

HIGHLY PATHOGENIC AVIAN INFLUENZA STANDARD OPERATING PROCEDURES:

8. HEALTH AND SAFETY & PERSONAL PROTECTIVE EQUIPMENT

FAD PReP

Foreign Animal Disease

Preparedness & Response Plan



**United States
Department of
Agriculture**

United States Department of Agriculture • Animal and Plant Health Inspection Service • Veterinary Services

File name: FAD_PReP_HPAI_Health_and_Safety_January2014	SOP number: SOP0008
Lead section: Preparedness and Incident Coordination	Version number: Draft 2.0
Effective date: January 2014	Review date: January 2017

The Foreign Animal Disease Preparedness and Response Plan (FAD PReP) Standard Operating Procedures (SOPs) provide operational guidance for responding to an animal health emergency in the United States.

These draft SOPs are under ongoing review. This document was last updated in **January 2014**. Please send questions or comments to:

National Preparedness and Incident Coordination
 Veterinary Services
 Animal and Plant Health Inspection Service
 U.S. Department of Agriculture
 4700 River Road, Unit 41
 Riverdale, Maryland 20737
 Telephone: (301) 851-3585 Fax: (301) 734-7817
 E-mail: FAD.PReP.Comments@aphis.usda.gov

While best efforts have been used in developing and preparing the FAD PReP SOPs, the U.S. Government, U.S. Department of Agriculture (USDA), Animal and Plant Health Inspection Service, and other parties, such as employees and contractors contributing to this document, neither warrant nor assume any legal liability or responsibility for the accuracy, completeness, or usefulness of any information or procedure disclosed. The primary purpose of these FAD PReP SOPs is to provide operational guidance to those government officials responding to a foreign animal disease outbreak. It is only posted for public access as a reference.

The FAD PReP SOPs may refer to links to various other Federal and State agencies and private organizations. These links are maintained solely for the user's information and convenience. If you link to such a site, please be aware that you are then subject to the policies of that site. In addition, please note that USDA does not control and cannot guarantee the relevance, timeliness, or accuracy of these outside materials. Further, the inclusion of links or pointers to particular items in hypertext is not intended to reflect their importance, nor is it intended to constitute approval or endorsement of any views expressed, or products or services offered, on these outside websites, or the organizations sponsoring the websites.

Trade names are used solely for the purpose of providing specific information. Mention of a trade name does not constitute a guarantee or warranty of the product by USDA or an endorsement over other products not mentioned.

USDA prohibits discrimination in all its programs and activities on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, sexual orientation, or marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and telecommunications device for the deaf [TDD]). To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 1400 Independence Avenue SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.



FAD PreP
 Foreign Animal Disease
 Preparedness and Response Plan

Contents

- 8.1 Introduction 8-1
 - 8.1.1 Goals 8-2
 - 8.1.1.1 Preparedness Goals 8-2
 - 8.1.1.2 Response Goals..... 8-2
 - 8.1.2 Guidelines..... 8-2
 - 8.1.3 Coordination 8-2
- 8.2 Purpose..... 8-3
- 8.3 Responsibilities 8-3
 - 8.3.1 Safety Officer 8-5
 - 8.3.2 Site Safety Officer 8-6
 - 8.3.3 Safety Supervisors 8-6
 - 8.3.4 Operations Section..... 8-6
 - 8.3.5 Logistics Section..... 8-6
 - 8.3.6 Supervisors 8-6
 - 8.3.7 Responders 8-6
- 8.4 Procedures..... 8-6
 - 8.4.1 Planning—APHIS Health and Safety Plan 8-6
 - 8.4.1.1 Developing SSHASP from APHIS HASP Template 8-8
 - 8.4.1.2 Administration of Health and Safety Plan..... 8-14
 - 8.4.2 Operations 8-14
 - 8.4.2.1 Personnel 8-14
 - 8.4.2.2 Training/Briefings..... 8-15
 - 8.4.2.3 PPE..... 8-17
 - 8.4.2.4 Medical Surveillance..... 8-23
 - 8.4.2.5 Monitoring..... 8-25
 - 8.4.2.6 Site Control Measures 8-27
 - 8.4.2.7 Decontamination Procedures..... 8-31
 - 8.4.2.8 Emergency Response/Contingency Plan..... 8-31
 - 8.4.2.9 Confined Space Entry 8-32
 - 8.4.2.10 Container Handling/Spill Prevention and Containment Program 8-32
 - 8.4.2.11 Quality Assurance/Quality Control..... 8-33
 - 8.4.2.12 Documentation and Reporting 8-33
 - 8.4.2.13 Demobilization 8-34
- Attachment 8.A Medical Self Certification..... 8-35
- Attachment 8.B Pre-deployment Guidance for Response Personnel..... 8-39
- Attachment 8.C Protocol for Encountering Dogs..... 8-41
- Attachment 8.D Guidance for Workers Handling Poultry Infected with HPAI..... 8-42
- Attachment 8.E Protocol for HPAI Field Staff Personal Safety..... 8-45

Attachment 8.F OSHA Respirator Fit Testing Procedures	8-47
Attachment 8.G Mental Health Concerns	8-50
Attachment 8.H Donning and Doffing PPE Levels A and B	8-51
Attachment 8.I Incident Reporting for Government Employees	8-54
Attachment 8.J Demobilization ICS Form 221	8-57
Attachment 8.K Training Checklist	8-59
Attachment 8.L Drug Information for Tamiflu®	8-61
Attachment 8.M Declination of Human Vaccine Form.....	8-63
Attachment 8.N APHIS Directive 6800.1	8-65
Attachment 8.O Interim Guidance for Implementation of APHIS Directive 6800.1, Including Avian Influenza Exposure Symptom Questionnaire.....	8-74
Attachment 8.P Abbreviations.....	8-91

8.1 Introduction

During a highly pathogenic avian influenza (HPAI) outbreak, responders are exposed to many hazards, including infection. In an HPAI response, personal protection and safety is essential to protect individuals from HPAI. Typically, those at increased risk for HPAI infection are personnel in prolonged and direct contact with infected birds in an enclosed setting. Upon confirmation of HPAI, public health authorities should implement appropriate public health measures, including surveillance, prevention, and case management (as required). Workers are highly encouraged to immediately receive the current season's inactivated influenza virus vaccine to reduce the possibility of dual infection with multiple viruses and potential genetic reassortment.

PPE is fundamental for ensuring personnel are protected from HPAI. Disposable or reusable outerwear may be acceptable, and all workers involved in the culling, transport, or disposal of HPAI infected poultry are provided with appropriate PPE. All visitors and employees, regardless of their exposure, are provided with disposable coveralls, boots, hats, and gloves for personal use before entering premises. Proper disposal of this PPE is required after leaving after leaving the premises.

This standard operating procedure (SOP) provides guidance to assist health responders create and implement health and safety measures for an HPAI outbreak. Because HPAI is zoonotic—it can be transmitted between animals and humans—there are good public and occupational health reasons for having health and safety measures. Properly implemented, these measures ensure the safety of all responders during the movement of personnel and material necessary for the extensive activities of a disease campaign, such as surveillance, vaccination, appraisal, depopulation, and disposal.

To protect the responders and meet Occupational Safety and Health Administration (OSHA) requirements, a site-specific health and safety plan (SSHASP) is required.

Several key Animal and Plant Health Inspection Service (APHIS) documents complement this SOP and provide further detail when necessary. For more information, please see the following APHIS documents:

- U.S. Department of Agriculture (USDA), APHIS, *HPAI Response Plan: The Red Book*
- APHIS Marketing and Regulatory Programs Business Services (MRPBS) Emergency Response Manual
- APHIS Directive 6800.1
- Veterinary Services (VS) Guidance Document 12001
- Foreign Animal Disease Preparedness and Response (FAD PReP)/National Animal Health Emergency Management System (NAHEMS) Guidelines
 - Health and Safety
 - Personal Protective Equipment (PPE)
- FAD PReP SOPs

-
- Biosecurity
 - Communication
 - Mass Depopulation and Euthanasia.

These documents are available on the internal FAD PReP website for APHIS employees at <http://inside.aphis.usda.gov/vs/em/fadprep.shtml> and on the APHIS website for the general public at http://www.aphis.usda.gov/animal_health/emergency_management/materials_ref.shtml.

8.1.1 Goals

8.1.1.1 Preparedness Goals

The preparedness goals for HPAI Health and Safety and PPE are as follows:

- Develop SSHASP templates before the incident or outbreak.
- Train personnel and/or develop just-in-time training that can be readily available for additional personnel.

8.1.1.2 Response Goals

The response goals for HPAI Health and Safety and PPE are as follows:

- Provide daily pre-entry safety briefings for all response personnel.
- Prevent, to every extent possible, adverse human health events related to emergency response efforts.

8.1.2 Guidelines

Observe the following guidelines to ensure proper health and safety measures:

- Ensure that medical monitoring, respiratory protection, and respirator fit testing programs are available for all first responders.
- Ensure that just-in-time medical monitoring and respirator fit testing programs are available for sustainment responders.
- Brief all personnel before any field activities that cover health and safety topics pertinent to the emergency response efforts.
- Provide all personnel and associated partners with appropriate PPE and instruction on using it to prevent adverse human health effects during emergency response efforts.

More information can be found in the FAD PReP/NAHEMS Guidelines: Health and Safety and the FAD PReP/NAHEMS Guidelines: PPE.

8.1.3 Coordination

The health and safety activities, including PPE, described in this SOP should be implemented in close coordination with biosecurity activities and the Biosecurity Group Leader. Please refer to

the HPAI Biosecurity SOP. The HPAI Communications SOP contains detailed communication procedures.

8.2 Purpose

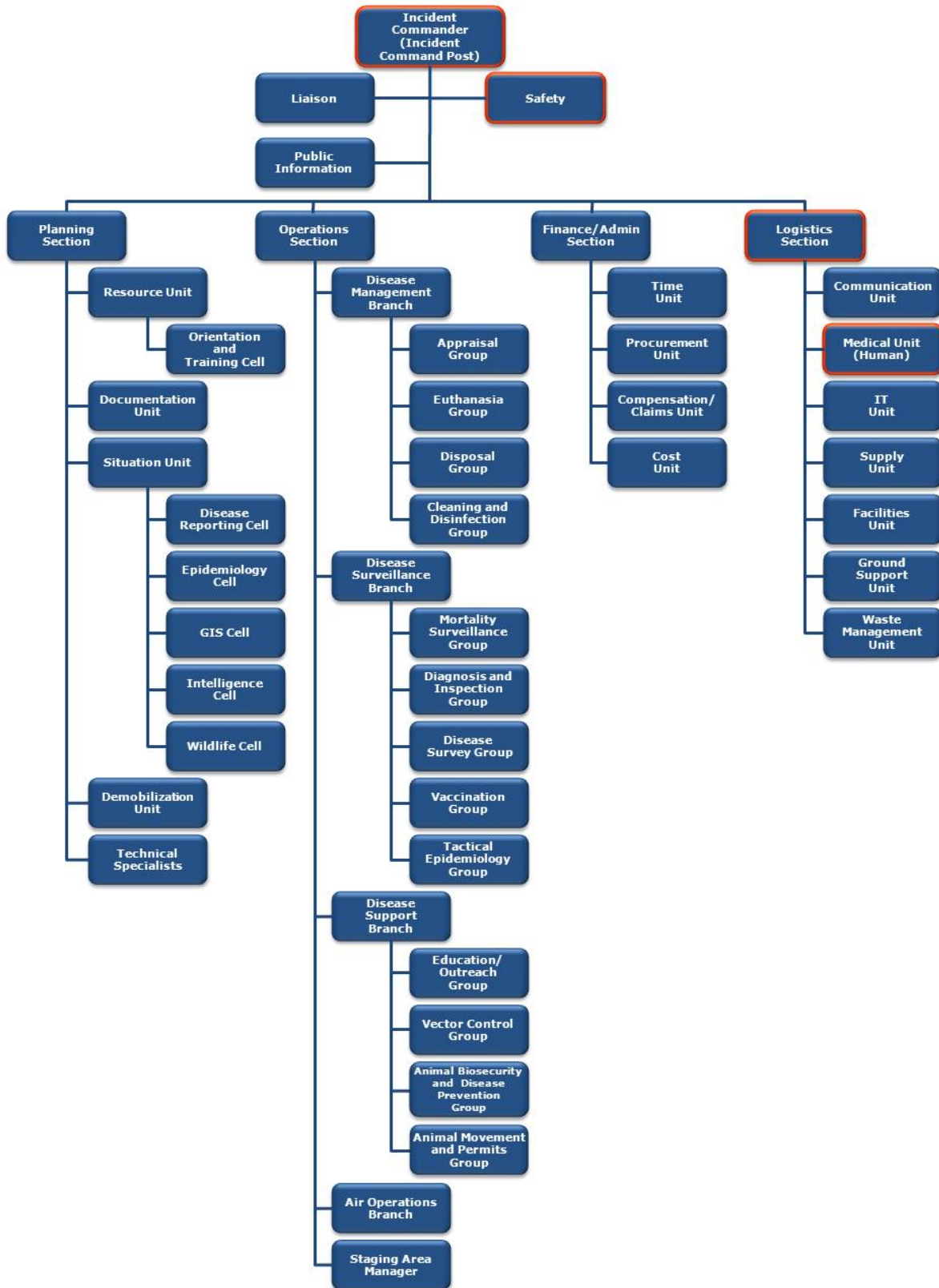
This SOP describes the steps for creating and implementing effective health and safety measures during a HPAI outbreak. It provides the Safety Officer (SO) and support personnel guidance for developing and implementing a SSHASP.

All personnel performing field activities are required to read, understand, and follow the policies and procedures of the SSHASP.

8.3 Responsibilities

The roles of health and safety response personnel may vary depending on the incident and may evolve during the incident. The number of personnel and the organizational structure are dependent on the size and complexity of the incident. Large scale incidents may involve multiple premises and may cover large areas. At a minimum, the Incident Commander (IC) assigns an SO or designee as soon as possible. The IC initially manages all the premises until he or she delegates the role to an SO at the Incident Command Post (ICP), or if multiple sites are involved, Site Safety Officers (SSO) at each site. As the response progresses, personnel requirements may change. All roles and responsibilities are assigned to available and qualified personnel as needed. The command structure and positions below are provided as guidance. Figure 8-1 shows an example of the Incident Command System (ICS).

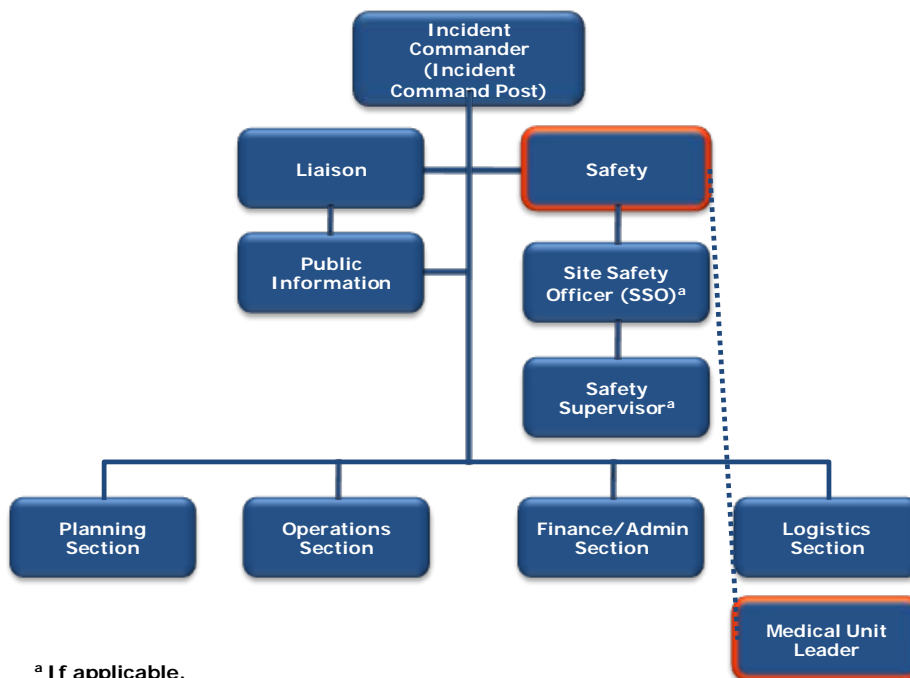
Figure 8-1. Example of ICS



Note: GIS = Geographical Information Systems; IT = Information Technology.

Figure 8-2 shows a detailed command structure for health and safety response personnel. Depending on the incident there may be more than one SSO or Medical Unit Leader.

Figure 8-2 Health and Safety Command



8.3.1 Safety Officer

The IC or others designated by the IC assign an SO. Although the IC has responsibility for the total incident, the SO and designees are responsible for ensuring the health and safety of the responders (whether APHIS employees, temporary employees, or contractors). The SO has the authority to stop an operation to correct safety or health hazards.

The SO operates out of the ICP and acts as an advisor to the IC. The SO eases the overall burden on the IC and ensures that at least one officer is attending to the health and safety of deployed personnel full-time.

The SO also does the following:

- Oversees development of an SSHASP by establishing safe work procedures.
- Identifies hazards in the response at headquarters and field sites, and seeks ways to minimize hazards.
- Assesses the need for PPE and assures proper PPE use, cleaning, and maintenance.
- Provides communication pertaining to safety and health matters.
- Performs inspections and ensures safe work procedures are followed.
- Provides training.

-
- Prepares reports.
 - Ensures that safety related supplies are on hand.
 - Briefs the IC on the status of health and safety on the deployment.

8.3.2 Site Safety Officer

Depending on the extent of the incident, the SO may designate SSOs to oversee efforts at individual premises or groups of premises. The SSO's role may be delegated to any other trained personnel in a management role.

8.3.3 Safety Supervisors

The SSO may designate a safety supervisor to supervise efforts at individual premises. The safety supervisor ensures that safety procedures are followed, safety training has been conducted and documented, and unsafe conditions and injuries are reported to the SSO. The safety supervisor also has the responsibility to stop an operation at a premises to correct safety or health hazards.

8.3.4 Operations Section

The Operations Section manages field operations for the response. Since most hazardous activities occur in the field, it must work closely with the SO to ensure safe working conditions for responders.

8.3.5 Logistics Section

The Logistics Section provides services and support to meet incident needs. It contains the Medical Unit which develops a medical plan and provides first aid to personnel assigned to the incident.

8.3.6 Supervisors

Each supervisor is responsible for ensuring safety procedures are followed, safety training has been conducted and documented, and unsafe conditions and injuries are reported to the Safety Officer.

8.3.7 Responders

All deployment personnel are responsible for following safe work procedures, using the prescribed PPE, reporting unsafe conditions and actions observed, and reporting all injuries to their supervisors.

