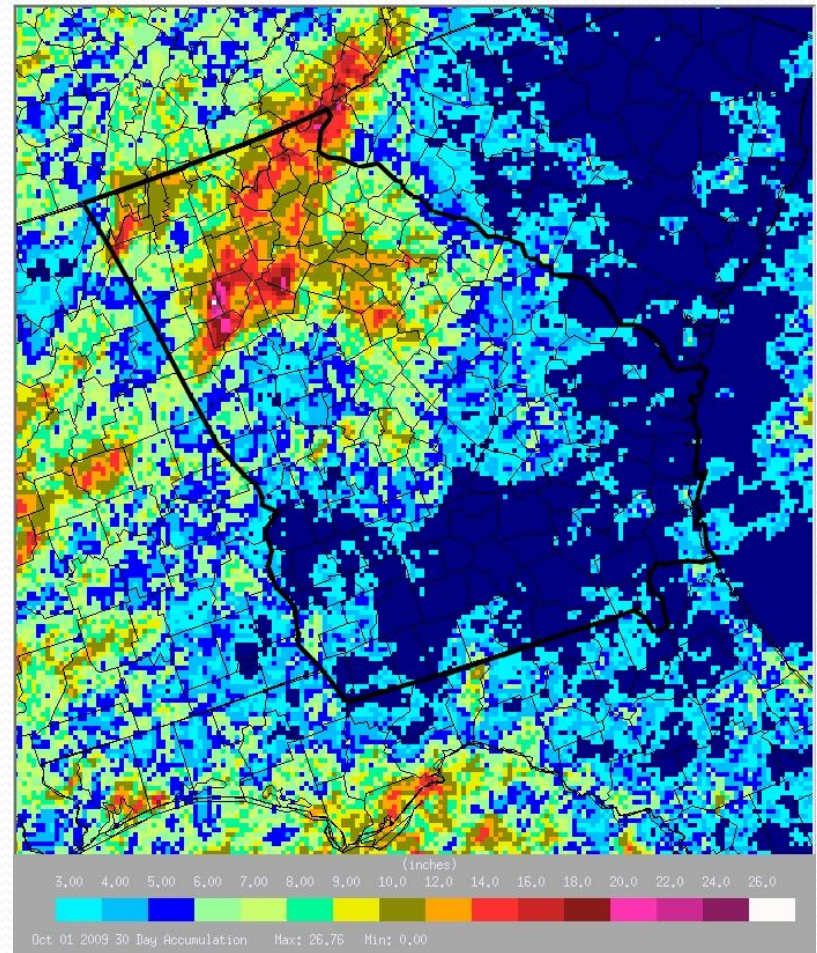


Lessons Learned During the Flood of 2009

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How It All Began

- Mid-September:
 - Nine days of rain in Metro Atlanta
- September 20-22:
 - Concentrated rainfall
 - In some areas: Over 20 inches of rain within 48 hours



