

Recent Avian Influenza Events – An APHIS Perspective
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Low pathogenic avian influenza is not considered a reportable disease under the Organization International des Epizootics (OIE) and poses no human health or food safety threat. Such outbreaks are typically managed by the affected state. Although H5 and H7 strains have been found in market channels and smaller flocks, aggressive measures are taken with respect to these strains because of the possibility of mutation to highly pathogenic strains that are reportable and can cause severe losses in commercial poultry. Therefore, USDA APHIS VS may become involved through State/Federal cooperative agreements to assist states in dealing with low pathogenic AI. This year has been a busy one for states dealing with these viruses. Presented here is a brief synopsis of some of those efforts.

In January 2002, a commercial egg layer flock in Southern California experienced a 30% drop in egg production and a significant increase in mortality. An H6N2 virus was isolated and characterized as low pathogenicity. This strain has previously circulated in egg-laying and backyard flocks in California. The industry in CA has been encouraged to maintain a high level of biosecurity and report any suspicious disease occurrences to CDFA or USDA.

Low Pathogenic Avian Influenza (LPAI) was first diagnosed in the State of Virginia on February 28, 2002 in turkeys from North Carolina slaughtered at a processing plant in the Shenandoah Valley. AI was first diagnosed in a Virginia flock on March 12. This flock was first symptomatic on March 8. By mid-April there were nearly 30 Virginia flocks diagnosed with AI. To respond to this outbreak, the Virginia Avian Influenza Task Force (VAITF) was developed as a cooperative effort between the State of Virginia and the USDA Animal and Plant Health Inspection Service (APHIS). USDA has proactively stepped in to assist Virginia in an effort to strengthen the federal-state partnership and help ensure the resources are managed to effectively control and eradicate this low pathogenic avian influenza strain. USDA will also provide \$69.2 million in indemnity to contract growers and owners.

In North Carolina a commercial turkey flock, within 2 miles of the flock positive at slaughter in Virginia, tested positive on March 18 (also H7N2). Further epidemiological investigation found a game flock with positive quail. Subsequent surveillance identified 1 positive broiler flock, 5 additional quail flocks and 3 backyard poultry flocks, resulting in approximately 50,500 birds depopulated.

In April 2002, 3 associated premises in TX were depopulated and buried on site due to an H5N2 isolation. The business also included a live bird market location in Houston. Testing done at the Live Bird Market (LBM) yielded no positive

animals. In May 2002, 200,000 table egg laying hens were determined to be positive. The birds were depopulated, buried on site, and indemnity was paid by the Texas Poultry Federation.

On May 30, 2002 the Ministry of Agriculture in Chile reported an outbreak of AI. A breeding farm had reported deaths of 110,000 hens. The remaining 400,000 hens were depopulated. Additional sites have shown serological evidence of AI without elevated mortality. Evidence of highly pathogenic AI was confirmed by NVSL on July 1, 2002. The APHIS response in this situation is to develop an Impact Worksheet outlining trade, travel and any implications for US agriculture. These impact worksheets are developed by the Center for Emerging Issues, Centers for Epidemiology and Animal Health and are available from the www.aphis.usda.gov website.

H7 isolates now circulating in the northeastern U.S. live bird markets have been monitored for several years. The markets and supply chain may serve as a reservoir for the avian influenza virus. Nearly 60% of the markets were positive for avian influenza virus in a recent virus isolation study. Complete depopulation of the markets, with cleaning and disinfection has been attempted.

The United States has periodically experienced trade restrictions based on the occasional introduction of low pathogenic H5 and H7 viruses into commercial poultry, and based on AI related changes in the import requirements for poultry and poultry products of several of our trading partners. Consequently, USDA is currently considering options for strengthening the ability of the United States to detect, prevent and control H5 and H7 LPAI virus infections, in both the live bird marketing system and the commercial poultry system.