U.S. Fish and Wildlife Service, Region 7

HPAI Response Plan

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GLOSSARY OF ACRONYMS & ABBREVIATIONS

ADEC	Alaska Department of Environmental Conservation
ADFG	Aaska Department of Fish and Game
APHIS	Animal and Plant Health Inspection Service
DOI	Department of the Interior
FAO	Food and Agriculture Organization
FWS	Fish and Wildlife Service
HPAI	Highly Pathogenic Avian Influenza
IAP	Incident Action Plan
ICS	Incident Command System
IMT	Incident Management Team
JIC	Joint Information Center
NEPA	National Environmental Policy Act
NWHC	National Wildlife Health Center
PPE	Personal Protective Equipment
R7	Region 7, Alaska
USDA	United States Department of Agriculture
USGS	United States Geological Survey
WHO	World Health Organization

EXECUTIVE SUMMARY

What is the danger of highly pathogenic avian influenza?

The Asian H5N1 strain of highly pathogenic avian influenza (HPAI), or bird flu, is primarily a disease of domestic poultry that is not native to, or currently present in, North America. However, outbreaks of HPAI in other parts of the world and the likelihood of continued spread, has heightened concern for Alaska.

Should HPAI be introduced to Alaska, potential exists to impact the U.S. Fish and Wildlife Service (Service) and National Wildlife Refuge (Refuge) lands. It is possible that there will be impacts to wildlife, primarily migratory birds. Further, humans could be exposed to and contract this illness by contact with infected birds, placing some Service employees and possibly Refuge users at risk. In addition, if the virus adapts so that sustained human to human transmission occurs, it is possible that the Service would be faced with participating, along with local, state and federal health officials, in controlling the spread of this agent among people.

What is in this Response Plan?

This Response Plan recommends actions to be taken at the Regional level if HPAI occurs in Alaska. The Plan addresses four levels of circumstances: 1) if a single dead bird tests positive for HPAI; 2) if a multiple-bird mortality/morbidity event occurs; 3) if a carcass or harvested bird collected from within a refuge tests positive; and 4) if a live bird from within a refuge tests positive for HPAI during field season. The level of response will also vary based on the number of cases that have occurred previously, i.e., the first several detections may be of highest concern.

What to do if the HPAI virus is detected in a live or hunter-killed bird during surveillance and monitoring.

Service employees, seasonal volunteers, refuge users, and the public can come into contact with birds, fecal material, or contaminated habitats through research, bird handling, sampling, and harvest activities, or the activity can cause dispersal of birds.

Communication with other agencies, particularly the USGS-National Wildlife Health Center (NWHC), USDA APHIS and the state veterinarian is critical. The Regional HPAI Coordinator has developed a list of appropriate local contacts. Information regarding the HPAI incident should be provided to all employees and the public.

In consultation with the R7 Incident Management Team, Regional HPAI Coordinator and Species Technical Experts, a variety of activities may be implemented including increased disease surveillance and additional management actions as recommended in this Plan.

What to do if the HPAI virus is detected within a National Wildlife Refuge.

If highly pathogenic avian influenza is confirmed in a National Wildlife Refuge, refuge staff will work closely with the Incident Management Team and the Regional HPAI Coordinator, who will analyze the situation, and develop the appropriate response.

Area refuge-closures may be instituted to maintain restricted access to potentially infected areas and may be expanded or contracted as appropriate. Refuge closures for contact public use activities will be based on input from Species Technical Experts and the Incident Management Team, and in consideration of ecological, epidemiological, or administrative circumstances. The HPAI incident should be managed in accordance with enabling legislation, agency policies, refuge purpose and significance, and management goals.

INTRODUCTION

BACKGROUND[1]

Historical and Scientific Information

The Asian H5N1 strain of highly pathogenic avian influenza (HPAI), or bird flu, is primarily a disease of domestic poultry that is not native to North America. At the time of this writing, H5N1 is not known to be present in North America; however, outbreaks of HPAI in Asia, the Middle East, Europe, and Africa, and the likelihood of continued spread to other parts of the world, have heightened concern in the United States. The Federal government response to HPAI is tiered from the Homeland Security Council's National Strategy for Pandemic Influenza (http://www.pandemicflu.gov). The Service's response is further tiered from the Department of the Interior Pandemic Influenza Preparedness and Response Plan and may be found at http://www.fws.gov/home/avianflu/.

Outbreaks of highly pathogenic avian influenza subtype H5N1 have been occurring in poultry in Southeast Asia since 2003. Wild birds, particularly waterfowl and shorebirds, commonly carry low pathogenic avian influenza viruses without harm. However, the Asian H5N1 HPAI virus has mutated and adapted to cause illness and death in domestic and wild birds, and has also affected a limited number of mammals, including humans. Worldwide, mortality from the virus has been detected in more than forty species of free-ranging birds including swans, ducks, geese, gulls, birds of prey, and some peridomestic species such as sparrows and corvids. See http://www.nwhc.usgs.gov/disease_information/avian_influenza/affected_species_chart.jsp. Over 200 million domestic birds in the affected countries have died or been culled in attempts to control the disease. In humans, the death rate from reported HPAI cases to date has been about 50%; however, case mortality in a pandemic has been projected in the U.S. National Strategy for Pandemic Influenza (2005) to be <2%.

The virus is spread among birds in fecal droppings, saliva, and nasal discharges. The virus is quite easily inactivated by disinfectants but can survive for long periods (a month or more) in cold water. HPAI has been detected in some apparently healthy wild birds. The role of migratory birds in the spread of the disease is likely, although human assisted movement of poultry or poultry products are also important transmission pathways. The impact of HPAI on wild bird populations is unknown. More clear is that HPAI poses a significant economic threat to domestic poultry and fowl operations and to human health.

If HPAI were identified in poultry or other domestic fowl in the United States, regulatory agencies (e.g., USDA APHIS) would respond with immediate culling of domestic birds within a predetermined radius of the case (the "infected zone"). Stepped-up surveillance, movement restrictions, and perhaps a zonal ring of vaccination of domestic birds, in facilities surrounding the outbreak would supplement disease control efforts. Although culling domestic birds to contain the spread of HPAI is considered an acceptable agriculture practice, culling of migratory birds is likely ineffective in disease control and would have unknown and potentially significant ecological consequences. Further, culling migratory birds is not recommended as an HPAI management action by the Food and Agriculture Organization of the United Nations (FAO) or World Health Organization (WHO), the two leading international health authorities.

[1] This Plan was adopted for the U.S. Fish and Wildlife Service Region 7 from the National Park Service "Highly Pathogenic Avian Influenza in Wildlife Response Plan, April 28, 2006"

Most human cases have occurred from contact with infected poultry or contaminated surfaces. To date, spread of H5N1 virus from person to person has been rare and spread has not continued beyond one person. However, because all influenza viruses are genetically unstable and have a tendency to change, scientists are concerned that the Asian H5N1 virus could one day be spread easily from one person to another. If the virus were able to infect people and spread easily from person to person, an influenza pandemic could begin.

Therefore, should HPAI be introduced in Alaska, potential exists to impact Service trust resources and refuge lands. The most likely exposure will be to migratory birds. Further, humans can be exposed to and contract this illness by contact with birds; possibly placing some Service employees and refuge users/visitors at risk. Additionally, if the virus adapts to achieve sustained human to human transmission, it is possible that the Service would be faced with participation, along with local, state and federal health officials, in controlling the spread of this agent among people.

Fish and Wildlife Service Management Considerations

In this plan, Region 7 considers potential disease response actions before HPAI occurs in Alaska wildlife. This plan evaluates the following:

- Potential impact on regional resources, including actions recommended for disease control.
- Effects on migratory bird populations and their habitats. If an event occurs on a refuge, activities will be assessed in accordance with each refuge's purpose and significance.
- Refuge subsistence users, in accordance with each refuge's purpose and significance.
- Maintenance of refuge employee and visitor health and safety.
- Loss to communities and the private sector from either animal destruction or travel restrictions.

PURPOSE OF THIS PLAN

General Purposes

Should highly pathogenic avian influenza be detected in Alaska, the Service's Regional HPAI Coordinator will be involved in a coordinated response with other agencies. Many of these agencies will want decisions made immediately and actions taken quickly. Therefore, adequate preparedness is critical (See Preparedness and Communication Plan).

The primary purpose of this Regional Highly Pathogenic Avian Influenza Response Plan (HPAI Plan) is to provide guidance for Regional management, the HPAI Coordinator and other appropriate staff in the event of an outbreak in Alaska, particularly on National Wildlife Refuges. This plan can help refuge managers consider the impacts to refuge resources and user/visitor experiences that proposed actions could cause.

An Incident Management Team using the Incident Command System is ideally suited for managing complex situations, including those involving multiple jurisdictions and agencies. This plan provides information, prototypes, and samples of incident management materials that can assist regional responders in properly managing a highly pathogenic avian influenza incident.

Relationship with Policy and Compliance

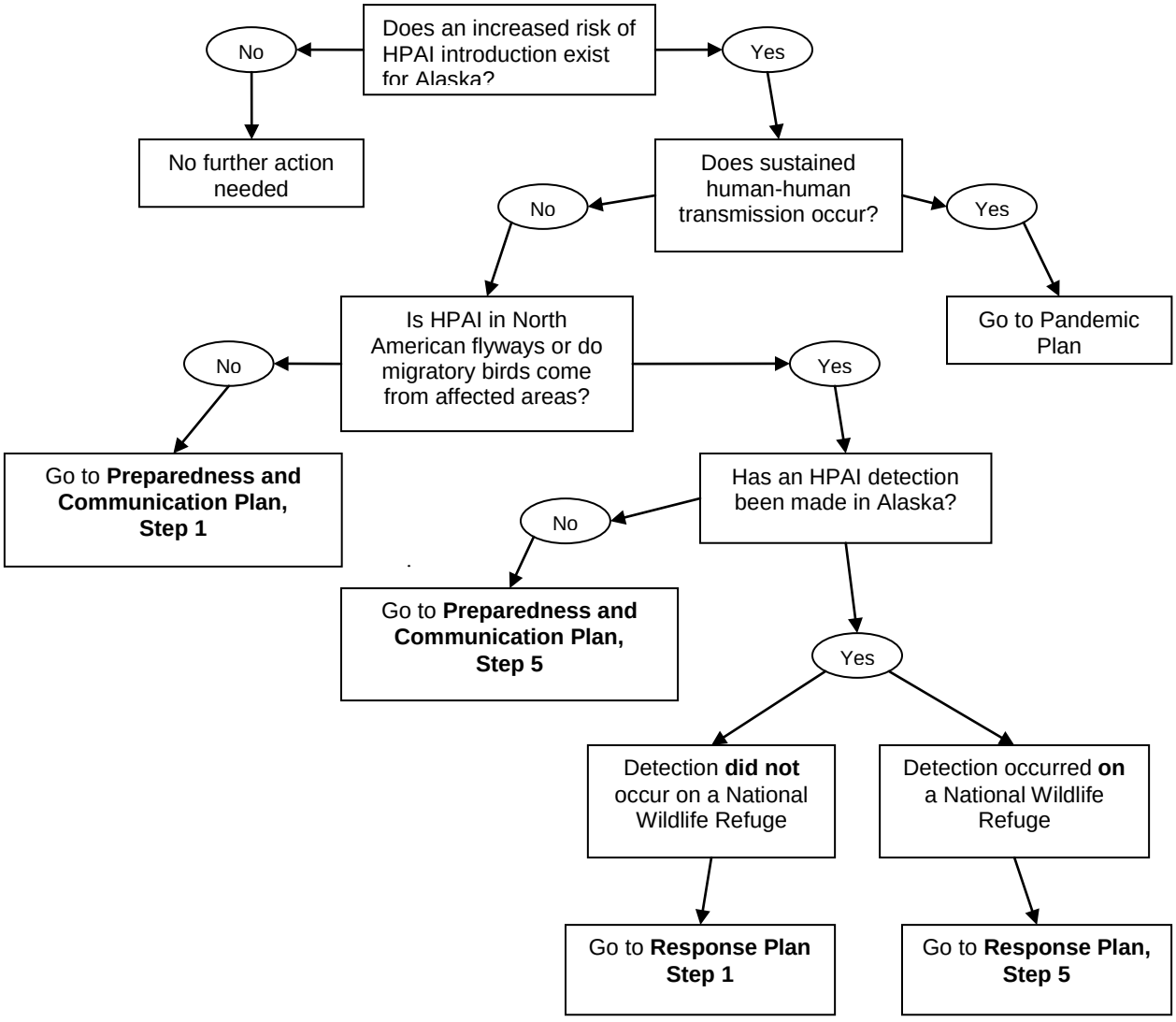
This plan is not intended to establish or modify Service or refuge policy. This plan should be considered guidance to Service, Region 7 management in the event of HPAI detection. *The applicability of legal constraints and obligations, policy requirements, applicable definitions (such as impairment) and strategic management goals must be considered when planning actions.*

HOW TO USE THIS PLAN

To assist Region 7 in addressing highly pathogenic avian influenza, two sets of plans have been developed. The Region 7 HPAI Plan includes a Preparedness and Communication section and Response section. The HPAI Plan is tiered from the Service's National Pandemic Influenza Plan, which addresses the situation when sustained human to human transmission occurs. The decision tree below can be used to determine the appropriate level of action based on the current situation. Note that as long as an increased risk from HPAI occurs in Alaska, action should be taken starting with Step 1 of the HPAI Plan Preparedness and Communication section and continuing through the appropriate portion of the "plan" and "step" identified in the decision tree.

Information on the geographic distribution, species affected, impacts, and appropriate response to HPAI is dynamic and continues to change and expand. Updated information to support these plans will be posted on the Service's website at http://www.fws.gov/home/avianflu/.

Highly Pathogenic Avian Influenza Decision Tree. This decision tree indicates the section of the HPAI Plan and Step at which each situation is addressed. Note that steps are progressive in the HPAI Plan Preparedness and Communication section and, regardless of current situation; if risk exists, action should begin at **Step 1 of the Preparedness and Communication** section of the HPAI Plan.

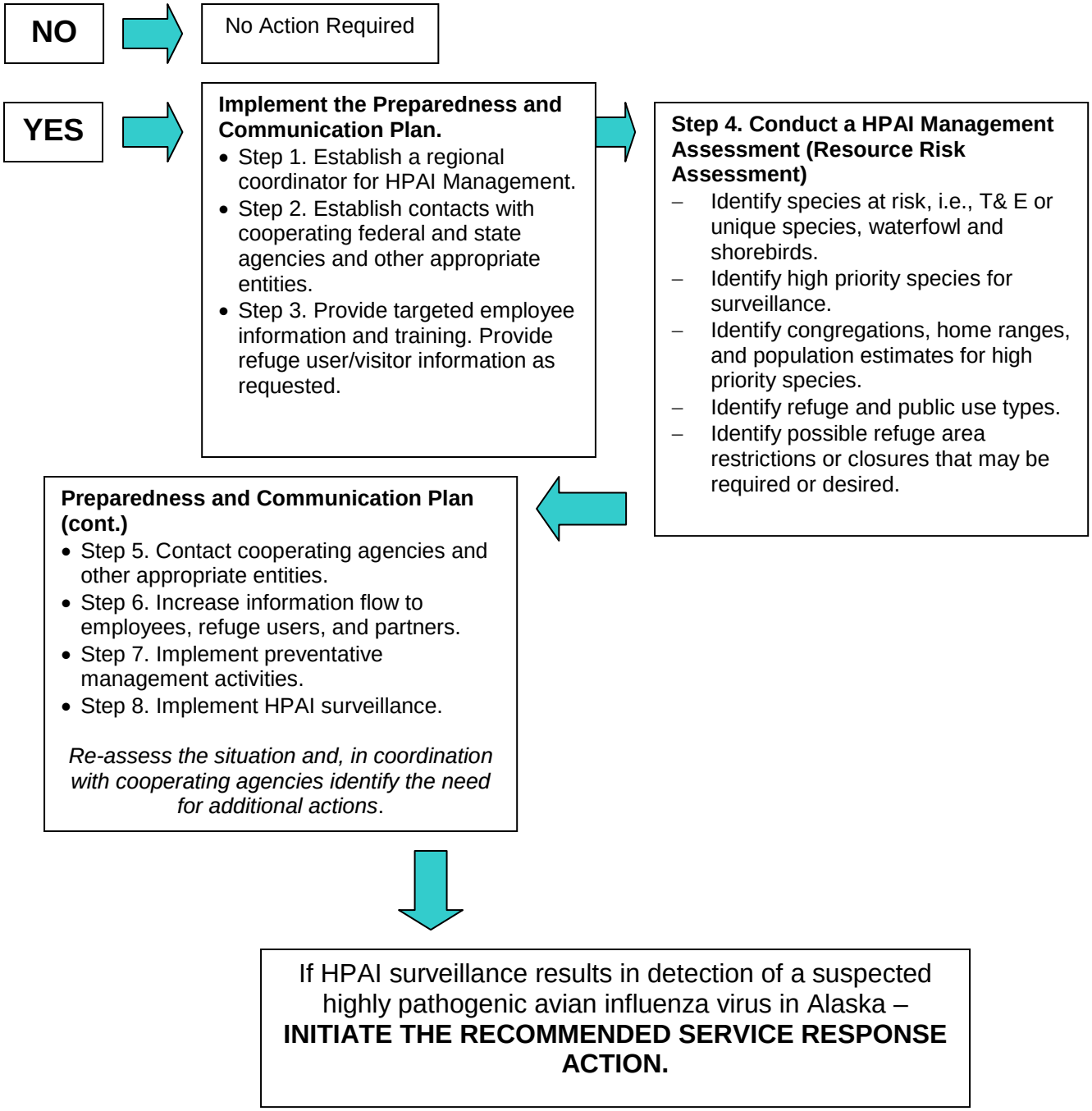


ACTION FLOWCHARTS for Moving Through the Preparedness and Communication and Response Plan

- Action Flowcharts have been developed to assist or provide guidance to Regional Service management and the HPAI Coordinator in determining when or whether to move from the HPAI preparedness and communication planning stage to the HPAI response stage. This decision is based on the current situation in Region 7. The process starts with the **Preparedness and Communication Plan** which is a limited measured response designed to provide Service Managers and Project Leaders with the necessary information to identify concerns and implement appropriate management actions.

