Department of Natural Resources CWD Update 2021-2022

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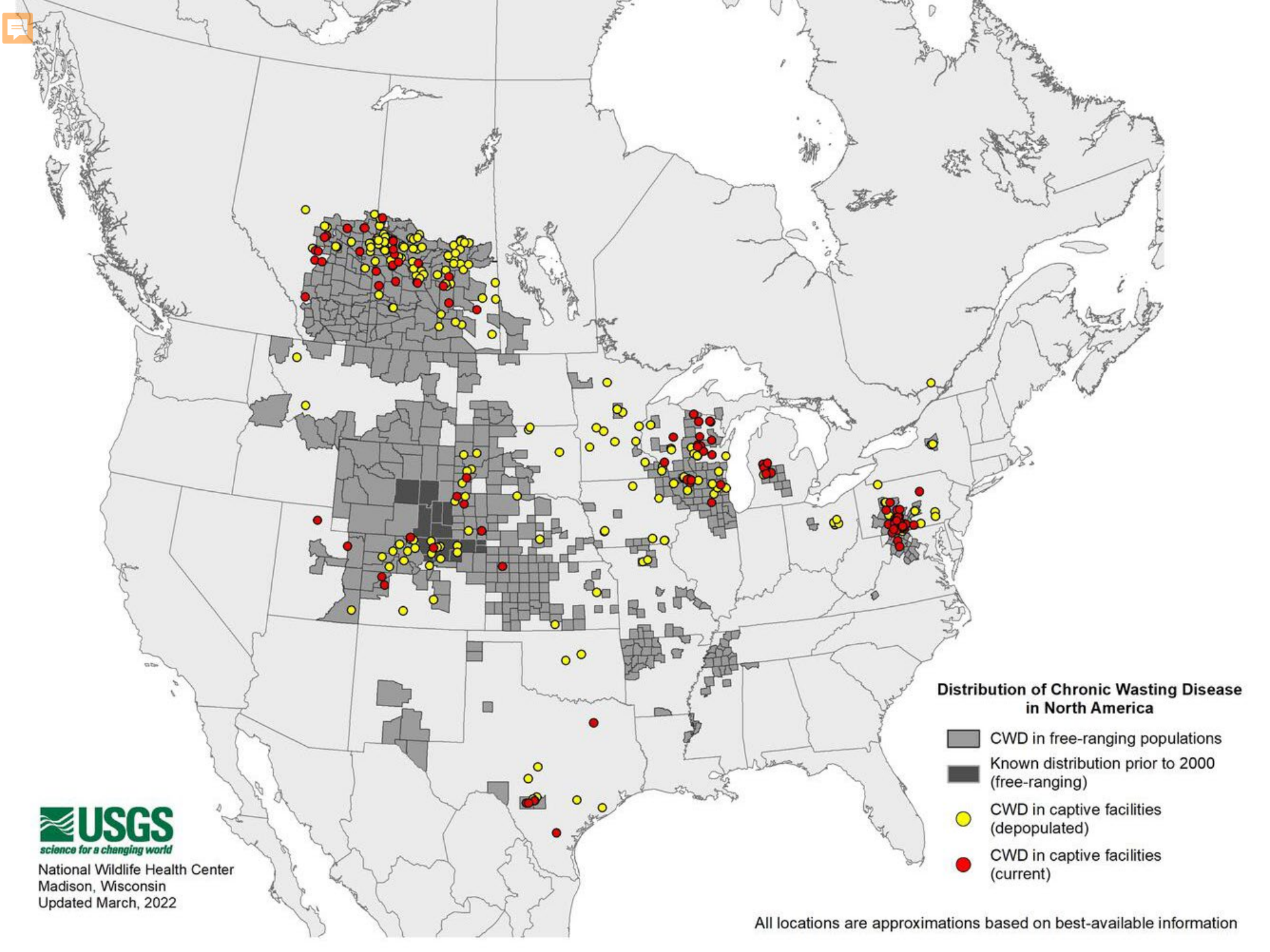
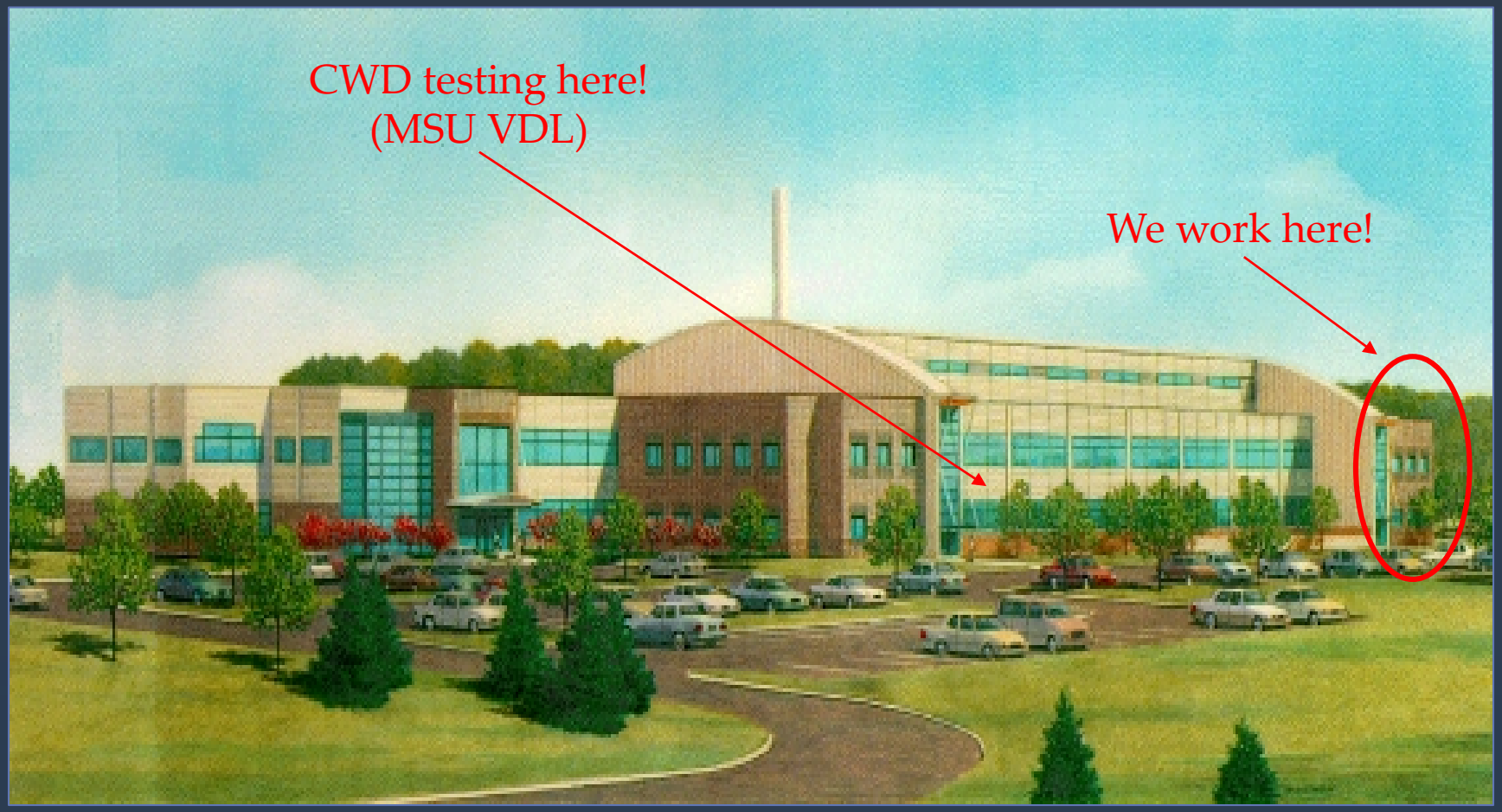
Executive Division

