

# Chronic Wasting Disease (CWD)



House Appropriations Subcommittee on  
Natural Resources and Environmental Quality  
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## Presentation Roadmap

- > CWD
  - > Background
  - > History in Michigan
  - > Next Steps



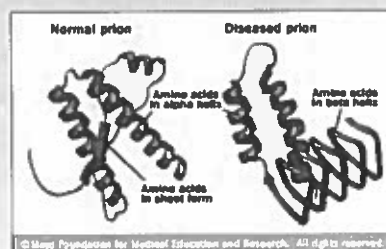
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## CWD: Background

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## CWD: The Basics

- > A disease of cervids (i.e. deer-like species, such as white-tailed deer, mule deer, elk, moose, and caribou)
- > CWD is caused by a misfolded protein called a prion



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# Transmission of CWD



Direct



Indirect



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## CWD: The Basics

- > There is no:
  - > Valid live animal test,
  - > Vaccine, or
  - > Treatment (yet)



*Photos: Wisconsin Department of Natural Resources*

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## Clinical Signs of CWD

- > Emaciation
- > Lack of coordination
- > Drooping head/ears
- > Excessive drooling
- > Excessive drinking
- > Excessive urination
- > Dull or ragged hair



*Photo: Arkansas Game and Fish Commission*

Prolonged incubation period: average of 18 months

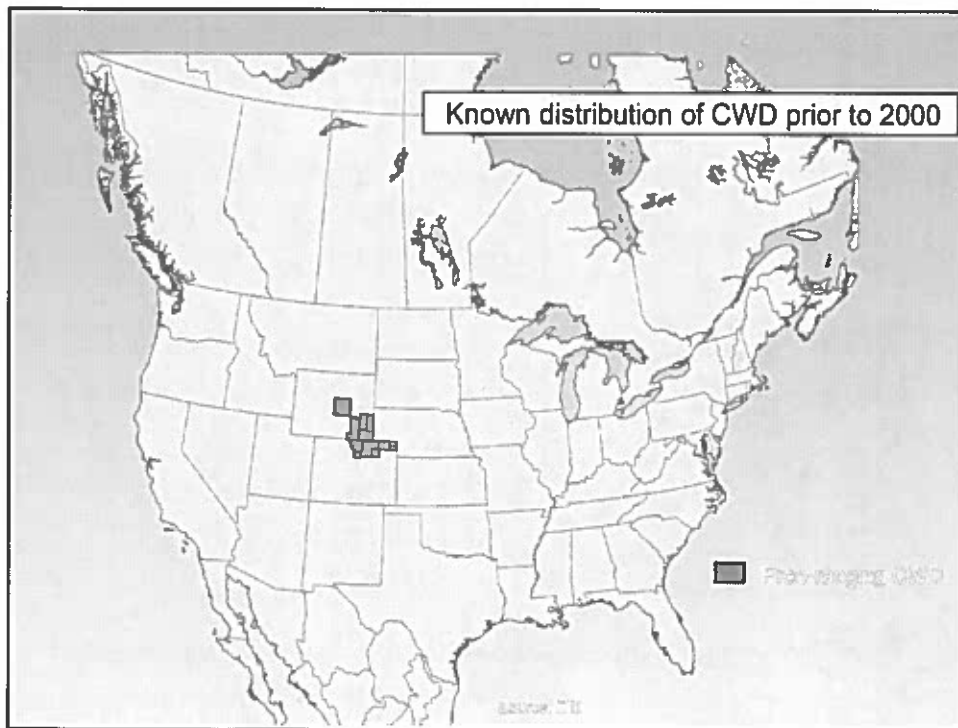
What does this mean??

