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# **Prevention and Control of H5 and H7 Low Pathogenicity Avian Influenza in the Live Bird Marketing System**

Uniform Standards for a State-Federal-Industry  
Cooperative Program,  
Effective August 15, 2008

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## Introduction

Historically, the H5 and H7 hemagglutinin subtypes of low pathogenicity avian influenza (LPAI) virus have repeatedly been isolated from the live bird marketing (LBM) system in the United States. Although LPAI virus infections cause little or no clinical illness in poultry, LPAI H5 and H7 subtypes have been shown to possess the potential to mutate into high pathogenicity avian influenza (HPAI) subtypes. Such mutations, if they occurred today, would cause serious harm to the U.S. commercial poultry industry.

The U.S. Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), Veterinary Services (VS), is responsible for protecting the health of the Nation's poultry flocks and supporting an environment conducive to trade. Our trading partners are increasingly wary of importing products from countries with LPAI. Such trade concerns, along with the risk of disease transmission posed by the virus circulating in the LBM system, have increased the need to prevent and control H5 and H7 LPAI in the LBM system.

In order to protect U.S. poultry from HPAI and prevent interruptions in trade, Federal, State, and industry officials must cooperate to actively prevent and control LPAI. In addition, some cases of human infections of HPAI have occurred in other countries in recent years. Therefore human health would also benefit from a program that prevents the development of HPAI infections through the control of LPAI infections.

This LPAI Program was originally developed as a cooperative effort of State Veterinarians, industry representatives, and other parties associated with poultry and poultry health. The LPAI Program has been approved by USDA, APHIS, VS.

The minimum national standards described in this document do not preclude the adoption of more stringent methods and rules by any geographical or political subdivision of the United States for application within that subdivision. However, regulations dealing with interstate movement must still conform to Federal regulations.

The LPAI Program, which is federally administered, is designed to enhance and unify State programs and to assist States in meeting their goals for prevention and control of LPAI in the LBM system. This publication is intended as a working document that will change as the Program develops. The standards discussed here refer only to the LBM system; the National Poultry Improvement Plan (NPIP) addresses AI surveillance for primary breeders, commercial egg-layers, and meat-type turkeys and chickens.

Premises and other forms of identification will be important to the success of the Program.

The following goals of the Program apply to all participants in the LBM system, including the suppliers, dealers, haulers, auction markets, wholesalers, and live bird markets:

1. Diagnose, control, and prevent H5 and H7 LPAI.
2. Help participants to improve biosecurity, sanitation, and disease control in their operations.
3. Minimize the effects of LPAI on the U.S. commercial poultry industry.

## **Part I—Definitions and Abbreviations**

### **Accredited Veterinarian**

A veterinarian approved by the Administrator of USDA, APHIS, in accordance with the provisions of title 9 of the *Code of Federal Regulations* (9 CFR), part 161, to perform functions required by State–Federal–industry cooperative programs.

**Antigen Capture Immunoassay (ACIA) test** – A USDA licensed type A influenza antigen capture immunoassay (ACIA) test to detect influenza A nucleoprotein and for use as an official test to screen for AI. The ACIA must be conducted using test kits approved by USDA and the State and must be conducted in accordance with recommendations of the manufacturer.

### **Administrator**

The Administrator of APHIS or any employee of USDA that the Administrator has delegated to act in his or her place.

### **Agar gel immunodiffusion (AGID) test**

The official test for serological detection of AI in which precipitates are formed by a combination of nonspecific AI antigens and antibodies that diffuses through a gel. A positive reaction indicates exposure to AI virus, but does not indicate a specific subtype. Samples positive by AGID must be further tested and subtyped using the hemagglutination inhibition test. A final decision on the status of an AGID-positive flock should be based on further sampling and testing for the presence of virus through real-time, reverse-transcriptase-polymerase chain reaction (RRT-PCR) or virus isolation.

### **AI**

Avian influenza

### **Animal health official**

A full-time employee of the State animal health department or of APHIS who has authority from the State Veterinarian or the Area Veterinarian in Charge to carry out program activities.

### **APHIS**

The Animal and Plant Health Inspection Service, an agency of the U.S. Department of Agriculture.

