

ANIMAL INDUSTRY DIVISION UPDATE

James Averill, DVM, PhD

Outline

- Bovine Tuberculosis
- H3N2v
- West Nile Virus

Bovine TB Program Audit

- **Conducted by USDA VS**
- **August 7-10, 2012**
- **5 Member Team**

Review Team Recommendations:

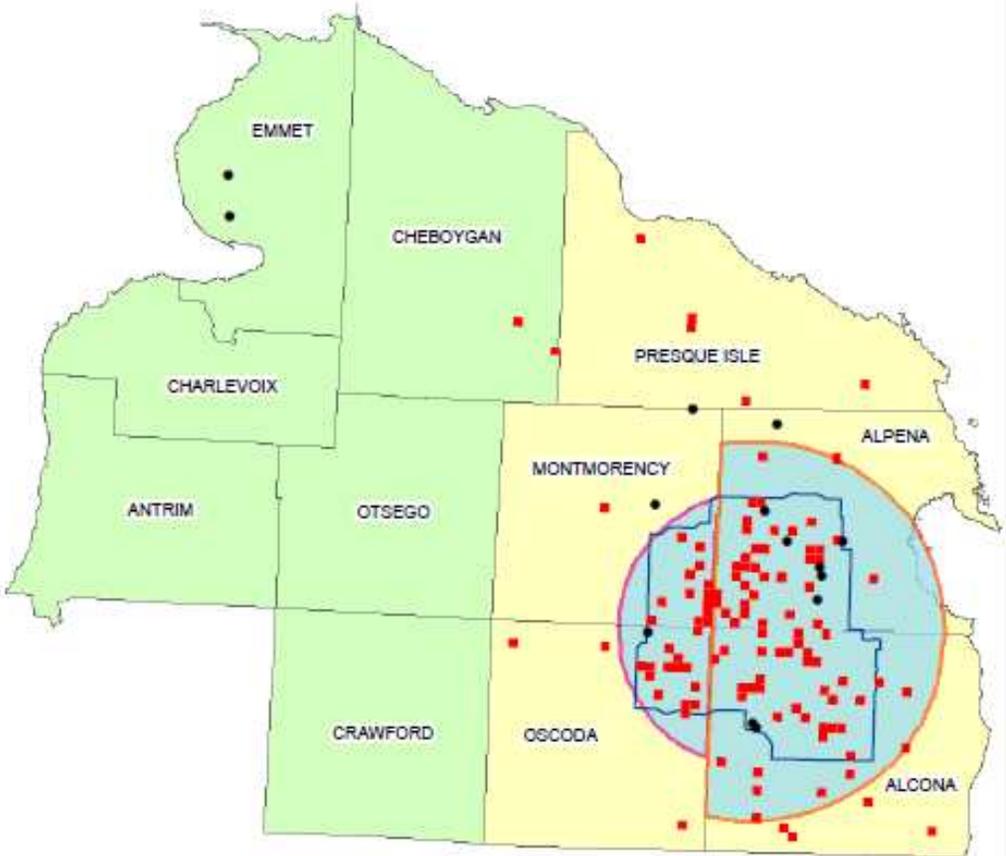
- Continue mobile patrols
- Fully implement Online Permitting System
- Streamline inventory reconciliation process
- Work with NRCS to cost-share mitigation efforts

Review Team

Recommendations:

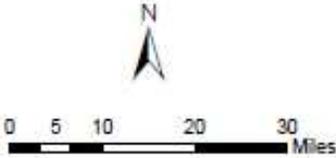
- Focus deer surveillance in counties around DMU452
- Maintain the feeding and baiting ban
- MDARD and DNR develop an integrated TB management plan

