

# Canine Influenza Virus (CIV H3N2 and H3N8): 10 topics you should know

## 1 How does Canine Influenza differ from CIRDC (kennel cough)?

CIV is one of the pathogens that causes Canine Infectious Respiratory Disease (CIRD). It is not possible to diagnose CIV from other pathogens that cause CIRD based on symptoms alone. The main distinction of CIV from other pathogens that cause CIRD is that dogs will typically begin shedding virus before they display any symptoms of disease. Thus, a dog that appears perfectly healthy can be shedding virus and is therefore capable of infecting other dogs.

## 2 What are the treatments for Canine Influenza?

The only treatment for a dog that is infected with CIV is to provide supportive care. This includes consideration of the potential for co-infection with other pathogens, especially those that are caused by bacteria and might require an antibiotic for treatment.

## 3 How fast does it affect dogs after contact?

Based on the results of the challenge study that was performed for Vanguard® CIV licensure, it appears that dogs may begin to display symptoms of respiratory disease between 2 and 5 days after infection with CIV H3N8<sup>1</sup>. It is important to note that in the same study, peak viral shedding was seen from 2–5 days, so it is possible that a dog with no or very early symptoms of respiratory disease may, in fact, be shedding CIV and capable of infecting other dogs.

## 4 How is it spread?

CIV is spread through direct contact with other dogs, infectious respiratory secretions (such as aerosolized droplets from sneezing) and through contact with contaminated objects such as toys, bedding, human clothing and communal water bowls.

## 5 How infectious is it?

The majority of dogs are naïve to CIV and therefore all unvaccinated dogs should be considered as being at risk.



<sup>1</sup> Data on file, Study Report Number 3161R-60-09383, Zoetis Inc.

## 6 Clinical signs?

The clinical signs of CIV are indistinguishable from those of other CIRDC pathogens and may commonly include: coughing, sneezing, nasal and ocular discharge and fever.

## 7 What samples are needed for CIV PCR testing?

PCR testing is commonly performed on nasal and deep pharyngeal swabs. It is important to note that if PCR testing is performed on samples obtained at a time when the dog is not actively shedding CIV, a false negative test may occur. After the acute phase of infection has passed, serology testing can be used to determine if the dog has mounted an immune response to CIV. Ideally this will involve two blood samples drawn 7–14 days apart.

## 8 Zoonotic potential:

CIV is not considered a zoonotic risk.

## 9 How to clean up a facility if an exposed dog comes into the clinic or at home:

Please see pages 12 and 13 of the Zoetis CIRDC Outbreak Management Technical Bulletin for detailed instructions on environmental management of CIRDC outbreaks.

## 10 How long after vaccination are they protected?

Duration of immunity has not been demonstrated for any of the CIV vaccines that are marketed in the United States. When the decision is made to vaccinate for CIV, an annual booster is recommended after the primary series of 2 doses administered 2–4 weeks apart. The Zoetis Companion Animal Immunization Support Guarantee applies to any dog that is appropriately vaccinated for CIV and received Canine Influenza Vaccine, H3N2, Killed Virus\* or Vanguard® CIV for the final vaccine. The guarantee provides coverage for 12 months and takes effect 2 weeks after the primary vaccination series is completed or at the time of annual booster vaccination.



\*This product license is conditional.  
Efficacy and potency studies are in progress.