

Hospital Ebola and Other Emerging Infectious Disease Preparations

Perspectives from the Region IX Ebola Treatment Center

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LEADING THE QUEST™

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Overview

- **Part One: About Cedars-Sinai**

- Who we are

- Responsibilities as a Regional Ebola Treatment Center

- **Part Two: About our Preparations**

- Organizational Structure and Treatment areas

- Laboratory and Waste Capacity

- Team, Training, and Drills

- Communications

- **Part Three: Next Steps**



Part One: About Us

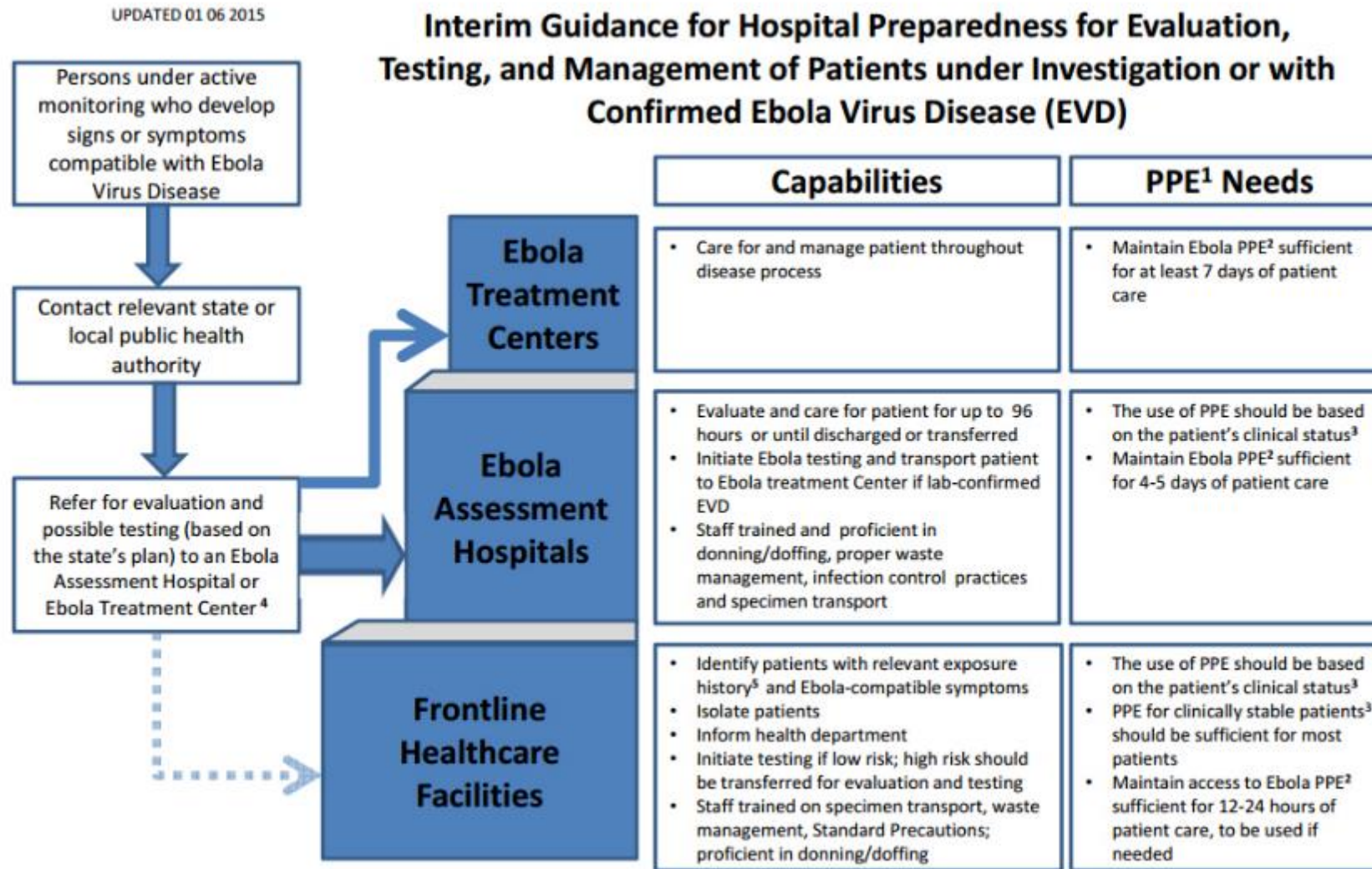


Cedars-Sinai

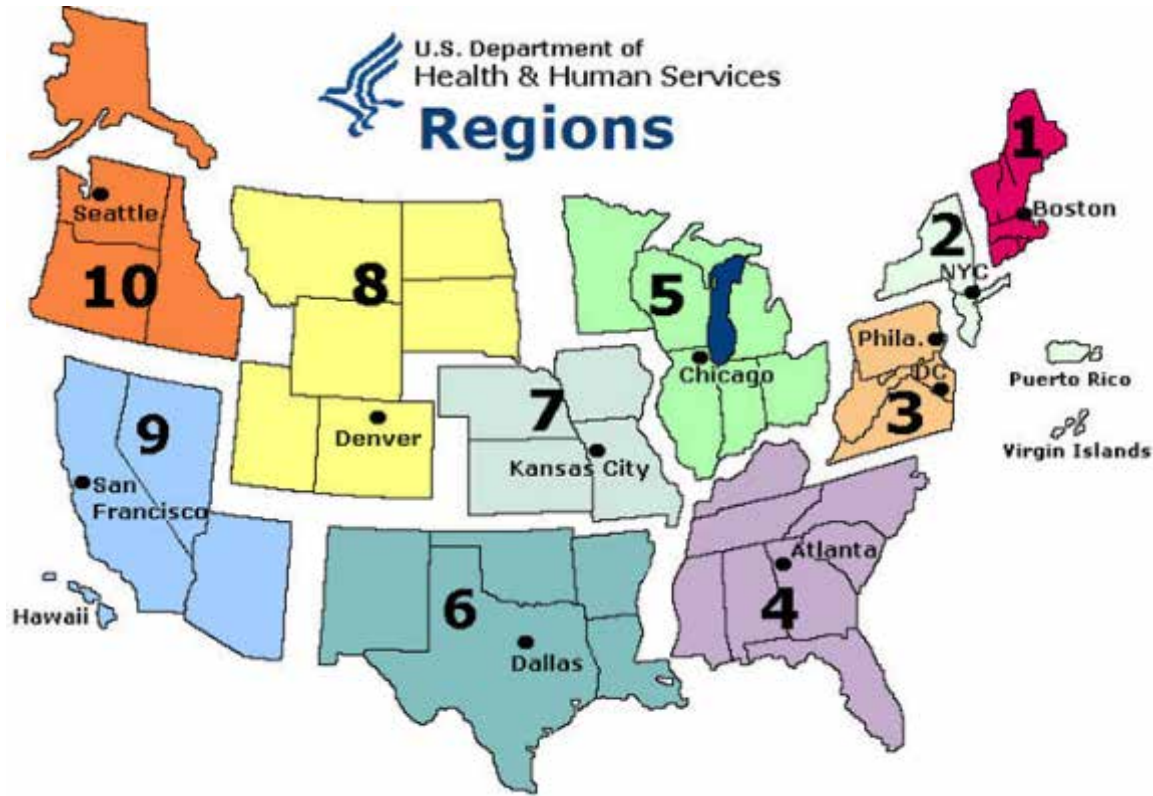


- 886-bed tertiary care, academic, community not-for-profit medical center in Los Angeles
- >49,000 admissions and 630,000 outpatient visits per year
- More than 10,200 full-time employees
 - 2,100 physicians on medical staff
 - 400 faculty
- >500 residents and fellows in graduate medical programs, with fellowships in 80 specialties and subspecialties
- Ranks among the nation's top independent hospitals in National Institutes of Health (NIH) funding
- Magnet Excellence in Nursing designation four consecutive times by the American Nurses Credentialing Center

CDC Tiered Approach



Regional Special Pathogens Center: Key Responsibilities



- Be prepared to receive a patient within 8 hours of notification
- Capacity to care for 2 simultaneous patients (including 1 child)
- Maintain a trained response team
- Maintain adequate supplies of personal protective equipment (PPE)
- Capacity to handle a high volume of infectious waste
- Annual NETEC onsite assessment

National Collaboration: National Ebola Training & Education Center (NETEC)

- Members from all 10 regional treatment centers
- Networking, collaboration, and sharing of best practices (regular meetings, points of contact)
- National resource for training and education
- Advocacy & Research
 - e.g. Experimental therapeutics (Zmapp)



Learning from Others



Hospital Preparedness

- Nursing
- Physicians (Critical care, ID, pediatrics)
- Infection Prevention
- Environmental Safety
- Emergency Department
- ICU Staff
- Disaster Management
- Communications
- Laboratory
- Imaging
- Employee Health
- Behavioral health/Crisis Management
- Bioethics
- Respiratory therapists
- Environmental Services
- Security
- Human Resources
- EIS
- Others ...