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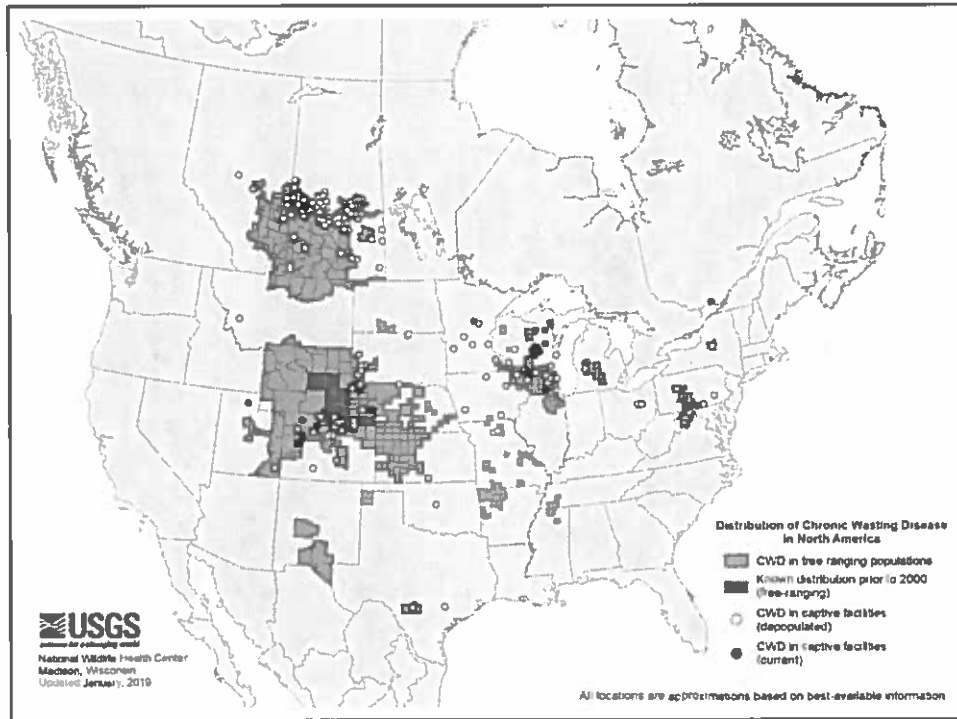
This is what \*most\* cases look like.



