



Infectious Canine Laryngotracheitis

*Kennel Cough – Canine Respiratory Disease
Complex – Infectious Canine Tracheobronchitis
– Infectious Canine*

Infectious Canine Laryngotracheitis

A highly contagious acute respiratory disease spread by close contact causing laryngitis, tracheitis, bronchitis and in some cases a rhinitis.

Most cases involve a primary viral infection and sometimes with secondary bacterial involvement.



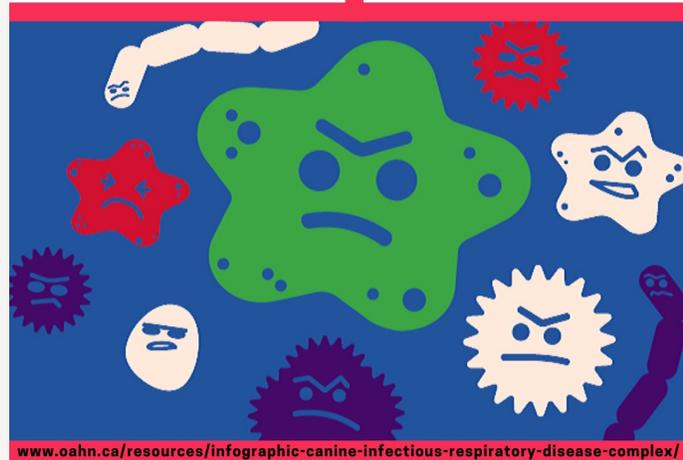
Etiology

- Canine adenovirus type 1 (CAV-1), Canine adenovirus 2 (CAV-2), Canine parainfluenza-2 virus, Canine herpesvirus, Canine distemper virus, Mycoplasma species and Bordetella bronchoseptica.

CANINE INFECTIOUS RESPIRATORY DISEASE COMPLEX



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infographic now available online



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The illness spreads rapidly among susceptible dogs housed in veterinary hospitals or kennels.

Infectious tracheobronchitis results from inflammation of the upper airways.

It is a mild, self-limiting disease but may progress to fatal bronchopneumonia in puppies or to chronic bronchitis in debilitated adult or aged dogs.

- Dry, hacking cough
- Retching
- Coughing up white foamy discharge
- Conjunctivitis

25 1-dose vials of vaccine, rehydrate each to 0.5 mL
25 0.5-mL vials of sterile diluent

Canine Adenovirus Type 2- Parainfluenza-Bordetella Bronchiseptica Vaccine

Modified Live Virus & Avirulent Live Culture

For vaccination of healthy dogs 8 weeks of age or older as an aid in preventing respiratory disease caused by canine adenovirus Type 2 (CAV-2) virus, canine parainfluenza caused by canine parainfluenza (CPi) virus, and disease caused by *Bordetella bronchiseptica*. Administer a single 0.5-mL dose intranasally. Store at 2°-7°C. Do not freeze. See back of card for complete directions and precautions.

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**RAPID
RESP 3**



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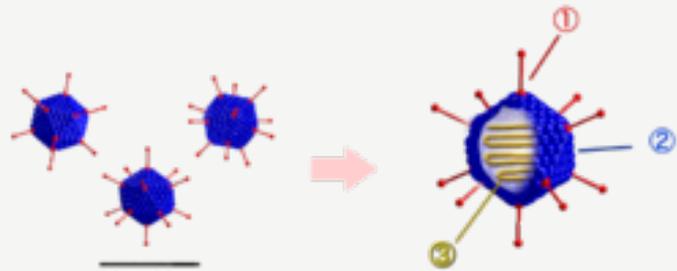
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**RAPID
RESP 3**



Infectious Canine Hepatitis (Hepatitis Contagiosa Canis)

Infectious canine hepatitis (ICH) is a worldwide, contagious disease of dogs with signs that vary from a slight fever and congestion of the mucous membranes to severe depression, marked leukopenia, and coagulation disorders.



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Etiology

Adenoviridae ----- Mastadenovirus --
----- CAV-1

nonenveloped DNA virus,
canine adenovirus 1 (CAV-1), which
is antigenically related only to CAV-2
(one of the causes of infectious
canine tracheobronchitis).

Transmission

CAV-1 infection occurs by inhalation and ingestion of the virus after shedding in the urine, faeces or respiratory secretions.

Transmission may be by direct contact, or by indirect contact such as via handlers or infected surfaces.

Pathogenesis

Initial infection occurs in the tonsillar crypts and Peyer patches, followed by viremia and disseminated infection.

Vascular endothelial cells are the primary target, with hepatic and renal parenchyma, spleen, and lungs becoming infected as well.

Chronic kidney lesions and corneal clouding (“blue eye”) result from immune-complex reactions after recovery from acute or subclinical disease.

Clinical Signs

Apathy, anorexia, thirst, conjunctivitis, serous discharge from the eyes and nose, and occasionally abdominal pain and vomiting.

Intense hyperemia or petechiae of the oral mucosa, as well as enlarged tonsils, may be seen.

Tachycardia out of proportion to the fever may occur.

There may be subcutaneous edema of the head, neck, and trunk.

In mild cases, transient corneal opacity may be the only sign of disease



This young dog with canine hepatitis has "blue eye" which is seen secondary to edema, vascular inflammation, or in the case of canine hepatitis virus, due to an immune response between the eye and the virus. Distemper virus is also associated with having a "blue eye".





Canine hepatitis is often deadly in unvaccinated puppies and young dogs, but older dogs usually tend to have mild symptoms and survive... but are carriers of the virus.

Yellow tint to the whites of the eye indicates liver disease. There are many possible causes, but canine hepatitis virus will be on high on your vet's rule out list if your dog hasn't been vaccinated.



Diagnosis

ELISA, PCR

PCR is required to definitively distinguish CAV-1 from CAV-2, if clinically necessary.

virus isolation,

immunofluorescence,

characteristic intranuclear inclusion bodies in the liver.