Domains of Preparedness

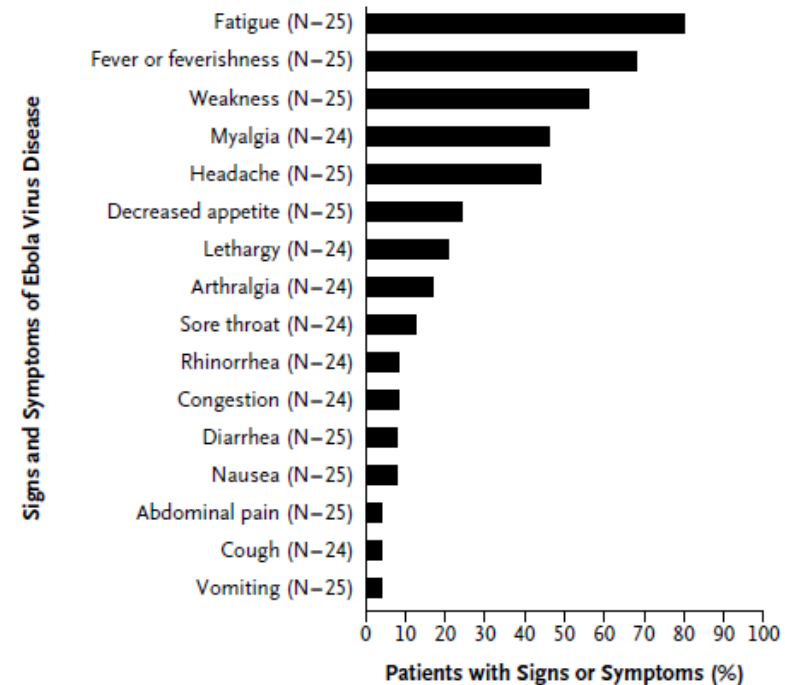
1. Pre-Hospital, EMS, ED
2. Staffing of patient care teams
3. Patient transport
4. Patient Placement
5. PPE Donning/Doffing
6. HCW Monitoring and exposures
7. Lab safety and capacity
8. Environmental Infection Control and Equipment reprocessing
9. Waste Management
10. Communications
11. Management of Deceased
12. Special Populations



Clinical Management of Ebola Virus Disease in the United States and Europe

- Review of all patients who received care for Ebola in US/Europe
- 27 patients; median age 36
- Median hospitalization 20d (survivors)
- 85% received investigation therapy
- Mortality 18.5%
- Take Away for Ebola Treatment Centers:
 - Long hospitalization
 - Be prepared to use investigational agents
 - High quality care can improve outcomes

A At the Onset of Illness



Collaboration

- Planning with LA County Public Health and EMS Agency
- Patient transport
 - California Mutual Aid Region I – Orange, Los Angeles, Ventura, Santa Barbara & San Luis Obispo counties
 - Mutual Aid Region II – San Diego, Riverside, Imperial, San Bernardino, Inyo & Mono counties
 - (Region I providers may be requested under Mutual Aid)
- Treatment and Assessment Center workgroup
 - Cedars-Sinai, UCLA, Kaiser Permanente Los Angeles, Children's Hospital LA



Los Angeles County Medical and Health Operational Area Coordination Program

Emerging Infectious Disease Healthcare System Annex Concept of Operations (CONOPS)

July 2018

A handwritten signature in black ink that reads "Cathy Chidester".

Cathy Chidester

Director, Emergency Medical Services Agency
Medical and Health Operational Area Coordinator

Part Two: About Our Preparations



Preparing for the *next* threat, not the last threat

Cedars-Sinai Special Pathogens Program

- Special Pathogens Program Coordinator
- Special Pathogens Clinical Education Coordinator

- SPRT Task Force
 - Safety/Disaster Management, Epidemiology, Nursing Resources, Critical Care MDs, Communications, Human Resources, Simulation Center, Laboratory, Crisis Management, EVS, Pediatrics, ED, Patient Safety, EHS

- SPRT Volunteer Clinical Response Team
 - Nurses, physicians (critical care, ID, pediatrics, OB), respiratory therapy, EVS
 - Quarterly training
 - Quarterly drills

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Ebola Drill Tests Cedars-Sinai's Readiness



Caring for the "patient" during the Ebola drill were Heather Jones, MD, medical director of the Critical Care Intensive Care Service, (left) and Eileen Dulce, BSN, RN, CCRN. Playing the patient was Gregory Eichelberger, MSN, RN, CEN, clinical nurse IV educator.

US Ebola Cases

- Cases diagnosed in US (2014)
 - Sep 30 – died (Dallas)
 - Oct 10 – survived (NIH)
 - Oct 15 – survived (Emory)
 - Oct 23 – survived (Bellevue)
- Cases transferred to US for treatment (2014)
 - Aug 2 - survived (Emory)
 - Aug 2 – survived (Emory)
 - Sep 5 – survived (Nebraska)
 - Sep 9 – survived (Emory)
 - Oct 6 – survived (Nebraska)
 - Nov 15 – died (Nebraska)



CS Ebola Organizational Response




Early Detection

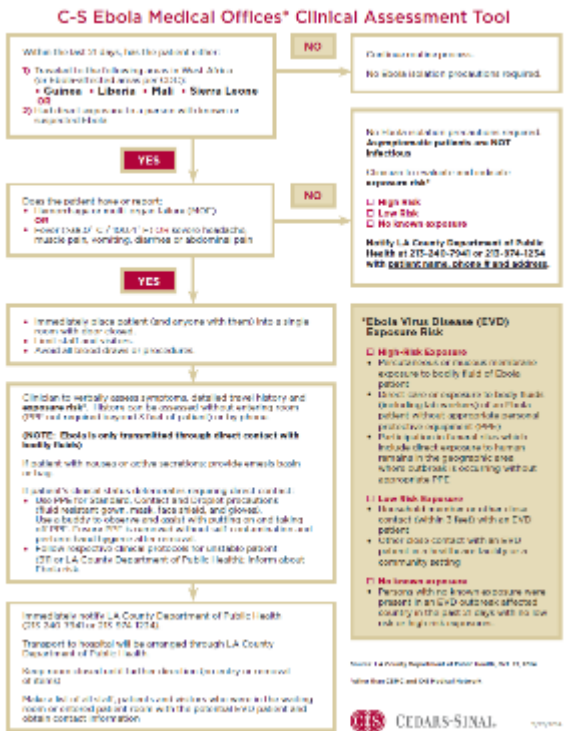
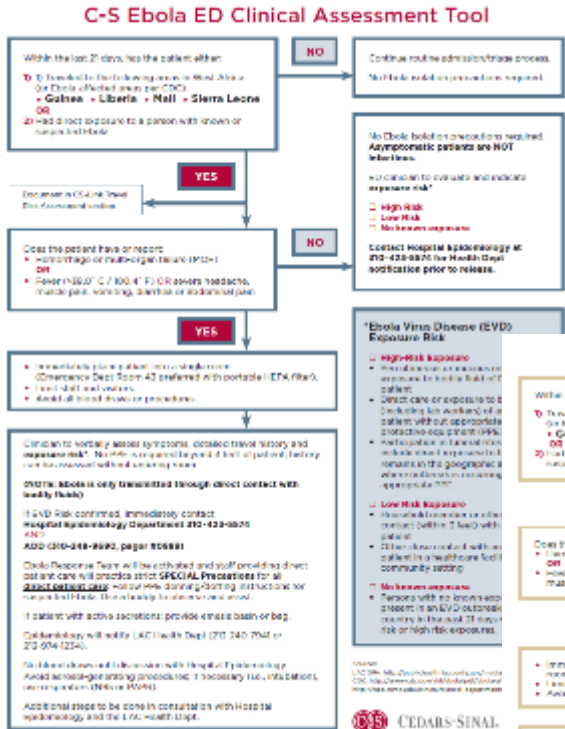
IF you have recently traveled out of the U.S.

OR had close contact with someone who recently traveled out of the U.S. and is ill...

AND now you have: fever, cough, trouble breathing, rash, vomiting or diarrhea

PLEASE TELL STAFF IMMEDIATELY





CS Link (Epic) Screening Tool

The screenshot displays the Epic CS Link screening tool interface. The patient information at the top includes: Test, Ebo; Male, 59 year old, 02/26/1955; MRN: 200011473; CSN: 40913; Allergies: Not on File; PCP: None; My CS-Link: Inactive; None; Active P/Ts: None; Code: Not on file; Adv Dir: None; Enc Cpt: None; POLST: None.

The main content area shows a "Travel Risk - Travel Risk" assessment for a visit on 10/8/2014. The assessment includes the following questions and answers:

- Within the Last 21 Days, has the patient traveled to the following areas in West Africa (or areas where known Ebola cases) : Guinea, Liberia, Sierra Leone, Nigeria. **Yes**
- Had direct exposure to a person (or human remains) with known or suspected Ebola. **No**
- Hemorrhage or Multi-Organ Failure (MOF)? **No**
- Other Clinical Symptoms? **Fever** | Severe Headache | Muscle Pain | Vomiting

A yellow alert box titled "Possible Ebola Risk" is overlaid on the right side of the screen. The alert text reads:

EBOLA RISK: This Patient has Identified EVD Risk Factors.

Current CDC Guidelines as of 10/1/2014 identify a Person Under Investigation For Ebola as having:

- Fever > 38.6 AND at least one of:
Severe headache, muscle pain, vomiting, diarrhea, abdominal pain, unexplained hemorrhage
- AND epidemiologic risk factors within the past 21 days before the onset of symptoms, including:
-contact with blood or body fluids or human remains of a patient known to have or suspected to have EVD
- OR residence in - or travel to - Guinea, Liberia, Nigeria, or Sierra Leone.

