

TECHNICAL BULLETIN

Canine Influenza

Canine Influenza differs from Canine Infectious Respiratory Disease Complex ("Kennel Cough"). Two strains of canine influenza virus have been identified in the United States: H3N8 and H3N2. Canine H3N8 was first identified in 2004 in Florida and is thought to have jumped to dogs from an equine H3N8 strain. Canine H3N2 was identified in Chicago March 2015 and is thought to have originated from an avian influenza. There has been no evidence that either strain can infect humans. Transmission is through fomites (hands, objects, or materials), and via aerosols (coughing, barking, sneezing).

Canine Influenza is highly infective. Dogs develop respiratory signs 2 to 8 days after infection. Virtually all dogs exposed to influenza become infected, with approximately 80% developing clinical signs. Those that do not become ill can still shed virus. Most dogs experience mild illness with a cough that persists for 10 to 21 days despite treatment with antibiotics. Nasal and/or ocular discharge, sneezing, fever, lethargy, and anorexia may also be observed. Most dogs recover without incident, however deaths due to H3N2 have been reported (10%). Confirmatory tests include PCR (within the first 5 days of infection), and serology afterward. Treatment includes fluid and nutritional support, antibiotics for secondary infection, and if needed, cough suppressants. Most dogs recover in 2-3 weeks.

The virus remains viable on surfaces for up to 48 hours, on clothing 24 hours, and on hands 12 hours. To prevent transmission, infected dogs, as well as all other dogs in households (or wherever there may be an outbreak) should be isolated for 4 weeks. Because the virus has a lipid soluble envelope, it is easily killed on hard surfaces by commonly used disinfectants (quaternary ammonium, aldehydes, phenols, and a 1:30 dilution of bleach, etc.). Vaccines are available for both H3N8 and H3N2. Vaccination will reduce the severity and duration of clinical illness. Dogs that may benefit from vaccination might include populations normally receiving a kennel cough vaccine (because the risk groups are similar). Since fomites are one of the known

vectors for transmission, it is especially important that hands and clothing of individuals handling infected animals be disinfected and/or sanitized to avoid spread of contagion. Also, being an airborne pathogen, treating the air in facilities where outbreaks are of concern is also of benefit.

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Dr. Seitz has a diverse business background through a variety of business affiliations. After serving in the U.S. Naval Air Corps, he graduated from Michigan State University with his Doctorate in Veterinary Medicine and began private practice. He then went on to develop and build a veterinary



product distributorship for one of the nation's largest Pet Product Distributors. Following that success, he moved to New England to take a position with a billion dollar a year medical supply manufacturing company and was instrumental in their efforts to build and develop a dominate presence among the veterinary community throughout the United States. He then left that position to start Alpha Tech Pet, Inc. in 1989, with a focus on developing, manufacturing, and marketing various environmental products for use in the animal care industry. Since that time he has established a strong presence in the marketplace with sales of nationally branded items throughout the United States. He also serves on the New England Board of Governors for Hope International, a Christian non-profit organization committed to microenterprise development, helping the poorest of the poor around the world start small businesses. Dr. Seitz is married with two children and believes solidly in commitment to strong family values. His favorite activities outside of work are reading the Bible, spending time with his family, golf, and serving in the church in which he and his family attend.