

EBOLA

KDHCD ACTION PLAN

OCTOBER 2014

MELISSA JANES

INFECTION PREVENTION MANAGER

10-13-15

KAWEAH DELTA



*Infection
Prevention*

LEARNING OBJECTIVES

1. Discuss **general** knowledge of Ebola and its current situation
2. Recall **several action steps** the Kaweah Delta Ebola Task Force undertook in order to assure optimal preparedness for an Ebola patient, ultimately leading to preparation for any highly infectious disease patient
3. Describe the required **crucial** process necessary for implementing **precautions** related to donning and doffing of personal protective equipment (PPE) for an Ebola patient



LEARNING OBJECTIVES (CONT.)

4. Relate this organization's **efforts** for equipment acquisition, especially when supplies were scarce
5. Detail the measures Kaweah Delta implemented to **verify high standards** for cleaning endoscopes associated with the CRE (Carbapenem-resistant Enterobacteriaceae) outbreak in another facility

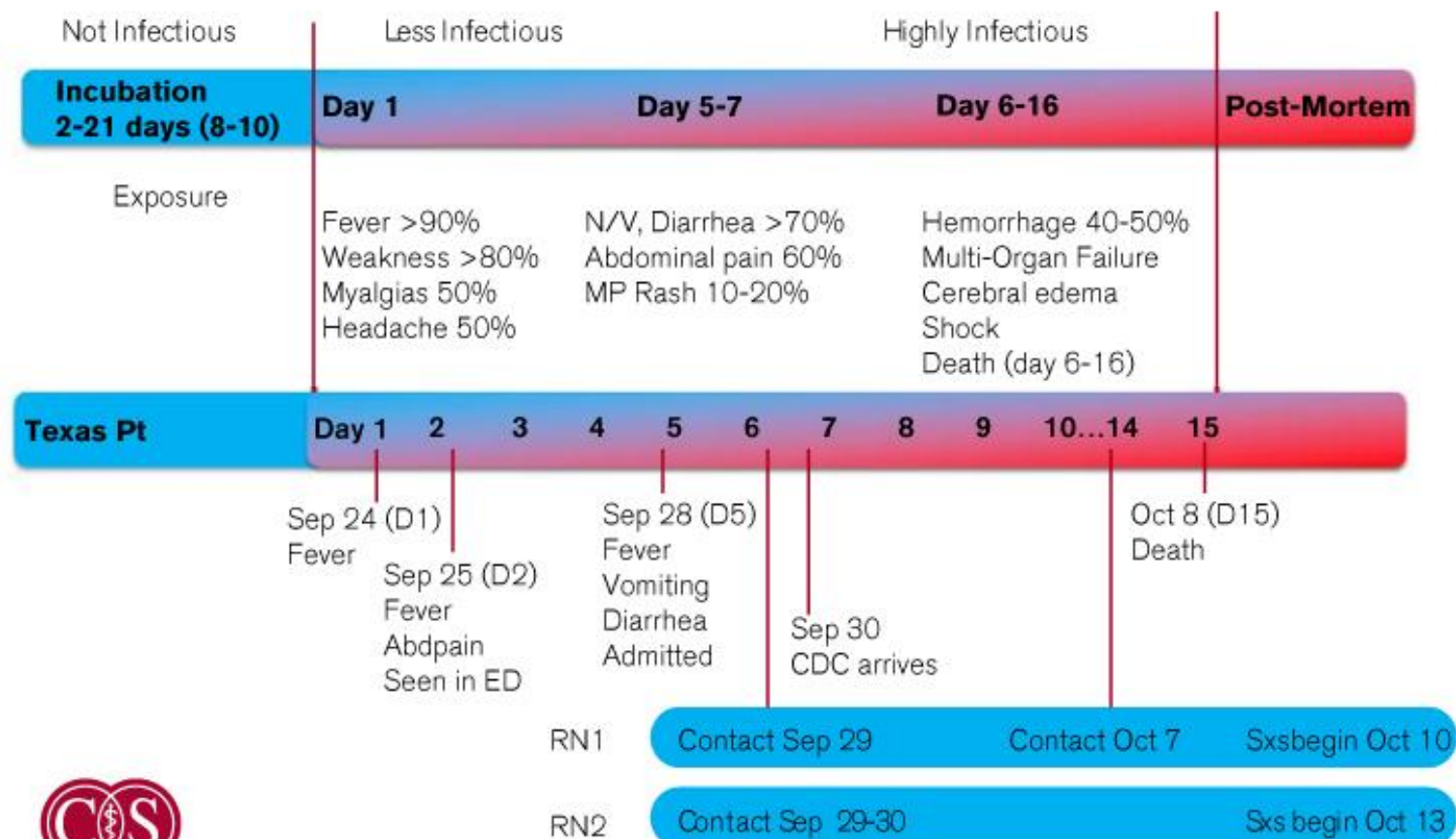


WHAT IS EBOLA

- **5 species of Ebola:** *Zaire ebolavirus*-West Africa
- **Signs and Symptoms:** Fever, severe headache, muscle pain, weakness, diarrhea, vomiting, abdominal pain and unexplained hemorrhage
- **Incubation:** 2-21 days (average 8-10 days)
- **Transmission:** Person to person via direct contact (broken skin or mucous membranes-eyes, nose or mouth) with blood or body fluids (urine, saliva, feces, vomit, breast milk, semen) of a person *ill* with Ebola. Also with needles and syringes and infected fruit bats or primates (apes or monkeys)
- **Considered Droplet and Contact:** Use *Strict Airborne/Contact Precautions (aerosol-producing procedures > body fluids)*
- **Infectiousness:** Not until symptoms start



Ebola: Clinical Course (CAVEAT: Public Media sources only)



CEDARS-SINAI. Courtesy J. Grein, MD

KAWEAH DELTA



KDHCD PREPAREDNESS: EBOLA

Current Status (9/30/15):

- Largest Ebola Epidemic in History
- **West Africa** (Guinea, Liberia and Sierra Leone)
