

**Testimony to the House Agriculture and Rural Affairs Committee
Informational Meeting on Highly Pathogenic Avian Influenza Outbreak**

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Overview

The highly pathogenic avian influenza (HPAI) outbreak in commercial poultry, backyard poultry, and wild birds is unprecedented in the United States. As of June 9, 2015, approximately 46.8 million birds have been affected on 228 premises in 21 states. Minnesota and Iowa have been the hardest-hit states. Estimated economic losses are significant to date - approximately \$300 million in Minnesota and \$600 million in Iowa alone. Detection of avian influenza in Ontario, Canada in April, and the most-recent detection in a wild bird (goose) in Michigan this week brings the outbreak closer to the Commonwealth.

Background

Virus: Avian influenza (AI) is a respiratory disease that affects many birds, including poultry. Clinically, some AI viruses may cause a mild (low pathogenicity) form of the disease, while other AI viruses cause a more severe (highly pathogenic) form. The viruses are classified according to two proteins – the hemagglutinin (H) and the neuraminidase (N) – found on the surface of the virus. The H5 and H7 viruses are of most concern in poultry. Historically, these viruses have had the ability to mutate from a mild form of the disease to a highly pathogenic form. That is what happened in the 1983-1984 HPAI outbreak in Pennsylvania. In April 1983, the virus was a low pathogenic avian influenza (LPAI), and six months later through mutation the virus changed to a highly pathogenic virus, resulting in a loss of 17 million birds and over \$60 million.

Transmission: There are several ways infectious diseases such as HPAI are transmitted to poultry, including through other birds, such as wild water fowl, people, vehicles, or equipment/tools/supplies. Important biosecurity measures to prevent the spread of the disease include: segregating new birds, limiting visitor access, wearing clean clothes dedicated to the premises, and not borrowing equipment, tools, or supplies from others who have contact with poultry.

Control measures: During an outbreak, the following steps are taken: the farm is quarantined, the birds are humanely euthanized, additional surveillance testing is done in the control zone, and the poultry houses/barns are cleaned and disinfected. Any flock found to be infected with highly pathogenic avian influenza will not enter the food supply.

Current Outbreak: Highly pathogenic avian influenza (HPAI) was first diagnosed in Washington and Oregon in December 2014. There have been three different H5 viruses detected in the United States during this outbreak. The HPAI H5N2 virus has been the most common. The viruses are not the same as the viruses detected overseas that have caused human illness. The Centers for Disease Control considers the risk for illness in people related to these viruses to be low. There are been no human infections.

As of June 9, 2015, HPAI virus has affected 7.5 million turkeys (3.2% of the annual production) and 41.1 million chickens (approximately 10% of the layer population; 5.5% of the pullet population). This involves 228 premises (207 commercial and 21 backyard).

Estimated economic losses so far are approximately \$300 million in Minnesota and \$600 million in Iowa. Losses will continue to increase because the outbreak is not contained. They include not only the direct loss of birds, but also losses to other industries such as feed, trucking, and processing. Poultry farm workers' wages, farm owners' ability to pay their mortgages, increased pricing on poultry products, and shortages of poultry products are all effects of this extensive and unprecedented outbreak.

Pennsylvania poultry industry and surveillance efforts

The Pennsylvania poultry industry has a mixed population of poultry including layers (~24 million), broilers, (~149 million) and turkeys (~7 million). In addition, examples of other birds commonly found in Pennsylvania include game birds, ducks, exhibition, pet birds (e.g. parrots), and backyard and pastured poultry. Pennsylvania also has an extensive live-bird market system and auction markets throughout the Commonwealth.

Since the 1983-1984 outbreak, Pennsylvania has had an extensive surveillance program for avian influenza. Each year the Pennsylvania Animal Diagnostic Laboratory System (PADLS) tests approximately 250,000 samples. This includes blood or swabs and samples from sick or dead birds submitted for necropsy examination.

Conclusion

The HPAI outbreak is economically devastating to U.S. poultry industry and the economies of the affected states. HPAI has been detected in close proximity to Pennsylvania. HPAI virus was detected in April of this year in three flocks in southern Ontario, Canada, and on Monday of this week in a wild goose in Michigan. The Ontario, premises are approximately 75 miles from Erie, Pennsylvania, and the location of the wild goose found in Michigan is approximately 145 miles from Erie, Pennsylvania. We must prepare and be ready to act when the virus is detected in the Commonwealth.