

WILDLIFE DISEASE RISKS



Dr. Jay Tischendorf

Director, American Ecological Research Institute (--AERIE)

and

Chief Medical Officer, Pet One Animal Medical Consultation Group

BIRD STRIKE COMMITTEE USA MEETING

Airports, wildlife hazards management and COVID – Impacts, Outcomes, Futures...

AUGUST 16, 17 & 19, 2021 | VIRTUAL



SPECIAL THANKS

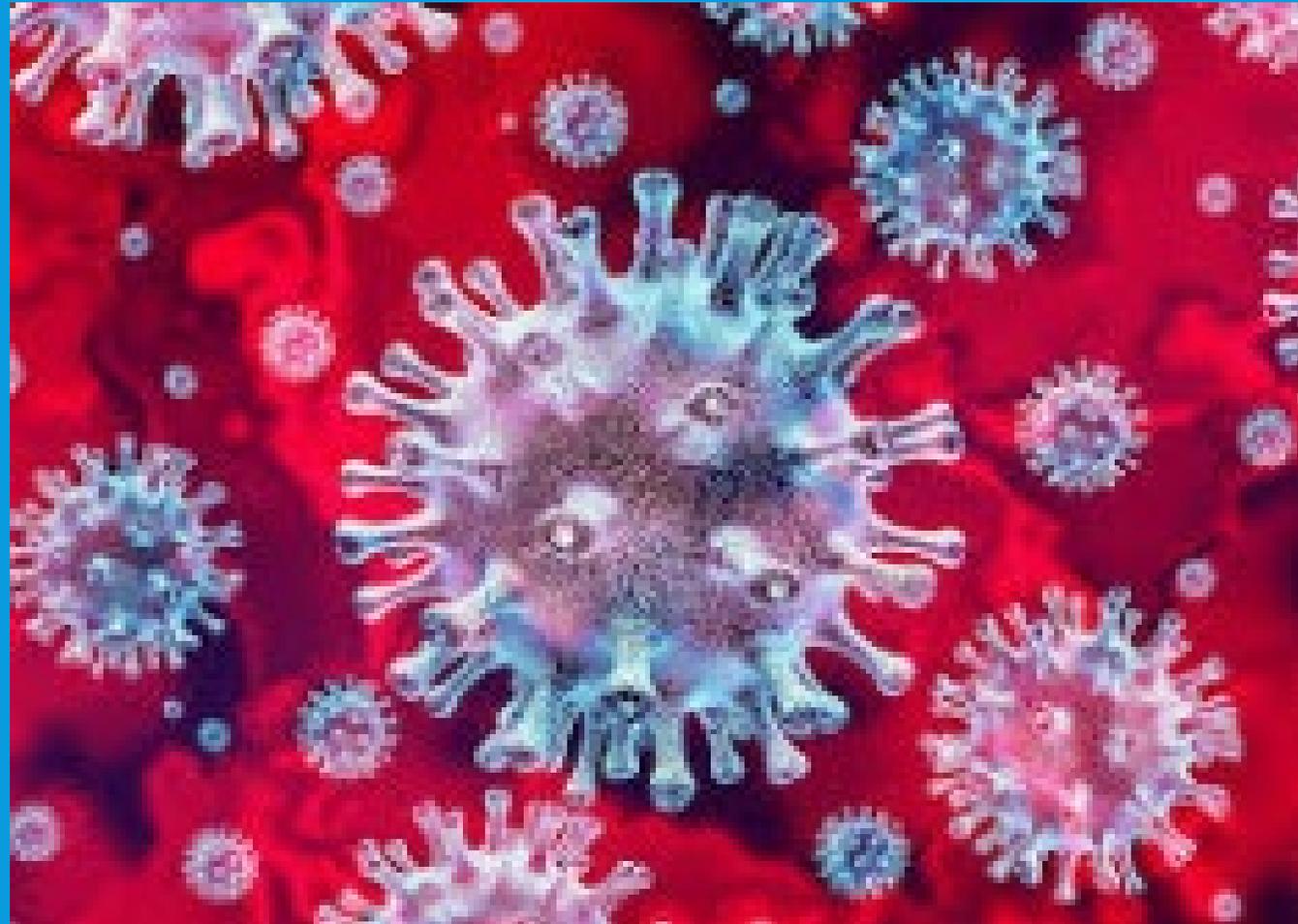


- James Laughlin - USDA
- John Ostrom - Minneapolis-St. Paul International Airport
- Roger Nicholson - Alaka'i Technologies