- Service Managers and Project Leaders should be advised that should a suspect or confirmed case of HPAI H5N1 be identified in Alaska, Region 7 may be required to go directly to implementing all or portions of the Region 7 HPAI Response Plan. In order to establish and maintain a measured response, communications between Service and cooperators is essential.

Situation: A highly pathogenic avian influenza virus is identified that has the **potential to enter** Alaska from North American flyways or other migratory bird flyways.



Situation: Highly pathogenic avian influenza **is confirmed to be present** in North America or migratory birds **may arrive** in Alaska via an affected flyway.

- **Review the HPAI Management Assessment (developed in Step 4 of the Preparedness and Communication Plan) in light of the facts specific to the outbreak.**
  - Affected flyway.
  - Proximity to Alaska/refuges.
  - Consult with Species Technical Experts
  - Cooperation with other agencies and their actions.
  - Consider additional proactive refuge, public, and other agency information and education.

Preparedness and Communication Plan (cont.)

- Step 5. Contact cooperating agencies and other appropriate entities.
- Step 6. Increase information flow to employees, refuge users, and partners.
- Step 7. Implement preventative management activities.
- Step 8. Expand HPAI surveillance.

Re-assess the situation and, in coordination with cooperating agencies identify the need for additional actions.

If HPAI surveillance results in detection of a suspected highly pathogenic avian influenza virus in Alaska – **INITIATE THE RECOMMENDED Service RESPONSE ACTION.**

PREPARATION

Introduction

Worldwide, mortality from the HPAI, H5N1 virus has been detected in more than forty species of free-ranging wild birds including swans, ducks, geese, gulls, birds of prey, and some peridomestic species such as sparrows and corvids (view full list at http://www.nwhc.usgs.gov/disease_information/avian_influenza/affected_species_chart.jsp). Strategies for collecting monitoring and surveillance data on HPAI in Alaska were developed by the Alaska Interagency Avian Influenza Working Group along with a ranking matrix for setting priority species for sampling within Alaska.

The systematic sampling for HPAI in live wild birds, hunter-killed birds, and of morbidity and mortality events in wild birds will play a critical role in the probability of detecting the virus if it is introduced by, or to, migratory birds in the Alaska. It should be noted that the detection of an avian influenza virus is not of concern unless it is a highly pathogenic strain, specifically in this case the Asian H5N1 strain. Avian influenza viruses occur naturally in birds, particularly birds that live on and around water. Most of these viruses are of low pathogenicity and cause no harm to the host and no threat to other species.

Prioritizing Surveillance Actions

Priority species may be defined as those migrating in from areas where HPAI occurs, or that are of greatest risk of disease. A system for ranking priority species is presented in *"Sampling Protocol for Highly Pathogenic Asian H5N1 Avian Influenza In Migratory Birds In Alaska"*. All wild bird species with populations that utilize areas of both Alaska and Asia were identified. Species were scored based on five factors:

1) Proportion of the population occurring in Asia
2) Contact with a known 'hot spot' or source
3) Habitats used in Asia in context with exposure potential
4) Population size in Alaska
5) Ability to obtain a representative sample of sufficient size

The overall emphasis for this ranking system was based on opinions regarding the probability of individuals of each species contracting the virus in Asia and bringing it to Alaska during migration. Teams with expertise within each of four taxonomic groups (waterfowl, shorebirds, seabirds, passerines) were formed to develop species-specific sampling plans.

Surveillance Planning and Implementation

The three general types of surveillance are: *detection, assessment,* and *monitoring* of a disease entity. *Detection* surveillance is designed to find a disease agent, *assessment* surveillance seeks to define the prevalence and distribution of the disease agent and its hosts, and *monitoring* surveillance watches the course and progression of the disease and its response to management.

An objective of any disease surveillance plan is to ensure disease is detected early, rapidly, and accurately. Heightened awareness of potential disease outbreaks and simple routine activities such as periodic observation of wildlife resources or carcass surveys on a National Wildlife Refuge can alert managers early in a disease event. Protocols for sample collection, storage,

transport and processing need to be comprehensive, unambiguous, and part of a field station's disease contingency plan.

"Sampling Protocol for Highly Pathogenic Asian H5N1 Avian Influenza In Migratory Birds In Alaska" identifies strategies for conducting early detection surveillance in wild migratory birds.

Service surveillance efforts for HPAI H5N1 will focus on three primary strategies:

- investigation of wild bird mortality,
- live bird surveillance, and
- hunter-killed bird surveillance.

Actions necessary to plan and implement monitoring and surveillance for HPAI are summarized in Table 1.

Table 1. Components of HPAI surveillance and detection activities.

Action	
Regulatory compliance	• Comply with NEPA as necessary • Assure appropriate permits are in place
Procure sampling/shipping materials	• Sampling gear (swabs, vials, syringes, carcass bags, disinfectant, etc.) • Shipping boxes, coolers, ice, shipping forms • Personal Protection Equipment • Sample and carcass transportation
Obtain necessary training for sample collection	• Provided by the Service, other DOI bureaus or other cooperators
Obtain necessary employee health review	• Respirator use • Vaccination advisement • Availability of antiviral drugs
Identify laboratory for sample submission	• USGS National Wildlife Health Center • Other veterinary laboratories certified to conduct Asian H5N1 virus diagnostics (confirm with lab)
Identify priority species	• Lists developed by Flyway Councils • Bird species migrating from affected areas • Waterfowl and shorebirds • Bird species with high infection rates (currently unknown)
Reporting system	• Identify key contact individuals • Develop system for reporting by employees, visitors, and residents
Respond to mortality events	• Communication of events • Evaluation of importance • Available trained staff • Transportation and logistics
Implement active surveillance and additional surveillance strategies	• As risk increases, seek out mortality events rather than passively awaiting reporting. • Implement other surveillance strategies as needed on a site-specific basis.

Human health protection is a critical element in HPAI surveillance. Appropriate protection of employees and users against exposure to HPAI should be followed and will vary with the level of risk (Appendix 9). Personal protective equipment (PPE) and other sampling equipment

should be available for response to morbidity and mortality events (Table 2). Only employees trained in wildlife mortality investigation or in direct contact with experts providing direction should handle animal carcasses.

Table 2. Equipment necessary for wildlife mortality event response.

PPE	• Coveralls • Disposable gloves • Goggles • Respirator • Boots or boot covers
Sampling equipment	• Shipping boxes/coolers • Carcass bags (trash bags) • Packing material • Blue ice or dry ice • Carcass label • Sharpie, tape • FedEx labels • History and submission forms • Disinfectant

Carcasses can be submitted to the National Wildlife Health Center (NWHC) in Madison, Wisconsin or other laboratories approved for detection of HPAI. Instruction forms for sample submission to the NWHC (and also useful for other labs) are included in Appendix 15. If samples will be submitted to other laboratories, check ahead of time to confirm that submissions will be accepted.

Surveillance should be continued, and likely expanded, after detection of HPAI H5N1 is made in an area. The type of surveillance methods used may be increased based on input from Species Technical Experts. Surveillance may also be broadened to include a wider range of species, including associated avian and mammalian species (specifically carnivores).

Situations and Actions

INITIAL RESPONSE: What to do if an avian influenza virus is detected in a single recovered carcass.

DEFINITION: Detection of any avian influenza virus in a migratory bird carcass may trigger initial steps of the Response Plan. However, wild birds commonly carry non-pathogenic strains of avian influenza which, unlike H5N1, are not cause for concern. Confirmatory tests are needed to determine if the strain detected is the Asian H5N1 of concern.

CONSIDERATIONS: While awaiting results of laboratory tests to define the avian influenza virus strain detected, the Regional HPAI Coordinator may decide to implement initial steps of the Response Plan to prepare for response if necessary and to provide transparent communication with partners and the public.

RECOMMENDED ACTIONS

STEP 1: Contact the appropriate animal health officials and cooperating agencies.

If a laboratory confirms a suspect H5N1 avian influenza virus in a single recovered carcass, the USGS National Wildlife Health Center and state wildlife veterinarian will be the first points of contact established with the Service and will participate in the overall response to detection of HPAI in free-ranging wild birds off Service lands. The Regional HPAI Coordinator is responsible for initiating those contacts, establishing the lines of communication with the Service, and determining how the operational expertise and field capability of the Service will be needed in the response effort. Upon notification, the Regional HPAI Coordinator may contact:

1. State veterinarian's office (Appendix 2)
2. USDA APHIS area representative (Appendix 2)
3. Species Technical Experts as appropriate (Appendix 3)
4. State wildlife agency (Appendix 4)
5. Service HPAI Responders (Appendix 6)

In the event of an HPAI H5N1 outbreak involving wild birds and not directly involving Service lands, the Service should be fully prepared to provide assistance in responding to the disease outbreak when called upon by USGS or the State. The Service, DOI, and APHIS may dispatch disease specialists to investigate.

MEASURED RESPONSE (OFF-REFUGE): What to do if an avian influenza virus is detected in a multiple-bird mortality/morbidity event, or from a live, wild bird sampling event, outside of a national wildlife refuge boundary.

DEFINITION: Morbidity and mortality events in wild birds can be due to a variety of causes. Diagnostic testing is required to determine cause of death and to confirm infection with HPAI. Detection of any avian influenza virus in a migratory bird carcass may trigger initial steps of the Response Plan. However, wild birds commonly carry non-pathogenic strains of avian influenza which, unlike H5N1, are not cause for concern.

DEFINITION: A sample from a live, wild bird is confirmed to have tested positive for a HPAI virus while Service field teams are in the field conducting research, contacting, collecting, and sampling migratory birds and the wild bird collection occurred outside a National Wildlife Refuge boundary.

CONSIDERATIONS: Employees, seasonal volunteers, and the public can come into contact with birds, fecal material, or contaminated habitats through the activity; or activity can cause dispersal of birds. While awaiting results of laboratory tests to define the avian influenza virus strain detected, the Regional HPAI Coordinator is encouraged to implement initial steps of the Response Plan and to provide transparent communication with partners and the public.

RECOMMENDED ACTIONS

STEP 2: Secure the area and increase the surveillance program in accordance with the instructions of the experts contacted in Step 1.

Follow directions of the experts for:

- *protecting employee health;*
- *establishing and securing a containment (hot-zone) perimeter around the infected site;*
- *handling and disposing of carcasses; and*
- *disinfecting personnel, equipment, and vehicles.*

In the case of “Other-Agency-Lead Response”, the Service is responsible for coordinating the design and implementation of an intensified wild bird surveillance program in the event of an occurrence of HPAI H5N1 in wild birds, as contribution to an overall interagency response. The Regional HPAI Coordinator should coordinate this design and implementation of intensified surveillance within the Service, with Species Technical Experts, USGS Alaska Science Center, NWHC, APHIS, and ADFG. The new goal will be assessment surveillance, to identify the geographic scope of the infection, and what species are involved.

The Regional HPAI coordinator should recommend the use of personal protective equipment and good hygiene practices to employees handling an HPAI suspect animal. If possible, simply monitor the area to keep users/visitors and animals away from the carcasses until trained assistance arrives. Use caution to minimize possible contamination of equipment, vehicle, or yourself with the virus and follow-up with disinfection and avoidance of other susceptible animals. Review and implement the HPAI Aviation Safety Protocols (Appendix 10).

In coordination with appropriate Region 7 personnel and technical experts, the Regional HPAI Coordinator should evaluate resources that may be affected by an HPAI viral outbreak. An assessment would consider factors that include, but are not limited to, movement of migratory birds from affected areas (e.g., via flyways), congregation of birds, and human factors. This will help to organize an incident response, should it be necessary and to determine the susceptibility of Refuges to an HPAI outbreak. Use the HPAI Situation Analysis Form (Appendix 11) in this effort.

STEP 3: Coordinate initial actions with cooperating agencies and participate in the ICS.

The DOI and APHIS disease experts will combine initial laboratory test results with history, presentation, and professional experience to classify the HPAI suspect animal as unlikely, possible, or highly likely. Based on their classification recommendations will be made to the Regional HPAI Coordinator and the Region 7, HPAI Incident Management Team (Appendix 1). Strongly consider implementing these recommendations until diagnostic tests refute or confirm H5N1.

Service personnel should work together with other state, federal, or tribal wildlife and land management personnel to intensify monitoring for bird morbidity and mortality and responding to reports of sick or dead birds by members of the public.

An Incident Management Team may be established by the agency leading the response (not necessarily the Fish and Wildlife Service) to provide for unified command in responding to an HPAI outbreak in wild birds. The Service should work within the established Incident Command System to delegate authority to the Incident Commander and assign an Agency Representative to work with the IC to implement necessary surveillance and response measures.

STEP 4: Conduct inreach/outreach to provide information to our employees and the public.

Communicate initial actions to the Service, DOI, and, in conjunction with cooperators and in accordance with the DOI Pandemic Influenza Plan, to the media.

All affected employees (at a minimum, those whose work area falls within the 10 km radius around a known or presumptive occurrence of HPAI H5N1) should be notified of the definitive or presumptive occurrence of HPAI H5N1 in birds, and the extra precautions they should take during the course of their normal duties.

USDA or the state lead agency (i.e., ADFG, ADEC) may establish a Joint Information Center (JIC) to coordinate communications and outreach. If a JIC is established as an element of the interagency response, the Service External Affairs should work through the JIC to coordinate

responses and outreach to members of the public who hunt, watch, or feed wild birds, or otherwise may come into contact with wild birds and their habitats.

Communication objectives will be to:

- Communicate actions the government is taking;
- Reassure the public that a detection in birds does not signal a human pandemic;
- Reassure the public that properly prepared wild game is safe to eat;
- Prepare the public for the possibility of more bird/animal cases; and
- Prepare the public for the possibility of human illness from direct contact with infected birds.

FULL RESPONSE (ON-REFUGE): What to do if an HPAI H5N1 virus is confirmed from a wild bird within a national wildlife refuge.

DEFINITION: A wild bird sample from: (a) a single carcass or multiple-bird mortality/morbidity event; (b) a hunter-harvest; or, (c) a live, wild bird collected while Service field teams are in the field conducting research, is confirmed to have tested positive for a HPAI virus and the sample collection occurred within a National Wildlife Refuge boundary.

CONSIDERATIONS: Employees, seasonal volunteers, and the public can come into contact with dead/moribund birds, fecal material, or contaminated habitats through the activity; or activity can cause dispersal of birds. Refuge managers are encouraged to maintain closure within at least 2 miles of the infected area of a confirmed HPAI case and expand refuge closures, when appropriate, based on input from Species Technical Experts, and considering ecological, epidemiological, or administrative circumstances. Unique uses, such as economic use of Refuges, Refuge residents, and/or research may require special case by case consideration for continuation.

RECOMMENDED ACTIONS

If an outbreak of HPAI H5N1 occurs on Service lands, the Service will be responsible for taking appropriate management action to contain the outbreak, protect the health of our employees and the public, and coordinate our action with the USGS NWHC, ADFG, APHIS, the State Veterinarian, and other responsible agencies.

STEP 5: Communicate the initial situational assessment with cooperating agencies and implement an ICS.

Steps 2 through 4 above should be revisited to ensure that the **surveillance program** has been appropriately expanded, a proper **situational assessment** has been completed, and adequate **communication** with employees and the public has been established.

The Regional HPAI Coordinator will contact the appropriate agencies, organizations, or entities (Appendices 1 through 6). As part of the Preparedness and Communication Plan, the Regional

HPAI Coordinator, in cooperation with the Incident Management Team, Refuge manager and Species experts, has previously identified resources at risk, developed an appropriate contact list specific to the region, and made introductory notifications to individuals.

Depending on Refuge resources at risk, four broad categories may guide the minimum level of contacts that need to be initiated (Table 1).

Table 1. Categories guiding contacts with other agencies and organizations.

Resources at risk	Recommended minimum level of contact
No wildlife, user/visitor activity, or employee/human health at risk.	No additional contact needed.
No wildlife at risk but user/visitor activities and employees/human health at risk	Contact appropriate refuge, regional, and safety personnel, including Public Health Programs and Risk Management, State Veterinarian for potential closures.
Wildlife at risk, but no user/visitor activities or employees/human health at risk.	Contact appropriate refuge, regional, and state personnel, State Veterinarian.
Wildlife at risk plus possibly one or more of the following: user/visitor activities and employee/human health.	Contact refuge, regional, and safety personnel, including Public Health Program, State veterinarian, State wildlife agency contact, and additional agencies or entities.

A. Gather as many facts about the incident as possible, using the **Situation Analysis Form** (Appendix 11). Consider factors that include, but are not limited to, movement of migratory birds from affected areas (e.g., via flyways), congregation of birds, and human factors. Be sure to consider the potential and forecasted effects. Ask yourself, what could happen, as well as what is likely to happen, in the next two weeks? The next month?

