# Welcome to the Emory SCDP ECHO "Special SCDP Webinar: Ebola/Special Pathogens Table Talk Discussion"

The session will begin soon.













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## "Special SCDP Webinar: Ebola/Special Pathogens Table Talk Discussion"











For educational and quality improvement purposes, we will be recording this video session. By participating in this clinic you are consenting to be recorded – we appreciate and value your participation.

Project ECHO® collects registration, participation, questions/answers, chat comments, and poll responses for some teleECHO® programs. Your individual data will be kept confidential. These data may be used for reports, maps, communications, surveys, quality assurance, evaluation, research, and to inform new initiatives.

If you have any questions or concerns about this ECHO program, please email scdp.echo@emory.edu.

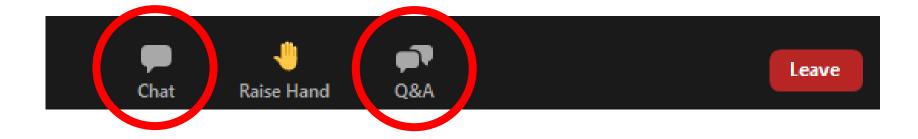
## About this ECHO Program

- ECHO stands for "Extension for Community Healthcare Outcomes"
- Telementoring model, in which expert teams lead virtual clinics, amplifying the capacity for providers to deliver best-in-practice care to their own communities
- This ECHO program meets every other Thursday and discusses bioprepardness topics and special pathogens
- Sessions are recorded and published as a podcastsubscribe so you never miss an episode!



### Reminders

- Experiencing IT issues? Send a message to IT ECHO in the Zoom chat.
- If you would like to ask a question, type it into the Q&A feature.



## Continuing Education Accreditation





 In support of improving patient care, this activity has been planned and implemented by Emory University and Project ECHO®. Project ECHO® is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC), to provide continuing education for the healthcare team.

#### **AMA Designation Statement**

Project ECHO® designates this live activity for a maximum of 1.0 AMA PRA Category 1 Credit $^{TM}$ . Physicians should claim only the credit commensurate with the extent of their participation in the activity.

#### **ANCC Designation Statement**

Project ECHO® designates this live activity for a maximum of 1.0
 ANCC contact hour. Nursing contact hours will be awarded for successful completion of program components based upon documented attendance and completion of evaluation.

### Disclosures

Project ECHO®, in compliance with the ACCME Standards for Integrity and Independence in Accredited Continuing Education, requires that anyone who is in a position to control the content of an educational activity disclose all relevant financial relationships they have had within the last 24 months with an ineligible company.

None of the planners and presenters for this educational activity have relevant financial relationship(s) to disclose with ineligible companies whose primary business is producing, marketing, selling, re-selling, or distributing healthcare products used by or on patients.

#### **PRESENTERS**

Alex Isakov, MD, MPH, FAEMS Kari L Love, RN MS CIC FAPIC Cherie Drenzek, DVM, MS

#### **PLANNING COMMITTEE**

Gavin Harris, MD Sharon Vanairsdale, DNP, APRN, ACNS-BC, NP-C, CEN, FAEN, FAAN Aneesh, Mehta, MD Allison Klajbor, MBA Yasmin Thornton, MPH

## Agenda

- Welcome & Introductions
- HHS Region 4 Situation Report
- Poll Questions
- Case Presentation
- Table Talk Discussion
- Q&A
- Closing Remarks & Poll Question



#### Kari L Love, RN MS CIC FAPIC

- Currently the Corporate Director of Infection Prevention at Emory Healthcare and has worked in healthcare for over 30 years as a Registered Nurse.
- Has published and co-authored books and numerous articles in peer-reviewed journals and continues to remain involved in the day-to-day challenges of infection prevention.
- Recipient of the Daisy Leadership Award for her contributions during the COVID pandemic response at Emory and has received recognition for her leadership and clinical achievements.
- Certified in infection prevention and control (CIC), recognized as a Fellow of APIC (FAPIC), and currently completing her Ph.D. in Translational Health Sciences at George Washington University.