 - 28,316 cases/11,310 deaths (40% mortality)
 - **USA** 4 cases/1 death
 - **Liberia** is considered Ebola free
 - **Guinea** and **Sierra Leone** are still considered to have widespread transmission- numbers are reducing



KDHCD PREPAREDNESS: EBOLA

- *What was the risk to KDHCD?*
 - **LOW** risk?
- *What did our preparedness need to be?*
 - **High** alert
 - **Ready** to respond



KDHCD PREPAREDNESS: EBOLA

- *What has the District done?*
 - ✓ Series of **Ebola** messages/Ebola **Advisories**/education packets (with screening protocols, checklists, Isolation Log, posters) since July 2014 to staff and physician offices
 - ✓ Nursing Managers/Leadership information-Leaders to **promote** material
 - ✓ **Posters** displayed in the ED, Urgent Care, Sequoia Prompt, Clinics



**SIGNS LIKE THIS
CAN BE FOUND POSTED
AROUND KDHCD**



KAWEAH DELTA



KDHCD PREPAREDNESS: EBOLA

- *What has the District done?*
 - ✓ IP Team (with Dr. Boken) reviewed **CDC and CDPH Checklists** for readiness and developed preliminary action plans (9/14)
 - ✓ **EOC/EPC** Stakeholder meeting further refined action plans
 - ✓ Assured **registration processes** ED, UC, Rural Health, L & D
 - ✓ Developed Ebola Virus Screening Protocol





Kaweah Delta Health Care District Ebola Virus Disease Screening Protocol



Start Here

START: IN ANY TRIAGE AREA

Q: Does the patient have a
FEVER >100.4 now or in the past
24 hours +/- headache, muscle
pain, nausea or vomiting, diarrhea,
abdominal pain or hemorrhage?

YES

NO

Unlikely to be Ebola Virus Disease.
Proceed with routine triage questions.

ASK THE PATIENT 3 QUESTIONS: In the past 21 days have **YOU** personally:

1. Been in the countries of Guinea, Liberia, or Sierra Leone?
2. Had contact with the blood or body fluids of a person with suspected or known Ebola Virus Disease?
3. Had direct contact with bats, rodents or primates from West Africa?

ALL NO

UNLIKELY TO BE EBOLA VIRUS DISEASE.
Proceed with routine triage questions.

