



Epidemiology Resource Center

EASTERN EQUINE ENCEPHALITIS VIRUS





Mosquito-borne alphavirus

Endemic in eastern US

Rare cause of severe illness in humans, horses

Reservoir: passerine birds

Vector: cattail mosquitoes



Habitat: Freshwater wetlands



Passer domesticus. Joe Ravi, CC-BY-SA 3.0.
Coquilletidia perturbans. Mardon Erbland.
Eby Bog, Elkhart County, IN. ACRES Land Trust.

Transmission cycle of EEEV

Mosquito vector



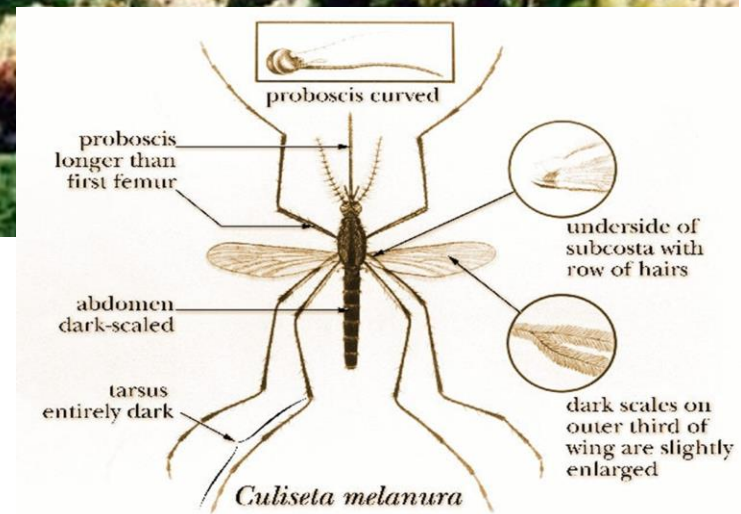
Amplifying host



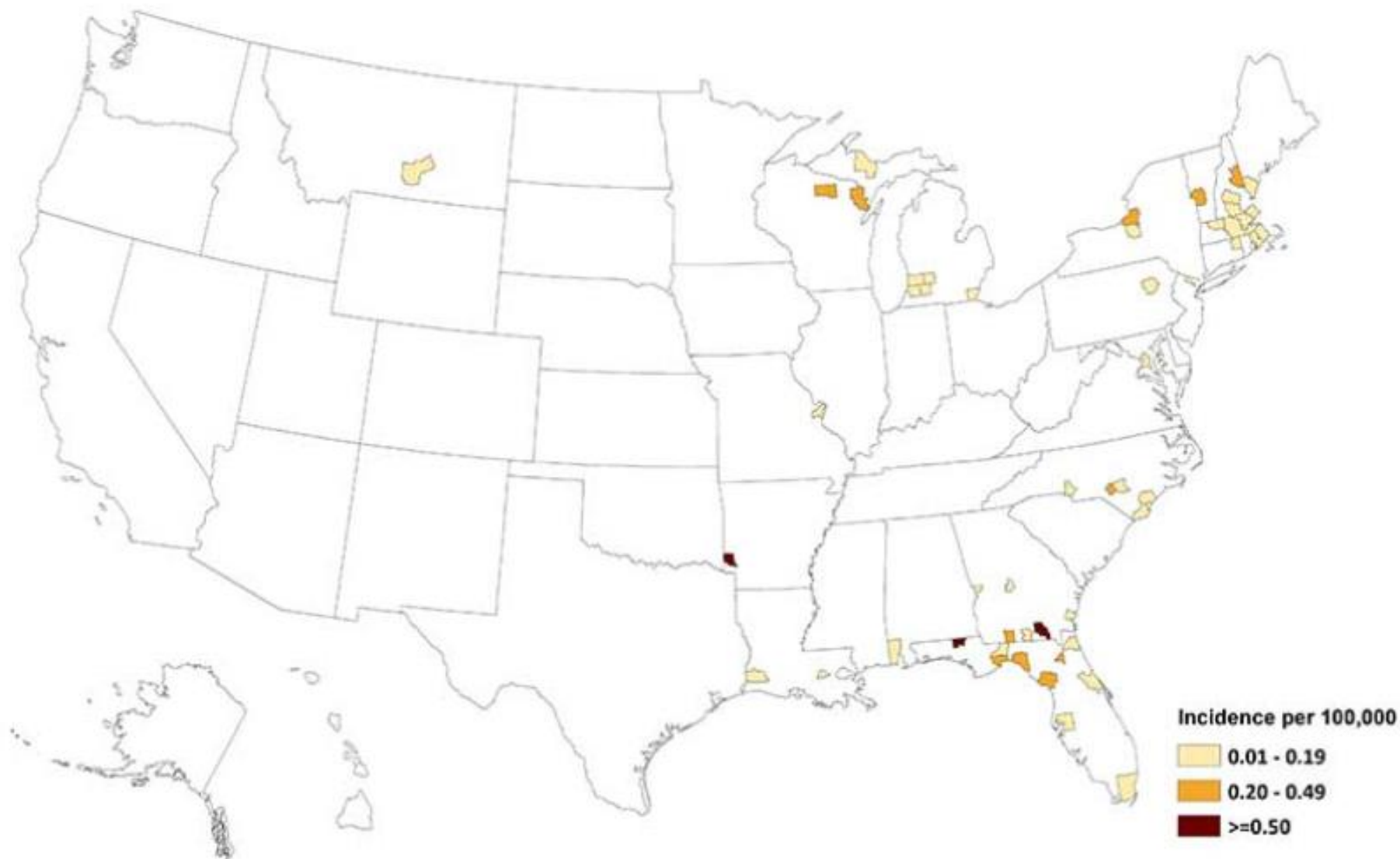