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## Transmission of CWD

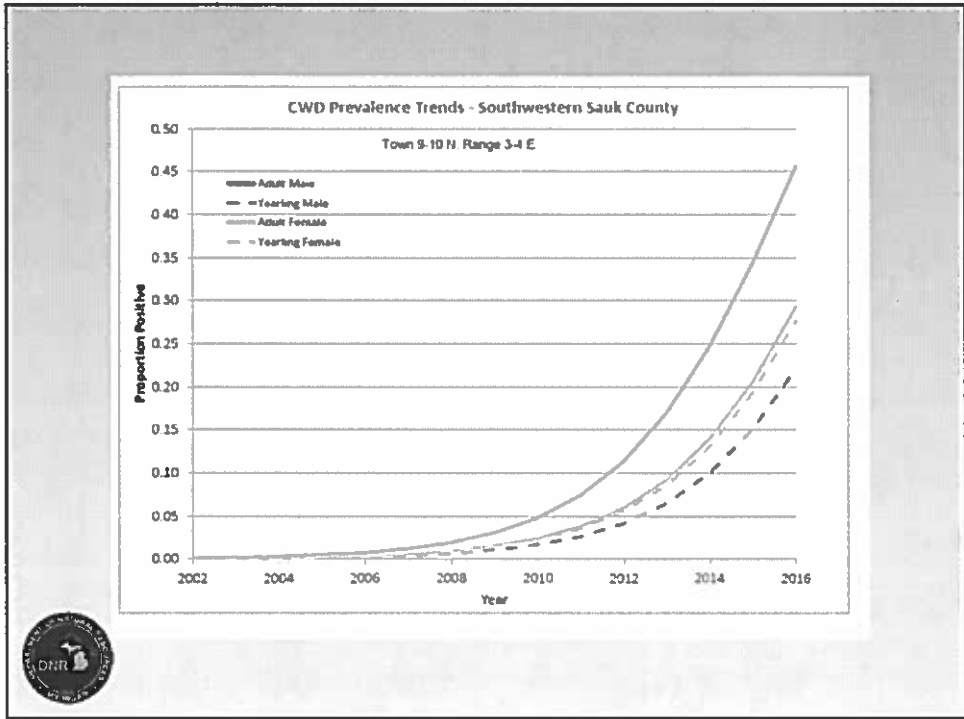


- > CWD is transmitted from deer to deer and can persist in environment
- > CWD moves across the landscape through the movement of deer
- > Rate of spread is affected by the number of infected deer
  - > Need to find it as early as possible!

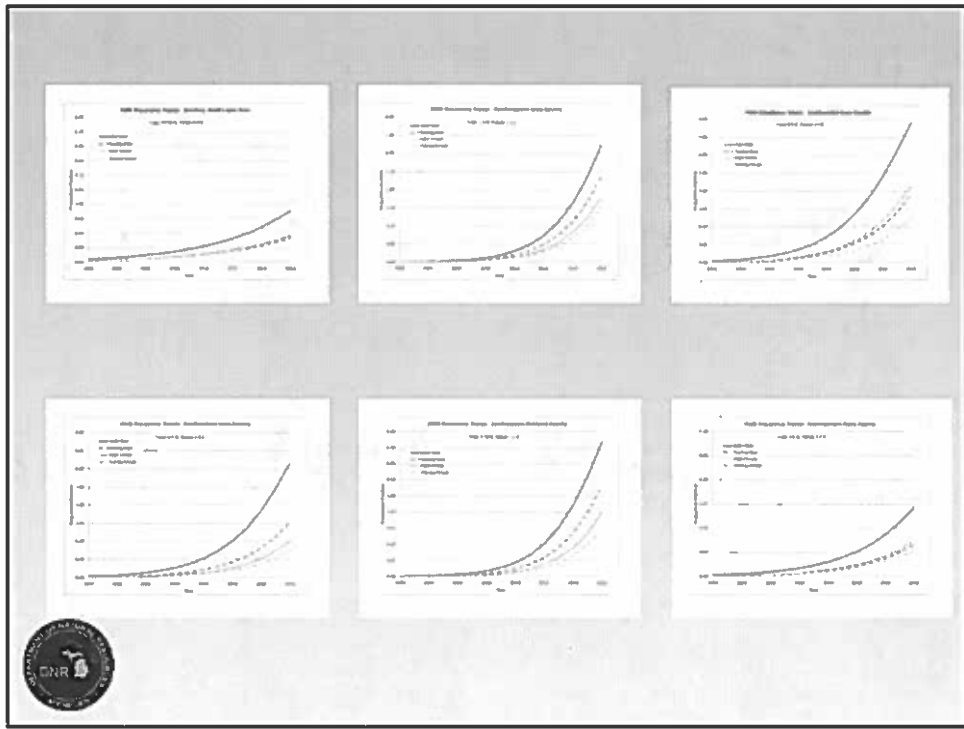


Once established, CWD will increase in prevalence and geographic spread.

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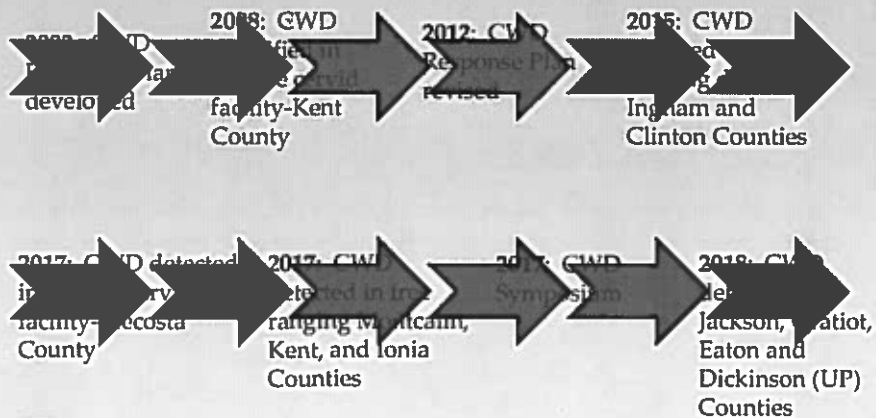