ANY YES

1. Put mask on patient and cover patient.
2. Transport patient to ED room 8 or 9.
3. Essential staff only/limit procedures.

ACCESS THE EBOLA PPE CART AND INSTRUCTIONS

STRICT AIRBORNE/ CONTACT PRECAUTIONS (SAC)

1. Single patient room with door closed
2. Must have observer for donning and doffing
3. Wear Hood, N95 Mask, Face Shield, gown, apron, double extended gloves, boot covers.
4. Hand hygiene between donning and doffing-Extra care when removing PPE
5. Maintain entry log each time

1. Contact charge nurse.
2. Contact house supervisor ASAP (# 5610)
3. Notify IP ASAP (# 2471 or cell below)
4. Notify Tulare County Health Officer ASAP

DETERMINE LEVEL OF RISK BY ASKING QUESTIONS BELOW

HIGH RISK

1. Have you had direct skin contact with an Ebola victim or suspected case? This includes needle sticks or fluids such as blood, vomit, urine, sweat, or feces making contact with your skin?
2. Have you worked in a lab that processes Ebola samples and you weren't wearing PPE?
3. Did you participate in a funeral or burial or have contact with human remains of a suspected Ebola victim?

ALL NO

MEDIUM RISK

1. Did you spend time in a hospital or other healthcare facility and used appropriate PPE or were not involved in patient or lab care?
2. Were you in a house with a suspected case of Ebola but had no contact?
3. Did you have direct, unprotected contact with bats or primates?

ALL NO

LOW RISK

1. Were you in the country only and not exposed to any sick person or animal? This includes flight layovers.

YES

ANY YES

High Possibility of Ebola
Preferred location Endo Suite
Use ED #8 and #9.

ANY YES

Minimal Possibility of Ebola

1. Work up should include test for malaria, typhoid, CBC, CMP, Coags, CRP, blood cultures, HIV.
2. Minimize patient contacts
3. Disposition/ Transfer will be determined jointly by KDHCDC/ Case Manager and TCHSA

1. Infection Prevention will notify the Tulare County Health Officer
2. House Supervisor will notify Endoscopy Suite and Administration
3. Follow steps 1-3 under Minimal possibility of Ebola.

IMPORTANT NUMBERS

IP Office: 624-2471 M-F, 0800-1700
IP Manager: Melissa Janes mobile: 559-786-8238
ID Med Director: Dr. Dan Boken 559-741-5119
Field IP: Cherise McBride 559-280-6370
Tulare Co Commun Disease: 685-5720; after hours 471-7092

KAWEAH DELTA



Infection Prevention

KAWEAH DELTA



KDHCD PREPAREDNESS: EBOLA

- *What has the District done to prepare?*
 - ✓ Current **Lab/EVS** Guidelines distributed
 - ☐ **Point of Care**
 - ☐ **Disinfectants**
 - ✓ **New** CDC precautions (Strict Airborne/Contact-SAC) developed with PPE.
 - ✓ Central Logistics prepared and distributed **Ebola Carts** (PPE, directions, log, etc) to ED, Lab, UC, SP, new ASP, L & D, clinics)



Ebola Carts-All Areas



KAWEAH DELTA



ED Trauma Room: *From Cart to Totes*



KAWEAH DELTA



KDHCD PREPAREDNESS: EBOLA

- *What has the District done to prepare?*
 - ✓ Determined room placement (***ED # 8/9 and Endo Suite***)
 - ✓ **CDC Three Tiers of Response:** KDHCD identified by Tulare County as a *Frontline Healthcare Facility*-not “Ebola Assessment Hospital” (transfer “Ebola Treatment Center” Hospital UCLA Medical Center)
 - ✓ Consulted current CDPH and CDC guidelines, as well as lessons learned from hospitals who have had Ebola patients



CDC/CDPH AND CAL-OSHA NEW STANDARDS

- Precautions Level 1, 2 & 3 (**Level 1**-(Clinics), **Level 2**-Dry patient (Urgent Care/ED), **Level 3**-Wet patient (ED/L&D)
- **Donning and Doffing:** N95, surgical hood (fully covering), face shield, gown, apron, double extended gloves, boot covers, and **now** PAPRS and coveralls, if appropriate.
- Assure **observers** before donning and doffing
- **3 rooms** (donning, doffing and patient)
- **Competency Assessment Tool** (CAT) for Donning and Doffing
- Videos completed (Level I and II)



KDHCD PREPAREDNESS: EBOLA

What has the District done to prepare?