AGENDA

- **Introduction to Zoonotic Disease**
- **Common Disease Risks for Airport Wildlife Biologists**
- **Practical Protection Strategies**
- **Q and A**

IT'S A WILD WORLD OUT THERE!



INFECTIOUS DISEASES ARE...

- Mostly ZOOONOTIC
- In our lives FOREVER AND ALWAYS



SHARE

TWEET

EMAIL

WEST NILE VIRUS

Chicago resident becomes 1st 2020 West Nile Virus death in Illinois

West Nile Virus symptoms can be found on IDPH website

By ABC 7 Chicago Digital Team

Friday, October 9, 2020



WEST NILE VIRUS



Coronavirus: How it spreads



First 2019 Illinois human case of West Nile virus confirmed



Mosquitoes test positive for West Nile in Niles



Mosquito population gets boost from warm, wet September weather

MORE VIDEOS

U.S. NEWS

Parts of Lake Tahoe closed after chipmunks test positive for plague

The infectious bacterial disease tends to be spread by chipmunks, other wild rodents and their fleas.

Aug. 3, 2021, 12:44 AM CDT

By The Associated Press

SOUTH LAKE TAHOE, Calif. – Officials are closing some areas on the south shore of Lake Tahoe after some chipmunks tested positive for plague.

The Tahoe Daily Tribune [reports](#) that the Taylor Creek Visitor Center, Kiva Beach and their parking areas will be off limits through Friday.

During that time, the U.S. Forest Service will be conducting vector control treatments to those areas.



Liberty Co. resident dies from mosquito-borne equine virus



(WTOC)

By WTOC Staff

Published: Aug. 3, 2021 at 9:56 AM CDT

DALLAS COUNTY

Dallas County Reports First West Nile Virus Death of 2021

Published August 9, 2021 • Updated on August 9, 2021 at 9:22 pm



Dallas County health officials reported the county's first death this year in a resident who contracted West Nile virus. The victim is a 90-year-old from Dallas.

TOKYO 2020 OLYMPICS Medal Count

#	Gold	Silver	Bronze	Total
1. United States	39	41	33	113
2. China	38	32	18	88
3. ROC	20	28	23	71
4. Great Britain	22	21	22	65

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CNBC

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MICHIGAN

Michigan's first cases of West Nile virus in 2021 confirmed in horse, birds

Mark Hicks The Detroit News

Published 8:10 p.m. ET Aug. 10, 2021

[View Comments](#)



The first cases of West Nile virus this year have been reported in Michigan animal and mosquito populations, state officials announced Tuesday.

The Michigan Department of Agriculture and Rural Development recently confirmed the first case in a 28-year-old Quarter Horse mare from Midland County. On July 15, the mare, which had been under-vaccinated, "became ill with a sudden onset of neurologic disease and was humanely euthanized," representatives said in a statement.

"With the discovery of WNV in a Michigan horse, this signals that the virus is circulating again in the state," said State Veterinarian Nora Wineland. "Its presence underscores the need to take all the necessary steps to protect animals from this disease."

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Raccoon Tests Positive For Rabies In Gales Ferry

The Ledge Light Health District is reporting that the animal tested positive for rabies recently.



