



EPI WATCH

Monthly Epidemiology and Preparedness Newsletter

December 2016

Florida Department of Health in Pinellas County

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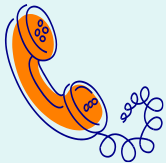
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For more information, or to add your e-mail address to the distribution list, please contact the Editor.

Division of Disease Control and Health Protection



Disease Reporting

To report diseases and clusters of illness:

Phone: (727) 824-6932
Fax: (727) 820-4270
(excluding HIV/AIDS)

To Report HIV/AIDS by mail:

Surveillance Room 3-138
205 Dr. MLK Jr St. N
St. Petersburg, FL 33701

Animal Bite Reporting:

Phone: (727) 524-4410
x7665

Can your pets make you sick?

By Sheila Alaghemand, MPH

There are many proven health benefits to owning a pet including decreased stress levels, promotion of an active lifestyle, and numerous positive impacts on social, emotional and cognitive development in children. Not only can pets provide comfort and companionship, they have even been used to detect certain cancers and oncoming seizures. Many studies have shown the positive impacts owning a pet can have on every stage of life.



Regardless of the health benefits, having pets in the house can also present new health risks if you're not careful. Although it may be rare, pets have been known to spread viral and bacterial illnesses to their owners. There are several actions owners can take to reduce the risk of disease transmission from pets to people.

- The first and most important action anyone can take to reduce the spread of infectious diseases is washing your hands. Washing hands with soap and running water after contact with your pet, their saliva, or poop will reduce the risk for the transmission of different diseases.
- If you are bitten or scratched by an animal, the wound should be cleaned and a healthcare provider consulted right away otherwise it might become infected. Be even more cautious with unfamiliar animals, as they may be carrying deadly diseases such as rabies.
- Pick up your dog's poop and dispose of it. Many different diseases are spread by the shedding of infectious organisms through poop.
- Regularly take your pet to a veterinarian. Keeping your pet healthy will prevent the risk of disease transmission to people. Pet vaccinations and monthly medications, such as flea, tick, and heartworm preventatives protect against common diseases.
- A pet doesn't have to have symptoms to be infected with a dangerous organism. If a pet urinates, poops, or vomits in the house make sure you disinfect it right away.

Below is a table of the most common infectious diseases that infect dogs, routes of transmission, and common symptoms.

| Disease Name | Routes of Transmission | Symptoms |
|---|---|--|
| Campylobacteriosis (<i>Campylobacter spp.</i>) | Ingesting contaminated food or water or contact with stool of infected animals. | Dogs may be asymptomatic when infected. Humans present with diarrhea, abdominal pain, nausea, and vomiting when infected. |
| Dog Tapeworm (<i>Dipylidium caninum</i>) | Ingesting fleas infected with the parasite. | In severe infections, symptoms include mild diarrhea and weight loss. |
| Hookworm (Zoonotic) (<i>Ancylostoma caninum</i> , <i>Ancylostoma braziliense</i> , <i>Uncinaria stenocephala</i>) | Routes include contact with contaminated soil or sand (the parasite can enter the top layers of human skin if exposed) and ingesting the parasite from the environment or from the infected mother's breast milk. | In dogs, symptoms include dark bloody stools and anemia. If left untreated, can result in death. In humans, hookworm infection causes an itchy reaction known as "cutaneous lava migrans". |
| Rabies | Animals and people are infected through the bite of a rabid animal. | Dogs present sudden behavioral changes and progressive paralysis. Symptoms for humans include, generalized weakness, fever, and headache, confusion, anxiety, behavioral changes and delirium. |
| Roundworm (<i>Toxocara spp.</i>) | Routes include Ingesting the eggs from the environment and vertical transmission from infected mother to puppies. | Infected puppies have developmental issues and have a "pot-bellied" appearance. In humans, roundworm infection can present in two forms: <ul style="list-style-type: none"> • Ocular Lava migrans: larvae invade the retina and cause inflammation, scarring, and possibly blindness. • Visceral Lava migrans: larvae invade parts of the body such as the liver, heart, lungs, or central nervous system. |



Zika Virus Update



On Friday, December 9, the Centers for Disease Control and Prevention (CDC) announced that the last area of active Zika Virus transmission in South Miami Beach, Florida was being lifted. Previously, the North Miami Beach area of active transmission was lifted on November 21 and the Little Haiti/Little River area was lifted on December 2. In order for an area of active transmission to be lifted, 45 days with no new infections in the area must have passed.

