Challenges and Triumphs
Georgia’s Ebola Active Monitoring System

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CDC Announces Active Post-Arrival Monitoring for Travelers from Impacted Countries

Press Release

For Immediate Release: Wednesday, October 22, 2014
Airport Screening

• October 2014 CBP and CDC began screening all travelers from Ebola effected countries
  – All travelers must enter U.S. from 1 of 5 airports
  – Exposure risk assessment performed at the airport
  – Temperature/symptom check
  – Traveler information sent to DPH via Epi-X

• Sick→ medical evaluation
How bad could that be?

• Travelers screened as of 5/4/2015
  – 1,465 (ATL), 15,207 (all airports)
  – 4 (ATL), 28 (all airports) referred for evaluation
Airport Screening

• Response plans
  – Communication
  – Quarantine
  – Medical evaluation

• Collaboration
  – CBP
  – CDC Quarantine Station
  – Airport security
  – EMS, area hospitals
Active Monitoring

• Travelers must report to public health daily for 21 days
  – Temperature and any symptoms taken 2x/day
  – Initial exposure risk assessment determines monitoring type and restrictions

• Georgia has ~130 travelers to monitor daily
  – Limited resources
  – 1 week to begin monitoring!!!
Rapidly Increase 24/7 Capacity

- High call volume – increase call capacity
- Develop a surveillance system
- Hire Ebola Duty Officers (7 days/week)
- Define risk categories/control measures
High Call Volume

• Georgia Poison Center (866-PUB-HLTH)
  – Staffed for limited volume of calls, surge with existing staff and overtime
  – SUPHER message handling and routing system
• Epidemiology Ebola Response Team call plan
• >1,000 temperature reports, 292 clinical inquiries (4/28)
Surveillance: Active Monitoring

• Facilitates
  – Early detection of possible Ebola cases
  – Appropriate medical evaluation
  – Rapid isolation to prevent its spread

• Ebola Active Monitoring System (EAMS)
  – IT and Epidemiology collaboration
  – Rapidly developed a novel system (6 days)
  – Using SendSS secure platform
  – 2 Epidemiologists can monitor >100 travelers
EAMS

DGMQ provides traveler with Symptom Monitoring Kits and provides line list to GDPH

Traveler records temperature and symptoms daily in online tool

Traveler may present to Georgia emergency department

GDPH Contacts travelers and establishes online monitoring account for traveler.

GDPH Monitors traveler for symptoms and reporting compliance

Hospital partner can query online list to see if patient is a monitored traveler

GDPH provides weekly summary to CDC

We Protect Lives.
<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
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<td><a href="mailto:kari.soet@gmail.com">kari.soet@gmail.com</a></td>
<td>Wendel Smitty</td>
</tr>
<tr>
<td>9</td>
<td>Countries Visited with Widespread Ebola Transmission in Past 21 Days</td>
<td>Departure Date</td>
<td>DHS Observed Vomiting, Diarrhea or Bleeding</td>
<td>Temperature taken by DHS</td>
<td>Fever/Chills in the past 48 hours</td>
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<td>98.6F</td>
<td>No</td>
<td></td>
<td></td>
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</table>
| 11 | | | | | We Protect Lives.
Traveler Record

Demographic Information:
- Traveler ID: 146458
- Last Name: Ebola Soet
- First Name: Karl
- Date of Birth: 01/01/1950
- Gender: Male
- Ethnicity: Unknown
- Race: Multiracial
- District Assigned To: Cobb (3-1)

Traveler Address Information:
- 10/25/2014: A New Address, Abbeville, AK
- 10/22/2014: 125 Some Street, Marietta, GA
- 10/15/2014: Adrian, AL

Ebola Followup:
- 10/22/14 00:00:00: keoetobier
- This is a test comment

Ebola Specific Information:
- Has traveler been contacted: Yes
- Date of Contact: 10/20/2014
- Reporting Type: Online
- Needs Translator: No
- Monitoring Type: Active
- Detailed data related to travel and risk
- Online account established and login email sent to traveler
Temperature and Symptom Check