B. Re-evaluate the situation with the Regional HPAI Coordinator and the Incident Commander, reviewing the facts from the Situation Analysis, to determine incident complexity.

C. If appropriate, establish an Incident Command System and make necessary assignments. If HPAI occurs on a National Wildlife Refuge, it is likely that the Service would be the lead agency and establish an Incident Command. In a memorandum (dated May 31, 2006), the Regional Director delegated authority and responsibility for management of the early detection and response to HPAI H5N1 to the Deputy Regional Director for Region 7 (as Incident Commander) and the Incident Command Team.

D. Ramp up the incident management team and order appropriate resources as needed. One of the benefits of the Incident Command System is that if the situation changes, you can always transition to a more complex or less complex management structure.

STEP 6: Review existing plans and policy documents.

A. Review the plans and policy documents applicable to the management Service trust resources. These may include:
   - Enabling legislation

- Refuge Comprehensive Conservation Plan
- Refuge Operations Plan
- Research Plans (including wildlife sampling plans)
- Concessions Plans, Agreements and Contracts
- Compliance Policies

B. Consult with your Regional legal, policy, and technical experts to determine the appropriate management approach to the situation. Ultimately, however, consultation between the Secretaries of Agriculture and the Interior under the Animal Health Protection Act may assign disease management authority.

STEP 7: Review the Situational Analysis and implement management actions for containment, clean-up, and health and safety, in accordance with law, policy and management goals.

If HPAI appears on Service lands, response actions will focus on limiting, to the extent possible, spread of the infectious agent and protecting the health of Service employees and the public, in addition to surveillance to assess and monitor the scope and status of the disease outbreak.

A. Work with cooperating agencies to determine the appropriate actions. Establishing a secured perimeter around the infected area to contain the disease and excluding entry by non-incident personnel, should be a priority management action. See ***Containment*** discussion below. Procedures for the disposal of carcasses will also have to be established.

B. Develop and **Incident Action Plan** (see examples in Appendices 14a and 14b). To begin, review the **Incident Management Checklist** (Appendix 12) and begin consideration of what the **Incident Objectives and Strategies** (below and in Appendix 13) might be.

C. Potential incident action objectives.

- Control spread of highly pathogenic avian influenza.
- Provide for the safety of the public, agency and incident personnel.
- Minimize negative impacts to private and public property, resources, recreation, businesses, and individuals.
- Provide accurate and timely information to agency and incident personnel and the public.
- Keep costs commensurate with incident needs.

D. Potential incident action planning strategies.

- Provide education to workers, residents and the public.
- Implement health monitoring of wildlife responders.
- Control feral and non-native species in or near the infected area.
- Limit the movement of animals (i.e., hazing) in or near the infected area.
- Vaccinate birds in or near the infected area (likely limited to T&E species).
- Continue or expand surveillance for HPAI in wild birds, and high risk mammalian species.

Use the Situation Analysis Form to organize the response development process and to guide communications and directives within the Region. Refer to the “Sample Incident Objectives and Strategies” (Appendix 13) for more complete information and management approaches. Use Appendix 14a and 14b to develop an IAP.

Containment

A "containment zone" or “hot-zone” should be established around the known occurrence, with a radius of at least 3 km (2 mi) from the location(s) of the known occurrence. A single entry/exit point to the containment/hot zone should be established and monitored. A decontamination station should be set up at this location. The command post, briefing area, equipment and supply area, eating facilities, and parking should be located outside of the containment (hot) zone.

Service managers should prevent the movement of personnel, vehicles, equipment, and other potential carriers of infectious material out of any part of the containment zone located on Service lands unless appropriate bio-security measures (e.g., disinfection) are followed. Any person, vehicle, or equipment exiting the hot-zone should undergo appropriate decontamination (disinfection).

With regard to management of Service lands within the containment zone or surveillance zone, the Refuge Manager shall exercise existing authority to temporarily close access or suspend public use as needed to avoid public contact with the HPAI H5NI virus or prevent its spread outside the containment zone.

Decisions on whether to limit or suspend hunting, fishing, or other Refuge user activities within the containment zone or surveillance zone will be the responsibility of the Refuge Manager. For state and private lands, the Service will defer to the state or local agency with the authority to control the activity, e.g., the ADFG with regard to hunting on state-owned or private lands.

There may be circumstances where containment is either not practical or of only limited use. In those cases, management will necessarily focus on assessment surveillance and communication and outreach to the surrounding community and along the potential migratory corridor to enhance biosecurity and detection efforts.

Live, apparently healthy wild birds may remain within the containment zone after the detection of HPAI H5N1. Management will need to consider actions to reduce risk factors for avian influenza transmission (e.g., crowded conditions on limited water), daily activity and movement patterns of birds using Service lands, and the need and opportunity to hold on-site potentially infected wild birds. The Regional HPAI Coordinator and Refuge Manager should consult with the Species Technical Experts, USGS National Wildlife Health Center, the USGS Alaska Science Center, ADFG, and adjacent landowners, to evaluate management options.

> ***Note:*** *There are no data to suggest that culling migratory birds is an effective means to control HPAI. Neither the World Health Organization or the Food and Agriculture Organization of the United Nations recommend culling migratory birds to manage HPAI.*

Clean-up

A list of EPA-registered disinfectant products that are labeled with a claim to inactivate "avian influenza A" viruses on hard, non-porous surfaces can be found at http://www.epa.gov/pesticides/factsheets/avianfluproducts.htm.

In the event of a large scale mortality event, carcass collection and disposal may be necessary to prevent spread of the disease agent to other animals through environmental contamination. However, removal of potentially infectious carcasses may not be the best option if conduct of those operations would lead to dispersal of infected populations to new areas. Contact wildlife disease specialists within the Service or at the USGS National Wildlife Health Center to determine the need and appropriate procedures for carcass collection and disposal options and procedures.

On-site methods for carcass disposal are generally preferred because they facilitate containment of the infectious agent. The USDA, APHIS Veterinary Services National HPAI Response Plan (http://www.aph is. usda.gov/newsroom/hot issues/avianinfluenza/avian influenzasummary.shtml) lists the overall order of preference for various disposal alternatives when dealing with HPAI H5N1 affected carcasses as:

1) On-site composting
2) On-site treatment (mobile incinerators, mobile digesters)
3) On-site burial
4) Off-site composting
5) Off-site landfill or off-site treatment (rendering, incineration, digestion)

Regulatory compliance will need to be addressed in site-specific disease contingency plans for carcass disposal. Ground water issues must be considered when burying carcasses and air quality and other regulations will need to be considered if burning or incineration is proposed. Coordination and communication with ADFG and ADEC will be most useful when considering the issue of carcass disposal.

Employee and Public Health

Public and employee safety will have the highest priorities in Service response to HPAI detection. The containment zone should be treated as containing a virus that may have significant animal and human health implications, and therefore response efforts should be closely coordinated with veterinary and public health agencies.

In accordance with the Service PPE guidelines, activities involving the handling of wild birds within the containment zone or surveillance zone are assumed to involve an elevated risk of contact with the HPAI H5N1 virus and thus require the use of *gloves, goggles, respiratory protection,* and other PPE and work practices (see Appendix 9).

STEP 8: Monitor to determine when outbreak is contained/over, and response activities may cease

If reliable assessments are made of the geographic scope and host distribution once a disease is established, further *disease monitoring* will be needed over time to monitor the course and progression of the disease, and its response to management. Disease monitoring, for example, may focus on key species or indicators in lieu of the wider based approaches used in the assessment of host range, distribution and prevalence. The goal with disease monitoring is to determine the success and/or failure of implemented management or to monitor the natural behavior of the disease over time. This information allows managers to infer trends, evaluate the effectiveness of management actions to control or eliminate HPAI, and evaluate links between risk factors and occurrence of the disease.

In the event of the HPAI H5N1 virus directly affecting Service lands, FWS management should reflect an elevated risk posture for at least two HPAI incubation periods, or 42 days, following the *last* detection. (The incubation period is the longest period during which an affected bird or other animal can be a source of infection.)

APPENDIX 1. REGION 7, HPAI INCIDENT MANAGEMENT TEAM

Contact Information

Incident Commander	
Primary: **Gary Edward**	Alternate: **Larry Bell**
Office: 86-3542*	Office: 786-3431
Cell: 360-2427	Cell: 223-2173
Home: 346-2088	Home: 222-3036
Deputy Commander	
Primary: **Doug Alcorn**	Alternate: **Kim Trust**
Office: 786-3545/3491	Office: 786-3398
Cell: 632-4550	Cell: 748-4903
Home: 243-7193	Home: 276-0005
Public Information Officer	
Primary: **Larry Bell**	Alternate: **Bruce Woods**
Office: 786-3431	Office: 786-3695
Cell: 223-2173	Cell: N/A
Home: 222-3036	Home: 338-8280
Safety Officer	
Primary: **Charity Haring**	Alternate: **Donna Dewhurst**
Office: 786-3588	Office: 786-3499
Cell: 230-2925	Cell: N/A
Home: 569-0030	Home: 522-7618
Planning Chief	
Primary: **Kim Trust**	Alternate: **Russ Oates**
Office: 786-3398	Office: 786-3560
Cell: 748-4903	Cell: 351-2444
Home: 276-0005	Home: 344-3555
Operations Chief	
Primary: **Todd Logan**	Alternate: **Danielle Jerry**
Office: 786-3667	Office: 786-3335
Cell: 382-1906	Cell: 230-7188
Home: 348-8868	Home: 274-5082
Logistics Chief	
Primary: **Beth Pattinson**	Alternate: **Michelle St. Peters**
Office: 786-3693	Office: 786-3691
Cell: 382-3999	Cell: 230-5438
Home: 561-4801	Home: 338-1988
Financial Chief	
Primary: **Richard Hannan**	Alternate: **Debora McClain**
Office: 786-3970	Office: 786-3481
Cell: 360-4879	Cell: 623-262-3797
Home: 868-3495	Home: 345-0480

* All area codes are 907 unless otherwise noted

APPENDIX 2.

SUMMARY OF ALASKA INTERAGENCY AVIAN INFLUENZA CONTACTS

AFFILIATION	DEPART./TITLE	NAME	CONTACT NUMBERS
Wildlife Agency Bird Hotline	US FWS	Michelle St. Peters	866-527-3358
STATE			
ADEC	State Veterinarian	Bob Gerlach	Office: 375-8214 Cell: 351-7848
ADFG	Wildlife Veterinarian	Kimberlee Beckmen	Office: 459-7257 Cell: 322-2384
	Wildlife Biologist	Mike Petrula	Office: 267-2159 Cell: 242-3300
FEDERAL			
NPS	HPAI Field Coord.	Russ Kucinski	Office: 644-3571
	Wildlife Veterinarian	Margaret Wild	Office: 970-225-3593 Cell: 970-214-2886
		Mark Graham	Office: 970-267-2160 Cell: 970-443-7737
		Vicki Jameson	Office: 970-267-2161
USDA	Veterinary Services	Linda Commerci	Office: 349-0125
	APHIS	Terry Smith	Office: 745-0871 Cell: 232-8652
	APHIS	Dave Sinnett	Office: 745-0871 Cell: 232-8658
USFWS	HPAI Coord.	Kim Trust	Office: 786-3398 Cell: 748-4903
	Regional Contaminants Coordinator	Philip Johnson	Office: 786-3483 Cell: 242-6893
USGS	NWHC	Krysten Schuler	Office: 608-270-2447 Cell: 605-690-7169
	NWHC	Mark Jankowski	Office: 608-270-2420 Cell: 608-239-2716
	NWHC	Scott Wright	Office: 608-270-2460 Cell: 608-209-3757
	NWHC	Paul Slota	Office: 608-270-2420 Cell: 608-833-5824

* All area codes are 907 unless otherwise noted

APPENDIX 3. AVIAN INFLUENZA ALASKA MIGRATORY BIRD EXPERT GROUP

Mission: Provide the best available information on Alaska Migratory birds for the Avian Influenza Program.

Goal: Provide information on the temporal distribution and abundance throughout the annual cycle of breeding and non-breeding migratory birds occurring in Alaska.

Team Members:

Kim Trust, FWS, Migratory Bird Management--Non-game, Anchorage, 786-3398
Russ Oates, FWS, Migratory Bird Management--Waterfowl, Anchorage 786-3560
Dirk Derksen, USGS, Alaska Science Center, Anchorage, 786-7061

Team Process: The Migratory Bird Expert Group will convene with appropriate experts within one hour of being notified of an information request. The Team will respond to the request with at least preliminary information within two hours and with additional detailed information within eight hours of the request.

SPECIES TECHNICAL EXPERTS

Seabirds

Dave Irons, FWS, Anchorage, 786-3376
Kathy Kuletz, FWS, Anchorage, 786-3453
Scott Hatch, USGS, Anchorage, 786-7163
Vernon Byrd, FWS, Homer, 235-6546

Landbirds

Steve Matsuoka, FWS, Anchorage, 786-3672
Colleen Handel, USGS, Anchorage, 786-7181
Phil Schempf, FWS, Juneau, 780-1171

Shorebirds

Rick Lanctot, FWS, Anchorage, 786-3609
Bob Gill, USGS, Anchorage, 786-7184
Brian McCaffery, FWS, Bethel, 543-1014

Waterfowl

Julian Fischer, FWS, Anchorage, 786-3644
Paul Flint, USGS, Anchorage, 786-7183
Craig Ely, USGS, Anchorage, 786-7182
Chris Dau, FWS, Anchorage, 786-3908
Bill Larned, FWS, Kenai, 260-0124
Ed Mallek, FWS, Fairbanks, 456-0341

Other Waterbirds

Tamara Mills, FWS, Anchorage, 786-3517
Joel Schmutz, USGS, Anchorage, 786-7186

APPENDIX 4. ALASKA STATE WILDLIFE AGENCY CONTACTS

Alaska Department of Fish and Game - Avian Influenza Contacts
Division of Wildlife Conservation - Area Offices and Area Biologists

Area Biologist	Location/Game Mgmt Unit	Address	City	State	Zip	Telephone	Fax
Rick Sinnott	Anchorage - Unit 14	333 Raspberry Rd.	Anchorage	AK	99518	267-2185	267-2433
Geoff Carroll	Barrow – Unit 26	PO Box 1284	Barrow	AK	99723	852-3464	852-3465
Phillip Perry	Bethel - Unit 18	PO Box 1467	Bethel	AK	99559	543-2839	543-2709
Dave Crowley	Cordova - Unit 6	PO Box 669	Cordova	AK	99574	4243215	424-3235
Steve DuBois	Delta Jct. - Unit 20	PO Box 605	Delta Junction	AK	99737	895-4484	895-4833
Jim Woolington	Dillingham - Unit 17	PO Box 1030	Dillingham	AK	99576	842-2334	842-5514
Neil Barten	Douglas - Units 1, 5	PO Box 20	Douglas	AK	99824	465-4267	465-4272
Don Young	Fairbanks - Units 20, 25	1300 College Road	Fairbanks	AK	99701	459-7233	452-6410
Beth Lenart	Fort Yukon - Units 25, 26	1300 College Road	Fairbanks	AK	99701	459-7242	452-6410
Glenn Stout	Galena - Units 21, 24	PO Box 209	Galena	AK	99741	656-1345	656-2368
Bob Tobey	Glennallen - Units 10, 13	PO Box 47	Glennallen	AK	99588	822-3461	822-3811
Thomas McDonough	Homer - Units 7, 15	3298 Douglas Place	Homer	AK	99603	235-1725	235-2448
Boyd Porter	Ketchikan - Units 1, 2	2030 Sealevel Drive, Suite 205	Ketchikan	AK	99901	225-2475	225-2771
Lem Butler	King Salmon - Units 9, 10	PO Box 37	King Salmon	AK	99613	246-3340	246-3309
Larry Van Daele	Kodiak - Unit 8	211 Mission Road	Kodiak	AK	99615	486-1880	486-1869
Jim Dau	Kotzebue - Unit 23	PO Box 689	Kotzebue	AK	99752	442-1711	442-2420
Roger Seavoy	McGrath - Units 19, 21	PO Box 230	McGrath	AK	99627	524-3323	524-3324
Tony Gorn	Nome - Unit 22	PO Box 1148	Nome	AK	99762	443-2271	443-5893
Tony Kavalok	Palmer - Units 14, 16	1800 Glenn Hwy, Suite 4	Palmer	AK	99645	746-6327	746-6305
Rich Lowell	Petersburg - Units 1, 3	PO Box 667	Peterburg	AK	99833	772-5235	772-9336
Phil Mooney	Sitka - Unit 4	304 Lake Street, Room 103	Sitka	AK	99835	747-5449	747-6239
Jeff Selinger	Soldotna - Units 7, 15	43961 Kalifornsky Beach Rd., Ste. B	Soldotna	AK	99669	260-2905	262-4709
Jeff Gross	Tok - Units 12, 20	PO Box 355	Tok	AK	99780	883-2971	883-2970
Mike Petrula	Waterfowl Biologist	525 W. 67th Avenue	Anchorage	AK	99518	267-2159	267-2859
Kimberlee Beckmen	ADFG Statewide - Veterinarian	1300 College Road	Fairbanks	AK	99701	459-7257	452-6410
Doug Larsen	Director, Div. of WildIife Conservation	1255 W. 8th Street	Juneau	AK	99811	465-4191	465-6142

APPENDIX 5. CONTACTS FOR PUBLIC HEALTH AND SAFETY DEPARTMENTS

Department	Contact Name	Contact Numbers
Alaska Department of Health and Social Services, Division of Public Health Director	Dr. Dick Mandsager	Phone: 465-3092 Cell: 321-0638
Alaska Department of Health and Social Services	Greg Wilkinson	Phone: 269-7285
Alaska Department of Environmental Conservation, Division of Environmental Health Director	Kristin Ryan	Phone: 269-7644 Cell: 632-2557
Alaska Department of Environmental Conservation, Division of Domestic Animal Concern	Weld Royal	Phone: 465-5009
Department of Military and Veterans Affairs, Division of Homeland Security and Emergency Management	Jeremy Zidek	Phone: 428-7077
Department of Public Safety	Megan Peters	Phone: 269-5413
Alaska Native Tribal Health Consortium	Joaqlin Estus	Phone: 729-1914
Anchorage Health Department	Minta Montalbo	Phone: 343-4619
Anchorage Office of Emergency Management	Genevieve Mauritis	Phone: 343-1402
Fairbanks North Star Borough	Jennifer Yuhas	Phone: 459-1302

APPENDIX 6.