Sharon Vanairsdale, DNP, APRN, ACNS-BC, NP-C, CEN, FAEN, FAAN

- Associate Professor, clinical track, and the Program Director for the Serious Communicable Diseases Unit at Emory University Hospital
- Manages unit readiness and hospital preparedness for patients with special pathogens and has been involved with the preparation and response to the COVID-19 pandemic at Emory Healthcare.
- Director of Education and Resources for the National Emerging Special Pathogens Training and Education Center (NETEC), a training program funded by HHS to prepare healthcare workers to safely and effectively manage patients with special pathogens
- Chair of the Emerging Infectious Diseases Expert Panel for the American Academy of Nursing and a member of the Emergency Nurses Association Position Statement Committee.



Alex Isakov, MD, MPH, FAEMS

- Professor of Emergency Medicine, Emory University's School of Medicine
- Director, Section of Prehospital and Disaster Medicine, Emory University
- Executive Director, Office of Critical Event Preparedness and Response
- EMS lead, National Emerging Special Pathogens Training and Education Center (NETEC)
- Designated Subject Matter Expert for ASPR TRACIE, with whom he led the development of the EMS Infectious Disease Playbook.
- Medical director for the Emory-Grady EMS Biosafety Transport Program.



#### Cherie Drenzek, DVM, MS

- State Epidemiologist and Chief Science Officer, Georgia Department of Public Health.
- Past experiences include serving as the Infectious Disease Medical Epidemiologist, the Director of the Acute Disease Epidemiology Section, and the Deputy State Epidemiologist at Georgia Department of Public Health
- Also serviced as the Assistant Professor of Epidemiology at the University of Georgia College of Veterinary Medicine.
- Led Georgia Department of Public Health's epidemiologic response to the COVID-19 Pandemic.

# Region 4 Special Pathogens of Concern Situation Report



27 October 2022





#### Situation Report 27 October 2022

#### Uganda: Ebola Virus Disease Outbreak 2022 Affected Areas SOUTH SUDAN DEMOCRATIC KENYA REPUBLIC OF Puerto Rico THE CONGO NORTHERA REGIÓN Country Boundary<sup>1</sup> Region Boundary Kassanda District District Boundary<sup>2</sup> Venezuela 10 cases\*, 2 deaths\* UGANDA District with reported cases\* District where cases have been reported in the previous 21 days<sup>8</sup> Kagadi District 1 case, 1 death District where cases" have been **CEASTERN** diagnosed/detected1 Operational Ebola Treatment Unit (ETU)<sup>3</sup> Mityana District Bunyangabu District Operational Ebola Lab\* case, 0 deaths Kampala Bolivia Note: All cases/deaths indicated in this map are UVRILIN Kampala District CONFIRMED cases/deaths only. Kyegegwa District 14 cases, 0 deaths cases, 1 death \*20 additional probable cases/deaths have been CENTRAL reported in the following districts: Mubende (19), Wakiso District Kassanda (1). REGION Mubende District 1 case, 0 deaths 60 cases\*, 24 deaths\* "Cases likely acquired infection from a district previously reporting cases. 82022 Google, (NEG) DATA SOURCE(S) TANZANIA \*ESRI 2021, "Uganda Bureaulof Statistics 2021, (Uganda Ministry of Health 2022) Centers for Disease Control and Prevention ATSDR Agency for Toxic Substances Geospatial Research, Analysis, and and Disease Registry

Services Program





https://scdu.emory.edu





# Poll Questions

# Case presentation: setting the stage







- 33M, from GA presents to a local emergency room following the development of fever to 103.4F, abdominal pain, vomiting and body aches x 3 days
- 10 days prior he had returned to Georgia following a medical missionary trip to Kampala, Uganda. As per CDC guidance he was quarantining at home alone after traveling through Atlanta Hartsfield-Jackson Airport
- In Uganda, he had provided care to many patients from surrounding districts at a city hospital – of note one patient died from presumed sepsis



What do you do if this patient presents to your Emergency Department?