➤ Task force developed with 5 subcommittees:

1. **Clinical Care Model** for care of the Ebola patient (small number of trained staff). *Team identified.*
2. **Acquisition of Supplies**-assured PPE
3. **HR and Employee Health**-Employee benefits
4. **Education:**
 - Conducted staff education forums for all District staff
 - Physicians and Residents
 - Donning and doffing for ED staff done
 - Train the small Ebola Team Responders (Ebola and donning and doffing). *In process.*
5. **Other Services Plan**
6. **Process of formalizing the comprehensive plan.**

➤ Maintain collaboration with local, state and federal emergency operation officials as processes evolve

KAWEAH DELTA



ACQUISITION OF SUPPLIES

Subcommittee

MEMBERS:

- ☐ George Jauregui, Chair
- ☐ Coby LaBlue, Director of Finance, Chair
- ☐ Natalie Orozco, Central Logistics Supervisor
- ☐ Melissa Janes, IP Manager
- ☐ Karen Hansen, ED Manager

MISSION:

1. Review and assess current supply
2. Locate required personal protective equipment
3. Assure adequate supply



ACQUISITION OF SUPPLIES

Subcommittee

CHALLENGES:

- Largest vendors-immediately backordered
- Supplies arrived sporadically over a two month period
- CDC, CDPH, Cal-OSHA-the rules *they were a' changin-almost weekly!*
- Internet search for any available supplies in large quantities-thinking *outside the box*
- Amazon.com was our hero! AKA the “grey” market

KAWEAH DELTA



Creative Talents from Central Logistics!



Goggles, Gowns, Coveralls and Hoods.....Oh my!

KAWEAH DELTA



Desperate Times Call for Desperate Measures...



Time to dust off those PAPRS from the Bioterrorism Grant!