Dead-end hosts



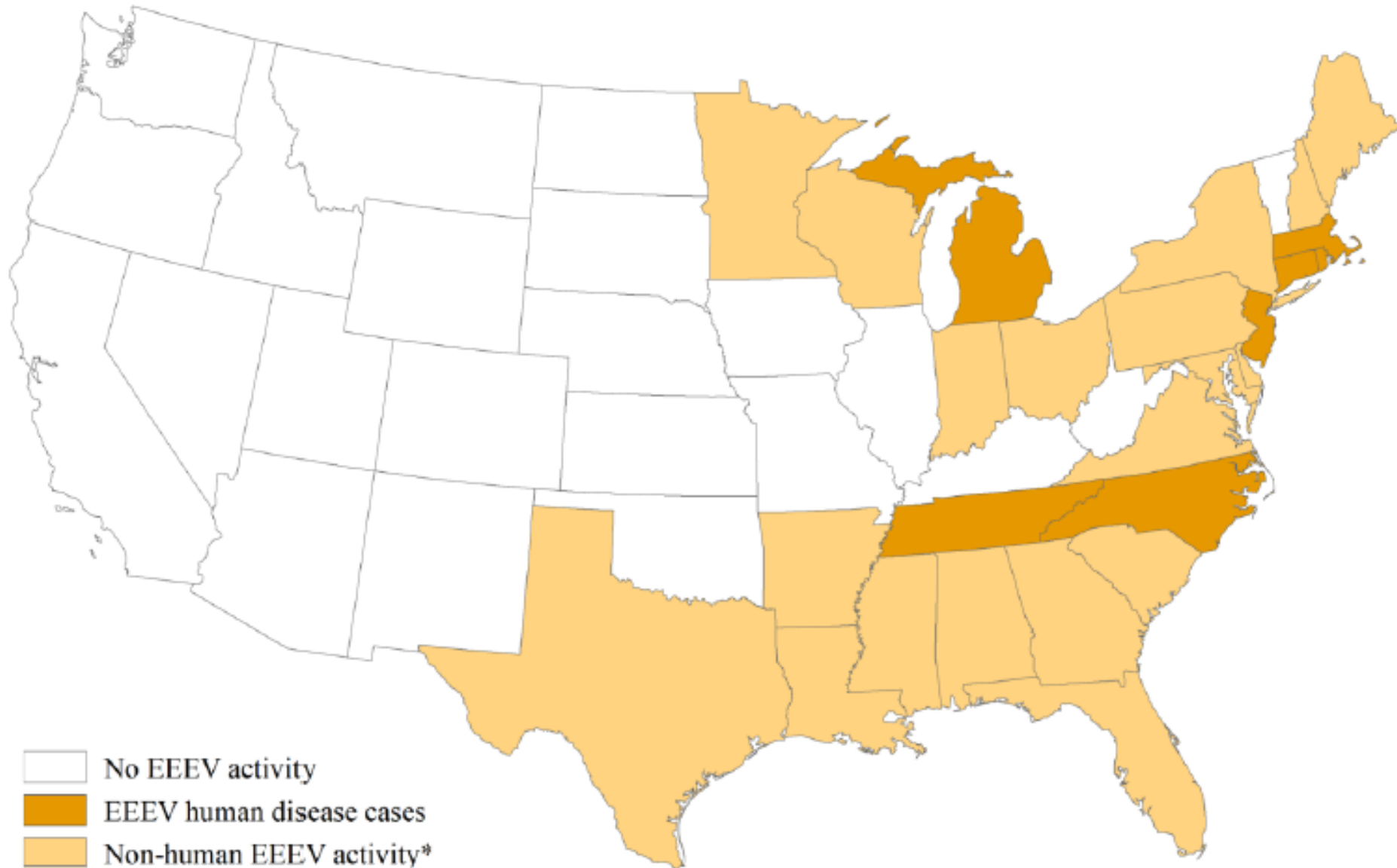
Bridge vector



Eastern equine encephalitis virus neuroinvasive disease average annual incidence by county of residence, 2009–2018



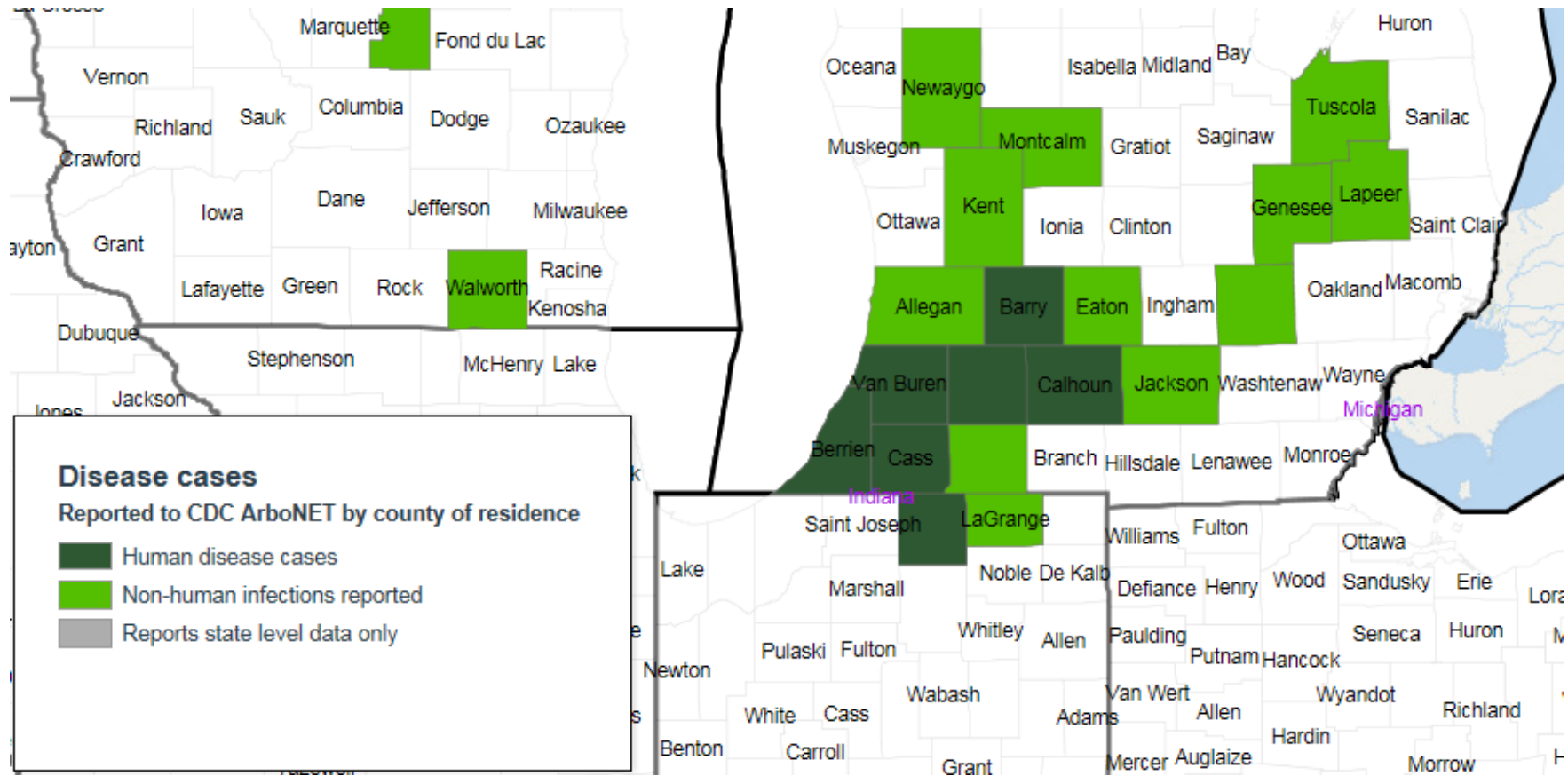
There was a EEEV epidemic in the US in 2019.