8.4 Procedures

8.4.1 Planning—APHIS Health and Safety Plan

APHIS has developed an emergency deployment generic health and safety plan (HASP) template (available on the [APHIS Emergency Management website](#), click on “Resource Links”) to help the SO and support personnel quickly and accurately develop an SSHASP plan for an HPAI outbreak emergency response.

To speed the SSHASP development process, the HASP template includes several sections of text, as well as dozens of forms, safety fact sheets, and pre-developed job hazard analyses (JHAs) for tasks likely to be encountered during an HPAI outbreak. The HASP template is available at http://www.aphis.usda.gov/emergency_response/hasp/health_safety_procedures.shtml, and has the following contents:

Section 1: [Introduction](#)

[Incident Description Form](#)

[Location of Incident Form](#)

[Local Medical Care Providers Form](#)

Section 2: [Key Personnel/Identification of Roles and Responsibilities](#)

[Command Structure Form](#)

[Key Team Members Form](#)

Section 3: [Hazard Analysis](#)

[Hazard Analysis Form](#)

[Appendix 3-A Hazard Analysis Example](#)

[Appendix 3-C Job Hazard Analyses](#)

[Appendix 3-D Job Safety Analysis Preparation](#)

Section 4: [Training Requirements](#)

[Daily Report Form](#)

[New Safety Officer De-Briefing](#)

[Appendix 4-A Safety Messages](#)

Section 5: [Personal Protective Equipment Introduction](#)

[Personal Protective Equipment](#)

[Appendix 5-A Why PPE](#)

[Appendix 5-B PPE Selection](#)

[Appendix 5-C Respiratory Protection](#)

[Appendix 5-D PPE Form](#)

Section 6: [Medical Surveillance Requirements](#)

[Medical Self Certification \(See Attachment 8.A\)](#)

Section 7: [Monitoring](#)

[Monitoring Equipment Form](#)

Section 8: [Site Control Measures](#)

[Site Control Form](#)

Section 9: [Decontamination Procedures](#)

[Appendix 9-A Department of Fire Services Decontamination](#)

Section 10: [Emergency Response/Contingency Plan](#)

[Emergency Procedures Form](#)

[Appendix 10-A Spill Response Materials](#)

Section 11: [Confined Space Entry](#)

[Spill Response Equipment/Confined Space Form](#)

[Appendix 11-A Confined Space Program](#)

Section 12: [Container Handling/Spill Prevention and Containment Program](#)

[Appendix 12-A Container Integrity and Labeling Checklist](#)

[Appendix 12-B Spill Response Kits](#)

[Appendix 12-C Spill Kit Locations](#)

[Appendix 12-D Overpacking Operations Guidelines.](#)

8.4.1.1 Developing SSHASP from APHIS HASP Template

The SO, SSO, or designee develops the SSHASP.

8.4.1.1.1 Create Binders and Print Forms and Content

The SO, SSO, or designee takes the following steps to create binders and print content:

1. Obtain a 3-inch binder and 15 tabs per copy of the plan (minimum 4 copies).
2. Label the tabs with the following titles:
 - a. Introduction
 - b. Roles and responsibilities
 - c. Job hazard analysis
 - d. Training and briefings
 - e. PPE
 - f. Medical surveillance
 - g. Monitoring
 - h. Site control
 - i. Decontamination
 - j. Emergency procedures
 - k. Confined space
 - l. Spill prevention.

-
3. When at the HASP site, open and read the links, especially the first 12, to become familiar with the intent, limitations, and content of the SSHASP to be developed.
 4. Click “[Forms](#)” and print all 15 forms listed by clicking each link. To print the file, click the printer icon, and then close the file after the document prints.
 - a. Place [Local Medical Care Providers](#) form in front of Tab 1 so it is the first thing visible when opening the binder. Complete this form. Contact all providers so they are aware of activity. Include maps.
 - b. Place [Incident Description](#) form and [Location of Incident](#) form behind Tab 1 (Introduction). Complete both forms. Include maps.
 - c. Place [Command Structure](#) form and [Key Team Members](#) form behind Tab 2 (Roles/Responsibilities). Complete both forms. Add a larger organization chart if applicable. Ensure all response positions, including administration and finance, are represented by at least one key team member on the [Local Medical Care Providers](#) form. Use additional pages if necessary.
 - d. Place form [Hazard Analysis](#) behind Tab 3 (Job Hazard Analysis).
 - e. Place [Personal Protective Equipment](#) form behind Tab 5 (PPE). Note: Tab 4 (Training/Briefings) is empty at this time.
 - f. Place [Monitoring Equipment](#) form behind Tab 7 (Monitoring). Note: Tab 6 (Medical Surveillance) is empty at this time.
 - g. Place [Site Control](#) form behind Tab 8 (Site Control).
 - h. Place [Decontamination](#) form behind Tab 9 (Decontamination).
 - i. Place [Emergency Procedures](#) form behind Tab 10 (Emergency Procedures).
 - j. Place [Spill Response Equipment/Confined Space](#) form behind Tab 11 (Confined Space). Strike through the top of the form, “Spill Response Equipment.” Only the bottom of this form, “Identified Permit-Required Confined Spaces,” is used.
 - k. After all 12 forms are printed and placed in the binder, return to the HASP template page.
 - l. Click “Appendices.”
 - m. Print the following template appendices at a minimum (print others if they apply to the specific response situation): 3-D, 5-A, 5-B, 5-D, 10-A, 11-A, 12-A, 12-B, 12-C, and 12-D.
 - n. Place Appendix 3-D ([Job Safety Analysis Preparation](#)) behind Tab 3 (Job Hazard Analysis).
 - o. Place Appendix 5-A ([Why PPE](#)) behind Tab 4 (Training/Briefings).
 - p. Place Appendix 5-B ([PPE Selection](#)) and 5-D ([PPE Form](#)) behind Tab 5 (PPE).
 - q. Place [Medical Self Certification](#) form [formerly Appendix 6.A (Self Certification)] behind Tab 6 (Medical Surveillance).

-
- r. Place Appendix 10–A ([Spill Response Materials](#)) behind Tab 10 (Emergency Procedures).
 - s. Place Appendix 11-A ([Confined Space Program](#)) behind Tab 11 (Confined Space).
 - t. Place Appendix 12-A ([Container Integrity and Labeling Checklist](#)), 12-B ([Spill Response Kits](#)), 12-C ([Spill Kit Locations](#)), and 12-D ([Overpacking Operations Guidelines](#)) behind Tab 12 (Spills).
 - u. Print all [safety messages](#) that apply to the specific response situation and place them behind Tab 4 (Training/Briefings).

8.4.1.1.2 Develop SSHASP Introduction

The SO, SSO, or designee includes in the SSHASP introduction details about the nature and location of the incident, as explained in Subsection 8.4.1.1.1, Step 6a.

8.4.1.1.3 Prepare Job Hazard Analysis and Select PPE

The JHA is location and task specific and based on the potential or actual risks and hazards that may be encountered in the specific situation. The SO or designee can perform the JHA. From the analysis, the SO recommends steps to minimize the risks and mitigate hazards. Physical, chemical (for example, concentrations and routes of entry), and biological hazards must be evaluated for the JHA.

The JHA is not a replacement for properly trained personnel, but it ensures the awareness of specific hazards and provides a baseline for personnel, who in a deployment situation are performing tasks outside their normal scope of work. HASP template [Appendix 3-A](#) depicts an example of a JHA for an APHIS deployment.

To prepare JHAs and select PPE take the following steps:

1. Go to Tab 3 ([Hazard Analysis](#)) and read the “Completion of Job Safety Analysis.” Complete the HASP form behind Tab 3 (both pages), listing all possible hazards to be encountered during the response. Check all pertinent topics on the second page. Place the completed form behind Tab 3.
2. Using the second page of the form just completed, print all checked topics in the HASP template, [Appendix 3-C](#) (Job Hazard Analyses).
3. After printing the pertinent JHAs from HASP template [Appendix 3-C](#), read them, noting the PPE required for each task.
4. Place the JHAs behind Tab 3 ([Hazard Analysis](#)).
5. Next, go to Tab 2 ([Key Personnel/Identification of Roles and Responsibilities](#)). Fill out [Key Team Members](#) form, and transfer all positions from that form to the PPE form behind Tab 5 ([PPE](#)). Even if a position requires no PPE, list it to document that all positions were considered.
6. Once all positions are listed, but before any PPE boxes have been checked, list on HASP template [Appendix 5-D](#) (PPE Form) behind Tab 5 ([PPE](#)) all tasks to be performed for each position. List each task once.

-
7. Check the list of tasks on page 2 of the HASP form behind Tab 3 completed previously to ensure it matches the JHAs printed out and placed behind Tab 3. Create additional JHAs for any tasks to be performed but not represented by a JHA. Review all JHAs (preexisting and newly created) to ensure completeness and accuracy. Have another safety professional review the JHAs to ensure all risks are identified. Errors in this step could result in bodily injury to responders.
 8. Transfer the hazard potential and specific PPE required from each JHA form to each corresponding line on the PPE form behind Tab 5 for all tasks. Refer to HASP template [Appendix 5-B](#) (PPE Selection) for help choosing the appropriate PPE. Consult with another safety professional to verify the choices.
 9. Once the specific PPE required for each task has been verified by another safety professional and entered on the PPE form, number the tasks sequentially.
 10. On the PPE form that lists PPE by position (positions should have been filled in previously), list the numbers of the tasks related to each position next to each position title.

Example: Position: Major Disinfecting 3, 11, 12, 18

11. Once all the positions have the accompanying tasks identified, transfer the specific PPE information from the PPE form to the [Personal Protective Equipment by Position Form](#), including the PPE for all tasks for each position.
12. If multiple tasks for a single position require differing types of PPE, use the specific PPE that provides the best protection.
13. Once the PPE is identified for each position, develop a spreadsheet or table showing the position, tasks, types of PPE required, and individuals assigned to each position.

8.4.1.1.4 Develop Medical Surveillance Section

Take the following steps to develop the medical surveillance section:

1. After identifying the names of those occupying each position, consult with the Medical Unit to determine whether medical surveillance and clearance is required or self-certification is adequate.
2. If the Medical Unit authorizes self-certification in writing, have each person complete a self-certification for their position.
3. Verify that each person is fit to perform the requirements of the position.
4. Verify with the Medical Unit.

8.4.1.1.5 Develop Monitoring Section

Take the following steps to develop the monitoring section:

1. From the JHAs and other information developed during PPE selection, determine the types, frequencies, and locations of monitoring to be performed (such as particulates, temperature, relative humidity, wind direction and velocity, pathogen counts,

combustible gasses, O₂, or other parameters). Consult with another safety professional to confirm the strategy.

2. Complete the form behind Tab 7 ([Monitoring](#)) to outline the monitoring plan.
3. Use the [Daily Report Form](#) behind Tab 4 ([Training/Briefings](#)) to record calibration results and monitoring data. If data loggers are used, include logs with the daily report.

8.4.1.1.6 Develop Decontamination Section

Take the following steps to develop the decontamination section:

1. Contact the Biosecurity Group to obtain the decontamination procedures for the HPAI response.
2. Place a copy of the approved decontamination procedures behind Tab 9 ([Decontamination](#)) in the SSHASP.
3. Review the decontamination procedures to verify that all aspects of the JHA are addressed, not just biological. If additional procedures are needed, work with the Biosecurity Group to revise them accordingly.

8.4.1.1.7 Develop Site Control Section

Take the following steps to develop the site control section:

1. Work with Biosecurity and other applicable units or groups to determine where the Exclusion Zone (EZ), Contamination Reduction Zone (CRZ), and Support Zone (SZ) are located. Complete the HASP [Site Control Form](#) behind Tab 8 ([Site Control](#)).
2. Develop a sketch of the site showing major features (for example, barns, silos, houses, roads, fences, and staging area) identifying the control zones and decontamination areas.
3. Place a copy of the site control sketch behind Tab 8 ([Site Control](#)).

8.4.1.1.8 Develop Emergency Procedures Section

Develop the emergency response/contingency plan by filling out HASP [Emergency Procedures Form](#) behind Tab 10 ([Emergency Procedures](#)). Include biological and chemical exposures and human illnesses in the plan. Consult with the Medical Unit and another safety professional when preparing this plan.

8.4.1.1.9 Develop Site-Specific Container Management and Spill Prevention Section

Take the following steps to develop the site-specific container management and spill prevention section (plan):

1. Identify where all chemicals and fuels will be stored, including disinfectant concentrates and solutions, fuel oil, hydraulic oil, and any other potentially hazardous materials.
2. Obtain a material safety data sheet (MSDS) for all materials to be stored or used on site.

-
3. Be sure that all materials are stored in accordance with the MSDS (such as away from heat or sunlight, away from incompatible materials, and in secondary containment, if required).
 4. Using HASP template [Appendix 12-B \(Spill Response Kits\)](#), identify types and quantities of spill kits needed.
 5. Identify where the kits will be stored by completing HASP template [Appendix 12-C \(Spill Kit Locations\)](#) behind Tab 12 ([Spill Prevention](#)).
 6. Have another safety professional review the plan.

8.4.1.1.10 Develop Confined Space Section

Take the following steps to develop the confined space section:

1. Identify all confined spaces at the response site and enter them on HASP [Spill Response Equipment/Confined Space Form](#) located behind Tab 11 ([Confined Space](#)).
2. Develop a confined space program, such as the APHIS program, and include it behind Tab 11.

8.4.1.1.11 Develop Training/Briefing Section

Develop an outline of training topics related to the SSHASP, including the following:

1. Where copies of the SSHASP are kept
2. Directions to nearest medical facilities
3. Incident details
4. The response environment
5. Personnel roles and responsibilities
6. Tasks personnel will perform
7. Hazards of various tasks
8. Safety messages
9. Why PPE
10. Use of PPE
11. Medical fitness and surveillance
12. Monitoring plan and action levels
13. Site Control Zones
14. Decontamination procedures
15. What to do in an emergency
16. Confined space program
17. Spill prevention protocols.

8.4.1.1.12 Additional Requirements for HASP Template

Additional components not included in APHIS HASP template that should be completed include the following:

- *A medical supplies and equipment list.* In addition to the PPE identified, develop a list of all other supplies and equipment necessary to support health and safety measures.
- *A quality assurance/quality control section.* Develop an inspection plan, outlining which aspects of the SSHASP will be checked, how often, acceptance criteria, and the results of noncompliance. Consider the following:
 - Proper use of PPE
 - Adequacy of initial training
 - Adequacy of daily briefings
 - Compliance with site control requirements
 - Adequacy of decontamination
 - Sufficiency of monitoring
 - Compliance with confined space program
 - Adequacy of spill prevention measures.
- *A demobilization section.* Develop a plan for demobilization.

8.4.1.2 Administration of Health and Safety Plan

8.4.1.2.1 Revision

The SSHASP is a working, dynamic document. It will be updated in the field as new information is gathered or made available. The SSHASP is also a controlled document, with controlled and numbered distribution.

8.4.1.2.2 Availability

The SSHASP must be available for review by all on-site response personnel. At a minimum, maintain copies of the SSHASP in the following locations:

- ICP with SO
- With SSO or designee
- Medical unit
- Each operational site.

8.4.2 Operations

8.4.2.1 Personnel

The SO decides whether additional safety personnel are needed and coordinates with the Administration Section to obtain qualified personnel.

See the following attachments for additional information:

- [Attachment 8.B Pre-deployment Guidance for Response Personnel](#)
- [Attachment 8.C Protocol for Encountering Dogs](#)
- [Attachment 8.D Guidance for Workers Handling Poultry Infected with HPAI Information](#)
- [Attachment 8.E Protocol for HPAI Field Staff Personal Safety.](#)

8.4.2.2 Training/Briefings

8.4.2.2.1 Training

OSHA's Hazardous Waste Operations and Emergency Response (HAZWOPER) Standard, 29 Code of Federal Regulations (CFR) 1910.120, calls for all personnel involved in an emergency deployment to be trained on specific items pertinent to health and safety. Each employee receives training on site-specific elements before beginning work at the site. The training required depends on the tasks the employee performs and the risks associated with these tasks. The SO decides on the training needed for the various personnel involved in the deployment.

To ensure the health and safety of all responders and compliance with 29 CFR 1910.120, all responders working on a deployment (including temporary employees) should receive the following training:

- Hazard communication
- How to report an injury
- Emergency communication
- Evacuation procedure
- Shelter in place
- HAZWOPER
- Relevant sections of this HASP (such as medical monitoring).

The information in the SSHASP, the deployment work plan, and other sources (such as the MRPBS *Emergency Responder Manual*) will be used to develop the final curriculum of the training.

Personnel involved in the HPAI response may require additional training, including the following:

- Recognition of permit-required confined spaces
- PPE use (inspection, donning, doffing, and disposal)
- Fire extinguisher use
- Defensive driving
- Material handling

-
- Job task training.

Personnel are also trained on the JHAs appropriate for their tasks (these must be covered in detail in the JHA section of the SSHASP—see 8.4.1.1.3) and on specific site procedures. They will also need some HAZWOPER training (in accordance with the OSHA standard, 29 CFR 1910.120). See the standard for applicability: An OSHA fact sheet on HAZWOPER training is available at <http://www.osha.gov/html/faq-hazwoper.html>.

Supervisors and managers must also be trained in the following:

- Reporting employee injuries (for workers' compensation).
- An 8-hour supervisor training course in addition to the 40-hour basic course and 8-hour refresher course (for those directly responsible for hazardous substance emergency activities).
- Any additional supervisory roles specified in the SSHASP.

Training and briefings are conducted before job start-up and as needed. The SO or designee initiates training prior to job start-up to ensure that employees thoroughly understand the SSHASP, SOPs, and hazards of the response area. This training is repeated as needed as new employees become involved in the deployment. The training does not need to be repeated if the employee can provide documentation of equivalent training during the past 12 months.

As part of the site-specific training session, the SO, SSO, or designee conducts a health and safety briefing covering the major items found in the SSHASP and the work plan. All personnel directly working in or supporting site operations are briefed before reporting for work.

The SO coordinates with the Orientation and Training Cell to establish the training delivery and tracking system. Records are kept of all the training delivered. Training certificates for all personnel (including subcontractors) performing response activities are maintained at the work site or command post.

The FAD PRoP/NAHEMS Guidelines: Health and Safety provides additional information on training of health and safety response personnel.

8.4.2.2.2 Briefings

In accordance with 29 CFR 1910.120(i)(2)(ii), pre-entry briefings are held before initiating any emergency response activity.