The following relevant values have been documented:

- Within the Last 21 Days, has the patient traveled to the following areas in West Africa (or areas where known Ebola cases) : Guinea, Liberia, Sierra Leone, Nigeria.: Yes**
- Had direct exposure to a person (or human remains) with known or suspected Ebola: No**
- Hemorrhage or Multi-Organ Failure (MOF)?: No**
- Other Clinical Symptoms?: Severe Headache**

The alert includes an "Acknowledge reason:" field with a dropdown menu showing "Informed Hospital Epidemiology Departmen...". At the bottom of the alert, there is a "Refresh" button and a "Last refreshed on 10/8/2014 at 2:12 PM" timestamp, along with an "Accept" button.

Answering yes to either of the first two questions AND either of the second two questions will trigger Best Practice Alert

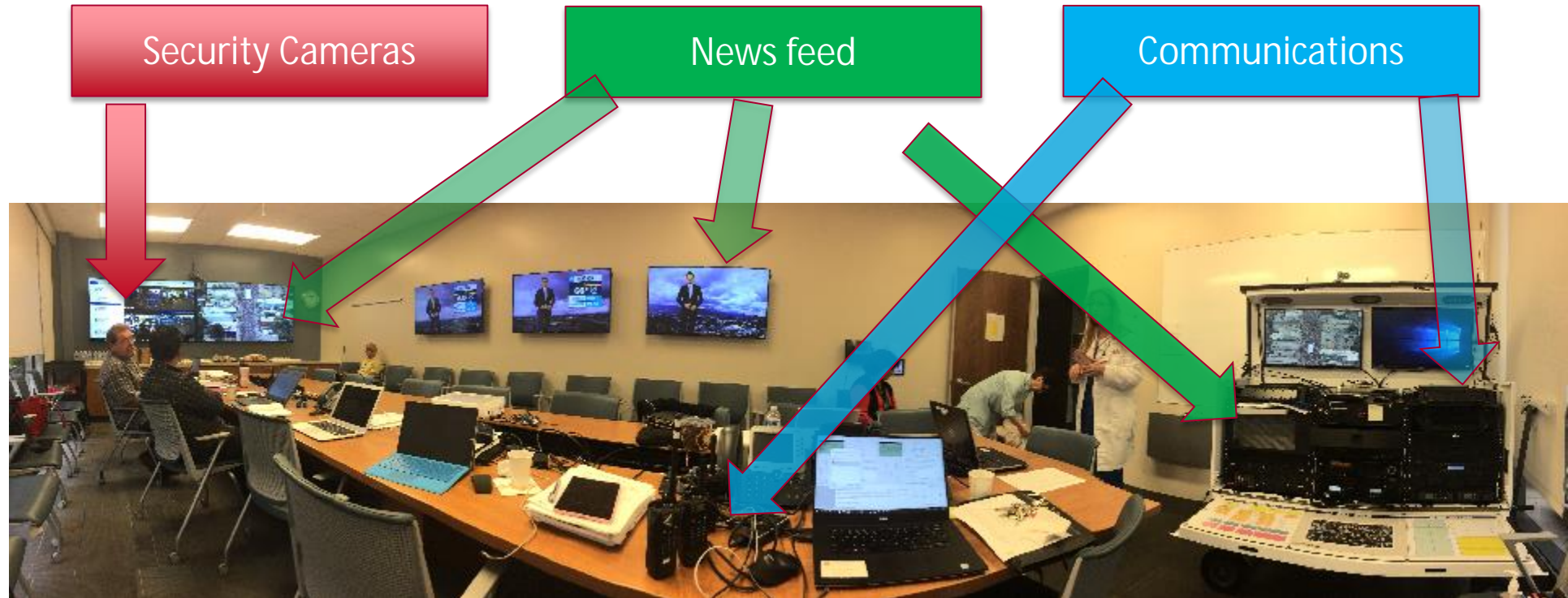
Hospital Activation Plan

- Electronic notification to leadership and clinical response team
 - Text, phone calls, emails (repeat until answered)
- Open Hospital Command Center
- Prepare treatment unit
- Conduct just-in-time PPE training for response team



Hospital Command Center objectives

- Communication
 - Staff, medical staff, patients, visitors, media
 - Partner agencies notifications (public health, EMS, sanitation, etc.)
- Staffing plan
- Unit setup
 - Moving existing patients off unit
- Security coordination
- Hazardous materials response (spills in public areas)
- Logistics
 - Assess current inventory and possible additional needs



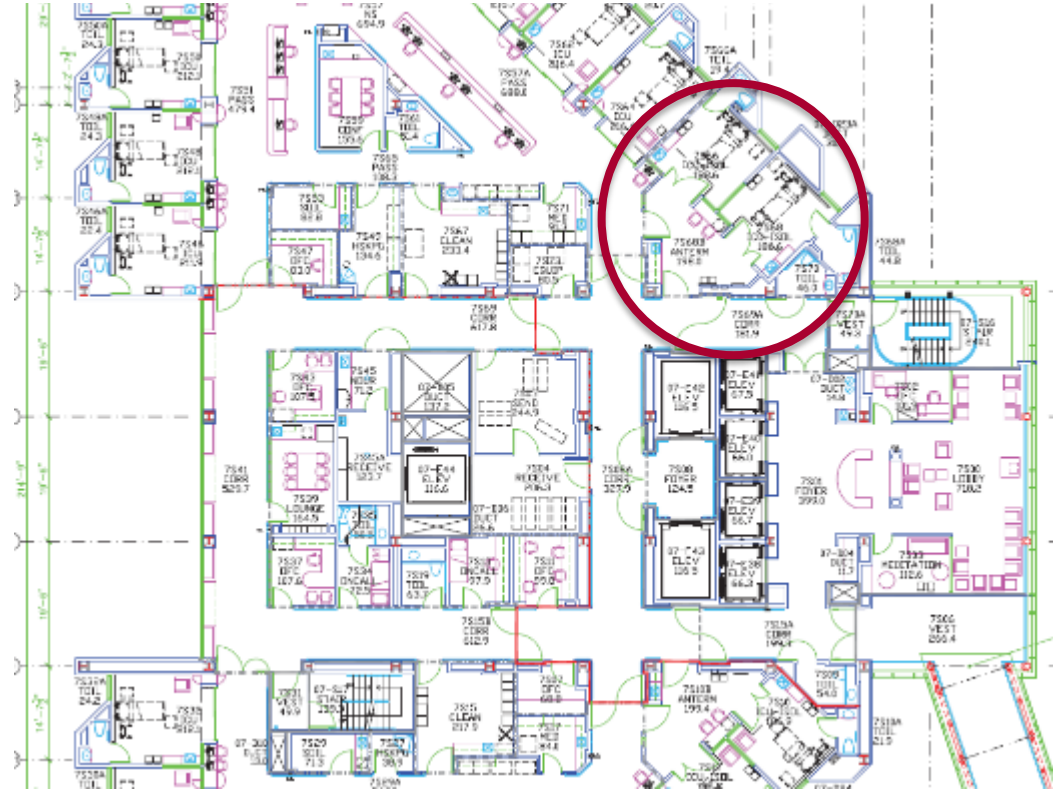
Treatment Areas

- Ambulance bay to accept EMS ground transport
 - Secured, private bay
 - Separate from ED ambulance bay
 - Direct and controlled access to medical ICU
- Emergency Department
 - Dedicated ED room
 - Direct and controlled access to medical ICU
- Medical ICU
 - Negative pressure isolation
 - Large anteroom
 - Secured access



