Minnesota H5/H7 Low Pathogenic Avian Influenza
Initial State Response and Containment Plan Executive Summary

Purpose:
The Minnesota H5/H7 Low Pathogenic Avian Influenza (LPAI) Initial State Response and Containment Plan, also known as the Minnesota Plan is a document used to outline the response to H5 or H7 Low Pathogenic Avian Influenza exposure in Minnesota domestic poultry. The objectives of the Minnesota Plan are to: (1) Detect H5/H7 LPAI exposure in Minnesota domestic poultry populations and respond accordingly; (2) Assure that H5/H7 LPAI viruses are not circulating in Minnesota domestic poultry populations; (3) Monitor and address worker safety; (4) Demonstrate to trading partners and consumers that Minnesota poultry is free of Notifiable Avian Influenza (NAI) viruses, thereby minimizing trade restrictions to the Minnesota poultry industry. The Minnesota Board of Animal Health (Board) serves as the Official State Agency and Cooperating State Agency for the implementation of the Minnesota Plan and is responsible for H5/H7 LPAI surveillance and response. The Animal and Plant Health Inspection Service (APHIS) of the U.S. Department of Agriculture will evaluate Minnesota’s H5/H7 LPAI Initial State Response and Containment Plan using an established set of criteria. Minnesota Plan approval by APHIS makes Minnesota NPIP Participants and poultry producers eligible for 100% indemnity of eligible costs subject to indemnity fund availability.

Situation:
Avian influenza is a disease caused by a virus with a varied clinical picture that includes respiratory signs, flock depression, egg production drops, air sacculitis or infection with no clinical signs at all. Disease caused by type A influenza viruses are classified as either highly pathogenic avian influenza (HPAI) or low pathogenic avian influenza (LPAI), based on the genetic features of the virus and the severity of disease. H5/H7 LPAI have the potential to mutate into an HPAI form that could potentially devastate the poultry industry and affect public health. Non H5/H7 LPAI introductions have been identified in Minnesota poultry flocks for over forty years and have been eliminated quickly by effective surveillance, industry cooperation, enhanced biosecurity and controlled marketing.

Command and Control:
In Minnesota avian influenza (AI) is a disease reportable to the Board. This means that any person, laboratory or veterinarian who suspects that domestic poultry is infected with AI or has positive AI test results must report this information to the Board for verification and submission to the National Veterinary Services Laboratory (NVSL) when necessary. The Board is the lead state agency that responds to a LPAI introduction and has formed an Emergency Disease Management Committee (EDMC) and an Emergency Response Committee (ERC) that consists of poultry industry representatives, veterinarians, government officials and technical experts to serve as advisors during an event. Industry NPIP participants have a written Memorandum of Understanding (MOU) with the Board that requires minimum biosecurity and emergency awareness plans.

Initial Reporting and Investigation:
Positive laboratory results may arise from samples collected during active surveillance (pre-market testing) or passive surveillance (clinical disease) activities also known as “general disease control plans”. Screening tests detect antibodies (AGID, ELISA tests) or viral antigen, viral RNA or live influenza virus (ACIA, RRT-PCR tests, virus isolation). Samples that react to these tests indicate exposure to an influenza virus which requires additional testing at NVSL. Suspect flocks are identified as flocks with positive avian influenza screening test results or flocks with clinical signs suggestive of an avian influenza exposure when submitted through the “general disease control plan”. All flocks on the suspect premises will be quarantined by the Board and movement from the premises will be restricted pending results from NVSL. Official confirmation of positive H5 or H7 test results can only be made by the NVSL. When received from NVSL, positive H5 or H7 test results reclassify the flock to a presumptive Infected Flock and activates the Minnesota Plan. Negative H5 or H7 test results releases the Board’s quarantine and the Board from any other official action or obligations.
Positive H5 or H7 results from NVSL:
When positive H5 or H7 test results are received from NVSL, the Board will dispatch a Foreign Animal Disease Diagnostician (FADD) to the affected premises. The FADD will initiate an epidemiological investigation, collect additional samples, and coordinate field activities as needed in order to define the flock as an Exposed Flock or an Infected Flock. The ERC will be notified immediately to set a meeting time/place and provide initial advice to the Board. The AVIC or designated representative and company/producer representative will be notified to set a meeting time/place and begin development of Flock Plans and draft Compliance Agreements, providing additional input as the event is being handled. The EDMC will be notified within 48 hours. The Board will notify the industry and will implement the Incident Command System (ICS) in order to manage the event and implement the Minnesota Plan.

Surveillance Zone Movement and Monitoring Plans:
Three zones will be created around the affected premises. An “Infected Zone” will extend within a one mile radius of the affected premises. If poultry on an epidemiologically linked premises are identified as infected based on the Board’s investigation and a positive H5/H7 laboratory test, an additional “Infected Zone” will be created. Movement of birds, progeny or eggs in the “Infected Zone” is allowed by Board permit. A “Surveillance Zone” extending two miles around each “Infected Zone” is allowed by Board permit. A “Buffer Zone” in a three – six mile zone around each “affected premises” will be identified.

Surveillance of commercial poultry flocks within the “Infected Zone” will consist of ten blood and ten tracheal swab samples (dead bird surveillance) per flock daily for the first seven (7) days. When completed and if test results are negative, additional samples from the flock will be collected weekly for 35 days under the supervision of the Board. Non-commercial poultry flock surveillance will be conducted by collecting 10 tracheal/oropharyngeal swabs from each gallinaceous species of poultry on a premises under the supervision of the Board, submitting samples to an authorized laboratory for RRT-PCR testing. Surveillance of non-commercial waterfowl will be conducted by collecting 10 cloacal swabs from each waterfowl species on a premises under the supervision of the Board, submitting samples to an authorized laboratory for virus isolation testing. Samples will be collected at week one, week three and week six (42 days). The status of the Infected Zone will be released when surveillance testing is negative for 42 days. Similar, but less stringent testing will be conducted in the “Surveillance Zone”.

Flock Management Plans:
Three flock management plans are described for H5/H7 LPAI infected or exposed flocks. The management plan developed will be determined with input from the producer, Board, APHIS and the EDMC. Options are:

- Controlled marketing
- Depopulation and disposal
- Controlled vaccination

Premises Management and Repopulation Plans:
Prior to any activities being conducted for which indemnity may be requested, a Flock Plan and Compliance Agreement for each affected premises must be developed, discussed, and signed before any activities for which indemnity may be requested. Following the removal of infected birds, the premises is to be cleared of the H5/H7 LPAI virus prior to repopulation. The protocol for clearing, or cleaning and disinfection as the case warrants, will vary in each situation and will be developed with input from the producer, Board, APHIS and the EDMC. Different premises management plans include (1) complete clean out of building/buildings that contained infected birds (Infected Flock), (2) partial clean out of building/buildings that contained exposed birds (Exposed Flock), (3) alternate cleaning and disinfecting plan that does not fit the above criteria.

An inspection of the premises by the Board is required prior to repopulation. Weekly surveillance testing of poultry on the repopulated premises is required for 42 days after the last positive premises is identified.