consistency of prevention and outbreak control recommendations being provided to the workers and others that may be involved in the outbreak;
- reporting summary data on human health issues and prevention/control measures to PHAC; and
- providing clear, consistent and up-to-date information to health care providers (particularly those outside of the jurisdiction of the affected local public health authority(s)); and the public.

#### Provincial Veterinary Diagnostic Laboratory

receiving and testing samples from animals

#### Local Level

#### Local Public Health Unit (Authority) - when the AI outbreak is NOT in Ontario

routine monitoring and surveillance activities in respective jurisdictions

#### Local Public Health Unit (Authority) - when the AI outbreak is in Ontario

- implementation of enhanced surveillance and public health measures and recommendations (possibly including legal requirements) related to:
  - human health issues (e.g. surveillance of farm families);
  - occupational health issues pertaining to any public health unit staff involved in the response;
  - providing clear, consistent and up-to-date information to local health care providers and public as necessary;
  - reporting data on human health issues and prevention/control measures to MOHLTC.

#### Local physicians or occupational health staff

 reporting of any individuals who may have/are suspected to have an AI infection to local public health unit

Note: Upon notification of an AI outbreak in the domestic poultry population(s) with human health implications, local public health units will initiate investigation, enhanced surveillance and implement appropriate public health measures. These measures will include primary prevention (e.g., infection control measures and antiviral prophylaxis), in addition to case finding and management activities. Investigations would also entail additional activities surrounding identification, understanding and containing sources of infection.

#### 3.1 Surveillance Activities

Surveillance activities are critical for characterizing and monitoring the impact of the outbreak on human health, **AND** guiding public health actions, including the collection and reporting of data necessary for national and international reporting.

The following are recommended surveillance activities for monitoring, managing and eliminating the health human impacts of AI.

- Development of a human AI case definition that includes details regarding specific symptoms, incubation period, exposures and locations of concern, in addition to laboratory test results that are associated with confirmed human cases.
  - Note: It is imperative that consensus is reached on the case definitions used at the outset of an outbreak. This could include input from local public health unit(s), MOHLTC, PIDAC), CFIA, PHAC in collaboration with the VPRIS committee and advice from the OCVO. See section 1.3.
- Notification of the human AI case definition to all relevant stakeholders including the public health outbreak investigators, occupational health authorities with employees involved in controlling the outbreak (e.g. OMAFRA, MOL, CFIA), the influenza pandemic committee (i.e., all other provincial/territorial (P/T) and surveillance working group members including VPRIS) and other stakeholders that might be involved in case detection (e.g. local physicians, clinics and hospitals). Notification will be done by MOHLTC through the use of Important Health Notices (IHN) alert system; and through PHAC for out-of-province notification.
- Development and dissemination of an initial human case reporting questionnaire to public health outbreak investigators in order to support enhanced surveillance activities for potential human cases (i.e., implementing a modified FRI protocol for consideration by PIDAC).
- Public health unit use of the integrated Public Health Information System (iPHIS) for the timely collection, storage and reporting of data. The timely use of iPHIS will also assist with case/information management.
- Identification of potential cases and contacts; and the administration of the human case reporting questionnaire in order to collect epidemiological information and implement the appropriate investigation and public health measures. This will involve communicating with a designated person(s) at the affected farm(s) and identifying any farmers, families, employees, crews, visitors or others who may have had contact with infected/contaminated or potentially infected/contaminated birds, people or material on the farm.
- Those involved in transporting infected poultry and those working at abattoirs will need to be contacted as well. Through this process, the number of ill persons (potential cases) and potentially exposed persons (contacts) can be identified and follow-up initiated.
- Ongoing surveillance for human illness linked to affected farms.

- Ongoing and timely reporting on any human cases and control measures put in place, through existing reporting channels (i.e., clinician -> local public health -> MOHLTC -> PHAC.
- Notification of any other P/Ts that would be receiving exposed/ill individuals linked to the AI outbreak
  (e.g. workers who have come to assist in outbreak management/control activities and returning to
  their home P/T). The MOHLTC's Public Health Division (PHD) will contact other P/Ts and PHAC for
  out-of-country contacts.
- Notification of asymptomatic individual(s) linked to the AI outbreak that is leaving Ontario with the
  possibility of symptom development after last exposure. Should symptoms develop in these
  individuals, they should be instructed to see a physician, undergo treatment and have symptoms
  reported to the local public health authority.
- Consideration of any special studies (e.g., laboratory testing for evidence of asymptomatic infection) that might require data or laboratory specimen collection during the AI outbreak.