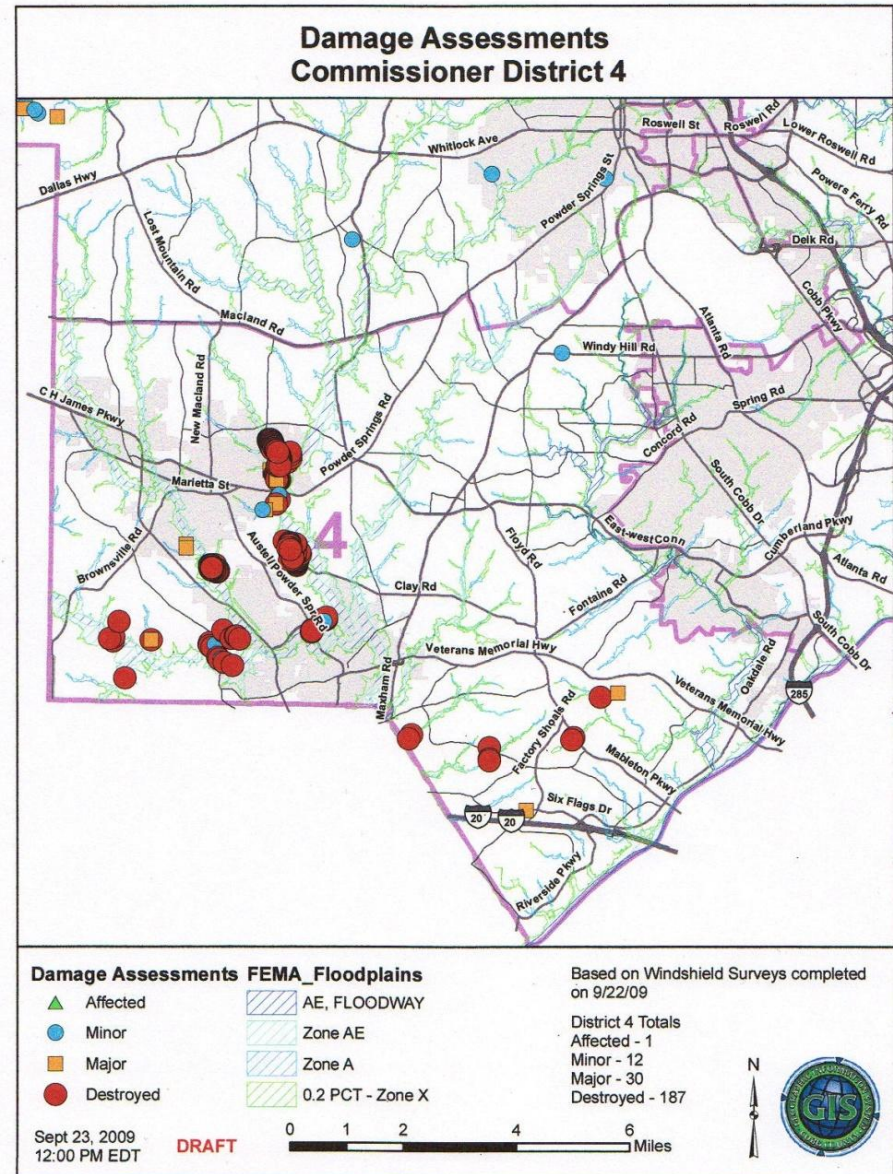
How It All Began



- Flash flooding in Carroll, Cobb, Douglas, Gwinnett, and Paulding counties (state of emergency declared for 17 counties)
- Unprecedented flooding from rivers and creeks
- Homes and businesses damaged and destroyed (est. \$250 million in damages)
- Bridges and roads closed
 - I-285, I-20, I-575, and I-75/85
- 10 flood related fatalities

