



Canine Influenza

Facts:

- Virus that causes a respiratory infection in dogs and rarely cats
- Closely resembles “kennel cough” and they are part of an overall respiratory complex
- Two strains isolated in the U.S.
 - o H3N2 (Chicago strain, emerged in 2015, currently in 25 states)
 - o H3N8 (Florida strain, emerged in 2004, currently in 40 states)

Symptoms:

- 80% of exposed dogs become infected and develop, respiratory symptoms
 - o Mild cough that persists for 10 to 21 days despite treatment
 - o Some develop persistent cough, thick nasal discharge, fever, lethargy, eye discharge and reduced appetite
 - o Mortality (death) rate is less than 10%
 - o Secondary bacterial infections can develop leading to pneumonia
- Some do not show signs of illness, but shed the virus and infect other dogs

Transmission:

- Highly contagious!
 - o Most contagious during 2-4 day incubation period **before** clinical signs noted
 - o Intermittent viral shedding for up to 24 days
- Easily spread through direct contact, contaminated objects, and airborne
- Virus remains viable on surfaces for up to 48 hours, on clothing for 24 hours, and on hands for 12 hours

Diagnosis:

- Cannot be diagnosed by clinical signs alone since it mimics other pathogens
- Nasal/throat swabs for PCR or blood samples need to confirm diagnosis

Treatment:

- Most recover within 2-3 weeks and treatment is largely supportive: antibiotics, fluids, anti-inflammatories, and cough suppressants
- Some patients require hospitalization

Prevention:

- Vaccination: May not completely prevent disease, but severity, length of illness and viral shedding are reduced.
 - o Should be based on exposure risk
 - Boarding, grooming, daycare, dog parks, dog shows
 - Travel to high risk areas like Chicago and Florida
 - o There is no cross protection between the two strains/vaccines
- Hygiene: hand washing, cleaning of shared of items
- Isolation protocols:
 - o Sick or exposed dogs should be isolated for 2 weeks, preferably with a separate air supply and personal protective equipment for caretakers
 - o Dog owners with symptomatic dogs should not participate in activities or bring their dog to facilities where other dogs may be exposed