Region 7, AVIAN MORBIDITY / MORTALITY RESPONSE TEAM

Team Name	Team Members	Work Contact	Home Contact	Cell Phone	Resp.	Rain Gear	Knee Boots	Hip Boots	Chest Waders	Tyvek Coveralls	Nomex	B-3 Class
Anchorage												
	Catherine Berg	271-1630		244-1529	S	*	*	*	M7	L	40L	X
	Beth Pattinson	786-3693	561-4801	382-3999	M	*	*	*	*	XL	44R	X
Team Contact	Donna Dewhurst	786-3499	522-7618	----	S		*	*	*	XL	44R	X
	Doug Alcorn	786-3545	243-7193	632-4550	M	MM	*	*	*	XL	46R	No
	Karen Laing	786-3549	344-9840	351-5176	S	*	*	*	*	L	38R?	X
	Maureen DeZeeuw	271-2777	337-2907	244-9090	M	L	*	*	M9	XL	42R	No
	Kim Trust	786-3398	276-0005	748-4903	S	M	M7	M7	M7	L	42R	No
	Michelle St.Peters	786-3691	338-1988	230-5438	S	S	M6					
Fairbanks ES	Angela Matz	456-0442	456-6723	699-1235	S	*	*	*	WL	L	L	No
A	Steve Kendall	456-0303	479-2256		M	*	*	M11	M11	L		X
K	Lisa Saperstein	456-0506	458-7259		S	*	*	M6-7	M6-7	L		X
ES	Deb Rocque	456-0272		382-2775	S	*	*	*	*	L		
YF	Nikki Guldager	455-1815	457-4072	978-8480	S	Med	*	*	*	L		X
YF	Sheila Dufford	456-0307	457-5161		S	Med	*	*	*	L		X
Juneau	Deborah Rudis	780-1183	789-4260	723-9981	S?	*	M7	M7	M7	L		X
AK Maritime	Heather Renner	226-4623	235-0738			MM	*	M8	M8	XL		X
	Leslie Slater	226-4607	235-1279	752-0217	M	WM	M6	M6	M6	L	40R	X
	Jeff Williams	226-4612				L	M10	M10	MT	L	42L	X
AK Peninsula	Susan Savage	246-1205	246-4492		M	*	*	*	*			X
	Dom Watts	246-1210	246-9653		M	*	*	*	M12	XL		X
	Bill Schaff	246-3339	246-3272		L	*	*	*	M8	L		X

APPENDIX 6.
Region 7, AVIAN MORBIDITY / MORTALITY RESPONSE TEAM

Team Name	Team Members	Work Contact	Home Contact	Cell Phone	Resp.	Rain Gear	Knee Boots	Hip Boots	Chest Waders	Tyvek Coveralls	Nomex	B-3 Class
Innoko	Kevin Whitworth	524-3251	524-3344			*	*	*				X
Izembek	Franz Muller	532-2445	532-2928		L							X
	Val Urban	532-2445	532-2903		L	*	*	*	*	--		X
Kenai	Doug Staller	262-7021	283-2889	252-8129		*	*	*	*	XL		X
	Liz Jozwiak	260-2818	262-9365	252-0349		Med	M7	M7	M7	--		X
	Todd Eskelin	260-2817	335-0017			L	*	M9	M9	L		X
Kodiak	Brandon Saito	487-2600	486-0434		M	Med	*	*	*	L		X
	Tonya Lee	487-2600	487-2696	539-7501	L	Med	*	*	*	L		No
Koyukuk/Now	Kenton Moos	656-1231	656-2323		M	*	*	*	*	XL		X
	Nate Olson	656-1231				*	*	*	13	XL		X
Selawik	Tina Moran	442-3799	442-2417		S	*	6-7	*	6-7	L		X
Tetlin	Buddy Johnson	883-9407	883-3664		M	M	*	*	M9	L		X
Togiak	Michael Winfree	842-2858	842-1063			*	*	*	*	XXL		X
	Jon Dyasuk	842-8408	842-5542		S	Med	M7	M7	M7	L		No
	Debbie Reiswig	842-8410	842-1486			Large	*	W6	W6	--		X
Yukon Delta	Tom Doolittle	543-3151	543-0737		L	*	*	*	*	--		X

APPENDIX 7. HPAI NFORMATION FOR REGION 7 SERVICE EMPLOYEES

Note: *Material in **bold** should be substituted for material in parentheses if HPAI is present in North America.*

The Asian strain of highly pathogenic avian influenza (HPAI) subtype H5N1, or bird flu, is primarily a disease of domestic poultry that may also affect wild birds and humans. (HPAI has not yet been found in North America or its territories, and strict measures are being taken to keep it out of the country and to monitor migratory birds arriving from affected areas of the world.) **HPAI has recently been discovered in (specific places in North America or its territories), and measures are being taken by appropriate authorities to contain it in order to prevent the outbreak from spreading.**

Wild birds, particularly waterfowl and shorebirds, commonly carry low pathogenicity avian influenza viruses without harm. It is no surprise when these low pathogenicity avian influenza viruses are detected in healthy wild birds. However, the Asian H5N1 HPAI virus has mutated and adapted to cause illness and death in domestic and wild birds, as well as a limited number of mammals, including humans. Mortality from the virus has been detected in more than eighty wild bird species worldwide. Over 200 million domestic birds in the affected countries have died or been culled in attempts to control the disease.

The virus is spread among birds in fecal droppings, saliva, and nasal discharges. The virus is quite easily inactivated by disinfectants but can survive for long periods (a month or more) in cold water. HPAI has been detected in some apparently healthy wild birds. The role of migratory birds in spread of the disease over long distances has been speculated; however, other means of (introduction to the U.S.) **spread**, such as through illegal importation of infected birds or bird products or by contaminated items, is also a concern. The impact of HPAI on wild bird populations is unknown. However, what is clear is that HPAI poses a significant economic threat to domestic poultry and fowl operations as well as to human health.

The Fish and Wildlife Service, in cooperation with other agencies, has developed a preparedness and communication plan, and a response plan to assist Region 7 Management if HPAI is detected in Alaska. Although culling domestic birds to contain the spread of HPAI is considered an acceptable agriculture practice, culling of migratory birds is likely ineffective in disease control and would have unknown and potentially significant ecological consequences. Culling migratory birds is not a recommended HPAI management action according to the Food and Agriculture Organization of the United Nations (FAO) or World Health Organization (WHO), the two leading international health authorities.

More detailed information is available to employees at http://www.fws.gov/.

APPENDIX 8. PUBLIC INFORMATION PLAN FOR AVIAN INFLUENZA EARLY DETECTION & RESPONSE PROGRAM IN ALASKA

Background:

The highly pathogenic avian influenza (Asian H5N1) continues to spread across the Asian continent, and wild birds from these areas are now migrating to certain areas of Alaska. Alaska has been identified as the most likely location that Asian H5N1 would first occur in North America if introduced by wild birds. The Alaska Interagency HPAI Bird Surveillance Working Group has developed a protocol for sampling wild bird populations for H5N1 in Alaska. Twenty-six high priority species have been selected for testing. Camps throughout Alaska will be taking samples from spring through the fall of 2006. One of the objectives of the "Avian Influenza Early Detection & Response Program" is to provide timely and appropriate information to internal and external audiences. This Information Plan addresses two scenarios: #1. No Positive Wild Bird Sample Identified; #2. Positive Wild Bird Sample Identified.

Scenario #1. No Positive Wild Bird Sample Identified

Goal: Audiences will understand the Avian Influenza Early Detection & Response Program in Alaska and will support its activities.

Issue: Many rumors are spreading about the H5N1 Avian Influenza and the Alaska Surveillance Program. In some cases, sensational stories in the media have resulted in people being misinformed and unnecessarily alarmed.

Audience #1 - Media

Objective: Reports and articles about the Avian Influenza Early Detection & Response Program in Alaska are accurate and timely.

Messages:

The current Asian strain of Avian influenza has not been found in any wild or farm-raised bird in America.

Although it is suspected that Avian Influenza was transmitted from wild birds to people in Azerbijan, it has not been transmitted from any wild bird to a person in North America.

No one has caught the H5N1 virus from eating a fully cooked bird.

The Alaska Interagency HPAI Bird Surveillance Working Group was formed to develop a protocol for sampling bird species for H5N1 Avian Influenza in Alaska.

Since 2006, samples from 28 priority bird species have been collected in Alaska by biologists at field camps and tested for presence of the H5N1 virus.

Strategies:

1. **R7 Web Site:** Current Topics, Avian Influenza page will be updated whenever there is new information about the Avian Influenza Early Detection & Response Program in Alaska. (EA, ITM)
2. **Media Inquiries:** The Alaska Region's Office of External Affairs will respond to all media inquiries. Media that call camp staff or field stations will be advised to call the Alaska Region's Office of External Affairs. Inquiries will be recorded and will include: media member name, address, phone, e-mail, affiliation, size of crew, and the nature

and date of inquiry. Weekly media inquiry summaries will be compiled and reported to the Alaska Interagency HPAI Bird Surveillance Working Group. (EA)

3. **Camp Visits:** Media that inquire about visiting camps will be directed to camps with easier access and egress, those with a higher probability of seeing birds caught, and those where media presence will be less burdensome to field biologists. Media visiting camps will be accompanied by state or federal Public Information Officers or Paul Slota, of the National Wildlife Health Center. (EA, state & other federal PIOs)
4. **Fact Sheets, radio PSA's, Q&As, and weekly Situation Summaries** will be updated, sent to field stations, and/or posted on the R7 web site when changes occur. (EA)
5. **Coordination:** The Alaska Region's Office of External Affairs will coordinate informational material and media requests with other state and federal agencies. (EA)

Audience #2 – Local Communities

Objective: Villagers are well informed about camp activities, and H5N1 testing in their areas.

Messages:

The current Asian strain of Avian influenza has not been found in any wild or farm-raised bird in America.

Although it is suspected that Avian Influenza was transmitted from wild birds to people in Azerbijan, it has not been transmitted from any wild bird to a person in North America.

No one has caught the H5N1 virus from eating a fully cooked bird.

The Alaska Interagency HPAI Bird Surveillance Working Group was formed to develop a plan for testing bird species for H5N1 Avian Influenza in Alaska.

Since 2006, samples from 28 priority bird species have been collected in Alaska by biologists at field camps and tested for presence of the H5N1 virus.

If you have questions or see dead or sick birds, especially if something you notice seems unnatural, call 1-866-5-BRDFLU (1-866-527-3358).

Strategies:

1. **Fact sheets** (hard copies) will be distributed in villages, whenever a Service employee visits. If necessary, they will be translated into Native languages. Currently the fact sheet is available in English and Yupik. (EA)
2. **Radio PSAs** on CD will be sent to AM and FM radio stations periodically when communicating new messages is needed. (EA)
3. **Community Contacts:** Prior to camp set up, village councils in local communities will be contacted with camp details. (Principle Investigator).
4. **Free 1-866-527-3358 telephone number:** This number will be answered by a live person 8 hours a day, Monday – Friday and messages are picked up twice/day on weekends. Q&As are available for reference; experts will be contacted for phone calls that are more complex. (AI) Evaluation: calls are being recorded as they come in.

Audience #3 – Other Agencies:

Objective: The USFWS and other agencies work cooperatively and establish strong working relationships to accomplish the Avian Influenza Early Detection & Response Program in Alaska.

Messages:

The U.S. Fish and Wildlife Service is a cooperative and willing partner in the Avian Influenza Early Detection & Response Program in Alaska.

The plan for "Sampling the Highly Pathologic H5N1 Avian Influenza in Migratory Birds in Alaska" is a cooperative venture by the U. S. Geological Survey, the Alaska Department of Fish and Game, and the U.S. Fish and Wildlife Service. Efforts of these three agencies are being augmented by the U.S. Department of Agriculture.

Strategies:

1. **Frequent personal communications** between employees working on the project by telephone and e-mail. (EA, AI, other federal and state reps)
2. **The Alaska Avian Influenza Information Group** will remain active and USFWS will continue to participate. (EA)
3. **The State of Alaska Multi Agency Coordination Group (MAC)** and USFWS will maintain a strong relationship. (MBM – Doug Alcorn)
4. **An Incident Command** within USFWS in Alaska is in place. A Joint Incident Command will be formed, if necessary. (Gary Edwards and Staff)

Audience #4 –USFWS Employees:

Objective: All USFWS R7 employees within the Incident Command structure communicate well with one another and collaborate to accomplish the Avian Influenza Early Detection & Response Program in Alaska. In addition, all USFWS R7 employees will be aware of where to find information so that they can stay current with the project.

Messages:

Employees of the USFWS in Alaska are working within the Incident Command structure to accomplish the Avian Influenza Early Detection & Response Program in Alaska.

Information about H5N1 and the Early Detection and Response Program is available on the R7 internal and external web site so that all employees can stay current with the program.

Strategies:

1. **Internal and external R7 Web sites** have updated documents and web links. (AI, EA, ITM)
2. **Incident Action Plan** will be updated weekly and distributed at briefings and to field stations. (IA)
3. **Briefings for USFWS Washington, Office of External Affairs,** will be done as necessary. (EA)

Scenario #2. Positive Wild Bird Sample Identified

The Washington Office of External Affairs has in place an Outreach and Communications Contingency Plan which identifies three scenarios where a positive sample is confirmed in North America:

- HP H5/H7 influenza is confirmed in wild birds in North America.
- A confirmed HPAI outbreak results in significant bird mortality, either in the wild or on a National Wildlife Refuge.
- A Service employee or associated researcher/contract employee contracts HPAI in the course of field work or a confirmed case of bird-to-human transmission of HPAI is suspected to have resulted from migratory bird hunting, bird watching or other contact with wild birds (this is considered highly unlikely).

Should any of these scenarios occur we expect the Contingency Plan to go into effect and that the Washington External Affairs Office will take the lead. If the positive sample is from Alaska, we will be the focus of communications activities. An Incident Response Communications Team would travel to Alaska to assist with communication duties. Should the positive sample come from another location, we will assist with communications work at that location, while playing a supportive role from Alaska.

APPENDIX 9. HPAI SAFETY POLICY AND SAFE WORK PRACTICES

United States Department of the Interior

FISH AND WILDLIFE SERVICE
1011 E. Tudor Rd.
Anchorage, Alaska 99503-6199

IN REPLY REFER TO:

ABA/OSH

April 19, 2006

Memorandum

To: RDT
Project Leaders/Supervisors
Principal Investigators

From: Acting Regional Director – Region 7 /s/ LaVerne Smith

Subject: Avian Influenza Safety Policy

This memorandum provides interim Region 7 policy for Fish and Wildlife Service employees, and all others doing official work for the Service in Region 7, regarding their safety and occupational health while handling wild birds. The policy is based on guidelines prepared by the U.S. Geological Survey National Wildlife Health Center, the World Health Organization, and the Centers for Disease Control and Prevention, and provides for the protection of persons handling wild birds and the prevention of spreading disease with regard to Highly Pathogenic Avian Influenza (H5N1). The policy defines levels of personal protective equipment (PPE) and work practices required to be used while performing the mission of sampling for H5N1 as well as all other activities involving bird handling. This interim policy will remain in effect until final Department of the Interior and Fish and Wildlife Service policies on this matter are issued.

Appropriate levels of PPE, as defined in the attached matrix, are required for all work conducted with wild birds in Alaska. Principal Investigators (PI) are responsible for project planning, including the procurement of all required PPE. The PI, Project Leader, or Supervisor may choose to require additional levels of PPE if they determine the level of risk warrants it. They, however, may not relax PPE requirements below the minimum for a given activity. If a PI has a safety concern, it needs to be elevated up the chain of command as quickly as possible. Any time a PI or a Supervisor believes there is an unacceptable risk associated with a given activity, they have the authority to suspend their team's activities immediately and should do so. This is true of any risk, not just exposure to H5N1.

Each Fish and Wildlife Service employee in Region 7 needs to understand their roles and responsibilities in regards to safety and health as identified in Service Policy 240 FW 1 (attached). Assistant Regional Directors and other Supervisors are responsible for ensuring that all personnel under their supervision, who will be working with wild birds in any capacity, have read this memorandum and attached Service policy, and fully comply.

Attachment 1 is the Fish and Wildlife Service policy pertaining to safety and health responsibilities. Attachment 2 is a matrix of activities and the level of protection required for bird handling. These requirements contain "common sense" practices to help in the prevention of spreading disease from one project to another; as well as preventing exposure by employees. Attachment 3 is a checklist of PPE to assist the PI or Supervisors in their project planning. Sound project planning will be the key to successfully fulfilling these requirements. Attachment 4 is the Service policy on PPE planning, purchase, and use. It requires an assessment for every project. The Job Hazard Assessment (JHA) must be completed, signed by the Supervisor and maintained in the Supervisor's employee files. A blank JHA is available by link in Attachment 4 or at http://region7.fws.gov/admin/safety/jha/blank.pdf.