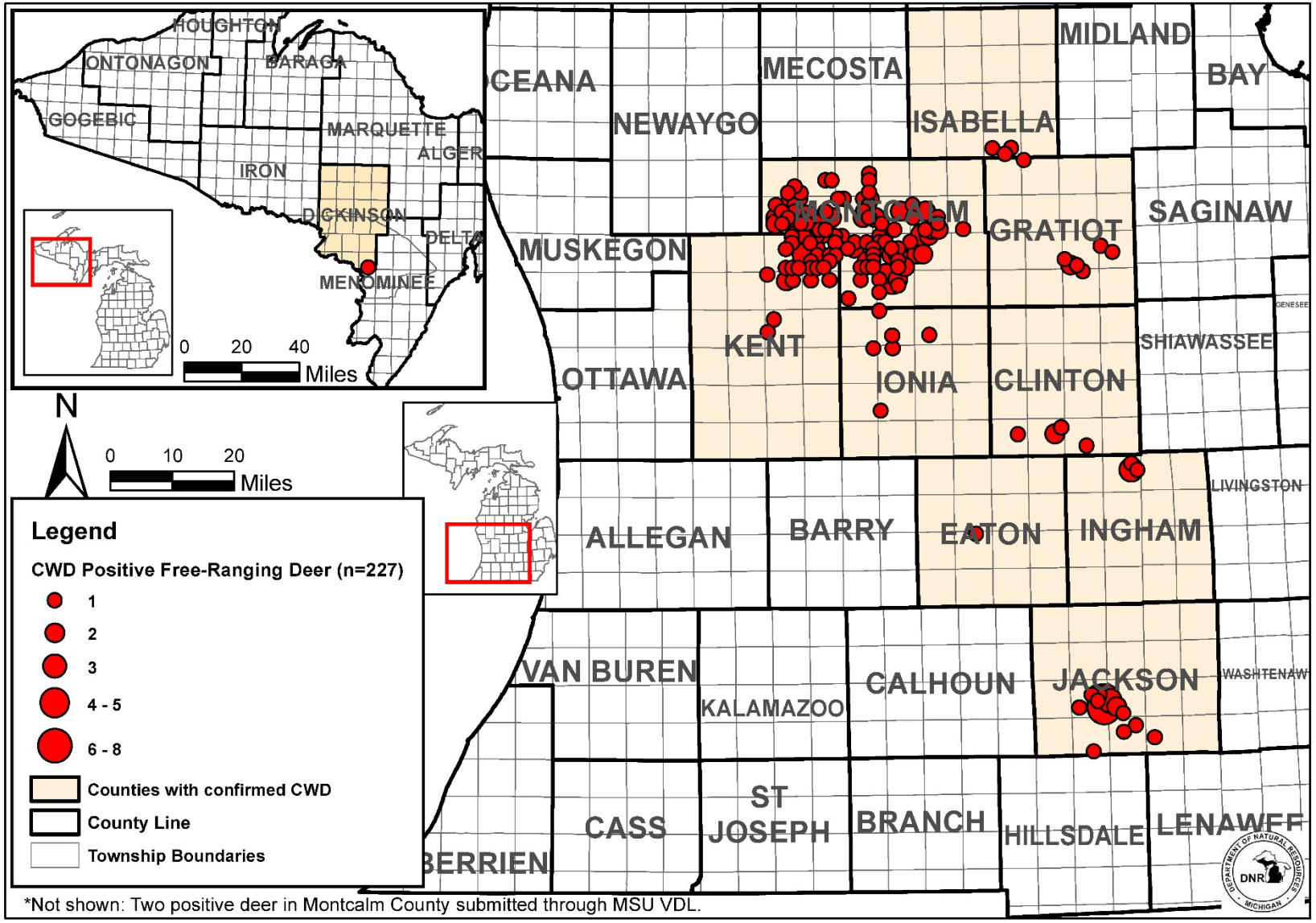

Distribution of Chronic Wasting Disease in North America
CWD in free-ranging populations
Known distribution prior to 2000 (free-ranging)
CWD in captive facilities (depopulated)
CWD in captive facilities (current)
USGS
science for a changing world
National Wildlife Health Center
Madison, Wisconsin
Updated March, 2022
All locations are approximations based on best-available information

Michigan Department of Natural Resources Wildlife Disease Laboratory



Free-ranging White-tailed Deer Positive for Chronic Wasting Disease (CWD)
Michigan

as of March 15, 2022



*Not shown: Two positive deer in Montcalm County submitted through MSU VDL.

March 15, 2022 (MC)

CWD Surveillance History

2012: 35 tested

2013: 46 tested

2014: 30 tested

2015: CWD DETECTED

2016: >7,000 tested

2017: >17,000 tested

2018: >30,000 tested

2019: >20,000 tested

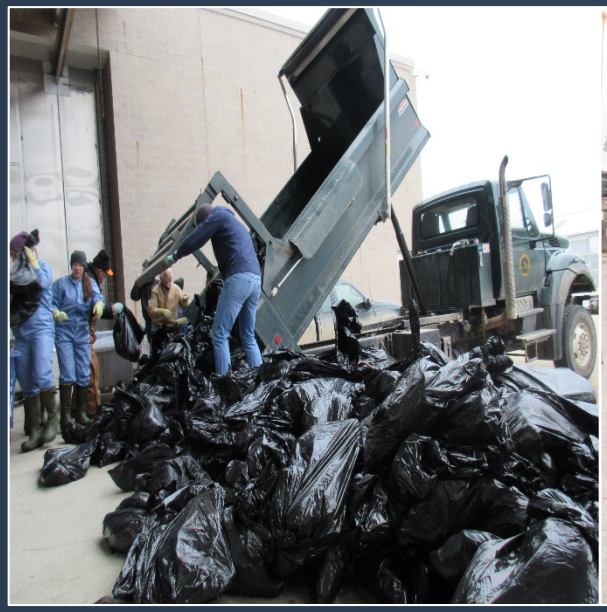
2020: >2,000 tested

2021: >7,000 tested

- Continue to provide testing for hunters outside of current CWD surveillance areas by partnering with diagnostic labs for direct submission of samples by hunters.

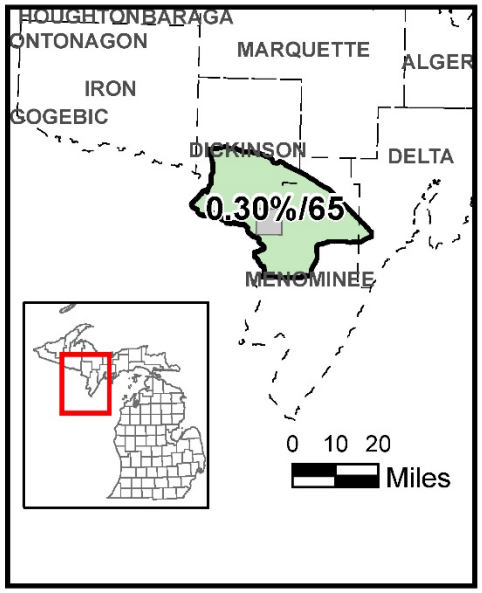
- Use DNR resources to intensively survey areas with historically low testing to focus on early detection of disease using a weighted surveillance method.