Proposed Split State Status



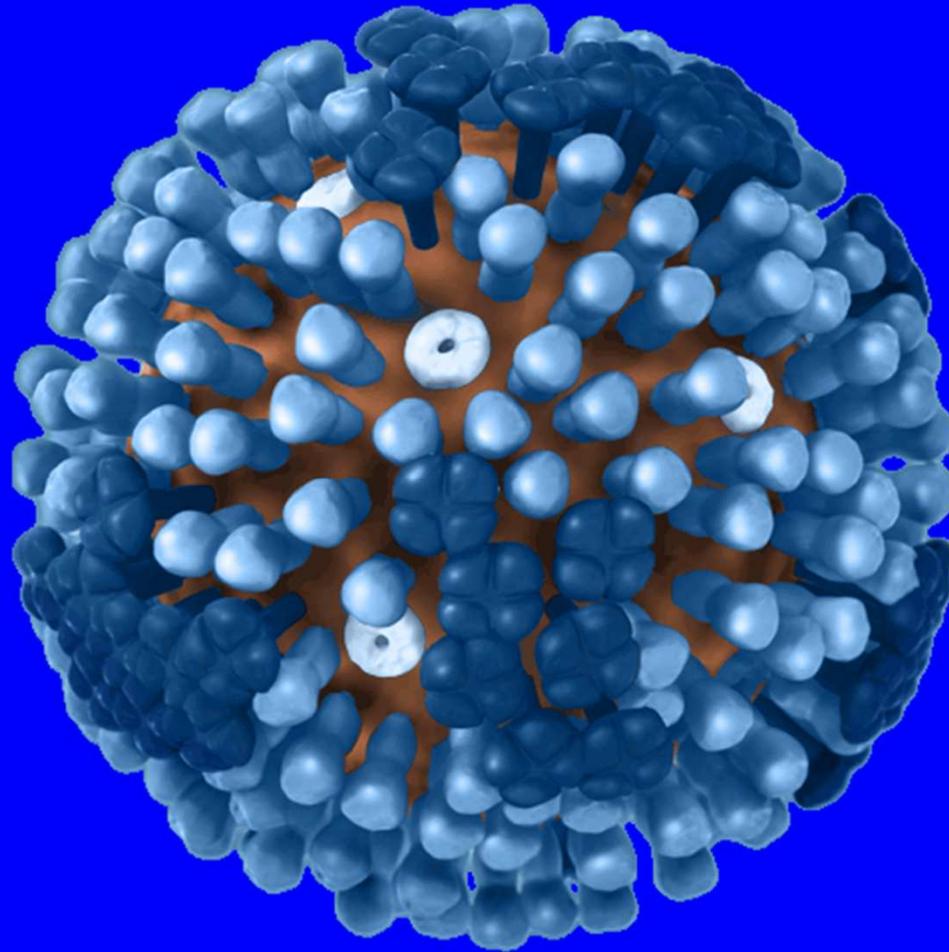
Legend

- Infected Cattle Herd (2008 - 2012)
- Infected Deer (2007 - 2011)
- Deer Management Unit 452
- County Line
- Proposed TB Free Zone
- Proposed MAAZ
- 15 Mile Radius - Proposed MAZ
- 20 Mile Radius - Proposed MAZ



Map Created By: Emily Sewell,
Alpena Conservation District
Date: 8/30/2012

Influenza



Influenza Basics

- Respiratory virus
- Mild to severe illness
- Many types
 - Seasonal
 - Human
 - Avian
 - Swine



Influenza H3N2v

- “Variant” - spreads more easily from hogs to people
- Contains gene from the 2009 H1N1 pandemic virus
- Detected in U.S. pigs in 2010
- Detected in U.S. humans in July 2011
- Not a food safety issue



Current H3N2v Situation

- 10 States affected
- 288 human cases
- 1 death
- 3 “likely” human – to –human transmissions
- 5 cases in MI
- 1 MI case is considered a “likely” human – to – human transmission