This policy will require a significant change in the work practices of the past and may restrict some activities. Through the use of various products, and evaluation of their effectiveness, we will learn what is most conducive to each type of work. As we gain experience we will adapt our requirements to the extent possible. We are committed to keeping our employees and others safe while successfully getting our assigned tasks completed. Thank you for being part of a historic sampling effort. Please remember to keep safety first as we accomplish this important mission.

In you have any questions please call Julie Wheeler, Occupational Safety and Health Manager, at 786-3551.

Attachment 1: 240 FW1 Policy and General Provisions
Attachment 2: Personal Protective Equipment and Best Practices
Attachment 3: Personal Protective Equipment Checklist
Attachment 4: 241 FW3 Personal Protective Equipment

ATTACHMENT 1

OCCUPATIONAL SAFETY AND HEALTH
Safety Program from Part 240

240 FW1 Policy and General Provisions

1.5 Responsibilities

F. Regional Safety Managers have the primary responsibility for the development, administration, and evaluation of the Regional safety and environmental safety management programs. Duties shall be to:

(1) Serve as the primary advisor to Regional management on all safety and environmental health matters.

(2) Respond to program problem areas by coordinating the necessary safety expertise and resources and recommend or initiate corrective action.

H. Project Leaders are responsible for all safety and environmental health management program activities under their supervision. Specific areas of responsibilities include:

(1) Ensure compliance with Service-wide and Regional safety program policies and goals.

(2) Evaluate safety program effectiveness at all work locations, and initiate actions to correct program deficiencies.

(3) Ensure that required or necessary safety and environmental health training is provided.

(4) Ensure prompt abatement of identified hazardous conditions or procedures.

(5) Appoint and provide training for a station safety officer (see 240 FW 2.2). Appointments will be for no less than 1 year.

I. Supervisor**s**, regardless of the employee's level in the organization, have the responsibility to:

(1) Orient employees as to their safety responsibilities.

(2) Evaluate assignments to ensure that all aspects of safety and environmental health have been included. Hazard analyses should be developed for hazardous activities.

(3) Ensure that employees are physically able and adequately trained to safely accomplish their assigned work.

(4) Enforce the use of personal protective equipment to protect the employee from potential injury.

(5) See that recognized safety and environmental health practices are followed by all employees and others in a work area.

(6) Abate immediately all unsafe practices.

ATTACHMENT 1

(7) Ensure that unsafe conditions are corrected without delay.

(8) Arrange for first aid, medical treatment, and/or transportation for medical treatment.

(9) Investigate and report all accidents within area of jurisdiction (see 240 FW 7.).

(10) Ensure the initiation, completion, and submission through proper channels of required Office of Workers' Compensation Program claim forms.

J. Employees**,** as a condition of employment shall:

(1) Observe and follow all safety and health policies and procedures required for the tasks assigned, both oral and written.

(2) Maintain a high degree of safety awareness so that their work is performed without accidents or incidents.

(3) Wear personal protective equipment that has been provided.

(4) Report all accidents/incidents and job related illnesses to appropriate supervisors immediately.

(5) Report all unsafe or unhealthful conditions which they believe to exist (see 240 FW 6.).

ATTACHMENT 2

Personal Protective Equipment and Best Practices for Bird Handling

WHEN ENGAGED IN THESE ACTIVITIES:	REQUIRED PROTECTIVE EQUIPMENT:	FOLLOW THESE REQUIRED WORK PRACTICES:	APPLY THESE REQUIRED PROCEDURES:
Risk Level 1			
Handling apparently healthy birds.	• **Gloves: nitrile, pvc, latex, or cut resistant.** • **Glasses: safety glasses, sun glasses, goggles or prescription glasses.**	• **Disinfect equipment when finished and/or before moving to a new location.** • **Sanitize hands after handling birds and before eating or smoking.**	**Use 10% chlorine bleach to disinfect boots, tarps, and equipment.** **Equipment and boots need to be cleaned or contained (plastic trash bags) before transporting in vehicle or aircraft.**
Handling birds in association with an apparently "normal" mortality event; e.g. mass starvation, weather event, structure strike.	**Same as above**	**Same as above**	**Same as above**
Risk Level 2			
Handling sick or dead birds associated with an unusual/large mortality event; e.g., drooping heads or wings, reduced fear of humans or other abnormal behavior.	• **Protective clothing e.g., rain gear or other outerwear conducive to disposal of or decontamination.** • **Gloves (nitrile, pvc or latex)** • **Protection against claw wounds on hands and arms (cut resistant Kevlar or similar)** • **Goggles** • **Particulate mask (N-95 or greater)** • **Rubber boots or coverings**	• **Disinfect equipment and protective clothing or dispose of when finished w/ project and before moving to a new location.** • **Sanitize hands after handling birds and before eating or smoking**	**Same as above, properly use <u>biohazard bags</u> for transport of contaminated clothing and equipment.**
Handling birds after H5NI has been confirmed in birds in Alaska	• **As above**	• **Use caution toward preventing exposure.** • **Use all previous practices, maximize decontamination efforts.** **<u>When appropriate</u>, burn contaminated materials on site.**	**Same as above, properly use <u>biohazard bags</u> for transportation of contaminated clothing and equipment.**
Risk Level 3			
Handling birds after H5N1 has been confirmed in humans in Alaska, or human to human transmission has been confirmed in any location.	• **Full protection for possible exposure to a known biological hazard (i.e., level A hazardous materials suit).**	**Work at this risk level would require training in biological hazardous materials operations and enrollment in a respiratory protection program. (*)**	**Work at this risk level will be done by the Center for Disease Control or the United States Department of Agriculture.**

(*) FWS Policy 242 FW 6, Hazardous Materials Operations does not allow for Service employees to work in biologically hazardous operations. The only exception to this would be with the Regional Director's emergency authorization.

ATTACHMENT 3

Personal Protective Equipment Checklist

Risk Level 1 - Handling apparently Healthy Wild Birds or dead birds associated with a "normal" die-off.

- ☐ Gloves (nitrile, pvc, latex, cut resistant sleeves)
- ☐ Glasses or Goggles
- ☐ Hand washing supplies
- ☐ Bleach (mark container w/instructions – 10% bleach to 90% water and package appropriately for transport)
- ☐ Garden sprayer or similar decontamination device
- ☐ Hand sanitizer

Risk Level 2 - Handling Sick or Dead Wild Birds associated with an unusual event or after H5N1 has been Confirmed in Wild Birds in Alaska

Items identified above and the following:

- ☐ Particulate Masks (N-95, mesh outershell, exhalation valve, size, disposable liner)
- ☐ Goggles required
- ☐ Protective clothing such as rain gear, disposable plastic aprons, jackets or coveralls, Tyvek Suits (great disposable protective clothing) Outerwear needs to be material you can decontaminate with bleach solution or dispose of.
- ☐ Bio hazard bags for contaminated equip or clothing you can't disinfect in the field
- ☐ Rubber boots or coverings (hip boots, chest waders, and calf-high Xtratuffs are acceptable)

R-7 employees are expected to do most work under Risk Level 1, however, it is important to maintain a supply of Risk Level 2 equipment in case the risk level changes during activity at the project.

The appropriate PPE will be identified during the development of the Job Hazard Assessment. A list of examples, vendor contact information and prices will be sent by email to each of the PIs from Migratory Birds in the Regional Office.

It is important to consider the frequency of changing products like gloves and particulate masks, so that a sufficient supply is ordered.

When selecting PPE, consideration should be given to:

- GLOVES
  - Strength, durability, and thickness (measured in mils)
  - Length – available from wrist to elbow
  - Sleeves for cut protection are available with multiple hand, finger options
  - Dexterity required to perform tasks
  - Risk for puncture or tear (14 mil latex gloves are tough to tear – others are not)
  - Cleaning or disposal
  - Size – only gloves which fit will be successful
  - To reduce the risk of latex allergy, latex should be avoided. If a latex rash develops employee should switch to latex free product.

- EYE PROTECTION
  - OTG glasses fit over prescription lens frames.
  - Ultraviolet protection
  - Anti fogging
  - Headband ease of use
  - Wide nose-bridge for fit with particulate mask
  - Splatter risk - a tear away lens might work well
  - Glasses need to be adjustable and have comfortable nose pieces
  - Method for carrying or wearing such as a lanyard

- PROTECTIVE CLOTHING
  - Apron – decontaminate or dispose
  - Light weight disposal rain gear can be decontaminated.
  - Permeability
  - Consider the environment

- FOOTWEAR
  - decontaminate or disinfect boots
  - disposable boot covers are an option

- RESPIRATORY PROTECTION
  - Particulate mask only
  - Weather conditions – rubber mesh for wet conditions
  - Exhalation valve for ease of breathing
  - Filter efficiency level – N95 or higher only
  - Ease of donning, comfort of wearing
  - Sizing

If a known hazard is identified – such as human to human transmission of the H5N1 –work will cease and employees will be returned from field camps.

ATTACHMENT 4

Handling birds and the hazard of virus exposure is not specifically identified in FWS PPE policy – however, the direction applies to all work activities.

OCCUPATIONAL SAFETY AND HEALTH
Safety Program Part 240

241 FW3 Personal Protective Equipment

3.1 What is the purpose of this chapter? This chapter outlines the Fish and Wildlife Service (Service) requirements and responsibilities for giving you clothing and equipment that protects you from hazards that you may encounter while performing your job tasks.

3.2 Who does the Personal Protective Equipment (PPE) Program apply to? It applies to all Service employees, volunteers, Job Corps and Youth Conservation Corps members and students, and seasonal workers who need PPE to protect them from hazards we have identified in their workplaces.

3.3 What are the authorities for this chapter?

A. Executive Order 12196, Occupational Safety and Health Programs for Federal Employees.

B. Public Law 91-596, Section 19, Federal Agency Safety Programs and Responsibilities.

C. 29 CFR 1910.132-133 and 135-138, Occupational Safety and Health Administration's (OSHA) General Industry Personal Protective Equipment Standards.

D. 29 CFR 1960, Basic Program Elements for Federal Employee Occupational Safety and Health Programs and Related Matters.

E. American National Standards Institute (ANSI) standards incorporated in the Occupational Safety and Health Act (29 CFR 1910).

F. National Institute for Occupational Safety and Health (NIOSH) Personal Protective Equipment Guidance.

3.4 Who is responsible for the Personal Protective Equipment Program?

A. The Chief, Division of Safety and Health will:

(1) Revise and update this chapter, as necessary.

(2) Provide interpretation of the Personal Protective Equipment Program requirements and serve as a consultant to resolve Service-wide questions or issues.

B. Regional Directors and Manager, California/Nevada Operations Office (CNO) must provide sufficient support and resources to effectively implement the Personal Protective Equipment Program in their areas of responsibility.

C. Regional/CNO Safety Managers must:

(1) Provide interpretation of the Personal Protective Equipment Program requirements and serve as an advisor to resolve Region-wide/CNO-wide questions and issues.

(2) Evaluate implementation of the Personal Protective Equipment Program during Regional/CNO field station safety program evaluations.

(3) Assist project leaders/Supervisors with developing job hazard assessments.

D. Project Leaders/Supervisors must make sure all aspects of the PPE Program are implemented in their facilities and workplaces. They must:

(1) Conduct thorough job hazard assessments to make sure that all hazards are identified, and take action to eliminate or reduce the hazards. Verify that these assessments have been performed through a written certification. Consult with the Regional/CNO Safety Manager for assistance with developing hazard assessments.

(2) Make sure employees have proper PPE to protect them from workplace hazards and are trained on how to select, use, maintain and clean it. Consult with the Regional/CNO Safety Manager for assistance in selecting appropriate PPE.

(3) Attend PPE training.

(4) Make sure that employees properly select, use, maintain and clean their PPE. Take appropriate disciplinary action if employees do not wear and properly maintain and clean their PPE.

(5) Immediately repair or replace defective or damaged PPE.

(6) Maintain records on PPE assignments and training.

E. Employees must comply with all Personal Protective Equipment Program requirements, including:

(1) Wear PPE as we require.

(2) Complete all PPE training.

(3) Clean and keep all PPE in good and serviceable condition.

(4) Tell their Supervisors when PPE needs to be repaired or replaced.

3.5 What is the Service policy regarding use of Personal Protective Equipment? We will take actions that protect you from known hazards in your workplace. We will use PPE only when equipment engineering controls, or management controls do not adequately protect you. When we cannot eliminate all known hazards, we will give you PPE at no cost to you. We will select PPE that is designed to protect you from the workplace hazards we have identified. The equipment will meet all current ANSI or equivalent industry standards, and we will make sure that it fits you properly. We will train you on how and when to use the PPE, its limitations, and how to maintain and clean it.

3.6 What is the definition of Personal Protective Equipment? Any clothing or equipment that is designed to protect any part of your body from workplace hazards that you can absorb, inhale, or that can physically touch you.

3.7 What is the Personal Protective Equipment Program? The Occupational Safety and Health Administration (OSHA) requires us to protect you from potentially hazardous conditions in your workplace. When we are unable to eliminate all identified hazards in your workplace, we must provide equipment that will act as a barrier against injury to you and your health. Specific information on the PPE Program can be found at http://www.osha.gov/SLTC/personalprotectiveequipment/index.html. The program must include protection of the eye, face, foot, hand, head and leg.

3.8 What are the major elements of the Personal Protective Equipment Program? A Personal Protective Equipment Program will contain, but is not limited to:

A. Job hazard assessments.

B. Selection of appropriate PPE.

C. Employee training.

D. Recordkeeping.

3.9 What is a job hazard assessment? A job hazard assessment is a process of identifying real or potential safety and occupational health risks for specific jobs within the workplace that might require the use of PPE to protect employees. The assessment includes identifying the specific PPE needed in each workplace. Note: Project leaders/Supervisors responsible for conducting hazard assessments must use FWS Form 3-2279 (Job Hazard Assessment) to record their findings and recommendations for type of PPE, its use, and necessary employee training. Exhibit 1 contains a description of the process and the procedure for conducting a job hazard assessment.

3.10 What are the Service requirements for selecting PPE? All PPE will be of safe design and construction for the work you perform. We will purchase or allow you to use only PPE that meets ANSI, NIOSH or equivalent industry standards. We will consider your comfort and fit of PPE when selecting it. All PPE will be maintained in a sanitary condition, by you or by a person we assign to maintain it.

3.11 Am I allowed to buy and wear my own PPE? You may use PPE you buy for your personal convenience, although we do not recommend it. Before we allow you to use PPE you purchase for yourself, it must:

A. Meet the same requirements as the Service provided PPE, and

B. Be approved by your project leader/Supervisor and the Regional/CNO Safety Manager.

3.12 Do I own the PPE the Service gives me to use? While you may have exclusive use of the Service-purchased PPE, it remains the property of the Service. You must return those PPE items that can be reused by other personnel. Items such as prescription safety glasses or safety shoes/boots that are generally used by only one person may be kept by the employee.

3.13 What are the types of PPE that I might be required to use? Exhibit 2 lists our recommendations for types of PPE you should use for various job tasks. This is only general information. Your project leader/Supervisor may require you to use other PPE, based on your job hazard assessment. Note: We have separate programs for respiratory and hearing protection because industrial hygiene monitoring is required to participate in those programs. Hearing Protection Program requirements are in 242 FW 3 and Respiratory Protection Program requirements are in 242 FW 14.

A. Electrical Protective Equipment (paragraph 3.14).

B. Eye and Face Protection (paragraphs 3.15, 3.16, and 3.17 and Exhibit 2).

C. Foot Protection (paragraph 3.18).

D. Hand Protection (paragraph 3.19 and Exhibit 3).

E. Head Protection (paragraph 3.20).

F. Leg Protection (paragraph 3.21).

G. Other special types of protective equipment we determine you need (paragraph 3.22).

3.14 What are the requirements for electrical protective equipment? You may be required to use electrical protective equipment such as insulating blankets, matting, covers, line hose, gloves, and sleeves made of rubber when exposed to electrical hazards. Your project leader/Supervisor will decide what specific PPE you need to protect you from electrical hazards in your workplace.

3.15 What are the requirements for eye protection? We require all persons who may be in eye hazard areas to wear ANSI approved protective eyewear, including employees, visitors, volunteers, and contractors. Project leaders/supervisors must have a sufficient quantity of suitable eye protectors available for all persons who might come into or through the eye hazard area. No one will be allowed in the workplace if suitable eye protection is not available. Note: You may refer to the Eye and Face Protection Selection Chart in Exhibit 3 for more information on what PPE is recommended for specific job tasks.

A. Project leaders/supervisors will make sure that caution signs are placed outside eye hazard areas. The signs will require everyone to put on eye protection before entering the area.

B. Suitable protectors will be used when you are exposed to hazards from flying particles, molten metal, acids or caustic liquids, chemical liquids, gases, or vapors, or potentially injurious light radiation.

C. You will wear an eye protection device that provides side protection if there is a hazard from flying objects. Detachable side protectors are permitted.

D. Your project leader/supervisor will make sure that eye and face PPE is distinctly marked to easily identify the manufacturer.

E. You must use filter lenses that have a shade number appropriate for the work you are doing if there is a hazard from light radiation (i.e., welding). Refer to Exhibit 3 for a chart of appropriate shade numbers for various job tasks.