Patient Care Area: Medical ICU

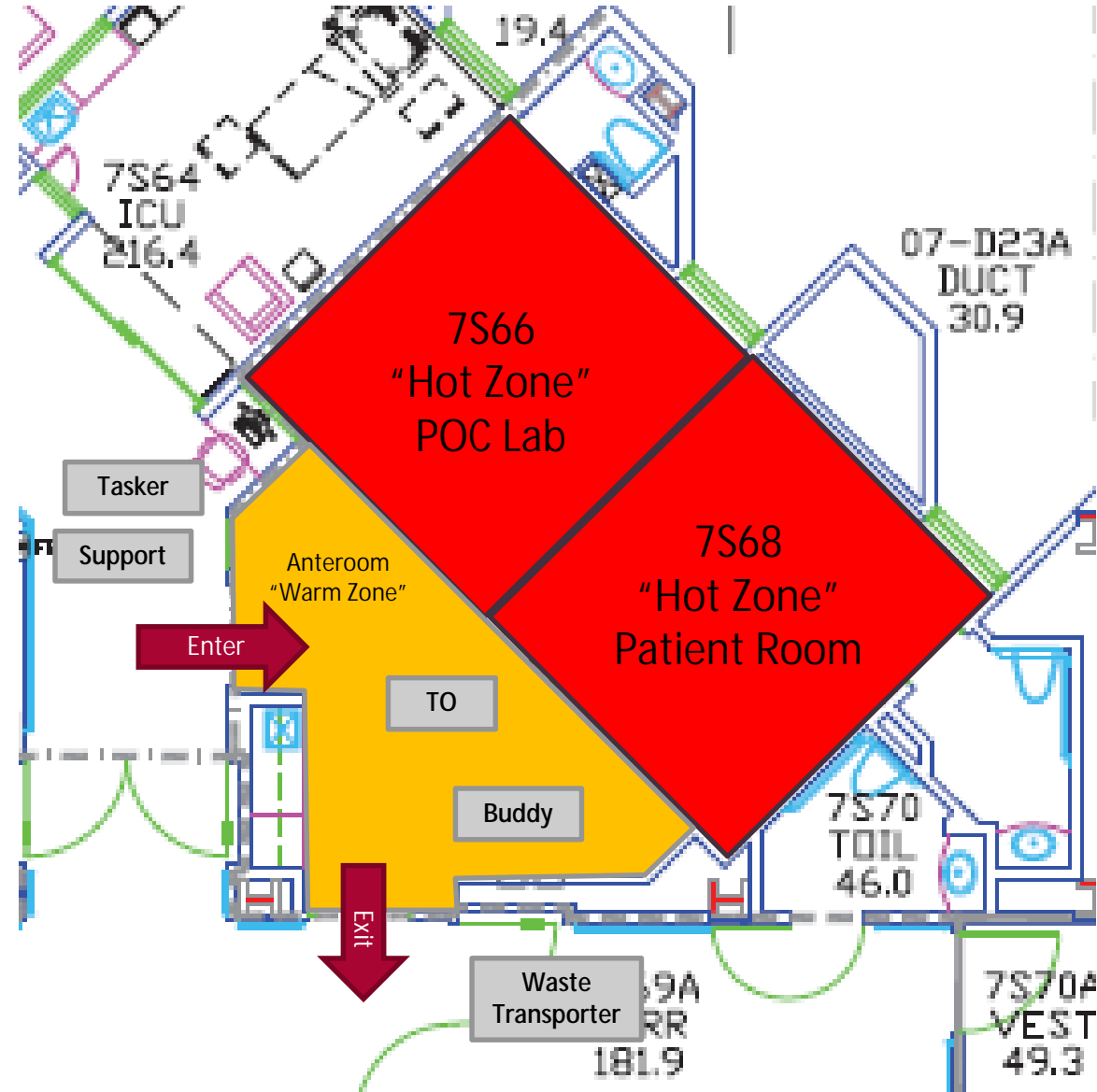
- Negative pressure room with bathroom and large anteroom and
- Patient care room
- POC lab (neighboring room)
- No patient transport outside room
- Designated areas for
 - Donning PPE
 - Doffing PPE
 - Safety monitor
 - Staff shower
 - PAPR Reprocessing



Medical ICU

HCW Roles:

- Bedside HCW
- "Buddy" HCW
- Trained observer
- Safety Monitor
- Tasker
- Support staff
- Waste transporter
- Lab technician
- Lab "buddy"



Patient Care Room



POC Laboratory (Neighboring Patient Room)

- Class 2 Biosafety cabinet setup in adjacent room
- Lab techs will work in pairs (both in full PPE)
- Specimen handoff protocols
- Category A Specimen packaging
- No labs performed in main laboratory



Point-of-Care Lab Capabilities



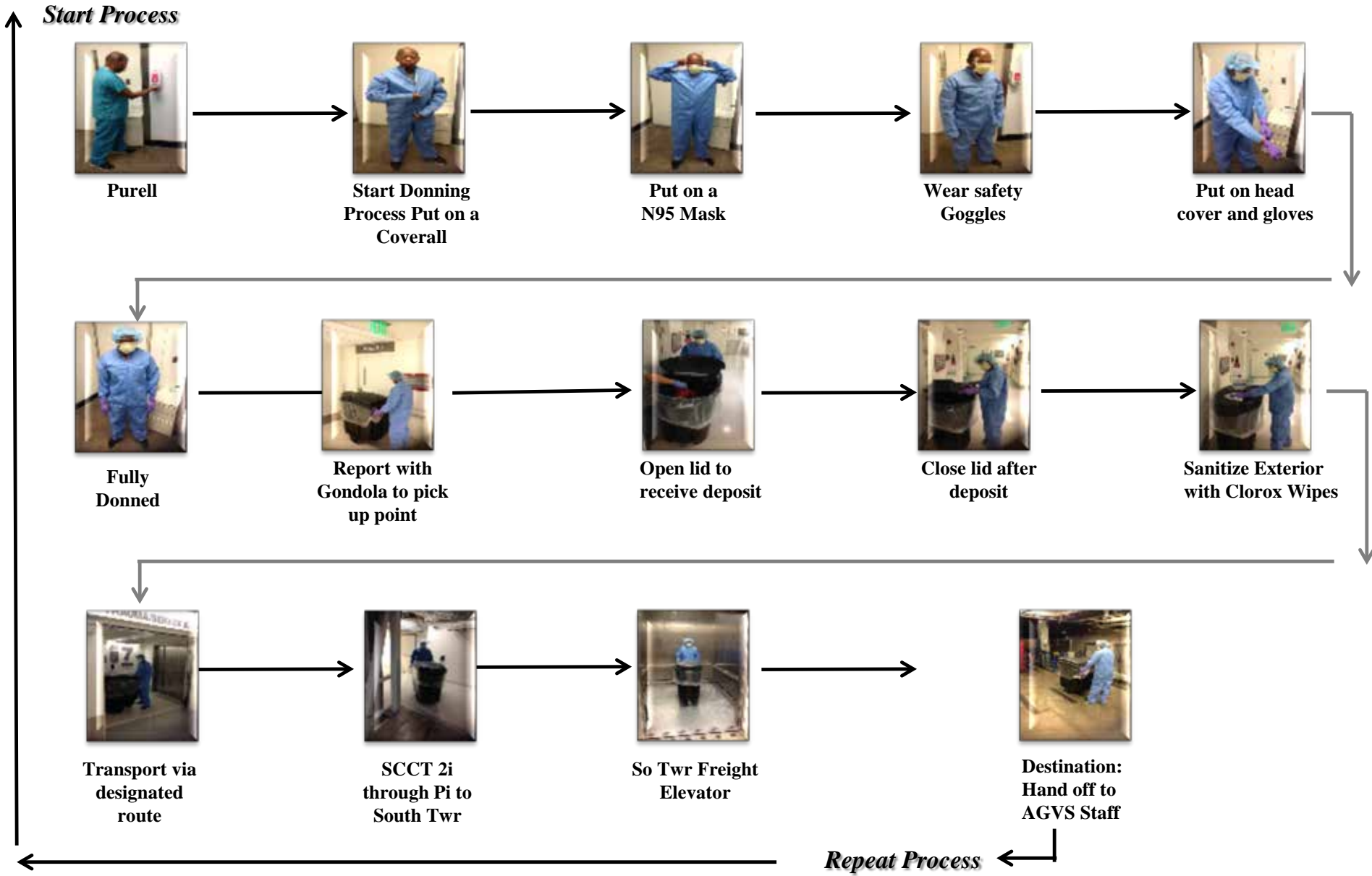
Instrument	Tests	
<u>Piccolo Express</u> Chemistries Comprehensive Metabolic Panel	ALB ALP ALT AST BUN Ca CRE Cl K	eGFR* GLU TBIL TP NA PHOS tCO2 Mg
<u>Alere BionaxNOW</u> Malaria Detection	Malarial Screen Sensitivity 99.7% Detects all 4 Vivax sp.	Differentiates falciparum from others
<u>Symex pocH-100i Hematology Analyzer</u> Hematology	WBC RBC HGB HCT MCV PLT	
Urinalysis Dipstick	Glucose Bilirubin Ketone Specific Gravity Blood	pH Protein Urobilinogen Nitrite Leukocyte Esterase
<u>Hemochron Signature Elite</u>	Citrated Protime with INR	Citrated APTT
<u>Veritor</u>	Rapid ID of Influenza A and B	

Waste Management

- Waste Streams
 - EMS/Ambulance waste
 - ED
 - Treatment area (ICU)
- Liquid waste
 - Pretreatment with disinfectant prior to flush
 - Protocol approved by LA City Sanitation
 - Toilet, sink, dialysate
- Solid waste
 - EVS transport plan and dedicated pathway
 - Two large-capacity onsite autoclaves
 - Contracted third party waste transport vendor (backup)

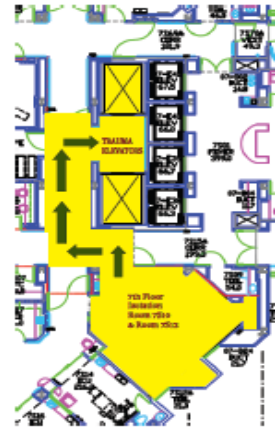


2.1 Waste Transportation Inc. Soiled Linen/Sharps - Daily



2.4 Transportation of Waste; Map Path (7SCCT-Dock)

EBOLA TRAVEL PATH FROM SAPERSTEIN BLDG. 7TH FLOOR TO MAIN BLDG. LOWER LEVEL / DOCK

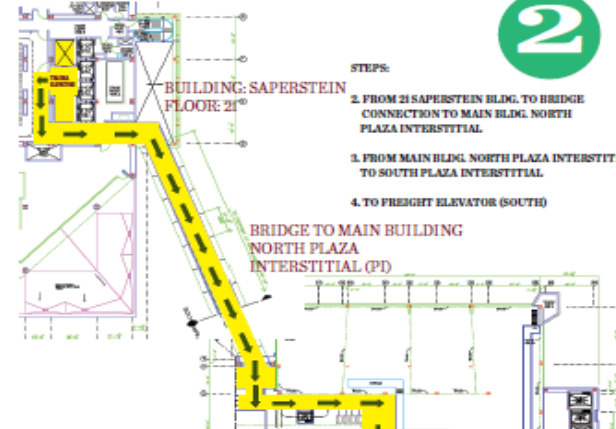


1

- STEPS:
1. FROM 7TH FLOOR ISOLATION ROOM TO TRAUMA ELEVATOR
 2. DOWN TO 2ND SAPERSTEIN BLDG.