#### 3.2 Monitoring (local public health units have the lead)

Monitoring of the human risk and human outbreak of AI will be led by the local public health unit. Monitoring activities may include:

- 1) the epidemiology of the AI outbreak;
- 2) impact of infection control measures; and/or
- 3) familiarity with the strain causing the AI outbreak;

If AI is detected in humans, enhanced monitoring activities will include contacting individuals exposed to the AI virus.

As contacts are identified through monitoring, surveillance and investigation activities during the AI outbreak, it is essential that "contacts" receive clear advice on steps to be followed i.e., what the signs and symptoms of the illness are, who to call and where to go if they become ill; and to practice cough etiquette and hand hygiene.

Note: While the reporting of human illness caused by influenza, including an AI strain, to public health units is a requirement under Ontario legislation, the reporting of bird illness that may impact human health is not as well defined. These processes are currently being examined at the national level.

In the meantime, Ontario public health units are encouraged to develop working relationships with their animal health counterparts within their respective jurisdictions in order to facilitate timely two-way communication and management of these types of events. This should include consensus on outbreak management structure, to facilitate an efficient outbreak response.

#### 4.0 Infection Control

Strict adherence to infection control precautions will be essential for the control of an AI outbreak and possible prevention of human infection. Infection control/prevention information should be provided to all workers, residents and visitors to affected sites at the first identification of the outbreak.

It is important that the information/infection control message be consistent regardless of the source (public health unit(s), occupational health authorities, or representatives of OMAFRA, MOHLTC, MOL, CFIA, or PHAC) Measures to monitor compliance of infection controls should also be considered.

#### 4.1 General Recommendations and Precautions (Infection Control)

- farm workers or owners who are not directly involved in culling activities should avoid exposure to known, or potential sources, of the AI virus (e.g., infected birds, bird manure or potentially AI virus-contaminated environmental surfaces);
- other individuals residing on the farm (e.g., family members) should also avoid exposure to known, or potential sources, of the AI virus;
- workers involved in culling activities, or who are otherwise expected to be exposed to known, or potential sources, of the AI virus should wear Personal Protective Equipment (PPE. See section 4.2 below and Annex C); and
- farm/culling workers, owners and family members should get a seasonal influenza vaccination. While the seasonal influenza vaccine will not protect against the AI virus, it does protect against the seasonal flu that could weaken an individual's immune system and/ or resistance to the AI virus.

Contacts of known or potential sources of AI are to be advised of the following precautions:

- avoid touching their faces and mucous membranes, including their eyes, with their hands (whether they have been wearing gloves or not);
- wash hands frequently<sup>1</sup> (including before putting on and after removal of PPE); hand hygiene should consist of washing with soap and running water for a minimum of 15-20 seconds, or the use of 60%-90% alcohol based hand sanitizer if hands are not visibly soiled;
- Practice proper cough etiquette. This involves covering the mouth and nose with a tissue when coughing/sneezing. Put the used tissue in the wastebasket. If a tissue is not available, cough into the upper sleeve, not in hands. Wash hands after coughing; and
- If antivirals are available, the exposed individual may chose to take the medication at the advice of a health care professional.

#### 4.2 Personal Protective Equipment for Farm Workers

The wearing of PPE is a critical measure to minimize an individual's risk of infection and is highly recommended to persons who may be exposed to the animal source of the AI virus.

Workers involved in the culling of infected poultry and others involved in the outbreak control efforts must strictly adhere to recommended PPE. Please refer to Annex C for the MOL's Labour's Guide to PPE for Health Care Workers and Agricultural Workers.

<sup>&</sup>lt;sup>1</sup> Hand hygiene is the most important measure in preventing the spread of infection after contact with infected or potentially infected poultry, contact with contaminated surfaces, or after removing gloves. Workers or other persons are at risk of exposure should be educated on the importance of strict adherence to and proper use of hand hygiene.

