



Mitigating the Effects of Alleged EBOLA Attacks at Multiple Airports

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Presentation

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- **Ebola Virus Information**
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- **Ebola Notional Public Health Timeline**
- **Recommended Preparedness Activities**
- **Potential Roles for Military in Responses to Bioterrorism**



USSOCOM-Specified EBOLA Scenario

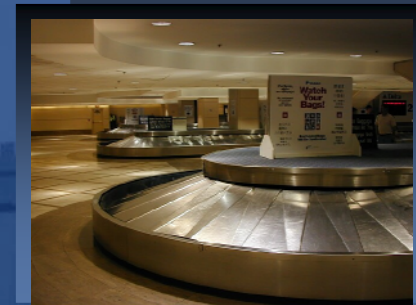
- Reports on blogs/websites that “Freedom Fighters” infected airline passengers at O’Hare, Logan, Hartsfield and Heathrow Airports with Ebola virus
- Police, FBI, TSA find crude devices in airports
- Devices, environmental samples sent to labs for analysis
- Boston police officer reports over nonsecure radio “We found the bioweapon in the trash..”
- *picked up by media*





USSOCOM-Specified EBOLA Scenario

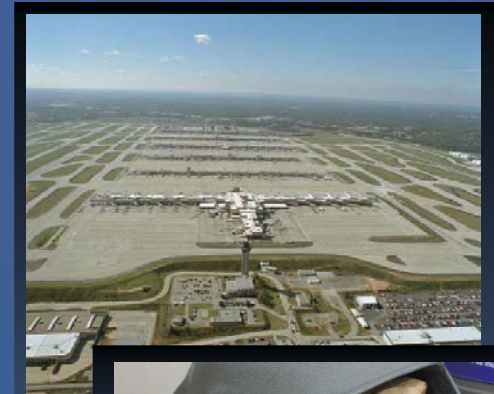
- Delta Flight 20, low on fuel, told to hold approach pattern to Frankfurt Airport and await further instructions
- Leader of Hartsfield baggage handlers union tells members to stop unloading aircraft
- CNN reporter, wearing respirator, broadcasts *“Breaking News”*





My Assumptions

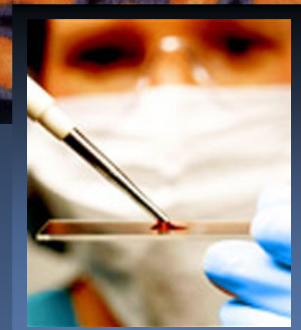
- Releases occur at same time at all airports
- Blogs/websites report incidents within one hour of releases
- Devices found in trash of food court area in secure area of terminal at all four airports
- Delta flight originated at Hartsfield Airport
- Incidents will yield confirmed attacks at Hartsfield, 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**





