

Coughing dogs – Can Fido really get the flu?

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Summertime fun is made even more enjoyable with our doggy companions! Many of us will bring our furry friends on summer vacations, camping or indulge in many walks outside in the park. Sometimes it isn't feasible to bring them with us and so our beloved fur-babies will be boarded or visit a doggy daycare. These types of summer places foster doggy friendships, and as such, commingling of dogs occurs. This lifestyle will put our pets at risk of contracting some infectious diseases, such as canine flu. Luckily, preventative measures can be taken to protect against the flu. Let's discuss various respiratory diseases your dog may be susceptible to in the summer!

Canine Infectious Respiratory Disease describes a disease that infects the upper and/or lower airways by various respiratory viral and bacterial bugs. This respiratory disease is more of a complex and encompasses the many bugs that may cause lung issues. How sick your pet becomes depends on a number of factors including husbandry, exposure and dose of bacteria/virus obtained.

Included in this disease complex is a term you may have heard before— “Kennel Cough”. Kennel cough, caused by the bacteria *bordetella bronchiseptica*, is one of the more commonly known pathogen that causes respiratory disease and is characterized by a dry-hacking cough. It is worth noting that multiple pathogens can occur in combination with each other to cause sickness in the lungs, or cause secondary damage once the lungs defenses are weakened and other bugs or viruses can set up shop. Kennel cough is very contagious and can be contracted from boarding facilities with kennels or in shelters.

However, other viruses such as, parainfluenza, canine respiratory coronavirus, adenovirus, distemper or canine influenza, or bugs like *mycoplasma*, may be at fault. So as to the title of this article: yes, your furry pal can indeed get the flu (canine influenza). Canine influenza is a contagious upper respiratory pathogen causing mild to severe illness by a few different strains of virus, just like in people. It is highly transmissible between dogs. There has been numerous recent outbreaks of canine flu across North America, with over 100 dogs in central Ontario infected in March. The strain of the flu infecting these Ontario dogs, H3N2, was first discovered in 2012, and suspected to be spread from importation of a rescue dog from Asia.

Clinical signs of any respiratory disease include coughing, congestion, nasal or ocular discharge, lethargy, loss of appetite and fever. An animal who is more seriously infected may have clinical signs of pneumonia and difficulty breathing. Fortunately for our infected furry friends, canine infectious respiratory disease is mainly associated with a cough and green (mucopurulent) ocular, or nasal discharge. This green color actually comes from inflammatory infiltrates the body is bringing into the respiratory tree and may not necessary mean a bacterial organism is causing disease (it could still very well be viral and not necessitate antibiotic therapy). Lower airway disease (lower refers to respiratory disease in the lung fields and includes the respiratory tree after the trachea) that causes a fever may require medical intervention and further treatment.

Favorably for disease caused by kennel cough, and for such viruses causing adenovirus and distemper, vaccination exists. Kennel cough vaccination needs to be given at least 72 hours prior to kenneling to maximize the immunity obtained from the vaccine, and is a needle-free (sprayed into the nose) easy way to immunize your furry friend. Although Kennel cough is not a core vaccination (like rabies vaccination), an owner should consider it for pets that visit dog parks, groomers, dog show competitions, agility trials or are an active socialite! Such breeds like pugs, or bulldogs, because of the short snout (pushed in face dogs or brachycephalic), may not be as tolerant of having a cough and also benefit from the vaccine. Animals with underlying respiratory or cardiac disease also cannot tolerating coughing so vaccination is worthwhile. However, the illnesses caused by these bacteria/flu are on the surface, indistinguishable, and most dogs with mild infections will recover within a few weeks with basic supportive care.

Once your pet has any of these clinical signs, a veterinary clinic visit is still warranted as a veterinarian can further assess and determine the best treatment options. Sometimes laboratory tests to culture the gross discharge is required to understand exactly what organism is infecting your pet and to guide which antibiotic needs to be given, if necessary. In shelter outbreak situations, culturing gives us the 'ammunition' to combat and stop the spread of disease! Overall, if a cough is noticed in your dog, be aware it might warrant more attention and feel free to consult with a veterinarian to determine the best course of action!