Chris Rhatigan, Patch Staff P

Posted Tue, Aug 10, 2021 at 2:04 pm ET



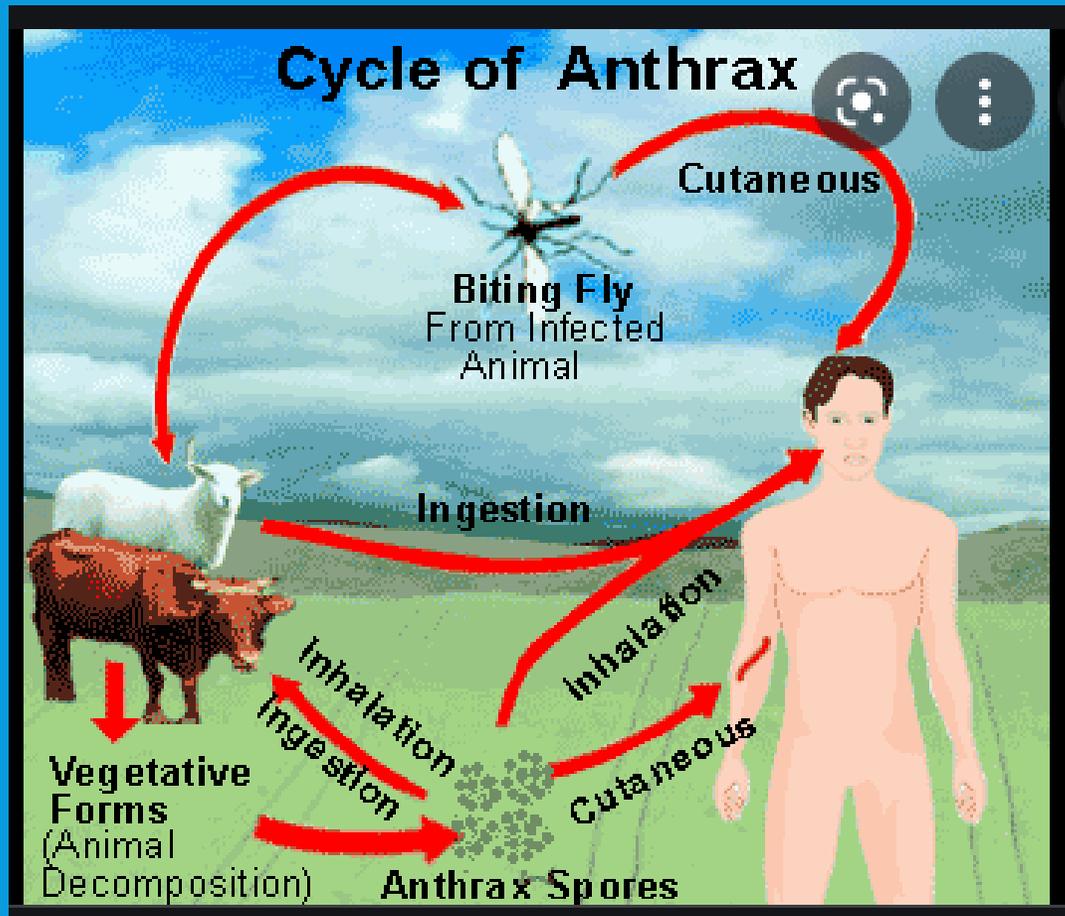
MICROBES / PATHOGENS



- Bacteria
- Fungi / Algae
- Parasites
- Prions
- Protozoa
- Viruses



ZOONOSES A TO Z



Zika fever

OVERVIEW

SYMPTOMS

SPECIALISTS

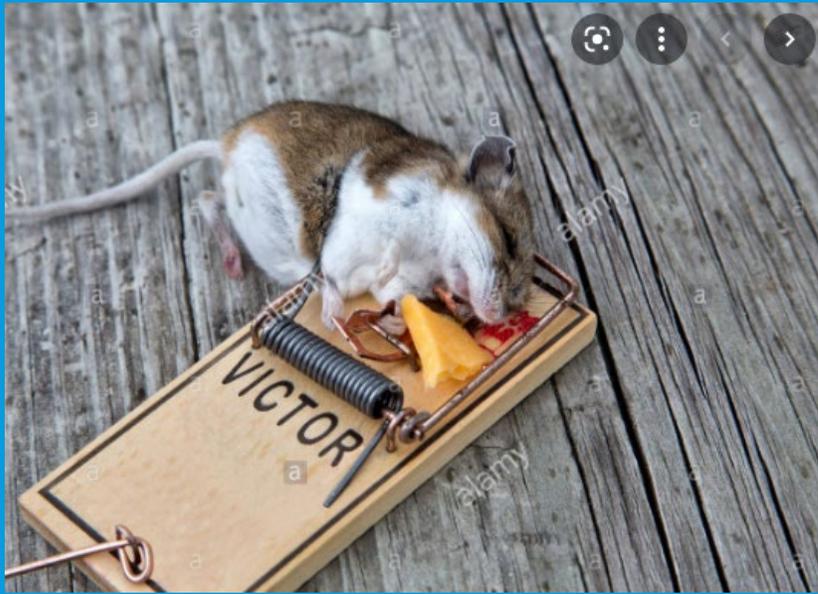
Fever
Rash
Joint pain
Red eyes



Spread through mosquito bites
Source

AIRPORT WILDLIFE BIOLOGIST ACTIVITIES











POTENTIAL EXPOSURE TO...

- Bites
- Scratches
- Feces
- Urine
- Blood and other body fluids
- Fleas, ticks, mites. etc...
- Mosquitoes, flies, other biting insects





The Hunter's Guide to Animal Poop

Scat, crap, droppings, or a&#!? No matter what you call it, here's how to identify 11 kinds of animal poop

BY BILL HEARBY | PUBLISHED MAY 17, 2023 @ 9:45 AM

SURVIVAL

OUTDOORS



WILDLIFE DISEASE RISKS

- Rabies
- Leptospirosis
- Hantavirus
- Cryptococcosis
- Histoplasmosis / Blastomycosis
- Salmonellosis
- Plague
- Bartonellosis
- Tularemia
- Typhus
- Lyme, West Nile, EEE. Etc...





Lyme disease 10 times more common in US than previously reported, CDC says

 SHARE

 TWEET

 COMMENTS

By Beth Daley

August 19, 2013

Lyme disease is 10 times more common than the federal government previously had counted, with about 300,000 people across the country getting the disease each year from deer ticks – most in the Northeast.

The new estimate, released Monday by the federal Centers for Disease Control and Prevention, is based on analyses of six years of data from health insurance claims, laboratories, and patients. Past estimates of 30,000 cases a year relied on

NEWS

Mysterious disease blinding birds in several states, leaving them unable to fly



by: Jonathan Jackson, Nexstar Media Wire

Posted: Jun 23, 2021 / 08:03 AM EDT / Updated: Jun 23, 2021 / 08:03 AM EDT

by: Jonathan Jackson, Nexstar Media Wire

Posted: Jun 23, 2021 / 08:03 AM EDT / Updated: Jun 23, 2021 / 08:03 AM EDT

COLUMBUS, Ohio (WCMH) – Wildlife experts are monitoring a scary mystery affliction that is leaving birds blind and dying.

Since the start of this June, the Ohio Wildlife Center identified multiple cases of an unknown illness in songbird species across Central Ohio, but the disease has also been identified in other states like Virginia, Delaware, Maryland, Indiana, and West Virginia.

SEASONALITY?