The SO, SSO, or designee holds safety briefings daily even if the work does not change, using the HASP [Daily Report Form](#). This briefing is an opportunity to remind the personnel involved in the deployment of the importance of safety, so the safety designee may present a daily safety message as a part of the briefing. This message may be given to the supervisors to review with all employees reporting to them.

Safety briefings cover at least the following:

-
- A review of the past day's injuries and incidents.
 - Any work procedure changes and the accompanying safety procedure changes.
 - Any changes to the command or supervisory structure.
 - Any relevant safety-related issues and cautions.

All new incoming SOs and SSOs are thoroughly briefed by the outgoing SO or SSO. The HASP [New Safety Officer De-Briefing Form](#) should be used to facilitate the process.

The briefing should include the following:

1. How objectives will be accomplished (site activities, operational sequence, and individual task assignments).
2. Personnel roles and responsibilities.
3. Site hazards, including an explanation of how personnel can slip, trip, or fall and how to prevent it during work.
4. Review donning and doffing of PPE equipment.
5. Identify and explain specific site hazards (such as electrical wiring, wandering animals, animal housing hazards, free-ranging animals gathered for culling, and structures to be decontaminated) from the site assessment.
6. Proper mixing techniques from the SOPs for cleaning and decontamination solutions.
7. Emergency procedures for workers injured on site.
8. Emergency donning and doffing for workers hurt in the EZ, and explain how a worker will be transported to seek medical attention.
9. Worker hours spent in PPE or the rotation cycle and when breaks are anticipated.
10. Proper donning and doffing procedures as workers exit the EZ for breaks and lunch.
11. Hours of operation at the site (such as the midday break).
12. Symptoms of heat stress so workers can monitor themselves in addition to others.

8.4.2.3 PPE

Engineering and administrative controls are preferable to PPE, which is the final line of defense in the hazard control hierarchy. PPE is the least preferred for hazard control because it is often not used, is inappropriately used, can malfunction, or can wear out. Nevertheless, numerous tasks and situations in a deployment require response personnel to rely on PPE for their protection.

8.4.2.3.1 PPE Levels

According to 29 CFR 1910.120 Appendix B, PPE comes in four levels, as summarized below:

- *Level D.* Has no respiratory protection and minimal skin protection. Includes normal work clothes and non-respiratory PPE, for example, work shirt, safety boots, and safety glasses. Dust masks used on a voluntary basis fall under Level D protection. Level D

Modified is the same as Level D for respiratory protection, but the skin protection is increased to that of Level C.

- *Level C.* Includes dermal protection, such as chemical or biological resistant clothing (Tyvek or similar) and air purifying respiratory protection. At this level, approved air filtering cartridges are used for known air contaminants that are not immediately dangerous to life or health (IDLH). Mandatory dust mask use (including for biological agents) may be classified as Level C. The FAD PReP/NAHEMS Guidelines: PPE suggest Level C PPE when responding to a HPAI outbreak. Refer to the guidelines for further details.
- *Level B.* Has the same skin protection as in Level C. Respiratory protection is a supplied air system (such as a self-contained breathing apparatus or airline); the same as Level A.
- *Level A.* Features a totally encapsulating suit, the highest level of protection. Used in situations where dermal contact can be IDLH. Uses a supplied air system for respiratory protection.

8.4.2.3.2 PPE Assessment and Selection

Based on the JHA performed, the SSO or designee selects which PPE to use for individual tasks. If a new task must be performed or the PPE must be modified from that on the JHA, the SSO or designee completes a new PPE form (see HASP template [Appendix 5-D](#)). A form is also included to indicate PPE requirements by position (see HASP [Personal Protective Equipment Form](#)).

The SSO or designee makes all decisions as to the protective level that is most appropriate, which are noted in the SSHASP. The level of protection selected is based on the following:

- Type and (if measurable) concentration of the chemical, biological, or physical agent of concern.
- Potential for exposure to substances in the air, liquid splashes, or other direct contact with various agents.

8.4.2.3.3 Respirators

For Level C and voluntary respirator use, a respiratory protection program is required. HASP template [Appendix 5-C](#) contains a sample program that can be used. Refer to FAD PReP/NAHEMS Guidelines: PPE for further details on respirator types and selection.

8.4.2.3.3.1 Medical Evaluation for Respirator Use

- All response personnel complete an OSHA [Respirator Medical Evaluation Questionnaire](#) as required by 29 CFR 1910.134.
- Persons assigned to tasks that require respiratory protection must be physically able to perform the tasks while wearing a respirator.
- An [APHIS Form 29, Occupational Medical Monitoring Program Occupational Exposure](#), indicating the employee as a respirator user and a [Federal Occupational Health](#)

[\(FOH\) 22, OSHA Respirator Medical Evaluation Questionnaire](#), is submitted by the employee upon initial employment and then annually or as often as needed based upon prior respiratory medical clearance time.

- FOH determines individual medical clearance for 1, 2, or 3 years based upon the [FOH 22 Respiratory Medical Questionnaire](#) or medical examination.
- Employees refusing a medical evaluation are not allowed to work in conditions requiring respirator use. This is an administrative situation to be resolved between employee and supervisor and is not a consideration of this plan.
- A re-evaluation is conducted under the following circumstances:
 - Employee reports physical symptoms that are related to the ability to use a respirator (such as wheezing, shortness of breath, or chest pain).
 - Employee is having a medical problem during respirator use.
 - The FOH or FOH-contracted facility physician performing the evaluation determines an employee needs to be re-evaluated and the frequency of the evaluation.
 - A change occurs in the workplace conditions that may result in an increased physiological burden on the employee.
 - Employee facial size/shape/structure has changed significantly.
- All examinations and questionnaires remain confidential between the employee and FOH or FOH contract facility physician.

8.4.2.3.3.2 Respirator Fit Testing

All employees must be medically cleared to wear a respirator before being fit tested. If wearing respirators, OSHA requires a medical evaluation by a healthcare provider in accordance with 29 CFR 1910.134. This includes “voluntary use” of respirators by the employee doing official USDA work. Fit test requirements are as follows:

- Fit tests are conducted to determine that the respirator fits the user adequately and that a good seal can be obtained. Respirators that do not seal do not offer adequate protection.
- Fit testing is required for tight fitting respirators.
- Fit tests are conducted
 - before being allowed to wear any respirator,
 - if the area changes respirator product,
 - if employee’s weight changes by 10 percent or more,
 - if employee has changes in facial structure or scarring, and
 - as OSHA standards require.

For fit testing procedures see [Attachment 8.F OSHA Respirator Fit Testing Procedures](#).

8.4.2.3.3.3 Respirator Use

General use:

- Employees use respirators under conditions specified by Respiratory Program Administrator (RPA), or at other times as “voluntary use,” and in accordance with the training they receive on the use of the selected models. A comprehensive training program is critical in ensuring responders understand how to wear PPE appropriately to provide optimal protection when working. In addition, the respirator shall not be used in a manner that is not certified by the National Institute for Occupational Safety and Health or by its manufacturer.
- All employees shall conduct positive and negative pressure user seal checks each time they wear a respirator.
- All employees shall leave a potentially contaminated work area to clean or change their respirator if the respirator is impeding their ability to work.

8.4.2.3.3.4 Respirator Inspection, Maintenance, and Repairs

All types of respirators are inspected before use.

8.4.2.3.3.4.1 Disposable

- Examine the face piece of the disposable respirator to determine if it has structural integrity. Discard if there are nicks, abrasions, cuts, or creases in the seal area or if the filter material is physically damaged or soiled.
- Check the respirator straps to be sure they are not cut or otherwise damaged.
- Make sure the metal nose clip is in place and functions properly (if applicable).
- Do not store disposable respirators after use. Discard them immediately after use.

8.4.2.3.3.4.2 Half- or Full-Face Respirators

- Examine the face piece of the disposable respirator to determine if it has structural integrity. Discard if there are nicks, abrasions, cuts, or creases in seal area or if the filter material is physically damaged or soiled.
- Check the respirator straps for cuts or damage.
- Inspect all seals, valves, and rubber components for integrity or deterioration. Replace or discard as needed to ensure the respirator seals and filters properly.

8.4.2.3.3.4.3 Powered Air Purifying Respirator

- Inspect the breathing tube and body of the High Efficiency Particulate Air filter for damage.
- Examine the hood for physical damage; if parts are damaged, contact the RPA.

-
- Check for airflow prior to use.
 - Follow manufacturer's recommendations on maintenance, including battery recharging.

8.4.2.3.4 Upgrading and Downgrading PPE

If air monitoring or other data indicate a change in hazard level, or a situation questions the effectiveness of current PPE, the SSO or designee evacuates the area of concern, evaluates the situation, and recommends PPE modification if necessary. Air monitoring and other data can be used to determine whether changes to work practices (such as work durations) are needed. See subsection 8.4.2.5 for further information on monitoring.

8.4.2.3.5 Obtaining and Disposing of PPE

Responders are provided all PPE needed for deployment tasks by their immediate supervisor, or the supervisor advises the employee where to obtain the PPE. The supervisor, SSO, or designee informs the employee of how to dispose of used PPE and to obtain replacements.

8.4.2.3.6 PPE Training

All employees, as part of their initial training, are taught the proper inspection, use, and storage for all PPE used in the deployment. They are also trained on disposal procedures and obtaining new PPE.

See the FAD PReP/NAHEMS Guidelines: PPE for further information on PPE training.

8.4.2.3.7 Donning PPE

This section delineates the steps required for donning a typical PPE ensemble. Donning instructions for other types and quantities of PPE may vary. Donning procedures for highest level PPE (A and B) are included in [Attachment 8.H Donning and Doffing PPE Levels A and B](#).

Don PPE as follows:

1. Remove all outwear and underwear including socks. Don disposable underwear and socks then put on the two-piece scrub suit. Socks should be under the scrub pants.
2. Insert feet into the boot pouches of the Tyvek® or similar protective coveralls.
3. Pull the rest of the protective coveralls on and zip part way up. Do not put on the hood yet.
4. Step into steel toed rubber boots.
5. Using the buddy system, wrap chemical-resistant tape around top of boot at the junction of the protective coveralls to ensure no fluid could enter the boot from the outside. One to three turns should be sufficient. One turn is sufficient with wide tape (3–4 inch or 7.6–10 cm in width), whereas two or even three turns are required with narrow tape (1–2 inch or 2.5–5 cm in width). Leave a tab on the tape end to help with doffing. If protective coveralls are without boot pouches are used, pull the leg of the coverall over the top of the boot and secure in place with chemical-resistant tape. When taping, be sure to leave enough give to bend a pair of gloves, these may be nitrile or latex disposable gloves.

There should be sufficient give in the legs and arms of the protective coveralls to allow easy movement and to prevent ripping.

6. Using the buddy system, wrap chemical-resistant tape around each wrist at the junction of the glove and coverall cuff. Stretch out arms and tape. Allow for give so arms can move freely without ripping of the protective coveralls.
7. Put on the assigned air purifying respirator (APR) (prior medical-clearance and fit testing required) and perform the required seal check. The following describes user seal checking for an APR:
 - a. Place face into APR, slide straps over head, and walk.
 - b. Place hand over opening on the exhalation valve on the facepiece.
 - c. Exhale strongly one time; the facepiece should pressurize slightly, then air should escape from the contact area between the slides of the face, forehead, and the facepiece.
 - d. Inhale with hands over the filter cartridges and hold for 5 seconds (when fitting properly, facepiece should collapse on face and remain collapsed for the duration of this step).
 - e. If a proper fit cannot be achieved, do not enter the area where protection is required. Contact your supervisor for a new respirator and then don and perform seal check again.
8. Put on goggles, if eye protection is not provided by the APR; take care not to disrupt the respirator seal.
9. Pull hood over your head.
10. Zip up the suit completely and seal the length of its zipper with chemical-resistant tape.
11. Put on the outer pair of chemical-resistant gloves. Pull the cuffs of the protective coveralls over the cuffs of the gloves and secure with chemical-resistant tape.
12. Enter work area and perform duties.

8.4.2.3.8 Doffing PPE

This section delineates the routine biosecurity steps required for doffing a typical PPE ensemble. Doffing procedures for the highest level PPE (A and B) are included in [Attachment 8.H Donning and Doffing PPE Levels A and B](#) as a reference.

Doff PPE as follows:

1. While still in the EZ and wearing the PPE, dry brush the PPE ensemble.
2. Exit the EZ, enter the CRZ, and begin doffing the PPE ensemble.
3. Using blunt-nosed scissors or simply by undoing the knot, remove the apron and place it in the biohazard receptacle.
4. Remove the gloves and place them in the biohazard receptacle.

-
5. With help from the CRZ worker, remove the boots using the blunt-nosed scissors and place them in the biohazard receptacle.
 6. Using the tab, remove the duct tape sealing the suit sleeve and green nitrile gloves.
 7. Remove the gloves by turning one inside out and then using the inner surface of the first glove to remove the second glove.
 8. Lean over, reach over your head, grab the elastic band of the goggles, and pull it over the hood, straight down toward the ground, allowing it to slip off the hood. (Or, using the blunt-nosed scissors cut the band.)
 9. Place the goggles in the biohazard receptacle.
 10. Using the tab on the duct tape, unwrap it from around the suit sleeve.
 11. Dispose of the tape in the biohazard receptacle.
 12. While still wearing the transparent latex gloves remove the suit hood and begin to exit and doff the suit by turning it inside out, keeping the inner booties on while removing them from the suit boot pouches.
 13. Dispose of the suit in the biohazard receptacle.
 14. Remove the inner booties and dispose of them on the biohazard receptacle.
 15. Finally, remove the transparent latex gloves (as in Step 7) and dispose of them in the biohazard receptacle.
 16. Again bend over and use the same action to remove the APR. (Or, using the blunt-nosed scissors cut the band.)
 17. Place the respirator in the biohazard receptacle.
 18. Exit the CRZ and immediately wash hands with soapy water in the SZ.

8.4.2.4 Medical Surveillance

8.4.2.4.1 Certification Procedures

All response personnel must participate in a medical surveillance program required by 29 CFR 1910.120. They must have received a medical baseline or follow-up examination within the past 12 months. Examinations include:

- *Initial exam.* All responders received an initial examination through the FOH service or in accordance with their organizational policy.
- *Periodic exam.* All responders receive an annual examination through FOH or in accordance with their organizational policy.
- *Termination examination.* All responders receive a termination examination through FOH or in accordance with their organization policy.
- *Respirator examination.* No responder may wear a respirator unless trained, fit-tested, and certified as medically fit to wear it.

The SO or designee must

-
- keep a physician's statement on file declaring that each field team member is medically qualified to perform hazardous-material-related activities; and
 - at a minimum, have Marketing and Regulatory Programs (MRP) Form 5-R, included as [Self-Certification Medical Statement Form](#) (see [Attachment 8.A](#)) for each responder.

Subcontractor employees must

- participate in their employer's medical monitoring program, and
- show proof of participation by providing appropriate documentation. Documentation includes a physician's statement declaring the employee medically qualified to perform hazardous material work.

8.4.2.4.2 Medical Recordkeeping

For medical recordkeeping, the FOH does the following:

- Retains all records of examinations and other medical-related documentation for APHIS personnel. Other personnel records should be documented and maintained in accordance with their organization policy.
- Keeps records in accordance with 29 CFR 1910.120. Personnel monitoring results, laboratory reports, calculations, and air sampling data sheets are part of the exposure record. For other responders, the records are kept in accordance with their organizational policy.

8.4.2.4.3 Specific Hazards

Some situations will call for medical surveillance for specific hazards. The SO determines the hazards personnel may encounter and notifies the medical officer. Together, the SO and medical officer determine the medical surveillance needed. Examples of specific hazards include the following:

- *Hazardous dusts.* Employees exposed to dust such as cotton dust or asbestos should obtain professional guidance to determine the necessity for chest X-rays and pulmonary function tests.
- *Organophosphate or carbamate exposure.* Routine blood cholinesterase determinations are performed (see HASP Template [Appendix 6-B](#) for the cholinesterase testing program).
- *Occupational bacterial and viral diseases.* Periodic serological tests are performed to determine blood titers. Monitoring for relevant diseases should be performed.
- See HASP template [Appendix 6-C](#) for the psittacosis testing program, if required.
- *Chemical exposures.* Certain chemicals can be detected in the blood stream, but for those that cannot, the employee needs to receive a battery of blood tests to evaluate kidney, liver, and endocrine metabolic functions.

Consult the latest edition of the [American Congress of Governmental Industrial Hygienists \(ACGIH\)](#) guide for Threshold Limit Values (TLVs) and biological exposure indices for specific agents.

8.4.2.5 Monitoring

8.4.2.5.1 General

Monitoring is the measurement of hazardous exposures to physical, chemical, or biological agents during a given period. Monitoring has multiple objectives, including determining the following:

- *Baseline.* The range and distribution of worker exposures.
- *Diagnostic.* Sources and tasks that pose the greatest potential exposure in the workplace.
- *Compliance.* Workplace compliance with OSHA standards.

To decide what constitutes a representative sample, six basic questions must be answered:

1. What to sample?
2. Where to sample?
3. Whom to sample?
4. How long to sample?
5. How many samples to take?
6. When to sample (such as day or night, month, or season)?

The environment (such as heat or cold, radiation, or noise), agent of concern (such as a chemical spill), and agents used during deployment (such as chemicals or radioactive devices) determines what is sampled. Use the ACGIH's TLV guide (as well as the industrial hygienist, if needed) to aid in these determinations.

Next, develop a sampling plan that gives an accurate overview of workers' exposure. Acquire each sample at a particular location at a specific interval. Sampling only provides a snapshot of the actual situation, but the more snapshots taken, the better the long-term picture and the more accurate the results. A statistically significant number of samples (a minimum of three) from a representative number of employees (not just one work area or job title) forms a more accurate overall picture.

8.4.2.5.2 Preliminary Workplace Survey

The preliminary workplace survey determines the substances or conditions to which workers will be exposed. An exposure assessment needs to recognize all physical and chemical exposures, evaluate each as acceptable or unacceptable, and control all unacceptable exposures.

Hazardous exposures take various forms:

- Chemicals (such as lead, solvent, and pesticides)

-
- Sound
 - Heat and cold
 - Dust (such as asbestos, cotton, and silica)
 - Radiation
 - Biological agents (such as fungus, bacteria, and virus)
 - Mental stress (see [Attachment 8.G Mental Health Concerns](#)).

8.4.2.5.3 *Quantifying Exposure*

8.4.2.5.3.1 General

After determining an exposure, the SO or designee does the following:

1. Collects samples of air or use direct-reading instruments to detect and determine its intensity, making every effort to obtain samples that represent the worker's exposure. No effective direct-reading instruments for biological agents are currently available. All biological monitoring involves collecting a sample (for example, air, soil, wipe, or swath) and having a laboratory analyze the sample for the presence of the pertinent biological agent. A chemical agent may not be of concern during a deployment, but deployment activities may introduce one into the area and necessitate monitoring. Physical agents, such as heat and cold, are a possibility when working outdoors.
2. Completes [HASP Monitoring Equipment Form](#) to ensure the instruments are calibrated and maintained.

