

# Championing **BORDETELLA** Education



We're making it easy so you can feel confident educating pet owners, giving them peace of mind and making an impact on the health of their pets.

## What is **BORDETELLA BRONCHISEPTICA**?

- Primary bacterial pathogenic agent associated with **Canine Infectious Respiratory Disease Complex (CIRDC)**
- Gram-negative aerobic bacteria that can inhibit ciliary function, cause cellular injury, and impair immune recognition and clearance

## What about **CIRDC**?

- Highly Contagious
- Socially transmitted disease
- Often referred to as "Kennel Cough"

## How do dogs **CONTRACT** CIRDC?

"Kennel cough" is the common term, but the disease is more complex and common than the term suggests. Dogs contract the disease through contact with infected dogs and **MANY DOGS ARE AT RISK.**

### Modes of **TRANSMISSION**:

- 1 Direct contact**  
(nose-to-nose)
- 2 Aerosol**  
(sneezing)
- 3 Fomite**  
(freshly contaminated objects)

### **COMMON AREAS** where dogs can get infected:

- Training classes
- Doggy daycare
- Veterinary clinics
- Pet stores
- Grooming salon
- Dog shows
- Animal shelters
- Dog parks
- Boarding facilities

## What are the **CLINICAL SIGNS** of CIRDC?!

- Dry "honking" cough
- Sneezing
- Nasal discharge
- Lower respiratory disease
- Ocular discharge
- Inappetence and lethargy

*Severe cases can lead to pneumonia and even death.*

Signs are usually seen  
**3 to 10 days**  
after exposure.<sup>1</sup>





How can you help

## PREVENT THE SPREAD

of *Bordetella bronchiseptica*?



**VACCINATION** is the first line of defense. Non-core does **NOT** mean not important.

Dogs can carry *Bordetella* without showing any clinical signs. Pet owners need to be educated about the risk of disease transmission while socializing their dogs in order to make informed decisions about their pet's well-being.

**INJECTABLE, INTRANASAL, and ORAL VACCINES:** What's the difference?



### MUCOSAL VACCINES (intranasal and oral)

- Contain live avirulent *Bordetella bronchiseptica*, and induce an immune response at the surface of mucus membranes called mucosal immunity
- The primary antibody involved in mucosal immunity is IgA which, among other things, helps block *Bordetella* penetration in a process called immune exclusion

**Immune exclusion** occurs when antibodies attach to a pathogen on the mucosal surfaces, facilitating immune clearance and helping to prevent damage to the cilia and epithelial cells.

- Only a single dose is required for healthy dogs (from 8 weeks of age onwards)



### INJECTABLE VACCINES

- There are two injectable vaccines available. One is a whole cell bacterin and the other is a killed cellular antigen extract
- The initial vaccination series requires 2 doses administered 2-4 weeks apart for healthy dogs (from 8 weeks of age onwards)



## PRECAUTIONS TO HELP PREVENT THE SPREAD

Precautions **YOU** can take as a vet tech in the clinic:

- Avoid crowding
- Ensure good ventilation
- Good sanitation
- Isolate infected dogs

Provide guidance to help the **PET OWNER:**

- Ensure pet owners follow their veterinarian's recommendation regarding when their dog can socialize with other dogs

*Always make sure that you are following the preventive care protocols of your veterinary health care team.*





## TECH TIP:

Pet owners are typically more open to vaccination when their dog is still a puppy. Explain why the risk may be higher than many realize, and explain what lifestyle changes would increase risk in the future.

## What is **YOUR ROLE?**

As an educator and pet advocate, you play a key role in **LEADING THE CONVERSATION** about CIRDC with pet owners.

**GUIDE** the conversation about vaccination protocols and the risks of not vaccinating.

**FRAME** the conversation around how some vaccines may not be required for every dog, but can be important for dogs that are at risk.

**GAUGE** the pet owner's understanding of the risks and educate them about their dog's vulnerability to *Bordetella bronchiseptica*.

**REASSURE** pet owners that you want what is best for their pet by addressing any concerns directly.

**RESOURCES** can be provided to the pet owner to take home, as necessary. Ensure you are using clear and appropriate language.



Handouts  
(consumer brochure)



AAHA Canine Lifestyle-Based  
Vaccine Calculator  
(available online)

Be confident **LEADING** the conversation

**ALIGN** your team on a common narrative to **REINFORCE** the importance of vaccination.

Come to an agreement on **COMMON TERMS** and how to communicate key takeaways with pet owners.

- E.g., identifying vaccines that are recommended but not required for all dogs

**SHARE YOUR KNOWLEDGE** with the team and make sure everyone is on board.

**REVIEW** cases seen in your clinic, and **DISCUSS** as a team.



<sup>1</sup> Ford RB. Canine infectious respiratory disease. In: Greene CE, ed. *Infectious Diseases of the Dog and Cat*. 4th ed. St. Louis, MI: Elsevier Saunders; 2012;4:55-65.