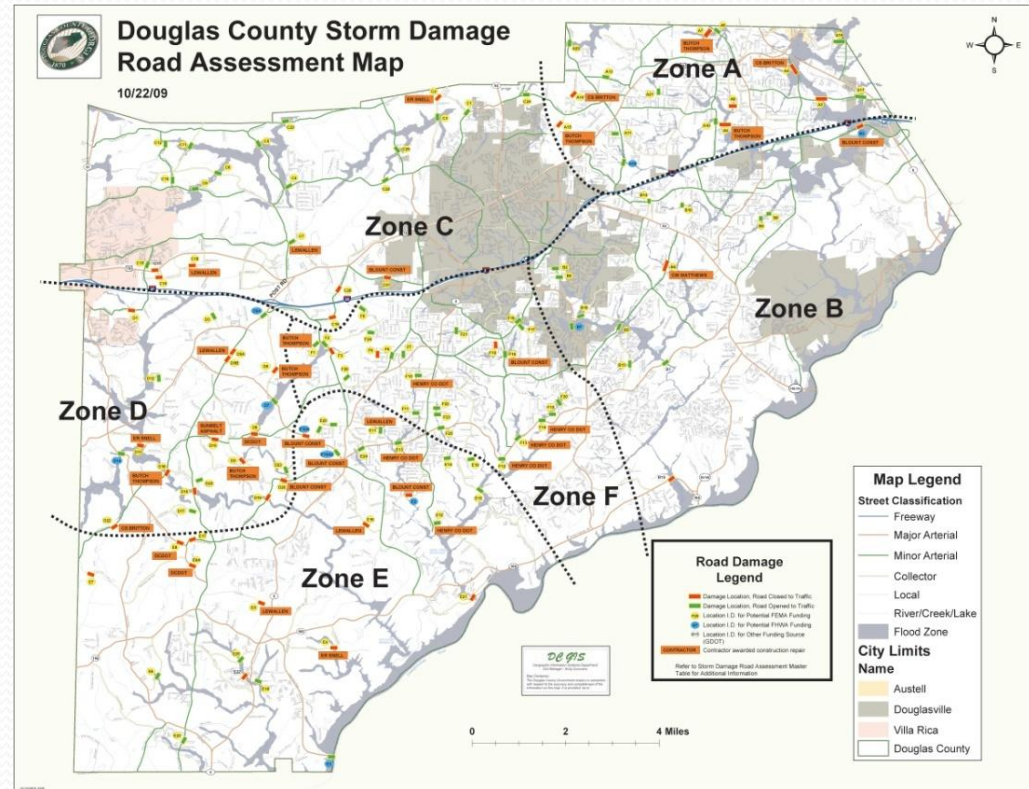
It Gets Local

- **Cobb County**
 - Austell
 - More than 700 homes damaged (almost 40%)
 - Powder Springs
 - 92 homes damaged
- 5 – 15 feet of water entering homes

