Mitigating the Effects of Alleged EBOLA Attacks at Multiple Airports

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USSOCOM CBR Conference and Exhibition
Tampa, FL
December 8, 2005
Presentation

- USSOCOM Scenario/Presentation Assumptions
- Ebola Virus Information
- Ebola Notional Incident Timeline
- Ebola Best Case Decontamination Timeline
- Ebola Notional Public Health Timeline
- Recommended Preparedness Activities
- Potential Roles for Military in Responses to Bioterrorism
USSOCOM-Specified EBOLA Scenario

- Reports on blogs/websites that “Freedom Fighters” infected airline passengers at O’Hare, Logan, Hartsfield and Heathrow Airports with Ebola virus

- Police, FBI, TSA find crude devices in airports

- Devices, environmental samples sent to labs for analysis

- Boston police officer reports over nonsecure radio “We found the bioweapon in the trash..”
  - picked up by media
USSOCOM-Specified EBOLA Scenario

- Delta Flight 20, low on fuel, told to hold approach pattern to Frankfurt Airport and await further instructions
- Leader of Hartsfield baggage handlers union tells members to stop unloading aircraft
- CNN reporter, wearing respirator, broadcasts “Breaking News”
My Assumptions

- Releases occur at same time at all airports
- Blogs/websites report incidents within one hour of releases
- Devices found in trash of food court area in secure area of terminal at all four airports
- Delta flight originated at Hartsfield Airport
- Incidents will yield confirmed attacks at Hartsfield, Logan and Heathrow Airports; O’Hare incident will be hoax
- No sensitive electronic equipment (e.g., scanning equipment) affected by attacks
- Best case response based upon significant preparedness and response planning/training
EBOLA Virus

- Fragile, RNA-containing Filovirus; causes Ebola Hemorrhagic Fever (EHV)

- Incubation period of 2-21 days

- Symptoms include sudden onset of fever, weakness, muscle pain, headache; followed by vomiting, diarrhea, rash, impaired kidney/liver function, and internal/external bleeding

- High mortality – no known treatment, only supportive medical care
EBOLA Virus

• Human-to-human transmission through contact with bodily fluids
  – Risk greatest during latter stages of disease when viral loads highest

• Cases must be isolated from other patients
  – Soiled clothing/bed linens must be disinfected

• Health care workers must use strict barrier nursing techniques
  – Non-disposable protective equipment must be disinfected prior to re-use

• Airborne transmission uncertain
EBOLA Virus
Facts About EBOLA Incidents

- No potentially exposed passengers, airline or airport workers will become ill for about 2-21 days, if at all.

- None of the above persons will be able to transmit the virus before becoming ill.

- If anyone develops EHF, that person(s) will need to be isolated.

- Fragile virus, if viable, will not live long in air or on nonporous surfaces (at most several days).

- No antimicrobial products registered by EPA for use against Ebola virus, but number of products are registered for use against viruses, including Vaccinia virus, on hard, non-porous sources.

- Barrier nursing equipment available in CDC Strategic National Stockpile (SNS).
Phases of EBOLA Airport Incidents

- **Suspicious Incidents**
  - Sufficient evidence to consider as credible threats, no analytical laboratory confirmation
  - Online reports + finding of devices

- **Presumed Positive Events**
  - Positive findings in PCR, virus isolation, antigen detection tests
    - Available within hours*
  - US analyses done at CDC, USAMRIID only – BL-4 facilities

- **Confirmed Attacks**
  - Definitive tests at CDC/USAMRIID yield positive findings
  - Results available within ½ to ¾ day*

*Source: Tom Ksiazek, CDC*
EBOLA Notional Incident Timeline

**Day 1**
- **Heathrow Airport**: Suspicious Incidents
- **Logan Airport**: Crude Devices Found
- **O'Hare Airport**: Preliminary Lab Results
- **Hartsfield Airport**: Terminal Operations Suspended
  - Samples Arrive

**Day 2**
- **Hartsfield Airport**: Samples Arrive
- **Logan Airport**: Samples Arrive
- **O'Hare Airport**: Samples Arrive
- **Heathrow Airport**: Airport Closed
  - Terminal Operations Suspended
  - Samples Arrive
- **Definitive Ebola Test**
  - Attacks Confirmed
Other Notional Activities During Suspicious Incident Phase of Attacks

- Airport managers alert Mayors who alert Governors who alert Secretary, DHS, and President
- Airports give media interviews
- Delta flight diverted to US air base in Germany
- Hartsfield baggage handlers unload baggage after meeting with airport management and receipt of Fact Sheets and FAQs
- Airports on high alert globally
Other Notional Activities During Presumptive Positive Phase of Attacks

- US airports activate Incident Command System
- EOCs activated (EPA, CDC, HSOC); PFOs appointed by DHS
- Interagency Committee on Domestic Response Preparedness holds secure teleconference/prepares for next steps
- Decision to federalize National Guard units in affected cities if attacks are confirmed
- Continuing interactions among governmental units and airport management
Other Notional Activities During Presumptive Positive Phase of Attacks

