

Dear Colleagues,

We are happy to share this Fall edition of the Public Health Vet Update! This issue contains information on current multistate *Salmonella* outbreaks related to pets and pet products, a summary of canine brucellosis cases in Washington state, an update of West Nile virus surveillance, and an emerging rabbit disease in the state.

If you are a King County veterinary professional, please call or email us anytime with questions regarding suspected or confirmed cases of diseases that may be zoonotic or have an impact on a greater population, whether animal or human.



Please share this link with your colleagues as only subscribers receive the newsletter: www.kingcounty.gov/zoo. All previously published newsletters are also available at this website.

Sincerely,
Beth Lipton, DVM MPH | Public Health Veterinarian
beth.lipton@kingcounty.gov | 206.263.8454

DEADLY RABBIT DISEASE PERSISTS AND SPREADS IN SAN JUAN COUNTY

Washington Department of Agriculture (WSDA) has been investigating an [outbreak of rabbit hemorrhagic disease \(RHD\) in domestic and feral rabbits on the San Juan Islands](#). The first case was confirmed in July 2019 on Orcas Island as virus 2 type (RHDV2), the same strain that caused an outbreak in feral rabbits in British Columbia in February 2018. In September 2018, RHDV2 was identified in the United States for the first time with a case in Ohio.

RHD is a viral disease that causes sudden death in rabbits and can be spread through contact with infected rabbits, their meat or their fur, or materials coming in contact with them. It poses no human health risk. A vaccine for RHDV2 is not currently available in the United States.

WSDA has issued an [emergency rabbit quarantine](#) for San Juan, Lopez, and Orcas Islands to prevent movement of any rabbits, rabbit crates, or rabbit equipment from the quarantined islands. Rabbit owners who have questions about this disease should contact their veterinarian. Veterinarians should contact APHIS or the State Veterinarian’s Office at ahhealth@agr.wa.gov if they suspect a case.

-NOTICE-

Rabbit hemorrhagic disease (RHD) is present on the San Juan Islands. It is a highly contagious and deadly viral disease of domestic rabbits. The virus is easily spread by wild rabbits, feral domestic rabbits, predators, birds, flies, and contaminated footwear, clothing and equipment.

PLEASE HELP PREVENT SPREAD OF RHD

- Do not contact dead or living wild or feral rabbits on the islands
- Do not bring pet or other rabbits onto the islands
- Do not move wild, feral or domestic rabbits off islands
- Do not transport flies in vehicles
- Launder clothing and clean and disinfect footwear before and after leaving the islands
- Educate others about this situation
- Wash your hands after being outside

Call the rabbit sick rabbit hotline to report cases 24-900-3878

RHD IS NOT A HUMAN HEALTH CONCERN

For more info: 206-903-3878 | ahhealth@agr.wa.gov
www.washingtonstate.gov | www.kingcounty.gov

Rabbit owners can practice good biosecurity measures to protect their animals from disease — washing hands before and after working with rabbits, not sharing equipment with other owners, keeping pet rabbits from having contact with wild or feral rabbits, and isolating new and returning show rabbits, as well as sick rabbits, for 30 – 60 days. For more information, see the following [RHD factsheet](#).

Selected Notifiable Conditions (# of cases reported)	King County		WA State	
	Yearly average, 2016-18	2019 through 8/31	Yearly average, 2016-18	2019 through 8/31
Human Cases:				
Brucellosis	0	1	0.7	3
Coccidiomycosis (Valley Fever)*	13	2	58	40
Cryptococcus gattii	0.3	0	3	2
Hantavirus pulmonary syndrome	1	0	3	1
Leptospirosis	0.7	0	2	2
Lyme disease	11	7	30	29
Plague	0	0	0	0
Psittacosis	0	0	0	1
Q Fever	0	0	4	3
Rabies suspected exposures	133	117	356	229
Tularemia	0.7	0	4	3
West Nile virus	1	0	8	1
Animal Surveillance:				
Positive rabies in bats tested	7	1	27	6
Positive rabies in other mammals	0	0	0	0
Cryptococcus gattii	0.3	0	0.3	0
West Nile virus: mammals	0	0	13	0
West Nile virus: birds	0	0	2	0
West Nile virus: mosquitoes	0	0	59	25

Note: 2019 counts are preliminary & may change as case information is reviewed and/or more cases are reported; *3 cases in 2018 exposed in-state (none to King County residents) and 1 case in 2019 being investigated for in-state exposure (not a King County resident)

Report canine cases to improve disease surveillance & prevention!