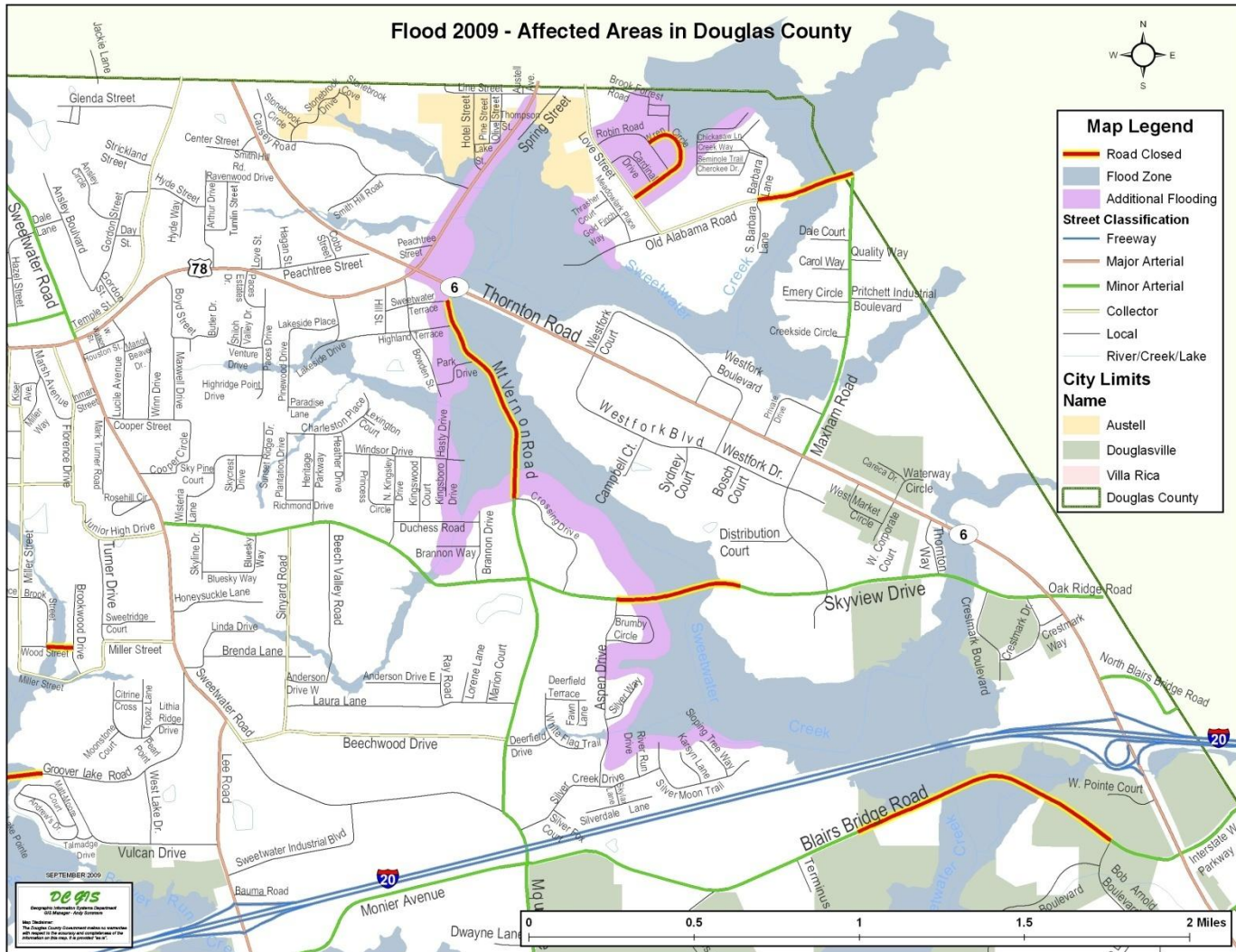


It Gets Local

- **Douglas County**
 - Widespread flooding
 - 256 properties damaged
 - 140 roads and 13 bridges out of service



It Gets Local



It Gets Local

- Peak gage heights (USGS)
 - Sweetwater Creek: 30.8 ft.
 - Dog Creek: 33.8 ft.
 - Chattahoochee River (Vinings): 28.12 ft.

"The flooding in Atlanta is certainly near the top of the list of the worst floods in the United States during the past 100 years," – Robert Holmes, U.S. Geological Survey National Flood Program Coordinator

It Gets Local



Photo from AJC.com

It Gets Local



Photo from AJC.com

It Gets Local



Photo from City of Austell

It Gets Local



Veteran's Memorial @ Maxham Road in Austell

Photo from City of Austell

It Gets Local



Photo from City of Austell

It Gets Local



Photo from City of Austell

It Gets Local



Photo taken by Kathleen Schmidt

It Gets Local



Photo taken by Jennifer Delveau

It Gets Local



Photo taken by Jennifer Delveau

It Gets Local



Photo taken by Jennifer Delveau

It Gets Local



Photo taken by Toni Cole

It Gets Local



Photo taken by Toni Cole

It Gets Local



Photo taken by Jennifer Delveau

It Gets Local



Photo taken by Jennifer Delveau

The Initial Response

- On the afternoon of September 21, EH was contacted for an inspection of a Red Cross shelter at the Cobb County Civic Center
 - Staff was limited due to inclement weather
 - Available staff were inexperienced with shelter inspections

Mini-lesson: It's never too late for a little on the job training.