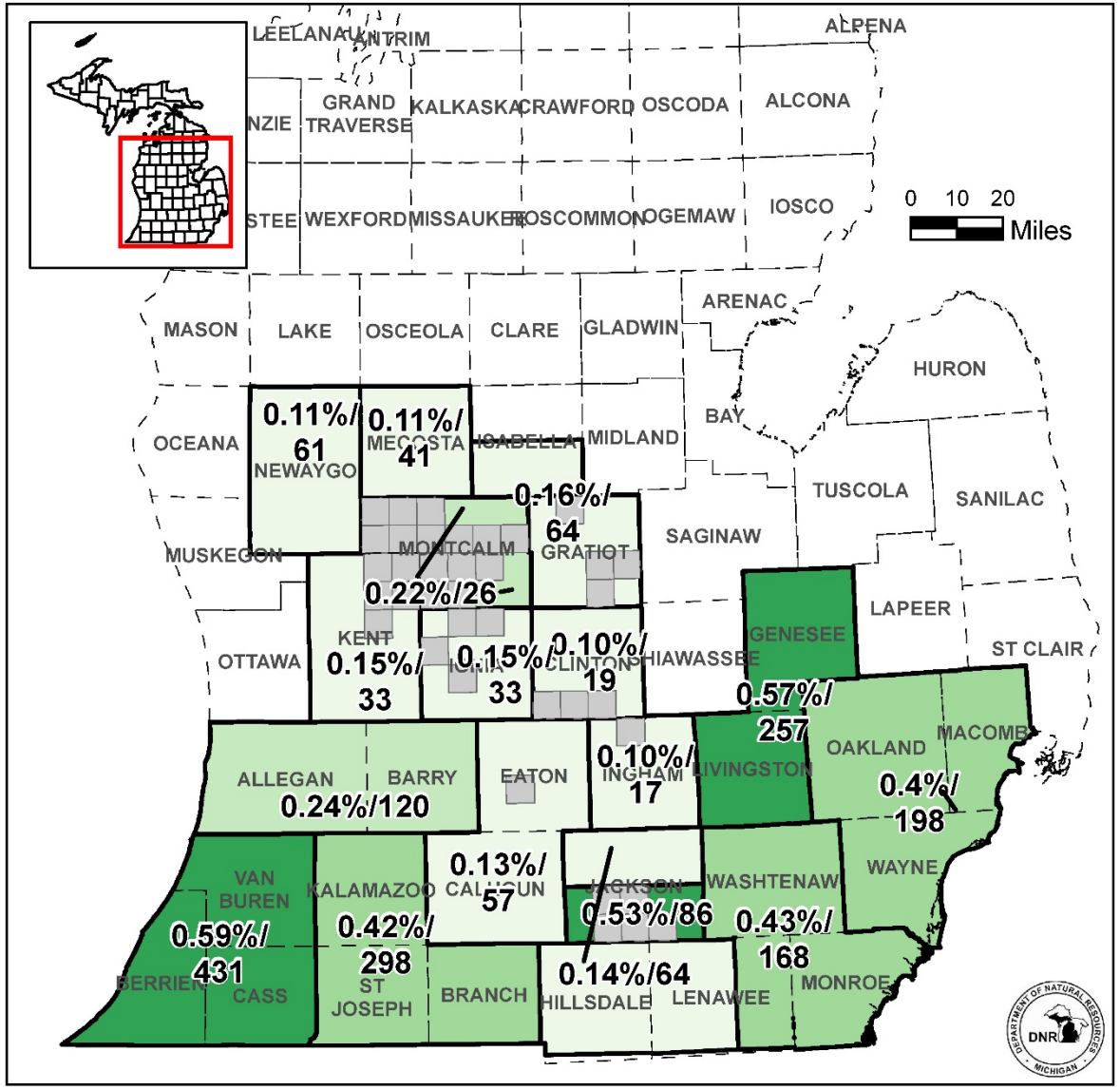
- Review after each season to assess confidence in our ability to detect the disease if present.



Estimated Potential Undetected Chronic Wasting Disease (CWD) Prevalence/Positive Deer* in the CWD Surveillance Areas, Michigan

Based on 2008-2020 Testing





Legend

- CWD Positive Township
- 2020 CWD Surveillance Populations
- County Line

Numbers represent the upper 95% credibile limit for undetected prevalence and the corresponding maximum number of positive deer.

*To the extent that CWD is clustered on the landscape and/or the deer tested are not represenative of the underlying population, prevalence/number of positive deer could be higher.

