

press release

**NEW STUDY CONFIRMS THAT CANINE FLU VIRUS SPREADS EASILY, CAN CAUSE LUNG DAMAGE NOT READILY DETECTABLE IN THE CLINIC**

Summit, N.J., September 8, 2010 -- A new study in *Veterinary Microbiology* is the first to confirm that Canine Influenza Virus (CIV) H3N8 easily spreads from infected dogs to other dogs. It also showed that CIV can cause more serious forms of respiratory disease in dogs, such as pneumonia, that often go undetected in clinical practice.

Cynda Crawford, DVM, PhD, University of Florida College of Veterinary Medicine, Clinical Assistant Professor of Shelter Medicine, and a leading expert on CIV, said, "This study is important for several reasons. First, it provides clear evidence that CIV H3N8 is highly transmissible between dogs, confirming field observations recorded during naturally occurring canine influenza outbreaks in confined populations of dogs. Second, the finding of subclinical pneumonia in nearly all infected dogs in the study underscores the virulence of this virus in both the upper and lower respiratory tract, predisposing many dogs to serious overt pneumonia requiring hospitalization."

In addition, researchers confirmed that excretion of the virus (shedding) precedes the manifestation of clinical signs. This is significant, according to the study, because it demonstrates that apparently healthy dogs can infect dogs they encounter at kennels, clinics, shelters, training settings, shows and other locations where they congregate.

Researchers also found evidence of "rolling" infection, which makes it difficult for infected kennels and shelters to eliminate the infection unless they can close down and keep new uninfected dogs from entering, according to the researchers. These locations can also become sources of disease with the potential to spread to other facilities.

NallaKannu Lakshmanan, MVSc, PhD, Associate Director of Biological Research at Intervet/Schering-Plough Animal Health and one of the authors of the study, said, "We know that canine influenza, a new disease for many veterinarians, is often under- or misdiagnosed because clinical signs are similar to other respiratory diseases. Our research further suggests that infected dogs may have serious lung damage that goes undetected because it does not manifest as pneumonia." Study authors concluded that many more dogs with CIV are likely to have lung damage not being detected clinically in

veterinary practice, particularly compared to canine cough, which rarely leads to serious respiratory disease.

Dr. Crawford also noted, “Since clinical trials have demonstrated that the Canine Flu H3N8 vaccine significantly decreases virus shedding and the presence of subclinical pneumonia, the findings of this new study suggest that vaccination may greatly reduce the potential for rolling infections and pneumonia, thereby protecting facilities from full-blown outbreaks and individual dogs from hospitalization.”

The article, “Transmission of canine influenza virus (H3N8) among susceptible dogs,” (Faris F. Jirjis et al) also stressed the importance of accurate sample collection. Dogs may only show increased nasal secretions in the early stages of infection, which often goes unnoticed. Once symptoms like coughing are evident, then serum samples can be submitted for diagnosis.

The study, conducted by Intervet/Schering-Plough Animal Health researchers, was recently published in *Veterinary Microbiology* (*Veterinary Microbiology* 144 (2010) 303–309).

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