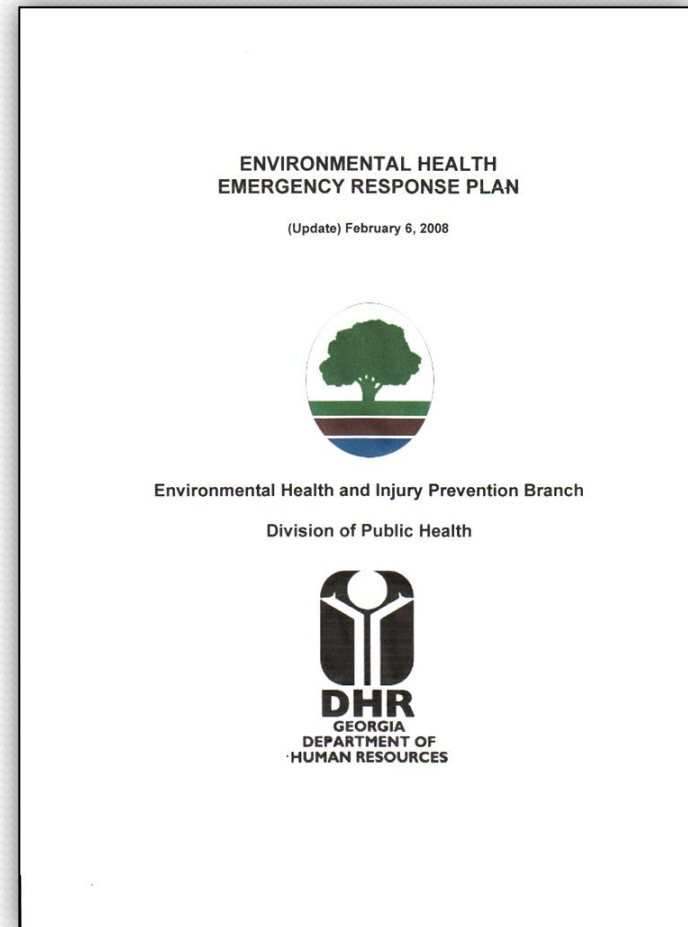
Red Cross Shelter



CDPH Photo

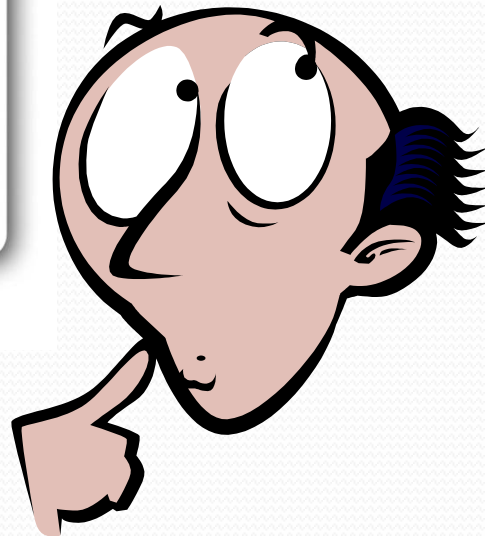
EH Emergency Response Plan

- Details EH role in emergency situations
- Forms for shelter and feeding site inspections
- Well chlorination
- Keep a printed copy handy



Lesson #1

- Just because the health department has closed for the day, doesn't mean you get the day off.



The Restaurant Crisis

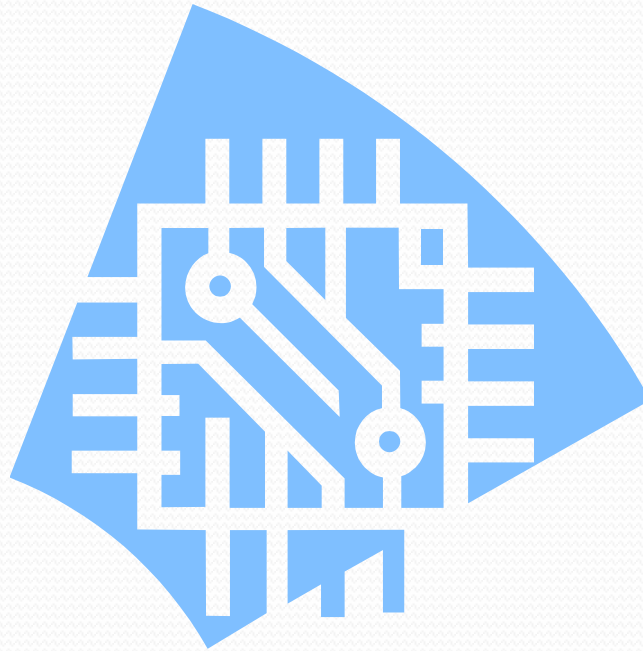


CDPH Photo

- Douglas County under a “boil water” advisory
- State EH: Water under such an advisory not suitable for commercial use
- 270+ food service facilities in Douglas
- DHD wants them all contacted by COB the next day

Lesson #2

- **Use technology to get the word out to your target audience**



Sending a Message

- Blast email (Douglas PIO)
- Prominent posting on Douglas County website
- Call lists
 - Mini-Call Center
 - Screening tool
- Field staff cruising concentrated areas



Lesson #3

- During certain situations, it's OK to give your cell phone number out to a few hundred (maybe 1000 or more) strangers.