8.4.2.5.3.2 Sampling Methods

Monitoring protocols will be pursuant to the manufacturer's guidelines. At a minimum

- calibrate the equipment before each day's use using the manufacturer's guidelines, and
- keep a copy of each instrument's manual in the SZ or field vehicle. Measure all action-level criteria as close to the agent's route of entry of the employee as possible.

The SO or designee maintains daily monitoring logs containing personnel names, the work being performed, and any new procedures established. In addition, these logs describe the types of air-monitoring equipment used, how and when it is calibrated, air-monitoring results, the level of PPE used, and all injuries, accidents, physical complaints, and unusual occurrences.

8.4.2.5.3.3 Equipment Calibration and Maintenance

The Operations Section Chief ensures all field equipment is inspected and approved for use.

Two instruments routinely used are a photo ionization detector to detect organic vapors in the atmosphere and a radiation meter to detect ionizing radiation sources. A combustible gas indicator is used to detect the presence of combustible gases. The radiation meter is calibrated by the manufacturer annually and before and after each use in the field.

After the daily briefing, field calibrate, document, and perform any required maintenance on the monitoring equipment to be used as follows:

- Calibrate equipment before and after each day's use, more frequently if field personnel suspect that calibration may have been altered (such as after a change of batteries, when equipment is dropped or knocked about, or if the temperature or humidity changes significantly).
- Calibrate all equipment according to the manufacturer's recommended protocol or regulatory standards (whichever is more stringent).
- Verify the satisfactory operating condition of each piece of equipment before transport.
- Record the maintenance and calibration of all monitoring equipment in the field logbook and on separate calibration log sheets for each instrument. Record the following information at a minimum:
 - Type of equipment and identification number
 - Date of entry
 - Name and signature of individual making the entry
 - Equipment calibration status (initial "zero" reading, initial calibration gas reading, and final span setting)
 - Equipment nonconformance
 - Equipment inspection and repair records.
- Check (monthly) and factory calibrate (annually) all equipment used for emergency operations in accordance with National Institute of Standards and Technology.

8.4.2.5.3.4 Air-Monitoring Action Levels

When an action level is exceeded in the work plan and if contaminants of concern are known include the air-monitoring action levels and required response.

8.4.2.6 Site Control Measures

8.4.2.6.1 *Security and Control*

All response personnel must follow the security procedures established by the command staff.

The security team must be alerted to any suspicious activities observed during field operations. The IC may assign the security officer as a member of the command staff or as a member of the operations staff.

To maintain security while conducting field operations the security officer does the following:

- Control all entrances and exits.
- Establish a personnel identification system.
- Enforce entry and exit requirements.

-
- Use temporary fencing if needed.
 - Assess the security threat potential to all buildings, dwellings, and sites occupied by APHIS personnel. The security officer may use the [HASP Site Control Form](#) to make an initial site assessment.

To maintain security during nonworking hours, the security officer secures the affected area. All equipment and supplies are secured or stored in locked facilities, and open holes are covered with plywood or similar material.

8.4.2.6.2 Work Zones

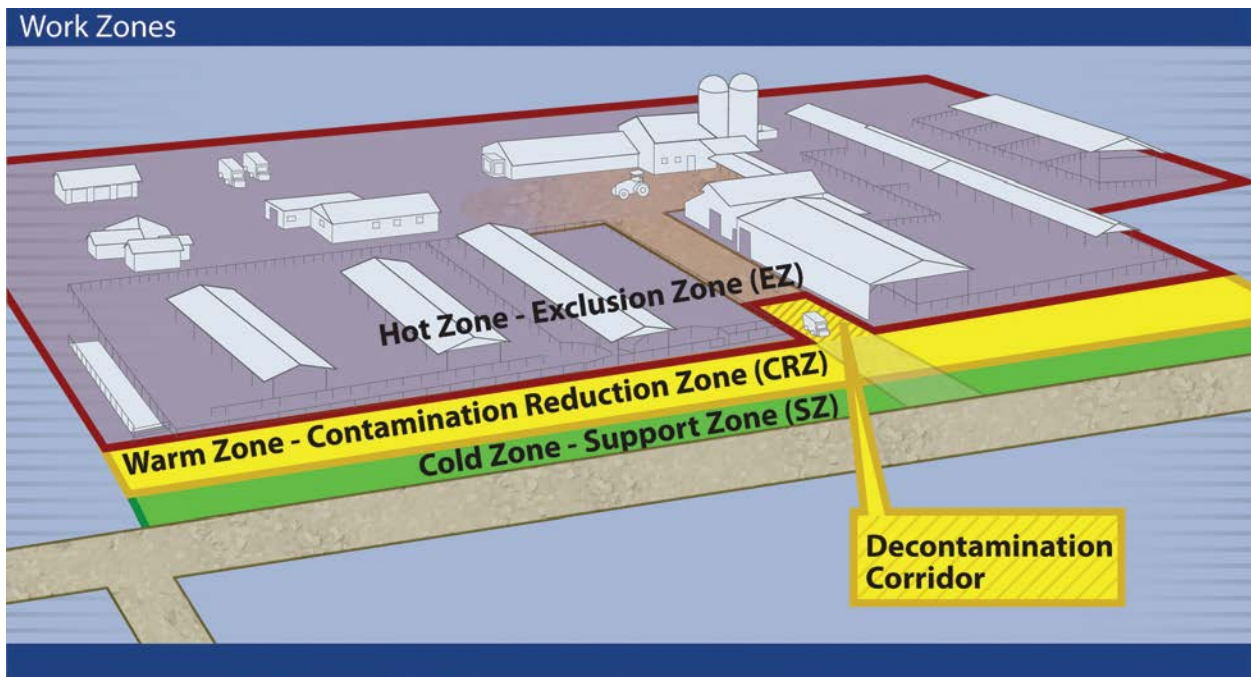
Establish site access control by setting up control lines (barriers) and establishing control zones to isolate and control entry and exit. The purpose is to control the movement of people into and out of the area of concern, limit the potential for increased spread and exposure to the agent, and monitor the agent for indications of spread. This section gives a brief overview on work zone control. See the HPAI Biosecurity SOP for further details on work zone control.

To prevent the accidental spread of hazardous agents by workers from contaminated areas to clean ones, delineate zones for intrusive investigative activities and control the flow of personnel in these zones. The establishment of work zones helps ensure

- personnel are properly protected against the hazards where they are working,
- work activities and contamination are confined to the appropriate areas, and
- personnel can be located and evacuated in an emergency.

Divide the site into three major zones (Figure 8-3) characterized by the presence or absence of biological and chemical hazards and activities performed.

Figure 8-3. Biosecurity Work Zones and Decontamination Corridor



Source: Dani Ausen, Andrew Kingsbury, Iowa State University.

Clearly mark the zone boundaries—using signs and fencing, traffic cones, and caution tape—at all times and control the flow of personnel among the zones. All biosecurity work zones must be adequately marked.

Monitor the site for changing conditions that may warrant adjustment of zone boundaries. Adjust zone boundaries as necessary to protect personnel and clean areas. When boundaries are adjusted, change the zone markings and immediately notify workers of the change.

Biosecurity work zones used during deployment activities, as deemed necessary by the IC with SO assistance, include the following:

- *EZ-Hot Zone.* The potentially contaminated or unsafe areas. Personnel and equipment will enter and exit the EZ from designated access points in the CRZ (Figure 8-3). A “hotline” where personnel routinely enter or exit the EZ is located upwind from the EZ, when possible. Personnel in the EZ will adhere to the established work procedures.
- *CRZ-Warm Zone.* The warm zone or the area where decontamination of PPE takes place. On the basis of monitoring results, CRZ boundaries may be adjusted to ensure that the SZ remains uncontaminated. Workers and equipment exit the EZ through the designated access points into the CRZ and are decontaminated according to the procedures in [HASP Section 9 Decontamination](#). Workers and equipment then exit the CRZ into the SZ through the designated access points (Figure 8-3). If necessary, emergency decontamination procedures are implemented (described in the emergency response program).

-
- *Decontamination (Decon) Corridor.* The area between the EZ and CRZ control lines where personnel and equipment are decontaminated. Entry teams enter and exit the EZ through the access control points at each end of the corridor.
 - *SZ-Cold Zone.* The cold zone or the uncontaminated area where workers should not be exposed to hazardous conditions. SZ is the clean area of the site, beyond the outer boundary of the CRZ. Administrative, clerical, and other support functions are based in the SZ. Monitor the air and surface in the SZ as needed to ensure that it remains uncontaminated. If contamination is detected, adjust zone boundaries until corrective action is taken and monitor results indicate that this zone is again uncontaminated.

Strictly limit access to the EZ and CRZ to those who meet all medical monitoring, training, and PPE requirements.

Visitors must receive appropriate training, be medically qualified, wear appropriate protection, receive a safety briefing, and be escorted by qualified personnel. Visitors who do not meet the specified requirements will remain in the SZ.

8.4.2.6.2.1 Criteria for Establishing Zones

Place yellow CRZ control line barrier tape around the incident to establish the initial control zone. Evacuate people from within this zone.

8.4.2.6.2.2 Isolation

- No person exits or is removed from the EZ until they have been properly decontaminated or removing them without being decontaminated has been confirmed as safe.
- No person is allowed into the CRZ or EZ without the proper PPE as specified by the SO or designee.
- No person enters the EZ prior to the establishment of a decontamination corridor.
- Once entry has been made into the EZ, no one who remains in the CRZ is allowed to exit into the SZ until they have been decontaminated or checked for contamination.

8.4.2.6.2.3 Accountability

The IC ensures methods are in place to account for personnel at all times, including those conducting site investigations or working in confirmed contaminated zones. Communication can be done via cell phone, radio, hand signal, or other methods.

All personnel enter and leave the APHIS deployment facilities at established points. They write down their information at the access point and tell the team leader where they are going when they leave the facility.

8.4.2.6.2.4 Buddy System

While in the EZ, use the buddy system. Work in pairs and stay in close visual contact and summon rapid assistance in case of an emergency. The responsibilities of workers using the buddy system include

- remaining in close visual contact with their partner,
- providing their partner with assistance as needed or requested,
- observing their partner for signs of heat stress or other difficulties,
- periodically checking the integrity of partner's PPE, and
- notifying the site manager or other site personnel if emergency assistance is needed.

8.4.2.7 Decontamination Procedures

The Biosecurity Group is responsible for developing decontamination procedures. See the HPAI Biosecurity SOP for details.

8.4.2.8 Emergency Response/Contingency Plan

Even with the precautions taken to ensure the safety of responders during a deployment, issues can arise which call for quick and decisive action. Planning beforehand enables better handling of these emergencies. Develop the emergency response/contingency plan as outlined in subsection 8.4.1.1.8 and include the following guidelines:

1. Before operations begin, an emergency medical assistance network is established and the SO or designee notifies the local fire, police, and rescue authorities to alert them of potential emergency situations that may arise due to activity.
2. A vehicle is available during all activities to transport injured personnel to the identified emergency medical facilities. If the injury is severe, medical transport is summoned.
3. Each field team is equipped with a cell phone or radio for communication. Satellite phones may be necessary as communication systems could be disabled. In extreme situations, the SO or designee may have to confer with APHIS subject matter experts on methods to ensure communication.
4. Field personnel work in pairs when possible. A call-in schedule (a schedule of when the employee is to call a supervisor or designee) is established for personnel working alone.
5. Upon arriving on location, emergency facilities locations are determined and mapped. Emergency telephone numbers and maps with written directions to the nearest emergency facility are placed in an easily accessible location in each vehicle and in the SZ. A copy of the SSHASP and a work plan (detailing the daily activity) are also placed in each vehicle.
6. A first aid kit, an adequate supply of fresh water, and portable emergency eyewash are maintained in each vehicle.
7. Personnel are trained in emergency procedures during the personnel training session.

-
8. The IC, SO, Security Officer, and Operations Section Chief evaluate work areas before work each day. The evaluation ensures evacuation routes are adequate, procedures are in place for recognized hazards, and communication systems are adequate. Any change to emergency procedures from this evaluation is communicated to personnel before they leave for the day.
 9. The supervisor ensures that all personnel understand the facility-specific emergency signals and procedures, if any. The SO also ensures all supervisors are trained and familiar with the facility-specific emergency signals and procedures.
 10. The IC ensures the evacuation, emergency treatment, and emergency transport of personnel, if necessary, and notification of emergency response units and appropriate management staff members.

Use the following forms to create an emergency response/contingency plan:

- [HASP Local Medical Care Providers Form](#)
- [HASP Emergency Procedures Form](#).

8.4.2.9 Confined Space Entry

The hazards encountered and associated with entering and working in confined spaces are capable of causing bodily injury, illness, or death to the worker. Accidents occur among workers because of failure to recognize that a confined space is a potential hazard. It should, therefore, be considered that the most unfavorable situation exists in every case and that the danger of explosion, poisoning, and asphyxiation is present at entry.

Possible hazardous conditions include hazardous atmospheres (flammable, toxic, irritant, and asphyxiating) and general safety hazards (mechanical, communications, entry and exit, and physical).

If responders enter a confined space with a known or potential hazard, a permit system must be used and training is required. HASP template [Appendix 11-A](#) contains a permit-required for confined space entry. Entering confined spaces requires three trained positions (a rescue team must also be available): entrant, attendant, and supervisor.

Training requirements for confined space entry are outlined in HASP template [Appendix 11-A](#). Also, arrangements must be made with local emergency response organizations for rescue service in the permit-required confined space.

8.4.2.10 Container Handling/Spill Prevention and Containment Program

During emergency response operations, a number of hazardous substances may be stored on site. These hazardous substances must be contained to prevent spills in accordance with OSHA requirements in 29 CFR 1910.120(b)(4)(ii)(J) and (j)(1)(viii).

Site-specific information on this topic is described in the SSHASP. The links below contain additional reference material:

- [Potential spills and available controls](#)

-
- [Initial spill notification and response](#)
 - [Spill evaluation and response](#)
 - [Post-spill evaluation](#)
 - [Spill response equipment/confined space.](#)

8.4.2.11 Quality Assurance/Quality Control

The purpose of the SSHASP is to minimize risks to personnel and maintain a safe and healthy working environment. Therefore, strictly following the SSHASP is important. To ensure compliance with the SSHASP, periodic inspections should be performed. The frequency and types of inspections are detailed in the SSHASP.

8.4.2.12 Documentation and Reporting

Documentation and reporting are performed in accordance with the SSHASP. Documents and reports may include the following:

- Incident reports. See [Attachment 8.I Incident Reporting for Government Employees.](#)
- Monitoring logs
- Claim forms
- Training records (topic, recipients, date, and trainer)
- Inspection reports
- Stop work orders
- Fit test results
- Medical surveillance information
- Personnel information
- Daily reports
- JHA
- MSDS's
- Site entry
- Confined space permits
- Illnesses and injuries.

At the end of the incident response, all records are retained in accordance with applicable policies and guidelines (for example, MRP Records Management Program, Directive MRP 3040.2).

8.4.2.13 Demobilization

Response personnel may leave an incident only when authorized by the SO or designee. The SO or designee drafts a demobilization plan and leads the effort. The plan includes the following:

- The safe and efficient return personnel to their Official Duty Stations or reassignment to another incident.
- The Critical Incident Stress Debriefings (CISD) for personnel before leaving the ICS. CISD is a structured process used with emergency responders who have been exposed to traumatic incidents to lower the level of stress, assist in the recovery process, help ensure a return to normalcy, and act as a foundation for referral resources.

The safety supervisor holds a demobilization briefing prior to releasing personnel from the incident. The briefing may include the following information which is documented on ICS Form 221 (see [Attachment 8.J Demobilization ICS Form 221](#)):

- Methods of travel
- Destinations
- Estimated times of arrival
- Transportation arrangements.

The SO or the IC contacts the Employee Assistance Program Manager to set up the CISD at the ICP.

1. Personnel flying on commercial airlines are required to shower and dress in clean clothes, have picture identification (ID), and be at the airport 2 hours prior to the scheduled departure time.
2. Responders must meet all travel and rest requirements before departing the incident site. This helps ensure a safe travel home.
3. Upon arrival at home, responders must notify the Team Leader and any other pre-determined personnel of their safe arrival home.

Attachment 8.A Medical Self Certification

(MRP Directive 4339.1 Attachment)

<p>According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0579-0196. The time required to complete this information collection is estimated to average .0167 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.</p>	<p>OMB No. 0579-0196</p>
<p>UNITED STATES DEPARTMENT OF AGRICULTURE MARKETING AND REGULATORY PROGRAMS</p> <p>SELF - CERTIFICATION MEDICAL STATEMENT</p>	<p>INSTRUCTIONS TO APPLICANT: Please read instructions for each section carefully before answering the question. Type or print answers in ink. If additional space is required to provide details use Section D on page 4. After completing this statement be sure to sign your name and give the date in Section E. Your replies will be evaluated in terms of the particular position for which you are applying. NOTE: At the discretion of the appointing officer, a medical examination at the Government's expense may be required.</p>

PRIVACY ACT STATEMENT

Solicitation of this information is authorized by Section 3301 of Title 5, U.S. Code, which provides for a determination as to an individual's fitness for employment with regard to age, health, and physical ability. This information will be used in determining your fitness and ability to perform duties of the position for which you are applying.

Executive Order 9397 (Numbering System of Federal Accounts Relating to Individual Persons) authorizes the collection of your social security number (SSN). Your SSN is used to ensure that the information you provide is accurately recorded as pertaining to you. Furnishing your SSN or any of the other data is voluntary. However, failure to provide complete and accurate information may limit consideration or jeopardize eligibility to hold a Federal position.

IDENTIFICATION OF APPLICANT		
NAME (<i>Last, First, Middle</i>)	Date of Birth (<i>Month, Day, Year</i>)	SOCIAL SECURITY NUMBER
ADDRESS (<i>Number, Street, City, State and Zip</i>)	TITLE OF POSITION APPLIED FOR	

SECTION A - PHYSICAL LIMITATIONS

Answer each item "YES" or "NO" by placing an "X" in the proper box below. If you answer "NO" to any item, give additional details in Section D.