COMMON VECTORS



MOSQUITOS



TICKS



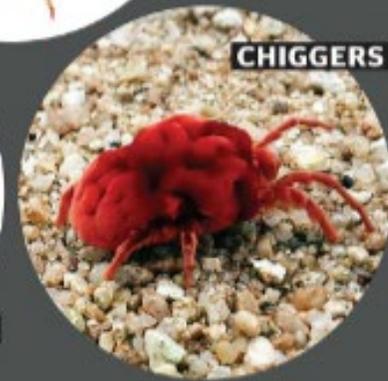
FLEAS



**VARIOUS SPECIES OF FLIES:
BLACK FLIES, TSETSE FLIES,
SANDFLIES, MIDGES, ETC.**



TRIATOMINE BUGS

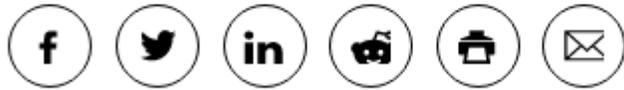


CHIGGERS

March 19, 2020

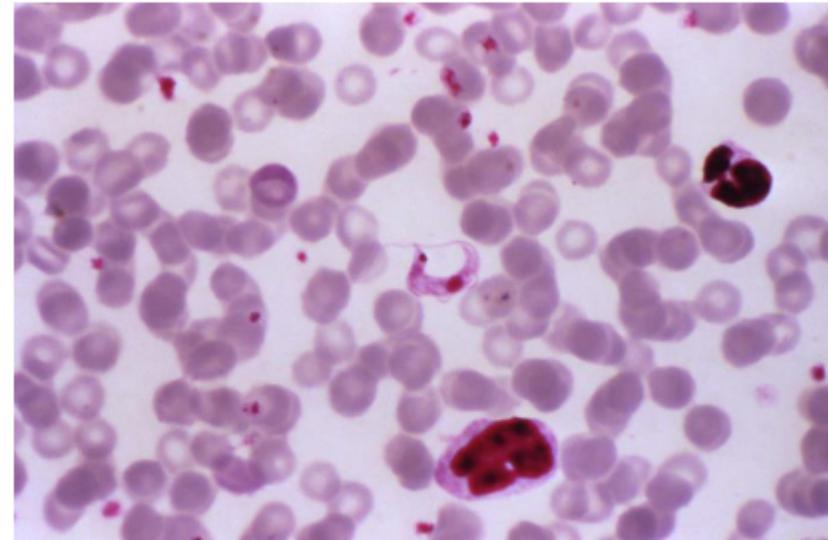
Possible Case of Locally Acquired Chagas Disease in Missouri

Bradley van Paridon



Findings in a case report published in *Morbidity and Mortality Weekly Report* suggest the possibility that exposure to *Trypanosoma cruzi* occurred locally in Missouri.

On December 13, 2017, the Missouri Department of Health and Senior Services was notified of a suspected case of Chagas disease in a patient who had donated blood. Laboratory screening of the blood donation revealed antibodies to *T cruzi*, the parasite that causes Chagas disease. No clinical symptoms of Chagas were found by physicians, and



On the basis of the patient's testing results, history, and presentation, this patient likely represents the first documented autochthonous case of Chagas disease in Missouri.

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PROTECTING YOURSELF – “A I D”

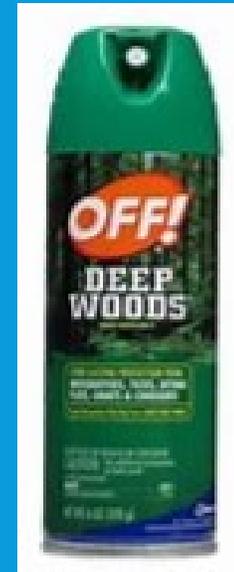
- Avoid
- Inspect
- Detect and Destroy



PROTECTING YOURSELF - PPE







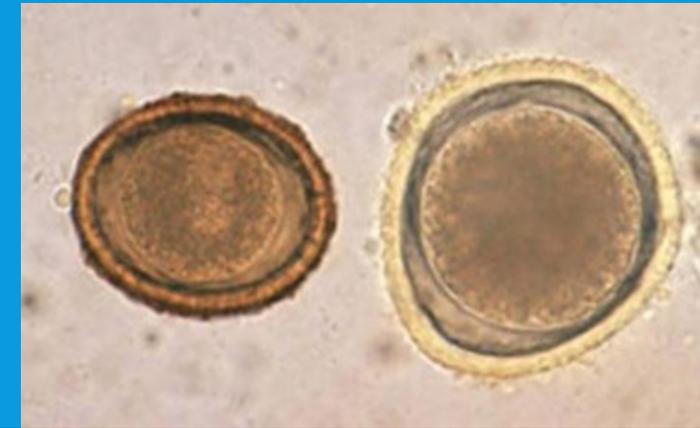
SANITATION, DISINFECTION, HYGIENE





QUESTIONS AND (HOPEFULLY) ANSWERS





WILDLIFE DISEASE RISKS



Dr. Jay Tischendorf

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