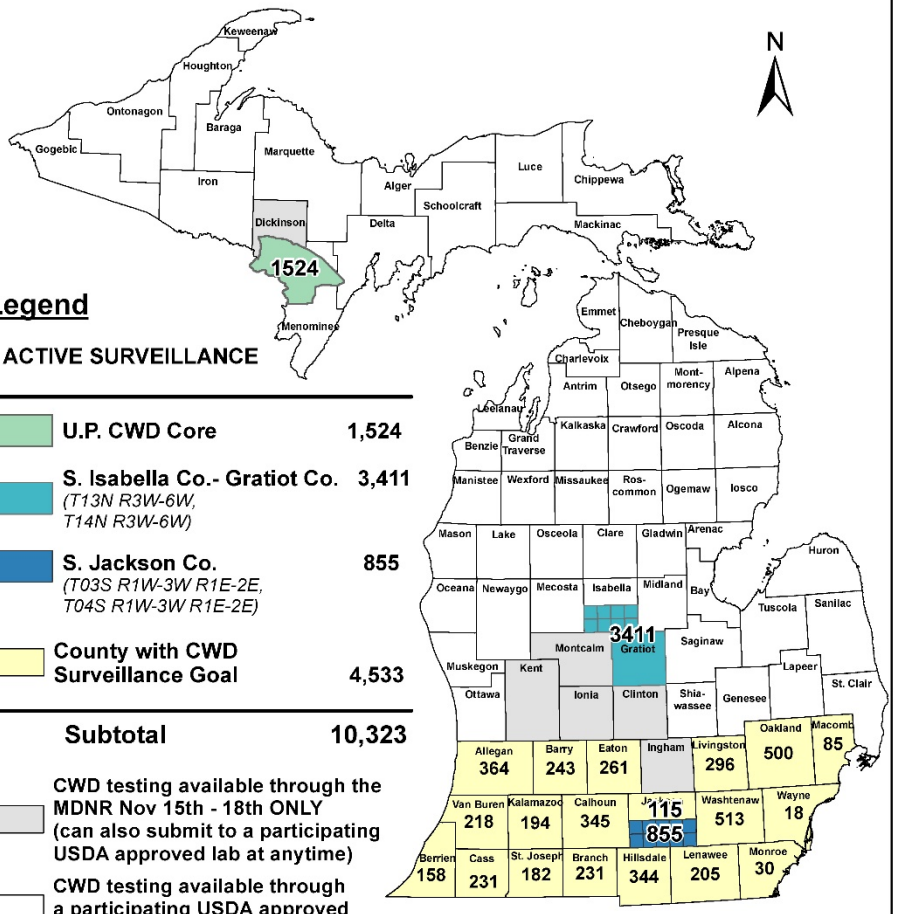
May 27, 2021 (MC)

Weighted Surveillance

- Age/gender and collection method considered
  - Male vs. female; Adult vs. yearling vs. fawn
  - Hunter harvest vs. sick deer vs. roadkill, etc.
- Each category assigned value or weight based on likelihood to be positive for CWD

Not all deer are created equal

2021 Michigan Chronic Wasting Disease (CWD) Surveillance Plan for Free-ranging White-tailed Deer



Legend

I. ACTIVE SURVEILLANCE

	U.P. CWD Core	**1,524**
	S. Isabella Co.- Gratiot Co. *(T13N R3W-6W, T14N R3W-6W)*	**3,411**
	S. Jackson Co. *(T03S R1W-3W R1E-2E, T04S R1W-3W R1E-2E)*	**855**
	County with CWD Surveillance Goal	**4,533**
	Subtotal	**10,323**
	CWD testing available through the MDNR Nov 15th - 18th ONLY (can also submit to a participating USDA approved lab at anytime)	
	CWD testing available through a participating USDA approved lab only	