#### PPE includes:

disposable fit-tested half-face N-95 respirator. Higher levels of protection may be needed to address
other inhalation hazards in the workplace, such as high levels of poultry dust inside barns, or the
presence of hazardous or inert gases such as CO<sub>2</sub>;

Note: Fit testing and training is necessary prior to use of any respirator. Respirators are recommended for these individuals since the process of culling or environmental decontamination (e.g. in affected barns) may cause contaminated materials (e.g. sawdust soiled with manure) to be suspended in the air, creating a risk potentially akin to an aerosol generating procedure in a hospital setting. Some may choose a respirator beyond an N-95. Employers may need advice on the selection and use of respiratory protection from a competent person if entering a barn with high levels of dust, or with hazardous or inert gases present.

- safety goggles (to protect the mucous membranes of eyes);
- gloves that are impervious (nitrile, PVC, rubber, hospital gloves):
  - o gloves should not be reused or washed. If heavy-duty rubber work gloves are used they should be disinfected after use or discarded.
  - o gloves should be removed immediately after use to avoid touching non-contaminated articles and surfaces.
- coveralls that are impervious to water:
  - o if using reusable protective clothing it must be washed immediately after use. If this is not possible, disposable coveralls should be used;
- disposable protective shoe/boot covers or rubber or polyurethane boots that are impervious to mud and water and are easily cleaned and disinfected should be worn;
- disposable head or hair cover to keep hair clean; and
- the use of foot baths may also be warranted.

Disposable PPE must be properly discarded in sealed plastic bags. Reusable PPE should be cleaned and disinfected as specified by local public health units. Proper hand hygiene must be performed after removing PPE.

Note: Farm workers, those involved in culling and others who may be exposed to AI infected poultry should be trained in proper techniques of donning, removing and disposing of PPE without contaminating him/herself. The training should be similar to that provide to health care workers by hospital occupational or infection control programs.

#### 5.0 Public Health Measures

Public health measures will largely depend on the initial findings from the epidemiologic assessment of the AI outbreak. Initially, the focus should be on education and infection control measures (see section 3.1 and 4.0).

Once human illness due to an AI virus is linked to an AI outbreak in the domestic poultry population(s), additional measures will be necessary.

#### 5.1 General Recommendations

Public health measures should include:

• Collecting accurate and up-to-date information on the AI outbreak, including why it is a potential human health risk; and appropriate infection control measures lead by PHD, MOHLTC in conjunction with local public health unit.

- Investigation and management of ill individuals/cases as well as their contacts. Local health delivery system will have the lead with public health unit support.
- Confirmation of roles and responsibilities with respect to the provision/delivery of occupational health and safety. MOL will have the lead.
- Advice regarding appropriate PPE. The PHD, MOL, and PIDAC will be involved.
- Activities to ensure timely local availability of antiviral drugs. This may include overseeing delivery
  from a central supplier to the appropriate location(s) for distribution and establishment of a
  centralized prescription and dispensing clinic lead by the EMU in conjunction with the public health
  unit(s) and Ontario Government Pharmaceutical and Medical Supply Service (OGPMSS).

#### 5.2 Burial, Composting or Incineration of Dead and Affected Birds

MOHLTC is not responsible for burial, composting or incineration of dead and affected birds, only for assessing associated public health risks.

Close collaboration amongst MOHLTC, CFIA, PHAC, OMAFRA, and the Ministry of the Environment (MOE) in Ontario, is required in this regard. Although this responsibility is identified in the FADERP as a separate task, it should be seen as a component of MOHLTC's broader role in assessing the public health risk associated with burial, compositing or incineration of dead and affected animals.

#### 6.0 MOHLTC Activities – Suspect or Confirmed Human Case(s)

Notwithstanding CFIA's leadership role in monitoring, controlling and eradicating all FAD in Canada, including AI in the domestic poultry population(s) – with lead provincial support from OMAFRA and EMO, once there is a suspected case(s) or confirmed case(s) of AI in humans, the MOHLTC will implement its Incident Management System (IMS).