- Interactions among all airports
- CDC/local health departments confer on potential public health responses
- Continuing airport briefings of media, distribution of Fact Sheets/FAQs
- Delta flight lands at Hartsfield/passengers quarantined
- Airlines notify passengers/flight crews on affected planes
Responses to Confirmed Attacks

- Decontamination Activities
- Public Health Activities
- Forensic Activities
- International Coordination
# EBOLA Best Case Decontamination Timeline

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<thead>
<tr>
<th>Day 2</th>
<th>Day 3</th>
<th>Day 4</th>
<th>Day 5</th>
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<tr>
<td><strong>Day 2</strong></td>
<td><strong>Day 3</strong></td>
<td><strong>Day 4</strong></td>
<td><strong>Day 5</strong></td>
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<tr>
<td>Agree on Clean-Up Procedures</td>
<td>Removal of Materials From Airports for Disposal</td>
<td>Bleach Treatment</td>
<td>Waste Removal (ECC Meets)</td>
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<tr>
<td>Coordinate With Heathrow</td>
<td>CBIRF Arrives</td>
<td>Bleach Treatment</td>
<td>Airport Reopens</td>
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<tr>
<td>Form UIC*</td>
<td>Removal of Materials From Airports for Disposal</td>
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*Unified Incident Commands*
**EBOLA Notional Public Health Timeline**

### Days 1 - 4: Airlines/Airports Notify Potentially Exposed Persons

- **Day 1:** Days 1 - 4: Airlines/Airports Notify Potentially Exposed Persons
- **Day 2:** Hour 3.5: Activation of Strategic National Stockpile (SNS)
- **Days 3 - 5:** Exposed Persons Quarantined
- **Day 4:** FBI Detects Suspicious Activity on Videotapes
- **Day 5:** Labs Report Virus Not Weaponized

### Days 5 - 6: Designation of Quarantine Areas in Affected Cities

- **Day 6:** EBF Case in Atlanta – CDC/WHO Notified

### Days 6 - 7: People Flee Atlanta Panic

- **Day 7:** FBI Identifies Cases as Perps

### Days 8 - 22: People Flee Boston

- **Day 8:** EBF Case in Boston – CDC/WHO Notified
- **Day 9:** People Return to Boston and Atlanta
- **Day 10:** Quarantine Lifted for Exposed Persons
- **Day 11:** Quarters Lifted for Exposed Persons

### Days 11 - 30: Commissions Appointed to Investigate Attacks/Responses

- **Day 12:** FBI Identifies Cases as Perps
- **Day 13:** EHF Case in London Suburb –
- **Day 19:** People Return to Boston and Atlanta
- **Day 22:** Quarantine Lifted for Exposed Persons
- **Day 30:** Commissions Appointed to Investigate Attacks/Responses

**Days 3 - 22:** Role of National Guard (NG) in Enforcing Quarantine
Response Assumptions

- Significant preparedness and response planning, including regular training, has occurred in advance
- Teams are ready and equipment is pre-positioned
- Responses are 24/7
- Interagency coordination alive and well
- Effective audibles were called when needed at all airports and immediately communicated to other airports
Recommended Preparedness Planning Activities

• Fact Sheets and FAQs on biothreat agents available at all US airports
  – Cover public health, decontamination, and notification/management issues for top bioterrorism agents
  – Also distributed to First Responders, police
  – Regularly updated

• Coordinated preparedness and response training, including table tops
  – Address both public health and decontamination issues
Recommended Preparedness Planning Activities

Decontamination Related Activities

- Prototypical Health and Safety Plans (HASPs) for airports
- Designated areas of airport for detainment of persons potentially exposed to bio agents
- Guidance on decontamination procedures for various biothreat agents
- Availability of portable PPE decon units/pre-determined sites for their location
Decontamination Activities (cont’d)

- Reachback
  - Current lists of contractors with demonstrated experience in bioagent decontamination, waste removal
  - Existing relationships with waste disposal facilities
- Templates for remediation action plans
- Creation of Technical Advisory Committee(s) to provide guidance to airports on terrorism incidents – both real and hoaxes
- Possibly regional/national
Recommended Preparedness Planning Activities

Interagency Committee on Domestic Response Preparedness

• Purpose
  – Planning for improved responses to multiple domestic terrorist attacks with potentially catastrophic consequences
    • Research/Training/Coordination
  – Advisory role during actual responses

• Co-chaired by DHS, DOD, and DHHS

• Membership
  – Civilian federal agencies: DHS (OP, TSA, FEMA), EPA, CDC (NIOSH, NCID), NIH, DOT, FAA, FBI, CIA, DOS
  – DOD agencies: SOCOM, NORTHCOM, STRATCOM, others
  – State/local advisors
  – Member/surrogate from each agency - electronically connected at all times on secure equipment
Potential Roles for Military in Responses to Bioterrorism

- Transport of samples to analytical labs
- Analysis of clinical/environmental samples
- Role of CBIRF/CST units in decontaminations
- Use of National Guard armories as potential quarantine centers/distribution of SNS meds
- Role for USSOCOM OCONUS in identifying/neutralizing terrorist cells
Need to be Prepared for the Next Bioattack, Not Just the Last One!
If you have seen one bioattack, you’ve seen one bioattack

We need to be complete and flexible to respond to asymmetric attacks
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