II. TARGETED SURVEILLANCE

Carcasses from deer with CWD-like symptoms accepted statewide, year-round

0 25 50 Miles

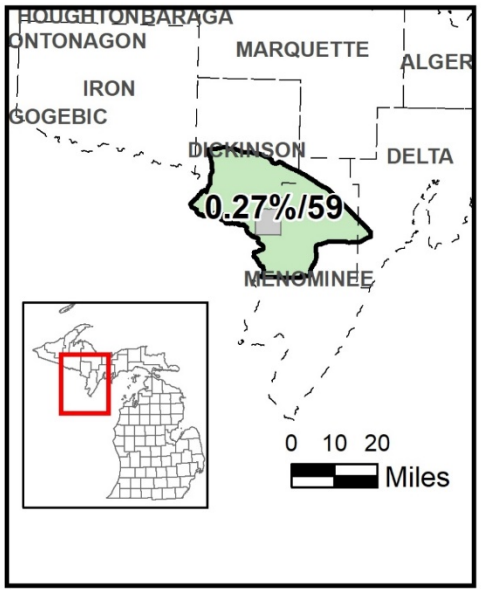
0 50 100 Kilometers

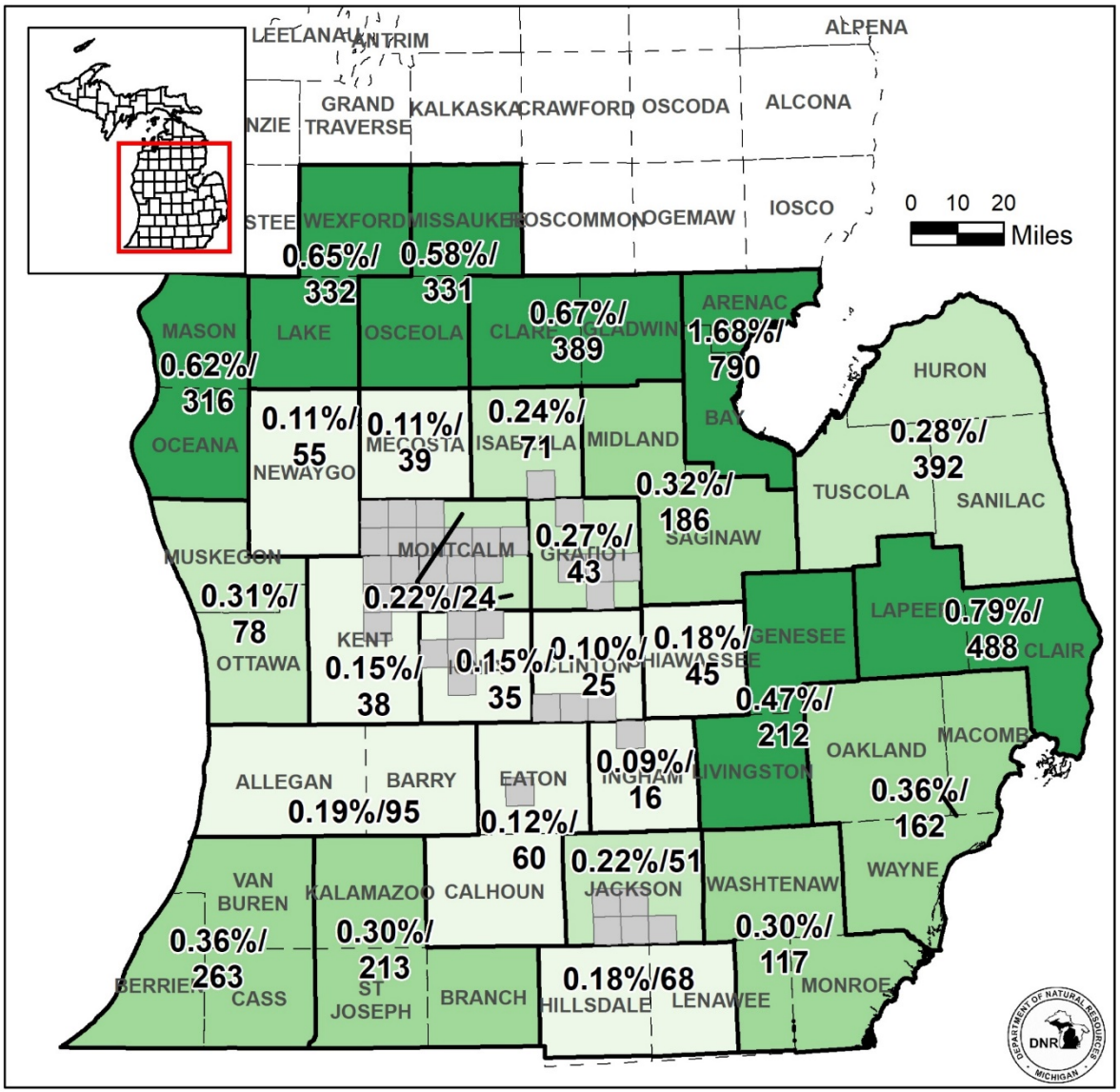
All deer tested for CWD are also tested for bovine tuberculosis.

June 7, 2021 (MC)

Estimated Potential Undetected Chronic Wasting Disease (CWD) Prevalence/Positive Deer* in the CWD Surveillance Areas, Michigan