The IMS will allow the MOHLTC to respond immediately and decisively to human health risks, impacts and illness in a coordinated fashion. Leads will be identified for each of the standardised IMS functions: Command (including Safety, Liaison and Communications), Operations, Planning, Logistics and Finance and Administration. Personnel will be notified to report to the MEOC and roles and responsibilities will be assigned (for details of roles and responsibilities for MOHLTC, please refer to Annex B).

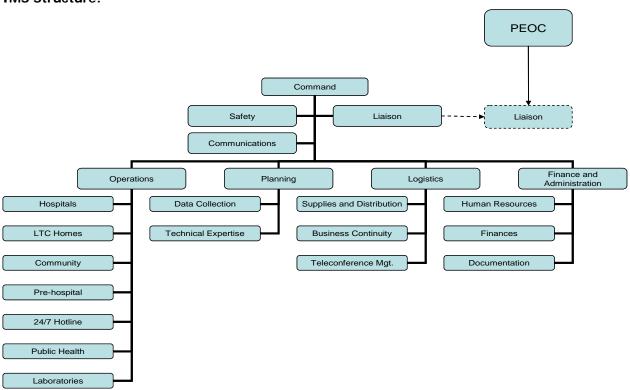
**Operations** would direct resources as required to fulfill the emergency response requirements. As such, this group will link with other stakeholders (CFIA, PHAC, PEOC, and OMAFRA) to carry out the decisions disseminated from Command. This staff also staffs the 24/7 EMU Healthcare Provider Hotline that responds to inquiries about the emergency from the health sector.

**Planning** would interpret, disseminate and evaluate the necessary emergency plans that are relevant to the AI outbreak. Planning is required to link between all elements of IMS to ensure that the ministry's plans are being carried out appropriately. This group will look forward to potential scenarios and recommend possible responses. Technical expertise and data collection activities (i.e. PIDAC, Scientific Response Team, surveillance, etc.) reside with planning to ensure that all relevant emergency data is available to Command and Operations staff.

**Logistics** is responsible for mobilizing the province's available resources for the response. This group is also responsible for ensuring the continuity of ministry operations during an AI outbreak, managing teleconference requirements and communicating and sharing of vital information.

**Finance and Administration** are responsible for the administrative functions that support MOHLTC response.

#### **IMS Structure:**



The MOHLTC will collaborate with PHAC, CFIA, PEOC and the local health unit(s) to increase surveillance and investigation of human cases and implement prevention and control measures to protect human health. The roles and responsibilities of MOHLTC when AI is detected in humans is an expansion of the surveillance activities assigned to the ministry through the FADERP.

Note: Depending on the scale and nature of the AI outbreak, MOHLTC may assume a broader role to manage a "human health emergency". In the event of human cases of AI, MOHLTC would reference the national document *Human Health Issues related to Domestic Avian Influenza Outbreaks*, May 2006.

If it is determined that the AI outbreak is the cause/or will cause the influenza pandemic, the Ontario Health Plan for an Influenza Pandemic (OHPIP) becomes the guiding document for MOHLTC's s response. In this situation, it should therefore be assumed the OHPIP will supersede the FADERP for human issues.

#### 6.1 Activities Initiated by MOHLTC

MOHLTC's response will reflect collaboration within PHD and EMU, to assess the scale and impact of the incident and the appropriate ministry response. The Ministry's response would also be informed by the involvement of the relevant local public health unit(s).

The PHD (with PIDAC support as required) will assess the public health risk and impact of the AI outbreak. PHD may not have sufficient scientific information to fully assess the health risks/impacts of an AI outbreak in domestic poultry at the outset. Ongoing collaboration with CFIA and OMAFRA to confirm and update available information will be required.

While conducting an assessment of the human health risks and impact of a suspect AI outbreak, PHD will also consider whether, and when, to increase ("ramp-up") other MOHLTC response activities. The EMU plays a critical role in this regard. It collaborates with PHD from the outset to assess risks and impacts but also provides leadership regarding the appropriate scale and nature of MOHLTC's response. For example, the Director of the EMU may chose to initiate "ramping-up" activities which may include assisting PHD to access additional scientific expertise, mobilizing staff to prepare for activation of the Ministry Emergency Operation Centre (MEOC), and providing ongoing strategic advice to senior management regarding the appropriate level of MOHLTC response activities.