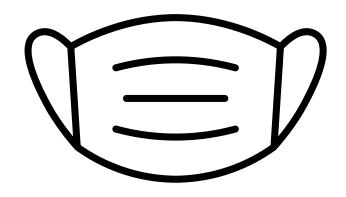
## Identify

- Do you have the following symptoms:
  - Bruising or bleeding
  - Vomiting and/or diarrhea
  - Fever
  - Joint and/or muscle pain
  - Rash
  - Weakness
  - Severe headache
- Have you traveled internationally in the last 3 weeks?



## Isolate

- Place a mask on the patient
- Place patients in a private room with door closed
- Perform hand hygiene...a lot!
- Wear appropriate PPE



# What PPE should clinicians don?

### **Ebola? What PPE do I Need?**

#### **Acute (Wet)Phase and Body Fluid Exposure**

Surgical hood (extends to shoulders)
Respirator or PAPR with full face shield, and helmet

Impermeable gown or coverall

2 pair of gloves
Outer gloves must have extended cuffs

Single use fluid resistant apron covers torso to mid-calf

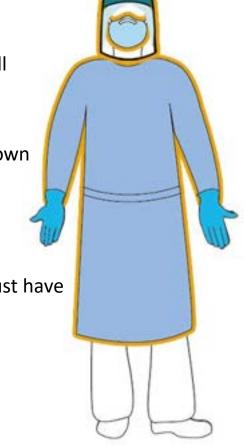
Single use shoe or boot cover

## Absolute Minimum for PUI – No vomiting, bleeding or diarrhea

Face mask and full face shield

Fluid resistant gown or coverall

2 pair of glovesOuter gloves must have extended cuffs



| Virus Family | Illness Caused  | Common<br>Geography   | Vector or<br>Source      | Person-to-<br>person spread | Precautions                                       | PPE | Comments  |
|--------------|---|---|--------------------------|-----------------------------|---|-----|---|
| Filoviridae  | Ebola Virus Disease   | Central, sub-<br>Saharan Africa                                   | Presumed bat             | YES                         | Contact,<br>Droplet/Airborne,<br>Eye              |     | Full body coverage<br>for acute (wet)   |
|              | Marburg virus   |   | Fruit bat                |                             |   |     | phase   |
| Arenaviridae | Lassa fever   | West Africa   | Rodents                  | YES                         | Contact,<br>Droplet/Airborne,<br>Eye              |     | Full body coverage<br>for acute (wet)<br>phase  |
|              | Junín<br>Machupo (Bolivian HF)<br>Guanarito (Venezuelan HF)<br>Sabia (Brazilian HF) | South America   |                          |                             |   |     |   |
| Bunyaviridae | CCHF — Crimean Congo<br>Hemorrhagic Fever   | Europe,<br>Mediterranean,<br>Middle East,<br>Africa, India, China | Tick, infected livestock | YES                         | Contact, Droplet*,<br>Eye                         |     | *Add respiratory<br>protection (N95 or †) for<br>centrifugation   |
|              | Hantaviruses<br>(HPS/HFRS*) (Sin<br>Nombre, Andes virus)                            | Worldwide   | Rodent                   | Possible                    | Standard Precautions unless Andes virus suspected |     | Contact, Droplet/Airborne, Eye for potential Andes virus or contact/clean- up of rodent droppings           |
|              | Rift Valley Fever   | All of sub-Saharan<br>Africa                                      | Mosquito                 | No                          | Standard<br>Precautions                           |     |   |
| Flaviviridae | Yellow Fever  | Tropics   | Mosquito                 | Blood*                      | Standard<br>Precautions                           |     | *Potential risk of Yellow<br>Fever transmission<br>in blood<br>transfusion, immediately<br>post vaccination |
|              | Dengue  | Tropics   | Mosquito                 | No                          |   |     |   |
|              | Kyanasur  | India   | Tick                     | No                          |   |     |   |
|              | Omsk  | Siberia   |                          |                             |   |     |   |

After identifying and isolating, what should healthcare workers do next?

