Alabama's Serious Infectious Disease Network

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Produced by the Alabama Department of Public Health Distance Learning and Telehealth Division

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CDC Disclaimer

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Objectives

- Define the purpose of Alabama's Serious Infectious Disease Network (SIDN)
- Discuss the SIDN tiered approach response for each provider

Objectives

- Discuss the SIDN screening tools for EMS providers
- Discuss the functions of unique operations that are specific to suspect patients with a serious infectious disease

Serious Infectious Disease Network

- Network of facilities within Alabama
- Uses a tiered approach to identify patients presenting with diseases of concern
- Utilized with diseases that require intense and specialized clinical management

Serious Infectious Disease Network

 Was originally developed around Ebola, but planning is ongoing to adapt to other serious infectious diseases such as smallpox, Sudden Acute Respiratory Syndrome (SARS), and other emerging pathogens

Topics Covered

- Serious Infectious Disease Network (SIDN)
 - Ebola Overview
 - Frontline Facilities
 - Assessment Facilities
 - Treatment Centers
 - Emergency Medical Services (EMS)
- Infectious Diseases of Concern

Ebola Outbreak in West Africa, 2014 - 2016

- Outbreak was recognized in March 2014 in Guinea
- Quickly came to involve Sierra Leone and Liberia, with isolated cases in other West African countries
- U.S. and other nations eventually implemented travel advisories and screening of international travelers

Source: https://www.cdc.gov/vhf/ebola/outbreaks/2014-west-africa/index.htm.

Ebola in West Africa



Ebola Case Counts

- Case Counts (as of April 13, 2016)
 - Total Cases (Suspected, Probable, and Confirmed): 28,652
 - Laboratory-Confirmed Cases: 15,261
 - Total Deaths: 11,325

Ebola in the U.S.

- August 2014: First American Ebola patient flown to U.S. for treatment
- September 2014: First Ebola case confirmed in U.S., Texas – traveler from Liberia
 - Two healthcare workers caring for a patient confirmed positive for Ebola
- October 2014: Returned traveler confirmed positive – New York City

Recent Ebola Activity

 May 2017: 9 cases including 3 deaths reported, 6 hospitalized – Democratic Republic of Congo

Hospital Preparedness Program

- Recognizes the need to ensure US healthcare system is prepared to respond to future Ebola patients
- Provides funding to ensure the US healthcare system is:

*ASPR Funding opportunity EP-U3R-15-002

Hospital Preparedness Program

- "...ready to safely and successfully identify, isolate, assess, transport, and treat patients with Ebola or patients under investigation for Ebola...." *
- Preparedness for Ebola will improve response to emerging and highly contagious pathogens

*ASPR Funding opportunity EP-U3R-15-002

Serious Infectious Disease Network

 Establish a network of facilities within Alabama that will ensure the appropriate and safe management of patients with Ebola Virus Disease (EVD) or other highly infectious, severe diseases

Serious Infectious Disease Network

- Tiered Approach
 - Identify patients presenting with diseases of concern
 - Coordinate the appropriate response among local, state, and federal partners

The Tiered Approach

- Frontline Healthcare Facilities
 - Identify, Isolate, Inform
- Assessment Hospitals
 - Test and Transfer

<u>Preparing U.S. Hospitals</u> <u>for Ebola</u>



The Tiered Approach

- Treatment Center
 - Treat



<u>Preparing U.S. Hospitals</u> <u>for Ebola</u>

Frontline Healthcare Facility

- Acute care hospitals and other emergency settings
 - Hospital Emergency Departments
 - Urgent Care Clinics
 - Critical Access Hospitals



<u>Interim Guidance for Preparing Frontline Healthcare</u> Facilities

Frontline Facility: Identify, Isolate, Inform

- Identify
 - Review travel history
 - Assess signs and symptoms (fever/Ebola compatible)



Identify, Isolate, Inform

Frontline Facility: Identify, Isolate, Inform

- Isolate
 - Determine if PPE needed and type
 - Facility should have enough PPE for 12-24 hrs of care