F. We will provide ANSI approved emergency eyewash facilities in all workplaces where your eyes may be exposed to corrosive materials. The eyewash facilities will be easily accessible to you in an emergency and provided for continuous flushing of the eyes for at least 15 minutes. First-aid instructions will be posted nearby.

3.16 I wear prescription glasses. What are the Service requirements for my eye protection? If we require you to go into an eye hazard area:

A. We will buy prescription safety glasses for you if you are exposed to eye hazards on a routine basis. Note: Be sure to inform your project leader/supervisor if your eyewear prescription changes.

B. We will give you goggles or face shields designed to fit over standard eye glasses if you are only occasionally exposed to eye hazards. The goggles or face shields must fit properly over your prescription glasses.

3.17 I wear contact lenses. Do I have to wear eye protection? Contact lens wearers must wear appropriate eye and face protection devices in areas we have determined require eye protection.

A. Contact lenses may increase the hazard to your eyes in some instances. Your project leader/supervisor will thoroughly evaluate the hazards in your workplace to decide if we can allow you to wear contact lenses while you do your job.

B. You are not allowed to wear contact lenses while you are working with or around chemicals, fumes, smoke, dust, flying particles, or molten metals that may increase your chance of injury because of the contact lenses.

3.18 What are the requirements for wearing foot protection? We will give you steel-toed safety shoes or other appropriate foot protection if we decide your job exposes you to possible foot injury.

A. You must wear safety shoes or boots with impact protection when your work involves carrying or handling materials such as packages, objects, parts or heavy tools which could be dropped; and for other activities where objects might fall onto your feet and cause injury.

B. You must wear safety shoes or boots with compression protection for work activities involving skid trucks (manual material handling carts), heavy equipment, and around heavy pipes.

C. You must wear safety shoes or boots with puncture protection if you work where you could step on sharp objects such as nails, wire, tacks, screws, large staples, scrap metal.

D. You must wear special types of foot protection when you work around electrical equipment or in areas with extreme temperatures (hot or cold).

3.19 What are the requirements for wearing hand protection? You must use protective gloves whenever you work with or handle any equipment or materials likely to be hazardous to your hands. Hand hazards include skin absorption of harmful substances; severe cuts or scrapes; punctures; chemical or thermal burns; and harmful temperature extremes. We recommend you use barrier creams to prevent dermatitis when you work with chemicals. Project leaders/supervisors will give you the appropriate hand protection materials based on their assessment of your workplace hazards. Note: See Exhibit 4 for a

guide to the most common types of protective work gloves and the types of hazards they can protect against.

A. Gloves should be replaced periodically, depending on how often you use them and how dirty they get.

B. Do not wear gloves around moving machinery, such as drill presses, mills, lathes, and grinders.

3.20 What are the Service requirements for cleaning and maintaining PPE? It is important that you keep PPE clean and properly maintained. Cleaning is particularly important for eye and face protection where dirty or fogged lenses could impair your vision.

A. You are responsible for cleaning and maintaining the PPE we give you to use, unless your project leader/supervisor specifically assigns that responsibility to someone else.

B. Project leaders/supervisors must make sure their employees' PPE is inspected, cleaned, and maintained regularly.

C. Project leaders/supervisors should establish a written schedule for PPE inspection, and assign someone the responsibility for monitoring the condition of all PPE.

D. Employees will not share PPE until it has been properly cleaned and sanitized. We will distribute PPE for individual use whenever possible.

E. Employees will not use defective or damaged PPE.

F. When not in use, goggles and safety glasses should be stored in a location where they will not be damaged, and can be stored in a "Ziploc" type baggie, for added protection from potential environmental contamination.

3.21 What training do I need if I have to wear Personal Protective Equipment while performing my job?

A. We will train you to know the following, as a minimum:

(1) When PPE is necessary.

(2) What PPE is necessary for which job tasks.

(3) How to properly put on, remove, adjust and wear PPE.

(4) The limitations of the PPE.

(5) The proper care, maintenance, useful life and disposal of the PPE.

B. Your project leader/supervisor will require you to demonstrate that you understand the PPE training and that you can use your PPE properly before we allow you to use it on the job.

C. We will retrain you when there are changes in your workplace conditions or in the types of PPE we require you to use, **or** when we think your need to have additional PPE training.

3.22 What recordkeeping is required?

A. The project leaders/supervisors must keep written records of PPE training you receive for the duration of employment. Training records will include:

(1) Name of person trained.

(2) Date of the training.

(3) Type of training provided.

B. Project leaders/supervisors must certify in writing that they have evaluated each workplace for hazards that might need PPE use.

(1) The document must state that it is a "certification of hazard assessment."

(2) The document must identify the workplace evaluated, the person certifying that the evaluation was performed, and the dates of the hazard assessment.

(3) The person certifying the evaluation may use FWS Form 3-2279 to meet this requirement.

(4) Project leaders/supervisors must keep the Certification of Hazard Assessment for their workplaces for the duration of your employment.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
1011 E. Tudor Rd.
Anchorage, Alaska 99503-6199

IN REPLY REFER TO:

ABA/OSH

June 29, 2006

Memorandum

To: Regional Directorate Team – Region 7
Project Leaders/Supervisors/Principal Investigators – Region 7
All Pilots – Region 7

Through: Director – Aviation Management Alaska Region /s/ Harry Kieling

From: Acting Regional Director – Region 7 /s/ Gary Edwards

Subject: Region 7 Avian Influenza Aircraft Safety Protocol

The attached protocol, developed jointly with Aviation Management, Alaska Region, supplements the Region 7 Avian Influenza Safety Policy (April 19, 2006) and applies to both agencies when aircraft are involved in work associated with Avian Influenza.

The use of aircraft to transport crews and samples to and from remote sampling sites makes it necessary to have protocols that protect the health of personnel riding in or working on aircraft, prevent the spread of disease by contaminated aircraft, and protect aircraft from the damaging effects of certain disinfectant agents. Given the potentially dangerous nature of this virus, maintaining daily documentation of the transportation of personnel and sampling containers is necessary.

This protocol establishes procedures to: 1) minimize the risk of contaminating cabin areas and float compartments with potential sources of avian influenza; 2) safely transport samples, gear, and personnel; and 3) appropriately document transportation activities in a timely manner. Compliance with this protocol is mandatory.

If you have any questions please call Julie Wheeler, Occupational Safety and Health Manager, at 786-3551 or Erik Akola, Regional Aviation Training Manager, at 786-3469.

Attachment

Region 7 Avian Influenza Aircraft Safety Protocol
Fifth Draft: June 21, 2006

This protocol establishes safety procedures for aviation operations associated with the *Sampling Protocol for Asian H5N1 Highly Pathogenic Avian Influenza in Migratory Birds in Alaska* and the U.S. Interagency Strategic Plan. This document supplements the Region 7 Avian Influenza Safety Policy (April 19, 2006).

As of this writing, Avian Influenza (AI) is a disease of birds that, in certain circumstances, can be contracted by humans. Although nearly every case of human infection can be traced to close contact with domestic poultry, at least one incident involving multiple cases of AI in humans appears to implicate contact with infected wild swans. Human to human transmission appears to occur extremely rarely or not at all. This protocol has been developed under the assumption that these conditions are currently valid.

Aircraft Use Reports (OAS-2, OAS-23) and Interagency Helicopter Passenger/Cargo Manifest (Optional Form 252)

Sampling for AI will often be accomplished incidental to other missions. The AI dedicated funds will not be used for such missions. Therefore, the AI charge code should be used on the OAS-2 and OAS-23 forms only for dedicated AI missions. However, tracking of all personnel, samples, and cargo related to AI and *any other work involving handling birds* is an essential precautionary measure. All pilots transporting personnel, equipment, and samples associated with AI or other bird handling work will complete OF-252 forms daily at a minimum (see attachment). Manifest entries shall include names of all personnel, sampling locations, and sample transport container numbers (for nitrogen shippers or dry ice coolers). Completed manifests should be attached to corresponding OAS-2 or OAS-23 forms. *All OAS-2 and OAS-23 forms involving AI or other bird-handling missions must be single-day forms and must be completed daily and submitted ASAP to facilitate tracking.*

Responsibility: Pilot In Command (PIC)

Passenger and Bird Capture Equipment Transport

Field crews involved in sampling for AI are required to wear Personal Protective Equipment (PPE) as described in the Region 7 Safety Policy Memorandum. To avoid contamination of aircraft interiors with potential sources of AI (feces, feathers, dander, or blood), external clothing (PPE) and capture equipment should be decontaminated before entering the aircraft. Personnel handling large live birds and sick or dead birds will be wearing rubber boots, gloves, and rain gear. The Safety Policy calls for use of a 10% bleach solution for decontamination or containment of contaminated gear before transport. Bleach solution is corrosive to aircraft parts and must not be used or be allowed to contact interior surfaces of aircraft (including float compartments). Therefore, chlorine solution should be washed from PPE and capture equipment with fresh or salt water (unless PPE is securely bagged) prior to loading the aircraft. Clear water from a stream or lake will suffice for rinsing.

The right float compartment has been designated for transport of all potentially-contaminated materials and should be lined with heavy plastic liners (such as 6 Mil Industrial Poly bags) to prevent contamination. If transportation of potentially-contaminated equipment cannot be avoided, it should be confined to the right float compartment.

Responsibility: Although the Field Crew Leader is responsible for ensuring that PPE and capture equipment are decontaminated and rinsed with fresh water, the PIC must confirm that PPE and equipment have been rinsed or bagged before entering the aircraft.

Personnel Exhibiting Flu Symptoms

Transport should be ordered for persons with:

* documented temperature >100.4
AND
* one or more of the following: cough, sore throat, shortness of breath
AND
* a history of working with wild birds within 10 days of symptom onset

Persons meeting the above criteria should be evacuated as quickly as possible to a regional health care facility.

Persons with flu symptoms must wear a surgical mask or an N-95 particulate mask during transport, and use sanitizer on hands prior to boarding the plane.

Transport of sick patients will be documented using OAS forms identified in the above section - Aircraft Use Reports.

Additional Medevac protocols may be included in the Incident Action Plan as updates are available.

Responsibility: The Field Crew Leader is responsible for making appropriate contacts with their first line supervisor or ICS branch chief when a transport is ordered, and to see that transport protocols are followed.

Sample Transport

Cloacal swabs will be transported from field camps in nitrogen shippers sealed in overpacks. These may be transported within the cabin.

Carcasses will be individually triple-bagged and transported in float compartments whenever possible.

Live birds will not be transported.

Responsibility: Field Crew Leader ensures samples are appropriately packaged**,** PIC confirms.

Transport of Decontamination Agents

The left float compartment has been designated for the transport of corrosive decontamination agents and should be lined with a heavy plastic liner (such as 6 Mil Industrial Poly bags). Bleach should be transported at full strength in the original container in the left float compartment. The bleach bottle should be inside a second sealed container while inside the float. Bleach solution should be mixed at the site of use and sprayers containing leftover solution should be emptied and rinsed before transport. If hand-pump sprayers will fit into another durable sealed container within the float, they may be transported while containing bleach solution. Bleach spills in the floats can cause corrosion of metal floats and could cause degradation of composite floats. Float compartments into which bleach has been spilled should be flooded with water to dilute the bleach. A 3-gallon plastic bucket should be on board each aircraft to facilitate float flushing.

Unused antiseptic wipes (benzyl ammonium chloride type) can be transported within the aircraft cabin. Used wipes should be sealed in a plastic bag and transported in the right float.

Responsibility: PIC

Decontamination of aircraft

Small spots of untreated, potentially-contaminated feces, feathers, dander, or blood deposited on aircraft interior surfaces should be wiped up immediately with a disinfectant wipe (benzyl ammonium chloride type).

Large spills of contaminated material, including splatter throughout the interior, could occur. In this event, a non-corrosive liquid disinfectant should be used to sponge down all contaminated surfaces.

Responsibility: PIC

Dispatch of Maintenance Personnel to Remote Sites

Aircraft should be decontaminated prior to arrival of maintenance personnel. Maintenance crew should require no additional PPE.

Responsibility: PIC

HIGHLY PATHOGENIC AVIAN INFLUENZA SITUATION ANALYSIS	Region/State:	Prepared by (Name and Title):	Date and Time Prepared

Geographic Factors

Describe the location of the source (attach map)	Give GPS or other coordinates
Refuge and Contact Information:	
List the facilities or transportation routes in the affected area:	
Describe the topography of the zones:	List accessibility problems:
Landownership/Land Use Issues:	History of HPAI in the geographic area:

Human Factors

Describe known hazards or other safety considerations:	
Describe visitor and/or public uses that may be affected in or near the affected area:	
What restrictions are in place: ☐ Area closures ☐ Travel restrictions ☐ Decontamination requirements	Details of restrictions:
Describe the actual or potential effects to local communities:	
Describe the level of media attention and political interest:	

Resource Factors	
What is at risk (see Vulnerability Assessment): ☐ Unique bird species ☐ Other birds ☐ T+E species ☐ Poultry/domestic fowl ☐ Unique plant communities ☐ Cultural resources ☐ Feral populations ☐ Other _____	Describe the risks (see Vulnerability Assessment in the HPAI Preparedness and Response Plan):
Describe other natural resource issues or considerations:	
Describe other cultural resource issues or considerations:	

Incident Management Factors			
How many people are likely to be involved?	What size is the incident area?	Are air operations likely to be involved?	Are other incidents occurring in the area?
Describe potential safety considerations:			
Describe policy issues and considerations:			
Describe likely logistical problems:			
Describe the current and forecast weather and its projected effect on the situation:			

What is the availability of resources? ☐ Good ☐ Fair – other incidents are occurring ☐ Poor – competition for resources is strong	Summarize the overall situation in the country:

APPENDIX 12. HPAI INCIDENT MANAGEMENT CHECKLIST

Incident Command

- ❑ Determine Incident Command Structure
    - ❑ Region 7 HPAI Incident Management Team: This allows for a single agency (Service) with geographic and jurisdictional responsibility to manage the incident with a single set of agency objectives.
    - ❑ Unified Command Team: This command structure provides for multiple agencies or individuals with geographic or jurisdictional responsibilities, to function jointly in managing the incident through a common set of objectives.
    - ❑ In case of Human Pandemic, planned actions may be jointly negotiated through a unified process in consultation between the Secretaries of Agriculture and Interior; management authority may be assigned in accordance with the DOI Pandemic Plan.

Safety Officer

- ❑ Obtain information/briefings form APHIS and public health officials to understand hazards, risks, and mitigation strategies.
- ❑ Convey information to all incident personnel regarding true risk factors and required mitigation strategies involved in the HPAI management.
- ❑ Ensure an appropriate level of monitoring for logistical functions as well as operations in the field. Order Assistant Safety Officers as appropriate.

Information Officer

- ❑ Assign this role to External Affairs. This person should have existing information strategy and a list of contacts, i.e. media, elected officials, key community members, other agencies, etc. This person should have experience dealing with the public.
- ❑ Make a list of phone and fax numbers and email addresses of important contacts, i.e. elected officials, special interest groups, refuge partners, other agencies, community leaders, etc. A media contact list should include newspapers, TV, and radio stations.
- ❑ Assign a website manager.
- ❑ Determine a location for the information center. If this is a Unified Command, consider forming a co-located Joint Information Center with a representative from each Command agency.
- ❑ Develop an information strategy to include the following elements:
    - ❑ Situation: *brief statement on who, what, where, when.*
    - ❑ Communication objectives: *measurable and attainable.*
    - ❑ Target groups: *who are you communicating with (employees, local residents).*
    - ❑ Information center location: *refuge visitor center, Regional Office.*

- ❑ Communication methods: *use as many as appropriate.*
- ❑ Key messages: *significant points you want to get across.*
- ❑ Monitor all types of media: *news coverage, employee feedback, website hits.*

Operations Section Chief

- ❑ Confer with local subject matter experts and Situation Unit on current incident conditions (wildlife, humans, topography, access, weather, travel conditions).

- ❑ Order and establish field response teams with specific tasking assignments as established in the IAP (i.e., carcass collection, bird hazing, perimeter security, live-bird inoculation).

- ❑ Many personnel may be new to ICS. Briefings on organization, chain-of-command, terms, ordering procedures may be required.

- ❑ Identify and maintain lines of communication to track the status of resources (personnel and supplies/equipment)

- ❑ Order technical specialists to be assigned to Operations as appropriate to provide expert operational knowledge and assistance.

- ❑ Consider assigning an Air Operations Branch Director as appropriate.

- ❑ Consider assigning Field Observers to locate and track wildlife movement.

- ❑ Check on local activities (i.e., set-net fisheries, subsistence hunts) that may significantly impact the incident, the Refuge, surrounding area, and neighboring communities.

Planning Section Chief

- ❑ Develop the Incident Action Plan. The IAP must include objectives, assignments, communications, task procedures, and protocols. In addition, consider providing briefing packets to all incident field personnel.

- ❑ Remember to include procedures for entering and exiting the hot zone (i.e., security badges, disinfection, access points).

- ❑ Establish and maintain an Incident Situation Board to include tracking site conditions, wildlife locations, personnel, supplies, and equipment.

- ❑ Documentation is extremely important. Consider requiring all incident personnel to maintain a daily log, using an ICS 214 form. Consider development of an Incident History.

- ❑ Order technical specialists to be assigned to Planning as appropriate to provide subject expert knowledge and technical assistance.

- ❑ Ensure all operational and administrative permits are in place (i.e., Refuge SUP, T&E species consultations, carcass disposal).

Logistics Section Chief

- ❑ Identify equipment caches/sources and provide transport to field locations as appropriate.