## Inform

- Notify the appropriate officials at your organization
- Inform jurisdictional public health officials (in Georgia: 1-866-PUBHLTH)
- Ensure the team you are working with have situational awareness so there are no inadvertent exposures proper signage, etc.
- Keep the patient informed



# How is GDPH managing returning travelers from Uganda?

### What is Public Health's Role?

"We Protect Lives", so there are 4 Lines of Defense:

- 1. <u>Control EVD Outbreak in Uganda</u>: Using public health control measures of isolating cases, contact tracing and monitoring, and stringent infection control.
- 2. Exit screening in Uganda to prevent ill persons from traveling
- Funneling, Risk Assessment, Entry Screening, and Post-Arrival Monitoring in the US for all travelers originating from Uganda (via DPH electronic system EAMS)\*
- **4. Early recognition of suspect cases** that have traveled here--so that rapid isolation and safe treatment can be implemented (engage IDN infrastructure in Georgia)

## Stop EVD Transmission: Overarching Goal

- The goal is to rapidly identify and isolate Ebola/SUDV patients so that they receive appropriate medical care and secondary transmission is prevented.
- DPH Medical Epidemiologists are available 24/7 at **1-866-PUB-HLTH** to assist in triage and risk assessment of patients who may meet the EVD Person Under Investigation (PUI) criteria.
- Diagnostic testing is performed at the Georgia Public Health Laboratory (GPHL)
- DPH Med Epis will coordinate clinical consult, specimen collection, packaging and transport for laboratory testing at GPHL, and patient EMS transport if needed (IDTN)
- Our collective mission to protect lives requires collaboration between healthcare providers, hospitals, EMS, and Public Health to identify, triage, and manage suspected EVD infections to, ultimately, prevent EVD transmission in our state.

While informing appropriate officials, what is happening with the patient?

# What is on the initial differential diagnosis list?

# What testing is required?

## Additional Clinical Information

 Initial examination reveals an acutely ill man with tachycardia, tachypnea, hypotension with leukopenia, thrombocytopenia, hypokalemia, hypomagnesemia, acute kidney injury, and elevated transaminases



With this new information, has your differential diagnosis list changed?

If a transfer to the closest special pathogen treatment center is warranted, how do you prepare for that?

## Considerations for Transport

- Call public health to determine if special transport capability is available
- Communication with sending and receiving facility
  - Patient condition, patient prep, point of patient transfer
- Implement a hierarchy of controls for ambulance transport
  - Engineering, work practices, PPE
  - Checklists, trained observers/supervisory personnel
- Clinical considerations
  - Special precautions, resuscitation, clinical deterioration
- Operational considerations
  - Mechanical failure, PPE breech, Biohazard spill, Provider down
- Cleaning, disinfection, waste management
- Post-mission health surveillance

What do you do with the waste generated by a patient with a suspected or confirmed special pathogen?

#### Packaging Requirements:

You must use packaging meeting the requirements for a Division 6.2 Category A material (49 CFR 173.196) or Special Permit DOT-SP 16279.

#### **Packaging Preparation:**

#### 1 Bag the waste

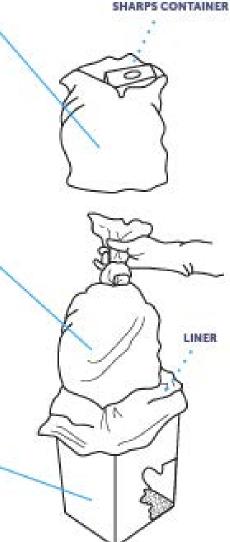
- Put contaminated waste into a leakproof primary receptacle
- · Use authorized container for sharps
- Wrap sharp edges to prevent puncturing of the plastic bag
- Close the packaging in accordance with closure instructions
- If following a DOT-SP, spray exterior surface with EPA-registered disinfectant that is recommended by the CDC for use against the Ebola virus

#### 2 Double bag

- Place primary receptacle into a leakproof secondary packaging with the closure facing upward
- Include absorbent material sufficient to absorb the entire contents of all primary receptacles
- Close the packaging in accordance with closure instructions
- If following a DOT-SP, spray exterior surface with disinfectant

#### 3 Put contaminated waste in outer packaging

- Put primary receptacle and secondary packaging in rigid outer packaging
- Close the packaging in accordance with closure instructions
- If following a DOT-SP, spray exterior surface with disinfectant



PROPERLY CLOSED



## Are you preparing suspected **Ebola- contaminated waste** for transportation?

Ebola contaminated waste is considered a Category A infectious substance and must be doubled bagged and placed in a rigid outer packaging prior to transportation.