## 6.2 Management of Human Cases of AI (health delivery system has the lead with support from local Public Health Unit)

Upon receipt of a report of an ill person, it is recommended that the local public health unit:

- contacts the ill person and complete a case report form (classifying them as a suspect or confirmed case for surveillance purposes);
- facilitates collection of appropriate laboratory specimens;
- facilitates access to antiviral treatment;
- reports the person under investigation/ probable case/ confirmed case as per previously established protocol to PHD (see definitions in section 1.4);
- provides information to the ill individual (and/or their family members) about their illness
  that includes who to call and where to go if their illness becomes more severe. Patient should be
  advised to call ahead to allow staff to use appropriate occupational health and safety procedures;
- instructs the ill individual to self-isolate, if required;
- provides information on infection control measures (i.e., cough etiquette and hand hygiene etc.);
- conducts active surveillance and documents course of illness; and
- identifies any close contacts.

Note: Employees should notify their health and safety representative of their illness and these activities should be conducted in collaboration with the respective occupational health services.

## 6.3 Presentation of an individual potentially meeting the human case definition (to a Hospital Emergency Department)

If an individual presents at an emergency department (ER) with symptoms and potentially meets the case definition of AI infection, ER physicians/staff should undertake the following:

- report the person under investigation to the local public health unit;
- provide information to the ill individual (and/or their family members) about their illness that includes who to call and where to go if their illness becomes more severe;
- instruct the ill individual to self-isolate, if required;
- provide information on infection control measures (i.e., cough etiquette and hand hygiene etc.):
- collect lab specimens as directed by local public health unit;
- provide antivirals as received by local public health unit;
- monitor illness; and
- notify Infection Control Practitioner when in hospital environment.

Note: Employees should notify their health and safety representative of their illness and these activities should be conducted in collaboration with the respective occupational health services.

## **Annex B: Checklists - Roles and Responsibilities**

Note: Once the Operational Plan is activated, all ministries are responsible for continuity of their operations and are assumed to be in a support role to CFIA, OMAFRA and EMO as the lead agencies.

## **Check List for the Chief Medical Officer of Health**

# 1. All detected in the domestic poultry population(s) in the province and MOHLTC is notified

Not Started	In Progress	Completed	
			Liaise with OCVO
			Liaise with the EMU to link public health
			assessment with decision-making and assessment
			regarding the appropriate scale and nature of
			MOHLTC's response
			Provide leadership and appropriate information
			with/to MOHs, through ongoing liaison
			Participate on Executive Emergency Management
			Committee (EEMC) if/when convened
			Provide leadership to deliver public messaging [if
			appropriate] regarding public health considerations.

### 2. Al has been shown to cause illness in humans in the province. In addition to the list above, further roles and responsibilities are required of Chief Medical Officer of Health

Not Started	In Progress	Completed	
			Liaise with affected MOH(s), regarding surveillance
			[and prevention] of human cases and human health
			effects*
			Liaise with EMU to [also] monitor and assess resource
			implications of MOHLTC prevention and control
			measures
			Provide leadership to deliver public messaging [as
			appropriate] regarding public health considerations
			Collaborate with PHAC to assess available
			information and associated human health impacts
			and risks
			Provide strategic advice to inform MOHLTC's
			assessment of impact and risks

<sup>\*</sup> It may be appropriate to gather additional information beyond Reportable Disease surveillance, e.g. syndromic impacts, in conjunction with local Public Health Unit.

## **Check List for Senior Veterinary Consultant**

Once the Operational Plan is activated, all ministries are responsible for continuity of their operations and are assumed to be in a support role to CFIA, OMAFRA and EMO as the lead agencies.

