

# Animal Disease Prevention

House Ag and Natural Resources Appropriations Committee  
November 7, 2019



**Dr. Nora Wineland and Dr. Kelly Straka**  
State Veterinarian and State Wildlife Veterinarian

- MDARD
  - Bovine Tuberculosis (TB)
- DNR
  - Bovine TB
  - Chronic Wasting Disease
  - Eastern equine encephalitis
- Summary and Questions



## BREAKING THE CHAIN OF TRANSMISSION STOPPING ZOOBOTIC AND BOVINE TUBERCULOSIS IN THEIR TRACKS

**ZOOBOTIC TB IN PEOPLE**

**ONE HEALTH  
HUMANS,  
ANIMALS,  
ENVIRONMENT**

**INFECTED  
WILDLIFE**

**BOVINE TB  
IN CATTLE**


**FOODBORNE**  
→ NON HEAT-TREATED DAIRY PRODUCTS  
→ RAW OR IMPROPERLY COOKED MEAT  
FROM DISEASED ANIMALS  
DIRECT CONTACT

**DIRECT CONTACT OR  
CONTAMINATED ENVIRONMENT**

**ACT NOW TO SAVE LIVES AND SECURE LIVELIHOODS**

World Health Organization | OIE | WORLD ORGANISATION FOR ANIMAL HEALTH  
Protecting animals, preserving our future | Food and Agriculture Organization of the United Nations | The Union | International Union Against Tuberculosis and Lung Disease  
Health solutions for the people

## History of Bovine TB in Michigan



*Bartlett, 1938; Jenkins and Bartlett, 1959*

## How Did it All Start Again?

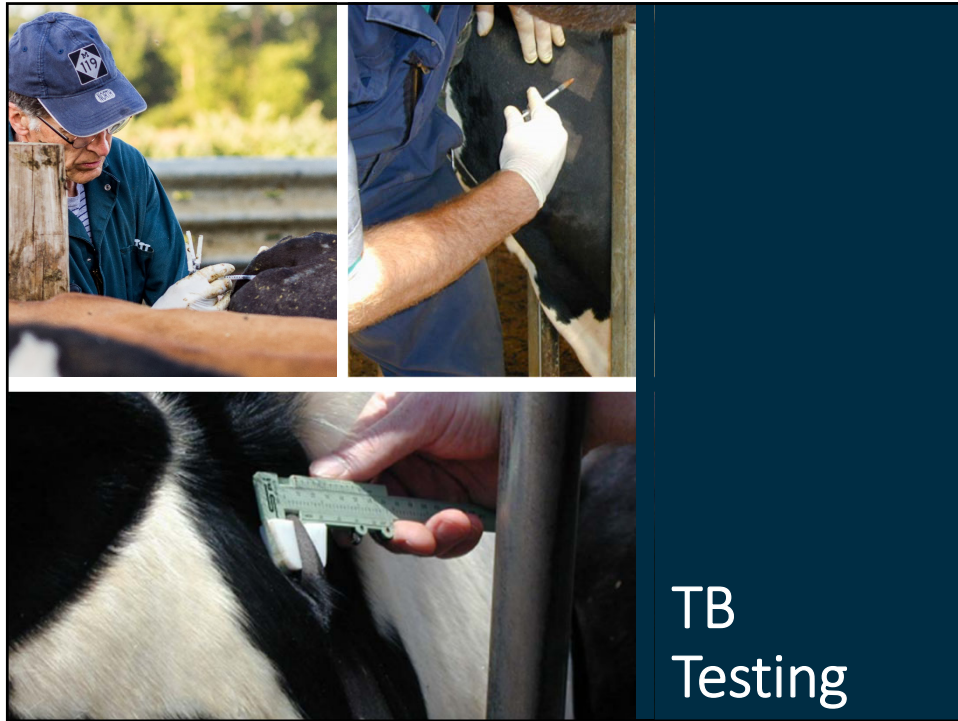
- **1975:** Positive deer found in NE lower MI
- **1979:** Michigan achieves TB Free Status for cattle
- **1994:** Hunter-harvested deer found positive
- **1998:** First positive cattle herd
- **2000:** Michigan loses TB Free Status for cattle

Dave Richey: Detroit Free Press

## Loss of Free State Status

- Modified Accredited Status
- Entire State Subjected to
  - Annual whole herd testing dairies
  - Beef herds require whole herd test in order to move animals
  - Individual animals must have a movement test within 60 days of movement
- Pursue Split State Status