Based on 2008-2021 Testing





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- CWD Surveillance Populations
- County Line

Numbers represent the upper 95% credibile limit for undetected prevalence and the corresponding maximum number of positive deer.

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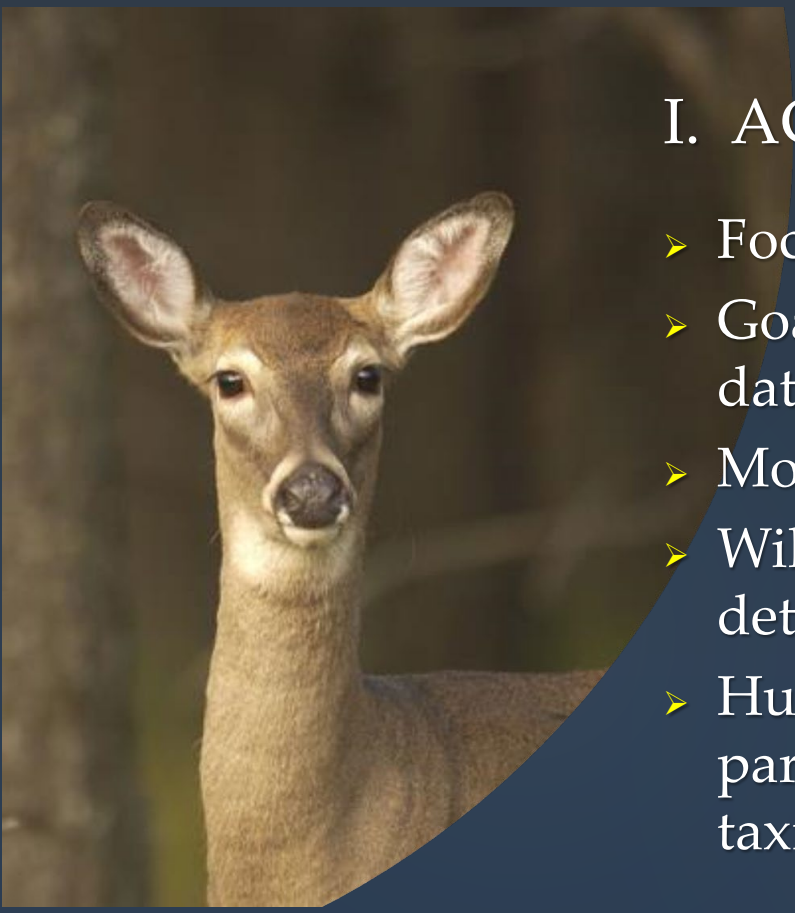
April 11, 2021 (MC)