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# CWD: History in Michigan

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## Michigan's CWD Timeline



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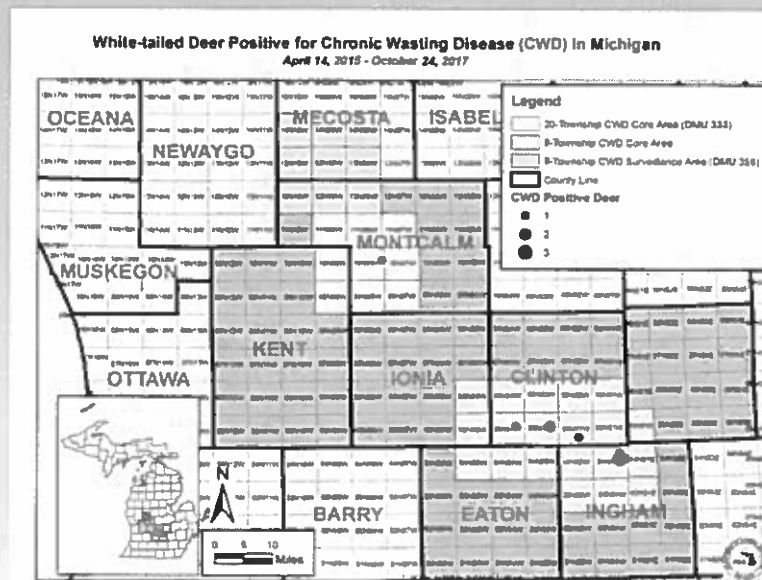
## CWD Surveillance Prior to 2015

- 2002-Statewide surveillance began
- 2008 to 2011-Additional surveillance around positive Privately-Owned Cervidae (POC) facility
- 2011-Shifted focus to targeted animals
- 2015-First case of CWD detected in free ranging deer
- Animals tested:
  - 34,000 deer
  - 1,600 elk
  - 70 moose



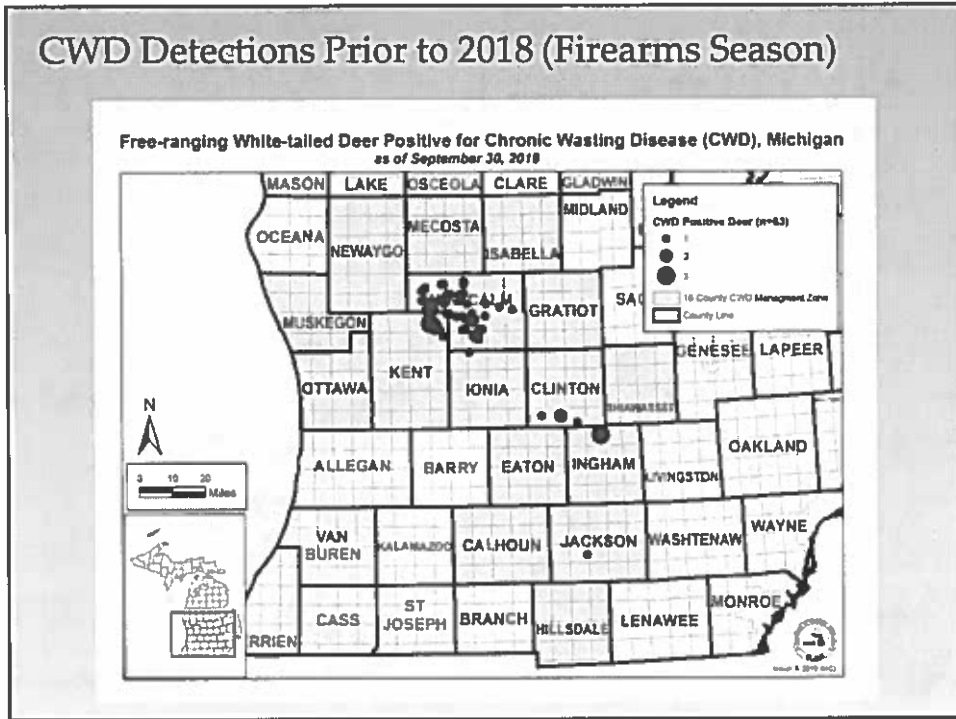
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## CWD Detections Prior to 2017 (Firearms Season)