For more information on transporting infectious substances, please visit PHMSA's website:

https://www.phmsa.doi.gov/transporting-infectious-substances/ transporting-infectious-substances-overview

or contact the Hazmat Info Center: 1-800-467-4922.

PHI-ISO-0000-0000

If a special pathogen is suspected, how are staff monitored and for how long?

# What resources are available for frontline facilities?

- Georgia Department of Public Health: <a href="https://dph.georgia.gov/TravelClinicalAssistant">https://dph.georgia.gov/TravelClinicalAssistant</a>
- Emory Serious Communicable Diseases Unit:
   <a href="https://med.emory.edu/departments/medicine/divisions/infectious-diseases/serious-communicable-diseases-program/ebola-resources/index.html">https://med.emory.edu/departments/medicine/divisions/infectious-diseases/serious-communicable-diseases-program/ebola-resources/index.html</a>
- National Emerging Special Pathogens Training and Education Center: <a href="https://repository.netecweb.org/exhibits/show/ebola2021/ebola">https://repository.netecweb.org/exhibits/show/ebola2021/ebola</a>
- NETEC Frontline Preparedness Checklist: <a href="https://repository.netecweb.org/items/show/1724">https://repository.netecweb.org/items/show/1724</a>
- NETEC Exercise Templates for frontline facilities: https://repository.netecweb.org/items/show/172

- CDC: <a href="https://www.cdc.gov/vhf/ebola/index.html">https://www.cdc.gov/vhf/ebola/index.html</a>
- EMS Infectious Disease Playbook: https://repository.netecweb.org/items/show/16
- Frontline Hospital Planning Guide for Special Pathogens: https://repository.netecweb.org/items/show/499
- Department of Transportation Solid Waste Contaminated with Category A Infectious Substance: <a href="https://www.phmsa.dot.gov/sites/phmsa.dot.gov/files/2022-06/Cat%20A%20Waste%20Planning%20Guidance%20-%20Final%20-%202022-06.pdf">https://www.phmsa.dot.gov/sites/phmsa.dot.gov/files/2022-06/Cat%20A%20Waste%20Planning%20Guidance%20-%20Final%20-%202022-06.pdf</a>
- Region IV Concept of Operations (CONOPS): <a href="https://netec.org/about-netec/partners-regional-contacts/#regional-contacts">https://netec.org/about-netec/partners-regional-contacts/#regional-contacts</a>

Cherie L. Drenzek, DVM, MS
State Epidemiologist
Chief Science Officer
Georgia Department of Public Health
404-657-2588
cherie.drenzek@dph.ga.gov

1-866-PUB-HLTH: Ask for a Medical Epidemiologist!

Interim Guidance for Emergency Medical Services (EMS)
Systems and 9-1-1 Emergency Communications
Centers/Public Safety Answering Points (ECC/PSAPs) for
Management of Patients Under Investigation (PUIs) for
Ebola Virus Disease (EVD) in the United States



Guidance for Developing a Plan for Interfacility
Transport of Persons Under Investigation or Confirmed
Patients with Ebola Virus Disease in the United States



EMS Infectious Disease Playbook



# Q&A Discussion

Facilitated by Gavin Harris

# Poll Question

## Thank you for participating in today's session!

Please take a moment to provide us feedback on this ECHO session by completing our brief survey – please use the link provided in the chat.

A certificate of attendance is available upon completing the survey.





# Access Resources & Subscribe to the Podcast

- Podcast version of this session, slide deck, and other resources will be available next week on our website.
  - https://med.emory.edu/departments/medicine/divisi ons/infectious-diseases/serious-communicablediseases-program/covid-19-resources/access-pastecho-recordings.html

## **Upcoming Sessions**

- 11.10.22: Lab Considerations for Special Pathogens
  - Register today: <a href="https://zoom.us/webinar/register/WN qxYRCdM5QwC0aCe1i">https://zoom.us/webinar/register/WN qxYRCdM5QwC0aCe1i</a>
     uzccQ

# Thank you!