*EEEV veterinary disease cases, or infections in mosquitoes, birds, or sentinel animals

CDC data as of
October 8, 2019.

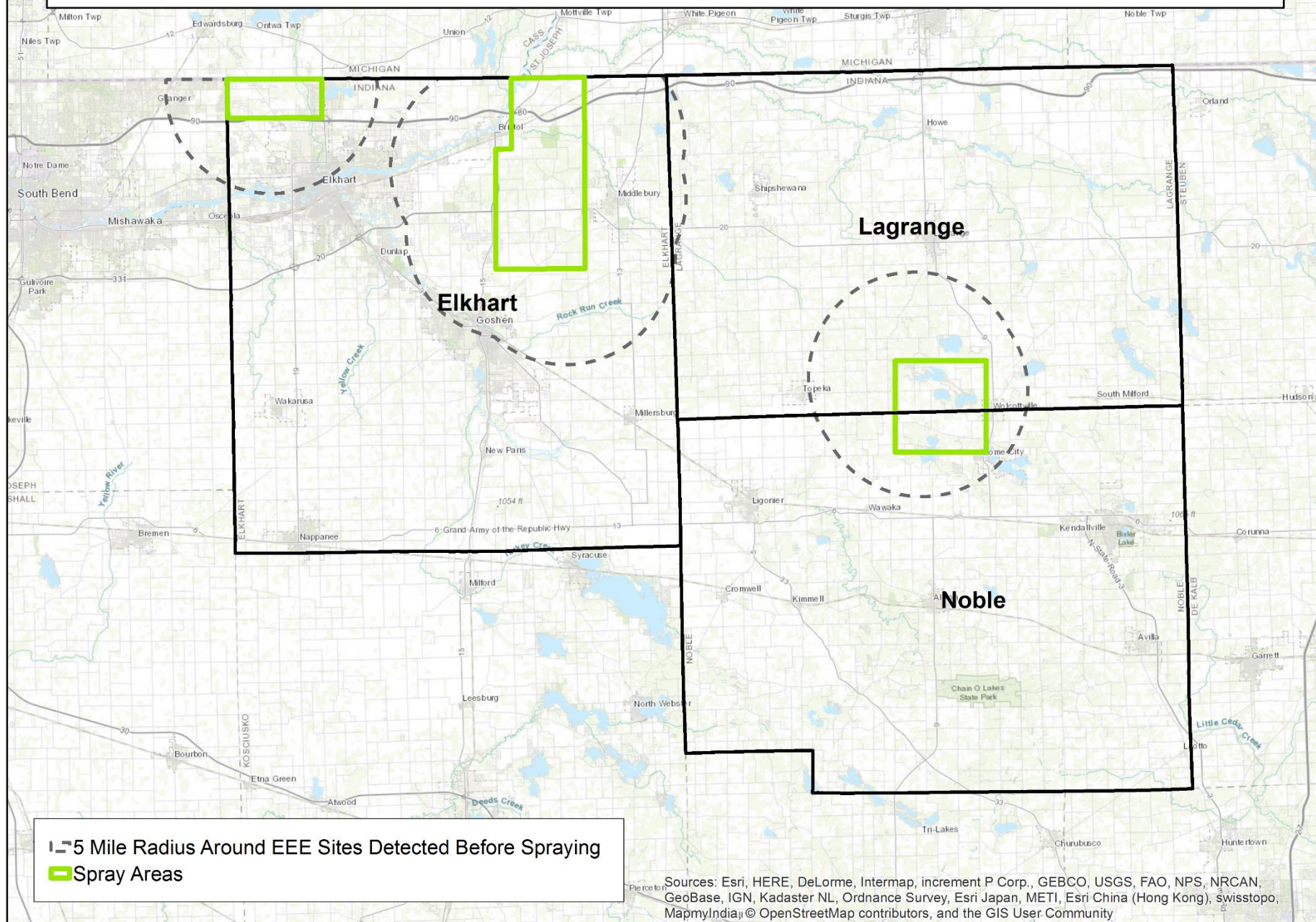
EEEV 2019



Both Elkhart and LaGrange Counties had evidence of EEEV transmission in 2019.

	Elkhart County	LaGrange County
Human cases	1	
Equine cases	11	3
Infected mosquitoes	1	

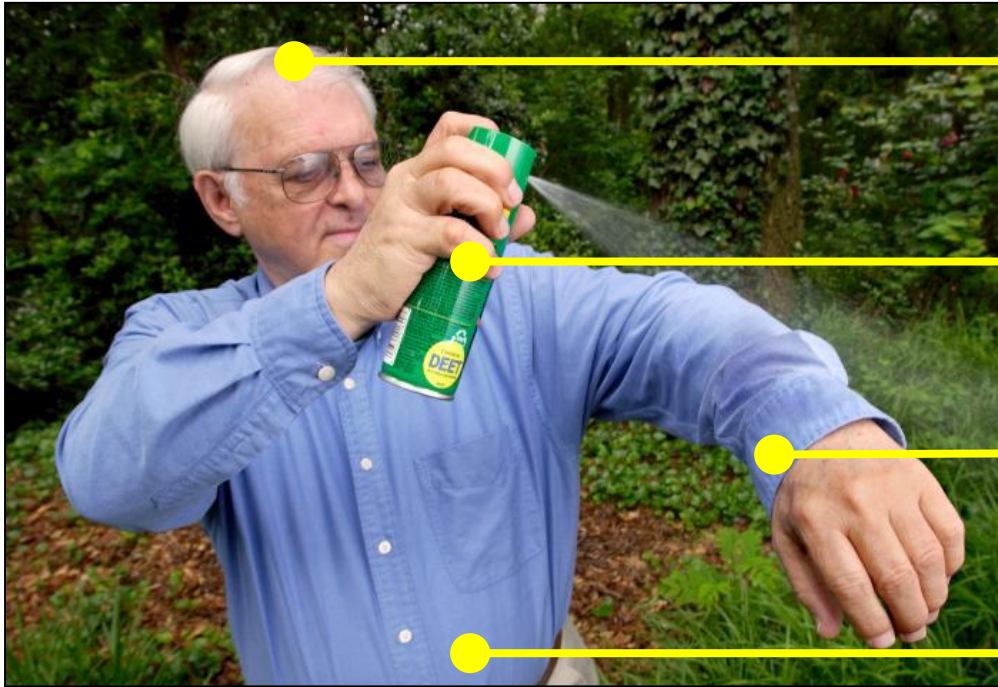
EEE Spray Areas and Areas Surrounding Equine Cases and Mosquito Pools



Aerial Application of Dibrom

- Application occurred after dark Oct. 2-3
 - 36,000 Acres in 3 counties
- Areas of Concern
 - Organic Farms
 - DriftWatch (OISC)
 - Pollinators
 - Press releases, Purdue Extension, BeeCheck, Professional groups

All Hoosiers should take precautions against mosquito bites until the first hard freeze.



Centers for Disease Control and Prevention.

Know when to expect mosquito bites.

Wear EPA-registered insect repellents.

Reduce the amount of exposed skin.

Treat clothes and boots with 0.5% permethrin.