Exposure

- Main risk factor for infection is exposure to pigs, mostly in fair settings

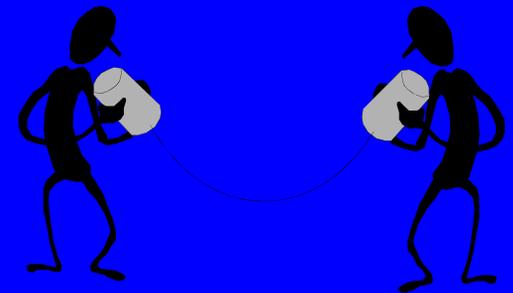


MDARD Goal

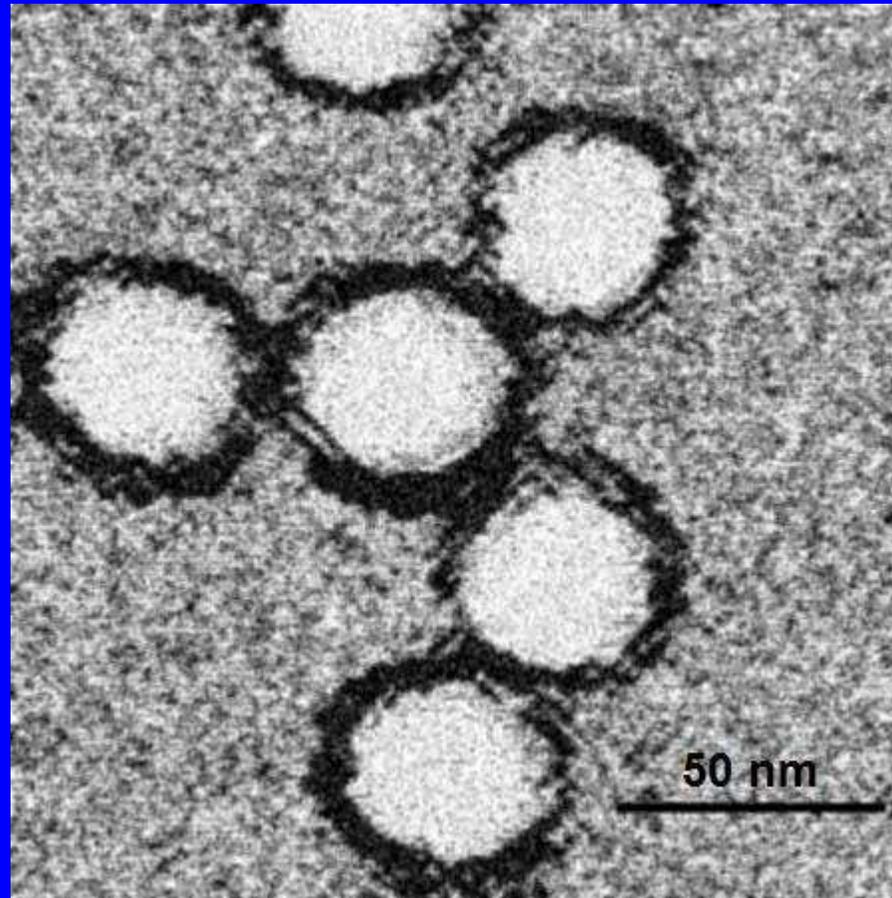
- Prevent disease in people and animals
- Reduce anxiety and panic
- Provide accurate information

MDARD Actions

- Communications with fairs and fair veterinarians
- Collaboration with MSU Extension Swine Team and 4-H coordinators
- Precautions, Bio-security, Notifications



