West Nile Virus 2003 Response Plan

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Components of Plan

- Communications
- Surveillance
- Personal Protection
- Mosquito Control Recommendations
Communications

- Press Releases
- Website
- 2003 Conference
- Hotline
- Educational Materials
Press Releases

Local or State agency generated

- proactive (generated before some event is documented)
  - mosquito season is here - avoid mosquito bites
  - personal protection
  - horse vaccine timing is important

- reactive (following a documented finding)
  - human, horse, bird, or mosquito positive
  - personal protection
  - scheduled response plans, etc...
Website

www.michigan.gov/westnilevirus
Purpose of Website

- Inter-agency site with MDCH, MDA, MDNR, MDEQ, MDIT, e-Michigan, and MSU.
- Disseminate up-to-date information on WNV surveillance data in birds, horses, humans, and mosquitoes.
- Solicit dead corvid reports and specimens for testing.
Michigan WNV Conference

- Wednesday, April 23, 2003, 8:30-4:00
- Holiday Inn South
- Information about human health issues, surveillance for WNV, and mosquito control
- Q and A session
- PPT Presentations available on the website
Additional Sources of Information

Hotline: 1-888-668-0869
Provides general information about WNV and updates on current surveillance information

Educational materials
Pamphlets
PSA’s
Surveillance

- Bird
- Human
- Horse
- Mosquito
Bird Surveillance

- Web-based reporting on dead corvid sightings (crows, blue jays, and ravens)
- Community-based testing offered by zip code
- Collecting of appropriate specimens for WNV testing
- Instantly updated tables of # of birds reported per county
- Weekly updates of positive birds/zip code
Phone Reports of Dead Birds versus Human Cases in Michigan as of November 26th, 2002

Data from 433 of 486 human cases
USGS Study

+ bird prior to Aug 1, 2-fold increase in human risk of WNV infection

+ bird after Aug 1, negatively associated with human risk for WNV infection
Applied to Michigan Cases:

> 96% of our human cases occurred in counties which had positive birds submitted for testing prior to Aug 1
Laboratory positive WNV cases Michigan 2002*

(Includes probable and confirmed cases, all clinical syndromes)

644 cases
51 deaths
*(Total Cases/Deaths)
Human Surveillance

- Communication with health care providers regarding testing and diagnostic criteria
- WNV is reportable condition
- Information provided on the website
- Weekly updates on positive specimens tested at MDCH Laboratories
- Pesticide Adverse Event reporting
Horse Surveillance

- Active surveillance activities with Michigan veterinarians
- MSU’s DCPAH testing specimens from suspect cases
- Weekly updates on positive cases provided via the website
- Fully licensed vaccine available
Other Animal Surveillance

- **MSU’s DCPAH** will be offering testing for suspect cases.

- **DNR** will be collecting information about wildlife morbidity and mortality, test those animals showing neurologic signs.
Mosquito Surveillance

MDA will continue longstanding surveillance program

MDA will provide 1 day training for LHD’s around mosquito control issues, including identification of Culex sp. mosquitoes and regulations for pesticide application
Personal Protection

- Individuals are responsible for reducing their exposure to mosquitoes
- Use of appropriate insect repellents according to package directions
- Source reduction around home/screening
- Avoid outdoor activity when mosquitoes most active
Mosquito Control Recommendations

- Source Reduction
- Larvaciding
- Targeted spraying
- MDNR lands
- MDEQ Easement Areas
Source Reduction

- Urban vs Suburban ecology
- Community Outreach Activities
Larvaciding

- Storm drains
- Communities should identify problem areas
- Mosquito surveillance information useful
- MDEQ registration required
Targeted Spraying

- Part of a comprehensive Integrated Pest Management Plan
- Use of current surveillance data (mosquito, bird, horse, human)
- Public outreach
- MDA regulates pesticides, and their application
MDNR and MDEQ Lands

- In general, no mosquito control is allowed in these areas.
- Mosquito control will be considered in specific areas in the event it is determined, based on surveillance data and consultation with state and local health officials, that a direct threat to human health exists.
MDEQ Also Regulates Mosquito Activity For:

- **Scrap tire piles** - “Scrap tire sites over 1,000 tires cannot be a source of mosquito breeding activity or the owner of the site is in violation of the law”

- **Campground** - “Requires campground owners to take the necessary measures to reduce populations of mosquitoes and other insects of public health significance”
Michigan’s WNV Interagency Group

Michigan Department of Community Health
• Bureau of Epidemiology
• Bureau of Laboratories

Michigan State University
• Diagnostic Center for Population and Animal Health
• Department of Microbiology and Molecular Genetics

Michigan Department of Agriculture
• Pesticide and Plant Pest Mgt. Division
  • Animal Industry Division
  • Laboratory Division

Michigan Department of Natural Resources
• Wildlife Diseases Division

Michigan Department of Environmental Quality
• Water Division