BUILDING: SAPERSTEIN
FLOOR: 7TH



2

- STEPS:
2. FROM 2ND SAPERSTEIN BLDG. TO BRIDGE CONNECTION TO MAIN BLDG. NORTH PLAZA INTERSTITIAL.
 3. FROM MAIN BLDG. NORTH PLAZA INTERSTITIAL TO SOUTH PLAZA INTERSTITIAL.
 4. TO FREIGHT ELEVATOR (SOUTH)

BRIDGE TO MAIN BUILDING
NORTH PLAZA
INTERSTITIAL (P1)



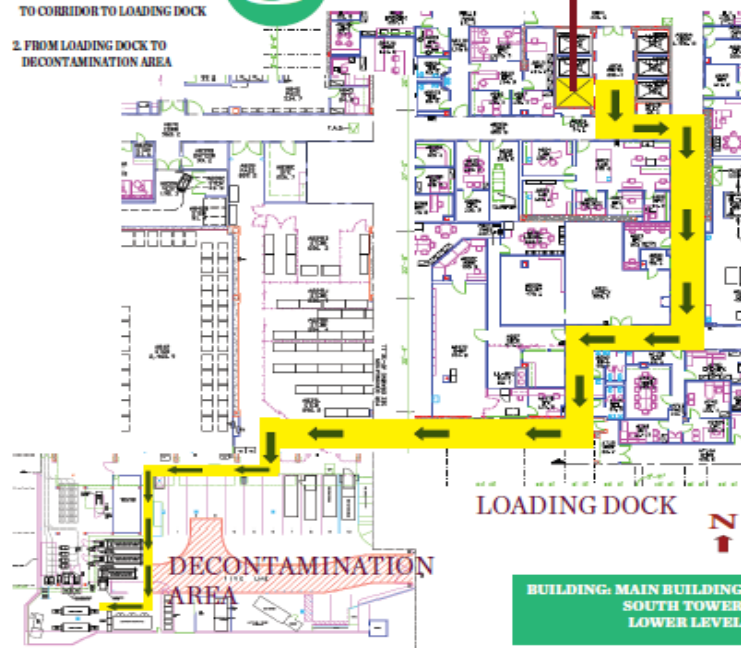
BUILDING: MAIN BUILDING
NORTH PLAZA
INTERSTITIAL (P1)

BUILDING: MAIN BUILDING
SOUTH PLAZA
INTERSTITIAL (P1)

SOUTH TOWER
FREIGHT ELEVATOR

- STEPS:
1. FROM SOUTH FREIGHT ELEVATOR TO CORRIDOR TO LOADING DOCK
 2. FROM LOADING DOCK TO DECONTAMINATION AREA

3



LOADING DOCK

BUILDING: MAIN BUILDING
SOUTH TOWER
LOWER LEVEL



NOTE:
THIS IS JUST TO HAVE AN IDEA
APPROXIMATE PATH TRAVEL:

- 934 LINEAL FEET
- 140 VERTICAL FEET

Personal Protective Equipment

- *Note: We do not endorse any of these products. Brands are provided to help determine desirable features/specifications.*
- PAPR: ILC Dover Sentinel HP with Clear Hood, HEPA filters. Options for rechargeable or D-cell batteries.
- Coverall: Viroguard 2
- Cooling Vest: TechKewl Phase Change Cooling Vest
- Apron: Tidi products 10403
- Gloves: CS Pro Gloves (16") and chemo gloves
- Shoe Covers
- Surgical Cap

- Consider all applicable requirements for PPE selections, such as ASTM F1670 & 1671.



Special Pathogens Response Team

- Membership is voluntary
- Willing and able to work in full PPE for up to 4 consecutive hours
- Able to work in teams and accept constructive feedback
- Commit to participate in training and drills
 - Initial training session (once)
 - Ongoing training (quarterly)
 - Must participate in one drill/year
- Team members by role:
 - Nurses (ED, ICU, Med/Surg, Pediatric ICU/NICU)
 - Physicians (critical care, ID, Pediatrics, Obstetrics)
 - Respiratory therapists
 - Clinical Lab Scientists
 - Environmental Service Supervisors

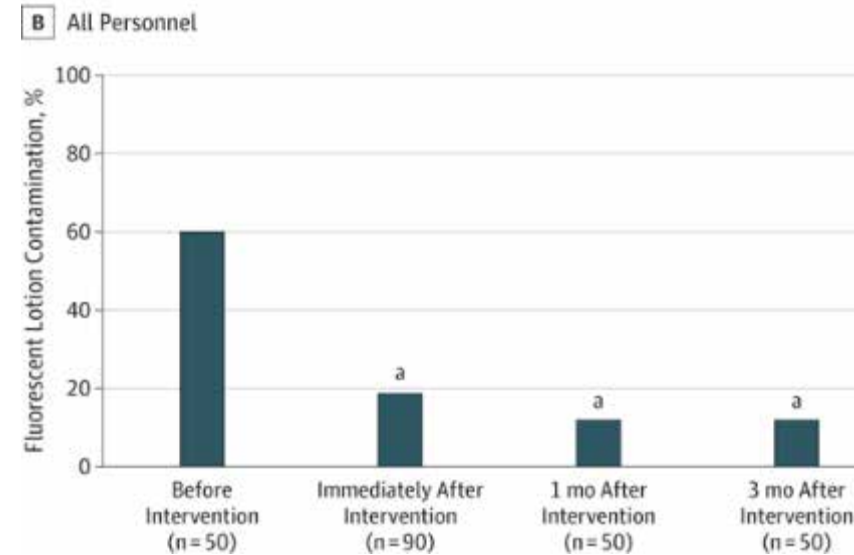
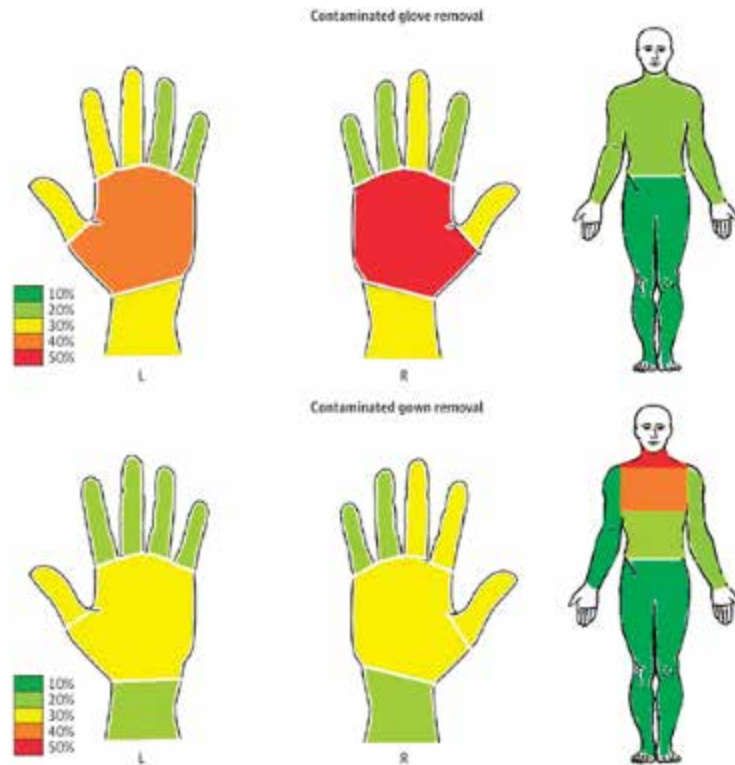


Special Pathogen Response Team: Principles for Staffing Model

- Staffing scenarios developed for 1 or 2 patients
 - 1 patient à 5:1 RN to patient ratio
 - 2 patients à 8:1 RN patient ratio
- Staff rotate roles every 4 hours
 - Bedside RN, doffing assistant, trained observer, tasker, support staff
- Safety monitor always present
- 12 hour shifts; no more than 4 consecutive hours in full PPE
- No more than 3-4 shifts/week
- Pediatric RN always at bedside for pediatric patient
- CS to provide all clothes under PPE (disposable scrubs, shoes)
- Employee Assistance Program and HR involved in task force



Doffing PPE: A Risk Factor



- Regular training in PPE donning/doffing is essential
- Always use a doffing partner and trained observer
- Never rush

SPRT Training Plan

- **Initial Training (4 hours):**

- Region 9 Treatment Center responsibilities
- Infection Control practices
- Roles and responsibilities of team members
- Introduction to PPE
- Patient transport and handoff
- Post-exposure monitoring

- **Refresher Training (~2 hours):**

- Briefing on selected protocols or relevant topics
- Don PPE
- Practice a skill selected by the instructor
- Practice a skill selected by participants
- Doff PPE

- **Bi-Annual Skills Fair**



Training

- Clinical Simulation Lab
- Practice clinical skills in full PPE
 - IV placement
 - Central line placement
 - Intubation
 - Spill management
- Fluorescent dye markers provide direct HCW feedback



