

# **Appendix C**

## ***Protocol for Sequential Depopulation and Use of Vaccine for Eradication of Low Pathogenicity H5 or H7 Avian Influenza Viruses\****

### **Case Definitions:**

For the sake of clarity, premises and houses will be classified as positive or negative. Quarantines are issued to a premises and not a house. The following definitions will apply:

Positive House: This house has a flock that was diagnosed positive for H5 or H7 LPAI, through virus isolation, or RT-PCR. A house will remain positive until that flock is removed, the house is cleaned and disinfected, and environmental culture results are negative. At that time, the house will be considered negative.

Positive Premises: A positive premises contains at least one house positive for LPAI through virus isolation, or RT-PCR. Positive premises will remain under quarantine until all flocks from positive houses complete their production cycle and are removed from the premises. When birds from the last positive house are removed, the quarantine will be released from the premises.

Negative House: A house in which no flocks have ever been diagnosed as positive or have ever had positive serology.

Virus-negative House: This house has a flock that has serology positive for H5 or H7 LPAI, but is negative for virus by virus isolation, or RT-PCR. A house will remain virus negative until that flock is removed or becomes positive. Once that flock has been removed, the house will be considered negative if the next flock remains serologically negative.

Virus-negative Premises: This premises has at least one flock that has serology positive for H5 or H7 LPAI, but is negative for virus by virus isolation, or RT-PCR. These premises will be continually monitored for possible re-emergence of H5 or H7 LPAI viruses. The frequency and modality of monitoring will depend on the risk of re-emergence and will be determined by the State Veterinarian.

Negative Premises: Premises on which all houses are negative for LPAI by serology, virus isolation or RT-PCR. The goal of this protocol is to allow both locations to be classified as negative premises.

### **Vaccine Issues:**

### **Purchase and Administration of the Vaccine:**

Vaccine shall be purchased by the company. It shall be approved by USDA-APHIS and be under control and permitted for use by the Oregon Department of Agriculture (ODA). The Federal and State role in the vaccination process will be limited to oversight and monitoring. It is the responsibility of the company to administer the vaccine.

Vaccine will be administered by appropriate route. Pullets should receive two injections, unless less than 90% of the flock is immunized two weeks following vaccination. If that is the case then, an additional vaccination will be performed. Previously infected layers, now recovered, should receive one injection.

### **Replacement Pullet Procedures**

Birds should be vaccinated a minimum of two weeks prior to moving to positive premises, so that there has been adequate time for antibody response. A cohort of 75 replacement pullets will remain unvaccinated for AI. These will be individually banded and tested for negative AI status by AGID at the time of placement onto the infected farm.

Upon movement to the laying house, these unvaccinated sentinels will be randomly placed in 15 cages throughout the laying house or commingled with cohorts in floor systems. Once moved to the laying house, every two weeks, 20 of the sentinels will be serologically sampled and tested by AGID. These samples will be collected or overseen by ODA personnel. Positive AGID results will require swabbing of 30 sentinels to determine whether virus is present using RT-PCR or virus isolation. If the sentinels are positive for virus, then the program will be terminated, and the farm will be depopulated. Negative premises will continue to be monitored by serum or egg yolk antibody testing on a regular basis. Any egg production drops or increases in mortality should also trigger additional diagnostic testing.

### **Manure Management:**

Movement controls to take manure off farm must be consistent and enforced. Definitive biosecurity procedures must be established that will not contribute to the spread of the disease. Monitoring of daily bird mortality by swabbing or by dead bird pick up on a weekly basis for three to four weeks must be implemented to establish whether manure is safe for movement and disposal.

### **Goals and Timeframes:**

The following steps should also be taken:

- Spent hens may be required to be depopulated, rather than marketed, after completing their production cycle.
- Review placement schedules and arrange for early push-outs. New placements indicate that a new group of replacement pullets will be of appropriate age for vaccination (13-15 weeks) every 3-4 weeks. Sequential house-by-house depopulation to eradicate the H7 virus, with “all-in all-out” movements, on the index farm should be completed in 15 months;

- After three months, the ODA and the USDA will reevaluate the frequency of testing and review results, making adjustments if necessary;
- After six months of negative sentinel results, the need to continue with vaccination will be reviewed.

ODA will seek additional recommendations from the USDA's Standard Operating Procedures HPAI Task Force Manual and the National Avian Influenza Response Plan, August 2006.