Information on cases of **canine leptospirosis** helps us track its epidemiology, estimate potential human risk, and quickly identify possible outbreaks; counts of canine leptospirosis are reportable to WSDA on a quarterly basis. Cases of **canine influenza virus (CIV) H3N2** have continued to occur sporadically in King County since first reported in 2015; reporting helps us identify increased local activity and risk factors to get inform owners, veterinarians, and pet businesses. The article on page 4 of this newsletter describes a new case report form for **canine brucellosis**, which is also reportable to WSDA within 24 hours. Find all case report forms [here](#).

MULTISTATE *SALMONELLA* OUTBREAKS ASSOCIATED WITH PETS OR PET PRODUCTS

When two or more people get the same illness from contact with the same animal or animal environment, the event is called a zoonotic outbreak. The following summaries represent current multi-state zoonotic outbreak investigations involving *Salmonella* led by the Centers for Disease Control and Prevention (CDC). Public health investigates outbreaks to control them, so more people do not get sick. Investigations also provide information about how to prevent similar outbreaks and what steps people can take to protect themselves.

Outbreak of Multidrug-Resistant *Salmonella* Infections Linked to Contact with Pig Ear Dog Treats – ongoing investigation

- CDC and FDA are advising **importers, suppliers, distributors, wholesalers, and other retailers to not sell any pig ear dog treats, and consumers not to buy or feed any pig ear dog treats** to pets, including any that may already be in homes. This includes pig ear treats that are in bulk, individually wrapped, or irradiated.
- People can get sick after handling the treats or caring for dogs who ate the treats. Dogs might get sick after eating them.
- No single supplier, distributor or common brand of pig ear treats has been identified that could account for all the illnesses.
- So far, a total of 143 people infected with the outbreak strains have been reported from 35 states, including one from Washington.
- Among ill people, 30% have been hospitalized and 20% are children younger than five years old.



Advice for dog owners and caregivers

Do not feed any pig ear treats to your dog. Throw them away in a secure container so that your pets and other animals can't eat them. Wash containers, shelves, and areas that held any pig ear dog treats with hot, soapy water.

Some dogs with *Salmonella* infection may not look sick. Dogs with *Salmonella* infection usually have diarrhea, which may be bloody. Talk to your veterinarian if you have concerns about your dog's health.

Always wash your hands thoroughly with soap and water right after handling dog food or treats.

Children younger than five years old should not touch dog food or treats. Persons with weakened immune systems should not handle pig ears or other partially cooked/uncooked pet food products or treats.

Store dog food and treats away from where human food is stored. Use a dedicated scoop for dog food – don't use the dog's bowl to scoop food.

See the CDC's [Pet Food Safety Infographic](#) for more tips on staying healthy while caring for pets. Additional information on specific companies supplying contaminated pig ears is not available at this time; information will be [updated](#) as it becomes available.

FDA encourages consumers to report complaints about pet food products electronically through the [Safety Reporting Portal](#).

Outbreak of *Salmonella* Infections Linked to Pet Hedgehogs – ongoing investigation

- A total of 47 people infected the outbreak strain have been reported from 21 states, including one from Washington, beginning in October 2018.
- Among ill people, 17% of have been hospitalized.
- A common source of hedgehogs has not been identified.



Story continued on next page

MULTISTATE *SALMONELLA* OUTBREAKS ASSOCIATED WITH PETS OR PET PRODUCTS ...continued

Advice to hedgehog owners

Hedgehogs can carry *Salmonella* germs in their droppings while looking healthy and clean. These germs can easily spread to the animal's body and to cages, toys, bedding or anything in the area where they live and roam. **Always wash your hands thoroughly after touching, feeding, or caring for a hedgehog or cleaning its cage/supplies.** You don't have to touch a hedgehog to get sick from their germs.