California Region I High Risk Ambulance Project

California Region I High Risk Ambulance Project

- 6 Units (available for mutual aid requests):
 - HRA 101 - Care - Santa Fe Springs, (Los Angeles County)
 - HRA 102 - Care - Orange (Orange County)
 - HRA 103 - McCormick - Compton (Los Angeles County)
 - HRA 104 - McCormick - Compton (Los Angeles County)
 - HRA 105 - AMR - Santa Clarita (Los Angeles County)
 - HRA 106 - AMR - Ventura County
- Dispatched through county EMS agencies
 - approximately 60 minute personnel/PPE muster time
- Unique Features:
 - Driver and patient compartment separated with steel bulkhead, welded and caulked
 - Patient compartment has negative pressure
 - Separate high capacity air conditioning units for driver and patient compartment – will keep personnel in Level C isolation PPE (PAPRs/suits) comfortable
 - HEPA filters with UV light disinfection in patient compartment air conditioning and exhaust
 - Tablet mount for receiving facility to monitor patient/team by video
 - Intercom and patient status lights to communicate between driver and patient compartment
 - Medical team seats swivel for patient access
 - Molded seats for easy disinfection
 - No shelves/cabinets for easy disinfection – medical equipment will be brought in bags
 - May be utilized for treatment/ transport teams as well as evaluation teams
 - Compatible with Iso-Pod isolation system
- Portable UV light disinfection system and luminometer available for post-incident decontamination
- Purchased with Los Angeles/Long Beach UASI Homeland Security Grant Funds to transport potential or confirmed highly infectious or contaminated patients



(3-27-18)

Drills

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THE BRIDGE

PRODUCED BY AND FOR THE EMPLOYEES OF CEDARS-SINAI

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Ebola Drill Addresses Challenges of a Teen Patient



Kat Green, RN, (right) and Grace Teaman, RN, tend to teen volunteer Bryce Caulfield during a preparedness drill for treating patients with highly infectious diseases like Ebola.

Cedars-Sinai recently staged an Ebola drill with a twist: A teen volunteer played the patient and another volunteer played his mom.

The Special Pathogen Response Team runs the drills periodically to practice treating patients with highly infectious diseases. This group of healthcare providers has rehearsed with pretend adult patients, but never with a teen.

"We're continuing to expand the different types of scenarios we may encounter, including working with family members of somebody with these types of infections to make sure we're supporting them," said Jonathan Grein, MD, medical director of the Department of Hospital Epidemiology and Infection.

- Performed quarterly
- Invaluable tool to identify weaknesses (and creative solutions)
 - Also a recruitment strategy
- Often involve external partners
 - EMS
 - Local health department
- Debrief and After-Action report
- Mistakes are ok (as long as we continually improve)

Drill Photos: EMS Participation



Drill Photos: Patient Transport



Drills



Central line
placement

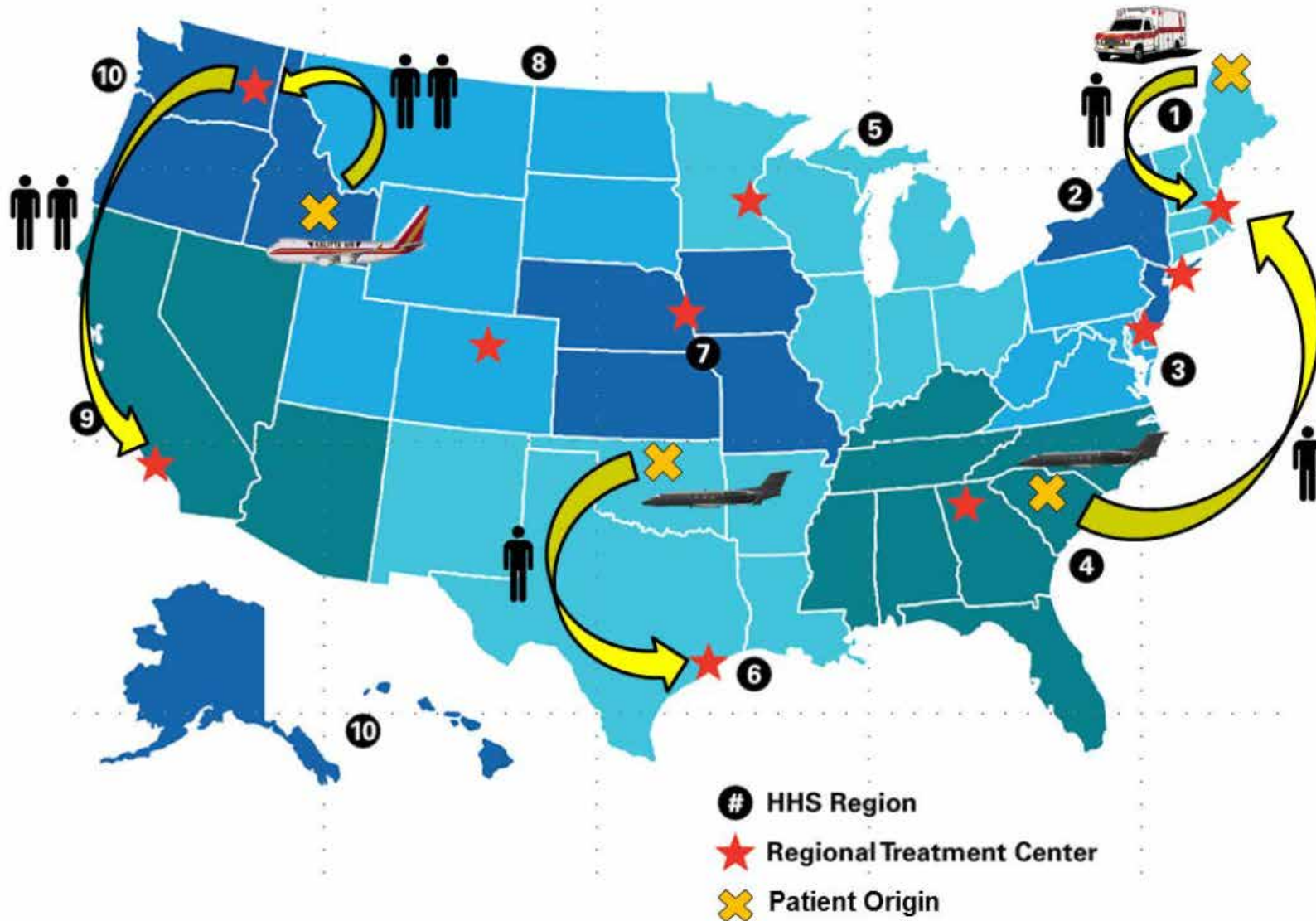
Use of Telemedicine Equipment



Remote AV Communication capabilities
Digital stethoscope
Portable ultrasound
HIPAA compliant



Tranquil Terminus



Tranquil Terminus (cont.)



Objectives for Cedars-Sinai:

- Activate Command Center
- Perform Just-In-Time training
- Activate Rapid IRB
- Receive 2 patients via ground transport from EMS



Tranquil Terminus (cont.)



Drills: Examples of Lessons Learned

“Life is trying things to see if they work.” – Ray Bradbury

- Value of including external partners (EMS, public health lab)
- Importance of team work and communication
 - Write HCW roles on PPE
 - Educate to explicit roles and responsibilities
- Early and regular family communication
 - Identify family point-of-contact, engage Social Work
- Importance of involving security
- Smaller drills just as useful as full-scale drills
- Don't be afraid to try new things (try different locations, manage unexpected events in real time, be flexible)



What the Special Pathogens Response Team is About ...

- Commitment to provide safe and high-quality care to **patients who need it the most**
- Protecting our staff
- Multi-disciplinary teamwork
- Problem-solving solutions to unique challenges



Electronic Healthcare Worker Symptom Monitoring

Ebola_HCW_Symptom_Monitoring

Please complete the survey below.
Thank you!

1) **Most recent day of exposure**
* must provide value

All Healthcare providers who have patient contact with a patient confirmed to have Ebola virus disease require **TWICE DAILY** symptom screening for 21 DAYS following their last patient contact. The development of fever or symptoms must be **IMMEDIATELY** reported to Hospital Epidemiology (310-423-5574) and the local department.

A single temperature of greater than or equal to 100.4F is considered a positive symptom. A temperature of greater than or equal to 99.6F should prompt more frequent checks. Persistently elevated temperatures between 99.6F and 100.3F for more than 24 hours is considered a positive symptom.

