



*Continued from Page 1.*

Those handling any aborted materials should take extreme caution and consider additional PPE. Respiratory and ocular PPE may be warranted in addition to gloves for aborted materials, handling brucellosis positive dogs, and the disinfection of kennels.

### **Clinical Presentation in Humans:**

Initial signs and symptoms can begin anywhere from 5 days to 6 months after exposure and typically present as generalized symptoms, such as fever, sweats, malaise, anorexia, headache, arthralgia, myalgia, back pain, and fatigue<sup>2</sup>. Some signs and symptoms may be short in duration while some may become chronic or reoccur. Chronic brucellosis can cause many different complications including endocarditis, arthritis, epididymo-orchitis (inflammation and infection of the testicles), central nervous system infections, and inflammation of the spleen and/or liver<sup>3</sup>.

### **Treatment in Humans:**

Brucellosis is treated with doxycycline and rifampin in a combination for at least 6 weeks. The recovery period may last anywhere from a few weeks to a few months depending on the severity of the illness and the time of the treatment. There is a very low risk of death from brucellosis, occurring in less than 2% of cases.

### **Cases in Animal Patients:**

Since brucellosis is a zoonotic disease that poses a significant health risk in people, it is important that cases are reported to public health. Please call Harris County Veterinary Public Health to report any animal cases at 832-927-1143. The zoonosis staff can discuss the guidelines on what should happen after diagnosis and go through different options for the next steps.

### **References:**

1. Information—Brucella. (2019). Texas Department of State Health Services. Retrieved from: <https://www.dshs.state.tx.us/IDCU/disease/brucella/Information.aspx>
2. Brucellosis. (2019). Centers for Disease Control and Prevention. Retrieved from: <https://www.cdc.gov/brucellosis/index.html>
3. Brucellosis. (2019). Mayo Clinic. Retrieved from: <https://www.mayoclinic.org/diseases-conditions/brucellosis/symptoms-causes/syc-20351738>

## **Zoonosis in the News: Puppies Behind *Campylobacter* Outbreak**

In mid-December the CDC announced that a 13-state outbreak of *Campylobacter jejuni* during 2019 is likely linked to store-bought puppies, but the investigation is still ongoing<sup>1</sup>. So far there are 30 confirmed cases across 13 states, 4 of which were hospitalized. The *Campylobacter* bacteria isolated from patients

so far has indicated that the strain is resistant to all the first-line antibiotics normally used, including azithromycin, ciprofloxacin, clindamycin, erythromycin, nalidixic acid, telithromycin, and tetracyclines<sup>1</sup>. No single supplier has been specifically indicated, but so far 12 cases have been linked to the Ohio-based Petland. This national chain was previously involved in a separate *Campylobacter* outbreak that sickened 113 individuals across 17 states, hospitalizing 23<sup>2</sup>. Evidence from the lab analysis indicates that the bacteria from the current outbreak is genetically similar to the previous multidrug-resistant *Campylobacter* outbreak linked to Petland puppies which began in 2016 and lasted until 2018<sup>1</sup>.

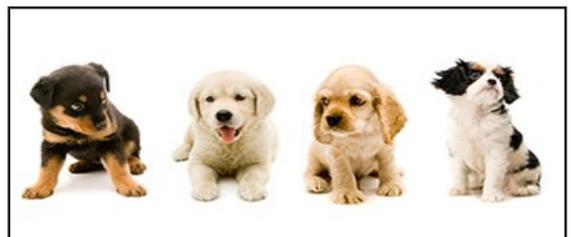


Image courtesy of cdc.gov

While we do not have any Petland locations in Harris County, there are locations in and around San Antonio, Tyler, and Dallas. Veterinarians are being urged to be on the lookout for puppies adopted from pet stores who show signs of *Campylobacter* infection, such as bloody mucoid diarrhea. Those who are

suspected of *Campylobacter* should be tested. The CDC recommends isolation for minor animal cases. If the animal case is severe enough to require antibiotics, a susceptibility panel is recommended since the antibiotic resistance profile for this outbreak includes commonly used antibiotics such as fluoroquinolones and macrolides<sup>1</sup>. Because of the inherent antibiotic resistance of *Campylobacter jejuni* (penicillins, cephalosporins, trimethoprim-sulfamethoxazole, amoxicillin-clavulanic acid, and metronidazole), outbreak strains may be difficult to treat<sup>1</sup>.

Pet owners are advised to wash their hands with warm water and soap after interactions with any puppy or dog, including handling their food, petting them, and cleaning up after them. *Campylobacteriosis* in humans has an incubation period of 1-10 days before they develop diarrhea, malaise, abdominal pain, nausea, and sometimes vomiting. Person-to-person transmission is uncommon. Symptoms will generally persist no more than one week. *Campylobacteriosis* is considered a notifiable condition in the state of Texas for humans. You can call Harris County Veterinary Public Health to report any animal cases at 832-927-1143.