All of Miami-Dade County remains a Zika cautionary area. This means that while local transmission has been identified, the intensity is not enough to be considered an area of active transmission. Pregnant women should still consider postponing travel to all parts of Miami-Dade County. Pregnant women that have lived in, traveled to, or had sex without a condom with someone who lived in or traveled to Miami-Dade County after August 1, 2016 should be tested for Zika Virus. Women who are considering becoming pregnant and have lived in, traveled to, or had sex without a condom with someone who has lived in or traveled to Miami-Dade County should consult their physician and the CDC recommendations.

The Zika situation in Miami Dade County is constantly evolving and updates to the guidance are issued regularly. To view the most recent recommendations, please visit the CDC website: <http://www.cdc.gov/zika/intheus/florida-update.html>

Plague in Domestic Cats– Idaho

Yersinia pestis, also known as plague, is a bacteria that exists in rural and semi-rural areas of the United States where a variety of rodent species can be found. Animals such as squirrels, chipmunks, and prairie dogs can be affected and the bacteria naturally cycle between the rodents and their fleas. Plague can also be transmitted to humans and domestic animals who are bitten by the infected fleas or come into contact with bodily fluids of an infected animal.

On December 9, the Centers for Disease Control and Prevention (CDC) released a Morbidity and Mortality Weekly Report (MMWR) detailing recent cases of plague in domestic cats in Idaho. Between May 30 and July 26, 2016, 6 domestic cats were found to be infected with plague. Five of the cats were from areas in Idaho where, in 2015, dead ground squirrels were found to be infected with the bacteria. Five of the six cats were indoor and outdoor cats and one lived exclusively outdoors. All six were domestic shorthairs that had been spayed or neutered and ranged in age from 10 months to 14.5 years old. The most common symptoms were fever and lymphadenopathy. Three of the cats were treated with antibiotics and two survived while one was euthanized. Of the three that were not treated, all died or were euthanized. All six cats had been in contact with rodents before becoming ill.



Compared to dogs, cats are highly susceptible to plague infections and can transmit the illness to humans through contact with respiratory droplets or by bodily fluids transmitted through a bite or a scratch. Cats can also carry infected fleas into homes. Between 1926 and 2012, 43% (n=6) of all primary pneumonic plague cases among humans in the United States reported contact with domestic cats.

Veterinarians should consider a diagnosis of plague in domestic animals who have compatible signs and symptoms and exposure to rodents or ill animals in areas where plague occurs. If plague is suspected, veterinary staff should take several steps including wearing personal protective equipment (PPE) including masks and gloves, isolate the ill animal, assess for pulmonary involvement, perform diagnostic testing, administer antibiotic therapy, implement flea control for the animal and the office, advise the owners of flea control for their home, and notify public health officials.

Pet owners can reduce the risk of their pets becoming infected with plague by limiting pet roaming and contact with rodents and rodent habitats and food sources. Implementing flea control is also important to prevent plague and other infections.

To read the entire MMWR report, please visit the CDC MMWR website: https://www.cdc.gov/mmwr/volumes/65/wr/mm6548a5.htm?s_cid=mm6548a5_w

For more information on plague, visit the CDC website: <https://www.cdc.gov/plague/index.html>

To learn more about how human and animal health are related, visit the One Health website: <https://www.cdc.gov/onehealth/>