2) **Time of symptom evaluation**
* must provide value

3) **Number of days post exposure**
* must provide value

4) **Temperature (F)**
* must provide value

5) **Symptoms present:**
* must provide value

Yes
 No

reset

Record_ID	Demographics Day 1 (AM)	Symptoms Day 1 (AM)	Symptoms Day 2 (AM)	Symptoms Day 2 (PM)	Symptoms Day 3 (AM)	Symptoms Day 3 (PM)	Symptoms Day 4 (AM)
1	✓	✓	⊘	⊘	⊘	⊘	⊘
2	✓	✓	⊘	⊘	⊘	⊘	⊘
3	✓	✓	✓	⊘	⊘	⊘	⊘
4	✓	✓	✓	⊘	⊘	⊘	⊘
5	✓	⊘	⊘	⊘	⊘	⊘	⊘
6	✓	✓	✓	⊘	⊘	⊘	⊘
7	✓	✓	✓	⊘	⊘	⊘	⊘
8	✓	✓	⊘	⊘	⊘	⊘	⊘
9	✓	✓	⊘	⊘	⊘	⊘	⊘
10	✓	✓	⊘	⊘	⊘	⊘	⊘
11	✓	✓	✓	✓	✓	✓	✓
12	✓	✓	✓	✓	✓	✓	⊘
13	✓	✓	✓	✓	⊘	⊘	⊘
14	✓	✓	✓	⊘	⊘	⊘	⊘
15	✓	✓	⊘	⊘	⊘	⊘	⊘



Special Pathogens Response Team Newsletter

Purpose:

- Team-building
- Informational
- Recruitment

Sections:

- In The News
- Policy and Protocol Updates
- Upcoming Training and Drills
- Welcome New Members
- Training Tidbit
- Recruitment statement

Special Pathogens Response Team Newsletter

Produced by and for the Cedars-Sinai Region IX Special Pathogens Response Team

In the News

New MERS outbreak in a Saudi Arabian hospital. Ten people (including two healthcare workers) were diagnosed with Middle Eastern Respiratory Syndrome (MERS) in March 2017, associated with transmission in a hemodialysis unit. No deaths have been reported and two people were asymptomatic. MERS is a coronavirus (related to SARS) and has been associated with several hospital outbreaks in the Middle East and South Korea since it was first described in 2012. <http://www.reuters.com/article/us-health-mers-idUSKBN17619K>



H7N9 Avian Influenza activity in China. Seventeen new human H7N9 cases have been identified in China in March. Nearly all had direct exposure to poultry. To date, more than 500 human cases have been related to 179 deaths since October 2016. Many authorities are concerned H7N9 has the potential to cause a human pandemic. However, to date, nearly all infections follow direct poultry exposure and sustained human-to-human transmission of H7N9 has not been observed. <http://www.cidrap.umn.edu/news-perspective/2017/03/china-reports-17-h7n9-cases-fast-disease-progression-noted>

Crimean-Congo Hemorrhagic Fever strikes Oman. Nine cases, including 3 deaths, of CCHF have occurred in Oman. CCHF is a tick-borne viral illness with mortality rates as high as 40 percent. Typically, more than 1,000 cases are described annually in Eastern Europe and Asia, most through tick bites. However, the infection can be spread person-to-person through blood/bodily fluid exposure and healthcare workers have been infected in several hospital outbreaks. <http://timesofoman.com/article/105291/Oman/Three-dead-as-Crimean-Congo-Fever-spikes-in-Oman>

Communications

- Communications plays an essential role in Special Pathogen readiness
- Internal Communication Plan
 - Drills are highlighted in regular employee communications
 - In the event of activation, templates developed for:
 - Staff information and FAQs
 - Patient/Visitor handouts
- External Communication Plan
 - Invite external media to drill events
 - Templates developed in the event of activation



Ebola Drill Tests Cedars-Sinai's Readiness



Caring for the "patient" during the Ebola drill were Heather Jones, MD, medical director of the Critical Intensive Care Service, (left) and Glenn Dulbe, BSN, RN, CCRN. Playing the patient was Gregory Elzheim, MSN, RN, CEN, clinical nurse IV educator.



L.A. NOW JUNE 14, 2016

Cedars-Sinai Medical Center tapped to fight Ebola

By **Soumya Karlamangla**

The 2014 Ebola outbreak killed thousands of people worldwide and set off international panic about the spread of the highly contagious disease. In the U.S., it also exposed concerns about how prepared the health system is to fight infectious diseases. As part of an effort to improve the nation's...

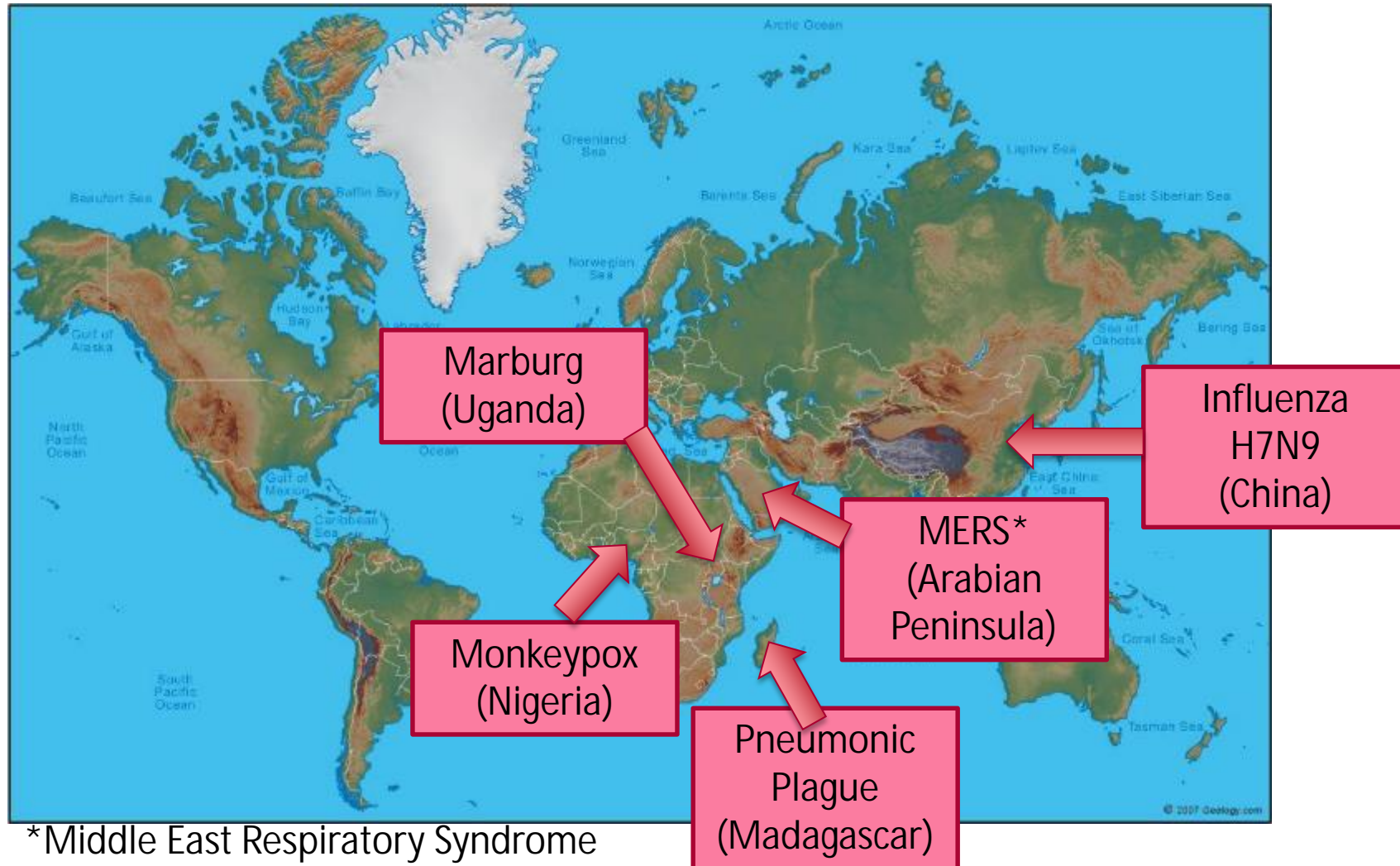
Los Angeles Times

Part Three: About the Future



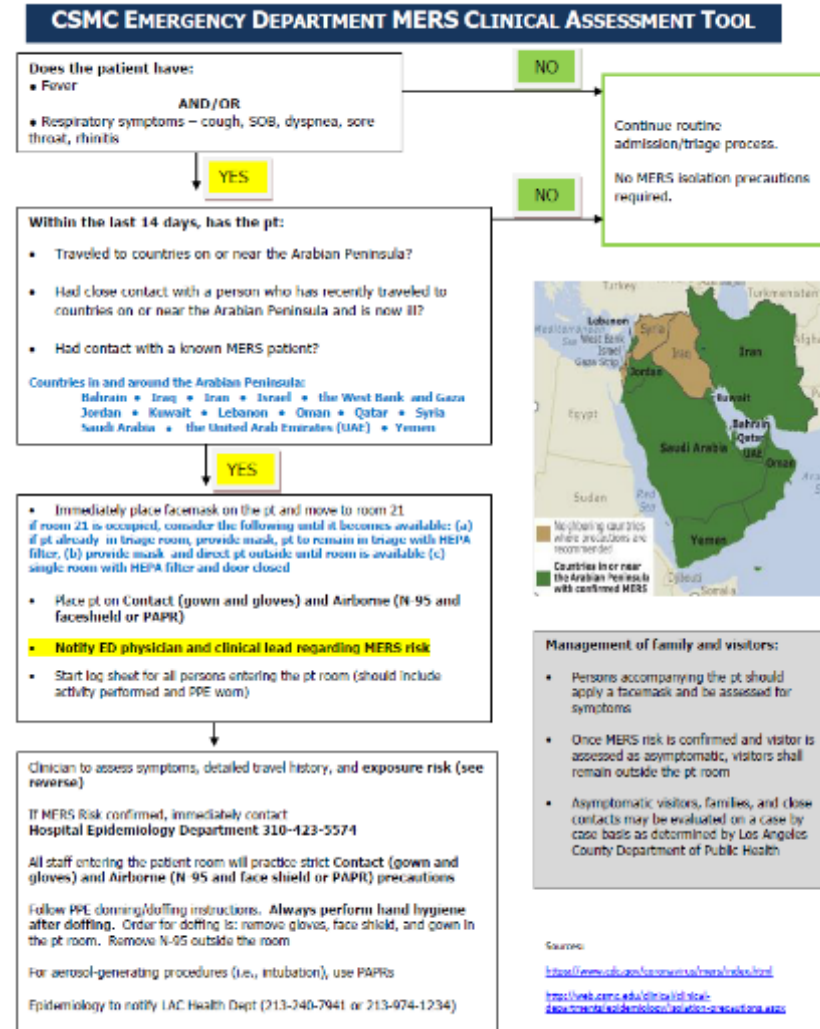
www.koreatimesus.com/wp-content/uploads/2015/06/mers100.jpg