### **Approved laboratory**

A State, Federal, university, or private laboratory that has been approved by USDA, APHIS, VS, to perform one or more types of official tests of AI diagnosis for the program.

### **Area Veterinarian in Charge (AVIC)**

The veterinary official of APHIS, VS, assigned by the Administrator to supervise and perform the official animal health programs of APHIS in the State or States concerned.

**Auction market**

A business where producers, dealers, wholesalers, distributors, and/or retailers meet to purchase, trade, or sell live birds.

**Botanica**

An establishment that sells supplies and some types of poultry and/or livestock for Santeria religious practices. Poultry and/or livestock sold at these establishments leave alive to meet the Santeria needs. In the United States the majority of these types of establishments are located in Florida, New York and New Jersey.

**Certified poultry technician (CPT)**

An individual who has been specially trained in poultry health monitoring and specimen collection by the State, and who is included on an official list of technicians certified by the State to perform inspections and specimen collections.

**Cleaning and disinfection (C&D)**

One of the steps in response to an AI-positive premises that will eliminate AI from the premises. This requires thorough removal of organic material and debris, followed by treatment with the proper concentration of an agent effective in inactivation of AI virus.

**Commingled flock**

Poultry from multiple sources that has been assembled for one or more shipments.

**Distribution system**

Businesses (such as wholesalers, dealers, haulers, and auction markets) engaged in the transportation and/or sale of poultry to live bird markets (LBMs). These are the links between production flocks and LBMs.

**Distributor**

Any of the businesses or an individuals working in any of the businesses within the distribution system serving the LBMs.

**Enzyme-linked immunosorbent assay (ELISA)**

A type-specific serological screening test to determine exposure to AI virus.

**Established flock**

Poultry of the same species held together on one premises for at least 21 days or, at the discretion of the State animal health official, any group of poultry on one premise that has been segregated from another group for at least 21 consecutive days.

**Flock**

All birds under the same biosecurity, environment, and management programs on the same premises. Types of flocks described in the Uniform Standards include monitored flocks, established flocks, commingled flocks, and non-monitored flocks.

**H5, H7 LPAI**

Low pathogenicity H5 and H7 subtypes of AI virus.

**Hauler/trucker**

A business or individual that transports poultry from producer premises to another supplier premises, to another distributor, or to an LBM.

**High pathogenicity avian influenza (HPAI) virus**

Any influenza virus that kills at least 75 percent of 4- to 6-week-old susceptible chickens within 10 days following intravenous inoculation of 0.2 ml of a 1:10 dilution of infectious allantoic fluid; or any H5 or H7 influenza virus that has an amino acid sequence at the hemagglutination cleavage site compatible with HPAI; or any influenza virus that grows in cell culture in the absence of trypsin. This is consistent with the World Organization for Animal Health (OIE) definition and the definition included in 9 CFR 53.1.

**Infected premises**

A premises that houses a flock(s) that has been confirmed to be positive for AI virus, subtype H5 or H7, by an approved laboratory using an official test.

**Licensing, registration**

The requirement to conduct business in the LBM system. This consists of the licensing or registration of facilities by the State, allowing for oversight of such facilities as recommended in these standards. States may elect licensing or registration procedures that best fit their statutes.

**Live bird market/ing (LBM)**

Any facility that gathers live poultry to be slaughtered and sold onsite. Other end-stage poultry markets in a participating State that are not "slaughter-only" markets will require development and approval of special biosecurity safeguards and inspections to assure that they meet Program Standards and are successful in the prevention and control of LPAI.

**Live bird marketing system (LBMS)**

The LBM system includes LBMs and their production and distribution systems.

**Live haul**

A process, and the personnel and equipment used in that process, in which live poultry are transported to a different location.

**Low Pathogenicity Avian Influenza H5 and H7 Program (LPAIP)**

The State-Federal-industry cooperative program for the prevention and control of H5 and H7 LPAI. This is a voluntary program for States, but participating States must have regulations to enforce program standards and requirements.

**Low pathogenicity avian influenza (LPAI) virus**

Any AI virus that does not meet the criteria for high pathogenicity.