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**KENNEL COUGH**  
**(Infectious Tracheobronchitis)**

***What is Kennel Cough?***

Kennel Cough is a broad term covering any infectious or contagious condition of dogs where coughing is a feature. The term tracheobronchitis describes the location of the infection in the windpipe and bronchial tubes. Several viruses and bacteria can be involved. These include adenovirus type-2 (distinct from the adenovirus type 1 that causes *infectious hepatitis*), parainfluenza virus, and the bacterium *Bordetella bronchiseptica*. Because the infection spreads when dogs are housed together, it is often seen soon after dogs have been in kennels, hence the name.



***What are the clinical signs, besides coughing?***

Clinical signs are quite variable. It is often a mild disease, but the cough may be chronic. Signs include runny eyes and nose, swollen tonsils, wheezing respiration, lack of appetite and depressed behavior.

***What is the treatment?***

There is no specific treatment for the viral infections, but many of the more severe signs are due to bacterial involvement, particularly *Bordetella*. Antibiotics are useful against this bacterium, although some antibiotic resistance has been reported. Some cases require prolonged treatment, but most infections resolve within a week, three weeks at most. Mild signs may linger even when the bacteria have been eliminated.

***How can I prevent my dog contracting Kennel Cough?***

Most vaccination programs your veterinarian will recommend contain adenovirus and parainfluenza. *Bordetella* vaccination is also highly recommended.

***How effective are these vaccines?***

Immunity, even after natural infection with respiratory viruses like parainfluenza, or bacteria such as *Bordetella*, is neither solid nor long-lasting. We cannot expect vaccines to do much better. Therefore it is sometimes recommended to give a booster dose, particularly of *Bordetella* vaccine, shortly before a scheduled period in kennels and every six months to ensure maximum protection against this troublesome infection.

***How are the *Bordetella* vaccines delivered?***

Bordetella vaccination is performed either by injection or intra-nasal route. Intra-nasal refers to the liquid vaccine administered as nose drops. This allows local immunity to develop on the mucous membranes of the nose, throat and windpipe where the infectious agents first attack.