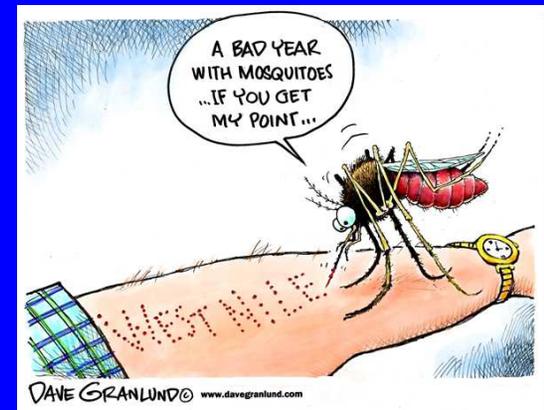
West Nile Virus



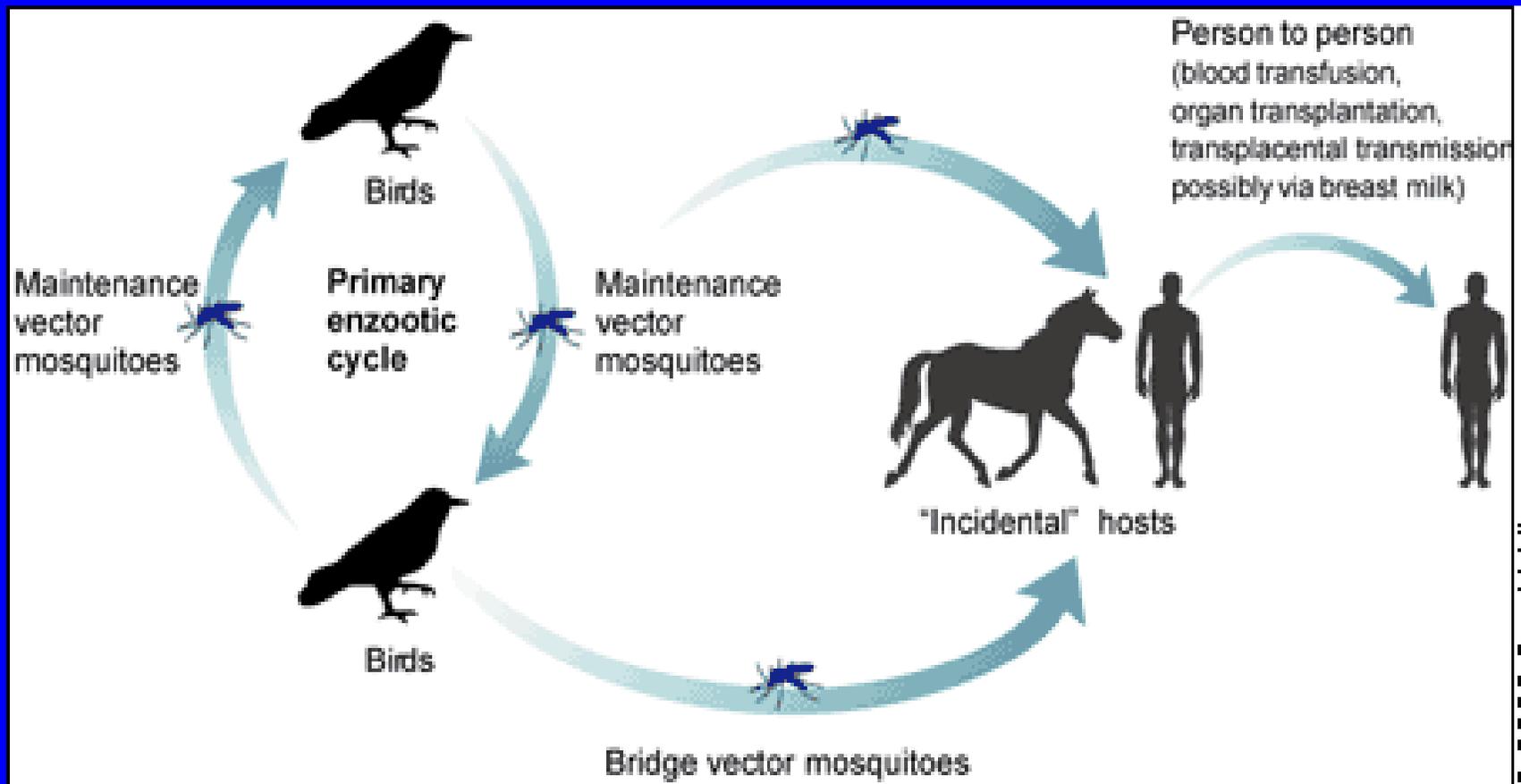
http://en.wikipedia.org/wiki/File:Em_wnvirus_j7908i.jpg

Background

- Virus transmitted via mosquitoes
- First discovered in the U.S. in 1999 and in Michigan in 2001
- Birds, Horses, and Humans



Transmission Cycle



Signs and Symptoms

Horses:

- Fever
- Twitching
- Incoordination
- Seizures
- Blindness
- Unable to rise
- Facial Paralysis
- Difficulties eliminating

Humans:

- Headache
- Fever
- Body ache
- Nausea/Vomiting
- Neurologic
(blindness,
seizures, coma)

Current Situation

- Mild winter + warm spring + drought conditions = perfect conditions
- CDC reports record numbers this year
- Of all Midwest states, Michigan appears to be hardest hit