The Restaurant Crisis, Part II

- Brief “boil advisory” in the City of Austell (less than 24 hrs.)
- 14 Food Service establishments
- Individual site visits
- Performed daily water system status updates



CDPH Photo

As the Weekend Approached...



- Daily shelter inspections
- Three DRCs to be staffed by EH
- The word on the street: Shelter #2 was on the way
- The fair was in town

Lesson #4

- It's OK to ask for help.



The Cavalry Arrives

- State EH office coordinated assistance for Douglas County DRCs (and offered encouragement to a frazzled new director)
- A big “Thank You” to:
 - The State EH DRC Team
 - **Bill Dukes**
 - **Virgil Fancher**
 - **Greg Harless**
 - **Maurice Redmond**
 - Fulton EH
 - **Laurie Cunningham**

Staffing The DRCs

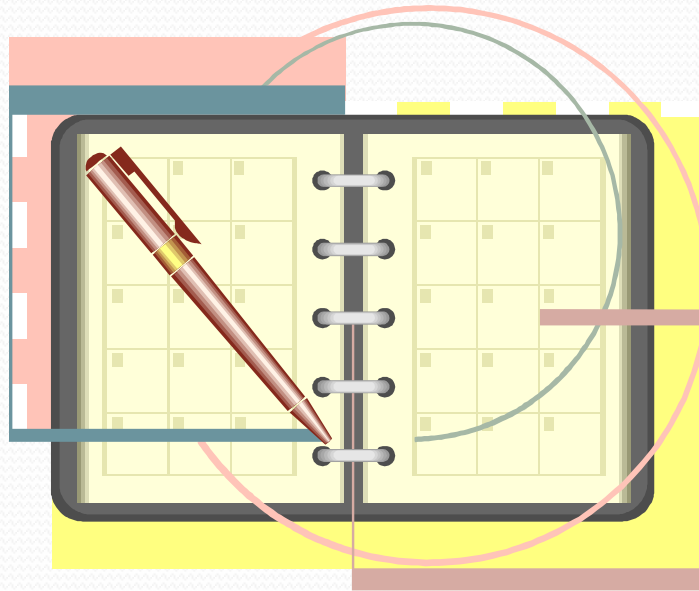
- Three DRCs
 - Austell: Threadmill Mall
 - Lithia Springs: LS First United Methodist Church
 - Douglasville: Heritage Baptist Church
- Handouts, advice, and empathy
- Open from 8 AM to 7 PM
- Two shifts, three shifts?
- PH presence morphs into EH presence
- Largest EH staff obligation



CDPH Photo

Lesson #5

- When the volunteer spirit begins to wane, it's time to make a schedule.



Schedules

- DRC staffing
- Daily shelter inspections
- Evens out participation
- Assures somebody will be there
- Prevents stranded staff



Mold Arrives



- After the flood water leaves, mold arrives
- Primary reason for EH phone calls
- Main EH role is information
 - CDC
 - EPA
- Used email as an effective way to deliver information
 - Links
 - Phone Numbers
 - PDFs

And Then Came the Media

- National media attention
- It eventually trickles down to EH
- Your PIO is your friend
- Local newspaper
 - Food service advisory
 - Dangers of debris
- Local television
 - Mold/Clean up
 - Abandoned properties



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And Then Came the Media



CDPH photos

Where's Joe?