	YES	NO
1. Can you read small newspaper print (corrective lenses permitted)? - - - - -		
2. Can you distinguish basic colors (red, green, blue)? - - - - -		
3. Can you distinguish shades of colors? - - - - -		
4. Can you distinguish normal tastes and smells? - - - - -		
5. Can you communicate effectively and independently by telephone? - - - - -		

SECTION B - PHYSICAL ENDURANCE FACTOR

Answer each item "YES" or "NO" by placing an "X" in the proper box below to show your physical ability to carry out the listed activities during each workday. If you answer "NO" to any item, give additional details in Section D.

During the workday are you able to perform activities involving the following:	YES	NO
1. Sitting for long periods of time?.....		
2. Standing for long periods of time?.....		
3. Some walking on flat surfaces, slight inclines, and occasionally climbing stairs?.....		
4. Frequent walking and/or climbing stairs or steep inclines?.....		
5. Continuous pulling (____ hours)?.....		
6. Occasional pushing and pulling		
7. Frequent pushing and pulling motions?.....		
8. Occasional bending, stooping, and crouching?.....		
9. Frequent bending, stooping, and crouching?.....		
10. Lifting and carrying under 15 pounds?.....		
11. Lifting and carrying 15 to 44 pounds?.....		
12. Lifting and carrying 45 pounds or over?.....		
13. Reaching above shoulders?.....		
14. Repeated bending (____ hours)?.....		
15. Standing (____ hours)?.....		
16. Crawling (____ hours)?.....		
17. Kneeling (____ hours)?.....		
18. Climbing, use of arms and legs?.....		
19. Operating a motor vehicle?.....		
20. Working under pressure and time constraints?.....		
21. Performing rapid mental and muscular coordination simultaneously?.....		

SECTION C - ENVIRONMENTAL ENDURANCE FACTOR

Some positions may involve unusual working conditions or working outside. Answer each item "YES" or "NO" by placing an "X" in the proper box below. If you answer "NO" to any item, give additional details in Section D.

Can you work under the following conditions:	YES	NO
1. Outside and inside? -----		
2. Severe heat? -----		
3. Severe cold? -----		
4. Severe humidity? -----		
5. Severe dampness or chilling? -----		
6. Dry atmospheric conditions? -----		
7. Severe noise? -----		
8. Constant noise? -----		
9. Dusty atmosphere? -----		
10. Some exposure to fumes, smoke, or gases? -----		
11. Some (incidental) contact with solvents, greases, and oils? -----		
12. Some contact with laboratory substances or chemicals? -----		
13. Working with hands in water? -----		
14. Occasional walking over rough terrain? -----		
15. Slippery or uneven walking surfaces? -----		
16. Around machinery with moving parts? -----		
17. Around moving objects or vehicles? -----		
18. Climbing ladders/scaffolding? -----		
19. Working below ground surface? -----		
20. Working alone? -----		
21. Working closely with others? -----		
22. Protracted or irregular hours of work? -----		
23. Commercial air travel? -----		
24. Rotating shifts? -----		
25. Nights? -----		

Attachment 8.B Pre-deployment Guidance for Response Personnel

The following guidance is an excerpt from the FAD PReP/NAHEMS Guidelines: Health and Safety. Refer to the guidelines for further detail.

Pre-Deployment Preparation

Because emergency situations may arise quickly, personnel with emergency response duties should maintain a certain level of readiness.

Personal Health

Responders reporting for duty must be in physical and mental condition to perform their assigned duties. To comply with this requirement, responders are encouraged to have regular physical examinations to assess their current health status. Personnel found unable to respond and contribute to the animal emergency response operation are deemed unable to participate in the field operation and will be required to leave the incident scene.

The following items are recommended for emergency response personnel:

- Current Tetanus/diphtheria booster.
- Know rabies vaccination status and date of last titer.
- Seasonal influenza vaccination. (Highly encouraged if responding to Highly Pathogenic Avian Influenza [HPAI] outbreaks. Note: The seasonal flu vaccine does not protect against infection with avian or novel Hemagglutinin Type 1 and Neuraminidase Type 1 [H1N1] flu strains. However, vaccination against seasonal influenza is encouraged under the theory that it helps prevent simultaneous infection with the avian or novel H1N1 and a human influenza strain and decrease the risk of a highly infectious influenza strain developing from a mixture of the strains.)
- Pneumococcal vaccine is recommended for persons over 65 years of age or with health conditions affecting the pulmonary or immune systems, such as diabetes, acquired immunodeficiency syndrome, renal dysfunction, and chronic lung disease.

In the event of an international deployment, additional vaccines may be required. Responders should be aware of any chronic disease conditions which may affect their ability to perform tasks in the field. Assignments to other less physically demanding functions can be made. Pregnancy may impair one's ability to perform some tasks, and some tasks may put the fetus at risk.

Personal Packing List

Preparation for deployment should begin prior to receiving a deployment notification. Emergency response personnel are expected to be self-sufficient with respect to personal supplies, equipment, and some PPE. Many of these items can be assembled and stored in anticipation of a deployment.

Items to consider packing for deployment include the following:

- Thirty-day supply of prescription medicines
- Photo ID badge
- Driver's license
- Specifically designed earmuffs and ear plugs (disposable and reusable)
- Splash proof goggles or glasses (unbreakable)
- Sunscreen
- Insect repellent containing N, N-diethyl-meta-toluamide, also known as DEET
- Lip balm
- First aid kit
- Non-prescription medications: (for example, pain relievers, allergy medications, cold medication, and anti-diarrheal medication)
- Clothing appropriate to climate, weather conditions (rain gear, gloves, and hat or cap) and PPE requirements
- Footwear and extra socks appropriate to climate, weather conditions, and PPE requirements
- Alarm clock (not electric)
- Flashlight and extra batteries
- Cell phone charger and extra battery
- Extra glasses or contact lenses
- Sunglasses
- Sleep aids (for example, ear plugs and eye shields)
- Medical and safety information: Emergency Management Response System information (it is your responsibility to keep information current) and medical clearances (for example, PPE clearance, and fit-test)
- Documentation of training (for example, driver's training).

A more comprehensive general packing list is provided in Appendix A: Pre-Deployment Checklist/What to Pack and the Introduction to NAHERC web module.

Attachment 8.C Protocol for Encountering Dogs

1. Think first, act second, and use common sense.
2. Be aware when approaching premises or entering yards. Response team personnel must be aware of their surroundings. When approaching an entrance, response team personnel will stop and observe.
3. Response team personnel will ask owners if dogs are present on the premises. Response team personnel will not enter or work in an area where dogs are present and have direct access to response team personnel.
4. If dogs are present, they should be restrained or separated from response team personnel while they are working.
5. Response team personnel will ask owners to restrain any dogs or other possibly dangerous animals present.
6. If the owner does not restrain the dog, personnel should call law enforcement or animal control.
7. If possible, response team personnel will enter the premises with another person.
8. If dogs are barking but cannot be seen, response team personnel will not enter the premises. Response team personnel will instead contact their supervisors.
9. If confronted by a dog, response team personnel should not stare directly into the dog's eyes.
10. If response team personnel are threatened, they will stop, back away, and get a gate or fence between themselves and the dog.

See the FAD PReP/NAHEMS Guidelines: Health and Safety for additional guidance on encountering dogs.

Attachment 8.D Guidance for Workers Handling Poultry Infected with HPAI

The following guidance is from [APHIS Directive 6800.1](#), “Ensuring the Protection of Employees Involved in Highly Pathogenic Avian Influenza Control and Eradication Activities,” which establishes policy and guidance for all APHIS Programs. See [Attachment 8.N](#) for a copy of the directive.

1. All persons who have who have been in contact with HPAI infected or exposed poultry or birds, their feces or respiratory secretions, or contact with contaminated or potentially contaminated surfaces must wash their hands frequently. Hand hygiene also must be performed immediately after gloves are removed and must consist of washing with soap and water for at least 15-20 seconds using other standard hand-disinfection procedures as specified by State government, industry, or USDA outbreak-response guidelines.
2. All workers involved in the culling, transport, or disposal of HPAI virus-infected poultry must not eat, drink or smoke while performing these duties and must be provided with the following appropriate personal protective equipment:
 - a. Protective clothing capable of being disinfected or discarded, preferably coveralls or surgical gowns and long cuffed sleeves (plus an impermeable apron¹).
 - b. Gloves capable of being disinfected or discarded; gloves must be carefully removed and discarded or disinfected and hands should be thoroughly washed when possible or disinfected using an alcohol-based hand cleaner. Gloves should be changed if torn or otherwise damaged.
 - c. Respirators: the minimum recommendation is a National Institute for Occupational Safety and Health (NIOSH) approved disposable particulate respirator (e.g., N95, N99 or N100) used as part of a comprehensive respiratory protection program. The elements of such a program are described in 29 CFR 1910.134. At a minimum, workers will be medically cleared and fit tested for the model and size respirator they wear. The workers will also be trained to fit check the seal of the face piece to the face. An N95 or higher respirator that is fluid resistant should be considered for workers who have a high risk of exposure to splashes or fluids.
 - d. Eye protection (for example, goggles).
 - e. Boots or protective foot covers that can be disinfected or discarded.
3. Environmental cleaning and disinfection, carried out in areas of culling, should use the same protective measures as in items 1 and 2.
4. Unvaccinated workers are highly encouraged to immediately receive the current season's inactivated influenza virus vaccine to reduce the possibility of dual infection with avian and human influenza A viruses and potential genetic reassortment. Influenza vaccine recipients should be advised that the seasonal influenza vaccine does not protect against avian influenza viruses. This vaccine will be made available at no cost to the worker.

¹ Impermeable apron must also be cut resistant.

-
5. Workers also are highly encouraged to receive an influenza antiviral drug daily (that is approved for the use of prophylaxis), for the duration of time during which direct contact with poultry, their secretions, or contact with contaminated surfaces occurs and continuing seven days after the last day of potential virus exposure. The choice of antiviral drug should be based on sensitivity testing when possible. In the absence of sensitivity testing, a neuraminidase inhibitor (for example, oseltamivir) is the first drug of choice since it is less likely that the virus will be resistant to this class of antiviral drugs than to amantadine or rimantidine.
 6. Potentially HPAI virus exposed workers must monitor their health for the development of avian influenza symptoms such as fever, respiratory symptoms, and/or conjunctivitis (i.e., eye infections) for 1 week after last exposure to HPAI virus-infected or exposed birds or to potentially contaminated environmental surfaces. Individuals who become ill should seek prompt medical care and give notification prior to arrival at the health care provider's office or clinic that they may have been exposed to an HPAI virus.
 7. To prevent the possible risk of transmission of an HPAI virus to their contacts, especially household members, ill persons must practice good respiratory and hand hygiene to lower the risk of transmission of the virus to others. For more information, visit the Center for Disease (CDC) "Cover Your Cough" website: www.cdc.gov/flu/protect/covercough.htm
 8. Patients or health care providers who wish to report possible human cases of HPAI infection or disease should consult with their local or State Department of Health.

The [*Interim Guidance for Implementation of APHIS Directive 6800-1*](#), contains additional guidance related to human avian influenza infection prevention and control, training of workers, basic infection control, use of PPE, decontamination measures, vaccine and antiviral use, surveillance for illness, and appropriate evaluation of persons who become ill. This document also contains the following:

1. A training checklist ([Attachment 8.K](#)), which employees who are involved in HPAI control and eradication activities are required to complete.
2. Drug Information for Tamiflu® ([Attachment 8.L](#)), which provides information on the side effects and contradictions of Tamiflu®.
3. The Avian Influenza Exposure Symptom Questionnaire (end of [Attachment 8.O](#)), which must be completed by all APHIS workers prior to commencing HPAI control and eradication activities.
4. The Declination of Human Influenza Vaccine form ([Attachment 8.M](#)), which employees must sign accepting or declining the seasonal human influenza vaccine.

See [Attachment 8.O](#) for a copy of the interim guidance.

In addition to the guidance contained in these documents, all persons involved in HPAI control and eradication activities must do the following:

1. Remove protective clothing (except for gloves) first and discard or secure the clothing for disinfection before removing their respirators and goggles. Before removing their gloves workers should wash their gloved hands thoroughly with soap and water, and after

removing the gloves, they should wash their hands again. Doffing of personal protective clothing/equipment should only be done in the decontamination zone.

2. Shower completely (including a shampoo) at the end of the activity or work shift, using a decontamination trailer or other facility that has been set up for this purpose (utilizing a dirty room for clothing removal and showering and a clean room for dressing in freshly laundered clothing to be worn home). Personnel should also clean under their fingernails. All these should be done immediately after leaving the infected or exposed area.
3. Not wear any item of clothing (including shoes and underwear) that is worn during HPAI control and eradication activities outside the home or to any public places outside of the infected/exposed area.

Attachment 8.E Protocol for HPAI Field Staff

Personal Safety

NOTE: If you fear for your personal safety from the owner or occupant of a premises or a member of the public, leave the premises immediately and call your supervisor.

Members of the Public May Attempt to Intimidate or Incite a Reaction

If a member of the public attempts to intimidate or incite a reaction from you, do the following:

- Remain calm.
- Ask them to step away.
- Tell them that by interfering with a government employee doing his/her job, they are in violation of Title 18 Section 111 of the U.S. Code, and may be subject to fines or up to 1 year in prison, or both.

Media

If you are approached by a member of the media, you should refer them to the Media Desk. Refer all other calls to the hotline, including those from elected officials, attorneys or other legal representatives, and the general public.

Serving Warrants

While serving warrants, no response team personnel should approach a premises until law enforcement personnel have cleared the way and safety is established.

NOTE: Threats may be implied or overt. Document any hostile behavior directed toward members of the response team and give the documentation to the ICP Safety Officer.

U.S. Code

Section 111—Assaulting, resisting, or impeding certain officers or employees

(a) In General. —

Whoever —

(1) forcibly assaults, resists, opposes, impedes, intimidates, or interferes with any person designated in Section 1114² of this title while engaged in or on account of the performance of official duties; or (2) forcibly assaults or intimidates any person who formerly served as a person

² Section 1114—Protection of officers and employees of the United States:

“...any officer or employee of the United States or of any agency in any branch of the United States Government (including any member of the uniformed services) while such officer or employee is engaged in or on account of the performance of official duties, or any person assisting such an officer or employee in the performance of such duties or on account of that assistance, shall be punished...”

designated in Section 1114 on account of the performance of official duties during such person's term of service, shall, where the acts in violation of this section constitute only simple assault, be fined under this title or imprisoned not more than one year, or both, and in all other cases, be fined under this title or imprisoned not more than three years, or both.

Attachment 8.F OSHA Respirator Fit Testing Procedures

Appendix A to OSHA Standard § 1910.134: Fit Testing Procedures (Mandatory) can be accessed at:

http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=9780.

Part I. OSHA-Accepted Fit Test Protocols

A. Fit Testing Procedures—General Requirements

The employer shall conduct fit testing using the following procedures. The requirements in this appendix apply to all OSHA-accepted fit test methods, both quality fit test (QLFT) and quantitative fit test (QNFT).

1. The test subject shall be allowed to pick the most acceptable respirator from a sufficient number of respirator models and sizes so that the respirator is acceptable to, and correctly fits, the user.
2. Prior to the selection process, the test subject shall be shown how to put on a respirator, how it should be positioned on the face, how to set strap tension, and how to determine an acceptable fit. A mirror shall be available to assist the subject in evaluating the fit and positioning of the respirator. This instruction may not constitute the subject's formal training on respirator use, because it is only a review.
3. The test subject shall be informed that he/she is being asked to select the respirator that provides the most acceptable fit. Each respirator represents a different size and shape, and if fitted and used properly, will provide adequate protection.
4. The test subject shall be instructed to hold each chosen facepiece up to the face and eliminate those that obviously do not give an acceptable fit.
5. The more acceptable facepieces are noted in case the one selected proves unacceptable; the most comfortable mask is donned and worn at least 5 minutes to assess comfort. Assistance in assessing comfort can be given by discussing the points in the following item A.6. If the test subject is not familiar with using a particular respirator, the test subject shall be directed to don the mask several times and to adjust the straps each time to become adept at setting proper tension on the straps.
6. Assessment of comfort shall include a review of the following points with the test subject and allowing the test subject adequate time to determine the comfort of the respirator:
 - a. Position of the mask on the nose
 - b. Room for eye protection
 - c. Room to talk
 - d. Position of mask on face and cheeks.
7. The following criteria shall be used to help determine the adequacy of the respirator fit:

-
- a. Chin properly placed
 - b. Adequate strap tension, not overly tightened
 - c. Fit across nose bridge
 - d. Respirator of proper size to span distance from nose to chin
 - e. Tendency of respirator to slip
 - f. Self-observation in mirror to evaluate fit and respirator position.
8. The test subject shall conduct a user seal check, either the negative and positive pressure seal checks described in Appendix B-1 of this section or those recommended by the respirator manufacturer which provide equivalent protection to the procedures in Appendix B-1. Before conducting the negative and positive pressure checks, the subject shall be told to seat the mask on the face by moving the head from side to side and up and down slowly while taking in a few slow deep breaths. Another facepiece shall be selected and retested if the test subject fails the user seal check tests.
 9. The test shall not be conducted if there is any hair growth between the skin and the facepiece sealing surface, such as stubble beard growth, beard, mustache, or sideburns which cross the respirator sealing surface. Any type of apparel which interferes with a satisfactory fit shall be altered or removed.
 10. If a test subject exhibits difficulty in breathing during the tests, she or he shall be referred to a physician or other licensed health care professional, as appropriate, to determine whether the test subject can wear a respirator while performing her or his duties.
 11. If the employee finds the fit of the respirator unacceptable, the test subject shall be given the opportunity to select a different respirator and to be retested.
 12. Exercise regimen. Prior to the commencement of the fit test, the test subject shall be given a description of the fit test and the test subject's responsibilities during the test procedure. The description of the process shall include a description of the test exercises that the subject will be performing. The respirator to be tested shall be worn for at least 5 minutes before the start of the fit test.
 13. The fit test shall be performed while the test subject is wearing any applicable safety equipment that may be worn during actual respirator use which could interfere with respirator fit.
 14. Test exercises.

For these two protocols, employers must ensure that the test subjects (employees) perform the exercise procedure specified in Part I.C.4(b) of this appendix for the controlled negative pressure (CNP) quantitative fit testing protocol, or the exercise procedure described in Part I.C.5(b) of this appendix for the CNP REDON quantitative fit-testing protocol. For the remaining fit testing methods, employers must ensure that employees perform the test exercises in the appropriate test environment in the following manner:

- a. Employers must perform the following test exercises for all fit testing methods prescribed in this appendix, except for the controlled negative pressure (CNP) quantitative fit testing protocol and the CNP REDON quantitative fit testing protocol.