Identify, Isolate, Inform

Frontline Facility: Identify, Isolate, Inform

- Inform
 - Notify hospital infection control & appropriate staff
 - Notify Health Department,
 - 1-800-338-8374

Identify, Isolate, Inform



Frontline Facility role in SIDN

- First contact with patient
 - Conduct initial health assessment
 - Recognize & identify symptoms of a serious infectious disease
 - Provide interim care to patient <12-24 hrs</p>



Frontline Facility role in SIDN

- Set the tone for an effective response
 - Notify appropriate Public Health officials,
 - 1-800-338-8374



Frontline Facility role in SIDN

- Establish patient and worker safety
 - Implement isolation protocols
 - Implement infection prevention and control protocols



Assessment Hospital

- Elects to participate in evaluation
- Designated by the State Health Officer after rigorous review
- Receives and isolates patient
- Provides immediate evaluation and coordination of testing

https://www.cdc.gov/vhf/ebola/healthcare-us/preparing/assessment-hospitals.html

Assessment Hospital

- Cares for patient until Ebola (or other disease) is confirmed or ruled out (up to 5 days)
- Maintains enough Ebola PPE for up to 5 days of care
- Transfers patient to an Ebola Treatment Center, if confirmed

https://www.cdc.gov/vhf/ebola/healthcare-us/preparing/assessment-hospitals.html

Ebola Treatment Center

- Receives and isolates patient with Ebola
- Cares for patient for duration of illness
- Maintains enough Ebola PPE for at least7 days of care (will restock if needed)
- Staffing plan to manage several weeks of care

https://www.cdc.gov/vhf/ebola/healthcare-us/preparing/treatment-centers.html

Tiered Approach - Alabama

Tier Level	Location
Frontline Healthcare Facilities	Statewide: • Urgent Care / Ambulatory Care • Hospitals
Assessment Hospitals	University of Alabama at Birmingham Huntsville Hospital University of South Alabama (Mobile)
Ebola Treatment Centers	Emory Hospital (Atlanta, GA) – designated for AL 55 nationwide (as of 02/18/2015)*

* https://www.cdc.gov/vhf/ebola/healthcareus/preparing/current-treatment-centers.html

Considerations for EMS: Screening

 Screening for Ebola starts with the Public Safety Answering point

Considerations for EMS: Screening

 If patient has Ebola-like symptoms (fever, headache, weakness, muscle pain, vomiting, diarrhea, abdominal pain, or unexplained hemorrhage)

AND

Considerations for EMS: Screening

 Has traveled to a country with widespread Ebola transmission OR been in contact with an individual with confirmed Ebola virus disease

Implement your Ebola Plan AND Call the Alabama Trauma Communications Center (ATCC)

Considerations for EMS: Consultation

- What happens when I call ATCC?
 - ATCC will connect you to the ADPH Office of EMS Medical Director who can then assist you in the <u>risk</u> <u>stratification</u> of the patient and provide <u>guidance for your response</u> based on the risk stratification and current CDC guidance. This may involve telephone communication with the patient as well.

Considerations for EMS: Consultation

- As we have learned from our recent experiences, in many cases we will be able to determine that the patient is at No Identifiable Risk and therefore will not require Ebola precautions
- Calling ATCC for ADPH physician consultation is mandatory in these cases!

Considerations for EMS: Isolation

- Patients should be separated from other individuals as much as possible
 - For example, in the back of the ambulance with the door closed or in a room with the door closed

Considerations for EMS: Isolation

- Limit exposure as much as possible
 - Use the minimum number of EMS Providers necessary to safely transport the patient
 - When moving the patient to and from the ambulance, clear and secure pathways of travel in order to avoid accidental contamination of bystanders

Considerations for EMS: PPE

- Do NOT have physical contact with the patient without donning the proper Personal Protective Equipment (PPE)
- Follow standard contact and droplet precautions

Considerations for Frontline/EMS: Transport

- In accordance with Alabama state plan, Frontline facilities may transfer Person Under Investigation (PUI) to either an assessment hospital or treatment center if:
 - PUI has a higher probability of EVD or is severely ill