CDPH photo

And Then Came the Media

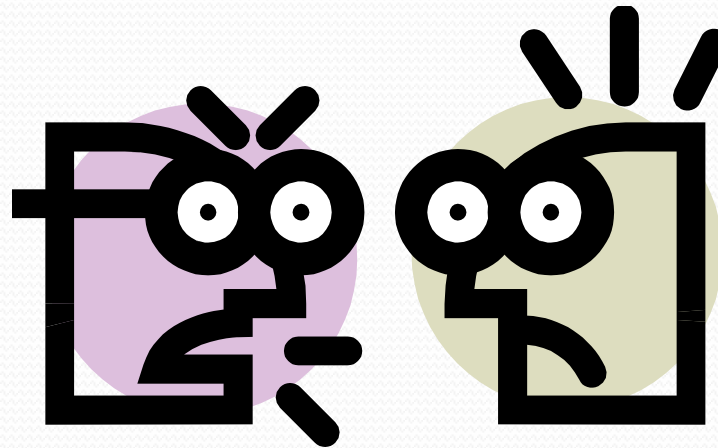


CDPH photo



Lesson #6

- Some situations may be more than an EHS can handle alone.



A Volatile Situation



- Report of people living in flooded mobile homes
- Sick children
- Two EHS on the scene
- No running water
- Angry mob forms
- Staff got out intact

A Volatile Situation

The next day...

- Needed to get people out of damaged trailers ASAP
- Nuisance ordinance was too slow
- Building code was just right
- Transported to shelter



CDPH photo

Lesson #7

- Just because you did something before doesn't mean you need to do it again.



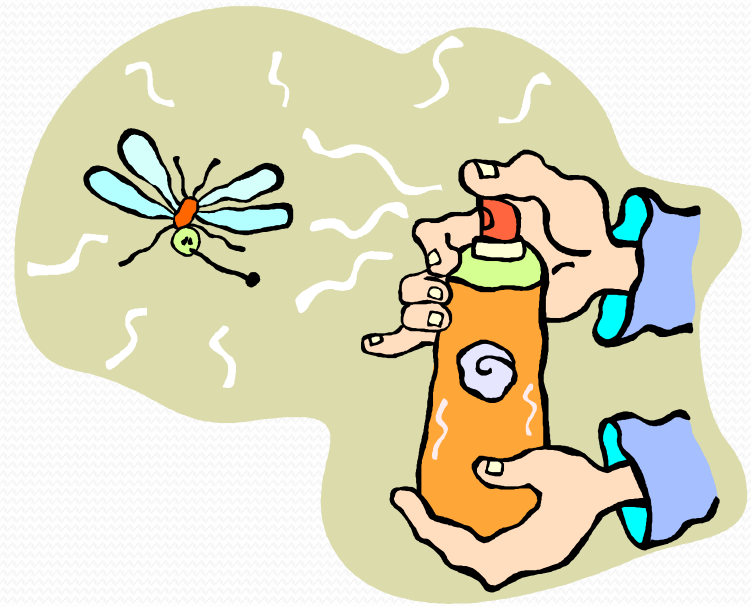
Mosquitoes: What to Do?



- The Hurricane Dennis (July 2005) approach:
 - Door to door (every flooded home)
 - Distribute mosquito prevention , mold, and clean-up info
 - Larvicide standing water, catch basins, etc.
 - Involves majority of staff

Mosquitoes: What to Do?

- It's late September
- Call Dr. Kelly for advice
 - Mosquito season in its waning days
 - Utilize WNV staff for complaint driven larviciding
 - A prevention press release



The Event Comes to a Close...

- EH staffing at DRCs ends during the first week of October
- Remaining Civic Center shelter residents transferred to Mt. Zion Baptist Church
- By October 11, all shelter residents are relocated to more permanent housing
- EH staff start getting reacquainted with normal work schedule



...Or Does It?

To be
continued...

- Recovery continues
- Abandoned homes
 - Garbage and debris
 - Mosquitoes
 - Rodents
- It flooded in 2005, 2009...

Mosquito Surveillance: 2010

- CDPH/CCWS WNV Program Partnership
 - Human: 1 positive
 - Horse: 1 positive
 - Birds: 2 positive
 - Mosquito pools: 2 positive (6 traps in use)
 - 180 mosquito related complaints so far...



CDPH photo

Questions?