KAWEAH DELTA

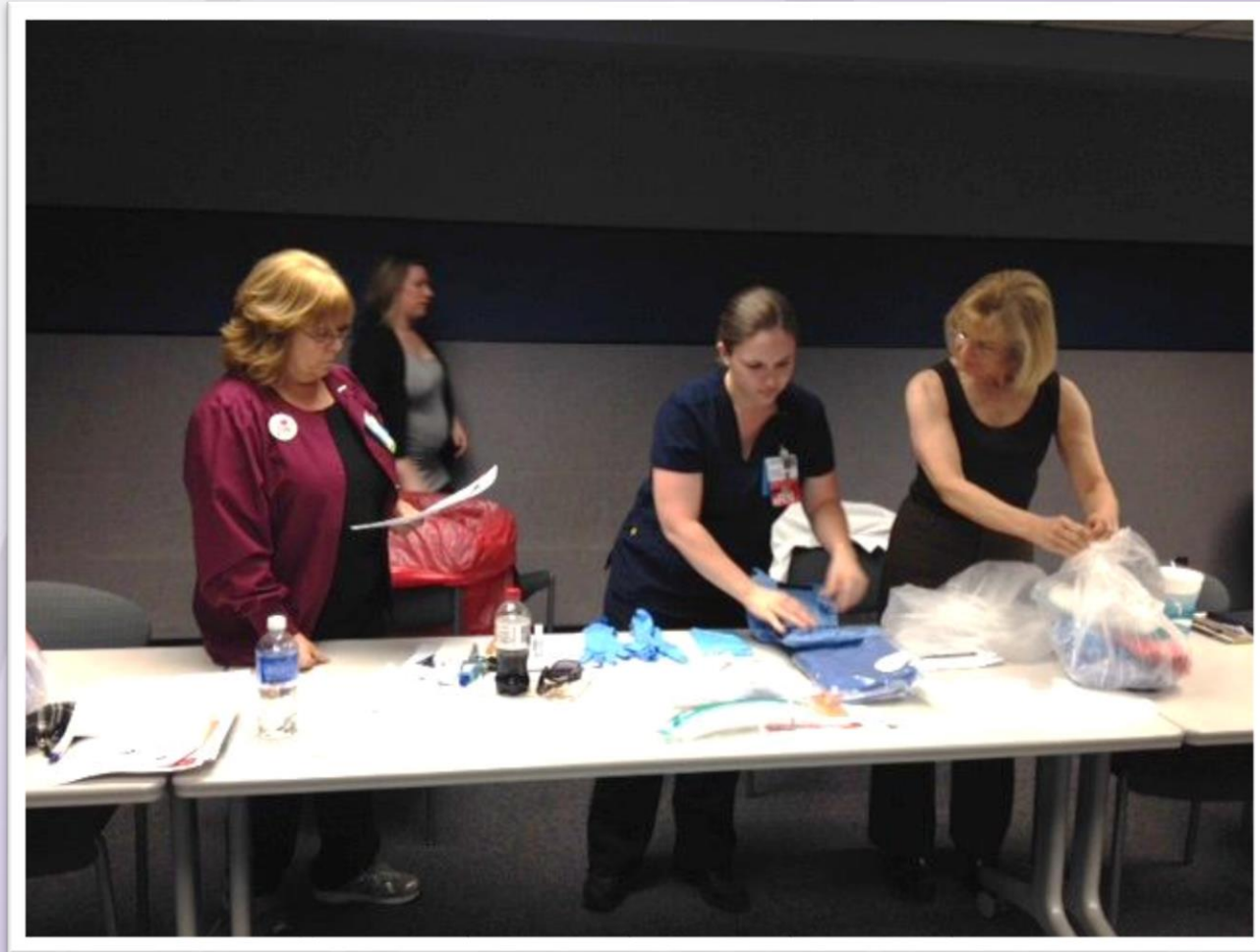


TRAINING THE TRAINER

KAWEAH DELTA



Our Educators at Work!



KAWEAH DELTA



So Many Steps!



KAWEAH DELTA



LEVEL OF PRECAUTIONS

Types of PPE Used

KAWEAH DELTA



LEVEL I PRECAUTIONS FOR CLINICS

Clinic Patients

Demonstrate

KAWEAH DELTA



LEVEL II STRICT AIRBORNE/CONTACT PRECAUTIONS

*Most commonly used for the “Dry” Ebola
Patient*

Urgent Care/ED

KAWEAH DELTA



NO VISITORS

STRICT AIRBORNE/CONTACT PRECAUTIONS

Required PPE:

1. Surgical Scrubs
2. Surgical Hood
3. Face shield (full length)
4. Mask N-95
5. Gown (impervious)
6. Apron
7. Double gloves (extended)
8. Boot covers
9. Wipeable shoes
10. Hand hygiene



Required For Care:

- Double bag waste/ linen: Wipe first bag with germicidal.
- Dedicated Equipment: (i.e., stethoscope, B/P Cuff, pens, Point of Care supplies)
- Disposable curtains
- Germicidal Wipes
- Sign in and out of room
- Observers for Donning and Doffing

Safety Point:

Do not touch face with hands/or adjust PPE while caring for patient

ESSENTIAL CORE STAFF ONLY

MINIMIZE PROCEDURES

INSTRUCTIONS FOR DONNING & DOFFING

Donning (To put on):

- Access donning room and engage observer
- Perform hand hygiene and don surgical scrubs
- Gather supplies
- Inspect PPE prior to donning
- Perform hand hygiene
- Don inner gloves
- Don boot covers (use chair)
- Don gown (cuff over inner gloves)
- Place N-95 mask securely
- Don surgical hood
- Don apron
- Don second pair of gloves (over cuff)
- Don face shield
- Verify integrity of PPE by observer
- Perform hand hygiene

Doffing (Removal of):

- Access doffing room and engage observer
- Inspect PPE for visible contamination, tears or cuts
- Hand hygiene
- Remove apron
- Hand hygiene
- Remove boot covers (dirty chair)
- Hand hygiene
- Remove outer glove
- Hand hygiene
- Remove face shield
- Hand hygiene
- Remove hood
- Hand hygiene
- Remove gown
- Hand hygiene
- Remove inner glove
- Hand hygiene
- Don new gloves
- Remove N-95 mask
- Hand hygiene
- Disinfect wipeable shoes with germicidal wipe (clean chair)
- Hand hygiene
- Remove gloves
- Hand hygiene
- Change into clean scrubs

Donning and Doffing Cart will travel!