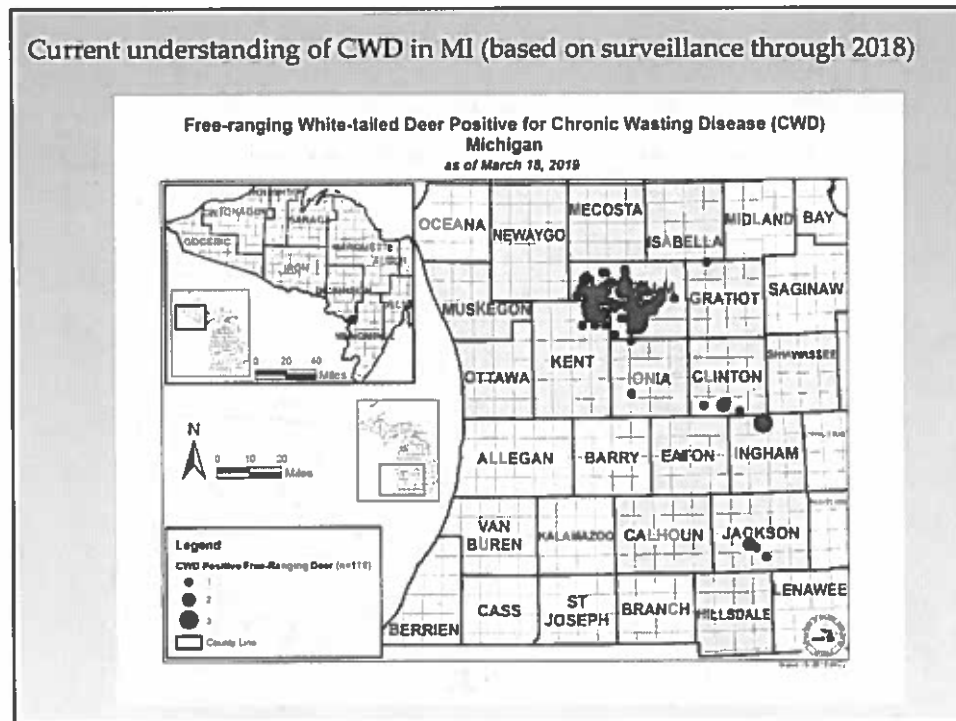
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## CWD Detections Prior to 2018 (Firearms Season)



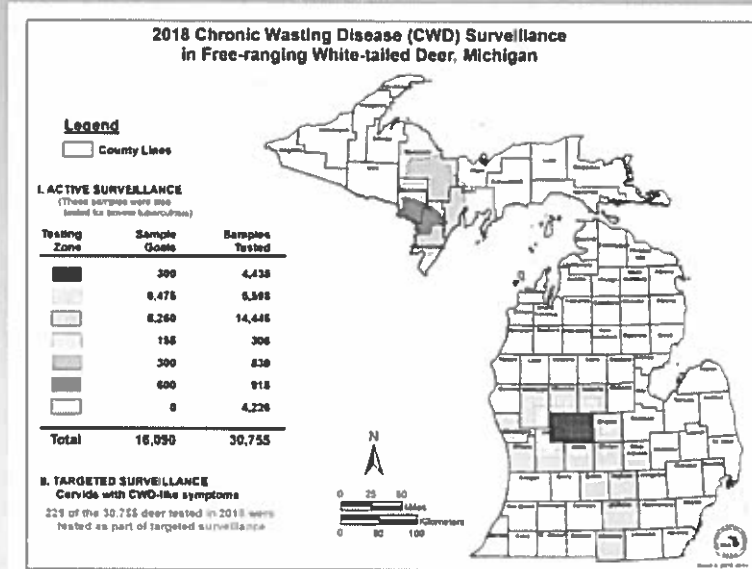
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## Current understanding of CWD in MI (based on surveillance through 2018)