- ❑ Order incident security as outlined in the Incident Action Plan.
  - ❑ Additional security may be required for facilities and supplies/equipment caches.
  - ❑ Area closures and security perimeters may require incident (field) base facilities to be located a substantial distance from operational areas.

- ❑ Ensure adequate transportation and housing for all incident personnel.

- ❑ Ensure adequate communication infrastructure for all field teams and for IMT-to-field communications.

- ❑ For a Unified Incident, consider multiple agencies will be involved and communications could be a significant challenge.

- ❑ Additional air/vessel/ground transportation may be required for moving carcasses.

- ❑ Consider ordering a technical specialist to manage disinfection and disposal.

- ❑ Fencing materials may be required; a fencing crew may work for Logistics or Operations and need to coordinate with Resource Advisors.

Finance Section Chief

- ❑ Documentation is critical. Establish time-keeping and cost documentation procedures. Convey this information to all incident personnel.

- ❑ Order additional Budget Assistants as appropriate.

- ❑ Prepare reimbursable accounts as needed.

- ❑ Check for existing cooperative agreements.

- ❑ Consider SEMA and FEMA may be involved.

- ❑ In a Unified Incident, consider multiple agency involvement will result in complex accounting.

APPENDIX 13. HPAI OUTBREAK *SAMPLE* INCIDENT OBJECTIVES AND STRATEGIES

1. **Control spread of highly pathogenic avian influenza, consistent with legislation and agency policies.**

Strategies: (Note: in most instances, multiple strategies will be employed simultaneously.)

a) Provide education to employees, workers, residents, and the public.
b) Identify the boundaries of and establish zones: Infected Zone, Buffer-Surveillance Zone, and Surveillance Zone. Consider consulting with APHIS when establishing zones.
c) Completely close all or part of either the Infected Zone or the Buffer-Surveillance Zone. Consider impacts to local users including subsistence users in the closed areas.
d) Remove carcasses for environmentally acceptable sanitary disposal. This strategy includes euthanizing moribund birds.
e) Where applicable, exclude or eliminate poultry-domestic fowl in the established zones.
f) If applicable, control feral and non-native species in the established zones.
g) Continue or expand HPAI surveillance in wildlife, including additional sampling of live wild birds.
h) Limit the movement of animals in and around the established zones, i.e., hazing and fencing.
i) If applicable, reduce artificial congregations of animals in and around the established zones such as feeding or modification of landscapes.
j) Require the decontamination of humans, equipment, and transport vehicles being moved out of the established zones.
k) Vaccinate animals within the infected area or other high risk areas. This may be most appropriate for T&E species.
l) Implement research to gain knowledge of HPAI in wild birds and effects of management actions.

2. Provide for the safety of the public, agency, and incident personnel.

Strategies:

a) Develop protocols for providing for worker health, including follow-up monitoring, prophylaxis, and definition of exposure.
b) Implement active surveillance for HPAI in humans in the affected area.
c) Analyze all planned operational tactics and logistical arrangements to identify likely hazards and performance errors. Plan and implement actions to remove or mitigate the hazards and errors.
d) Use only standard or approved procedures for all activities.
e) Use only qualified personnel for specialized procedures and techniques.

3. Minimize negative impacts to private and public property, resources, recreation, businesses and individuals.

Strategies:

a) Determine the types of unacceptable impacts.
b) Conduct an impact review of all planned actions. Analyze proposed operational tactics to identify impacts on property, natural and cultural resources, residents, refuge users, and other members of the public.
c) Identify those actions that will result in unacceptable impacts and either alter the action or take mitigating steps to prevent the impacts.

4. Provide accurate and timely information to agency and incident personnel and the public.

Strategies:

a) Develop and implement an information Plan for target audiences.
b) Fulfill each request for information from other sources on a case-by-case basis.

5. Keep costs commensurate with incident needs

Strategies:

a) Use local resources to the extent possible.
b) Require Section Chiefs to approve all orders.
c) Provide instruction to incident personnel regarding proper ordering procedures.
d) Require that all personnel follow standard ICS ordering procedures.
e) Require justification for unusual or expensive requests.

INCIDENT ACTION PLAN	1. INCIDENT NAME Highly Pathogenic Avian Influenza Outbreak	2. DATE PREPARED	3. TIME PREPARED
4. OPERATIONAL PERIOD (DATE/TIME) General Objectives for Entire AI Response Event			

5. INCIDENT OBJECTIVES

1. Control spread of highly pathogenic avian influenza.
2. Provide for the safety of the public, agency and incident personnel.
3. Minimize negative impacts to private and public property, resources, recreation, businesses and individuals.
4. Provide accurate and timely information to incident and agency personnel and the public.
5. Keep costs commensurate with incident needs.

6. WEATHER FORECAST FOR OPERATIONAL PERIOD

[insert latest weather forecast here]

7. GENERAL/SAFETY MESSAGE

[insert pertinent general safety information here]

8. ATTACHMENTS (☒ IF ATTACHED)

☒ - ORGANIZATION LIST (ICS 203)	☒ - SAFETY MESSAGE
☒ - DIVISION ASSIGNMENT LISTS (ICS 204)	☐ - INCIDENT MAP
☒ - COMMUNICATIONS PLAN (ICS 205)	☐ - TRAFFIC MAP
☒ - MEDICAL PLAN (ICS 206)	☐ - UNIT LOG (ICS 214) (Turn in to Planning at end of period)
☒ - AIR OPERATIONS SUMMARY	

202 ICS 3/80	9. PREPARED BY (PLANNING SECTION CHIEF)	10. APPROVED BY (INCIDENT COMMANDER)

ORGANIZATION ASSIGNMENT LIST *ICS-203*	DATE PREPARED	TIME PREPARED
Highly Pathogenic Avian Influenza Outbreak Incident	OPERATIONAL PERIOD (DATE/TIME)	

INCIDENT COMMANDER AND STAFF	OPERATION SECTION
Incident Commander: **Gary Edwards** Deputy Incident Commander: **Doug Alcorn** Liaison to MAC: Information Officer: **Larry Bell** Safety Officer: **Charity Haring** Agency Representatives	Operation Chief: **Todd Logan** Division A Division B [as many as needed] Animal Management Group [other groups as needed]
PLANNING SECTION	**AIR OPERATIONS BRANCH**
Planning Section Chief: **Kim Trust** Resource Unit Leader Situation Unit Leader Documentation Unit Leader Demobilization Unit Leader Technical Specialists: Wildlife Veterinarian Wildlife Biologist Cultural Resource Specialist	Air Ops Branch Director Fixed-wing Coordinator Helicopter Manager Helibase Manager
LOGISTICS SECTION	**FINANCE SECTION**
Logistics Chief: **Beth Pattinson** Communications Unit Leader Medical Unit Leader Ground Support Unit Leader Facilities Unit Leader Food Unit Leader	Finance Section Chief: **Richard Hannan** Time Unit Leader Procurement Unit Leader Comp/Claims Unit Leader Cost Unit Leader

PREPARED BY (Resource Unit Leader) Date/time:

1. BRANCH ----	2. DIVISION/GROUP A	**DIVISION ASSIGNMENT LIST** (ICS) 1/82
3. INCIDENT NAME Highly Pathogenic Avian Influenza Outbreak		4. OPERATIONAL PERIOD DATE TIME

5. OPERATIONS PERSONNEL

OPERATIONS CHIEF _____ DIV/GROUP SUPERVISOR

BRANCH DIRECTOR ___---___ AIR ATTACK SUPERVISOR NO. _____---

6. RESOURCES ASSIGNED THIS PERIOD

STRIKE TEAM/TASK FORCE/ RESOURCE DESIGNATOR	LEADER	NO. OF PERSONS	TRANS. NEEDED	DROPOFF PT/TIME	PICKUP PT/TIME

7. CONTROL OPERATIONS

8. SPECIAL INSTRUCTIONS

9. DIVISION/GROUP COMMUNICATION SUMMARY

FUNCTION	FREQ	SYST.	CHAN	FUNCTION	FREQ.	SYSTEM	CHAN.
TACTICAL/LOCAL							
COMMAND/ REPEATER				[insert radio information here]	TX		
					RX		

PREPARED BY (Resources Unit Leader)	APPROVED BY (Planning Section Chief)	DATE	TIME

1. BRANCH ----	2. DIVISION/GROUP B	**DIVISION ASSIGNMENT LIST** (ICS) 1/82
3. INCIDENT NAME Highly Pathogenic Avian Influenza Outbreak		4. OPERATIONAL PERIOD DATE TIME

5. OPERATIONS PERSONNEL

OPERATIONS CHIEF _____ DIV/GROUP SUPERVISOR

BRANCH DIRECTOR ___---___ AIR ATTACK SUPERVISOR NO. _____---

6. RESOURCES ASSIGNED THIS PERIOD

STRIKE TEAM/TASK FORCE/ RESOURCE DESIGNATOR	LEADER	NO. OF PERSONS	TRANS. NEEDED	DROPOFF PT/TIME	PICKUP PT/TIME

7. CONTROL OPERATIONS

8. SPECIAL INSTRUCTIONS

9. DIVISION/GROUP COMMUNICATION SUMMARY

FUNCTION	FREQ	SYST.	CHAN	FUNCTION	FREQ.	SYSTEM	CHAN.
TACTICAL/LOCAL							
COMMAND/ REPEATER				[insert radio information here]	TX		
					RX		

PREPARED BY (Resources Unit Leader)	APPROVED BY (Planning Section Chief)	DATE	TIME

1. BRANCH ----	2. DIVISION/GROUP Animal Management Group	**DIVISION ASSIGNMENT LIST** (ICS) 1/82
3. INCIDENT NAME Highly Pathogenic Avian Influenza Outbreak		4. OPERATIONAL PERIOD DATE TIME

5. OPERATIONS PERSONNEL

OPERATIONS CHIEF _____ DIV/GROUP SUPERVISOR

BRANCH DIRECTOR ___---___ AIR ATTACK SUPERVISOR NO. _____---

6. RESOURCES ASSIGNED THIS PERIOD

STRIKE TEAM/TASK FORCE/ RESOURCE DESIGNATOR	LEADER	NO. OF PERSONS	TRANS. NEEDED	DROPOFF PT/TIME	PICKUP PT/TIME

7. CONTROL OPERATIONS

8. SPECIAL INSTRUCTIONS

9. DIVISION/GROUP COMMUNICATION SUMMARY

FUNCTION	FREQ	SYST.	CHAN	FUNCTION	FREQ.	SYSTEM	CHAN.
TACTICAL/LOCAL							
COMMAND/ REPEATER				[insert radio information here]	TX		
					RX		

PREPARED BY (Resources Unit Leader)	APPROVED BY (Planning Section Chief)	DATE	TIME

INCIDENT RADIO COMMUNICATIONS PLAN			1. INCIDENT NAME Highly Pathogenic Avian Influenza	2. DATE/TIME PREPARED	3. OPERATIONAL PERIOD (DATE/TIME)
4. BASIC RADIO CHANNEL UTILIZATION					
SYSTEM/CACHE	CHANNEL	FUNCTION	FREQUENCY/TONE	ASSIGNMENT	REMARKS
		Operations			
		Contingency Tactical			
		Command			
		Logistics			
205 ICS 9/86	5. PREPARED BY (COMMUNICATIONS UNIT)				

MEDICAL PLAN	1. INCIDENT NAME Highly Pathogenic Avian Outbreak	2. DATE PREPARED	3. TIME PREPARED	4. OPERATIONAL PERIOD

5. INCIDENT MEDICAL AID STATIONS

MEDICAL AID STATIONS	LOCATION	PARAMEDICS	
		YES	NO
None			

6. TRANSPORTATION

A. AMBULANCE SERVICES

NAME	ADDRESS	PHONE	PARAMEDICS	
			YES	NO

B. INCIDENT AMBULANCES

NAME	LOCATION	PARAMEDICS	
		YES	NO

7. HOSPITALS

NAME	ADDRESS	TRAVEL TIME		PHONE	HELIPAD		BURN CENTER	
		AIR	GRD		YES	NO	YES	NO

8. MEDICAL EMERGENCY PROCEDURES

Minor injuries will be treated by on-site first-aid-trained personnel. If anyone becomes seriously injured or ill, locate, access, and stabilize the patient. If the patient is in a hazardous location, remove the hazard, if possible, or move the patient away from the hazard. Notify the Operations Section Chief and request medical assistance. Medical transport will be to the _____ Hospital.

206 ICS 8/78	9. PREPARED BY (MEDICAL UNIT LEADER)	10. REVIEWED BY (SAFETY OFFICER)

AIR OPERATIONS SUMMARY	1. INCIDENT NAME Highly pathogenic avian influenza	2. OPERATIONAL PERIOD	3. DISTRIBUTION HELIBASES_____ FIXED WING BASES_____

4. PERSONNEL AND COMMUNICATIONS	NAME	AIR/AIR FREQUENCY	AIR/GROUND FREQUENCY
AIR OPER. DIRECTOR	_____	_____	_____
	_____	_____	_____
HELICOPTER COOR.	_____	_____	_____
	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

5. REMARKS (Spec. Instructions, Safety Notes, Hazards, Priorities)

All personnel will wear personal protective equipment and be briefed on safe helicopter operations by qualified personnel.

Priority will be given to any mission involving a threat against life.

Reconnaissance flights will be scheduled as needed.

6. LOCATION/ FUNCTION	7. ASSIGNMENT	8. FIXED WING		9. HELICOPTERS		10. TIME		11. AIRCRAFT ASSIGNED	12. OPERATING BASE
		NO.	TYPE	NO.	TYPE	AVAIL.	COM-MENCE		
	13. TOTALS		1						

220 ICS 3/82 NFFS 1351	14. AIR OPERATIONS SUPPORT EQUIPMENT	15. PREPARED BY (Include Date & Time)

INCIDENT ACTION PLAN	1. INCIDENT NAME Highly Pathogenic Avian Influenza Outbreak	2. DATE PREPARED	3. TIME PREPARED
4. OPERATIONAL PERIOD (DATE/TIME): 1st Operational Period - Example [insert date and times of operational period here]			
5. INCIDENT OBJECTIVES 1. Implement Incident Management Team 2. Establish communications with appropriate Federal and State agencies 3. Ensure personnel safety 4. Establish and Secure site containment perimeter (hot-zone).			
6. WEATHER FORECAST FOR OPERATIONAL PERIOD [insert latest weather forecast here]			
7. GENERAL/SAFETY MESSAGE [insert pertinent general safety information here]			
8. ATTACHMENTS (☒ IF ATTACHED) ☒ - ORGANIZATION LIST (ICS 203) ☒ - DIVISION ASSIGNMENT LISTS (ICS 204) ☒ - COMMUNICATIONS PLAN (ICS 205) ☒ - MEDICAL PLAN (ICS 206) ☒ - AIR OPERATIONS SUMMARY ☒ - SAFETY MESSAGE ☐ - INCIDENT MAP ☐ - TRAFFIC MAP ☐ - UNIT LOG (ICS 214) (Turn in to Planning at end of period)			
202 ICS 3/80	9. PREPARED BY (PLANNING SECTION CHIEF)	10. APPROVED BY (INCIDENT COMMANDER)	

ORGANIZATION ASSIGNMENT LIST *ICS-203*	DATE PREPARED	TIME PREPARED
Highly Pathogenic Avian Influenza Outbreak Incident	OPERATIONAL PERIOD (DATE/TIME)	

INCIDENT COMMANDER AND STAFF	OPERATION SECTION
Incident Commander: **Gary Edwards** Deputy Incident Commander: **Doug Alcorn** Liaison to MAC: Information Officer: **Larry Bell** Safety Officer: **Charity Haring** Agency Representatives	Operation Chief: **Todd Logan** Division A (Security): **Stan Pruszenski** Division B [as many as needed] Animal Management Group [other groups as needed]
PLANNING SECTION	**AIR OPERATIONS BRANCH**
Planning Section Chief: **Kim Trust** Resource Unit Leader Situation Unit Leader Documentation Unit Leader Demobilization Unit Leader Technical Specialists: Wildlife Veterinarian Wildlife Biologist Cultural Resource Specialist	Air Ops Branch Director Fixed-wing Coordinator Helicopter Manager Helibase Manager
LOGISTICS SECTION	**FINANCE SECTION**
Logistics Chief: **Beth Pattinson** Communications Unit Leader Medical Unit Leader Ground Support Unit Leader Facilities Unit Leader Food Unit Leader	Finance Section Chief: **Richard Hannan** Time Unit Leader Procurement Unit Leader Comp/Claims Unit Leader Cost Unit Leader

PREPARED BY (Resource Unit Leader) Date/time:

1. BRANCH ----	2. DIVISION/GROUP A	**DIVISION ASSIGNMENT LIST** (ICS) 1/82
3. INCIDENT NAME Highly Pathogenic Avian Influenza Outbreak		4. OPERATIONAL PERIOD DATE TIME

5. OPERATIONS PERSONNEL

OPERATIONS CHIEF _____ DIV/GROUP SUPERVISOR

BRANCH DIRECTOR ___---___ AIR ATTACK SUPERVISOR NO. _____---

6. RESOURCES ASSIGNED THIS PERIOD

STRIKE TEAM/TASK FORCE/ RESOURCE DESIGNATOR	LEADER	NO. OF PERSONS	TRANS. NEEDED	DROPOFF PT/TIME	PICKUP PT/TIME
Law Enforcement Unit		3	Variable	As Assigned	As Assigned
Wildlife Biologist		1	Variable	As Assigned	As Assigned

7. CONTROL OPERATIONS

- Restrict travel in the following areas:
- Conduct foot, ATV and/or aerial patrols and post lookouts to prevent people from entering the infected area.
- Establish main access points and post closure signs.
- Observe migratory bird movement and report information to the Operations Section Chief as appropriate.