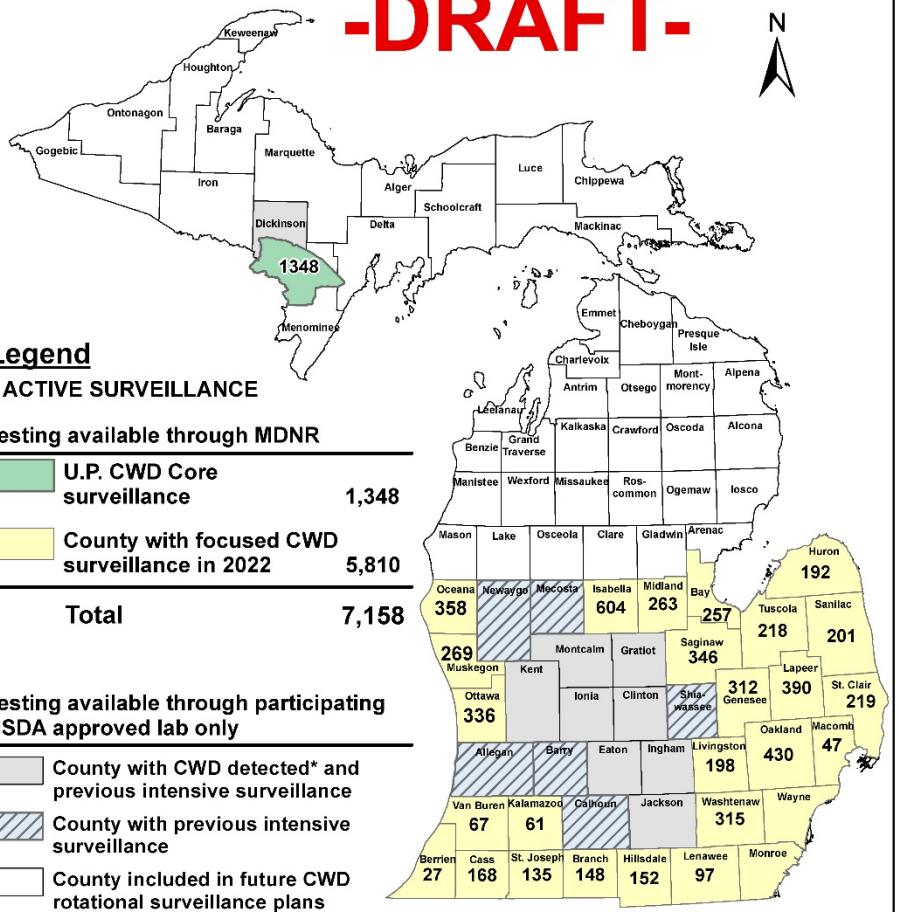
I. ACTIVE SURVEILLANCE

- Focus on Southern Lower Peninsula in year one
- Goals statistically modelled using best available data
- More intensive sampling in priority areas
- Will address gaps in historical surveillance-early detection
- Hunter support will continue through expanded partnerships with landowners, processors and taxidermists

II. Cervids with CWD-like symptoms accepted statewide, year round

2022 Michigan Chronic Wasting Disease (CWD) Surveillance Plan for Free-ranging White-tailed Deer

-DRAFT-



Legend

I. ACTIVE SURVEILLANCE

Testing available through MDNR

U.P. CWD Core surveillance	1,348
County with focused CWD surveillance in 2022	5,810
Total	**7,158**

Testing available through participating USDA approved lab only

- County with CWD detected* and previous intensive surveillance
- County with previous intensive surveillance
- County included in future CWD rotational surveillance plans

**CWD has also been detected in Isabella Co.*

II. TARGETED SURVEILLANCE

Carcasses from deer with CWD-like symptoms accepted statewide, year-round

All deer tested for CWD are also tested for bovine tuberculosis.

