

CORNELL UNIVERSITY MEDIA RELATIONS OFFICE

FOR RELEASE: April 12, 2015

Melissa Osgood
(607-255-2059
mmo59@cornell.edu

Joe Schwartz
(607) 254-6235
Joe.Schwartz@cornell.edu

Midwest Canine Influenza outbreak caused by new strain of virus

ITHACA, N.Y. – The canine influenza outbreak afflicting more than 1,000 dogs in Chicago and other parts of the Midwest is caused by a different strain of the virus than was earlier assumed, according to laboratory scientists at Cornell University and the University of Wisconsin. Researchers at Cornell say results from additional testing indicate that the outbreak is being caused by a virus closely related to Asian strains of influenza A H3N2 viruses, currently in wide circulation in southern Chinese and South Korean dog populations since being identified in 2006. There is no evidence that it can be transmitted to humans.

The outbreak in the Midwest had been attributed to the H3N8 strain of virus, which was identified in the U.S. dog population in 2004 and has been circulating since. The H3N2 virus had not been previously detected in North America. The outbreak in Chicago suggests a recent introduction of the H3N2 virus from Asia.

Testing of clinical samples from the outbreak conducted at The New York State Animal Diagnostic Laboratory at Cornell indicated that the virus was Influenza A. Further testing led researchers to believe a new strain was at fault. Subsequent testing, carried out with the assistance of the Wisconsin Veterinary Diagnostic Laboratory, identified the new subtype as H3N2. The National Veterinary Services Laboratories in Ames, IA is sequencing two isolates from this outbreak, which were isolated at Cornell, to facilitate rapid complete characterization of the viruses.

Both Influenza strains can cause high fever, loss of appetite, coughing, nasal discharge, and lethargy. Symptoms may be more severe in cases caused by the H3N2

virus. Some infected dogs may not show symptoms at all.

H3N2 has caused infection and respiratory illness in cats.

Veterinary professionals are advised that diagnostic testing of samples from sick pets can be done using a broadly targeted Influenza A matrix reverse transcriptase-polymerase chain reaction assay (Rt-PCR). The canine-specific Influenza A H3N8 Rt-PCR in use in several laboratories will not detect this virus. Serology is also currently not available as the H3N2 virus is different enough from H3N8 that antibodies may not cross react. However, an H3N2-specific serologic assay is under development and will be available soon.

It is not known if the current vaccine will provide any protection from this new virus. It does protect against H3N8, which is in circulation in some areas. Other preventive advice remains the same: In areas where the viruses are active, avoid places where dogs congregate, such as dog parks and grooming salons.

Owners of symptomatic dogs and cats should consult their veterinarians about testing and treatment.

Cornell University has television, ISDN and dedicated Skype/Google+ Hangout studios available for media interviews.