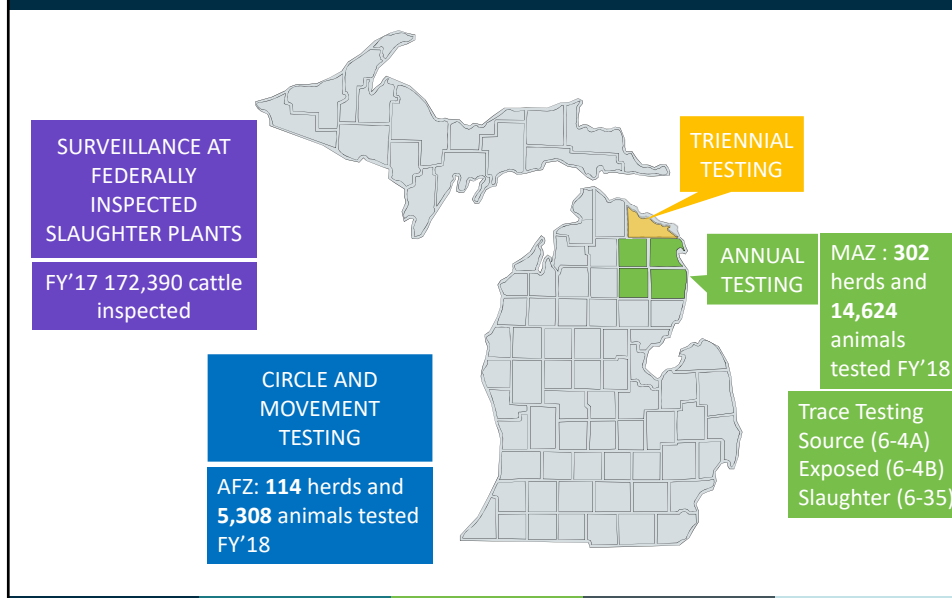




## Split State Status

- First achieved in 2004
- Recognize Free zone and Modified Accredited Zone
- MOU with USDA
  - Testing of cattle and deer (surveillance)
  - Movement controls and traceability for cattle
  - Adequate resources to support surveillance and movement controls
  - Enforcement of feeding and baiting ban
  - Response to finding any positives in cattle and deer
  - Wildlife Biosecurity
  - Renewal/change if find increased level of disease inside MAZ or disease outside MAZ

## Surveillance

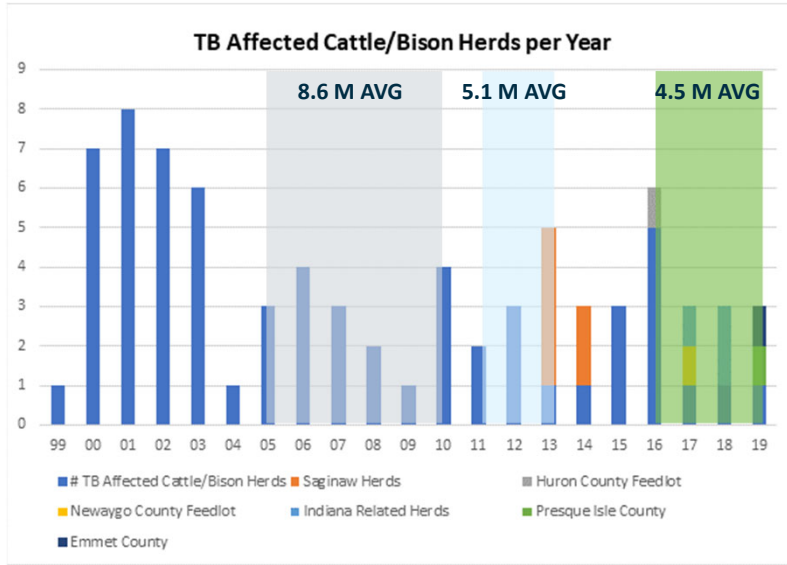


## Traceability

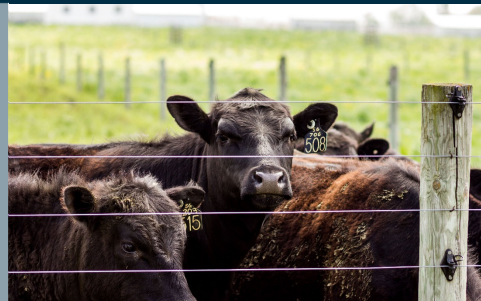
- Michigan law requires **all cattle to be identified with RFID** tags prior to leaving the farm – may be applied at approved markets. MAZ cattle require permit to move.
- **RFID readers** in cattle markets and slaughter plants
- **TB testing** veterinarians electronically capture RFID
- **Secondary ID Required** in MAZ cattle
  - Allows for effective inventory reconciliations
  - Linked to RFID for improved traceability