- Traveler logs in each day by 12 pm
- Records temperature and symptoms
- Records travel planned during monitoring period
- Automated email to epidemiology if fever or symptoms reported

Entering symptoms for: Karl Ebola Soet  DOB: 01/01/1950

Click Here for temperature and symptom monitoring instructions

1. Please Choose the Day and Time: Evening Day 21 11/03/2014 (done)
2. Please enter your Temperature: 98.6 °F
3. Please indicate any symptoms you are experiencing by clicking the picture(s), then click “DONE” at the bottom:

- FEVER
- DIARRHEA OR RIDDING STOMACH
- VOMITING
- BLEEDING: RED EYES
- HEADACHE
- BLEEDING: BLOODY NOSE
- FEELING WEAK OR TIRED

If you have no symptoms, please click OK, NO SYMPTOMS above and leave the field below blank:

List additional symptoms here: 

4. Do you have any trips planned between now and 11/03/2014?: Yes
   If yes, please describe the where and when you are going, and how you are getting there:
   Some place warm by boat

Click Here for travel approval instructions

We Protect Lives.
Ebola Active Monitoring Query

- Used by hospital to determine if patients being treated are being monitored
- Hospital Partner logs in and enters patient information
- Records matching search criteria are providing limited information
### Traveler Monitoring Dashboard

#### Summary

<table>
<thead>
<tr>
<th>ID</th>
<th>Name</th>
<th>Status</th>
<th>District Assigned</th>
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**Notes:**
- **Symbol Table:**
  - D = No Symptoms for the Day
  - S = Symptoms indicated for the Day
  - T = Person has indicated planned travel
  - R = Travel Reported to CDC
  - D = Person needs direct monitoring
  - NT = Not a traveler, other exposure risk
  - Blue = CDC Employee in Monitoring Period
  - Travel outside Georgia
  - Travel in Georgia

**Summary as of 01/23/15:**
- Symptomatic: 2
- Not Compliant: 12
- Ok: 81
- Requires Contact: 6
- Attempted To Contact: 1
- Needs Home Visit: 1
- Complete: 356
- Out Of Jurisdiction: 72
- Complete - Unable To Reach: 7
- Deleted: 50
- New: 9
- Visiting From Out Of State: 24

**CDC Employees Under Active Monitoring:**
- 44
CDC Employee Integrated Monitoring

- CDC employees >50% of Georgia travelers
- Integrated monitoring since January 2015
- DPH creates EAMS record for traveler
- CDC
  - Enrolls traveler
  - Delivers Georgia Self-Monitoring Agreement
  - Follows up with non-compliant or symptomatic employees
- CDC uses EAMS
  - Special account with only CDC employees
  - Facilitates communication and information sharing between DPH, the district, and CDC
Active Monitoring Summary

• Monitoring ~130 travelers daily, 1,354 total (5/8)
• 29 Referred for medical evaluation
  – 9 Influenza, 9 viral URI
  – traveler’s diarrhea, viral gastroenteritis, malaria, chronic disease or viral infection complications, pregnancy
• 6 Tested for Ebola (all negative)
• 27 Some-risk travelers DAM (all asymptomatic)
• 6 High-risk travelers DAM and quarantine
• Improving processes and hiring to sustain effort
Defining Exposure Risk

• Based on CDC guidance, CDC sets the lower limit
• Varies from state to state, case-by-case interpretation

**High risk**
- Percutaneous (e.g., needle stick) or mucous membrane exposure to blood or body fluids of a person with Ebola while the person was symptomatic
- Exposure to the blood or body fluids of a person with Ebola while the person was symptomatic without appropriate PPE
- Processing blood or body fluids of a person with Ebola while the person was symptomatic without appropriate PPE or standard biosafety precautions
- Direct contact with a dead body without appropriate PPE in a country with widespread Ebola virus transmission
- Having lived in the immediate household and provided direct care to a person with Ebola

