A Peek into Our Program; The DeKalb Experience

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DeKalb County Board of Health

Georgia Mosquito Control Association
October 22, 2009
First, a peek into DeKalb County

- DeKalb County is the most densely populated & ethnically diverse county in Georgia.
First a peek into DeKalb County

- DeKalb covers **268 square miles**

- It encompasses **nine municipalities**, including the county seat of Decatur and a portion of the City of Atlanta
First a peek into DeKalb County

Areas of interest include:

- Stone Mountain Park
- Emory University & CDC
- DeKalb
- Perimeter Center
- International Corridor
- Fernbank Science Center
Population: 739,956

- 54.1% Black or African American
- 35.4% White
- 17.4% Foreign-born
- 10.4% Hispanic/Latino
- 4.1% Asian

* From 2008 American Community Survey
The Crew!
The Mission

Mosquito Control vs. Arbovirus Control

- Culex quinquefasciatus
- West Nile virus
Public Education

Health Fairs

Television Interviews

Neighborhood Meetings

Senior Center Presentations

Media Events

Town Meetings

Door to Door Contact
Priority Facilities

- Provide an **assessment** of the property and educate staff about **reduction of mosquito breeding sites**

- **Larvicide** around areas with concentrations of high risk individuals

- Provide West Nile Virus **information** including personal protection measures to residents/visitors of facilities
DeKalb County Board of Health
Arbovirus Program Update
2009 Season Update
Reporting Activity January through September 17, 2009

Human Surveillance:
- No 2009 cases of West Nile virus (WNV) in DeKalb County residents
- 2 WNV cases in Georgia (Muscogee and Tift counties)
- One WNV viremic blood donor, blood donation tested positive for WNV but did not develop symptoms of illness, in Georgia (Clinch County)
- 280 WNV cases (6 deaths) in CDC National Report including 51 in Colorado and 40 in Texas

Mosquito Surveillance:
- 4 WNV positive mosquito collections from 3 locations in DeKalb County
- 12 WNV positive mosquito collections in Georgia (DeKalb [4], Fulton [2], Lowndes [5], and Muscogee [1] counties)
- 24 mosquito trap locations sampled weekly
- 486 collections of mosquitoes submitted for arbovirus testing
- 355 mosquito trap nights
- 6,278 total mosquitoes counted and identified

Avian Surveillance:
- No WNV positive birds in Georgia
- 56 reports of dead birds in DeKalb

Mosquito Control Efforts:
- 248 calls requesting mosquito control efforts received and visited
- 248 priority facilities including senior centers, personal care homes, higher risk centers and green spaces have been visited, larvicided and staff educated on eliminating mosquito breeding sites on their property
- Larviciding of storm drains throughout the county in progress
- Detailed assessments, including distributing educational materials, reducing mosquito breeding sites and larviciding, in the environment around positive activity and areas where surveillance has indicated increased risk for virus activity

Additional Arbovirus Activity:
- Eastern equine encephalitis (EEE) results in South Georgia (38 horses, 1 calf and 1 dog)
- 2 WNV positive results in dogs in Georgia (Brooks County)
- 2 cases of LaCrosse encephalitis (Cherokee and White counties)
- 2 cases of internationally-acquired dengue reported (Travel to El Salvador and Honduras)

Compiled by the Division of Environmental Health at the DeKalb County Board of Health

Education

- Program Updates to Commissioners and public
- West Nile virus positive activity notification
- Website Updates
- Press Releases
Mosquito Surveillance

- 24 Mosquito Trap Locations
Mosquito Surveillance

Methods for collecting mosquito
- Dip for Larvae
- Fay Prince Trap
- CDC Light Traps
- Gravid Traps
- Backpack Aspirator
Mosquito Surveillance

- Count, sort and identify species of mosquitoes
- Select specimens sent to lab for virus isolation
Mosquito Surveillance

- Analyze the data!
- Respond to the data as well as positive results
Bird Surveillance

West Nile Virus Activity
North DeKalb County
Dead Birds Reported - Jan - June, 2003
Positive Birds - 2003
Mosquito Control

Larvicide

- Detailed environmental assessment around positive activity and areas of concern
  - Neighborhood assessment
  - Distribution of educational material
  - Larviciding when appropriate
- Calls for mosquito control efforts
- Larviciding of storm drains and catchment basins throughout the county
WEST NILE VIRUS

PROTECT YOURSELF AND YOUR FAMILY

- Avoid mosquito bites. All it takes is one bite from an infected mosquito to get WNV.
- Use mosquito repellent. Follow manufacturer’s instructions. The most effective repellents contain:
  - DEET
  - Picaridin
  - Oil of lemon eucalyptus
  - Permethrin (for clothing, shoes, bed nets and camping gear but not for skin)
- Cover up with long sleeves and pants.
- Know that peak biting hours are from dusk to dawn.
- Eliminate breeding sites. Don’t give mosquitoes a place to breed. Encourage your neighbors to do the same.

MOSQUITO PREVENTION CHECKLIST

The mosquitoes that carry West Nile virus tend to breed in containers and typically do not fly very far. Therefore, your help is needed to effectively reduce mosquito populations around your home.

Make a checklist of items in your yard to check weekly for standing water. Empty, drain or remove. Remember, a bottle cap can hold enough water to breed mosquitoes.

I have marked the items below that I noticed may need attention:

- Air conditioner
- Bird bath
- Boat
- Bucket, pan, can
- Container
- Decorative pond
- Ditch
- Drink can, bottle
- Flower pot
- Litter and debris
- Low spot in yard
- Magnolia leaves
- Pet bowl
- Plastic sheeting
- Rain barrel, cistern
- Rain gutters and drains
- Swimming pool, spa and covers
- Tarp or other plastic covers
- Tire
- Tree hole
- Truck bed
- Wading pool
- Wagons, trucks, toys
- Wheelbarrow

Additional concerns in your yard are:

Thank you for helping us protect the health of those who live, work and play in DeKalb County!

QUESTIONS? CONTACT:
NUMBER:
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- Tire
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- Wagons, trucks, toys
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So....

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Georgia and National Data from CDC National Case Counts for West Nile virus on CDC.gov
West Nile virus first arrived in Georgia in 2001
Questions?
Questions about this presentation may be directed to

Juanette Willis
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DeKalb County Board of Health

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Web site: www.dekalbhealth.net