Selected Reportable Diseases in Pinellas County

| Disease | Pinellas | | YTD Total | | Pinellas County Annual Totals | | |
|--|---------------|---------------|---------------|--------------|-------------------------------|------|------|
| | November 2016 | November 2015 | Pinellas 2016 | Florida 2016 | 2015 | 2014 | 2013 |
| A. Vaccine Preventable | | | | | | | |
| Measles | 0 | 0 | 0 | 5 | 0 | 0 | 0 |
| Mumps | 0 | 0 | 0 | 14 | 0 | 0 | 0 |
| Pertussis | 0 | 4 | 18 | 307 | 17 | 19 | 17 |
| Varicella | 4 | 3 | 72 | 671 | 38 | 35 | 19 |
| B. CNS Diseases & Bacteremias | | | | | | | |
| Creutzfeldt-Jakob Disease (CJD) | 0 | 0 | 1 | 16 | 3 | 0 | 0 |
| Meningitis (Bacterial, Cryptococcal, Mycotic) | 0 | 1 | 7 | 105 | 6 | 4 | 5 |
| Meningococcal Disease | 0 | 0 | 0 | 15 | 1 | 0 | 1 |
| C. Enteric Infections | | | | | | | |
| Campylobacteriosis | 11 | 6 | 122 | 1833 | 104 | 103 | 63 |
| Cryptosporidiosis | 1 | 5 | 27 | 545 | 49 | 240 | 19 |
| Cyclosporiasis | 0 | 0 | 5 | 36 | 3 | 0 | 5 |
| <i>E. coli</i> Shiga Toxin (+) | 0 | 0 | 3 | 166 | 2 | 6 | 7 |
| Giardiasis | 2 | 3 | 36 | 1036 | 30 | 42 | 34 |
| Hemolytic Uremic Syndrome (HUS) | 0 | 0 | 0 | 6 | 0 | 0 | 1 |
| Listeriosis | 0 | 0 | 2 | 34 | 2 | 0 | 0 |
| Salmonellosis | 24 | 20 | 169 | 5163 | 196 | 216 | 203 |
| Shigellosis | 0 | 10 | 17 | 682 | 174 | 21 | 5 |
| D. Viral Hepatitis | | | | | | | |
| Hepatitis A | 0 | 0 | 2 | 112 | 4 | 2 | 6 |
| Hepatitis B: Pregnant Woman +HBsAg | 1 | 2 | 24 | 391 | 37 | 21 | 17 |
| Hepatitis B, Acute | 8 | 3 | 61 | 622 | 57 | 44 | 39 |
| Hepatitis C, Acute | 3 | 7 | 43 | 248 | 32 | 19 | 17 |
| E. VectorBorne/Zoonoses | | | | | | | |
| Animal Rabies | 0 | 0 | 3 | 69 | 1 | 2 | 0 |
| Rabies, possible exposure | 11 | 4 | 123 | 3035 | 114 | 190 | 193 |
| Chikungunya Fever | 0 | 1 | 1 | 14 | 2 | 10 | 0 |
| Dengue | 0 | 3 | 2 | 74 | 3 | 1 | 2 |
| Eastern Equine Encephalitis | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Lyme Disease | 0 | 0 | 11 | 176 | 6 | 5 | 8 |
| Malaria | 0 | 0 | 0 | 66 | 2 | 3 | 1 |
| West Nile Virus | 0 | 0 | 1 | 10 | 1 | 0 | 0 |
| Zika Virus | 0 | 0 | 20 | 1169 | 0 | 0 | 0 |
| F. Others | | | | | | | |
| AIDS** | 3 | 9 | 103 | n/a | 118 | 129 | 114 |
| HIV** | 22 | 24 | 195 | n/a | 252 | 171 | 157 |
| Chlamydia | 333 | 308 | 3779 | n/a | 4147 | 3853 | 4141 |
| Gonorrhea | 116 | 108 | 1421 | n/a | 1438 | 1295 | 1424 |
| Hansen's Disease | 0 | 0 | 0 | 17 | 0 | 0 | 0 |
| Lead Poisoning: Children < 6 years: | 1 | 0 | 6 | 145 | 6 | 8 | 4 |
| Legionellosis | 1 | 2 | 18 | 291 | 18 | 13 | 10 |
| Mercury Poisoning | 0 | 0 | 0 | 19 | 1 | 2 | 0 |
| Syphilis, Total | 26 | 25 | 353 | n/a | 283 | 186 | 114 |
| Syphilis, Infectious (Primary and Secondary) | 14 | 8 | 169 | n/a | 151 | 75 | 52 |
| Syphilis, Early Latent | 7 | 8 | 125 | n/a | 83 | 61 | 37 |
| Syphilis, Congenital | 0 | 0 | 1 | n/a | 3 | 0 | 0 |
| Syphilis, Late Syphilis (Late Latent; Neurosyphilis) | 5 | 9 | 58 | n/a | 52 | 50 | 25 |
| Tuberculosis | 7 | 0 | 25 | n/a | 14 | 25 | 30 |
| <i>Vibrio</i> Infections | 0 | 1 | 8 | 173 | 11 | 10 | 11 |

n/a = not available at this time. Blank cells indicate no cases reported. Reportable diseases include confirmed and probable cases only. All case counts are provisional. Data is collected from the Merlin Reportable Disease database, surveillance systems maintained at the Florida Department of Health in Pinellas County, and Florida CHARTS <http://www.floridacharts.com/charts/default.aspx>.

**STD data in PRISM is continually updated. Please note, data from the previous month takes up to an additional month or more to be correctly updated.

**Current HIV infection data by year of report reflects any case meeting the CDC definition of 'HIV infection' which includes all newly reported HIV cases and newly reported AIDS cases with no previous report of HIV in Florida. If a case is later identified as being previously diagnosed and reported from another state, the case will no longer be reflected as a Florida case and the data will be adjusted accordingly. Data from the current calendar year (2016) are considered provisional and therefore should not be used to confirm or rule out an increase in newly reported cases in Florida.