Canine infectious respiratory disease:
- Recent increase in reported cases in Chicago
- Involves several pathogens: bacteria and viruses
- Dogs housed in private and commercial kennels, pet shops, animal shelters and boarding facilities are at significantly higher risk of exposure and infection
- Transmission occurs via direct contact, oronasal contact or aerosolized respiratory secretions through contaminated dishware, human hands or fomites
- Clinical signs can develop within 1 to 3 days after exposure or longer (ave. 3-10 d, shed ≤10d)
- Clinical signs include coughing, “honking cough” with or without production, nasal discharge, fever, lethargy or decreased appetite
- Diagnosis based on history of recent exposure along with other tests including physical examination findings, baseline bloodwork, chest radiographs or pathogen isolation
- Treatment requires veterinarian evaluation: Typically supportive in nature: fluids, antiemetics, cough suppressants, or antibiotics if bacterial or secondary bacterial infection is suspected. Understand that if your dog has a viral infection, there no “antibiotic” for viral infections, instead the disease has to run its course and more severely affected animals require hospitalization for supportive care until the disease has passed.
- Contact your veterinarian with any questions or if you believe that your dogs is showing clinical signs
- Isolate your dog from other dogs for 2-3 weeks beyond clinical signs
- Canine influenza is a new disease recognized in 2004. As such the majority of dogs in the United States have not been exposed and have no natural immunity. The majority of dogs exposed to the virus will develop the disease.
- Most cases will be mild and self-limiting but some will progress to moderate to severe disease states require hospitalization.

To avoid infection:
- Avoid taking your dog to high risk areas: dog parks, dog day care, kennels, grooming facilities, training facilities, dog shows, or any areas where dogs frequent.
- Discuss having your dog vaccinated against Canine Influenza. There is a vaccine available that requires two vaccinations, 3 weeks apart to develop immunity. Like the human influenza vaccines, there is some question of its ability to provide protection, so vaccination is not a guarantee of full protection.
- If you visit a place that has an infecting, coughing dog, make sure to wash your hands thoroughly and consider changing clothes before interacting with your dog.

To manage outbreaks:
- Isolate dogs suspected of having contagious respiratory disease when first signs develop in an effort to limit exposure to susceptible dogs
- Thorough, routine cleaning of housing facilities preferably using fresh sodium hypochlorite (remade every 24-hours), chlorhexidine or benzalkonium solution
Canine Influenza Virus is easily killed by most common veterinary disinfectants and will die on its own after 48 hours on unstable or “labile” objects.

- Use isolation procedures for suspected infected animals
- Decrease crowding of congregated animals
- Wash hands frequently
- Adequate ventilation: from 12-20 air exchanges per hour
- No evidence that intranasal vaccination administered when clinical signs are manifest will alter the course of an outbreak
- Once an outbreak has developed, isolating or depopulating the entire facility for up to 2 weeks may be the only reasonable and most efficacious method of containing infection
- Testing for the causative agent is essential for proper management of the disease. Diagnostics to be considered include: Canine Influenza PCR Testing, Transtracheal washes, Canine respiratory viral panels.

Public health considerations:

- Zoonotic spread of canine B. bronchiseptica has been reported. At greatest risk are individuals that are immunosuppressed.
- Although human influenza virus strains occasionally infect dogs and cats, no evidence that canine influenza virus can be spread from dogs to people
- Nevertheless, immunocompromised people should avoid direct contact with animals having respiratory illness


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