# Bovine TB Positive Herds



## Wildlife Biosecurity



## Protecting Cattle from TB in Deer

...separating deer from cattle  
literally and conceptually



## Protecting Cattle from TB in Deer

### Wildlife Risk Mitigation

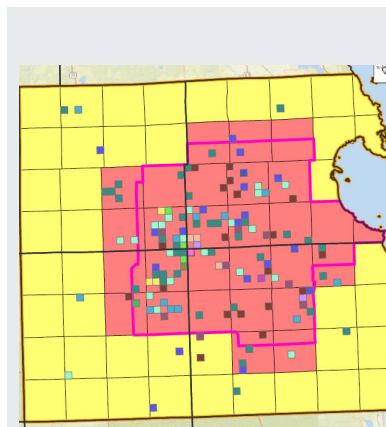
MAZ outside of the EWB, Presque Isle, Cheboygan and Otsego Counties

### Enhanced Wildlife Biosecurity (EWB)

Highest Risk Area of the MAZ

Components:

- Farm Assessment and Risk Mitigation
- Targeted Deer Removal



## Cost-Share Program - EWB



## Targeted Deer Removal

USDA WS partners with MDARD to remove deer that present a direct risk to the farm





## Identifying Deer for Removal

Deer activity on individual farms is monitored by WS four different times, during three separate seasons, resulting in 1,464 farm surveys.