KAWEAH DELTA





KAWEAH DELTA





KAWEAH DELTA





LEVEL III PAPR/WET EBOLA PATIENT

Demonstration of the new Level III

PAPRS and Coveralls

Volunteer?

KAWEAH DELTA



The New PAPRS have arrived!



KAWEAH DELTA



Maintaining State of Preparedness

- ☐ Merging the Ebola Preparation Plan into a Highly Infectious Disease (HID) Policy
- ☐ Donning and Doffing Part of Routine IP Education
- ☐ Intensify Ongoing Education for the ED staff
- ☐ Ebola (HID) Totes in All Areas
- ☐ Keep Stock Supply of PPE (6 PAPRS)

KAWEAH DELTA



KEEP CALM



AND DOFF CAREFULLY

Carbapenem-resistant Enterobacteriaceae (CRE) Community Outbreak Response

- ✓ **2/17/15:** Received AFL from CDPH: Call to review and revise current reprocessing protocols
- ✓ Last CRE case KDHCDC in **2013**
- ✓ **Collaboration:** IP Manager/Endoscopy Director/Reprocessing staff
- ✓ **Current processes:** Reviewed-only one ERCP scope in question used
- ✓ **3/5/15:** Staff Competency for reprocessing validated by Olympus Support Specialist using the current Olympus Endoscopic Competency Assessment Tool



Carbapenem-resistant Enterobacteriaceae (CRE) Community Outbreak Response

- ✓ **Executive Team/Board** notified of status
- ✓ **Revised** KDHCDC Endoscopic processing policy meeting all FDA/CDC mandates/guidelines
- ✓ **Reviewed** Lab processes to assure identifying and reporting CRE per CDC CRE Toolkit
- ✓ **Patient** and physician education supplied
- ✓ IP Developed **High Risk Survey Tool** based on FDA and Olympus current protocols. Surveyed reprocessing *staff-Outstanding performance with no recommendations for improvement*



Endoscopy-ERCP High Risk Assessment

Date of Inspection ____7/2/15_____					Person Completing Inspection :_Tina Toth Field IP Meghan Qualls Field IP
					Employee:
		Yes	No	Not Observed	Comments
<u>(The Endoscope should be visually examined, especially the distal sheath, for excessive wear and tear (e.g. cracks/tears) before reprocessing)</u>					
Precleaning: Performed at the point of use, before bioburden has the opportunity to dry and before complete decontamination					
1	Refer to the reprocessing manual to determine if the instructions specify the use of water or detergent for precleaning	x			
2	Wear appropriate personal protective equipment	x			
3	Turn OFF the video processor and light source	x			
4	Prepare a clean 500 ml container of water/detergent solution and wipe down the insertion tube with a detergent or water-soaked lint-free cloth	x			
5	Turn ON the suction pump and close the biopsy valve cap.	x			
6	Immerse the distal end of the insertion section in detergent solution or water; *FDA recommends raising and lowering the elevator three times***.	x			
7	Depress the suction valve, and aspirate detergent solution or water into the channel for 30 sec.	x			
8	Remove distal tip from detergent solution or water.	x			
9	Depress the suction valve, and aspirate air for 10 seconds.	x			
10	Turn OFF the suction pump.	x			
11	Turn the light source ON and switch airflow to HIGH	x			
12	Switch OFF the airflow regulator on the light source	x			
13	Detach the air/water valve from the endoscope, and place it in the detergent solution.	x			
14	Attach air/water channel cleaning adapter	x			
15	Immerse the distal tip in clean water.	x			
16	Depress air/water channel cleaning adapter, and feed water for 30 seconds.	x			
17	Release the air/water channel cleaning adapter to flush air for 10 seconds.	x			

Thank you!

Questions?

KAWEAH DELTA