8. SPECIAL INSTRUCTIONS

Division Supervisor will notify the Operations Section Chief of any breach of the closed area immediately. Ensure that biosafety/decontamination protocols are followed when moving from one area to another. Keep a supply of information packets available to distribute to the public as needed.

9. DIVISION/GROUP COMMUNICATION SUMMARY

FUNCTION	FREQ	SYST.	CHAN	FUNCTION	FREQ.	SYSTEM	CHAN.
TACTICAL/LOCAL							
COMMAND/ REPEATER				[insert radio information here]	TX		
					RX		

PREPARED BY (Resources Unit Leader)	APPROVED BY (Planning Section Chief)	DATE	TIME

1. BRANCH ----	2. DIVISION/GROUP B	**DIVISION ASSIGNMENT LIST** (ICS) 1/82
3. INCIDENT NAME Highly Pathogenic Avian Influenza Outbreak		4. OPERATIONAL PERIOD DATE TIME

5. OPERATIONS PERSONNEL

OPERATIONS CHIEF _____ DIV/GROUP SUPERVISOR

BRANCH DIRECTOR _____ AIR ATTACK SUPERVISOR NO.

6. RESOURCES ASSIGNED THIS PERIOD

STRIKE TEAM/TASK FORCE/ RESOURCE DESIGNATOR	LEADER	NO. OF PERSONS	TRANS. NEEDED	DROPOFF PT/TIME	PICKUP PT/TIME
Avian Influenza Surveillance Team—In Anchorage		2	Air Cargo	TBD	TBD

7. CONTROL OPERATIONS
- Procuring extra PPE for field responders
- Assembling carcass collection equipment and supplies
- Ship supplies to the field

8. SPECIAL INSTRUCTIONS

Provide copy of Region 7 Avian Safety Policy to all personnel on-site/receiving PPE.

9. DIVISION/GROUP COMMUNICATION SUMMARY

FUNCTION	FREQ	SYST.	CHAN	FUNCTION	FREQ.	SYSTEM	CHAN.
TACTICAL/LOCAL							
COMMAND/ REPEATER				[insert radio information here]	TX		
					RX		

PREPARED BY (Resources Unit Leader)	APPROVED BY (Planning Section Chief)	DATE	TIME

1. BRANCH ----	2. DIVISION/GROUP Animal Management Group	**DIVISION ASSIGNMENT LIST** (ICS) 1/82
3. INCIDENT NAME Highly Pathogenic Avian Influenza Outbreak		4. OPERATIONAL PERIOD DATE TIME

5. OPERATIONS PERSONNEL

OPERATIONS CHIEF _____ DIV/GROUP SUPERVISOR

BRANCH DIRECTOR ___---___ AIR ATTACK SUPERVISOR NO. _____---

6. RESOURCES ASSIGNED THIS PERIOD

STRIKE TEAM/TASK FORCE/ RESOURCE DESIGNATOR	LEADER	NO. OF PERSONS	TRANS. NEEDED	DROPOFF PT/TIME	PICKUP PT/TIME
Law Enforcement Unit		1	No	As Assigned	As Assigned
Wildlife Veterinarian – In Anchorage		1	No	As Assigned	As Assigned
Wildlife Biologist		1	No	As Assigned	As Assigned
Mortality/Morbidity Response Team Member		1-2	No	As Assigned	As Assigned
Safety		1	No	As Assigned	As Assigned
Disposal Team		4	No	As Assigned	As Assigned

7. CONTROL OPERATIONS

- Collect and ship animal carcasses and record data.
- Implement carcass disposal plan when appropriate
- Observe migratory bird movement and report information to the Operations Section Chief as appropriate.

8. SPECIAL INSTRUCTIONS

Ensure that biosafety/decontamination protocols are followed when moving from one area to another. Keep a supply of information packets available to distribute to the public as needed.

9. DIVISION/GROUP COMMUNICATION SUMMARY

FUNCTION	FREQ	SYST.	CHAN	FUNCTION	FREQ.	SYSTEM	CHAN.
TACTICAL/LOCAL							
COMMAND/ REPEATER				[insert radio information here]	TX		
					RX		

PREPARED BY (Resources Unit Leader)	APPROVED BY (Planning Section Chief)	DATE	TIME

INCIDENT COMMUNICATIONS PLAN			1. INCIDENT NAME Highly Pathogenic Avian Influenza	2. DATE/TIME PREPARED	3. OPERATIONAL PERIOD (DATE/TIME)
4. BASIC RADIO CHANNEL UTILIZATION					
SYSTEM/CACHE	Contact Number	FUNCTION	FREQUENCY/TONE	ASSIGNMENT	REMARKS
		Communication Lead - Anchorage			
		Incident Command - Anchorage			
		Field Base Command			
		Field Team A			
		Field Team B			
205 ICS 9/86	5. PREPARED BY (COMMUNICATIONS UNIT)				

APPENDIX 15. HPAI CARCASS COLLECTION AND SHIPPING PROTOCOL

Protocol for Morbidity and Mortality Events

The information below is the protocol for collecting and shipping a dead bird to be tested at the NWHC. If you find a dead bird or come across a large die off you need to follow the procedure below.
With that said, I know that it will be extremely difficult to make a phone call in the field or contact someone with a three hour time difference that works Monday - Friday.

Use your professional judgment and if you feel that a bird has died of suspicious causes and should be sent to the NWHC for a full necropsy follow the protocol below.

Bottom line is **DO NOT SWAB DEAD BIRDS!!! DO NOT SWAB DEAD BIRDS BEING SENT IN TO MADISON OR ANCHORAGE. DO NOT SWAB RANDOM DEAD BIRDS IN THE FIELD!**
** If a bird dies while handling it please make note in comments section. You will still choose the "**Surveillance in Live Wild Birds" as the sample strategy**.

<u>If you have any questions please call Yvette at 907-786-3326.</u>

If you come upon a dead bird in the field, you are supposed to call the **Alaskan bird hotline. That number is 1-888-5-BRD-FLU or 866-527-3358.** I know it will be a hassle to call this phone number from a satellite phone in the field, but this will be the best way to figure out if the Health Center would like your bird sent in for sampling. If you are unable to reach to the hotline, please track down **Kim Trust at 907-786-3398; 907-748-4903 (cell) or Michelle St. Peters at 907-786-3691, (cell) 907-230-5438.**

You may also contact the National Wildlife Health Center (NWHC) directly. Please call **Dr. Krysten
Schuler (NWHC) at 608-270-2447 or emergency contact (NWHC) at 608-270-2400**.

II is recommended that you print out the following attachments on write-in-the rain paper in case you do run across a dead bird that needs to be sent to Madison, Wisconsin. Each bird will be different in how you send it in. Some places will be able to Fed-Ex directly to NWHC in Madison and should do so if directed. Other camps will only be able to send it in to Refuge Headquarters or to Michelle St. Peters in Anchorage and she will handle the shipping from there. You will have to be sure that all info needed is shipped with the bird.

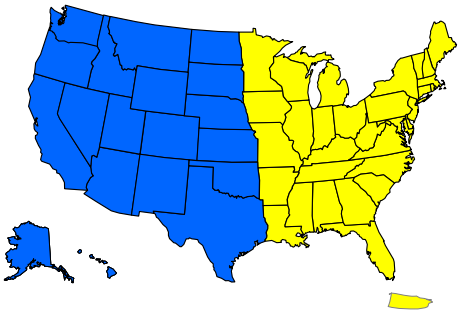
I would recommend that each camp take supplies to use in shipping dead birds.

1.) Garbage bags for double and triple bagging the birds
2.) Tags to attach to the bird's leg and tags to attach to the outside of bag containing the bird
3.) Shipping Tape
4.) Hard sided coolers for those areas able to directly ship to Madison Wisconsin via Fed-Ex.
5.) Write-in-the-rain copies of the NWHC Specimen form and a few copies of the Specimen Shipping form. See forms in Shipper Kit notebook.
6.) UN-3373 labels. You can get labels from Michelle, Yvette, or from shipper kit notebook.

Dead birds will be sampled at the NWHC.

** If a bird dies while handling it please make note in comments section. You will still choose the **"Surveillance in Live Wild Birds" as the sample strategy**.

National Wildlife Health Center
6006 Schroeder Road
Madison, WI 53711
Phone: 608.270.2400
FAX: 608.270.2415



SPECIMEN HISTORY FORM

For mortality events please e-mail a USGS Field Investigation Team member before shipping
Western States: Krysten Schuler kschuler@usgs.gov, 608-270-2447

For single animal cases, please e-mail Wildlife Disease Technician before shipping
Nationwide: Nathan Ramsay nramsay@usgs.gov, 608-270-2435

Submitter's name: **Affiliation:**
Address: **Telephone:**

E-mail:

Date collected: **Collector's Name:**

Method of animal collection: ☐ **Found Dead,** ☐ **Died in Hand,** ☐ **Euthanized**
Method of euthanization:

Species:

Number Submitted: **Condition:** ☐ **Chilled,** ☐ **Frozen,** ☐ **Preserved Tissues**

Specific die-off location (refuge unit, pond, address, intersection, park, etc):

State: **County:** **Nearest City:**

Latitude/longitude (Decimal degree in WGS 84): **Zone:**

Disease onset date: (Best estimate) **Disease end date:** (best estimate)

Species affected: (The diversity of species affected may provide clues to the disease involved.)

Age/sex: (Any pattern noticed that is related to age and sex?)

Known dead: (Actual number counted) **Known sick:**

Estimated dead: **Estimated sick:**
(Consider removal by scavengers or other means, density of vegetation, etc.)

Clinical signs: (Any unusual behavior and physical appearance.)

Population at risk: (Number of animals in the area that could be exposed to the disease.)

Population movement: (Recent changes in number of animals on area and their source or destination, if known.)

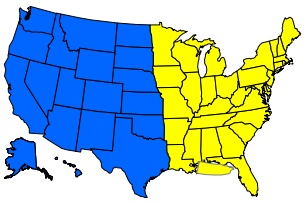
Problem area description: (Land use, habitat types, and other distinctive features.)

Environmental factors: (Record conditions such as storms, precipitation, temperature changes, or other changes that may contribute to stress.)

Comments: (Additional information/observations of value such as past occurrences of disease in area, photographs and videos are great additions.)

USGS – National Wildlife Health Center

INSTRUCTIONS FOR COLLECTION AND SHIPMENT OF AVIAN AND MAMMALIAN CARCASSES



Contact your USGS Field Investigation Team (FIT) member first!

Western states – Dr. Krysten Schuler kschuler@usgs.gov 608-270-2447
Emergency Contact Number 608-270-2400

The following instructions should be used for collecting and shipping wildlife carcasses, carcass parts, and samples extracted from animals to the National Wildlife Health Center (NWHC) to insure adequate and well preserved specimens.

Freezing/thawing impedes isolation of some pathogens and damages tissues. NWHC prefers unfrozen specimens if they can be sent within 24-36 hours of collection or death. We will provide guidance on freezing samples on a case-by-case basis. As a general guideline: if you cannot call or ship within 24-36 hours, freeze the animal(s).

☐ Contact FIT to get shipping approval and discuss shipping arrangements. Typically, ship specimens by 1-day (overnight) service, Monday through Wednesday, to guarantee arrival at NWHC before the weekend. If specimens are fresh and need to be shipped on Thursday or Friday, special arrangements can be made.

☐ Email/fax history and tracking number to FIT. Packages will not be opened if history does not arrive first!

☐ Use rubber, vinyl, or nitrile gloves when picking up sick or dead animals. If you do not have gloves, insert your hand into a plastic bag.

☐ More than one disease may be affecting the population simultaneously. When possible, collect both sick and dead animals. Note behavior of sick animals before euthanizing.

☐ Collect specimens that are representative of all species affected and geographic areas.

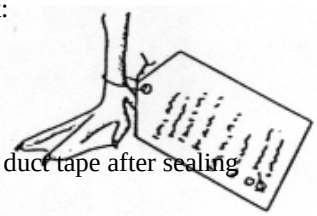
☐ Collect the freshest dead specimens. Decomposed or scavenged carcasses are usually of limited diagnostic value. If you plan to collect animals in the field, take along a cooler containing ice to immediately chill carcasses.

☐ Contact NWHC for assistance when collecting samples from animals that are too large to ship.

☐ Collect animals under the assumption that an infectious disease or toxin is involved and other animals may be at risk. Protect yourself as some diseases and toxins are hazardous to humans.

☐ Immediately attach a leg tag to each animal with the following information in pencil or waterproof ink:

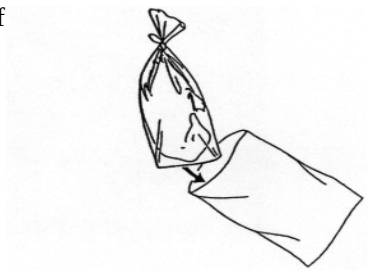
- Date collected
- Location (specific site, town, county, state)
- Collector (name/address/phone)
- Species
- Found dead or euthanized
- Your reference #



☐ Place each animal in a plastic bag, close, and seal the bag. Cover zipper bag closure with strapping or duct tape after sealing zipper.
Twist non-zipper bags closed, fold over on itself, and secure with package strapping or duct tape.

☐ Place 1st bag inside a 2nd bag, close and seal. More than one individually bagged animal can be placed in the 2nd bag. This prevents cross-contamination of individual specimens and leaking shipping containers.

☐ Tag the outside of 2nd bag and number of animals and type, date collected, location, and name of collector. Reminder order: TAG, BAG, BAG, TAG.



☐ Use a hard-sided cooler in good condition for shipment. Close the drain plug of cooler and tape over inside. Line cooler with a thick bag (1 mil thickness, 3rd layer of bags).

☐ Place absorbent material in the 3rd plastic bag to absorb any liquids that might leak during shipping.
See appendix for examples of bags and absorbent materials.

☐ Pack the individually bagged animal(s) that are contained within the 2nd sealed bag into the 3rd bag with enough FROZEN BLUE ICE PACKS or similar coolant to keep carcasses cold. Use enough coolant to keep samples chilled if there is a delay in delivery.

- Blue ice (unfrozen) can be obtained at hardware, sporting goods, or grocery stores.
- Wet ice can be used if frozen in a sealed plastic container (i.e., soda or water bottle).
- DO NOT USE DRY ICE.

☐ Seal the 3rd bag with methods described for 1st bag.

☐ Place the completed specimen history and return shipping label in a ziplock bag and tape to the inside lid of the cooler (if you want the cooler returned). NWHC CANNOT PAY FOR SHIPPING.

☐ Using packing or duct tape, tape the cooler shut around the lid and at each end using a continuous wrap around the cooler.

☐ Attach the shipping document (airbill) with the DOT information below to the outside of each cooler in a resealable pouch:

Address:

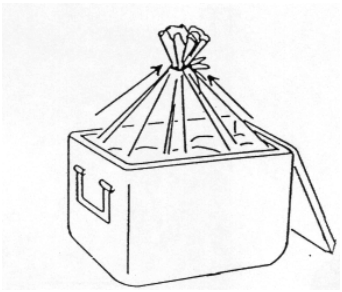
National Wildlife Health Center
Necropsy Loading Dock
6006 Schroeder Road
Madison, WI 53711

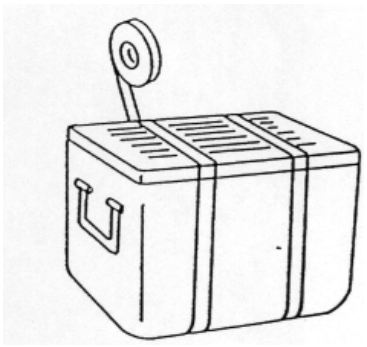
Emergency Contact:

NWHC FIT emergency
608-270-2400

Supplementary Labels**:**

Keep Cold





☐ Mark the cooler with the appropriate information:

(See Pg. 3 for printable marking labels)

- Carcasses of animals that died of unknown causes:
  BIOLOGICAL SUBSTANCE, CATEGORY B and **UN 3373.**
- Blood and tissue samples from apparently healthy animals (hunter-killed, live captured):
  EXEMPT ANIMAL SPECIMENS.
- Blood and tissue samples from dead or sick animals:
  BIOLOGICAL SUBSTANCE, CATEGORY B and **UN 3373**.

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☐ Note the tracking number in case packages are delayed.

☐ These instructions cover federal shipping regulations for commercial carriers.

Appendix:

Example of bags available at large supermarkets (list not all inclusive):

Inner and second layer bags:

Hefty Big Bag – 22 gal	Ziplock Freezer – 1 gallon
Hefty Freezer – 1 gal	Ziplock Big Bag – 20 gallon
Hefty Jumbo – 2.5 gal	Glad Freezer – 1 qt, 2 qt, 1 gal

Third layer for cooler liner:

Hefty Cinch Sak (1.1 mil) – 33 and 39 gal	Glad Force Flex (1.05 mil) – 25 gal
Hefty Lawn and Leaf (1.1 mil) – 33 and 39 gal	Hefty Ultra Flex (1.3 mil) – 30 gal
House brand large trash (1.1 mil) – 30 gal	House Lawn - Leaf (1.2 mil) – 39 gal

Absorbent material:

Super absorbent packet or pads for water	Cellulose wadding
Paper towels	Cotton batting or cotton balls
Do not use packing peanuts or shredded paper.	