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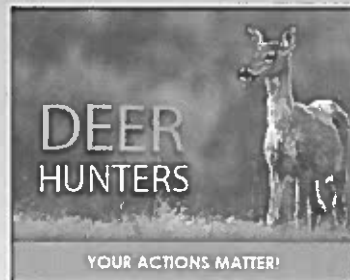
## Summary of 2018 CWD Surveillance



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## CWD: Next Steps

- DNR is committed to surveillance, management and research of CWD
- Support for these actions by Michigan's public is necessary for long-term success
- Surveillance is not management: Without public support, disease spread and prevalence are likely to accelerate



For more information:  
[www.mi.gov/CWD](http://www.mi.gov/CWD)



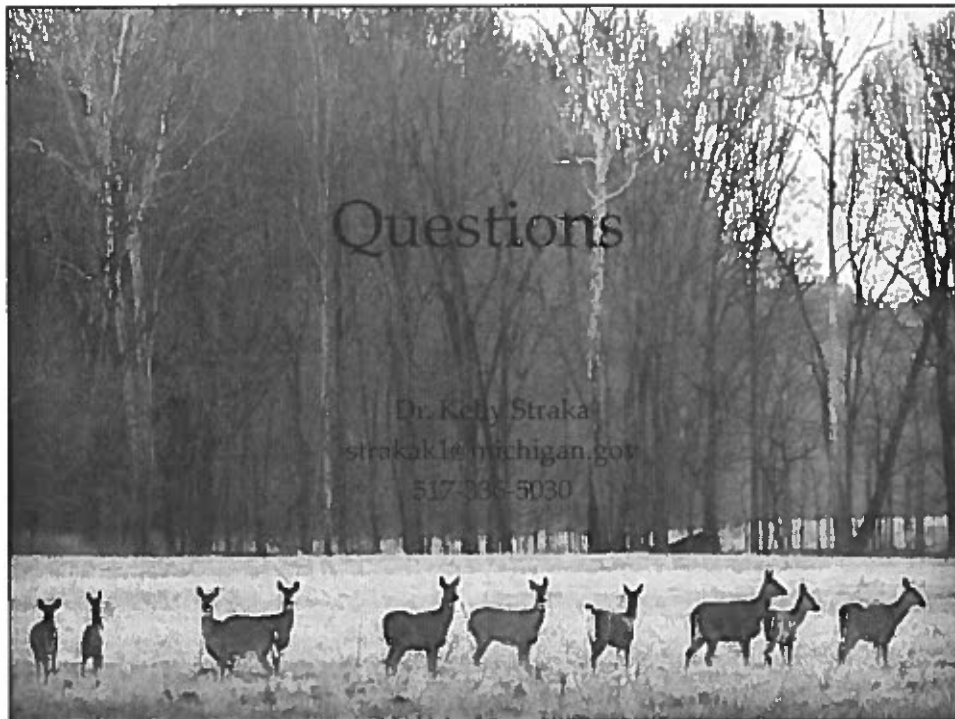
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## FY 2020 Proposed Investment: Protect Wildlife and Public Health



- **Objective:** Fight the emergence of chronic wasting disease by:
  - Researching the transmission, spread, and prevention of the disease
  - Covering laboratory costs to test deer for the disease and provide test results
- **Investment:** \$2.3 million General Fund
  - \$2.0 million one-time for research
  - \$0.3 million ongoing for testing

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