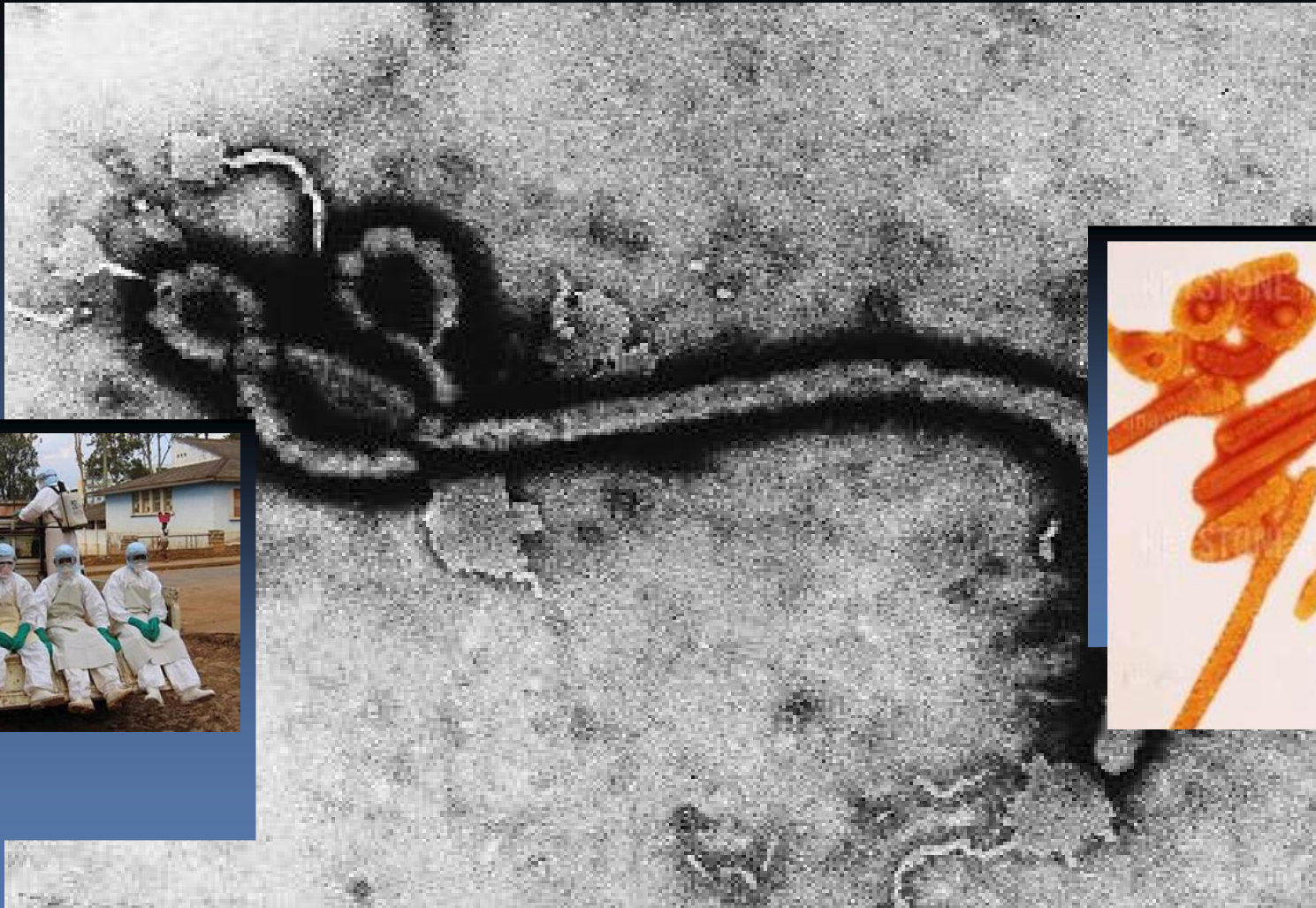
EBOLA Virus

- 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

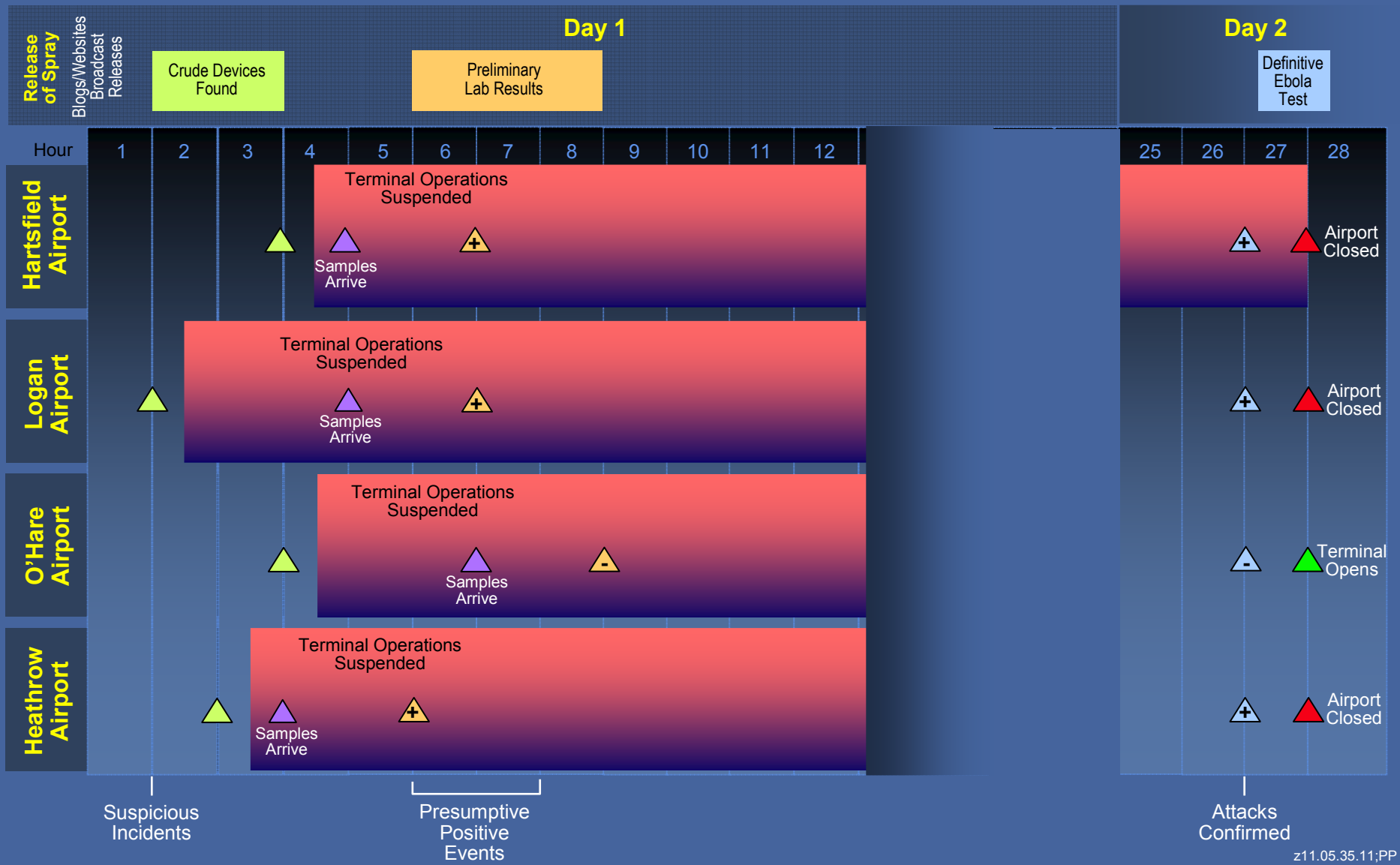
- **Suspicious Incidents**
 - Sufficient evidence to consider as credible threats, no analytical laboratory confirmation
 - Online reports + finding of devices
- **Presumed Positive Events**
 - Positive findings in PCR, virus isolation, antigen detection tests
 - Available within hours*
 - US analyses done at CDC, USAMRIID only – BL-4 facilities
- **Confirmed Attacks**
 - Definitive tests at CDC/USAMRIID yield positive findings
 - Results available within 1/2 to 3/4 day*