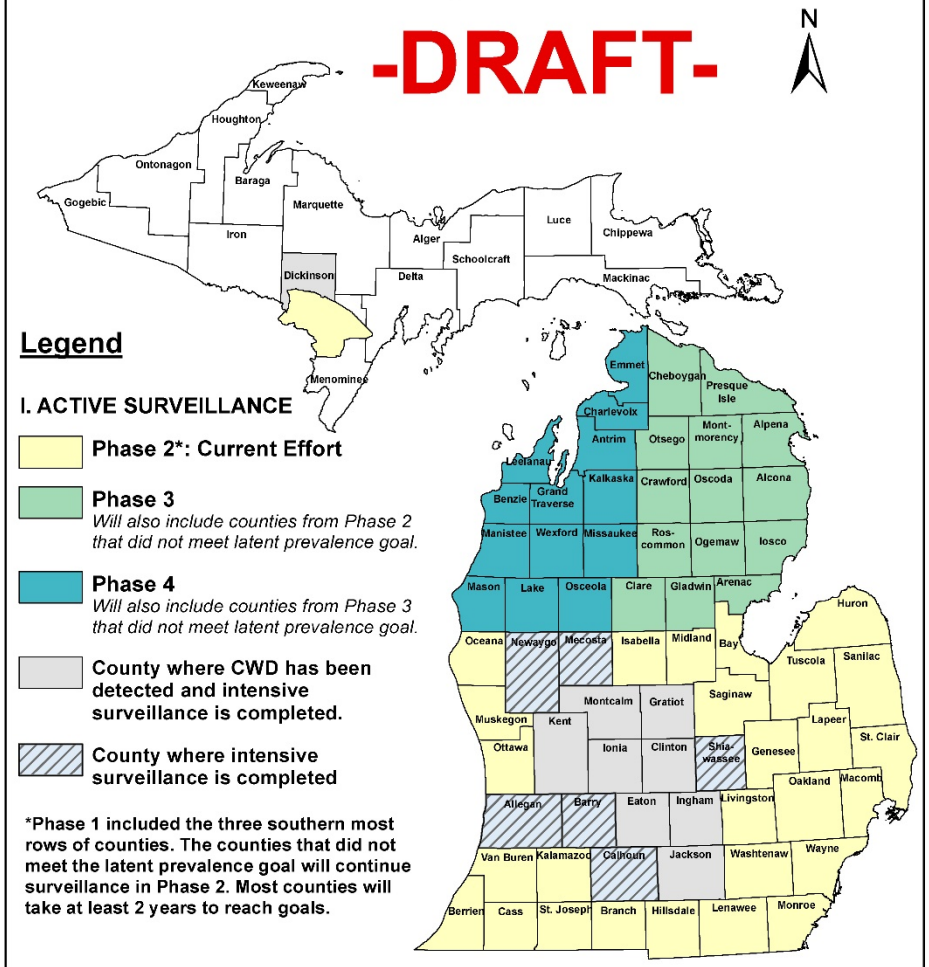
0 25 50 Miles

0 50 100 Kilometers

March 24, 2022 (MC)

Michigan Chronic Wasting Disease (CWD) Surveillance Plan for Free-ranging White-tailed Deer Conceptual Plan

-DRAFT-



Legend

I. ACTIVE SURVEILLANCE

- **Phase 2*: Current Effort**
- **Phase 3**
  Will also include counties from Phase 2 that did not meet latent prevalence goal.
- **Phase 4**
  Will also include counties from Phase 3 that did not meet latent prevalence goal.
- **County where CWD has been detected and intensive surveillance is completed.**
- **County where intensive surveillance is completed**

***Phase 1 included the three southern most rows of counties. The counties that did not meet the latent prevalence goal will continue surveillance in Phase 2. Most counties will take at least 2 years to reach goals.**

II. TARGETED SURVEILLANCE

Carcasses from deer with CWD-like symptoms accepted statewide, year-round

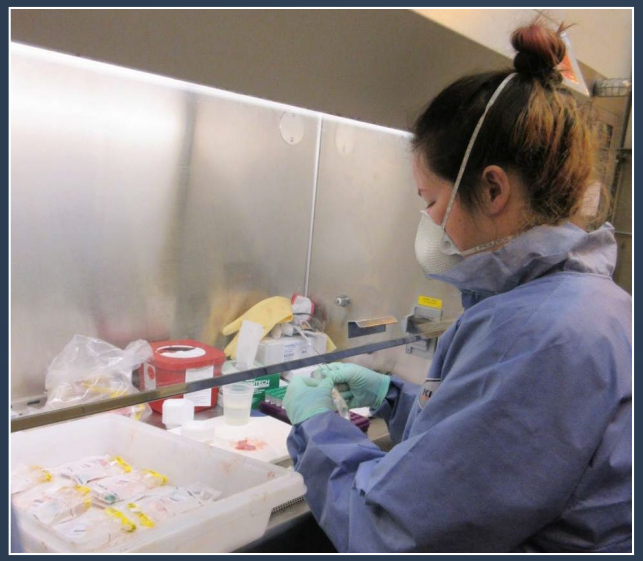
All deer tested for CWD are also tested for bovine tuberculosis.

0 25 50 Miles
0 50 100 Kilometers

March 22, 2021 (MC)

When it comes to CWD in 2022 and beyond, the goals of our surveillance are to:

1. Assess if disease is present in new areas (i.e. catch it early)
2. Continue to support limited testing in core areas and continue to develop opportunities for hunter submissions to non-DNR labs
3. Determine appropriate frequency and effort needed for long-term monitoring



#1: Systematic, risk-based rotating surveillance

#2: Exploring partnerships with MSU VDL, MSUE, stakeholder groups

#3: Goal is to gather information to inform models developed by MSU, which inform how the disease moves on the landscape

Thank you!

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