

## **FAQ Regarding Kennel Cough/Upper Respiratory Infections (URI) in dogs at ACCT Philly:**

Q: What is Kennel Cough/URI?

A: Upper Respiratory Infection is the formal diagnoses of a canine cold. URI can be caused by many different viruses (parainfluenza virus type 3, canine herpes virus, canine respiratory corona virus, canine pneumovirus, canine influenza virus and others) and a few types of bacteria, Bordetella bronchiseptica (commonly called “kennel cough”) or mycoplasma. This collection of infectious agents is also referred to as Canine Infectious Respiratory Disease complex, or CIRDC.

The word “upper” reflects the upper airways of the respiratory tract, and means that symptoms from this infection are limited to coughing, nasal discharge and sometimes general symptoms of lethargy, inappetance and fever, just like colds in people. When a dog develops “lower” airway disease, this is pneumonia, and must be diagnosed with a radiograph and requires a longer treatment plan and more frequent rechecks by a veterinarian.

Normally, out in the community when a completely healthy, vaccinated and unstressed dog is exposed to these infectious agents, they will become infected but do not get sick because their immune system can fight off the infection before it really gets started. Unfortunately, when a dog enters the shelter, they are often stressed, may not have received recommended vaccinations and other preventive care, and are at risk of developing URI that causes illness and is a risk for developing pneumonia.

Q: Does every dog who goes to ACCT Philly end up with URI?

A: Similar to when children go to school, dogs in a kennel setting bring with them and are exposed to infectious agents that cause sickness. Unfortunately, the current structure of the large dog kennels at ACCT Philly are built in an older style that causes easy spread of these viruses between the dogs.

Specifically, the open siding in the top half of the kennel walls, kennel fronts less than 8 feet apart, and the entire kennels sharing a single air space all contributes to the spread of disease. When a dog is starting to have a cold the dogs around him are exposed to increasing numbers of these germs.

This happens even before volunteers and staff can tell that he isn't feeling well, even before the first sneezes! Because of this, every dog who is housed in our large dog kennels is exposed to CIRDC and at risk of becoming sick with URI, and the longer they stay with us, the more likely they will become sick.

However, dogs who were vaccinated before entering the shelter, only spend a few days in the kennels, or who have been in our kennels before, got sick and then got better, tend to not get sick or are very transiently sick and get well quickly, especially once out of the shelter.

Q: What does ACCT Philly do to try to reduce the spread of URI between dogs in the kennels?

A: Every dog is given a brief intake exam which includes vaccinations, de-wormer and flea treatment as soon as possible from the time they arrive at the shelter. While not perfect protection, these vaccines can help reduce the clinical severity from URI and for dogs who were previously vaccinated, can significantly shorten the course of disease or prevent it all together by boosting their immunity.

Dogs who are identified as at risk of getting severe URI due to age, body condition or another medical problem are urgently promoted for exit from our kennels, as they are at increased risk of not only getting URI but also developing a more severe version of this illness that becomes pneumonia and can be life threatening.

Q: How does ACCT Philly diagnose and treat URI in the shelter?

A: Every day a veterinarian walks through the shelter to look at every dog in the kennels, specifically assessing for clinical signs of URI which include: decreased appetite, lethargy, coughing, hacking, nasal discharge that is clear or yellow, increased rate or effort to breath and signs of congestion. Any dog that has clinical signs of URI is marked with a pink "Relax" sign to indicate they are feeling under the weather and should not be exposed to strenuous activity or extreme cold temperatures.

Depending on the clinical signs observed, how long they stay in the shelter setting, signalment (age, body condition, breed, etc) of the dog, a treatment plan is made to either monitor that individual dog more closely; begin monitoring and start on our first line antibiotic (doxycycline); or in severe presentations to start the dog on a stronger, second line antibiotic (azithromycin) and recommend urgent promotion to get her out of the shelter setting to reduce stress and facilitate recovery. Once the treatment plan is implemented, the dog's response is monitored daily by a veterinarian and the treatment plan updated as appropriate.

