USDA
United States Department of Agriculture

Animal and Plant Health Inspection Service

Veterinary Services

Center for Veterinary Biologics

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CENTER FOR VETERINARY BIOLOGICS NOTICE NO. 15-07

TO: Biologics Licensees, Permittees, and Applicants
Directors, Center for Veterinary Biologics
Veterinary Services Leadership Team

FROM: Byron Rippke
Director
Center for Veterinary Biologics

BYRON RIPPKE

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Date: 2015.06.10 07:39:02 -05'00'

SUBJECT: Availability of Avian Influenza Isolates

I. PURPOSE

The purpose of this notice is to inform interested parties that samples of highly pathogenic avian influenza (HPAI) isolates are available for purchase from the National Veterinary Services Laboratories (NVSL).

II. BACKGROUND

H5N1 HPAI virus emerged in China during 1996 and has subsequently evolved into diverse clades and subclades. Beginning in January 2014, a distinct group of HPAI H5 reassortant viruses (H5N8 subclade 2.3.4.4) caused outbreaks in poultry in South Korea. By late 2014, it had spread to Japan, the Russian Federation, and Europe, with multiple isolations occurring from wild birds, including apparently healthy birds.

HPAI viruses originating from Eurasia spread rapidly along wild bird migratory pathways from the Eastern to the Western Hemisphere during 2014 and continue to be detected in the United States. The index cases in the United States were detected in Whatcom County, Washington. A 2.3.4.4 HPAI H5N8 virus was isolated from a captive gyrfalcon (*Falco rusticolus*) that hunted and fed on wild birds, and an H5N2 virus was isolated from a wild Northern pintail (*Anas acuta*) that was found dead in the same area. Initial phylogenetic analysis of the H5 clade 2.3.4.4 viruses detected in the United States indicated the Eurasian lineage avian H5N8 clade 2.3.4.4 virus survived introduction to North America in its entirety.

All U.S. HPAI viruses genetically analyzed to date are very similar, have an HA gene derived from the Eurasian H5 clade 2.3.4.4, and are highly pathogenic in poultry. Both the H5N2 and H5N8 strains have been implicated in recent poultry outbreaks. Molecular evidence indicates that independent introductions as well as “common source” exposures are occurring in several states concurrently. In February 2015, the Eurasian H5N2 virus was isolated from commercial poultry in the Midwestern United States and has been detected in commercial or backyard poultry in 13 states, affecting

nearly 40 million birds as of May 2015. The poultry isolates characterized to date are >99% similar to the index viruses.

III. ACTION

Veterinary Services is making selected viruses available to facilities with appropriate Select Agent registration to encourage disease research and development to benefit the U.S. poultry industry, courtesy of the United States Geological Services (USGS), National Wildlife Health Center (NWHC), Washington State, and the Minnesota Board of Animal Health. Isolates available include:

- A/Northern pintail/Washington/40964/2014(H5N2) – courtesy of USGS NWHC and Washington State
- A/gyrfalcon/Washington/41088-6/2014(H5N8) – courtesy of USGS, NWHC, and Washington State
- A/turkey/Minnesota/9845-4/2015(H5N2) – courtesy of the Minnesota Board of Animal Health

Biologics firms with appropriate Select Agent Registration that wish to obtain samples of these isolates for research purposes should:

A. Contact the NVSL Diagnostic Virology Laboratory at (515) 337-7551 for guidance regarding the appropriate forms and payments to submit.

B. Submit the completed forms and the payment associated with the order by one of the following methods:

1. Mail: NVSL User Fees, Box 844, Ames, Iowa 50010
2. Email: NVSL_concerns@aphis.usda.gov.

C. **Note that these isolates must be transferred in compliance with the Select Agent Regulations. No Material Transfer Agreement will be required. These isolates are not pre-tested Master Seeds; they are being made available for research and development. The availability of these isolates does not infer any impending change in vaccination policy.**

IV. IMPLEMENTATION/ APPLICABILITY

These reagents are currently available from the NVSL.