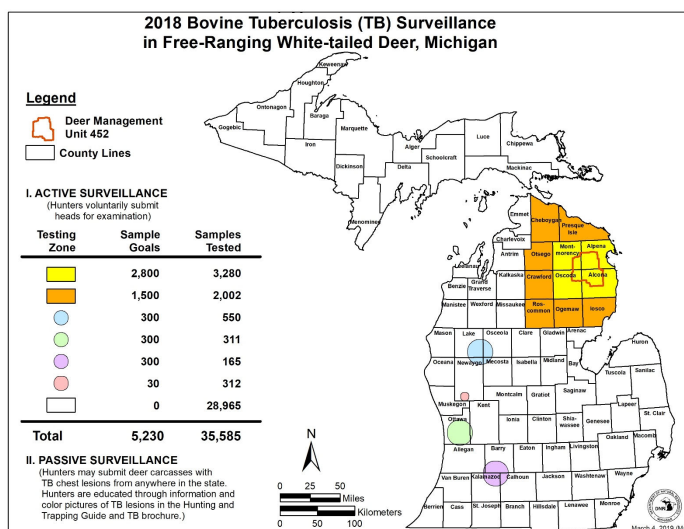


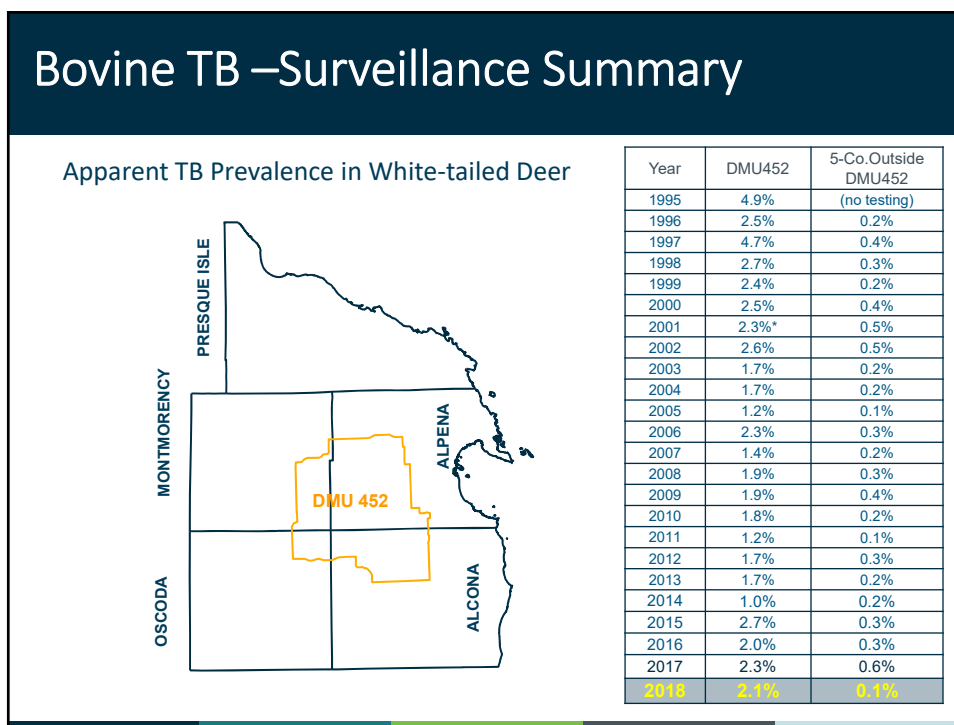
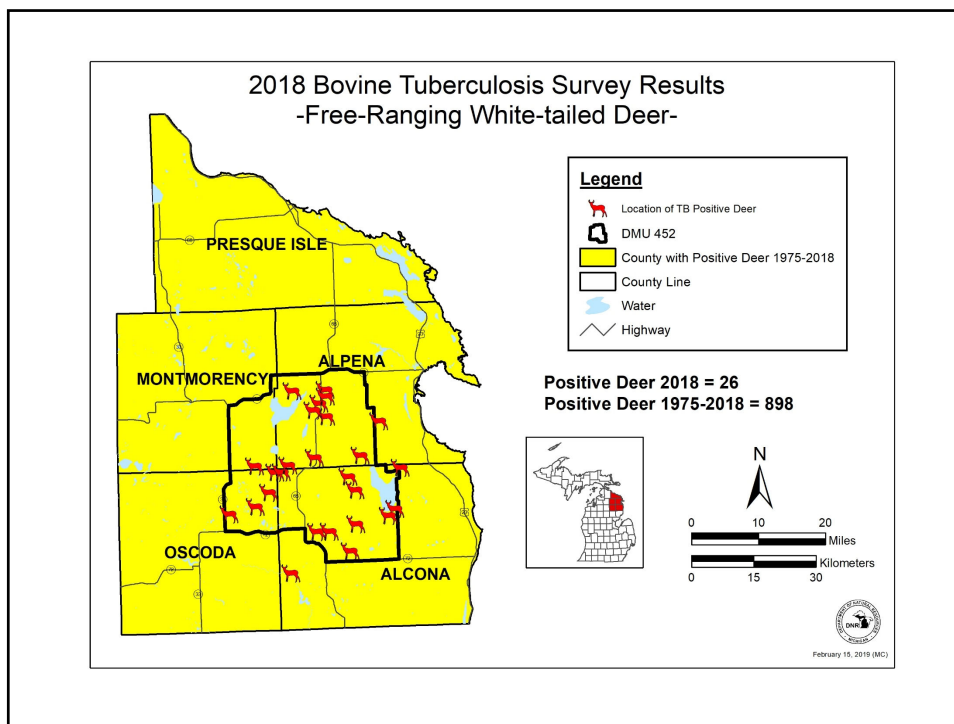
- Michigan's TB Program is required in order to maintain compliance with our MOU
- Failure to comply with MOU could result in entire state status drop
- The MOU is available at [www.michigan.gov/bovineTB](http://www.michigan.gov/bovineTB)



