

Bordetella: Why Risk It?

Boarding dogs isn't the only way they can contract respiratory diseases, including Bordetella.

By Laura Thill

A stroll through the park? A trip to the local Starbucks? Dogs live for these outings. But, the more time they spend outdoors, the greater is their risk of being exposed to respiratory illness. “If you think about it, it’s much more common today for pet owners to take their dog with them when they go out for, say, ice cream,” says Kyle Malter, DVM, technical services veterinarian, Boehringer-Ingelheim Vetmedica, Inc. “And, dogs can be very social [with one another].” Add to that the fact that canine infectious respiratory disease (CIRD) is spread through aerosolized droplets. Whether dogs are face-to-face with one another – or simply caught in the line of a sneeze – it’s not difficult for them to become ill.



One of the most common canine respiratory illnesses – and one that is associated with some of the most severe symptoms – is *Bordetella*, Malter points out. For this reason, many veterinarians include the non-core Bordetella vaccine in their vaccination protocols. Still, if they don’t impress on clients why it’s so important, clients, in turn, may not realize their dogs are at risk, regardless of whether they will be staying at a kennel, he adds.

A serious disease

As with human flu, *Bordetella* symptoms can range from mild to extreme (pneumonia, lethargy, fever) and, on rare occasions, result in death. Puppies and dogs with underlying health issues tend to be at greater risk of developing severe illness. The bacterium – *Bordetella bronchiseptica* – is often associated with canine infectious tracheobronchitis, or kennel cough. Symptoms include:

- A dry hacking cough, or a cough that sounds like honking.
- Retching.
- Watery nasal discharge.

Dogs are usually vaccinated either by injection under the skin or intranasally. Recently, an oral vaccine

has become available as well. (Cats tend to be vaccinated less routinely than dogs. Primarily, sheltered cats are vaccinated when an outbreak of *Bordetella* has occurred, according to Malter. The feline vaccine is administered intranasally.) The American Animal Hospital Association recommends the following in its vaccination guidelines:

- Puppies can be vaccinated using the intranasal vaccine as early as three weeks of age, depending on the product label. A second dose should be given 2-4 weeks later.
- Puppies can receive the injectable vaccine as early as 6-8 weeks, followed with a booster between 10 and 12 weeks of age.
- Adult dogs or puppies over 16 weeks can receive the intranasal vaccine once. The injectable vaccine should be given twice, 2-4 weeks apart.
- Dogs should receive boosters every six to 12 months, depending on their risk of exposure.
- Kittens can be vaccinated intranasally as early as eight weeks of age.
- Adult cats and kittens older than 16 weeks can receive a single intranasal vaccine. Animal boosters are recommended for cats with known risk of exposure.

True, AAHA may consider the *Bordetella* vaccine as part of a noncore protocol. But that doesn't mean it's not important, notes Malter. "Pet owners tend to be more compliant with vaccinating their pets when the vaccines are required, or when the veterinarian makes it part of his or her core vaccine program," he says. When veterinarians don't impress on them the importance of following through with certain vaccines – some of which may be non-core – clients may not realize their value. The bottom line is, veterinarians should do a better job of assessing their patients for risk, he explains. This means asking not only if clients have plans to board their dog, but helping them

A wide range

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mean it's not important, notes Malter. Veterinarians can increase compliance by making it part of their core vaccine program

evaluate how much their dog socializes or is in the presence of other dogs.

"Vaccinations can be very effective at reducing the clinical signs of CIRDC," says Malter. "We also can reduce dogs' contact with unvaccinated dogs. Most kennels do this by requiring the vaccination [prior to boarding]." But, when owners take their dog to the park or the pet store, they can't avoid contact with unvaccinated dogs, he notes. "So, really, [an unvaccinated] dog can be at risk of infection in its own backyard if other dogs come through."

All viruses that cause CIRDC are contagious, says Malter. And while there are tests available to clinically diagnose *Bordetella* (e.g. polymerase chain reaction (PCR) test or cultures), veterinarians sometime feel limited by the cost and bypass them, he points out. "So, the veterinarians might [decide that because] the dog was exposed to other dogs and is coughing, it should be placed on antibiotics for *Bordetella*," he explains. But, viruses can lead to coughing or

respiratory issues as well, and ideally, the goal is to place the animal on the right antibiotics, he adds.

Bordetella vaccines have traditionally been very effective, he continues. At the same time, however, they have been unpleasant for the patient. “The problem has been that the nasal vaccines can be difficult to administer and the injection can be painful,” he explains. “We now have an effective vaccine for *Bordetella* that can be administered orally.” Dogs appear to enjoy the taste and are less resistant to it, he notes.

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Under-assessed, under-appreciated

Overall, veterinarians are doing a better job of educating their clients about canine respiratory disease, says Malter. Still, many clients don’t appreciate the risk of respiratory disease, which – together with cost factors – contributes to a lack of compliance with vaccination. “Pet owners aren’t always aware that their dogs are at risk for respiratory disease, even when they’re not sheltered at a kennel,” he says. Clients also may be unaware that respiratory disease can lead to life threatening diseases, such as pneumonia. And, they likely don’t realize that an oral vaccine is available, making it easier for their dog to receive it, he adds. “In the past, respiratory vaccines often

were considered the worst ones – especially when given nasally – because they were uncomfortable for the dog.

“Veterinarians must do a better job of risk-assessing patients for non-core vaccines, such as *Bordetella*,” he continues. Distributor sales reps can help in this regard by “highlighting just how socialized dogs are today. Dogs are accepted in stores, restaurants and outdoor cafes, and any place one dog is exposed to another, it is at risk for respiratory disease.” Even show dogs are at risk, he points

out. So, not only should veterinarians ask their clients whether they have plans to board their dog, they should be inquiring whether they take their dog to PetSmart. Sales reps can point their customers in the right direction by asking a few

probing questions, such as the following, suggests Malter:

- “Doctor, what percentage of your canine patients receive the *Bordetella* vaccine?”
- “What type of vaccine are you using?”
- “Remember, respiratory disease is not only spread in kennels. Are you asking your clients about their dogs’ broader exposure to other dogs?”

This is an opportunity, not only for veterinarians to begin a dialogue with their clients, potentially leading to better patient care and stronger client relations, but also for sales reps to provide service by mentoring their customers. ■

Social animals



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