Owners should know to **clean cages, toys and supplies outside the home**, if possible, and always out of the kitchen or any area where food is prepared, served or stored.

People should not kiss or snuggle with hedgehogs.

Households with children younger than five years old, persons with weakened immune systems, and adults older than 65 should be aware that these groups have a higher chance of serious illness and hospitalization from *Salmonella* germs.

Outbreaks of *Salmonella* Infections Linked to Backyard Poultry – ongoing investigation

- So far, a total of 1,003 people infected with the outbreak strains have been reported from 49 states, including 16 from Washington.
- Among ill people, 29% have been hospitalized and 23% are children younger than five years old. Two deaths have been reported.
- Infected persons have reported getting chicks and ducklings from several sources, including agricultural stores, websites, and hatcheries.
- Backyard poultry from multiple hatcheries are the likely source of these outbreaks. Regardless of where poultry are purchased, they can carry *Salmonella* germs that can make people sick.



Advice to backyard poultry owners

As raising backyard flocks becomes more popular, more people are having contact with chickens and ducks, and they might not know about the risk of *Salmonella* infection. **Owners should know that contact with backyard poultry or their environment can make people sick with *Salmonella* infections.** Chickens and ducks can be carrying *Salmonella* bacteria but appear healthy and clean, with no signs of illness.

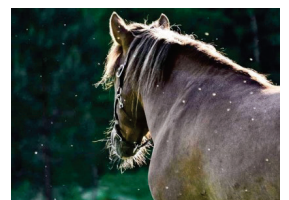
Always wash your hands thoroughly with soap and water right after touching birds or anything in the area where birds live and roam. Adults should supervise handwashing for young children.

Backyard poultry should never be let inside the home, and their supplies (feeders, waterers) should be cleaned outside of the home.

Children younger than five years old should not handle or touch chicks, ducklings, or other poultry without adult supervision.

PUBLIC HEALTH CONDUCTS MOSQUITO SURVEILLANCE FOR WNV

A Seattle resident tested positive for [West Nile virus \(WNV\)](#) in the fall of 2018, making it the first locally acquired case of WNV reported in King County. Prior to this case, all reported cases of WNV infection to King County residents had a history of travel either out of Washington state or to eastern Washington. WNV was also detected in mosquitoes in Pierce County around that time, the first detection in mosquitoes west of the Cascades. WNV had been previously detected in birds and a horse in King County. Horses have a 30-40% death rate when infected; horse owners are strongly encouraged to consult with their veterinarian about immunization. Horses also benefit from mosquito control efforts. Public Health received funding to conduct active surveillance of mosquitoes this season. Two interns set weekly traps in multiple sites from July to September, sorted mosquitoes, and shipped them to the Washington State Dept. of Health for PCR lab-testing for WNV and St. Louis Encephalitis. No mosquitoes tested positive this past summer. We hope to be able to conduct active surveillance again next summer.



AN UPDATE ON CANINE BRUCELLOSIS IN WASHINGTON STATE

Canine brucellosis is caused by the bacterium, *Brucella canis*, and is most often associated with reproductive disorders in dogs. While the true prevalence and incidence in domestic dogs is unknown, canine cases of *B. canis* have been reported in Washington state since the early 1990's. *B. canis* is also a *known zoonotic disease*, but human infections likely go undetected and underdiagnosed. For these reasons, further investigation into the epidemiology of *B. canis* is warranted. For additional information on disease etiology, clinical presentation, zoonotic risk and testing, please refer to the [Public Health Vet Update- Fall 2018](#).