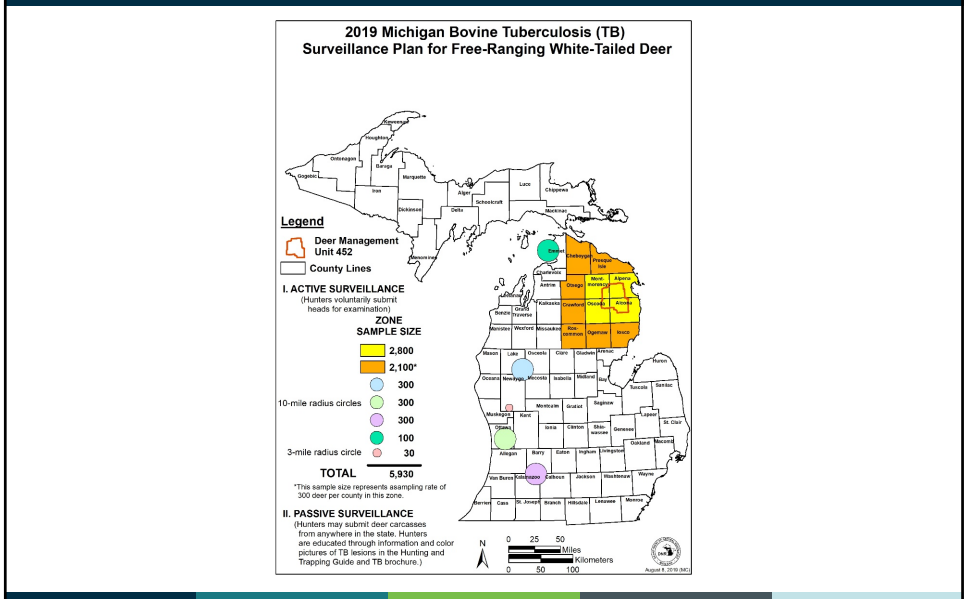


## Bovine TB – 2018 Surveillance Summary



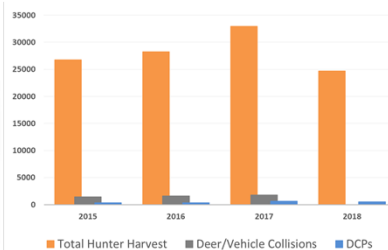


# Bovine TB – 2019 Surveillance Goals



## DNR's Actions: Bovine TB

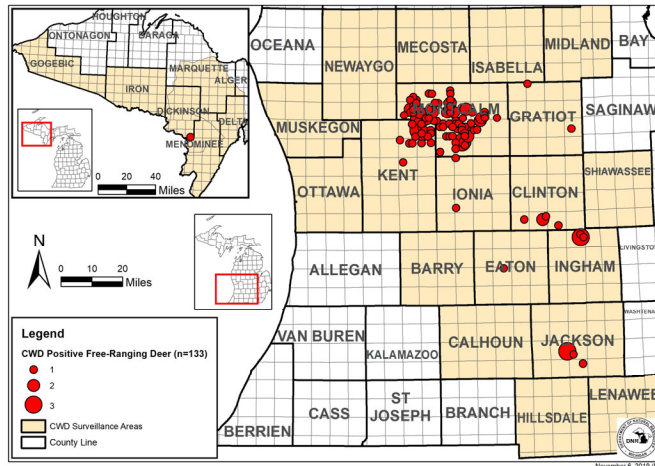
- Additional hunts in January 2017 and 2018 in the high-risk area of the MAZ to increase antlerless deer harvest
- More accessible disease control permits for no cost, year-round use for producers and adjacent landowners
- Full time wildlife health specialist to foster relationships and deer removal efforts with hunters and farmers
- Hunting Access Program opened over 4,000 acres of private land for deer hunting in DMU487