# 1. All detected in the domestic poultry population(s) in the province and MOHLTC is notified

Not Started	In Progress	Completed	
			Liaise with CFIA/EMO/OMAFRA to confirm and
			update information and available science regarding
			inputs
			Provide expert veterinary advice to the provincial
			СМОН
			Liaise with affected local public health unit staff, as
			appropriate, to confirm available information and to
			contribute to assessment of specific situation, and
			broader impacts
			Liaise with the EMU to share available intelligence

### 2. Al has been shown to cause illness in humans in the province. In addition to the list above, further roles and responsibilities are required of the Senior Veterinary Consultant

Not Started	In Progress	Completed	
			Provide veterinary expertise and advice to inform
			PHD's overall response activities

## **Check List for Public Health Division**

Once the Operational Plan is activated, all ministries are responsible for continuity of their operations and are assumed to be in a support role to CFIA, OMAFRA and EMO as the lead agencies.

# 1. All detected in the domestic poultry population(s) in the province and MOHLTC is notified

Not Started	In Progress	Completed	
			Monitor public health risks and impacts including surveillance and human epidemiological investigation
			Undertake/monitor ongoing public health surveillance
			Liaise and cooperate with the EMU on an ongoing basis as required  Inform the Unit's assessment of MOHLTC's appropriate strategic response, as appropriate  Advise regarding relevant public health information  Share required information on an ongoing basis  Make staff available to MEOC as required
			Provide advice and support to CMOH

### 2. At has been shown to cause illness in humans in the province. In addition to the list above, further roles and responsibilities are required of the Public Health Division

Not Started	In Progress	Completed	
			Liaise with CFIA Epidemiologist(s)
			Provide required/appropriate support to local public health unit

# Check List for Local Medical Officer of Health/Local Public Health Unit

Once the Operational Plan is activated, all ministries are responsible for continuity of their operations and are assumed to be in a support role to CFIA, OMAFRA and EMO as the lead agencies.

# 1. All detected in the domestic poultry population(s) in the province and MOHLTC is notified

Not Started	In Progress	Completed	
			Monitor local public health risks and impacts including surveillance and human epidemiological investigation including assessment of any possible risk to food safety
			Share available information with MOHLTC
			Liaise with on-site CFIA, OMAFRA on-site staff and farm staff to assess health risks to any non- CFIA workers deployed and farm owner and workers
			Deploy public health inspectors if required
			Liaise with local municipal authorities through the Municipal EOC
			Act on direction and advice of CMOH as required
			Assess and manage local-level public health impacts (i.e. food safety)
			Advise when local resources are anticipated to be overwhelmed
			Support clinical management of any affected individuals

# 2. All has been shown to cause illness in humans in the province. In addition to the list above, further roles and responsibilities are required of the Local Medical Officer of Health /Local Public Health Unit

Not Started	In Progress	Completed	
			Oversee local-level public health response activities
			to address human health impacts
			Ongoing local level disease surveillance, case follow
			up and contact tracing
			Provide information to MOHLTC (PHD/CMOH)
			regarding local-level issues and feedback on
			associated provincial responses
			Receive and act upon direction of CMOH, when
			received

## **Check List for Emergency Management Unit**

Once the Operational Plan is activated, all ministries are responsible for continuity of their operations and are assumed to be in a support role to CFIA, OMAFRA and EMO as the lead agencies.

# 1. All detected in the domestic poultry population(s) in the province and MOHLTC is notified

Not Started	In Progress	Completed		
			Provide strategic advice to CMOH/PHD regarding assessment of public health impacts especially in terms of the appropriate MOHLTC operational response	
			Convene PIDAC (if required) to provide strategic advice to inform MOHLTC's assessment of impact and risks	
			Notify CEO(s) of involved Local Health Integrated Networks(s) (LHINs)	
			Makes decision regarding appropriate MOHLTC activation level	

# Check List for Communications and Information Branch

Once the Operational Plan is activated, all ministries are responsible for continuity of their operations and are assumed to be in a support role to CFIA, OMAFRA and EMO as the lead agencies.

# 1. At is detected in the domestic poultry population(s) in the province and MOHLTC is notified

Not Started	In Progress	Completed		
			Responsible for ongoing activities and readiness to	
			deploy crisis communications plan as and when	
			required	
			Undertake ongoing media monitoring	
			Perform routine liaison with local contacts as	
			appropriate	
			Develop information for public distribution	
			Liaises with CFIA, OMAFRA, EMO through the	
			Joint Information Centre, if activated, in	
			communications messaging	
			Liaises with EMU regarding communications	
			messaging	
			Respond to media calls	

## Check List for Divisional ADMs and Local Health Integrated Networks

Once the Operational Plan is activated, all ministries are responsible for continuity of their operations and are assumed to be in a support role to CFIA, OMAFRA and EMO as the lead agencies.