Situation Report – Highly Communicable Diseases



Emerging Respiratory Illness Preparation

- Engage Emergency Department in MERS readiness
- Identify, Isolate, Inform
- Regular unannounced “walk-in” drills for triage staff
- Emphasize the importance of a recent travel history in patients presenting with acute febrile illness
- Challenge is teaching more to principles, less to specific pathogens



Integrating Lessons Learned into Everyday Care

Our long-term vision:

- Leverage Special Pathogens Response Team members to serve as unit resource
- Reinforce basic principles of infection prevention
- Maintain awareness of emerging infectious disease threats



Benefits of Serving as the Region IX Treatment Center



- Developing a team of experts to safely handle the next emerging threat
- Providing service to the community
- Strengthening relationships with local and regional agencies
- Serving as a regional resource
- Contributing to national preparedness efforts

What if a Suspected Ebola (or Other Highly Infectious Patient) Arrives at my Hospital?

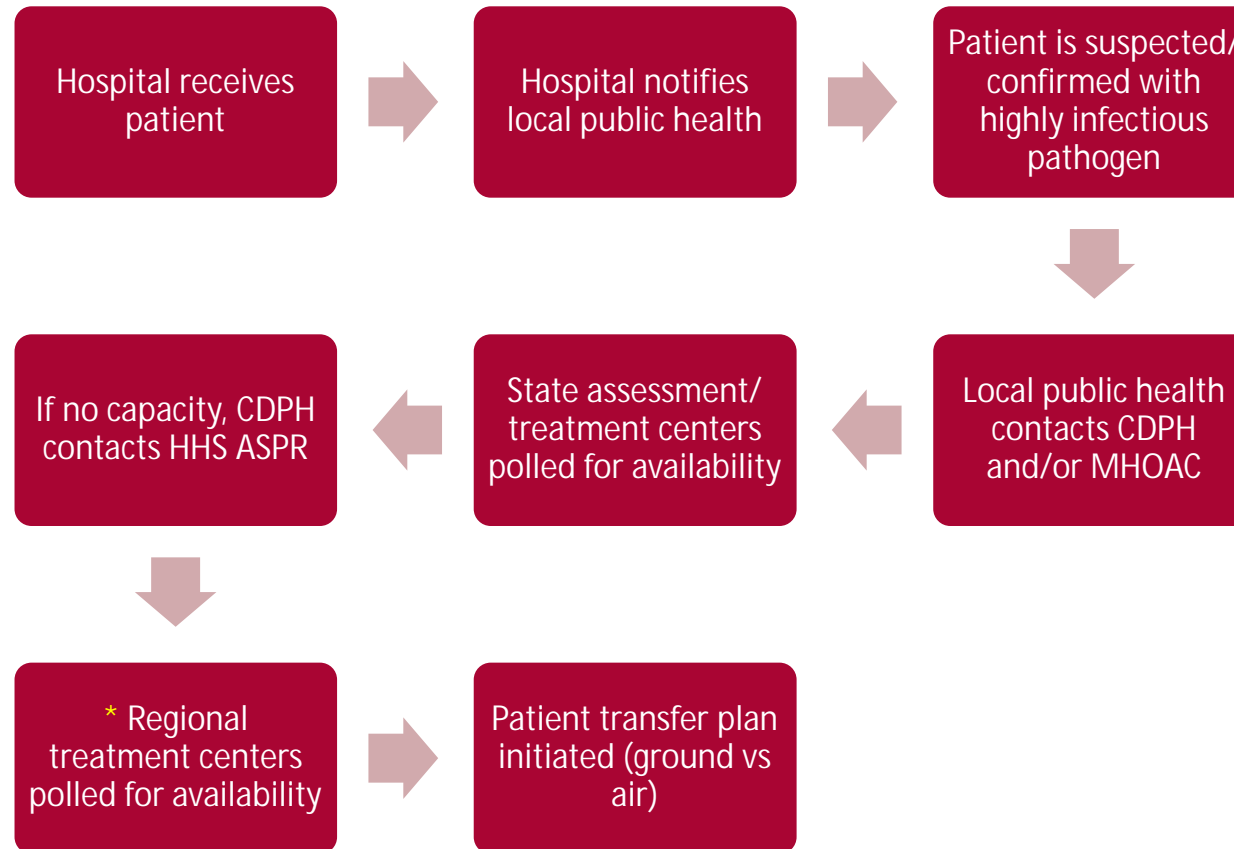
- Screen for travel history
- Notify hospital epidemiology/infectious diseases
- Notify local public health
- Consider testing or transfer
- You must have a plan
 - Stabilization of the patient
 - PPE supply
 - Specimen transport
 - Waste management
 - Communications plan
 - Employee monitoring
- It will take time to transfer the patient

Frontline Healthcare Facilities

- Identify patients with relevant exposure history⁵ and Ebola-compatible symptoms
- Isolate patients
- Inform health department
- Initiate testing if low risk; high risk should be transferred for evaluation and testing
- Staff trained on specimen transport, waste management, Standard Precautions; proficient in donning/doffing

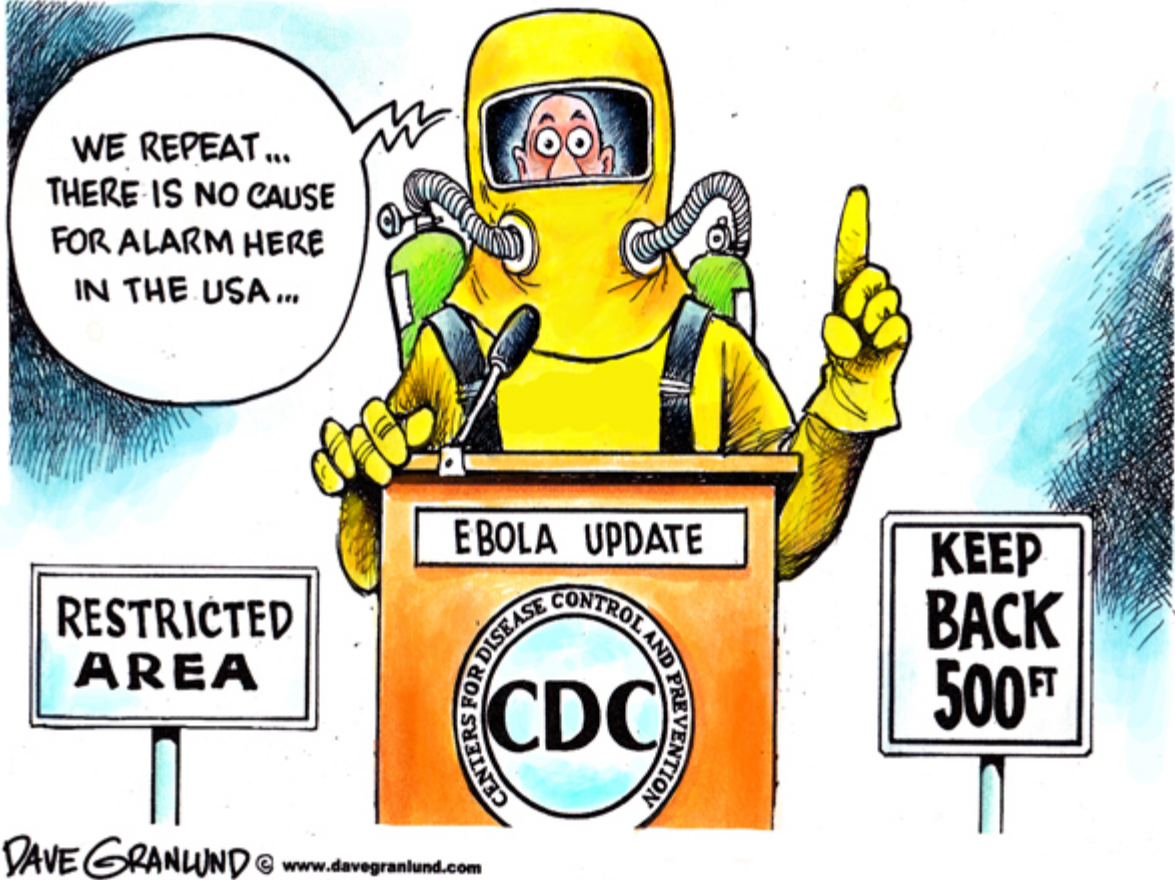
- The use of PPE should be based on the patient's clinical status³
- PPE for clinically stable patients³ should be sufficient for most patients
- Maintain access to Ebola PPE² sufficient for 12-24 hours of patient care, to be used if needed

How Patient Transfer Works



*Pathogen must be confirmed for regional treatment center activation

Questions?



Thank you!



Thank you!

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