*Source: Tom Ksiazek, CDC



EBOLA Notional Incident Timeline





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

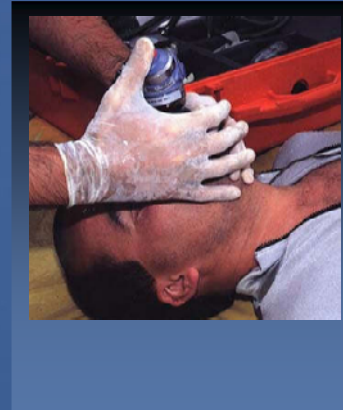
- Interactions among all airports
- CDC/local health departments confer on potential public health responses
- Continuing airport briefings of media, distribution of Fact Sheets/FAQs
- Delta flight lands at Hartsfield/passengers quarantined
- Airlines notify passengers/flight crews on affected planes





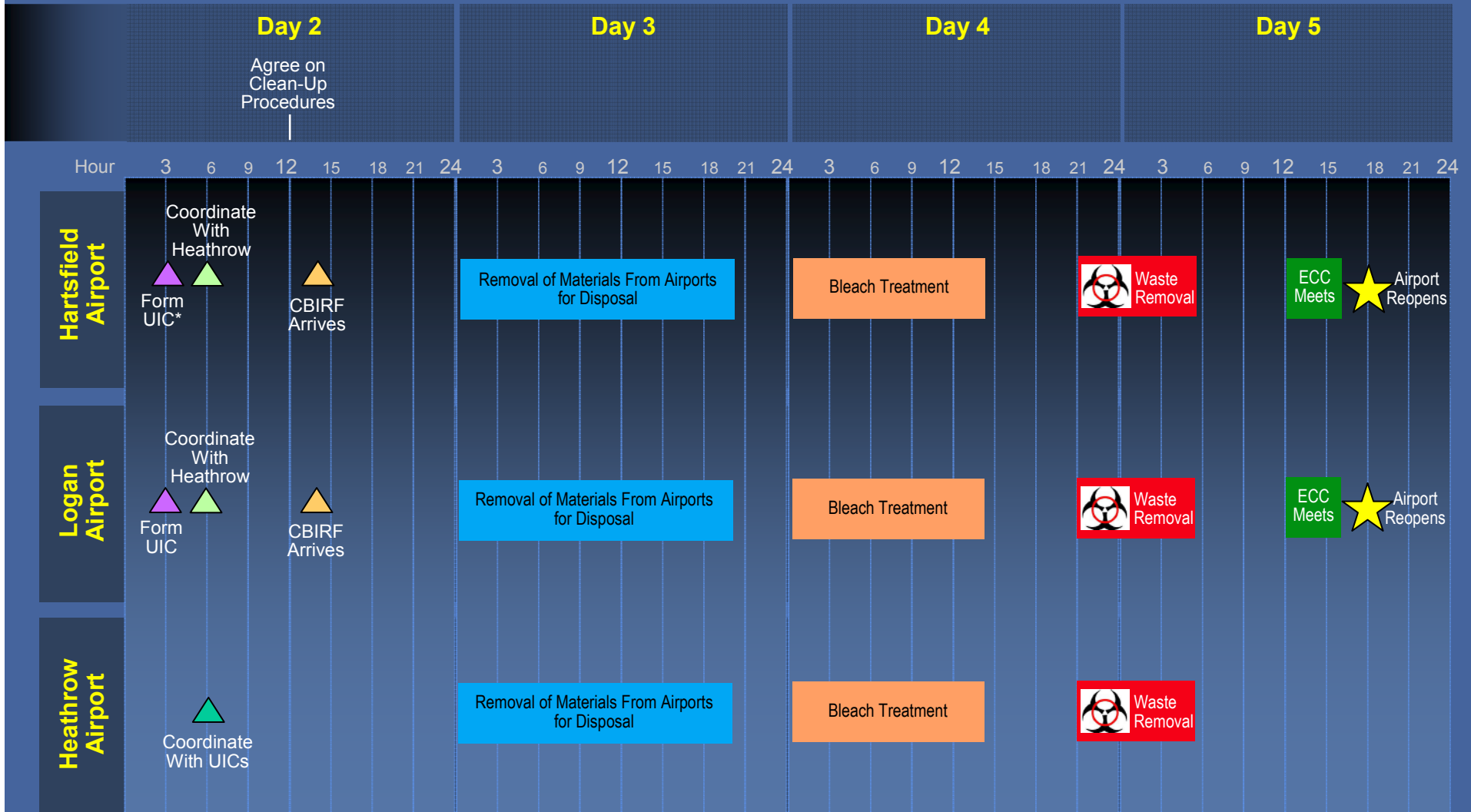
Responses to Confirmed Attacks

- Decontamination Activities
- Public Health Activities
- Forensic Activities
- International Coordination





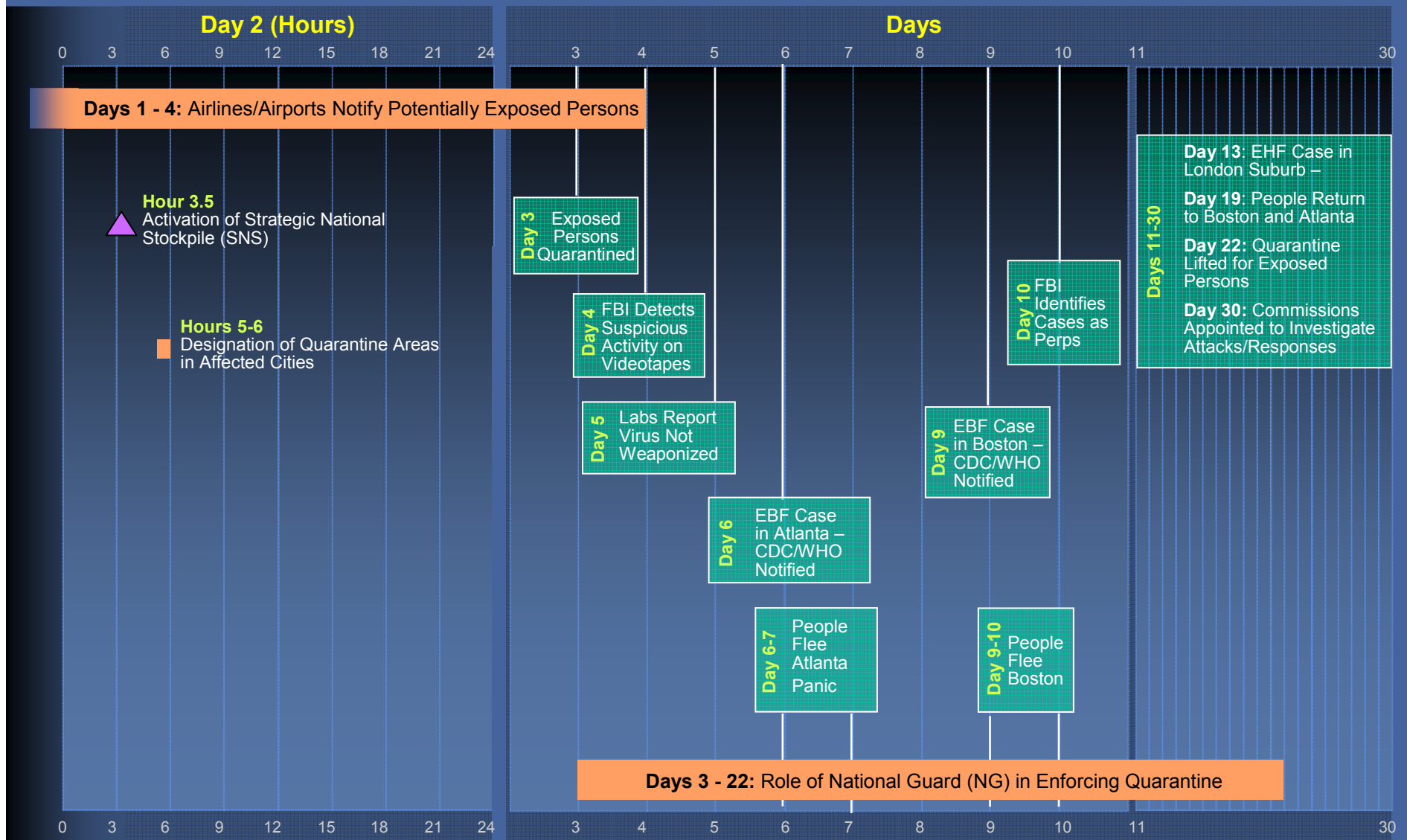
EBOLA Best Case Decontamination Timeline