For these two protocols, employers must ensure that the test subjects (i.e. employees) perform the exercise procedure specified in Part I.C.4(b) of this appendix for the CNP quantitative fit testing protocol, or the exercise procedure described in Part I.C.5(b) of this appendix for the CNP REDON quantitative fit-testing protocol. For the remaining fit testing methods, employers must ensure that employees perform the test exercises in the appropriate test environment in the following manner:

- i. Normal breathing. In a normal standing position, without talking, the subject shall breathe normally.
- ii. Deep breathing. In a normal standing position, the subject shall breathe slowly and deeply, taking caution so as not to hyperventilate.
- iii. Turning head side to side. Standing in place, the subject shall slowly turn his/her head from side to side between the extreme positions on each side. The head shall be held at each extreme momentarily so the subject can inhale at each side.
- iv. Moving head up and down. Standing in place, the subject shall slowly move his/her head up and down. The subject shall be instructed to inhale in the up position (i.e. when looking toward the ceiling).
- v. Talking. The subject shall talk out loud slowly and loud enough so as to be heard clearly by the test conductor. The subject can read from a prepared text such as the Rainbow Passage (see Box 8-1). [Subjects can also count backward from 100, or recite a memorized poem or song.]

Box 8-1. Example Text

When the sunlight strikes raindrops in the air, they act like a prism and form a rainbow. The rainbow is a division of white light into many beautiful colors. These take the shape of a long round arch, with its path high above, and its two ends apparently beyond the horizon. There is, according to legend, a boiling pot of gold at one end. People look, but no one ever finds it. When a man looks for something beyond reach, his friends say he is looking for the pot of gold at the end of the rainbow.

- vi. Grimace. The test subject shall grimace by smiling or frowning. (This applies only to QNFT testing; it is not performed for QLFT.)
 - vii. Bending over. The test subject shall bend at the waist as if he/she were to touch his/her toes. Jogging in place shall be substituted for this exercise in those test environments such as shroud type QNFT or QLFT units that do not permit bending over at the waist.
 - viii. Normal breathing. Same as exercise (1).
- b. Each test exercise shall be performed for one minute except for the grimace exercise which shall be performed for 15 seconds. The test subject shall be questioned by the test conductor regarding the comfort of the respirator upon completion of the protocol. If it has become unacceptable, another model of respirator shall be tried. The respirator shall not be adjusted once the fit test exercises begin. Any adjustment voids the test, and the fit test must be repeated.

Attachment 8.G Mental Health Concerns

To protect the health and safety of all personnel, it is critical to take into account the toll that a HPAI outbreak can take on an individual's mental health.

In the case of a HPAI outbreak, the effects of HPAI depopulation efforts can significantly affect the health of responders, poultry owners, and others impacted by the outbreak and response efforts.

Personnel should receive training on how to effectively deal with euthanasia-related stress. Physical as well as mental and emotional stress can occur before, during, and after participation in mass depopulation efforts. Personnel involved in depopulation activities should be made aware of any available mental health counselors available for their use. If evidence of undue stress is observed, report it to the ICP and refer the individual a mental health counselor and, if possible, shift him or her to less traumatic roles in the animal disease eradication effort. At the very least, encourage responders to take frequent breaks, eat regular meals, get adequate sleep, and engage in leisure activities that provide opportunities for detachment and stress relief. Promoting these stress-relieving activities also helps to prevent fatigue and stress-related accidents.

The Department of Health and Human Services has developed resources specifically for emergency and disaster responders, States and planners, health professionals, and the general public: <http://www.bt.cdc.gov/mentalhealth/>. In addition, further information on how personnel can effectively deal with euthanasia-related stress is provided in the HPAI Mass Depopulation and Euthanasia SOP.

Attachment 8.H Donning and Doffing PPE Levels A and B

Levels A/B

These are the two highest levels of PPE protection—used for unknown agents (usually chemical or radiologic) in high concentrations. Special training is required for handling hazards that require this type of PPE use.

Level B PPE Protection

PPE Level B protection is required when the highest level of respiratory protection is necessary but a lesser level of skin protection is needed than in Level A. Where Level C requires an APR, Level B requires a Self-Contained Breathing Apparatus (SCBA).

Collect the following supplies and prepare to don PPE:

- Four-inch width chemical-resistant tape.
- A pair of blunt-nosed scissors.
- Strips of chemical-resistant tape that have been measured and cut long enough to fit around ankles, wrists, and over zipper and crotch; 4–5 4-inch pieces of tape to be used around the facepiece of the respirator; and several extra pieces in case one of the pieces accidentally bunches against itself and becomes unusable. Put tabs on all chemical-resistant tape to assist with removal.
- Communication radios and headsets (if applicable). Perform a communications check before use.
- A pair of socks long enough to fit under the pant legs of the scrub suit.
- Disposable underwear.
- A two-piece scrub suit or other appropriate undergarment.
- An optional disposable sweatband or surgical hat.
- Disposable gloves.
- Two pairs of chemical-resistant gloves. The inner pair should be in the wearer's size and the outer pair should be at least ½ size larger so that they can be worn over the protective suit.
- SCBA.
- A chemical-resistant disposable protective suit.
- Chemical-resistant steel-toed boots.

Don PPE

1. Remove all outerwear and underwear including socks. Don a dedicated pair of socks, disposable underwear, and scrubs.
2. Put on a disposable protective suit.
3. Put on a pair of disposable gloves.
4. Put on the inner pair of chemical-resistant gloves.
5. Test the SCBA respirator using standard operational procedures found in the Safety and Health manual, Chapter 11, supplemental section B.
6. Attach the facepiece to the respirator.
7. Turn on the SCBA respirator unit and put it on. This must be done with a buddy.
8. Using the buddy system, pull on the hood of the protective suit and seal the edge of the SCBA respirator to the hood with chemical resistant tape.
9. Step into a pair of rubber boots, pull the legs of the suit over the boot tops, and seal the suit legs securely with chemical-resistant tape around the ankle area.
10. Put on the outer pair of chemical-resistant gloves. Pull the cuffs of the protective suit over the gloves and tape the sleeves to the gloves by placing the chemical resistant tape equal distance over the suit cuff and glove. Wrap the tape up to three additional turns around wrists to ensure a tight seal between the cuffs of the garment and the cuffs of the gloves. Although one turn is sufficient with chemical-resistant tape that is 3–4 inches (7.6–10 cm) wide, two or even three turns are required with narrow tape that is 1–2 inches (2.5–5 cm) wide.

Doff PPE

Doffing occurs after team members have completed their current task and decontamination procedures. The following describes the process for doffing:

1. Remove all chemical-resistant tape from the suit, including gloves, boots, facepiece, and zipper. Dispose of tape in provided containers.
2. Remove the inner and outer layer of chemical-resistant gloves.
3. Follow standard operational procedures to shut down and remove the air pack.
4. Sitting on a stool or other support, remove boots and place in a designated container.
5. Unzip the outer disposable protective suit.
6. Reach inside the hood and roll it back, touching only the inside of the suit. This step is easiest with the assistance of a team member.
7. Take the SCBA off and hold it in one hand. Pull the suit off one shoulder (turning it inside out) to ensure any residual contamination is kept away from the body. Switch the SCBA to the other hand, and pull the suit off the opposite shoulder.
8. Peel the protective suit down from head to toe and step out of the suit.

-
9. Place the suit in a designated container.
 10. Remove inner gloves and dispose in a designated container.
 11. Remove and dispose of dedicated outerwear and underwear.
 12. Remove the SCBA face piece and place in designated container before departing the premises.

Level A PPE Protection

Level A protection is selected when the greatest level of skin, respiratory, and eye protection is required. Level A requires a totally encapsulating chemical protective suit for skin protection and an SCBA for respiratory and eye protection. Emergency response activities in which veterinary responders are involved will almost never necessitate the use of Level B or Level A PPE. Special training is required for handling hazards that require these levels of PPE protection.

Attachment 8.I Incident Reporting for Government Employees

Included below are excerpts from FAD PReP/NAHEMS Guidelines: Health and Safety. Please refer to the guidelines for further detail.

General

1. Immediately notify the supervisor or next higher official of all incidents that occur during a response.
2. Complete all appropriate forms and comply with the instructions when submitting forms and/or medical information.
3. Report incidents via telephone to the Safety Health and Environmental Protection Branch (SHEPB) personnel at APHIS as soon as possible but no later than 2 hours after occurrence.
4. Complete written reports within 5 days of occurrence.
5. Incident reports must include:
 - a. Date, time, and place of occurrence
 - b. Person(s) involved
 - c. Type of incident
 - d. Description of the incident and action taken
 - e. Recommendation(s) for prevention of a similar occurrence.
6. Sign and date the completed report. The Safety Officer will sign and date the report upon receipt. All incident reports and follow-up action on the incidents will be kept on file by the SHEPB department.

Accident and Injury Reports

1. For any serious accident or emergency, call 911.
2. Immediately report all accidents or injuries to your supervisor and the Safety Officer.
3. Seek medical assistance, if necessary.
4. In case of a serious injury, response personnel should be accompanied to the hospital by another response team member.
5. Following an accident or injury, supervisors will immediately initiate an investigation and develop recommendations for remediation. Supervisors should consult with the IC as appropriate.
6. Federal response personnel can obtain Office of Workers' Compensation Programs (OWCP) forms from the Finance Unit. Temporary employees should see their employment agency representative for State Workers' Compensation Forms.

Workers' Compensation

Workers' Compensation is available for government employees injured while working. OWCP forms may be downloaded from the following website:

<http://www.dol.gov/owcp/dfec/regs/compliance/forms.htm>.

Employee

1. Report injury/illness to supervisor.
2. Review CA-10 (What to do When Injured).
3. Complete CA-1 (Notice of Traumatic Injury and Claim for Continuation of Pay/Compensation) or CA-2 (Notice of Occupational Disease and Claim for Compensation) as appropriate.
4. If medical treatment is required complete the CA-16 (Authorization for Examination and/or Treatment).
5. Return all completed documents (CA-1/CA-2 and medical documentation) to supervisor.

Supervisor

1. Ensure employee obtains treatment, if necessary.
2. Ensure all required documents are completed, including employee and supervisor signatures, and transferred to the Safety Officer as soon as possible.

Safety Officer

1. Maintain required forms.
2. Review documents for completeness.
3. Update all required OSHA forms and reports.
4. Transfer ALL OWCP forms and medical documentation to the Finance Officer, as soon as possible.

Finance Officer:

1. Scan all OWCP (CA-1 and CA-16) documents and medical documentation and e-mail to Marquess.C.Commodore@aphis.usda.gov as soon as possible.
2. Mail all OWCP documents and medical documentation to:

USDA APHIS Workers' Compensation Program
Safety, Health, and Environmental Protection Branch
4700 River Road, Unit 124
Riverdale, MD 20737

Workers' Compensation Program Manager

Send all OWCP forms indicating treatment or lost time to the appropriate OWCP District Office. Copies of forms will be sent to the employee's official duty station office/regional office. Send first aid forms to the employee's official duty station.

Attachment 8.J Demobilization ICS Form 221

DEMOBILIZATION CHECKOUT		ICS-221
1. INCIDENT NAME/NUMBER	2. DATE/TIME	3. DEMOB NO.
4. UNIT/PERSONNEL RELEASED		
5. TRANSPORTATION TYPE/NO.		
6. ACTUAL RELEASE DATE/TIME		7. MANIFEST YES NO NUMBER _____
8. DESTINATION _____		9. AREA/AGENCY/REGION NOTIFIED NAME _____ DATE _____
10. UNIT LEADER RESPONSIBLE FOR COLLECTING PERFORMANCE RATING		
11. UNIT/PERSONNEL YOU AND YOUR RESOURCES HAVE BEEN RELEASED SUBJECT TO SIGNOFF FROM THE FOLLOWING: (DEMOB. UNIT LEADER CHECK <input checked="" type="checkbox"/> APPROPRIATE BOX)		
<u>LOGISTICS SECTION</u>		
<input type="checkbox"/> SUPPLY UNIT _____		
<input type="checkbox"/> COMMUNICATIONS UNIT _____		
<input type="checkbox"/> FACILITIES UNIT _____		
<input type="checkbox"/> GROUND SUPPORT UNIT LEADER _____		
<u>PLANNING SECTION</u>		
<input type="checkbox"/> DOCUMENTATION UNIT _____		
<u>FINANCE/ADMINISTRATION SECTION</u>		
<input type="checkbox"/> TIME UNIT _____		
<u>OTHER</u>		
<input type="checkbox"/> _____		
<input type="checkbox"/> _____		
12. REMARKS _____ _____		
221 ICS 1/83		

NFES 1353

INSTRUCTIONS ON BACK

INSTRUCTIONS FOR COMPLETING THE DEMOBILIZATION CHECKOUT
(ICS FORM 221)

Prior to actual demobilization, Planning Section (Demobilization Unit) should check with the Command Staff (Liaison Officer) to determine any agency specific needs related to demobilization and release. If any, add to line Number 11.

Item Number	Item Title	Instructions
1.	Incident Name/No.	Print Name and/or Number of incident.
2.	Date/Time	Enter Date and Time prepared.
3.	Demob No.	Enter Agency Request Number, Order Number, or Agency Demobilization Number if applicable.
4.	Unit/Personnel Released	Enter appropriate vehicle or Strike Team/Task Force I.D. Number(s) and Leader's name or individual overhead or staff personnel being released.
5.	Transportation Type/No.	Method and vehicle I.D. Number for transportation back to home unit. Enter N/A if own transportation is provided. *Additional specific details should be included in Remarks, block #12.
6.	Actual Release Date/time	To be completed at conclusion of demobilization at time of actual release from incident. Would normally be last item of form to be completed.
7.	Manifest	Mark appropriate box. If yes, enter manifest number. Some agencies require a manifest for air travel.
8.	Destination	Location to which Unit or personnel have been released, i.e., Area, Region, Home base, Airport, Mobilization Center, etc.
9.	Area/Agency/Region Notified	Identify Area, Agency, or Region notified and enter date & time of notification.
10.	Unit Leader Responsible for Collecting Performance Ratings	Self-explanatory. Note, not all agencies require these ratings.
11.	Unit/Personnel	Demobilization Unit Leader will identify with a check in the box to the left of those units requiring check-out. Identified Unit Leaders are to initial to the right to indicate release. Blank boxes are provided for any additional check (unit requirements as needed), i.e., Safety Officer, Agency Representative, etc.
12.	Remarks	Any additional information pertaining to demobilization or release.

*GPO 1985-0-593-005/14032

Attachment 8.K Training Checklist

This attachment depicts the training checklist APHIS employees are required to complete before becoming involved in HPAI control and eradication activities. A negative response to any of the questions below may negatively impact whether an employee may respond to an incident involving HPAI.

Please read, circle appropriate response, and initial each item below. Sign form at bottom when completed.

_____ 1. **I understand/do not understand (circle one)** that the H7N2 strain of avian influenza and all previous US outbreaks of AI have not been found to cause disease in any humans in the US.

_____ 2. **I understand/do not understand (circle one)** that these guidelines provided by APHIS are the recommendations of the Centers for Disease Control and Prevention (CDC) for maximum protection for workers exposed to AI virus and that these precautions are being taken for my personal protection against the risk of human infection with AI virus.

_____ 3. **I have/have not (circle one)** completed and passed the “Avian Influenza Exposure Symptom Questionnaire” prior to being exposed to AI infected poultry or premises contaminated with AI virus.

_____ 4. **I have/have not (circle one)** received the seasonal human flu vaccine. I received this vaccine at least two weeks **prior to today/today (circle one.)** If I refuse vaccination **I agree/not agree (circle one)** to sign the declination form (Attachment 4). **I understand/do not understand (circle one)** that this vaccination will not prevent human infection by AI viruses but is intended to minimize the likelihood of an AI virus from recombining with human influenza viruses.

_____ 5. **I have/have not (circle one)** been offered antiviral medications and **agree/do not agree (circle one)** to take them as directed by medical professionals.

_____ 6. **I agree/do not agree (circle one)** to wear the Personal Protective Equipment (PPE) recommended by my employer at all times during possible exposure to AI virus. This PPE includes but is not limited to: cloth gloves over nitrile disposable gloves (replace gloves immediately if torn or otherwise damaged), discardable clothing and foot wear or washable boots that can be cleaned and disinfected on site, eye protection, disposable particulate N-95 (or higher) type respirator, and hair bonnet. I have/have not (circle one) been instructed on how to properly remove contaminated PPE to prevent cross contamination.

_____ 7. **I have/have not (circle one)** been fit tested and approved to wear an N-95 equivalent or higher respirator during the completion of physically strenuous activities.

_____ 8. **I have/have not (circle one)** been instructed about the importance of strict

adherence to and proper use of hand hygiene after contact with AI infected poultry or AI virus contaminated surfaces. After removing protective gloves **I agree/do not agree (circle one)** to thoroughly wash my hands with soap and water for at least 10-15 seconds or to use other hand disinfection procedures as specified by the Safety Officer.

_____ 9. **I agree/do not agree (circle one)** to shower at the end of the work shift in a decontamination unit on site or via arrangements with local hotels using a dirty room for clothing removal and showering and a clean room for dressing in clean clothing to be worn home.³ Under no circumstances will I wear clothing worn in an AI contaminated environment home: this includes shoes, underwear, etc.

_____ 10. **I agree/do not agree (circle one)** to complete the attached health questionnaire on or about day 7 and again on day 14 after possible exposure to AI virus. If I answer “yes” to any question **I agree/do not agree (circle one)** to be referred to the healthcare provider and to follow their instructions for further examination and specimen collection as needed. I understand that my personal health information may be shared with appropriate county and state health departments and **agree/do not agree (circle one)** to follow additional directions from these agencies if requested to do so.

_____ 11. **I understand/do not understand (circle one)** that both Safety Officers and healthcare providers will be on site to answer any questions that I may have concerning these guidelines.

Printed Name: _____ Date: _____

Signature: _____

³ Priority should be given to showering facilities in the decontamination area.

Attachment 8.L Drug Information for Tamiflu®

This attachment depicts the Drug Information Sheet for the side effects and contraindications of Tamiflu®.

Attachment 2

Drug Information for Tamiflu® (Oseltamivir)

Brand Name: Tamiflu®

Active Ingredient: Oseltamivir Phosphate

Strength(s): 75 mg AND 12 mg/ ml

Dosage Form(s): Capsule AND Powder (for oral suspension)

Side Effects: Side effects of Tamiflu® in adults include, but are not limited to, the following:

- Nausea
- Vomiting
- Diarrhea
- Dizziness
- Headache
- Bronchitis
- Stomach pain
- Insomnia
- Vertigo
- Cough
- Fatigue

Rarer side effects in adults, occurring in less than 1% of patients receiving Tamiflu® for treatment, include:

- Unstable angina
- Fever
- Fracture of the humerus
- Peritonsillar abscess
- Anemia
- Pneumonia
- Pseudomembranous colitis

Contraindications:

- Children less than one year of age
- Tamiflu's safety and effectiveness have not been determined in people with chronic heart or lung disease, kidney failure, or in people with high-risk underlying medical conditions
- Contraindicated in individuals with known hypersensitivity to any of the components of the drug.
- Should be used in pregnancy ONLY if the potential benefit justifies the potential risk to the fetus

Attachment 8.M Declination of Human Vaccine Form

This attachment depicts the form which employees must sign accepting or declining the seasonal human influenza vaccine.