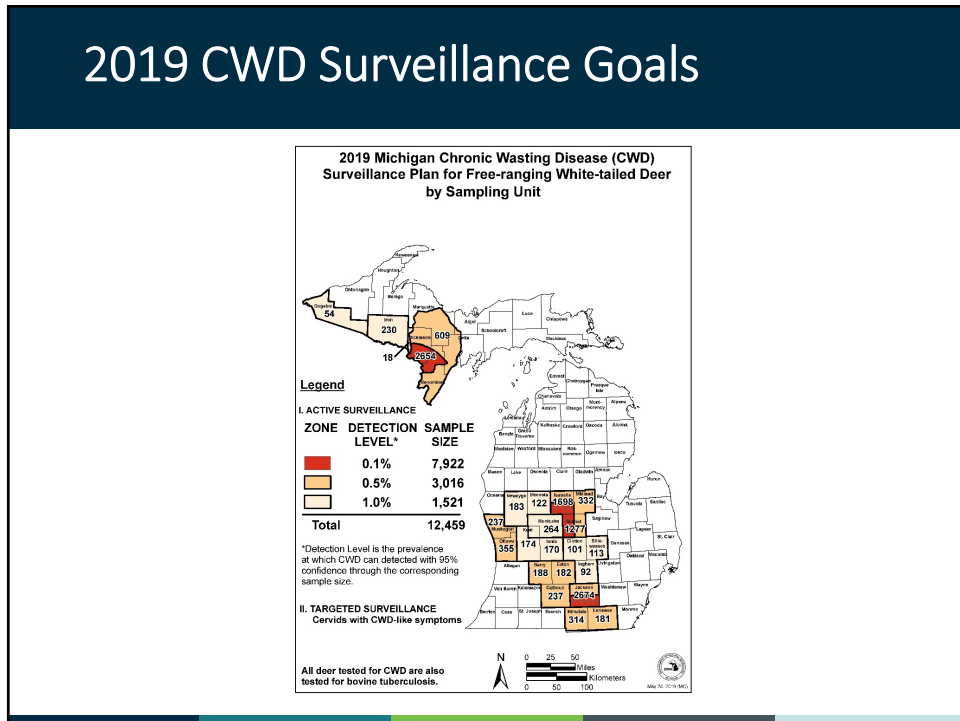
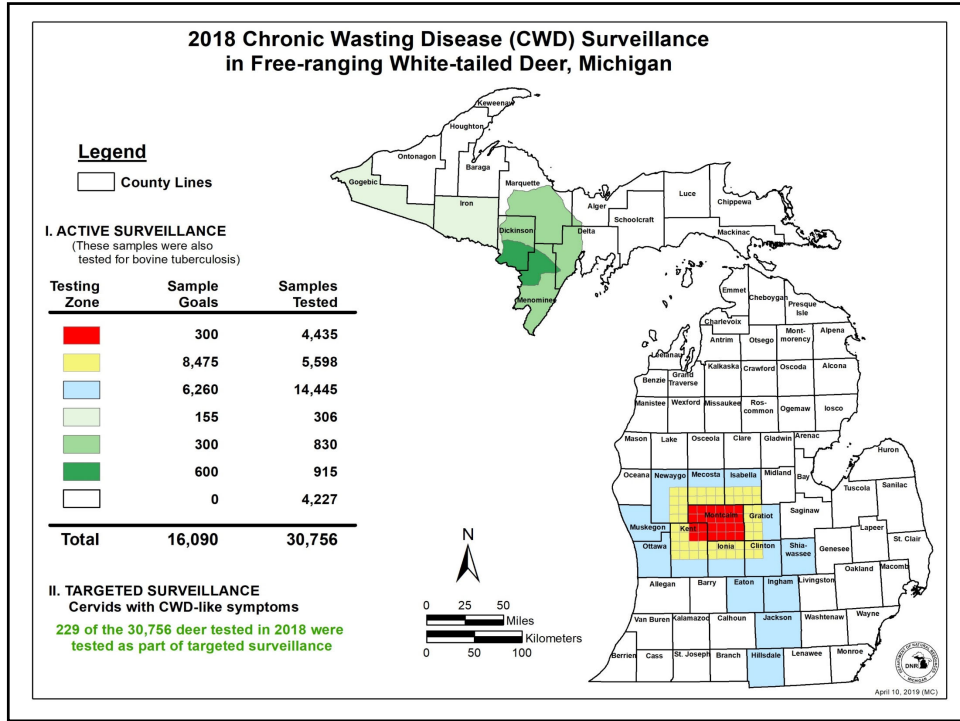




## CWD–Surveillance Summary

Free-ranging White-tailed Deer Positive for Chronic Wasting Disease (CWD)  
Michigan  
as of November 6, 2019

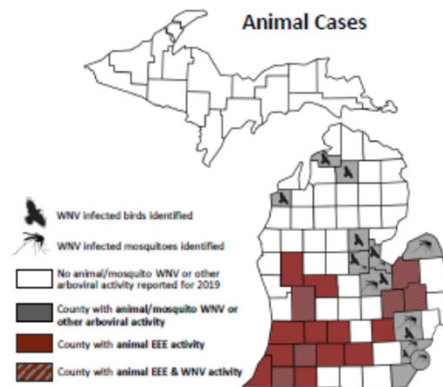






## Eastern Equine Encephalitis-2019

- 164 deer with nervous system signs (aka “targeted” deer)
- 31 deer, 2 elk tested (had screening tests consistent with EEE)
- 14 Positive deer to date
- Highest number of positives previously: 7 (2005)



## Questions?

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