ACCT Philly also performs periodic surveillance testing that tells us about the circulating respiratory viruses and bacterial agents in our shelter population. To date, this testing confirms that since 2012 when routine surveillance started, canine influenza and canine distemper virus have not played a role in the endemic URI observed. This summer, a more in depth round of testing will take place with help from the University of Wisconsin Shelter Medicine program, and their diagnostic lab, to confirm this as well as to make sure that the new H3N2 flu strain has not entered our shelter.

Q: Why doesn't every dog just get started on antibiotics to prevent them from getting so sick?

A: Again, just like with human colds, the pre-clinical and early phase of URI infection can be entirely caused by a virus, which is not responsive to antibiotic treatment. If every dog was started on doxycycline on arrival, for example, they would still get URI from the circulating viral CIRD agents, and when a bacterial component arises, the doxycycline would then not work because it was started too early.

“Preventive” or “prophylactic” use of antibiotics to treat viral infections is considered an inappropriate use of antibiotics, and contributes to resistance, putting canine (and human) lives at risk!

Q: Why can't a dog who needs stronger antibiotics like Baytril<sup>®</sup> stay in kennels?

A: Similar to “prophylactic” use, housing a dog with a CIRDC infection so severe that a third line medication like enrofloxacin or another fluoroquinolone is indicated is an inappropriate quality of care and risks generating antibiotic resistance.

Bacteria have many ways of developing resistance to medications intended to kill them, and while currently the “Baytril/Azithro cocktail” is a very effective rescue protocol for dogs who have developed severe URI or possible pneumonia from ACCT acquired CIRDC, if dogs who are on this protocol are housed in kennels and other dogs are exposed to them prior to developing their own CIRDC infection, they are at risk of not responding to treatment at all, due to the ability of bacteria to “share” this defensive ability.

Using antibiotics responsibly and with a consistent “first-line”, “second-line” and “rescue” protocol preserves their effectiveness and saves lives by reducing the rate of resistance observed to these essential medications.

An additional factor for these patients is that when they are so sick as to need high power antibiotics, they also need closer monitoring, and may have become so sick due to the stressful environment of the shelter. The best thing we can do for a dog who has not responded to treatment or has become very sick with URI very quickly, is to get them out of the shelter environment and treated with a closely monitored, individualized treatment plan provided by a fully resourced veterinary hospital.

Q: What can Volunteers, Adopters and Transfer Partners do to help dogs with URI at ACCT Philly?

A: The single best way to prevent a dog from getting shelter acquired URI is to never let it enter the shelter!

Due to the structural limitations of our facility, it is not possible to truly isolate dogs with URI at ACCT Philly, which is the gold standard for managing infectious disease in a population setting. Therefore we must be vigilant with monitoring, implementing appropriate treatment plans and “isolating in place” those dogs with clinical URI. Any dog that a volunteer, staff member or transfer partner notices having possible clinical signs of URI can be identified for a vet check and a closer exam.

The next best thing is to get them out ASAP and until then, limiting the movement of clinically ill dogs. Also giving them warm blankets, appetite stimulating treats and quiet time out of the kennels (while avoiding direct contact with other dogs) can help a sick dog feel better faster and reduce the spread of these infections.

Foster care is another great way to get a dog with URI better faster, as a home environment is much less stressful for the patient and the close monitoring and supportive care possible in foster care makes a world of difference to these sick pets! When fostering a URI patient, it is important to keep them separate from other dogs in the home and neighborhood, even when they are starting to feel better, as the agents that cause URI can be infectious to all dogs; though healthy, vaccinated dogs who are not stressed are much less likely to get sick, and if they do, it is more likely to be a limited infection.

This document is intended to be informative for volunteers, transfer partners and other affiliates of ACCT Philly and in no way replaces prompt medical assessment or treatment by a veterinarian if a pet has possible URI.

Please contact [XXX@acctphilly.org](mailto:XXX@acctphilly.org) with any additional unanswered questions or concerns regarding the endemic URI of ACCT Philly or visit [www.XXX.org](http://www.XXX.org) to donate to our ACCTion Heros campaign, which is