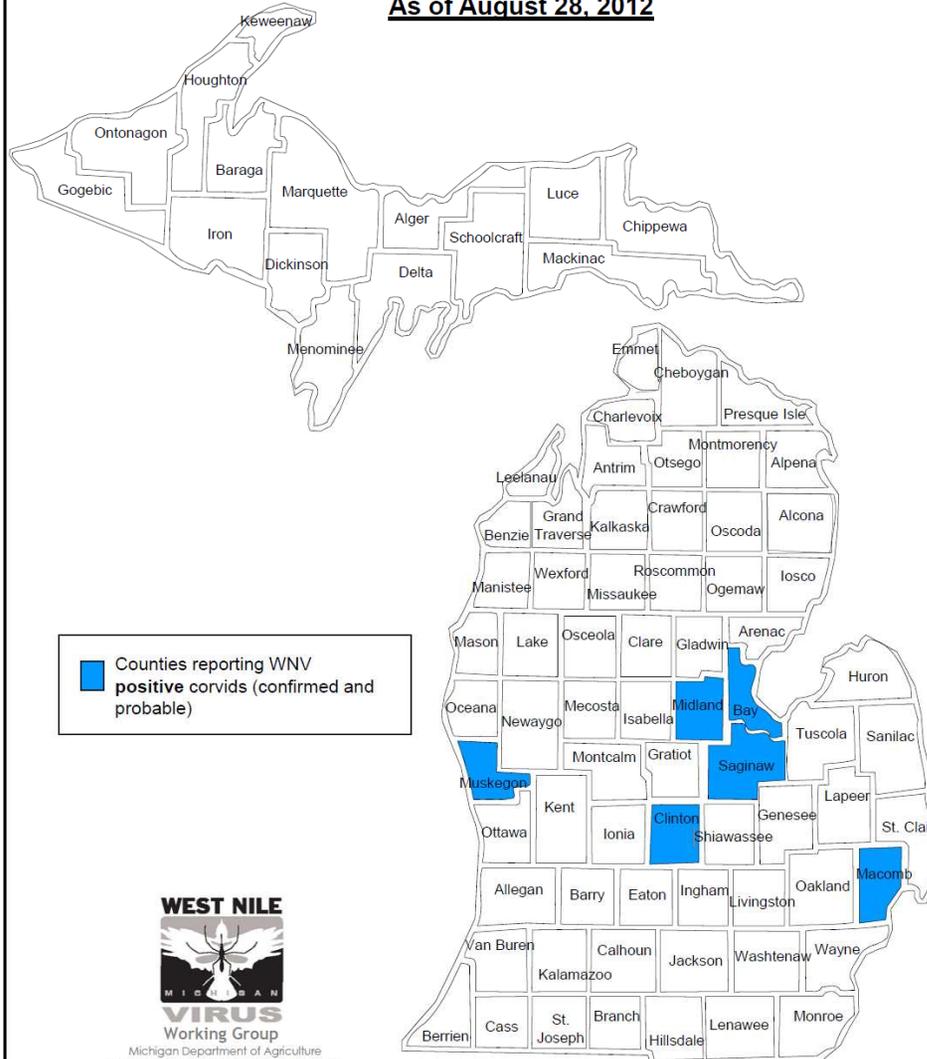
Current Situation

As of August 29, 2012

- MI human numbers:
 - 107 cases of which 27 found in blood
 - 4 deaths
- MI animal numbers:
 - 1 horse
 - 1 finch, 1 wild turkey, 16 crows, & 1 bluejay
 - 1 squirrel

2012 West Nile Virus Corvid Testing Results

As of August 28, 2012



Michigan Department of Agriculture
Michigan Department of Community Health
United States Department of Agriculture
Michigan Department of Natural Resources
Michigan Department of Environmental Quality
Michigan State University

In 2011 there were 14 total WNV positive corvids reported from Bay, Genesee, Saginaw, and Wayne Counties.

Control and Prevention

- Vaccinate horses annually.
- The four D's
 - Drainage
 - Dusk
 - Dress
 - Deet

Conclusions

- Over 100 reportable diseases
- Only snapshot of a few diseases
- Busy summer for AID staff

Questions