* Unified Incident Commands



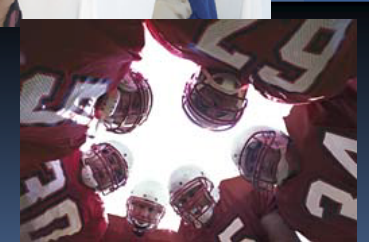
EBOLA Notional Public Health Timeline





Response Assumptions

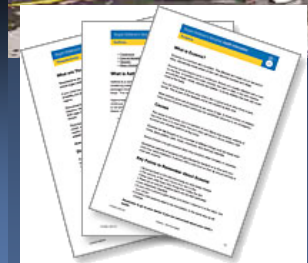
- Significant preparedness and response planning, including regular training, has occurred in advance
- Teams are ready and equipment is pre-positioned
- Responses are 24/7
- Interagency coordination alive and well
- Effective audibles were called when needed at all airports and immediately communicated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

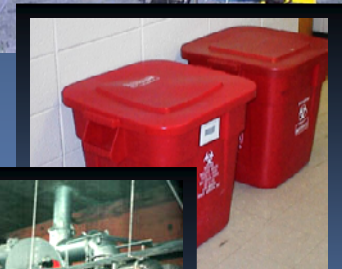
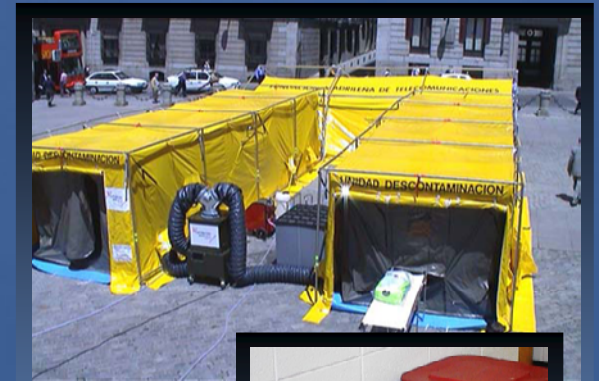




Recommended Preparedness Planning Activities

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

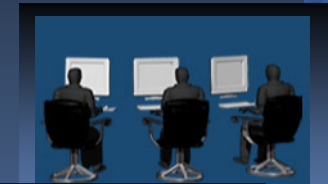




Recommended Preparedness Planning Activities

Interagency Committee on Domestic Response Preparedness

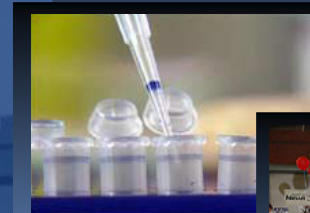
- **Purpose**
 - Planning for improved responses to multiple domestic terrorist attacks with potentially catastrophic consequences
 - Research/Training/Coordination
 - Advisory role during actual responses
- **Co-chaired by DHS, DOD, and DHHS**
- **Membership**
 - Civilian federal agencies: DHS (OP, 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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