

Education Stations

Southwest Louisiana Veterinary Clinic

Topic: How is Bartonella transmitted to people and pets?

Gill Bright Animal Hospital

Topic: How do we prevent transmission of Bartonella?

Maplewood Animal Hospital

Topic: What is Bartonella?

Prien Lake Animal Hospital

Topic: How do you effectively remove a tick?

Myra Vincent RN – RN Supervisor B at the Calcasieu Parish Health Unit, Office of Public Health

Topic: What is emerging infectious disease?

Scott Willis, MS- Director of Mosquito, Control Calcasieu Parish Police Jury

Topic: What is Vector Borne Disease?

Via Video

Dr Ed Breitschwerdt DVM, DACVIM

@NCSU/Duke University directs the Intracellular Pathogens Research Laboratory in the Institute for Comparative Medicine at NCSU. He also co-directs the Vector Borne Diseases Diagnostic Laboratory and is the director of the NCSU-CVM Biosafety Level 3 Laboratory

Dr Monica E. Embers, PhD

Assistant Professor Division of Bacteriology and Parasitology @ Tulane University

Dr Bobak Mozayeni, MD

Founder of the Translational Medical Group and specializes in Internal Medicine, Rheumatology, and Vascular Inflammatory Diseases. He is the Chief Medical Officer of Galaxy Diagnostics.



We would like to give a special thank you to our presenters and sponsors for making this One Health Day event possible!

Sponsors of LOHA's Beating Bartonella Color Run and Bartonella Bonanza

- ❖ Maplewood Animal Hospital
- ❖ Southwest Louisiana Veterinary Clinic
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- ❖ Spirit Halloween
- ❖ West Cal Cam Hospital
- ❖ Gill Bright Animal Hospital
- ❖ Prien Lake Animal Hospital
- ❖ Lake Charles Memorial Hospital

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LOUISIANA ONE HEALTH IN ACTION
PRESENTS

BARTONELLA BONANZA

AWARENESS EDUCATION ADVOCACY

A One Health Day Event

2018



ONE HEALTH

One Health recognizes that the health of people is connected to the health of animals and the environment. It is a collaborative, multisectoral, and trans-disciplinary approach—working at the local, regional, national, and global levels—with the goal of achieving optimal health outcomes recognizing the interconnection between people, animals, plants, and their shared environment. A One Health approach is important because 6 out of every 10 infectious diseases in humans are spread from animals. <https://www.cdc.gov/onehealth/index.html>

EMERGING INFECTIOUS DISEASE

Emerging infectious diseases are infections that have recently appeared within a population or those whose incidence or geographic range is rapidly increasing or threatens to increase soon. There are five major types of infectious agents: bacteria, viruses, fungi, protozoa, and helminths.

<https://www.bcm.edu/departments/molecular-virology-and-microbiology/emerging-infections-and-biodefense/emerging-infectious-diseases>

IMPACT OF ZONOTIC DISEASES

2.4 BILLION **2.3 MN**

ARE EFFECTED BY ZONOTIC DISEASES GLOBALLY PER YEAR

DEATHS PER YEAR GLOBALLY

ZONOTIC DISEASES REPRESENT

60%

OF ALL HUMAN DISEASES

75%

OF ALL EMERGING DISEASES

ZONOTIC INFECTION

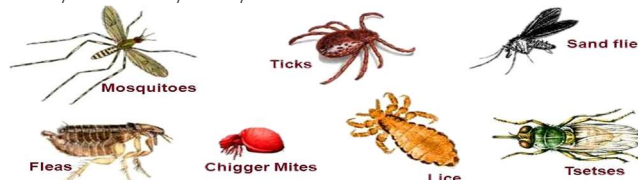
Zoonoses, infections that are transmitted from animals to humans, can be transmitted in various ways:

- through the air
 - by eating contaminated meat or produce
 - through close contact with an infected animal
 - by touching an area or surface that an infected animal touched
 - through insect bites like mosquitos or ticks
- Many transmissions occur when people hike, bike, boat, or enjoy other activities in the great outdoors. Petting zoos are also common places for a zoonotic disease to be transmitted. Those who live and work on farms are in close contact with many types of livestock. Livestock is a common carrier of many zoonoses. Your family pet can carry ticks and fleas indoors that can then move onto you and your family.

<https://www.healthline.com/health/zoonosis#transmission>

VECTOR BORNE DISEASE

Vectors are living organisms that can transmit infectious diseases between humans or from animals to humans. Many of these vectors are bloodsucking insects, which ingest disease-producing microorganisms during a blood meal from an infected host (human or animal) and later inject it into a new host during their subsequent blood meal. Mosquitoes are the best-known disease vector. Others include ticks, flies, sandflies, fleas, triatomine bugs and some freshwater aquatic snails. <http://www.who.int/news-room/fact-sheets/detail/vector-borne-diseases>



BARTONELLA

Bartonellosis is an infectious disease caused by bacteria in the genus Bartonella. Bartonella species are very difficult to detect. Consequently, little has been known until recently about the pathogenesis of this disease. While potentially life-threatening to immunosuppressed patients, Bartonellosis is associated with chronic illness in immunocompetent patients. Bartonella may be transmitted by contact with flea and louse feces, ticks or biting flies, or by the scratch or bite of an infected animal, most often a flea-infested cat. Suspected transmission of Bartonella following the bite or scratch of wild animals, such as groundhogs, squirrels and coyotes has also been documented. Research suggests that people who live and work with animals, especially veterinary workers, have the highest risk of Bartonella infection. Symptoms that vary in number and severity among patients may include: fever, fatigue, headache, malaise, swollen lymph nodes, skin rash or markings, joint aches and swelling, cardiovascular signs, neurovascular inflammation, abnormal sleep patterns, memory loss, skin lesions, vasoproliferative tumors. <https://www.galaxydx.com/what-is-bartonellosis/>

Symptoms and Conditions

Two types of presentations:

- 1 Acute**
Cat Scratch Disease, an illness characterized by fever and lymph node swelling following a cat bite or scratch
- 2 Chronic**
Moderate-to-severe and including debilitating conditions and symptoms, including neurologic, cardiac, vasoproliferative or rheumatologic