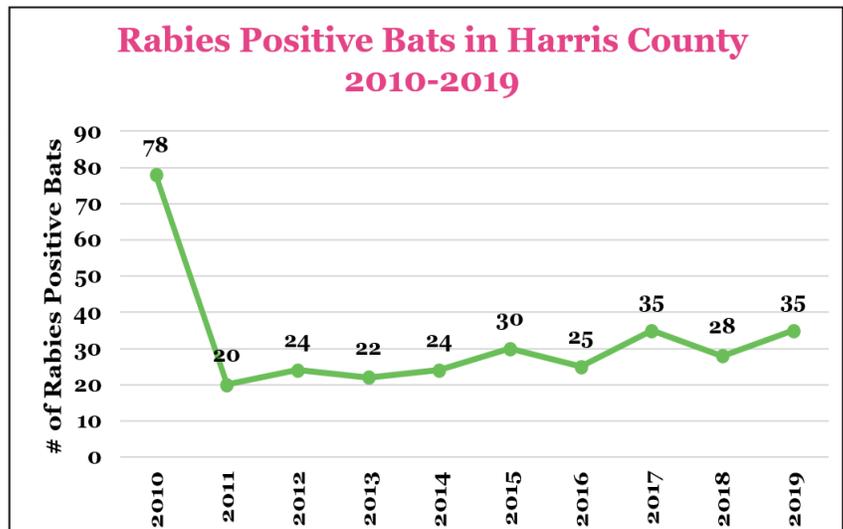
**References:**

1. Outbreak of Multidrug-resistant *Campylobacter* Infections Linked to Contact with Pet Store Puppies. (2019). CDC. Retrieved from: <https://www.cdc.gov/campylobacter/outbreaks/puppies-12-19/index.html#owners>
2. Multistate Outbreak of Multidrug-Resistant *Campylobacter* Infections Linked to Contact with Pet Store Puppies. (2018). CDC. Retrieved from: <https://www.cdc.gov/campylobacter/outbreaks/puppies-9-17/index.html>

**Harris County Rabies Report for 2019**

The 2019 rabies numbers are in! In 2019, Harris County had 35 bats test positive for the rabies virus. Bats were the only animal that tested positive for rabies from Harris County in 2019.

Bats, as most Harris County residents know, live and thrive in our area. Just because a bat is seen near a home does not mean there is any danger, unless it is exhibiting abnormal behaviors. These can include the inability to fly, flying during daylight, lethargy, weakness, anorexia, hypothermia, irritability, or paralysis.



[www.CountyPets.com](http://www.CountyPets.com)

In celebration of our new Harris County Pets Resource Center opening in 2020, we are selling pavers as a fundraiser. Memorialize or honor a special person or animal by donating a paver.

Type this link into your browser for more information.

[BIT.LY/HARRISCOUNTYPAVERS](https://bit.ly/harriscountypavers)

## Confirmed Cases of SARS-CoV-2 in Animals in the United States

The USDA has a list of animals that have been confirmed as cases of SARS-CoV-2 (the virus that causes COVID-19 in humans) by its National Veterinary Services Laboratories on the USDA APHIS website and will be updating it as additional cases are confirmed.

Type of Animal	Date Confirmed	State
Tiger*	April 4, 2020	New York
Lion*	April 15, 2020	New York
Cat	April 21, 2020	New York
Cat	April 21, 2020	New York
Dog**	June 1, 2020	New York
Cat	June 1, 2020	Minnesota
Cat	June 4, 2002	Illinois

\*Another three tigers and two lions at the same facility were all confirmed with SARS-CoV-2.

\*\* A second dog in the household showed no signs of illness; however, antibodies were also identified in that dog, suggesting exposure.

[https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/sa\\_one\\_health/sars-cov-2-animals-us](https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/sa_one_health/sars-cov-2-animals-us)

## Zoonosis Trivia

1. Who was the first to publish about the concept of One Health? And what was the name of the work?
2. How many people (estimated) die from zoonotic tuberculosis every year?
3. Who developed the first rabies vaccine for canines?
4. What is the most commonly reported U.S. laboratory-associated bacterial infection in humans?
5. How much of the human race does toxoplasmosis affect?
6. How much did zoonotic diseases emerging between 1997 and 2009 cost the world?



1. Hippocrates in 400 BCE "On Airs, Waters, and Places"
2. Over 10,000
3. Louis Pasteur
4. Brucellosis
5. 1/3
6. \$80 billion