**Some risk**
- In countries with widespread Ebola virus transmission: direct contact while using appropriate PPE with a person or with the person’s body fluids with Ebola while the person was symptomatic
- Close contact in households, healthcare facilities, or community settings with a person with Ebola while the person was symptomatic

**Low (but not zero) risk**
- Having been in a country with widespread Ebola virus transmission within the past 21 days and having had no known exposures
- Having brief direct contact (e.g., shaking hands), while not wearing appropriate PPE, with a person with Ebola while the person was in the early stage of disease
- Brief proximity, such as being in the same room for a brief period of time, with a person with Ebola while the person was symptomatic
- In countries without widespread Ebola transmission: direct contact while using appropriate PPE with a person with Ebola while the person was symptomatic
- Traveled on an aircraft with a person with Ebola while the person was symptomatic

Response By Risk Category for Asymptomatic Travelers — Georgia

- Low (but not zero) risk
  - AM, travel approval
  - Agreement for Self-monitoring

- Some risk
  - DAM, travel and movement restriction
  - Limited Quarantine Order

- High Risk
  - DAM, quarantine
  - Quarantine Order
Quarantine in Georgia

• Authority to issue orders
  – DPH- Isolation/Quarantine
  – Local County BOH- Isolation orders
  – Can be issued without prior court approval

• Refusal or failure to comply is a misdemeanor
  – Misdemeanor, PH can seek LE assistance
  – Court order for injunction or restraining order

• 6 Healthcare workers with high-risk exposures

• Many challenges implementing quarantine
Challenges: Responding to Ill Travelers

- When do we seek medical evaluation?
- How do we seek medical evaluation?
- When do we recommend testing?
- How do we facilitate testing?
Patient Evaluation

• Symptoms of Ebola, or fever >100.4 with no clear alternative diagnosis
  – Easily confused with flu, other viral diseases

• Decision to
  – **Evaluate** based on symptoms and exposure risk category
  – **Test** for Ebola based on medical evaluation, and sometimes public concern
Hospital Preparedness

3-Tiered Hospital Plan

Treat
- Hospitals designated to treat EVD

Diagnose
- Hospitals have capability to manage a suspect case of EVD
- Specimen collection for diagnostic testing
- EMS transport to hospitals for treatment if positive

Identify and Isolate
- Hospitals identify EVD symptoms
- Isolate patients if needed
- EMS transport to hospitals for diagnosis

EMS Service

911 Call or Walk in to the Emergency Department

FOR OFFICIAL USE ONLY
Tiered Hospital System

• Hospitals specify tier
  – Identify ≥1 regional evaluation hospital

• Treatment and evaluation hospitals
  – Evaluated to determine if meet standards
  – Re-evaluated until standards met and hospital is approved
  – 5 designated treatment facilities
  – Emory regional treatment facility

• Great opportunity for relationship building
EMS Preparedness

• Guidance for EMS and 911 PSAPs
• Infectious Disease Transportation Network
  – 25 Regions
  – 1 Provider in each region prepared to transport suspect Ebola cases
  – Central dispatch through Atlanta Metro EMS
  – Improved communication between EMS and public health
Laboratory Response

- Guidance on safe sample collection, handling, packaging, and shipping
- GPHL certified Ebola LRN Reference Lab
- Designated hospital lab for routine testing
- Georgia State Patrol can transport samples
- Additional training needed for Category A Substances
Incredible Advances in Preparedness

• Importance of having a surveillance platform and IT staff to rapidly deploy a system
• Collaborations and relationship building
• Where do we go now?
  – How do we sustain this effort?
  – How do we institutionalize this knowledge?
  – How do we build on our advances?
Thank You

Contact Information

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