Considerations for Frontline/EMS: Transport

- Coordination between Alabama
 Department of Public Health & Office of Emergency Medical Services (OEMS)
 - Medical Director on Call (MDOC)
 - Center for Emergency Preparedness (CEP)
 - Area Emergency Preparedness (EP)
 Coordinator

Considerations for Frontline/EMS: Transport

- MDOC & OEMS
 - After testing approval, MDOC to determine which Assessment Hospital will receive PUI
 - Determine means of transport (EMS, privately owned vehicle)
 - ■Level of PPE required
- CEP Logistics & Area EP Coordinator
 - ■Coordinate transport of PUI

Medical Waste Management

 Ebola-associated medical waste that has been inactivated (e.g., autoclaved) or incinerated may be transported as regulated medical waste

Medical Waste Management

- Ebola-associated waste that has been properly inactivated or incinerated is no longer considered a Category A infectious substance and is no longer infectious
 - http://www.cdc.gov/vhf/ebola/hcp/surv ivability-ebola-medical-waste.html
 - http://www.epa.gov/waste/nonhaz/ind ustrial/medical/programs.htm

Medical Waste Management

 Alabama Department of Environmental Management (ADEM) maintains a list of permitted medical waste disposal companies

Special Considerations for Frontline Facilities

- Isolation
- Notification
- Personal Protective Equipment
- Waste Management
- Transport

Serious Infectious Diseases

Infectious Diseases of Concern

- Highly contagious and/or present infection control challenges
- Serious illness requiring intense and specialized clinical management
- Pose a significant public health threat

Examples

- Ebola and other viral hemorrhagic fevers (e.g., Marburg, Lassa, Machupo)
- Novel influenza A virus
- Middle East Respiratory Syndrome (MERS-CoV)

Examples

- Variola major (smallpox)
- Sudden Acute Respiratory Syndrome (SARS)
- Emerging pathogens

Emerging Serious Infectious Disease

- These diseases are often travel related
- Always check the latest travel health notices found on the CDC website
 - <u>CDC Travel</u> Destination List



Considerations for Frontline/EMS: Transport

 CDC and ADPH recommend clinicians inquire about international travel as a part of their ill patient screening



Considerations for Frontline/EMS: Transport

 Patients with a history of travel AND with fever, rash, unexplained hemorrhage, vomiting, diarrhea, or cough may have a serious infectious disease



Four Hour Reportable

 Report within 4 hours of Presumptive Diagnosis Immediate, Extremely Urgent

Anthrax, human	Smallpox
Botulism	Tularemia
Plague	Viral hemorrhagic fever
Poliomyelitis, paralytic	Cases related to nuclear, biological, or chemical terroristic agents *
Severe Acute Respiratory Syndrome Coronavirus (SARS-CoV)	

* Select Agents List

During Business Hours and After Hour Notification

 Immediate, Extremely Urgent must be reported within 4 hrs of <u>presumptive</u> diagnosis by telephone

7/24/365 → Phone: 1-800-338-8374

ADPH's Roles in SIDN

- Health Department Area & Central office
- Infectious Disease and Outbreaks
- Center for Emergency Preparedness
- Bureau of Clinical Laboratories
 - Analytes offered by Bureau of Clinical Laboratories

Health Care Coalition

■ Purpose

Establish a healthcare system-wide approach for preparing for, responding to, and recovering from incidents that have a public health and medical impact in the short and long-term

Health Care Coalition

■ Goal

 Serve as a multiagency coordinating group to assist with preparedness, response, recovery, and mitigation activities related to healthcare organization disaster operations

Health Care Coalition

Serve as an excellent resource for planning within your community as it exists as a collaborative network of healthcare organizations and their respective public and private sector response partners

Health Care Coalition

Benefits

- Opportunities to plan, exercise, and evaluate response plans
- Be better equipped to respond to any serious infectious disease or other public health threat or emergency

Health Care Coalition - ADPH Areas