Attachment 4

Declination of Human Influenza Vaccine

I understand that due to my potential occupational exposure to avian influenza, I am being offered the seasonal human influenza vaccine. This vaccination will help to prevent the seasonal human influenza virus from recombining with the avian influenza virus potentially causing a new strain of influenza virus. This vaccine will not protect against avian influenza. I understand that by declining this vaccine I continue to be at risk of acquiring seasonal human influenza virus. If in the future I want to be vaccinated with seasonal influenza vaccine, I can request the vaccination.

Name (Print): _____

Signature: _____

Agency: _____

Last 4 of Social Security Number: _____

Date: _____

Reason for Declination:

Medically contraindicated (explain): _____

Other (explain): _____

Attachment 8.N APHIS Directive 6800.1

This attachment contains the APHIS Directive 6800.1, which specifies APHIS policy to ensure the safety of employees engaged in HPAI control and eradication activities.

**ENSURING THE PROTECTION OF EMPLOYEES INVOLVED IN HIGHLY
PATHOGENIC AVIAN INFLUENZA CONTROL AND ERADICATION ACTIVITIES**

1. PURPOSE

This Directive specifies APHIS policy to ensure the safety of employees engaged in highly pathogenic avian influenza (HPAI) control and eradication activities. The policy is based on the degree of risk known to be associated with various levels and types of exposures to HPAI viruses and should be considered complementary to avian disease control and eradication strategies as determined by State government, industry, or the United States Department of Agriculture (USDA).

2. AUTHORITIES

- a. Occupational Safety and Health Act of 1970, Section 5(a)(1), the General Duty Clause of the Act: “each employer shall furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees.”
- b. 29 Code of Federal Regulations (CFR) 1910.120, 1910.132, 1910.134, and 1910.1030, Occupational Safety and Health Administration (OSHA) General Industry Regulations.

3. BACKGROUND

Avian influenza (AI) is a contagious viral infection or disease of many avian species including poultry, wild and exotic birds, ratites, shorebirds, and migratory waterfowl. HPAI is seen primarily in poultry (rarely in other birds) and is characterized by severe depression, a decrease in egg production, high mortality, edema, hemorrhage, and necrosis. Birds that are infected with avian influenza virus can shed virus in saliva, nasal secretions, and feces. Contact with feces or respiratory secretions is important in the transmission of infection among poultry.

Avian influenza viruses may be defined as highly pathogenic based either on mortality rates in chickens following intravenous inoculations or on the amino acid sequence at the hemagglutinin cleavage site. Only those results confirmed as HPAI by the National Veterinary Services Laboratory (NVSL) in Ames, Iowa will be considered highly pathogenic.

Although HPAI viruses rarely infect humans, since 1997, instances of human infection have occurred outside the United States resulting in serious illness and even death. Transmission to humans is mainly thought to be caused by direct contact with infected poultry. The modality of transmission is not known, but could include virus entering a person's mouth, nose, eyes, or lungs via aerosolization and inhalation into the lungs, or by ingestion of contaminated material. Additionally, it is possible that infection could result from contact with virus-contaminated surfaces followed by self-inoculation of the virus in the eyes, nose, or mouth.

This Directive is based on what are currently deemed optimal precautions to protect individuals from infection and illness while they are involved in the response to an HPAI outbreak, and to guard against the subsequent risk of viral reassortment (i.e., mixing of genes from human and avian viruses) if a human does become infected.

Employees involved in HPAI control and eradication activities on known affected or potentially affected premises are at increased risk for exposure to the HPAI virus because those employees frequently have prolonged and direct contact with infected birds or contaminated surfaces in an enclosed setting.

4. POLICY

- a. APHIS employees involved in activities to control and eradicate any HPAI virus among poultry in the United States or abroad must read, understand, and follow Attachment 1 entitled: "APHIS Guidance for Protecting Workers Against Highly Pathogenic Avian Influenza." This document was adapted from the Occupational Safety and Health Administration (OSHA) publications "Guidance for Protecting Workers Against Avian Flu" (<http://www.osha.gov/dsg/guidance/avian-flu.html>) and "Avian Influenza—Protecting Poultry Workers at Risk" (<http://www.osha.gov/dts/shib/shib121304.html>).
- b. Employees also must review the Centers for Disease Control and Prevention's interim guidance documents regarding protection of employees involved in controlling and eradicating avian influenza in U.S. poultry. These guidance documents, "Interim Recommendations for Persons with Possible Exposure to Avian Influenza During Outbreaks Among Poultry in the United States" and "Interim Guidance for Protection of Persons Involved in U.S. Avian Influenza Outbreak Disease Control and Eradication Activities" are available online at <http://www.cdc.gov/flu/avian/professional/possible-exposure.htm> and <http://www.cdc.gov/flu/avian/professional/protect-guid.htm>, respectively.
- c. To mitigate the risk of exposure or infection, all employees involved in such activities must follow the precautions specified in Attachment 1. Among other topics, the Attachment includes recommendations about personal protective equipment, vaccination with the seasonal influenza vaccine, administration of

antiviral drugs for prophylaxis, surveillance and monitoring of workers, and evaluation of workers who develop a febrile respiratory illness within 7 days of their last exposure to infected birds or contaminated surfaces.

- d. All employees involved in an HPAI response must understand and comply with this Directive.
- e. Any required negotiations with appropriate bargaining unit exclusive representatives will be conducted.

5. INQUIRIES

- a. Questions about this Directive or the specific instructions detailed in Attachment 1 should be directed to the Safety, Health, and Employee Wellness Branch (SHEWB), Employee Services Division, Marketing and Regulatory Programs Business Services. SHEWB can be reached during regular business hours Monday-Friday (8 AM to 5 PM Eastern Time) at 301-734-6116.
- b. This Directive is available on the Internet at www.aphis.usda.gov/library

/s/

Wm. R. DeHaven
Administrator

Attachment

**ANIMAL AND PLANT HEALTH INSPECTION SERVICE
GUIDANCE FOR PROTECTING WORKERS AGAINST HIGHLY PATHOGENIC
AVIAN INFLUENZA**

GUIDANCE FOR PROTECTING POULTRY WORKERS AT RISK

Highly pathogenic avian influenza (HPAI) is a highly contagious disease of poultry. Despite the uncertainties, poultry experts agree that immediate culling of infected and exposed birds is the first line of defense to both reduce further losses in the agricultural sector and to protect human health. However, culling must be carried out in a way that protects workers from exposures to highly pathogenic avian influenza viruses and therefore reduce the likelihood of infection, illness or viral reassortment.

Exposure to infected poultry, their feces, or respiratory secretions, or contact with potentially contaminated surfaces can result in transmission of the virus to humans. Human infection with avian influenza, however, is a rare occurrence. Although there is evidence of limited person-to-person spread of the HPAI virus infection, sustained and efficient human-to-human transmission has not been identified.

The following summarizes recommendations for protecting at-risk workers developed by the Centers for Disease Control and Prevention (CDC), the World Health Organization, and the Occupational Safety and Health Administration. Employees involved in HPAI control and eradication activities must take these precautions.

1. All persons who have been in contact with poultry, their feces or respiratory secretions, or contact with potentially contaminated surfaces must wash their hands frequently. Hand hygiene also must be performed immediately after gloves are removed and must consist of washing with soap and water for at least 15-20 seconds or using other standard hand-disinfection procedures as specified by State government, industry, or United States Department of Agriculture (USDA) outbreak-response guidelines.
2. All workers involved in the culling, transport, or disposal of HPAI virus-infected poultry must not eat, drink, or smoke while performing these duties and must be provided with the following appropriate personal protective equipment:
 - a. Protective clothing capable of being disinfected or discarded, preferably coveralls (plus an impermeable apron) or surgical gowns with long cuffed sleeves (plus an impermeable apron).
 - b. Gloves capable of being disinfected or discarded; gloves must be carefully removed and discarded or disinfected and hands should be thoroughly washed when possible or disinfected using an alcohol-based handcleaner or 10% bleach/water solution. Gloves should be changed if torn or otherwise damaged.

- c. Respirators: the minimum recommendation is a disposable particulate respirator (e.g., N95, N99 or N100) used as part of a comprehensive respiratory protection program. The elements of such a program are described in 29 CFR 1910.134. At a minimum, workers will be medically cleared and fit tested for the model and size respirator they wear and be trained to fitcheck the seal of the facepiece to the face. An N95 or higher respirator that is fluid resistant should be considered for workers who have a high risk of exposure to splashes or fluids.
 - d. Eye protection (e.g., goggles).
 - e. Boots or protective foot covers that can be disinfected or discarded.
3. Environmental clean-up must be carried out in areas of culling, using the same protective measures as in items 1. and 2., above.
 4. Unvaccinated workers are highly encouraged to immediately receive the current season's inactivated influenza virus vaccine to reduce the possibility of dual infection with avian and human influenza A viruses and potential genetic reassortment. Influenza vaccine recipients should be advised that the seasonal influenza vaccine does not protect against avian influenza viruses. This vaccine will be made available at no cost to the worker.
 5. Workers also are highly encouraged to receive an influenza antiviral drug daily (that is approved for use as prophylaxis), for the duration of time during which direct contact with poultry, their secretions, or contact with contaminated surfaces occurs and continuing 5-7 days after the last day of potential virus exposure. Antivirals must be administered in combination with inactivated influenza vaccine (as mentioned above). The choice of antiviral drug should be based on sensitivity testing when possible. In the absence of sensitivity testing, a neuraminidase inhibitor (e.g., oseltamivir) is the first drug of choice since the likelihood is smaller that the virus will be resistant to this class of antiviral drugs than to amantadine or rimantidine.
 6. Potentially exposed workers must monitor their health for the development of fever, respiratory symptoms, and/or conjunctivitis (i.e., eye infections) for 1 week after last exposure to HPAI virus-infected or exposed birds or to potentially contaminated environmental surfaces. Individuals who become ill must seek prompt medical care and give notification prior to arrival at the health care provider's office or clinic that they may have been exposed to an HPAI virus.
 7. It is important to take measures to prevent the virus from being spread to other areas. To do this, disposable items of personal protective equipment must be discarded properly, and non-disposable items must be cleaned and disinfected according to outbreak-response guidelines.
 8. To prevent the possible risk of transmission of an HPAI virus to their contacts, especially household members, ill persons must practice good respiratory and hand hygiene to lower the risk of transmission of the virus to others. For more information, visit CDC's "Cover Your Cough" website: www.cdc.gov/flu/protect/covercough.htm

9. Patients or health care providers who wish to report possible human cases of zoonotic transmission of highly pathogenic avian influenza must consult with their local or State Department of Health.

GUIDANCE FOR WILDLIFE BIOLOGISTS

1. Wildlife Biologists handling **healthy** wild birds should:
 - a. Work in a well-ventilated area if working indoors.
 - b. Work upwind of animals, to the extent practicable, to decrease the risk of inhaling aerosols such as dust, feathers, or dander when working outdoors.
 - c. Wear rubber or latex gloves that can be disinfected or disposed of.
 - d. Wear protective eyewear or a face shield while handling animals.
 - e. Wash hands with soap and water often and disinfect work surfaces and equipment between sites. If soap and water are not available, alcohol-based handcleaner or 10% bleach/water solution will be used.
 - f. Not eat, drink, or smoke while handling animals.
2. Wildlife Biologists handling **sick or dead** birds should:
 - a. Follow the recommendations above, and, at a minimum, wear protective clothing, including coveralls, rubber boots, and latex or rubber gloves that can be disinfected or disposed of.
 - b. Minimize exposure to mucosal membranes by wearing protective eyewear (goggles) and a particulate respirator (NIOSH N95 respirator at a minimum).
 - c. Decontaminate and properly dispose of potentially infectious material including carcasses.
 - d. Not eat, drink, or smoke while handling animals.
3. HPAI Response in Wild Birds. Wildlife Biologists working with wildlife in an area where HPAI H5N1 is suspected or has been detected must comply with this Directive by:
 - a. Following the recommendations above and the basic guidelines for infection control, including how to put on and use, remove, disinfect, or dispose of personal protective equipment and clothing.

- b. Washing hands with soap and water frequently and disinfecting exposed surfaces and field equipment between work sites. If soap and water are not available, alcohol-based handcleaner or 10% bleach/water solution will be used.
- c. Not eating, drinking, or smoking while handling animals.
- d. Wearing coveralls, gloves, shoe covers, or boots that can be disinfected or discarded, a respirator (NIOSH N95 respirator at a minimum protective), and eyewear (goggles).
- e. Monitoring their health for clinical signs of influenza infection, such as fever, cough or sore throat, trouble breathing, or eye inflammation, during and for one week after, their last exposure to potentially HPAI virus-infected or exposed birds.
- f. Contacting their healthcare provider if they develop fever, flu-like symptoms, or conjunctivitis (eye inflammation). Inform the provider prior to arrival that they have potentially been exposed to HPAI.

Additional information about HPAI H5N1 can be found at the following web link:
USGA National Wildlife Health Center:

http://www.nwhc.usgs.gov/disease_information/avian_influenza/index.jsp

GUIDANCE FOR VETERINARY LABORATORY WORKERS

Highly pathogenic avian influenza A viruses are classified as “select agents” and must be handled under Biosafety Level (BSL) 3 enhanced or BSL 3-Agriculture laboratory standards. These include controlled access, double door entry with change room and shower out, use of respirators when working with specimens outside a biological safety cabinet, and decontamination of all waste. Laboratories working on these viruses must be USDA-approved.

Clinical specimens from suspect HPAI virus cases may be tested by polymerase chain reaction (PCR) assays using standard BSL 2 work practices in a Class II biological safety cabinet. In addition, commercial antigen detection testing can be conducted under BSL 2 levels to test for influenza viruses.

All employers processing biologic specimens suspected of being infected with the HPAI virus must ensure that their employees comply with all provisions of 29 CFR 1910.1030 for employee protection against bloodborne pathogens, including the reporting of accidental exposure to avian influenza virus. Any accidental exposure must be reported to an immediate supervisor or employee health department.

Additional Sources of Information on Avian Influenza

Centers for Disease Control and Prevention, <http://www.cdc.gov/flu/avian/index.htm>

U.S. Department of Agriculture, Animal and Plant Health Inspection Service,
http://www.aphis.usda.gov/lpa/issues/ai_us/ai_us.html

World Health Organization, "Avian Influenza – Fact Sheet"
http://www.who.int/csr/disease/avian_influenza/en/

World Health Organization, "Avian Influenza Frequently Asked Questions"
http://www.who.int/csr/disease/avian_influenza/avian_faqs/en/

APHIS Medical Surveillance Service Form 29 and How to Complete
<http://www.aphis.usda.gov/mrpbs/forms/aphisforms.html>

Attachment 8.O Interim Guidance for Implementation of APHIS Directive 6800.1, Including Avian Influenza Exposure Symptom Questionnaire

This attachment contains the Interim Guidance for Implementation of APHIS Directive 6800.1, which contains guidance related to human avian influenza prevention and control. All APHIS workers will complete the Avian Influenza Exposure Symptom Questionnaire prior to commencing HPAI control and eradication activities.

**Interim Guidance for Implementation of APHIS
Directive 6800.1**

July 7, 2008

Summary:

- APHIS Directive 6800.1, “Ensuring the Protection of Employees Involved in Highly Pathogenic Avian Influenza Control and Eradication Activities”, was signed March 20, 2006, and establishes policy and guidance for all Programs within the Agency.
- The information contained herein provides practical guidance related to human avian influenza infection prevention and control, including guidance related to training of workers, basic infection control, use of personal protective equipment, decontamination measures, vaccine and antiviral use, surveillance for illness, and appropriate evaluation of persons who become ill.

Background:

Avian influenza is an infection caused by avian (bird) influenza (flu) viruses, type A. These flu viruses occur naturally among birds, particularly waterfowl and shore birds. Wild birds worldwide may carry the viruses in their intestines, but usually do not get sick from them. However, there is a form of avian influenza that can make some domesticated birds, including chickens, ducks, and turkeys, very sick or kill them.

Strains of avian influenza virus are classified as being of either low pathogenicity (most strains) or high pathogenicity. Low pathogenic strains typically cause few or no signs of disease in infected birds. When signs are seen, they may include respiratory problems, diarrhea, a decline in egg production, or an increase in mortality. However, under field conditions, certain low pathogenic strains (H5 and H7 subtypes) can mutate and become highly pathogenic avian influenza viruses, leading to the deaths of entire flocks of poultry.

Infected birds shed influenza virus in their saliva, nasal secretions, and feces. Susceptible birds become infected when they have contact with contaminated excretions or with surfaces that are contaminated with excretions or secretions. Domesticated birds may become infected with avian influenza virus through direct contact with infected waterfowl or other infected poultry or through contact with surfaces (such as dirt or cages) or materials (such as water or feed) that have been contaminated with the virus.

Avian influenza viruses do not usually infect humans, but since 1997, the World Health Organization (WHO) has confirmed 331 cases in humans with 202 deaths (as of 12 November 2007) from influenza H5N1 of avian origin. Most cases of H5N1 infection in humans have resulted from direct or close contact with infected poultry (e.g., domesticated chicken, ducks, and turkeys) or surfaces contaminated with secretions and excretions from infected birds. The spread of H5N1 viruses from an ill person to another person has been reported very rarely, and transmission has not been observed to continue beyond one person. During an outbreak of H5N1 among poultry, there is a possible risk to people who have direct or close contact with infected birds or with surfaces that have been contaminated with secretions and excretions from infected birds.

Two main risks for human health from avian influenza are the risk of direct infection when the virus passes from the infected bird to humans, sometimes resulting in severe disease; and the risk that the virus will change into a form that is highly infectious for humans and be able to spread easily from person to person. The latter scenario could lead to a human pandemic (worldwide outbreak of disease).