# 1. All detected in the domestic poultry population(s) in the province and MOHLTC is notified

Not Started	In Progress	Completed	
			Responsible for business continuity and ongoing operations based on direction from, and consultation with, the EMU
			Designated ADMs - Participate on EEMC when activated
			Ensure Telehealth has appropriate tools to respond to anticipated questions

2. AI has been shown to cause illness in humans in the province. In addition to the list above, further roles and responsibilities are required of the Divisional ADMs and Local Health Integrated Networks

Not Started	In Progress	Completed	
			Make staff available to EMU if required

## **Annex C**

## **Guide to PPE for Avian Influenza**

#### For Health Care Workers\*

	Providing care for suspect or confirmed
	human cases of Avian influenza H5N1, when
	in patient room
Precautions	Routine/Droplet/Contact/Airborne
	-
Hand hygiene	Yes
Gloves	If required by routine precautions
Gown	If required by routine precautions
Surgical mask for HCW	
	_
N95 or higher respirator for	Yes.
HCW (fit-tested).	
Eye Protection	If required by routine precautions
Surgical Mask on Patient	If outside of Airborne Infection Isolation
Surgical Wask Off Patient	Room
	NOUIII

## For Agricultural Workers

	Contact with animals/animal by-products: on farm	Contact with animals/animal by-products: off farm	No contact with animals/animal by-products: on farm
Implement OMAFRA or CFIA biosecurity requirements	Yes	Yes	Yes
Hand washing	Yes	Yes	Yes
Gloves	Yes	Yes	
Coverall	Yes	Yes	
Head covering	Yes	Yes	
N95 or better respirator*	Yes	Yes	
Eye Protection	Yes	Yes	
Foot coverings	Yes	Yes	Yes

<sup>\*</sup>N95 respirator is recommended only for workers involved in culling operation

Workers involved in the culling of infected poultry and others involved in the outbreak control efforts must strictly adhere to recommended PPE.

#### This equipment includes:

- disposable fit-tested half-face N-95 or better respirator<sup>2</sup>;
- higher levels of respiratory protection may be needed to address other inhalation hazards in the workplace, such as high levels of poultry dust inside barns, or the presence of hazardous or inert gases such as CO<sub>2</sub>;
- safety goggles (to protect the mucous membranes of eyes);
- gloves that are impervious (nitrile, PVC, rubber, hospital gloves);
  - o Gloves should not be reused or washed. If heavy-duty rubber work gloves are used they should be disinfected after use or discarded,
  - o gloves should be removed immediately after use to avoid touching non-contaminated articles and surfaces; and
- coveralls that are impervious to water.

<sup>&</sup>lt;sup>2</sup> Fit testing and training is necessary prior to use of a N–95 or better respirator. This type of respirator is being recommended for these individuals since the process of culling or environmental decontamination (e.g. in affected barns) may cause contaminated materials (e.g. sawdust soiled with manure) to be suspended in the air, creating a risk potentially akin to an aerosol generating procedure in a hospital setting.

# Annex D List of Foreign Animal Diseases included in FADERP

The Office International des Epizooties (OIE) provides worldwide disease reporting services to 164 member countries including Canada on the occurrence of certain animal diseases and establishes guidelines for international trade of animals and animal products. The OIE is responsible for international health standards and has published the Terrestrial Animal Health Code which includes a list of diseases of concern.

The following thirteen diseases are considered "highly contagious foreign animal diseases":

African swine fever
Classical swine fever (formerly hog cholera)
Foot and mouth disease
Highly pathogenic AI
Newcastle disease
Swine vesicular disease
Vesicular somatitis
African horse sickness
Bluetongue
Contagious bovine pleuropneumonia
Lumpy skin disease
Peste des petits ruminants
Sheep pox and goat pox

The following four diseases are zoonotic"

Highly pathogenic Al Newcastle disease Rift Valley fever Vesicular Stomatis