



KENNEL COUGH

ABOUT THE DISEASE

Kennel cough describes a group of infectious organisms which causes **canine infectious tracheobronchitis complex (CITBC)**. This disease is characterized by a harsh, hacking cough that most people inaccurately describe as sounding like something is stuck in the throat. During coughing fits or following a strong cough, patients might stimulate the gag reflex and vomit as well.

One or a combination of pathogens are responsible for causing similar symptoms in the canine patient. Some of these pathogens include Bordetella bronchiseptica, E. coli, staph species, strep species, proteus species, parainfluenza, adenovirus type 2, distemper, respiratory coronavirus, or canine influenza.

Each organism has its own level of severity (virulence), which can range from a simple cough to full pneumonia and systemic illness. Please see the [Canine Distemper Virus](#), [Canine Coronavirus – Respiratory](#), [Canine Influenza Virus](#), or [Pneumonia](#) documents for additional information.

Infected canine patients often shed bacteria and viruses for up to 2-3 months, depending on organism. While coughing these pathogens can become airborne. In some circumstances, they can be transmitted on toys, food bowls, or other objects. Once a healthy patient is contacted, the incubation period from contact to symptoms is typically 2-14 days.

Not all patients contacted develop disease. Normally, the respiratory tract has substantial safeguards to prevent invading pathogens. However, if these safeguards are damaged (due to stress, inflammation, infections, etc.), the invading pathogens have an increased probability of causing disease.

Bordetella bronchiseptica is the chief agent known for causing **kennel cough**. This pathogen is more efficient at bypassing the normal respiratory safeguards as well as damaging the airways enough for other pathogens to invade an otherwise normal respiratory tract. It is because of this that a Bordetella vaccine was developed, but the **kennel cough** vaccine does not vaccinate against other pathogens.

OBTAINING A DIAGNOSIS

A thorough clinical history and physical examination by a veterinarian is typically enough to diagnose canine patients with **canine infectious tracheobronchitis complex**.

X-rays (radiographs) will not necessarily help diagnose this condition unless it has progressed to pneumonia.

Routine laboratory testing will not usually help diagnose this condition unless the patient has progressed to systemic symptoms. Reference laboratories do contain respiratory pathogen panels, which can help identify several different types of organisms. In more extreme cases, this will help narrow treatment recommendations.

TREATMENT

In most cases **CITBC** is a self-limiting disease, meaning it will cause a cough but rarely progress to serious symptoms. In mild cases, minimal treatment is required aside from anti-inflammatories and a mild cough suppressant.

Typically, young puppies or older patients are susceptible to disease, so **CITBC** is treated a bit more aggressively when symptoms worsen or cause pneumonia. Routine antibiotics can typically cover most bacterial pathogens, but occasionally hospitalization and intensive care are required for severely affected patients.

TIPS FOR SUCCESS

- Always booster vaccinations according to veterinary recommendations.
- Many cases of **CITBC** are self-limiting and only require anti-inflammatories and rarely antibiotics.
- Recheck if the patient becomes systemically ill (lethargic, not eating, severe cough, etc.).
- Patients can still get **CITBC** even if they have been vaccinated against Bordetella