In Washington state, there were six reported cases of suspected or confirmed *B. canis* during 2018 and seven cases as of July 2019. Among the cases reported,

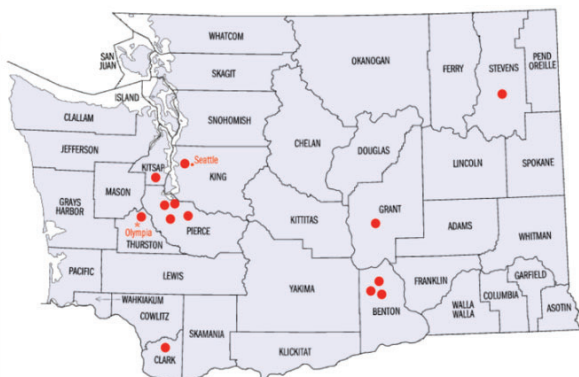


Image 1. A map of the 2018-2019 cases of *B. canis* in Washington represented by county of dog's residence. For two cases the dog's residence was unavailable, so they were designated to the county of the veterinarian's report.

failure to thrive. Orchitis and prostatitis were seen in a male being used for breeding. The most common chronic clinical presentation among the cases reviewed were discospondylitis and arthralgia. In one case, a dog presented with a draining mediastinal abscess that was cultured during surgery and isolated as *B. canis*.

Breed, gender, and origin were known for 11 of 13 cases. A diverse group of breeds were represented including a French Bulldog, Havanese, Havanese mix, Shiba Inu, Siberian Husky, Yorkshire Terrier, Pitbull mix, and Golden Retriever. In addition, the sex of affected dogs was split (6 males/5 females). These findings support that *B. canis* can infect any dog regardless of breed or gender. *B. canis* has been previously associated with strays and dogs from commercial breeding operations. Due to the number of dogs which may be born and obtained from out-of-state breeders and rescue organizations, the origin of the infected animals was of interest. Three dogs originated from Washington state; seven dogs were obtained out-of-state including three from Georgia, one each from California, Arizona and Texas, and one from an unknown state. Additionally, one dog was imported to the United States from South Korea through an animal rescue. A total of six dogs (55%) were obtained from a commercial breeding operation.

In order to reduce the risk of disease transmission, routine screening for *B. canis* is recommended for breeding dogs as well as those imported domestically and internationally.

Demographics of Dogs with Confirmed or Suspected <i>B. canis</i> in Washington State, 2018-2019	
11 of 13 cases had information available	# (%)
Sex	
Male	6 (55)
Female	5 (45)
Acquired from a Commercial Breeder	6 (55)
Origin	
In-State	3 (27)
Out-of-State	7 (64)
International	1 (9)

reproductive disorders were the most common acute clinical presentation. These included abortions, stillbirths and puppies'

While these cases provide additional details about *B. canis* in Washington State, ultimately there is still not enough information to provide adequate insight into disease prevalence. *B. canis* is likely underreported nationwide and information gaps exist due to incomplete reporting. Unfortunately, the risk of transmission to people who have been in contact with infected dogs – including owners, family members, veterinarians, technicians and lab personnel – is still poorly understood.

According to a 2015 report, 52 human cases of *B. canis* were reported between 1968-2010 with 38 of those occurring in the United States. Since then, there have been several other human cases. The most notable case was a 3-year-old girl from New York City who was infected from exposure to the family's newly obtained puppy. This was the first zoonotic case between a dog and human that was confirmed with genome sequencing. The puppy was purchased from a pet store in New York, but ultimately originated from a commercial breeder in Iowa. Between 2008 and 2015 there were 14 probable or confirmed human cases of *B. canis* during a multi-state outbreak linked to Midwest commercial breeding facilities. A recent [canine outbreak in Iowa](#) has also been described.

Clearly, *B. canis* is an ongoing issue in Washington state and throughout the country. In order to further understand the epidemiology of *B. canis* and implement effective preventive measures in both dogs and people, proper reporting is critical.

Remember: It is **mandatory to report *B. canis* to WSDA** within 24 hours of suspicion or confirmation of infection. Additionally, Public Health - Seattle & King County is interested in collecting more information to better define local disease epidemiology. To assist these efforts, we are asking veterinarians to also complete our **new, voluntary Public Health case report form**.