Three conditions must be met for a pandemic to start: 1). A new influenza virus subtype must emerge; 2). It must infect humans and cause serious illness; 3). It must spread easily and efficiently among humans. The H5N1 virus currently circulating meets the first two conditions: it is a new virus for humans, and it has infected more than 331 humans, killing over half of them. The third condition, the establishment of efficient and sustained human-to-human transmission of the virus, has not occurred. For this to take place, the H5N1 virus would need to improve its transmissibility among humans. This could occur either by “reassortment” or adaptive mutation. Reassortment occurs when genetic material is exchanged between human and avian viruses during co-infection (infection with both viruses at the same time) of a human or pig. The result could be a fully transmissible pandemic virus. A more gradual process is adaptive mutation, where the capability of a virus to bind to human cells increases during infections of humans.

Symptoms of avian influenza in humans have ranged from typical human influenza-like symptoms such as fever, cough, sore throat, and muscle aches, to eye infections (conjunctivitis), pneumonia, severe respiratory diseases (such as acute respiratory distress syndrome), and other severe life-threatening complications. The symptoms of avian influenza may depend on which specific virus subtype and strain caused the infection. In poultry, infection with avian influenza viruses causes two main forms of disease: (a) a low pathogenic form commonly causing only mild signs of illness such as ruffled feathers and a drop in egg production and which may go undetected and, (b) a highly pathogenic form that causes disease affecting multiple internal organs and is rapidly fatal with a mortality rate approaching 100%. Signs of highly pathogenic avian influenza in poultry include difficult breathing, diarrhea, weakness, decrease in activity, facial swelling, bluish discoloration of the combs and wattles, bleeding from the mucous membranes, and sudden death.

Target Human Population:

- I. Poultry workers
- II. Wildlife biologists
- III. Surveillance workers
- IV. Veterinary laboratory workers
- V. Animal disease outbreak responders

Procedures:

I. Training

1. All APHIS employees involved in HPAI control and eradication activities will be trained by their ICS safety officers and/ or their ICS supervisors with assistance from Safety, Health, and Employee Wellness Branch (SHEWB).
2. Training will include all aspects of prevention and control of human AI infection such as basic infection control, proper use of personal protective equipment (PPE), decontamination measures, vaccine and antiviral use, surveillance for illness, and evaluation of employees who become ill.
3. Materials for training include, but are not limited to, this guidance document and the APHIS Health and Safety Plan (HASP) Template.
4. Employees will be required to complete the “Training checklist” (Attachment 1).
5. Additional Avian Influenza related safety and health training will also be provided by Federal Occupational Health (FOH) industrial hygienists contracted to perform Avian Influenza related respirator fit-testing.

II. Basic Infection Control

1. After contact with infected or exposed birds; contact with contaminated (or potentially contaminated) surfaces; or after removing gloves, wash hands with soap and water for a minimum of 15-20 seconds or the use of other standard hand-disinfection procedures as specified in other USDA (or APHIS or CDC or OSHA) protocols that are developed for basic infection control.
2. Do not eat, drink, or smoke while actively involved in control and eradication activities.
3. Wildlife biologists when working outdoors must work upwind of birds/animals, to the extent practical, to decrease the risk of inhaling aerosols containing dust, feathers, or dander.

III. Personal Protective Equipment (PPE)

All APHIS employees involved in HPAI control and eradication activities will be provided with, trained in the proper use of, and be required to use the following appropriate PPE when carrying out these activities:

- A. Protective clothing capable of being discarded or disinfected, preferably coveralls (with an impermeable apron) OR surgical gowns with long cuffed sleeves (with an impermeable apron).

- B. Gloves capable of being disinfected or discarded (such as nitrile disposable gloves). Cotton inner gloves may be used, in addition to the outer gloves, to absorb perspiration. Gloves must be changed if torn or otherwise damaged. Hands must be washed each time gloves are removed or changed.
- C. Respirators (with the minimum recommendation being the use of a disposable filtering face piece respirator e.g., N95, N99, or N100), used as a part of a comprehensive respiratory protection program as described in 29 CFR 1910.134. Workers shall be medically cleared and fit tested for the model and size of respirator they wear and be trained to fit check the seal of the face piece to the face as a minimum.

Industrial hygienists from FOH will be contracted to perform avian influenza related respirator fit-testing and the associated PPE and Safety and Health training for APHIS employees nationwide. They will perform quantitative respirator fit-testing, using the TSI PortaCount® and N95 Companion exclusively, and will provide avian influenza related PPE training for APHIS employees who have been medically cleared by FOH clinicians to wear respiratory protection.

The N-95 respirators used by APHIS are: 3M 8210, 3M 8511, 3M 8271, and Moldex 2700. After having been medically cleared to wear a respirator, the employees will have a quantitative fit-testing with an N-95 respirator using the TSI PortaCount®. If an acceptable fit factor is not achieved, the employee will be progressively fit-tested with respirators with increasing degrees of protection (N100/ P100, ½ face Air Purifying Respirator [APR], Full Face Air Purifying Respirator [APR], or Powered Air Purifying Respirator [PAPR]) until an acceptable fit factor is achieved.
- D. Eye goggles (or other form of appropriate eye protection).
- E. Protective shoe covers, or rubber or polyurethane boots that can be disinfected or discarded.

IV. Decontamination

- A. All APHIS employees involved in HPAI control and eradication activities will shower completely (including a shampoo) at the end of the activity/ work shift, using a decontamination trailer or other facility that has been set up for this purpose (utilizing a dirty room for clothing removal and showering and a clean room for dressing in freshly laundered clothing to be worn home). Personnel should also clean under their fingernails and clear their respiratory passages by blowing their noses, clearing their throats, and expectorating into a sink with running water. All these should be done immediately after leaving the infected or exposed area.
- B. No item of clothing (including shoes, underwear, etc) worn during HPAI control and eradication activities can be worn home or to any public places outside of the infected/exposed area.
- C. Personnel should always remove protective clothing (except for gloves) first and discard or secure the clothing for disinfection before removing their respirators and goggles. Before removing their gloves workers should

wash their gloved hands thoroughly with soap and water, and after removing the gloves, they should wash their hands again. Doffing of personal protective clothing/equipment should only be done in the decontamination zone.

D. Frequent hand washing as detailed in II above

V. Vaccine

All APHIS employees involved in HPAI control and eradication activities are highly encouraged to receive the current season's influenza virus vaccine. This is to reduce the possibility of dual infection with avian and human influenza viruses. This vaccine will be provided at no cost to the worker through Federal Occupational Health as part of the Occupational Medical Monitoring Program.

VI. Antiviral Drugs

All APHIS workers involved in HPAI control and eradication activities will be highly encouraged to receive protection against avian influenza through the use of daily dose of a neuraminidase inhibitor (e.g., Oseltamivir). The current recommendation is Oseltamivir (Tamiflu®) at a dose of 75mg once a day for every day that the employee is involved in these control and eradication activities. The use of Tamiflu is recommended to continue for at least 7 to 10 days after the last exposure. Please see the Drug Information Sheet for Tamiflu® (Attachment 2) for the side effects and contraindications of Tamiflu®.

VII. Surveillance Monitoring

- A. All APHIS workers involved in HPAI control and eradication activities will complete the Avian Influenza Exposure Symptom Questionnaire (Attachment 3) prior to commencing these activities. Anyone answering "yes" to any question on the health assessment section baseline (Day 0) of the matrix will be excluded from participation in the HPAI control and eradication activities.
- B. The questionnaire will be administered again by the safety officer or healthcare provider on or about day 7 and again day 14 after the exercise. Anyone answering "yes" to any question will be referred to Federal Occupational Health for further evaluation.
- C. All workers involved in HPAI control and eradication activities must monitor their health for the development of fever, respiratory symptoms (cough, runny nose, sore throat, etc), muscle aches, and/or eye infections for at least up to 1 week after their last involvement with these control/eradication activities.

VIII. Evaluation of Ill Workers

- A. Workers who develop fever, respiratory symptoms (cough, runny nose, sore throat, etc.), muscle aches, and/or eye infections for at least up to 1 week after their last involvement in HPAI control/eradication activities

should promptly seek medical care from their healthcare provider and give notification prior to their arrival at the healthcare provider that they may have been exposed to the HPAI virus.

- B. Health care providers should refer to CDC guidelines (<http://www.cdc.gov/flu/avian/professional/>) for the appropriate evaluation, treatment and follow up of individuals developing symptoms after exposure to HPAI. Healthcare providers must follow appropriate federal, state, and/or local guidelines for reporting cases, specimen collection, etc.

References:

Attachment 1

Please read, circle appropriate response, and initial each item below. Sign form at bottom when completed.

_____ 1. I **understand/do not understand (circle one)** that the H7N2 strain of avian influenza and all previous US outbreaks of AI have not been found to cause disease in any humans in the US.

_____ 2. I **understand/do not understand (circle one)** that these guidelines provided by APHIS are the recommendations of the Centers for Disease Control and Prevention (CDC) for maximum protection for workers exposed to AI virus and that these precautions are being taken for my personal protection against the risk of human infection with AI virus.

_____ 3. I **have/have not (circle one)** completed and passed the “Avian Influenza Exposure Symptom Questionnaire” prior to being exposed to AI infected poultry or premises contaminated with AI virus.

_____ 4. I **have/have not (circle one)** received the seasonal human flu vaccine. I received this vaccine at least two weeks **prior to today/today (circle one.)** If I refuse vaccination I **agree/not agree (circle one)** to sign the declination form (Attachment 4). I **understand/do not understand (circle one)** that this vaccination will not prevent human infection by AI viruses but is intended to minimize the likelihood of an AI virus from recombining with human influenza viruses.

_____ 5. I **have/have not (circle one)** been offered antiviral medications and **agree/do not agree (circle one)** to take them as directed by medical professionals.

_____ 6. I **agree/do not agree (circle one)** to wear the Personal Protective Equipment (PPE) recommended by my employer at all times during possible exposure to AI virus. This PPE includes but is not limited to: cloth gloves over nitrile disposable gloves (replace gloves immediately if torn or otherwise damaged), discardable clothing and foot wear or washable boots that can be cleaned and disinfected on site, eye protection, disposable particulate N-95 (or higher) type respirator, and hair bonnet. I **have/have not (circle one)** been instructed on how to properly remove contaminated PPE to prevent cross contamination.

_____ 7. I **have/have not (circle one)** been fit tested and approved to wear an N-95 equivalent or higher respirator during the completion of physically strenuous activities.

_____ 8. I **have/have not (circle one)** been instructed about the importance of strict adherence to and proper use of hand hygiene after contact with AI infected poultry or AI virus contaminated surfaces. After removing protective gloves I **agree/do not agree (circle one)** to thoroughly wash my hands with soap and water for at least 10-15 seconds or to use other hand disinfection procedures as specified by the Safety Officer.

_____ 9. I **agree/do not agree (circle one)** to shower at the end of the work shift in a decontamination unit on site or via arrangements with local hotels using a dirty room for clothing removal and showering and a clean room for dressing in clean clothing to be worn home. Under no circumstances will I wear clothing worn in an AI contaminated environment home: this includes shoes, underwear, etc.

_____ 10. I **agree/do not agree (circle one)** to complete the attached health questionnaire on or about day 7 and again on day 14 after possible exposure to AI virus. If I answer “yes” to any question I **agree/do not agree (circle one)** to be referred to the healthcare provider and to follow their instructions for further examination and specimen collection as needed. I understand that my personal health information may be shared with appropriate county and state health departments and **agree/do not agree (circle one)** to follow additional directions from these agencies if requested to do so.

_____ 11. I **understand/do not understand (circle one)** that both Safety Officers and healthcare providers will be on site to answer any questions that I may have concerning these guidelines.

Printed Name: _____ Date: _____

Signature: _____

Attachment 2

Drug Information for Tamiflu® (Oseltamivir)

Brand Name: Tamiflu®

Active Ingredient: Oseltamivir Phosphate

Strength(s): 75 mg AND 12 mg/ ml

Dosage Form(s): Capsule AND Powder (for oral suspension)

Side Effects: Side effects of Tamiflu® in adults include, but are not limited to, the following:

- Nausea
- Vomiting
- Diarrhea
- Dizziness
- Headache
- Bronchitis
- Stomach pain
- Insomnia
- Vertigo
- Cough
- Fatigue

Rarer side effects in adults, occurring in less than 1% of patients receiving Tamiflu® for treatment, include:

- Unstable angina
- Fever
- Fracture of the humerus
- Peritonsillar abscess
- Anemia
- Pneumonia
- Pseudomembranous colitis

Contraindications:

- Children less than one year of age
- Tamiflu's safety and effectiveness have not been determined in people with chronic heart or lung disease, kidney failure, or in people with high-risk underlying medical conditions
- Contraindicated in individuals with known hypersensitivity to any of the components of the drug.
- Should be used in pregnancy ONLY if the potential benefit justifies the potential risk to the fetus

Reference: <http://www.fda.gov/cder/consumerinfo/druginfo/tamiflu.htm>
http://www.fda.gov/cder/drug/InfoSheets/patient/oseltamivir_phosphatePIS.htm
http://www.fda.gov/cder/foi/label/2005/021246s017_021087s030lbl.pdf

Avian Influenza Exposure Symptom Questionnaire

Date of interview (mm/dd/yy) _____ **Name of interviewer:** _____

Name: (Last) _____ **(First)** _____

Address (# Street Name): _____ **City/State/ZIP:** _____

County of Residence: _____ **Primary Language Spoken** _____

Home Phone: _____ **Work/cell phone:** _____

Age (Years): _____ **DOB (mm/dd/yy):** _____ **Gender:** **M** **F**

Vaccination Information:

Did you receive an influenza vaccination this year?

Yes (approximate date mm/dd/yy _____) What type? Flu shot FluMist® No

Work Information:

Occupation: _____

Employer: Poultry Company _____ **Private contractor** _____
State/Fed Agency _____

Type of work (check all that apply):

- Care of live poultry
- Obtaining blood samples of poultry
- Slaughter poultry (not depopulation)
- Disinfecting equipment
- Other _____
- Transportation of live poultry
- Process poultry specimens in a lab
- Poultry depopulation
- Farm owner
- Cleaning of poultry houses, cages or trucks
- Obtain cloacal or tracheal swabs
- Composting dead poultry
- Other farm work

What is the most recent date you were performing any of the above activities (at any location)?

Date (mm/dd/yy): _____

Still performing above duties

What is the most recent date you performed any of the above activities at a site where poultry were known to be infected with avian influenza?

Date (mm/dd/yy): _____

Still performing above duties

While performing these activities (during the past two weeks), have you used personal protective equipment (PPE)?

Yes, always

Yes, most of the time

Yes, sometimes

Never

Name: (Last) _____ (First) _____

Exposure Date (mm/dd/yy): _____ Exposure Location _____ Exposure # _____

If you used PPE, which articles did you use? (Check all that apply)

- Protective clothing (such as disposable clothing)
- Disposable gloves
- Hair bonnet
- Fit-tested respirator (such as an N95 or higher mask)
- Eye Protection
- Disposable protective foot wear or washable boots
- Other _____

Health Assessment:

Since your first possible contact with avian influenza infected birds, have you developed any of the following symptoms?

Symptoms	Day 0 (Today's Date: _____)			Day 7 (Today's Date: _____)			Day 14 (Today's Date: _____)		
	Circle One	Date of Onset	Date Resolved	Circle One	Date of Onset	Date Resolved	Circle One	Date of Onset	Date Resolved
Fever	Yes No			Yes No			Yes No		
Measured Temp \geq 100F	Yes No Temp°:			Yes No Temp°:			Yes No Temp°:		
Cough	Yes No			Yes No			Yes No		
Sore Throat	Yes No			Yes No			Yes No		
Runny Nose	Yes No			Yes No			Yes No		
Body Aches *	Yes No			Yes No			Yes No		
Red or Watery Eyes	Yes No			Yes No			Yes No		
Diarrhea	Yes No			Yes No			Yes No		
Headache	Yes No			Yes No			Yes No		
Drowsiness	Yes No			Yes No			Yes No		
Other:	Yes No			Yes No			Yes No		

* Symptom by itself does not indicate referral to local health department for follow-up

Additional documentation may be on an attached form.

Did you seek medical care for your illness? No Yes

If yes, name of provider: _____ Address: _____ Phone Number: _____

Were you hospitalized? No Yes If yes, Name of Hospital _____ Dates admitted _____

Antiviral Information:

Have you taken any antiviral medication? [Amantadine(Symmetrel), Rimantadine (Flumadine), Oseltamivir (Tamiflu)]

Yes Name of antiviral: _____ First dose _____ Last dose _____ No

Have any of your family members or other close contacts developed any of the above symptoms? No Yes If yes, who?

<u>Name</u>	<u>Age (Yrs.)</u>	<u>Relationship</u>	<u>Contact #</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Attachment 4

Declination of Human Influenza Vaccine

I understand that due to my potential occupational exposure to avian influenza, I am being offered the seasonal human influenza vaccine. This vaccination will help to prevent the seasonal human influenza virus from recombining with the avian influenza virus potentially causing a new strain of influenza virus. This vaccine will not protect against avian influenza. I understand that by declining this vaccine I continue to be at risk of acquiring seasonal human influenza virus. If in the future I want to be vaccinated with seasonal influenza vaccine, I can request the vaccination.

Name (Print): _____

Signature: _____

Agency: _____

Last 4 of Social Security Number: _____

Date: _____

Reason for Declination:

Medically contraindicated (explain): _____

Other (explain): _____

Attachment 8.P Abbreviations

ACGIH	American Congress of Governmental Industrial Hygienists
APHIS	Animal and Plant Health Inspection Service
APR	air purifying respirator
CFR	Code of Federal Regulations
CISD	Critical Incident Stress Debriefings
CNP	controlled negative pressure
CRZ	Contamination Reduction Zone
EZ	Exclusion Zone
FAD	foreign animal disease
FAD PReP	Foreign Animal Disease Preparedness and Response Plan
FOH	Federal Occupational Health
GIS	geographical information systems
HASP	health and safety plan
HAZWOPER	Hazardous Waste Operations and Emergency Response
HPAI	highly pathogenic avian influenza
IC	Incident Commander
ICP	Incident Command Post
ICS	Incident Command System
ID	Identification
IDLH	immediately dangerous to life or health
JHA	job hazard analysis
MRP	Marketing and Regulatory Programs
MRPBS	Marketing and Regulatory Programs Business Services
MSDS	material safety data sheet
NAHEMS	National Animal Health Emergency Management System
OSHA	Occupational Safety and Health Administration
OWCP	Office of Workers' Compensation Programs
PPE	personal protective equipment

QLFT	quality fit test
QNFT	quantitative fit test
RPA	Respirator Program Administrator
SCBA	Self-Contained Breathing Apparatus
SHEPB	Safety Health and Environmental Protection Branch
SO	Safety Officer
SOP	standard operating procedure
SSHASP	site-specific health and safety plan
SSO	Site Safety Officers
SZ	Support Zone
TLV	threshold limit values
USDA	U.S. Department of Agriculture