Department of Natural Resources CWD Update



Melinda Cosgrove Laboratory Scientist Manager Wildlife Health Section



Amy Derosier Acting Director Office of Public Lands Executive Division

Michigan Department of Natural Resources Wildlife Disease Laboratory









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

as of March 15, 2023



Michigan White-tailed Deer CWD Surveillance



Positive Year **Total Deer Tested** 2002 4,372 2003 5,617 2004 6,822 2005 1,702 2006 1,546 2007 1,406 2008 9,347 2009 1,136 2010 895 798 2011 2012 32 2013 46 33 2014 2015 5 4,226 2016 4 7,624 2017 17,414 45 2018 62 30,773 2019 65 20,071 2020 20 2,276 2021 25 7,770 ESOURCES 2022 16 11,196 135,102 **Grand Total 242**

MICHIGAN

Weighted Surveillance

- Method developed through analysis of Wisconsin dataset containing 90,000 sampled deer with
 >1,000 positives (Jennelle et al., 2017)
- Deer grouped into categories by collection method/gender/age
 - Hunter harvest vs. sick deer vs. roadkill, etc.
 - Male vs. female; Adult vs. yearling vs. fawn
- Each category assigned value or weight based on likelihood to be positive for CWD

Not all deer are created equal

Estimated Potential Undetected Chronic Wasting Disease (CWD) Prevalence/Positive Deer* in the CWD Surveillance Areas, Michigan Based on 2008-2021 Testing







Estimated Potential Undetected Chronic Wasting Disease (CWD) Prevalence/Positive Deer* in the CWD Surveillance Areas, Michigan Based on 2008-2022 Testing









Hunter Self-Submissions

- Began in 2020 to ensure testing available to anyone in the state
- Samples were submitted by hunter directly to diagnostic labs and paid for by hunter
- In 2020, 286 samples submitted and in 2021, 181 samples submitted (467 over both years).
- In 2022, the DNR began offering this same option at no cost to hunters in counties were CWD had been previously detected

Hunter Self-Submissions

- Free kits containing supplies and instructions, were made available and overnight shipping was included.
- > 274 samples were submitted and 210 of those were through the free kits.
- Program will continue in 2023



- Use DNR resources to build confidence in our understanding of CWD across the state with a focus on early disease detection.
- Collect the necessary samples to achieve objectives without overburdening the system.
- Continue to provide access to testing for hunters outside of current CWD surveillance areas by partnering with diagnostic labs for direct submission of samples by hunters.







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



2023 and beyond, the goals of our CWD surveillance are to:

- 1. Assess if disease is present in new areas (i.e. catch it early)
- 2. Provide options for hunters who want to have their deer tested
- 3. Determine appropriate frequency and effort needed for long-term monitoring
- 4. Continue to use research and models to better understand how the disease moves on the landscape, and effective management approaches

Thank you!

Amy Derosier derosiera@michigan.gov Melinda Cosgrove cosgrovem1@michigan.gov

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